

APPENDIX

U

INLAND
RAIL 

Social Impact Assessment

INLAND RAIL—BORDER TO GOWRIE ENVIRONMENTAL IMPACT STATEMENT

ARTC Inland Rail Border to Gowrie Project EIS Appendix U: Social Impact Assessment

November 2020

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Abbreviations

ABS	Australian Bureau of Statistics
ACH Act	Aboriginal Cultural Heritage Act 2003
AEDC	Australian Early Development Census
AEP	Australian Exceedance Probability
AIP Plan	Australian Industry Participation Plan
ALA	Acquisition of Land Act 1967
AMP	Accommodation Management Plan
ARTC	Australian Rail Track Corporation
ASGS	Australian Statistical Geography Standard
BNTAC	Bigambul Native Title Aboriginal Corporation
CCC	Community Consultative Committee
CEMP	Construction Environmental Management Plan
Ch	Chainage
CHMP	Cultural Heritage Management Plan
CLP	Charlton Logistics Park
COAG	Council of Australian Governments
CRG	Community Reference Group
CYMHS	Child and Youth Mental Health Service
DAF	Department of Agriculture and Fisheries
Db(A)	Decibel levels weighted to approximate the way the human ear hears
DDHHS	Darling Downs Health and Hospital Service
DDSW	Darling Downs and South West
DESBT	Queensland Government Department of Employment, Small Business and Training
DESSFB	Department of Employment, Skills, Small and Family Business (Commonwealth)
DET	Queensland Government Department of Education and Training
DFW	Domestic and family violence
DIRD	Department of Infrastructure and Regional Development

DITRDC	Department of Infrastructure, Transport, Regional Development and Communication (Commonwealth)
DPE	NSW Department of Planning and Environment
DPI	Population Health Information Data Unit
DSDMIP	Department of State Development, Manufacturing Infrastructure and Planning
DSDTI	Department of State Development, Tourism and Innovation
DVO	Domestic violence order
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EP Act	Environmental Protection Act 1994
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
ERP	Estimated resident population
FFJV	Future Freight Joint Venture
FTE	Full time equivalent
G2H	Inland Rail Gowrie to Helidon Project
GP	General practitioner
GRC	Goondiwindi Regional Council
GRP	gross regional product
GTT	Gateway to Training
Ha	Hectare
HACC	Home and Community Care
IARE	Indigenous Area
IEO	Index of Education and Occupation
IEO	Index of Education and Occupation
IFC	International Finance Corporation
IRSAD	Index of Relative Socio-Economic Advantage and Disadvantage
IS	Infrastructure Sustainability
LGA	Local Government Area
LOTE	Language Other than English
m	metre

MHADC	Mental Health Activity Data Collection
mm	millimetres
NIEIR	National Institute of Economic and Industry Research
NNTT	National Native Title Tribunal
NS2B	Inland Rail North Star to Border
NSW	New South Wales
NT	Native Title
OCG	Queensland Government Office of Coordinator-General
OEH	Queensland Government Office of Environment and Heritage
OEMP	Outline Environmental Management Plan
P&C	Parents and Citizens Association
PHA	Population Health Areas
PHIDU	Population Health Information Data Unit
PHN	Primary Health Network
PM	Particulate Matter
QAS	Queensland Ambulance Service
QBA	Queensland Beekeepers' Association Inc
QFRS	Queensland Fire and Rescue Service
QLD	Queensland
QPS	Queensland Police Service
QR	Queensland Rail
RD Plan	Regional Development Plan
RDA	Regional Development Australia
RDANI	Regional Development Australia Northern Inland
REC	Regional Economic Clusters
RFB	Rural Fire Brigade
RFS	Rural Fire Service
RSIS	Regional Skills Investment Scheme
RUMP	Road Use Management Plan

SA	Statistical Area
SBPF	Surat Basin Regional Planning Framework
SIA	Social Impact Assessment
SILO	Schools Industry Links Outreach
SIMP	Social Impact Management Plan
SSC	State Suburb (Code)
STEM	Science Technology Engineering and Mathematics
TAFE	Technical and Further Education
TEH	Toowoomba Enterprise Hub
TI Act	Transport Infrastructure Act 1994 (Qld) (TI Act).
TRC	Toowoomba Regional Council
TSR	Travelling Stock Reserves
UCL	Urban Centre/Locality
USA	United States of America
VET	Vocational Education and Training
WHO	World Health Organization
WIP	Witmack Industry Park

Summary

This Social Impact Assessment (SIA) has been prepared as part of the Environmental Impact Statement (EIS) for the Border to Gowrie Project (the Project). The purpose of the SIA is to identify how the Project may affect local and regional communities, and how ARTC will work with stakeholders to mitigate negative social impacts and enhance Project benefits.

The Project is partially 'greenfield' (new rail corridor) and partially 'brownfield' (existing rail corridor) and is one of the 'missing links' within the Inland Rail Program. The Project connects directly to Inland Rail's North Star to New South Wales (NSW)/Queensland (QLD) Border (NS2B) in the south, and the Gowrie to Helidon (G2H) Inland Rail Project in the northeast.

The SIA has addressed the Coordinator-General's statutory requirements as provided by the Terms of Reference (TOR) for the EIS and the Coordinator-General's SIA Guideline. The TOR's central requirement for the SIA is to describe and assess the Project's potential social impacts (both negative and positive) and identify relevant and effective impact mitigation and benefit enhancement measures.

SIA impact assessment area

The SIA impact assessment area includes the Project footprint (including the temporary and permanent footprints), potentially impacted communities, and the Goondiwindi and Toowoomba Local Government Areas (LGAs).

Potentially impacted communities include towns and rural localities near the Project footprint. The Project commences to the west of the rural locality of Kurumbul and travels in a generally northeast direction:

- Through the towns of Yelarbon and Brookstead, and near the towns of Inglewood, Millmerran, Pittsworth, Southbrook, Kingsthorpe and Gowrie Junction, the urban settlement of Gowrie Mountain, and rural land in Westbrook
- Through the rural localities of Kurumbul, Whetstone, Canning Creek, Bringalily, Millwood, Clontarf, Pampas, Umbiram, Athol, Biddeston, Yarranlea and Wellcamp.

The Project ends and connects with the Inland Rail G2H Project approximately 1 km southwest of Gowrie Junction.

Stakeholder engagement

The SIA engagement process was designed to ensure the involvement of a broad range of stakeholders. SIA engagement activities were integrated with the Project's overall engagement process for the draft EIS, including participation in community information sessions throughout the SIA impact assessment area, and in ARTC's Southern Darling Downs Community Consultative Committee (CCC) and Inner Darling Downs CCC meetings. Additional SIA-specific stakeholder engagement included a community survey, workshops, meetings and interviews.

Key issues identified by stakeholders which are considered in the SIA in relation to Project construction and operation include:

- Impacts on cultural landscapes and local character
- Impacts of property acquisition and property severance on the use and amenity of properties
- Impacts on farm productivity and management
- Impacts of changes to flood patterns on homes, farms and agricultural land
- Impacts of Project construction and operation on rural amenity
- Changes to connectivity, within and between properties, on the road network, and with respect to level crossings
- Potential for the Project to have negative impacts on property values

- Growing community stress and desire for better information about the Project
- Effects of Project-related stress on mental health, and need for support for affected residents
- Impacts of noise, vibration, and air quality changes on community well-being
- Impacts of construction on groundwater access for farms and businesses
- The potential for Project traffic to use school bus routes, leading to safety issues.

The results of stakeholder engagement are documented in Section 6 and have been incorporated throughout the SIA.

Social baseline

The Goondiwindi LGA is a primarily agricultural region located in the south-west Darling Downs. The main towns are Goondiwindi, Inglewood and Texas, where nearly three quarters of all residents live. The balance of residents live in smaller townships, including Yelarbon, or on rural properties. Goondiwindi is the main services centre and a transport hub for the southwest Darling Downs and the northern tablelands in NSW. Inglewood is a smaller service centre supporting communities further north.

Toowoomba LGA is home to both city and rural communities, and occupies a large region west of the Toowoomba Range, some 130 km west of Brisbane. Toowoomba City is the main administrative and regional centre for the Northern and Western Darling Downs.

The population of the Goondiwindi LGA was estimated at 10,629 people in 2016, unchanged since 2011. By comparison, Toowoomba LGA's population increased 6.34 per cent over this period, growing to an estimated 160,777 people by 2016.

The SIA impact assessment area's diverse communities have a strong sense of place, with the rural qualities of the townships and landscapes forming an intrinsic part of character and identity. SIA engagement indicates that community members in proximity to the Project value a rural lifestyle, and a quiet rural environment. Features 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.

Potentially impacted communities include rural localities with sparse populations, and towns with populations ranging from approximately 300 people to 3,300 people.

Key features of the social baseline which are relevant to local sensitivity to social impacts and benefits include:

- Socio-Economic Indices for Areas (SEIFA) scores indicate that potential socio-economic disadvantage is evident in areas near the Project footprint, including near Pittsworth, Millmerran and Southbrook
- Indigenous populations are more highly represented in most communities in the SIA impact assessment area than is typical for Queensland
- Both LGAs recorded slightly higher median ages than the Queensland median. More than half the potentially impacted communities had higher median ages than the Queensland median
- Family households were the most dominant household type across the SIA impact assessment area, but at slightly lower levels than the Queensland average
- Median incomes were differentiated by proximity to Toowoomba, with areas such as Brookstead, Gowrie Junction, Gowrie Mountain and Westbrook having higher median household incomes than the Queensland median, while the rural areas had lower median incomes
- Rental vacancy rates in all relevant postcodes were relatively low, with little local capacity to provide housing for Project workers without displacing other residents

- Police and emergency service agencies are well organised and coordinated to respond to major project construction, and require ongoing cooperation with the Project
- Hospital facilities in potentially impacted communities are small and will require advance notice on the workforce profile to prepare for any changes to demands
- Residents have no access to public transport and are heavily reliant on private transport.
- At the regional level both Toowoomba and Goondiwindi LGAs are relatively well supplied in terms of labour skills and education according to the Index of Education and Occupation, with Toowoomba LGA leading Goondiwindi LGA.

The extended drought affecting South East and South West Queensland as well as COVID-19 restrictions have had a negative effect on the financial resources of families and businesses throughout the Project region, and the 2021 Census may reveal decreases in incomes and socio-economic indicators such as labour force participation.

Social benefits and opportunities

The Project would result in social benefits, primarily in relation to employment, training and business supply opportunities for residents in the SIA impact assessment area. Social benefits include:

- Employment opportunities in Project construction during 2021-2026, including for local people and groups that are disadvantaged in the labour market
- Local businesses would benefit from increased trade from workers resident in non-resident workforce accommodation and from supply opportunities offered by the non-resident workforce accommodation provider
- The operations phase will provide direct permanent employment for approximately 15 people, some of whom may be drawn from the SIA impact assessment area. Indirect employment benefits are also likely as the result of the Project facilitating economic development
- The Project provides a potential training and career pathway development for young people, Indigenous people and unemployed people in the SIA impact assessment area
- The Project is likely to provide significant opportunities for local, regional and Indigenous businesses (including construction, transport or logistics businesses) to participate in its construction supply chain. Transport, logistics and warehousing industries may be catalysed by the Project in Goondiwindi and Toowoomba
- As part of the Inland Rail Program, the Project has potential to improve the agricultural industry's access to freight transportation and stimulate business and industry development, including at the Toowoomba Enterprise Hub.

Appendix V: Economic Impact Assessment of the EIS (KPMG, 2020) includes an assessment of estimated community benefits including crash cost savings, cost savings from environmental externalities and road decongestion benefits, as well as freight benefit savings. Appendix V of the EIS indicates that the Project would have a community benefit of \$157.84 million and the value of freight benefits was estimated at \$516.52 million (net present value, at a 7 per cent discount rate) over a 50-year analysis period. Additional benefits would accrue at State and national levels as described in Appendix V of the EIS.

Social Impacts

Without appropriate mitigation strategies, the Project has potential to result in the following social impacts:

Construction

- Potential to affect Aboriginal cultural landscapes or heritage values, by adding additional infrastructure to the natural and rural landscapes, potentially affecting feelings of connection to country
- Stress and anxiety related to property acquisition discussions and/or fears about Project impacts on property use and amenity, environmental qualities, or potential for changes to flooding risks
- Impacts on the use and management of agricultural land, including severance of and between land parcels, intrusion on farm infrastructure, temporary disruptions to access to landholdings, and impacts on on-farm and off-farm movements including the ability to move machinery, stock and supplies across the corridor
- Property owners have expressed considerable anxiety regarding the potential for property values to decrease as a result of Project impacts e.g. noise, severance and visual amenity factors. Individual properties values may be affected by a range of factors related and unrelated to the Project
- Noise, dust and increased traffic related to construction activities and sites may affect residential amenity whilst works are near homes and businesses, with any impacts resulting from laydown areas and bridge construction sites lasting for extended periods
- Community cohesion may be reduced through displacement of residents, physical severance between properties, disruption to the road network and/or, potentially, community conflict
- There is potential for noise from construction activities and/or Project traffic near the Brookstead, Southbrook and Yelarbon State Schools to impact on the learning environment of the schools
- Temporary non-resident workforce accommodation will be established near Millmerran, Inglewood and Yelarbon, and whilst largely self-sufficient, there is potential for impacts on town character if non-resident workforce accommodation facilities are located in towns, or due to worker influxes to town facilities or businesses
- Whilst non-resident workforce accommodation facilities will include access to paramedic services, some additional demand is anticipated on local health and police services associated with minor workplace injuries, and the non-resident workforce accommodation, with the nature of demand also likely to differ due to the younger demographic of the workforce
- Potential for impacts on rental housing availability in Goondiwindi, Millmerran, Pittsworth and Inglewood
- Construction labour demand may contribute to shortages in specific trades and labour, including farm labourers, particularly if a number of projects are constructed during the same period.

Operation

- Level crossings will result in periodic disruptions to traffic, including potential to delay emergency vehicles during operation
- The quiet rural amenity of properties near the Project may be impacted by rail freight noise during operations
- Property severance and changes to landowners' movements across the corridor will continue
- There is potential for rail noise to affect the learning environments of the Brookstead and Yelarbon State Schools
- There is potential for rail noise to affect the amenity and use of the Pittsworth Assembly of God/Harvest Life Church
- The presence of a freight rail line may increase the risk of road/rail accidents and rail fatalities, resulting in social impacts for individuals, families, communities and rail staff

- Flood sensitive receptors that are impacted by changes in peak water levels under the 1% AEP event that exceed the flood impact objectives include:
- Nine dwellings (five between Pampas and Yandilla, and four at Yelarbon)
- One shed at Pampas
- Three commercial buildings (grain silos) at Yandilla
- One state-controlled road (Cunningham Highway at Yelarbon)
- One local public road (Leesons Road between Kingsthorpe and Gowrie Junction).

Changes to flooding patterns may affect feelings of security, the amenity of homes, and the use and condition of sheds, silos and other infrastructure on affected properties.

Social impact management

The SIA includes a Social Impact Management Plan (SIMP) which outlines the objectives, outcomes and measures for mitigation of social impacts and measures intended to enhance Project benefits and opportunities. The SIMP includes five management sub-plans and a monitoring and reporting framework as summarised below.

Community and Stakeholder Engagement

The Community and Stakeholder Engagement Plan describes how the Project will communicate and engage with community members and other stakeholders throughout the pre-approval, detail design, pre-construction and construction phases of the Project. The objectives of the Community and Stakeholder Engagement Plan are:

- Establish and maintain engagement mechanisms which build relationships between ARTC and its stakeholders
- Support mitigation of impacts on amenity, community cohesion and local character through stakeholder engagement and delivery of local community programs in partnership with community and government stakeholders.
- Enable adaptive management of impacts on amenity, connectivity and community values during construction.

This sub-plan describes the communication tools, engagement measures (such as regular liaison with landholders, Community Reference Group/s [CRG/s] and stakeholder meetings), specific engagement actions to be implemented in each Project stage, and the responsibilities for community and stakeholder engagement. A summary of the status of ARTC's partnerships and agreements with stakeholders is also provided.

The sub-plan includes a monitoring and reporting framework for community and stakeholder engagement, and describes how stakeholder inputs will be incorporated in ongoing development and implementation of SIMP measures.

Upon the completion of the construction phase, the Project will be commissioned as part of the Inland Rail network. Before the completion of the construction phase, ARTC and/or its contractor will develop community and stakeholder engagement strategies for the commissioning phase and the first three years of operations, in accordance with ARTC's established practices

Workforce Management

ARTC aims to maximise employment opportunities for residents within the SIA impact assessment area by:

- Facilitating skills development opportunities to build regional capacity in construction and rail operation

- Building partnerships with training providers to strengthen workforce skills in the SIA impact assessment area, and reduce the potential for cumulative impacts to draw labour and skills from other businesses
- Requiring the Principal Contractor to employ locally, and to implement workforce training and diversity strategies.

The workforce management sub-plan describes how ARTC will maximise training and employment opportunities for residents in the Goondiwindi and Toowoomba LGAs, manage the potential for impacts on other industries, and support workforce wellbeing.

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

- Increase the number of skilled local people eligible for employment on Inland Rail and associated regional industries
- Increase school student awareness and capability by connecting students with industry best practice
- Create opportunities for local businesses to participate in new supply chains
- Equip Inland Rail employees with world-class skills.

Inland Rail Skills Academy initiatives will include targeted local training and business capacity building programs which are being developed in cooperation with community, Council and Government stakeholders.

Housing and Accommodation

The Housing and Accommodation sub-plan describes the measures that ARTC will undertake to mitigate potential impacts on housing and accommodation access in the SIA impact assessment area, and support management of the Project's non-resident workforce accommodation.

The Project proposes the provision of three non-resident workforce accommodation facilities, to be located near Yerlarbon, Inglewood and Turallin (near Millmerran). This is expected to minimise the potential for Project personnel's housing demands to affect local housing access, and also minimise demands on short term accommodation which could affect tourists' access.

ARTC will require its Principal Contractor provide an Accommodation Management Plan (AMP) for ARTC's approval, monitor any impacts on housing or accommodation, and modify accommodation management strategies if the potential for negative impacts is identified. .

The construction and provision of additional accommodation for the operational workforce is not proposed as part of the Project given the small workforce required for operation.

Health and Community Wellbeing

The Health and Community Wellbeing sub-plan addresses the potential for impacts on community facilities and services, community safety and mental health, and the potential for impacts on community wellbeing due to changes to local amenity, community cohesion or local character.

The sub-plan includes measures for cooperation with community and government organisations to maintain the amenity of community facilities and local access to services, including emergency services and mental health services. A more detailed Community Wellbeing Plan will be developed in cooperation with key stakeholders during the detail design phase and will include:

- Initiatives to upgrade community facilities
- Placemaking initiatives to offset impacts on local character, and/or support recreation or tourism initiatives

- Projects to support community cohesion and resilience
- Cooperation with police and emergency services.

Local Business and Industry Content

The Local Business and Industry Content sub-plan addresses the potential for Project impacts on businesses including farms, agribusinesses and tourism-related businesses, and describes ARTC's commitments to ensuring that local and regional businesses benefit from the Project.

ARTC is working with directly affected landowners to develop and implement property-specific measures to mitigate impacts on agricultural land uses, and is committed to ongoing cooperation with all directly affected landowners and those adjacent to the Project footprint to minimise Project impacts.

ARTC will consult with tourism-related businesses in potentially impacted communities when the Project's detail design is confirmed regarding potential impacts on tourism businesses related to e.g. the road network or local character, and work with tourism stakeholders to minimise or offset impacts on tourism businesses.

ARTC is committed to providing full, fair and reasonable opportunities for capable local businesses (within the Goondiwindi and Toowoomba LGAs and nearby LGAs) and Indigenous businesses to compete and participate in the Project's supply chain. An Australian Industry Participation Plan (AIP Plan) will be prepared to support opportunities for businesses to supply the Project. This will include capacity building programs for local and Indigenous businesses to be delivered as part of the AIP Plan and within the Inland Rail Skills Academy.

Monitoring and reporting

The SIMP includes a monitoring and reporting framework to:

- Track and enable reporting on delivery of measures which mitigate social impacts or increase community benefits
- Collect data on the effectiveness of mitigation and benefit enhancement measures
- Support identification of corrective actions to improve the effectiveness of management measures.

Proposed roles for Councils and the Project's CRG/s in SIMP implementation and monitoring are included in this sub-plan.

ARTC will track SIMP 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/s at each meeting and a report against performance measures will be presented to the CRG/s, TRC and GRC annually during construction.

ARTC will review the SIMP annually during the construction phase, and where necessary update it based on monitoring results, including stakeholder feedback.

1. Introduction

1.1 Purpose of the SIA

Australian Rail Track Corporation (ARTC) proposes to construct and operate the New South Wales (NSW)/Queensland (QLD) Border to Gowrie Project ('the Project').

This Social Impact Assessment (SIA) has been prepared as part of the Project's Environmental Impact Statement (EIS), in accordance with the Terms of reference for an environmental impact statement: Inland Rail – Border to Gowrie Project (November 2018) (TOR) and Social Impact Assessment Guideline (SIA Guideline) (State of Queensland, DSDMIP, 2018a). The purpose of the SIA is to identify how the Project may affect local and regional communities, and how ARTC will work with stakeholders to mitigate negative social impacts and enhance Project benefits.

The objectives of the SIA are to:

- Identify potentially impacted communities, having regard to all potential social impacts throughout the Project's life
- Enable potentially impacted stakeholders and communities to provide inputs to the SIA
- Develop a comprehensive baseline of social characteristics against which potential Project-related changes can be assessed
- Provide a detailed assessment of likely social impacts and benefits, including their significance to stakeholders and communities during each stage of the Project
- Provide a Social Impact Management Plan (SIMP) and monitoring strategy to support adaptive management of social impacts and opportunities for the Project to benefit local communities.

1.2 Project location

The Project is a section of the proposed Inland Rail freight route connecting metropolitan Melbourne to Brisbane. The Project consists of approximately 216.2 km of new single track railway, comprising of 7 kilometres (km) of standard gauge rail and 209.2 km of dual gauge rail. The Project utilises 71.2 km of existing (brownfield) rail corridor and requires 145 km of new (greenfield) rail corridor.

The Project commences at the NSW/QLD border, the median line of the Macintyre River, approximately 18 km to the south east of Goondiwindi near Kurumbul. From this crossing point the alignment heads in a northerly direction for approximately 7 km before joining the Queensland Rail South Western Line to the east of Kildonan, within the existing rail corridor. The Project continues within the South Western Line rail corridor for 46.8 km through Yelarbon and towards Inglewood before turning off and becoming a greenfield alignment near Whetstone. The alignment skirts the hills to the west of Inglewood and then follows a new corridor that is approximately parallel to Inglewood-Millmerran Road until joining the Millmerran Branch Line, within the existing rail corridor, between Millmerran and Yandilla.

The Millmerran Branch Line is regarded as being operational however it is disused south of Brookstead due to track damage sustained in the 2011 floods. Within the Millmerran Branch rail corridor, the Project crosses the Condamine River floodplain with its three main water courses – Grasstree Creek, Condamine River South Branch and Condamine River Main Branch. The alignment continues via Pampas and Brookstead and deviates from the Millmerran Branch Line at Yarranlea.

The rail corridor is greenfield from this point for the remaining 44.5 km and runs along the northern side of the Gore Highway, passing on the northern side of Pittsworth. The alignment then follows a north-easterly direction passing through the north-western side of Southbrook. From here the alignment follows a more northerly direction as it passes through Athol and to the west of the Toowoomba Wellcamp Airport, through the Wellcamp Industrial Precinct. The alignment passes to the west of Gowrie Mountain and crosses the Warrego Highway before connecting to the G2H section of the Inland Rail between Leeson Road and Draper Road, on the south eastern outskirts of Kingsthorpe.

The Project is located within the local government areas (LGAs) of Goondiwindi and Toowoomba and is located within the Darling Downs Region. North of Southbrook the Project is also located within the South East Queensland Region. Key permanent and temporary features of the Project are presented in Table 1-1. Potentially impacted communities are identified in Section 4.2.2 and are discussed in detail in Section 5.1.3.

Table 1-1: Key permanent and temporary features of the Project

Aspect	Description
Permanent features	
New track	<ul style="list-style-type: none"> 216.2 km of new single track railway (trains travelling in both directions share the same track), consisting of 7.0 km of standard gauge rail (1,435 millimetres (mm)) and 209.2 km of dual gauge rail (standard (1,435 mm) and narrow (1,067 mm) gauge) Rail infrastructure and corridor will initially be constructed for 1,800 m long trains, future proofed for operation of 3,600 m trains
Rail corridor	<ul style="list-style-type: none"> Establishment of approximately 145 km of new rail corridor and utilisation of approximately 71.2 km of existing rail corridor
Crossing loops and turnouts	<ul style="list-style-type: none"> Crossing loops are places on a single line track where trains in opposing directions can pass each other. Five crossing loops are proposed, each 2,200 m in length Crossing loops and turnouts allow the train to be guided from one section of track to another. Turnouts that tie-in to the Queensland Rail's existing South Western line and Millmerran Branch Line will be incorporated as part of the Project
Bridges	<ul style="list-style-type: none"> Bridges to accommodate topographical variation, crossings of waterways and other infrastructure
Drainage	<ul style="list-style-type: none"> Reinforced concrete pipe culverts and reinforced concrete box culverts. Scour protection measures will generally be installed around culverts to avoid erosion.
Rail crossings	<ul style="list-style-type: none"> Rail crossings including level crossings, grade separations/rail or road overbridges, occupational/private crossings
Ancillary works	<ul style="list-style-type: none"> The construction of associated rail infrastructure including maintenance sidings and signalling infrastructure Ancillary works including works to level crossings, signalling and communications, signage and fencing, drainage works, and installation or modification of services and utilities within the rail corridor
Construction features	
Land	<ul style="list-style-type: none"> The land required for the Project will comprise a corridor with a minimum width of 40 m. Wider sections of corridor are required to accommodate earthworks, drainage structures, rail infrastructure, access tracks and fencing. The corridor will be of sufficient width to accommodate the infrastructure currently proposed for construction including the crossing loops, as well as future expansion to accommodate the potential for 3,600 m trains. The temporary footprint encompasses land needed to safely and efficiently construct the Project. Temporary access tracks will be used to access construction sites. Where possible they will be retained to serve as rail maintenance access roads during the operation of the Project Construction of temporary workspace, site offices and laydown facilities.

Aspect	Description
Embankments and cuttings	<ul style="list-style-type: none"> ▪ Embankments and cuttings will be required along the length of the alignment
Borrow pits	<ul style="list-style-type: none"> ▪ Identification, establishment and lawful use of borrow pits and quarries for the sourcing of construction materials
Accommodation	<ul style="list-style-type: none"> ▪ Construction, use and decommissioning of temporary non-resident workforce accommodation

2. Legislation, policy and guidelines

The Coordinator-General has declared the Project to be a '*coordinated Project for which an EIS is required*' under Section 26(1)(a) of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act).

The Project was also referred to the Minister for the Environment under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and was determined to be 'a controlled action' requiring an EIS. The EIS will address the requirements of the SDPWO Act and the EPBC Act under the Assessment Bilateral Agreement between the Australian and Queensland Governments.

The SIA has been conducted in accordance with the draft EIS TOR and the Coordinator-General's SIA Guideline as outlined below. The SIA also considers local and regional planning objectives as addressed in Section 2.4.

2.1 State Development and Public Works Organisation Act 1971

The SDPWO Act aims to facilitate 'timely, coordinated and environmentally responsible infrastructure planning and development to support Queensland's economic and social progress' (Queensland Government, 2017). The SDPWO Act provides for the appointment of a Coordinator-General representing the Queensland Government, and gives the Coordinator-General powers to (among other things) declare a Project to be a 'coordinated Project', evaluate an environmental impact statement 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 which addresses the TOR to the satisfaction of the Coordinator-General.

2.2 EIS Terms of reference

The EIS TOR include general EIS requirements and specific information requirements for the SIA as summarised below.

The TOR state that the objectives of the draft EIS are to ensure that all relevant environmental, social and economic impacts of the Project are identified and assessed, and to recommend mitigation measures to avoid or minimise adverse impacts. Relevant 'Mandatory EIS requirements' (TOR Section 6) which have been addressed by the SIA include, in summary:

- Identify and describe the environmental (i.e. social) values that must be protected
- Cover both the short and long terms and state whether any relevant impacts are likely to be irreversible, including discussion of scenarios of unknown and unpredictable impacts
- Provide a concise summary and assessment of the Project's impacts and cumulative impacts, with the measures proposed by the proponent to avoid, minimise, mitigate, manage and/or offset those impacts
- Observe the preferred hierarchy for managing likely impacts (i.e. avoid impacts, minimise/mitigate impacts and offset impacts once avoidance and mitigation have been applied)
- Provide detailed strategies for the protection or enhancement of relevant environmental values in terms of measurable outcomes, including ongoing monitoring and proposals for an adaptive management approach.

Land use and tenure requirements require an outline of land acquisition and compensation processes for properties directly impacted by the Project.

'Further requirements of an EIS' (TOR Section 7) requires an appropriate public consultation program involving Local, State and Commonwealth government agencies, and potentially impacted local communities. A public consultation report detailing how the public consultation plan was implemented and the results of the implementation is provided as Appendix C to the draft EIS.

The TOR's objective for assessment of social impacts is: "The construction and operation of the Project should aim to (a) avoid or mitigate adverse social impacts arising from the Project and (b) enhance opportunities for local and regional communities."

The information requirements for SIA are:

- "(11.139): Prepare a social impact assessment (SIA) for the Project consistent with the relevant requirements in the Coordinator-General's Social impact assessment guideline March 2018 (SIA Guideline)
- (11.140): The SIA is to be developed in consultation with the Coordinated Project Delivery Division in the Office of the Coordinator-General, Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP). The SIA is to describe the potential social impacts (both positive and negative) of the Project, and must identify relevant and effective impact mitigation and benefit enhancement measures".

Compliance with the SIA Guideline is summarised below.

2.3 SIA Guideline

The Coordinator-General published the SIA Guideline in March 2018 (State of Queensland, DSDMIP, 2018a), pursuant to the Strong and Sustainable Resources Communities Act 2017 (Qld) (SSRC Act). The SIA Guideline is a non-statutory guideline for non-resource projects subject to an EIS under the SDPWO Act or Environmental Protection Act 1994 (Qld) (EP Act).

The SIA guideline requires that the type, level and significance of the Project's social impacts (both negative and positive) must be analysed and described, based on the outcomes of community engagement, social baseline studies and impact analysis processes, and considering the potential changes to key aspects included in the social baseline study as a result of the Project. This should include assessment of the potential scope and significance of impacts at the local and regional level including cumulative impacts. Key factors for consideration include:

- Population and demographic changes
- Impacts on how people live, work, play and interact on a day-to-day basis, including impacts on lifestyles and amenity, and access to housing
- Community values and/or the way communities function
- Culture, history, and ability to access cultural resources
- Impacts on communities' access to, and quality of, infrastructure, services and facilities
- Impacts on communities' quality of life including liveability and aesthetics, as well as the condition of their environment (for example, air quality, noise levels, and access to water)
- Impacts on communities' physical safety, exposure to hazards or risks, and access to and control over resources
- Changes to livelihoods, for example, whether peoples' jobs, properties or businesses are affected, or whether they experience advantage/disadvantage
- Communities' physical and mental health and well-being, as well as their social, cultural and economic well-being.

Community and stakeholder engagement requirements include commencement of engagement at an early stage of the draft EIS process and the involvement of stakeholders including affected land holders, local residents, community groups, traditional owners, state and local government agencies, and non-government organisations, local businesses and traditionally-underrepresented stakeholders including Indigenous people and young people. This is discussed in Section 6.

The Project is part of a larger program which has inter-regional, State and National social impacts and benefits, which requires a clear focus on the cumulative effects of the Inland Rail Program and other relevant major projects.

The SIA responds to the SIA Guideline as outlined in Table 2-1. The SIA Guideline requires management plans for each impact area, which are provided in the SIMP in Section 8.

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

Table 2-1: Compliance with SIA Guideline 2018

Guideline requirement	SIA Section
Consideration of the Guideline's key matters, for the full life cycle of the Project	Section 7
Description of a meaningful, inclusive and transparent engagement process with potentially impacted communities and stakeholders during the development of the SIA	Section 6
Analysis of the nature and scope of the Project	Section 4.1
Analysis of potentially impacted communities and the sensitivity of the social environment	Sections 4.2.2, 5.1 to 5.7
Development of a social baseline that includes demographic indicators, community values and history, community health and well-being, key industries, the local and regional workforce, access to social facilities and services, and housing and accommodation	Section 5.1 – 5.7
Assessment of social impacts and opportunities across all relevant issue categories, for each stage of the Project lifecycle, including cumulative impacts	Sections 7 and 9
Integration with the draft EIS process, including consideration of the social consequences of technical matters assessed in other parts of the draft EIS	Sections 7.1 and 7.4
Provision of a SIMP which documents the management measures that address potential negative impacts and capitalise on positive opportunities and includes a monitoring and reporting framework.	Section 8

2.4 State, regional and local plans and policies

The objectives of State, regional and community plans as relevant to community values and priorities in potentially impacted communities are outlined below.

2.4.1 State Planning Policy (SPP)

The State Planning Policy identifies 17 State interests relating to land development with five key themes:

- 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):

- 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 centre design
- Facilitating the provision of pedestrian, cycling and public transport infrastructure and connectivity within and between these networks
- Planning for cost-effective, well-located and efficient use of community facilities and utilities.

2.4.2 Darling Downs Regional Plan 2013

The Project is located within the southern and eastern areas of the Darling Downs Region. The Darling Downs Regional Plan was released in 2013 to resolve competing State interests on a regional scale by delivering regional policy aimed at achieving specific regional outcomes. The Plan provides policy responses to resolve the region's most important issues affecting its economy and the liveability of its towns. The regional policies aim to *'protect Priority Agricultural Land uses while supporting co-existence opportunities for the resources sector'* and *'provide certainty for the future of towns'*.

The Darling Downs Regional Plan recognises the productive and resource rich attributes of the Darling Downs Region including prime agricultural land and extensive mineral deposits. It also recognises that the region has some of the state's best assets, with high value scenic and natural amenity, vibrant towns and strong communities underpinned by a diverse range of cultural values.

The Darling Downs Regional Plan highlights the importance of strengthening inter-regional linkages to facilitate the movement of commodities and to allow shared opportunities in terms of employment, accommodation, infrastructure and service delivery. The Regional Plan also identifies opportunities to leverage rail infrastructure to boost economic development in the region, including facilitating opportunities for intermodal facilities east of Goondiwindi and within the Charlton Wellcamp industrial precinct.

2.4.3 South East Queensland Regional Plan 2017 (ShapingSEQ)

The ShapingSEQ sets out five goals for the Region's development:

- Goal 1: Grow
- Goal 2: Prosper
- Goal 3: Connect
- Goal 4: Sustain
- Goal 5: Live.

Outcomes for the Western sub-region which includes the principal regional activity centre of Toowoomba include a dispersed network of urban and rural centres, significant expansion areas, Regional Economic Clusters and infrastructure connections of national significance. Key actions include:

- **Grow:** Focusing density in and around appropriate locations along urban corridors, and in areas with superior access to public transport, employment and services
- **Prosper:** Identifying, protecting and growing economic opportunities and synergies within and between Regional Economic Clusters (RECs) which includes the Western Gateway (the intersection of three national highways), the Toowoomba Wellcamp Airport, and the Charlton Wellcamp Enterprise Area, Toowoomba Bypass and Inland Rail

- **Connect:** The intent to be a region of interconnected communities that moves people and freight efficiently to maximise community and economic benefits with key improvements to the integrated regional transport system, including supporting delivery of the Inland Rail
- **Sustain:** Protect and nurture the regional biodiversity network and manage regional landscapes, including recognition of Traditional Owners' cultural knowledge and connection to land and sea in planning
- **Live:** Developing and promoting great places to support the sub-region's liveability, prosperity, sense of identity and community, including Toowoomba city centre.

2.4.4 Surat Basin Regional Planning Framework 2011

The Surat Basin Regional Planning Framework (SBRPF) is a non-statutory regional planning instrument that was published to set directions and establish principles to inform future decision-making and policy relevant to the Surat Basin in the midst of strong resource sector growth. The purpose of the SBRPF is to inform and align the federal, State and local government strategic planning agendas and regional policies responsible for land-use planning, service delivery and infrastructure provisions within the Surat Basin.

The SBRPF identifies the Western Corridor, located between Brisbane and Toowoomba, as having substantial capacity, infrastructure investment and service capability to support strong residential and employment growth. It also recognises that the capacity for the Western Corridor to capture growth linked to activity in the Surat Basin will be significantly influenced by the quality of rail freight connections, particularly, the upgrading of freight corridors through the urban area of Toowoomba.

2.4.5 Regional Development Australia Darling Downs South West Roadmap

The Australian Government established Regional Development Australia (RDA) to help set up committees that seek to strengthen economic development in regional areas of Australia.

The RDA Darling Downs South West Regional Roadmap (RDA, 2014) notes that Darling Downs and South West (DDSW) region is one of the most dynamic and diverse growth areas in Australia and is a major contributor to the Qld economy, with key issues for the region being connectivity and infrastructure investment. To achieve the vision for the region, the RDA Roadmap has identified the following regional priorities:

- Social infrastructure including health facilities and community and cultural centres
- Local Government planning reforms and certainty of funding
- Connectivity
- Diversifying local economies
- Infrastructure supporting connectivity, community vitality and regional economic development.

The Regional Roadmap 2016-2020 for Darling Downs and South West identifies the need for important new infrastructure including the Inland Rail Project.

2.4.6 Corporate and Community Plans

The Goondiwindi Corporate Plan 2019 - 2024 (GRC (GRC) 2019) sets Council's vision for the region and provides a strategic framework for enhancing communities' quality lifestyle.

The Toowoomba Regional Community Plan (TRC 2014) articulates the long-term vision, goals and priorities to strengthen the assets of the Toowoomba Region and serves as the key driver for TRC's Corporate Plan, Planning Scheme and other planning projects within the LGA. Transport and mobility are identified as key themes of the Plan, and enhanced freight transport is identified as a key priority. It is recognised that an efficient freight transport system enhances the region's position as a major freight

distribution centre, while minimising the associated impacts of freight movement of the community and its environment.

The two LGA's planning schemes set out the controls and use of land that apply to land in the region.

Priorities of particular relevance to the SIA as identified in the Goondiwindi and Toowoomba Community Plans, the Toowoomba Regional Planning Scheme (TRC, 2018) and the Goondiwindi Regional Planning Scheme (GRC 2018) are summarised in Table 2-2.

Table 2-2: Local planning context

Community Plan priorities	Planning Scheme priorities
Goondiwindi Region – Corporate Plan	
<ul style="list-style-type: none"> ▪ A welcoming, engaged and resilient community supported by quality community infrastructure and services ▪ A region known for its prosperous rural economy and innovation ▪ A sustainable, well managed and healthy region for today and future needs ▪ An engaging and transparent Council providing community leadership and quality service delivery 	<ul style="list-style-type: none"> ▪ Promote a compact settlement pattern and access to employment and services in towns ▪ Identify future urban growth opportunities, such as the town of Goondiwindi ▪ Allocate sufficient land for industry diversification and development in the towns of Goondiwindi, Inglewood and Texas ▪ Recognise and protect natural economic resources such as productive rural land whilst promoting opportunities for further economic diversification in these areas ▪ Protect and enhance biodiversity values to support a healthy ecosystem that underpins the liveability and prosperity of the region ▪ Maintain the character and vibrancy of town centres ▪ Promote the diversification of housing products
Toowoomba Region	
<ul style="list-style-type: none"> ▪ A compact urban form and a network of rural towns, with Toowoomba as the principal regional activity centre ▪ Diverse rural communities with a strong sense of place linked to local heritage, character and identity ▪ Equitable access to affordable, suitable and good quality housing ▪ An integrated passenger transport system, an efficient and integrated freight transport system, and access to active transport ▪ Protecting primary production and areas of environmental significance ▪ Coordinated infrastructure planning and delivery, integrated water management, improved waste management and up to date information and communications technology ▪ Protection of ecosystems and biodiversity networks ▪ Well managed scenic landscapes and regional greenspaces 	<ul style="list-style-type: none"> ▪ Safe, convenient and attractive suburban neighbourhoods and centres ▪ Self-reliant and self-contained qualities of rural towns are retained and enhanced ▪ Planning for social and cultural infrastructure, which is well located and accessible, flexible and adaptable ▪ Equitable access to affordable, suitable and good quality housing ▪ Public open space provides a mixture of passive and active recreation opportunities ▪ Valuing and sharing the diverse cultural heritage and intergenerational knowledge and skills

2.4.7 Millmerran and Pittsworth Community Actions Plans

Community actions plans have been developed in partnership between residents and TRC to guide future growth and development in Millmerran and Pittsworth.

The Millmerran Community Growth Action Plan Economic Development Strategy (TRC, 2015) identified five actions that the Millmerran community agreed should be the priority for collaborative action including:

- Opportunities for non-traditional methods for Year 11 and 12 schooling
- Potential opportunities that may develop from the Inland Rail Program
- Developing a unique tourist attraction, capitalising on the town's location on the Gore Highway
- Investigating additional water sources to support agricultural growth
- Investigate potential opportunities resulting from proposed solar farm projects.

Other key priorities include town beautification, tourism development and promotion, retaining and developing new industry, and fostering economic and social well-being.

The Pittsworth Community Growth Action Plan (TRC, 2017b) was developed in partnership between Pittsworth residents and the TRC.

The Pittsworth community's two key priorities included:

- Investigate increased tourism opportunities to increase visitation to Pittsworth
- Investigate opportunities to better support place making initiatives and beautification projects in Pittsworth to enhance the appearance of town.

An additional three priority actions were identified as follows:

- Increase the supply of suitably zoned residential land to meet existing and future demand
- Identify business and investment opportunities for Pittsworth in relation to the Toowoomba Wellcamp Airport, Toowoomba Bypass, Inland Rail and Toowoomba Enterprise Hub
- Develop a Master Plan for the Pittsworth Aerodrome to facilitate additional use and extra hangar/storage space.

2.4.8 Project response to plans and policies

The Project's relevance to local and regional planning outcomes as shown in Table 2-3.

Table 2-3: Project alignment with planning context

Document	Alignment with planning priorities
State Planning Policy Themes	<ul style="list-style-type: none"> ■ Project use of brownfield and alignment minimises impacts on the liveability of local communities ■ Support for regional economic growth, for the long term ■ Provision of freight rail infrastructure
Darling Downs Regional Plan	<ul style="list-style-type: none"> ■ Strengthening inter-regional linkages to facilitate the movement of commodities ■ Development of opportunities for employment and infrastructure ■ Provision of rail infrastructure to leverage economic development
ShapingSEQ	<ul style="list-style-type: none"> ■ Support for economic opportunities and synergies within and between Regional Economic Clusters ■ Support for the development of interconnected communities that move freight efficiently ■ Recognition of the regional biodiversity network

Document	Alignment with planning priorities
Goondiwindi Corporate Plan 2019-2024 and Goondiwindi Regional Planning Scheme	<ul style="list-style-type: none"> ▪ Support for a strong and sustainable regional economy, and for the growth of industry and business activities ▪ Respect for the balance between the development of built infrastructure and the conservation of natural and cultural resources ▪ Project generally avoids town centres ▪ Potential to negatively affect productive rural land
Toowoomba Region Community Plan and Toowoomba Regional Planning Scheme	<ul style="list-style-type: none"> ▪ Support for an enhanced freight transport system ▪ Enhancement of the region's position as a major freight distribution centre ▪ Design minimises impacts on natural economic resources such as productive rural land and forestry ▪ Support for opportunities for economic diversification ▪ Project generally avoids town centres ▪ Potential to affect character and scenic landscapes near the Project footprint
Millmerran Community Growth Action Plan	<ul style="list-style-type: none"> ▪ Enables opportunities that may develop from the Inland Rail Program ▪ May support the retention and development of industry
Pittsworth Community Growth Action Plan	<ul style="list-style-type: none"> ▪ Supports business and investment opportunities in relation to the Toowoomba Wellcamp Airport

3. Methodology

This section describes how the SIA was conducted, including:

- Engagement 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 impact assessment area and the scope of assessment
- Developing a social baseline which combines quantitative and qualitative data, to provide a profile of existing social conditions in local and regional communities against which Project-related changes can be assessed
- Assessing the likelihood, nature and distribution and 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 which avoid, reduce or offset social impacts, and maximise Project benefits
- Evaluating the significance of social impacts and benefits.

3.1 Stakeholder engagement

The purpose of SIA engagement 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. SIA engagement principles are shown in Table 3-1.

Table 3-1: SIA engagement principles

Principles	How achieved
SIA is informed by the views of directly affected stakeholders.	<ul style="list-style-type: none">■ The views of community members who may be affected by the Project's impacts or benefit from Project opportunities are represented in the SIA. The results of ARTC's engagement with traditional owners, directly affected landowners, businesses, Government agencies and other key stakeholders are incorporated in the SIA.
SIA engagement is inclusive of all interested stakeholders	<ul style="list-style-type: none">■ Access to SIA engagement was available and accessible through the SIA community survey, community information sessions, Community Consultative Committee (CCC) meetings, workshops and interviews
Stakeholders are able to provide informed inputs to the SIA	<ul style="list-style-type: none">■ Stakeholders have access to information about the Project through face to face and online options, including access 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, through SIA team participation in community information sessions to speak with residents, land holders and business owners, and attendance at CCC meetings to provide information about the SIA scope, process and the preliminary findings of the SIA. The SIA also incorporates the results of ARTC's stakeholder engagement

A profile of SIA stakeholders and their key issues is provided in Section 4.4. The results of stakeholder SIA-specific engagement are detailed in Section 6.3 and included:

- A community survey with residents in the Queensland LGAs through which Inland Rail would pass
- Meetings with Toowoomba and GRC managers to discuss community concerns, potential social impacts and benefits, and mitigation and management measures

- Discussions with community members including landowners and members of community groups as part of community information sessions
- Workshops with community organisations and government agencies to discuss social infrastructure access and community concerns about the Project
- Meetings and interviews with Traditional Owners
- Meetings with organisations representing businesses in affected communities
- Meetings with the Office of the Coordinator-General (OCG)
- Workshops with government departments to discuss preliminary findings and mitigation measures.

The results of stakeholder engagement have been incorporated throughout the SIA.

3.2 Scoping

The purpose of the SIA scoping process is to identify potentially impacted communities and define the focus for assessment. The scoping process identified potentially impacted communities and matters to be assessed by considering:

- 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 informed by:
 - Consultation with landowners 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 and rural centres, land uses and infrastructure
- The scope of potential social impacts and benefits throughout the Project lifecycle, based on experience with infrastructure projects
- The location of other projects in the region which may contribute to cumulative social impacts over time.

Following consideration of these factors, the SIA impact assessment area was defined (refer Section 4.2) and potential impacts and benefits to be assessed were identified. The outcomes of the scoping process are summarised in Section 4.5.

3.3 Social baseline

Investigations undertaken to develop the social baseline included research and analysis of:

- Potentially impacted 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 and social infrastructure (community facilities, services networks).

Stakeholder engagement outcomes assisted to define community values and validate research findings. The baseline includes a summary of social indicators against which quantitative changes in social conditions can be measured.

3.4 Impact assessment

Impacts were assessed for the pre-construction, construction and operations phases of the Project. A summary of the assessment methods and data sources is provided in Table 3-2. The SIA includes assessment of potential cumulative impacts as described in Section 3.6.

Table 3-2: SIA Assessment Methods

Social domains	Assessment method	Data sources	Rationale
Community and stakeholder engagement	<ul style="list-style-type: none"> ■ Stakeholder analysis and SIA scoping process ■ Analysis of stakeholder engagement inputs ■ Analysis of planning context ■ Analysis of community values 	<ul style="list-style-type: none"> ■ Primary data: collected through stakeholder engagement outcomes (community survey, community information sessions, meetings and interviews) ■ Secondary data: Regional and Community Plans 	<ul style="list-style-type: none"> ■ Stakeholder inputs are central to SIA ■ Regional and community plans provide an overview of community values, informed by extensive stakeholder engagement
Settlement pattern	<ul style="list-style-type: none"> ■ Identify the distribution and key indicators of the population in the SIA impact assessment area ■ Identify and describe the location of potentially impacted communities and land uses, and the physical and social connections between them ■ Compare the Project footprint and activities to the baseline to identify potential changes to social characteristics ■ Identify potential negative impacts on the use and amenity of properties and communities 	<ul style="list-style-type: none"> ■ Primary data: corridor scan (physical and via aerial maps) ■ Secondary data: Planning Schemes, Regional Plans, Regional Transport Plan, and research on the potential for infrastructure projects to change property values as referenced 	<ul style="list-style-type: none"> ■ Scanning the corridor enables identification of communities, localities and features which may be impacted ■ Planning schemes and regional plans identify the current and likely future of land uses
Population, housing, employment and skills	<ul style="list-style-type: none"> ■ Demographic analysis and research ■ Model potential impacts on population, housing and labour demand based on population Projections, current labour force profile and Project workforce estimates 	<ul style="list-style-type: none"> ■ Primary data: Project workforce estimates and accommodation plans ■ Secondary data: Australian Bureau of Statistics (ABS) Census of 2016, Queensland Government Statistician's Office Regional Profiles and Projections, SQM Research, realestate.com.au, and other sources as referenced 	<ul style="list-style-type: none"> ■ The Project's estimates of workforce numbers are key inputs to the assessment ■ The ABS Census provides the most consistent and reliable demographic data available for a large number of indicators

Social domains	Assessment method	Data sources	Rationale
Social infrastructure	<ul style="list-style-type: none"> Profile the provision and where known, the capacity of social infrastructure servicing local and regional communities Consult social infrastructure providers to identify specific local vulnerabilities, potential impacts on social infrastructure, community capacity to address social impacts, and strategies to reduce impacts and enhance Project benefits Model potential impacts on social infrastructure as a result of workforce influx, and describe the potential for the Project to affect social infrastructure functions, either directly or indirectly 	<ul style="list-style-type: none"> Primary data: stakeholder engagement outcomes, social environmental scan outcomes and population modelling Secondary data: desktop research of various websites and databases as referenced 	<ul style="list-style-type: none"> A combination of sources is required to identify the distribution and where known, capacity of social infrastructure
Community values (e.g. amenity, cohesion, community identity, rural values)	<ul style="list-style-type: none"> Community survey and supplementary engagement to identify community values Analysis of values identified in community and regional plans and reports Identify Project design and management measures relevant to community values Describe the potential for Project impacts to affect community values 	<ul style="list-style-type: none"> Primary data: stakeholder engagement outcomes, Project design and management measures Secondary data: community and regional plans 	<ul style="list-style-type: none"> Stakeholder inputs are a key source for identification of community values Regional and community plans provide an overview of community values,
Health and well-being	<ul style="list-style-type: none"> Consultation and research to identify community health and safety status Consultation with social infrastructure providers to identify any changes to facilities' access or amenity which could affect community well-being or safety Consideration of changes to social conditions and the physical environment which may affect human health, community well-being or community safety 	<ul style="list-style-type: none"> Primary data: Stakeholder engagement outcomes Secondary data: ABS Census of Population and Housing 2016, Population Health Information Data Unit (PHIDU) data, EIS assessments of air quality, noise and vibration, traffic impacts, visual amenity and water quality 	<ul style="list-style-type: none"> Stakeholder inputs are a key source for identification of community health determinants and potential impacts on social infrastructure ABS Census provides consistent data on socio-economic health determinants PHIDU provides specialised datasets relating to health status

Social domains	Assessment method	Data sources	Rationale
Business and Industry	<ul style="list-style-type: none"> Analysis of the distribution, type and size of business in local communities, and profiling of regional businesses with relevant capabilities Engagement with businesses to identify opportunities for participation in the Project 	<ul style="list-style-type: none"> Primary data: Stakeholder engagement outcomes Secondary data: ABS data and other sources as referenced 	<ul style="list-style-type: none"> Stakeholder inputs are a key source for identification of potential impacts on businesses ABS data and other data as referenced provide insights into the distribution of businesses

Table 3-3 provides information on the reliability of data used in the SIA.

Table 3-3: Data quality summary

Data type/set	Source	Currency	Reliability	Uncertainties
Demographic data	ABS Census of Population and Housing	2016	Good. Minor variances in totals due to ABS rounding procedures Indigenous people traditionally under-represented in Census (~10%)	Change since 2016, particularly in relation to the effects if drought
Population and housing Projections	Queensland Government Statistician's Office	2016	Good	Effect of newly proposed projects and economic trends on Projections
Housing data	ABS Census of Population and Housing SQM Research	2018	Good	Effect of cumulative impacts and economic trends on housing markets
Public Health Information Development Unit (PHIDU)	ABS Census of Population and Housing and other sources as referenced	Variable, as referenced	Variable, as referenced	Local relevance of modelled estimates
Social infrastructure provision	Stakeholder feedback and various research sources	2018	Good, verified in stakeholder engagement	Potential for gaps in capacity data
Labour force	Department of Jobs and Small Business - Labour Market Portal	2018	Good, but subject to seasonal fluctuations	Under-representation of rural unemployment
Research references	As referenced	Various	Variable, as referenced	As specified in each source

3.5 Integration with EIS findings

Changes to the biophysical environment, infrastructure or land use may result in social impacts including impacts on amenity, health, safety or sense of place. The SIA integrates the relevant findings of EIS technical reports as shown in Table 3-4. The SIA refers to mitigation measures identified Chapter 22: Outline Environmental Management Plan of the EIS, but does not replicate strategies which are detailed elsewhere, e.g. noise and air quality mitigation measures.

Table 3-4: Links to EIS Findings

Impact area	Key findings	EIS Section	SIA Section
Land use and tenure	<ul style="list-style-type: none"> Existing and proposed land use and planning designations Properties to be acquired 	Chapter 7	7.1.1, 7.1.2, 7.5.1
Cultural heritage	<ul style="list-style-type: none"> Impacts on non-indigenous cultural heritage 	Appendix W	7.1.8
Economic impact assessment	<ul style="list-style-type: none"> Economic impacts 	Appendix V	7.2.1, 7.2.3, 7.5.1, 7.5.4
Stakeholder engagement	<ul style="list-style-type: none"> Outcomes of Project and EIS engagement are considered in SIA, and SIA engagement results are considered in EIS 	Appendix C	6.1, 7.1 – 7.5, 8.2-8.6
Landscape and Visual Amenity	<ul style="list-style-type: none"> Impacts on visual amenity and landscapes 	Appendix I	7.1.5, 7.1.8
Air quality	<ul style="list-style-type: none"> Assessment findings in relation to amenity and health 	Appendix O	7.1.4, 7.4.3
Noise and vibration	<ul style="list-style-type: none"> Assessment findings in relation to amenity and health 	Appendices S (Construction) and T (Operation)	7.1.4, 7.4.3
Land resources	<ul style="list-style-type: none"> Potential for contaminated land to be disturbed or created 	Chapter 8	7.4.7
Traffic, transport and access	<ul style="list-style-type: none"> Changes to traffic network and travel safety 	Appendix X	7.1.6, 7.4.7
Surface water quality	<ul style="list-style-type: none"> Changes to surface water quality 	Appendix P	7.4.6
Hydrology and flooding	<ul style="list-style-type: none"> Changes to flooding risks 	Appendix Q1	7.4.5
Terrestrial ecology	<ul style="list-style-type: none"> Impacts on biosecurity 	Appendix J	7.4.7
Groundwater	<ul style="list-style-type: none"> Changes to groundwater levels affecting water access 	Appendix R	7.4.6
Impacted properties	<ul style="list-style-type: none"> Number and nature of land acquisitions 	Appendix F	7.1.2, 7.5.1
Outline environmental management plan	<ul style="list-style-type: none"> Management measures of relevance to social impacts 	Chapter 22	Various

3.6 Cumulative social 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 impacts of the adjacent Inland Rail projects – NS2B and G2H, along with other ‘state significant’ projects planned, or being constructed or operated at the time the TOR were finalised (November 2018).

- The potential area of influence has been identified with respect to potential spatial and temporal impacts. The assessment commenced with development of:
- A list of applicable projects and operations for consideration in the cumulative social impact assessment, including major projects in the Project region and major rail projects in South East Queensland
- A figure showing the Project’s areas of spatial and social influence, and its overlap with relevant projects or operations (refer Chapter 21: Cumulative impacts of the Border to Gowrie Project EIS)

- 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 evaluating their significance.

A review of other projects' EISs, relevant literature and qualitative analysis enabled potential cumulative impacts at the local and regional levels to be identified. Finally, cumulative impacts were considered in evaluating the significance of social impacts and benefits, using the assessment matrix (likelihood and consequence) from the NSW SIA Guidelines (refer Table 9-1). Collaborative strategies to address cumulative impacts have been included in the SIMP.

3.7 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 social impact management sub-plans addressing community and stakeholder engagement, workforce management, housing and accommodation, local business and industry content, and health and community well-being. The process for SIMP development included:

- Stakeholder engagement to identify stakeholders' suggestions about mitigation measures
- Consideration of ARTC's design responses and commitments to Project benefit enhancement
- Designing additional mitigation, management and enhancement measures
- Developing performance indicators and a monitoring and reporting framework to support adaptive management of social impacts.

3.8 Risk assessment

A two-stage risk assessment was undertaken. Firstly, the impacts and benefits identified in Section 7 were summarised, and their likelihood and consequence were evaluated using a social risk matrix (refer Section 9), with reference to:

- Assessments of environmental impacts (as referenced in Section 3.5) and application of management measures provided in the Outline Environmental Management Plan (Chapter 22 of the EIS)
- Social baseline characteristics e.g. employment rates, rural amenity and access to social infrastructure (as detailed in Section 5)
- Stakeholders' inputs on how they expected the Project would affect their communities or households (as detailed in Section 6)
- ARTC's commitments with respect to working with stakeholders and enhancing Project benefits (summarised in Sections 8.2 to 8.6).

The effectiveness of mitigation measures identified in Section 8 was then considered to assess the expected change in the likelihood of impacts and benefits occurring, and/or a change in their consequence. This process identified residual risks, which are summarised in Section 10. The adequacy of mitigation and management measures is discussed in Section 8.1.2.

3.9 Limitations

The findings of this report are based on the information available to date. Following Project approval, the Project will undergo a detail design phase, during which components such as level crossing designs, road re-alignments and construction methodologies will be refined. ARTC's Principal Contractor may also suggest innovations which change the construction methodology. Should the final design and construction methodology differ from the current information available, social impacts may vary.

Uncertainties include the full number of partial and full acquisitions required to accommodate construction, and the number of properties to be acquired to mitigate unacceptable noise impacts. This assessment includes assumptions about the number of acquisitions required based on the results of ARTC's engagement with directly affected landowners (those who own land which would be acquired to accommodate the Project), and assessment of impacted properties as detailed in the Border to Gowrie EIS: Appendix F: Impacted Properties (refer Section 7.1).

As the construction and operation of new freight rail lines is uncommon, there is little to no evidence on which to draw regarding social impacts such as changes to property values, resilience to construction noise and the extent to which changes to road networks may affect tourism or other businesses. Such uncertainties are reflected in relevant sections of this report.

At the time that the SIA was being completed, uncertainties were emerging regarding changes to social and economic conditions in South East Queensland and the broader Australian community as the result of the COVID-19 pandemic. Potential changes to social baseline conditions in the SIA study area include:

- Increased unemployment, resulting in increased availability of labour to the Project and other projects considered as part of the cumulative social impact assessment
- Changes to labour mobility, which in the short term may be constrained, and in the longer term may increase as specific industries and regions recover from changes to economic conditions
- Loss of the viability of small businesses, with the retail, accommodation and tourism sectors among those likely to be affected
- Potential to decrease households' incomes, savings or asset value, leading to the potential for increased disadvantage
- Changes to the capacity of health, police and ambulance services due to the need for services to respond to the pandemic during the pre-construction or construction period
- Increased anxiety levels and changes to mental health, with an increased need for mental health services
- Increased service capacity as the result of government and community responses to the pandemic, e.g. investment in training or mental health services, which may or may not be of adequate capacity to respond to social and economic changes
- Changes to community resilience, cohesion and/or liveability due to physical distancing measures and/or other unknown changes to social dynamics.

Such changes to the social baseline could change the way that communities experience the social impacts and benefits of major projects, e.g. the availability of employment and business opportunities will become critical to community and economic recovery, and changes to community resilience (either positive or negative) or mental health may affect the way people experience Project impacts.

ARTC will review the available data on key indicators such as labour and housing availability, and engage with TRC and GRC during the detail design phase to discuss changes to social conditions in the SIA study area. Any need for a review of the significance of social impacts and benefits or mitigation measures in light of social and economic changes resulting from the COVID-19 pandemic will be agreed with the OCG prior to construction.

If Queensland Health directives require COVID-19 safety plans or specific health management provisions at the time that pre-construction or construction are occurring, ARTC will develop a COVID-19 Safe Industry Plan or similar, in consultation with Queensland Health, to minimise the risk of contributing to a spread of the infection and develop risk mitigation measures to limit any Project demands on local health services.

4. Project description and SIA scope

This section describes the Project, the SIA impact assessment area, SIA stakeholders and the scope of potential impacts and opportunities considered.

4.1 Project description

The Project is a 216.2 km section of the proposed Inland Rail freight route connecting metropolitan Melbourne to Brisbane. The objectives of the Project are to:

- Provide a combination of upgraded and new rail infrastructure to enable trains using the Inland Rail corridor to travel between the QLD/NSW border near Kurumbul to Gowrie
- Provide connection between adjoining sections of Inland Rail, being NS2B to the south and G2H to the northeast
- Minimise the potential for adverse environmental and community impacts.

The Project's indicative timeframe is:

- 2020 - 2021: detail design, planning and approvals
- 2021: pre-construction and land acquisition
- 2021 - 2026: construction
- 2026: Project commissioning.

The Project has a design life of 100 years.

The intended land use for the Project is rail and associated infrastructure, including road realignments, grade separations and ancillary infrastructure. Parts of the existing brownfield rail corridor do not currently comply with ARTC's design requirements. In such instances, the Project alignment may not be wholly located within the existing rail corridor. It is anticipated that ARTC would be granted a sub-lease over the gazetted rail transport corridor to manage the movement of freight in accordance with the *Transport Infrastructure Act 1994 (Qld)* (TI Act). This will be confirmed following execution of the inter-governmental agreement between the Commonwealth and the Constructing Authority.

ARTC is responsible for providing Inland Rail's trunk infrastructure. Train services and rolling stock will be provided by third party operators.

Elements that are future opportunities facilitated by Inland Rail but are not included as part of the Project include:

- Complementary infrastructure, such as metropolitan and regional freight terminals
- Upgraded fleet/rolling stock
- Complementary land use and freight precinct developments.

The following subsections describe the Project nature and scale as relevant to stakeholders and the social environment.

4.1.1 Pre-construction

Pre-construction activities are required to enable construction of permanent infrastructure components of the Project to commence. These activities are expected to include:

- Land acquisition
- Obtaining additional environmental and planning approvals

- Surveys and geotechnical investigations
- Establishment of access tracks
- Utility/service relocations
- Relocation or protection of Queensland Rail assets
- Installation of fauna and pest exclusion fencing
- Establishment of site compounds and construction accommodation.

4.1.2 Construction

ARTC anticipates that a construction contract could be awarded by the end of 2020, with completion of construction targeted for 2026, followed by a six-month testing and commission phase. Construction activities would include:

- Site set out and pegging
- Establishment of laydowns and compounds, including vehicle workshops and washdown facilities as required
- Clearing – utilising dozers, chainsaws, excavators, trucks and similar equipment.
- Bulk earthworks – major cut to fill operations include the winning of suitable construction material from sections of cut along the railway alignment or from borrow areas external to the site
- Supply, delivery and installation of ballast and concrete sleepers
- Construction of drainage facilities – cut off drains, table drains and culvert structures
- Installation of rail track and other items of rail infrastructure using rail mounted equipment
- Construction and installation of concrete railway bridges and culverts.
- Installation of railway signalling and communications equipment
- Construction of railway maintenance facilities, administration and amenities buildings, car and truck parking and bulk fuel provisioning and storage areas
- Other miscellaneous activities to complete the works.

General construction activities will be undertaken from Monday to Friday – 6.30 am to 6.00 pm and Saturday from 6.30 am to 1.00 pm, with no work planned on Sundays or public holidays.

Night works (where they comply with the Performance Criteria set out in the Chapter 22: Outline Environmental Management Plan of the EIS) would be undertaken Monday – Friday, 6.00 pm to 10.00 pm and Saturday 1.00 pm to 5.00 pm.

Track possessions may occur on a 7 day/ 24-hour calendar basis subject to agreement with Queensland Rail (QR). There may be circumstances where work outside the above standard hours will be required for example, delivery of materials. Work outside standard hours will only be undertaken where consultation with the local community is demonstrated.

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.

Opportunities for beneficial re-use of construction facilities, such as laydown areas and non-resident workforce accommodation, will be investigated through consultation with local governments and relevant stakeholders. Where a beneficial re-use cannot be identified, the construction facilities will be progressively decommissioned, with removal of temporary and demountable infrastructure, and rehabilitated (refer EIS Chapter 5: Project description for more detail).

4.1.3 Operations

Following construction, testing and commissioning of the rail line and communication and signalling systems will be undertaken. Construction sites, compounds and access routes would be rehabilitated prior to construction commencing.

Inland Rail 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 would have a design life of 100 years. The Project will initially accommodate 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. Train services will be provided by a variety of operators and may include grain, bulk freight, and other general transport trains.

It is estimated that once operational, the Project will involve an annual average of about 14 train services per day in 2026. This is likely to increase to an average of 20 trains per day in 2040, and up to 25 per day during peak operational periods. Annual freight tonnages will increase in parallel, from approximately 14 million tonnes per year in 2026 to 19 million tonnes per year in 2040.

Operational processes will include:

- 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

Train speeds will be up to 115 kph.

Standard ARTC maintenance activities will be undertaken during operations, typically, 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.

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. Fencing will not be provided across flood-prone areas due to debris entrapment risk. 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.

Fauna fencing will be provided to maintain effective fauna movement across the rail corridor. ARTC has commenced consultation with the GRC to determine fencing requirements in relation to the wild dog check fence and the rabbit fence located within the Goondiwindi LGA.

4.1.4 Workforce and accommodation

Pre-construction activities are anticipated to require a small number of personnel over a six month period.

For the construction period, the size and composition of the workforce will vary depending on the construction activities being undertaken and the staging strategy adopted. The construction workforce for the Project is estimated to peak at approximately 950 full time equivalent (FTE) personnel between weeks 50 and 70. The average number of full-time equivalent workforce on site across the full construction period is approximately 400 personnel.

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 construction workforce is expected to be drawn predominantly from South East Queensland, including personnel from potentially impacted communities. Construction personnel who originate from beyond a safe daily driving distance to the Project will stay locally whilst rostered on. Temporary non-resident workforce accommodation facilities are proposed near Millmerran, Inglewood and Yelarbon, each with a capacity of up to 300 beds.

Workforce recruitment will be the responsibility of the Principal Contractor engaged by ARTC to construct the Project. Local resident and Indigenous workforce targets will be established by ARTC and passed on to the Principal Contractor.

Once operational, a workforce of approximately 10-15 FTE is expected for the Project's operation and ongoing maintenance, including:

- Minor maintenance works, such as bridge inspections, culvert cleanout, sleeper replacement, rail welding, rail grinding, ballast profile management, track tamping and clearing /slashing the rail corridor
- Major periodic maintenance such as ballast cleaning, formation works, reconditioning of track, adjustment, turnout replacement and correction of track level and line.

The Project's workforce may be shared with adjacent projects i.e. NS2B and G2H, with potential for a higher number of operational personnel servicing two or more projects.

A portion of the operational workforce may be drawn from communities within a safe daily driving distance, with little potential for change to population or housing demand.

The Project is expected to be operational for in excess of 100 years. The design life of structures is 100 years to support this operational objective. The decommissioning of the Project cannot be foreseen at this point in time and has not been discussed in the SIA.

4.1.5 Supply opportunities

The Project will require construction supplies, including borrow material, ballast material, pre-cast concrete, concrete sleepers and turnout panels, steel, fencing materials, electrical components, fuel and consumables. A range of services will also be required during construction, including transport and logistics, fencing, electrical reticulation and water reticulation. ARTC has a commitment to local content in its supply chain, as discussed in Sections 7.5.3 and 8.6.3.

Operational supplies may include ballast material, and services and materials for maintenance of the rail corridor, bridges, fences, crossings, and rehabilitation (e.g. landscaping and planting).

4.1.6 Project elements and operations

Project elements with potential to generate social impacts and benefits are summarised in Table 4-1.

Table 4-1: Project elements of relevance to the social environment

Key elements	Detail	Potential impact areas
CONSTRUCTION		
Construction employment	<ul style="list-style-type: none"> ■ An average of 400 FTE personnel over four years with a peak of approximately 950 FTE construction personnel. 	<ul style="list-style-type: none"> ■ Employment and training opportunities ■ Other industries or communities' access to skilled labour

Key elements	Detail	Potential impact areas
Workforce accommodation	<ul style="list-style-type: none"> Temporary non-resident workforce accommodation would be located near Millmerran, Inglewood and Yelarbon Each non-resident workforce accommodation facility is assumed for the purpose of assessment to have a capacity of up to 300 people. 	<ul style="list-style-type: none"> Temporary population influx Temporary demands for social infrastructure Amenity of towns and properties Community cohesion Community safety Privacy and feelings of security
Corridor and associated works construction	<ul style="list-style-type: none"> Establishment of approximately 145 km of new rail corridor and utilisation of approximately 71.2 km of existing rail corridor 216.2 km of new single-track railway, consisting of 7.0 km of standard gauge rail and 209.2 km of dual gauge rail Five crossing loops, each 2,200 m in length Significant embankments and cuttings along the length of the alignment Identification, establishment and use of approximately 12 borrow pits and use of approximately seven existing quarries for the sourcing of construction materials Construction of temporary site offices Construction workspace and access roads 39 track laydown areas and 35 bridge laydown areas to accommodate storage and distribution of construction materials and facilitate construction activities 	<ul style="list-style-type: none"> Connectivity of road network Community cohesion Agricultural operations Sense of place Residential amenity Privacy and feelings of security Travel behaviour Health Access to water resources
Roadworks	<ul style="list-style-type: none"> Road realignments, road closures, construction of grade-separated and level crossings (refer EIS Chapter 5: Project description for more detail) 	<ul style="list-style-type: none"> Road network access Property access Connectivity Traffic safety
Crossing construction	<ul style="list-style-type: none"> Rail interfaces with public roads, including: <ul style="list-style-type: none"> 16 grade separated crossings 17 active public road level crossings 20 passive public road level crossings 23 consolidation, relocation or diversions of roads Interfaces with 62 private, formed access roads or tracks and 153 unformed access roads or tracks The permanent footprint traverses 34 easements and the temporary footprint traverses 43 easements. 	<ul style="list-style-type: none"> Property access Connectivity between and across properties Property management Stock and equipment movements
Bridge construction	<ul style="list-style-type: none"> Construction of 34 new bridge structures to accommodate topographical variation, crossings of waterways and other infrastructure. Bridges include: <ul style="list-style-type: none"> 11 rail-over-road bridges 3 road-over-rail bridges (Cunningham Highway, Gore Highway and Linthorpe Road) 20 rail-over-watercourse bridges Construction of culverts and viaducts to enable drainage under the rail line 	<ul style="list-style-type: none"> Road network access Connectivity Rural character Noise Flooding

Key elements	Detail	Potential impact areas
Project procurement	<ul style="list-style-type: none"> A range of construction supplies and services will be required, some of which will be sourced from local and regional businesses 	<ul style="list-style-type: none"> Local business supply
OPERATIONS		
Freight rail operation	<ul style="list-style-type: none"> Double-stacked container freight trains of up to 1,800 m length, with potential for future accommodation of freight trains of 3,600 m 	<ul style="list-style-type: none"> Residential amenity Rural character Tourism values Community safety Regional development Health and well-being
Operational employment	<ul style="list-style-type: none"> Approximately 10-15 personnel 	<ul style="list-style-type: none"> Local employment and training opportunities
Level crossing operation	<ul style="list-style-type: none"> The Project will have 17 active (secured) road level crossings and 20 passive road level crossings of public roads, as well as crossings on private roads as listed above. 	<ul style="list-style-type: none"> Connectivity Emergency services access Traffic safety and travel times Rural character Agricultural movements
Bridge operation	<ul style="list-style-type: none"> Bridge structures may enable noise or dust to travel beyond the immediate surrounds of the Project 	<ul style="list-style-type: none"> Residential amenity - noise, visual amenity and/or air quality
Crossing loop operation	<ul style="list-style-type: none"> Crossing loops would be located near: <ul style="list-style-type: none"> Yelarbon – Ch 16.3 km to Ch 18.5 km (future-proofed to Ch 20.3 km) Inglewood – Ch 50.2 km to Ch 52.4 km (future-proofed to Ch 54.2 km) Kooroongarra – Ch 89.2 km to Ch 91.4 km (future-proofed to Ch 93.2 km) Yandilla – Ch 129.8 km to Ch 132.0 km (future-proofed to Ch 129.3 km and to Ch 133.3 km) Broxburn – Ch 174.9 km to Ch 177.1 km (future-proofed to Ch 178.9 km). 	<ul style="list-style-type: none"> Residential amenity - noise Connectivity
Track maintenance	<ul style="list-style-type: none"> Regular track maintenance would be performed 	<ul style="list-style-type: none"> Noise Employment

4.1.7 Potential for cumulative impacts

The Project is likely to be constructed during the same period as other major projects in the Goondiwindi and Toowoomba LGA, so cumulative social impacts are likely. At the southern end the Project would connect to the NS2B Inland Rail Project, and in the east, to the G2H Inland Rail Project. Cumulative impacts on amenity and/or connectivity may occur for communities in the Goondiwindi and Toowoomba regions from 2021 to 2026, as the result of the construction and operation of the three Inland Rail projects. Localised cumulative impacts on connectivity or amenity are possible if the Project is constructed at the same time as one or more of several projects in the SIA impact assessment area, and regional and inter-regional impacts are also possible. Potential cumulative social impacts are discussed in Section 7.6.

4.2 SIA impact assessment area

The SIA impact assessment area was identified by considering the:

- Project's location and activities in relation to population centres and rural localities
- SIA Guideline's requirement to identify potentially impacted communities
- Likely distribution of potential social impacts and benefits at local and regional levels
- Results of ARTC consultation prior to commencement of the draft EIS
- Location of other relevant projects which may contribute to cumulative social impacts.

The geographic reach of impacts can vary depending on the particular Project element being assessed. For example, impacts on amenity may occur for people living closest to the Project, whilst impacts such as housing demands or changes to access to facilities may be experienced in nearby communities, and impacts on health and emergency services may be experienced at the regional level.

The SIA discusses social impacts for different geographies, including:

- The Project footprint as described in Section 4.2.1
- Potentially impacted communities as described in Section 4.2.2
- The Goondiwindi and Toowoomba LGAs, which represent the SIA impact assessment area as a whole.

The SIA impact assessment area is shown in Figures 4-1a to 4.1d.

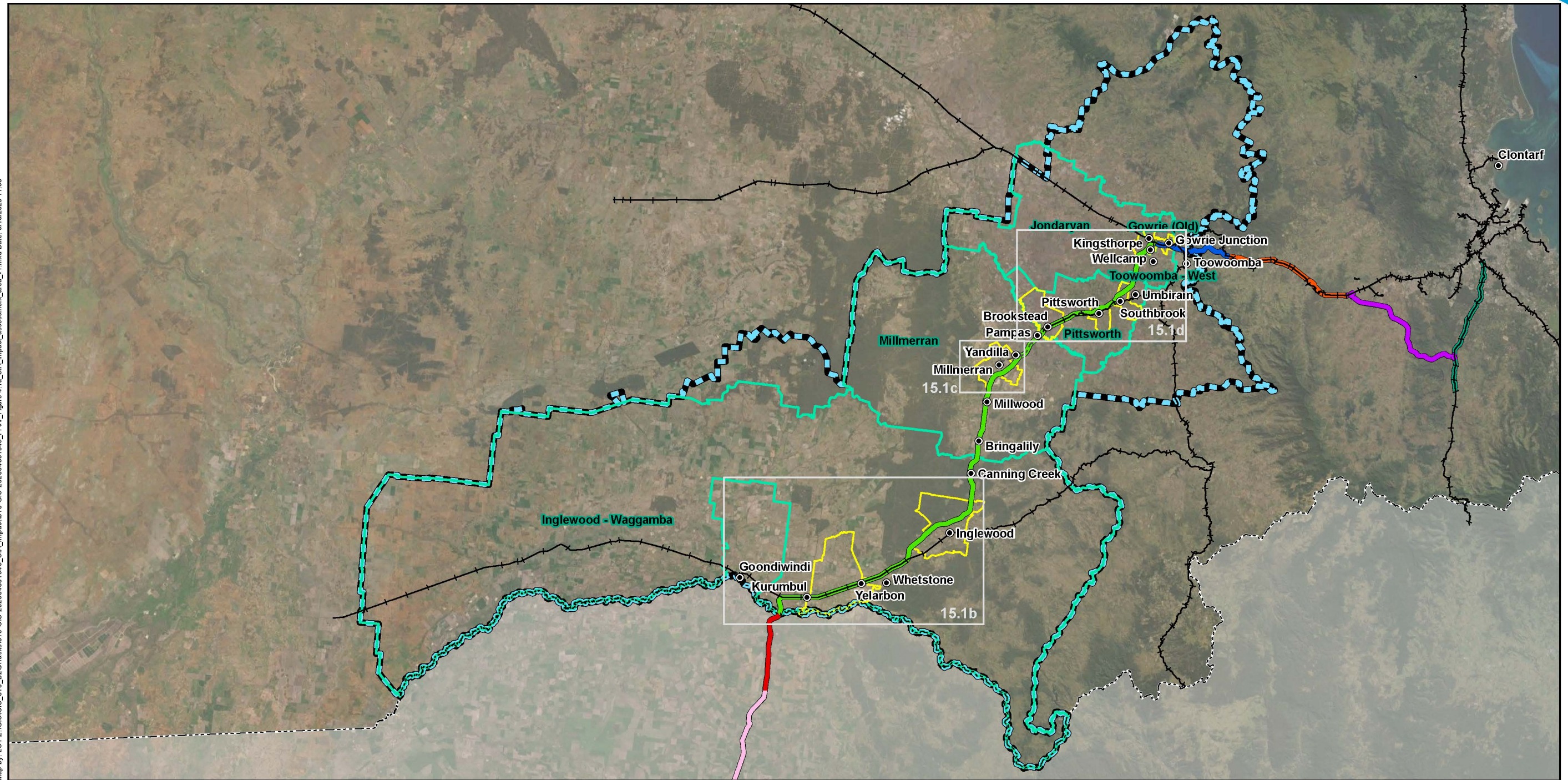
The impact assessment area for assessment of the Project's economic impacts and benefits (refer Appendix V: Economic Impact Assessment of the EIS (KPMG, 2020)) equates to the SIA impact assessment area, i.e. the Goondiwindi and Toowoomba LGAs. The broader regional economic catchment being the Darling Downs – Maranoa Statistical Area 4 (SA4) is also considered in Appendix V of the EIS.

4.2.1 Project footprint

The 'Project footprint' refers to the final rail corridor and all ancillary activities for construction and operation of the Project, i.e.:

- Permanent footprint: land required to accommodate rail infrastructure, road infrastructure, earthworks, rail maintenance access roads and drainage
- Temporary footprint: land required to accommodate construction phase activities, facilities and movements.

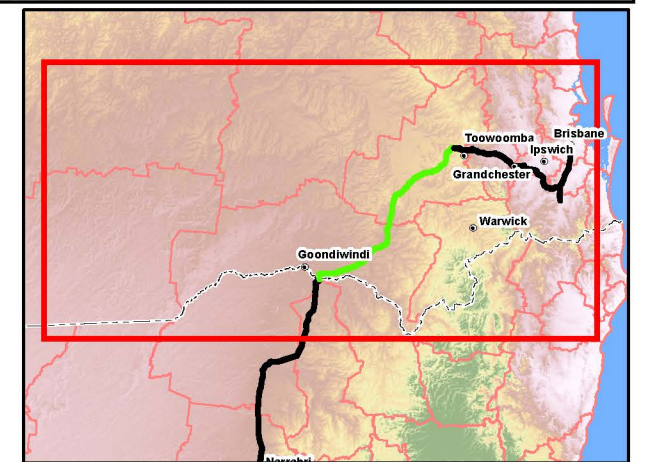
Map by: LCT Z:\GIS\GIS_310_B2\GIS\GIS-2020\4301045_SIA_impact\310-GIS-2020\4301045_FF\IV_Figure 4.1a_SIA_impact_assessment_area_v1.mxd Date: 5/13/2020 11:53



Legend

- Localities
- Narrabri to North Star alignment
- North Star to NSW/QLD border alignment
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Helidon to Calvert alignment
- Calvert to Kagaru alignment
- Kagaru to Acacia Ridge/Bromelton alignment

- Existing rail (operational)
- Existing rail (non-operational)
- NSW/QLD border
- State Suburb (SSC) boundary
- SA2 boundary
- ▨ SIA Study Area



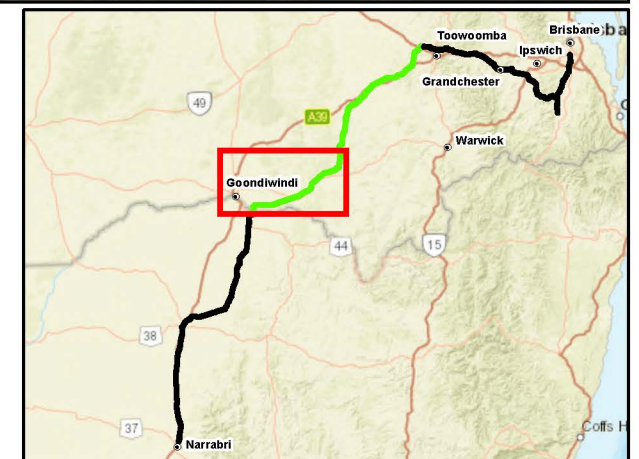
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0 10 20 30 40 50km

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Legend

- 5 Chainage (km)
- Localities
- North Star to NSW/QLD border alignment
- Border to Gowrie alignment
- Existing rail (operational)
- NSW/QLD border
- State Suburb (SSC) boundary
- SA2 boundary
- SIA Study Area
- Local Government Areas



A3 scale: 1:270,000
 0 2 4 6 8 10km



Future Freight
 Integrating Community, Environment and Engineering

Issue date: 13/05/2020 Version: 1
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

Figure 4.1b:

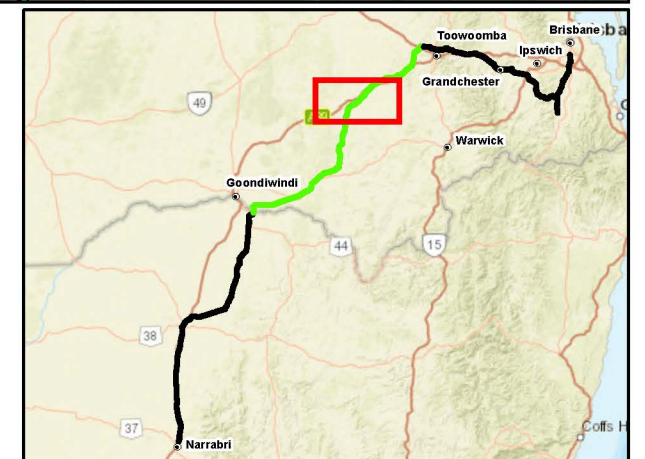
SIA impact assessment area - southern section

Map by: LCT Z:\GIS\GIS_310_B2\GIS\Tasks\GIS-2020\4301045_SIA_Impact\310-B2-GIS-2020\4301045_FF\IV_Figure 4.1b_SIA_Impact_assessment_area_v1.mxd Date: 31/05/2020 14:42



Legend

- | | |
|---------------------------------|-----------------------------|
| 5 Chainage (km) | State Suburb (SSC) boundary |
| Localities | SA2 boundary |
| Border to Gowrie alignment | SIA Study Area |
| Existing rail (operational) | Local Government Areas |
| Existing rail (non-operational) | |



A3 scale: 1:180,000
0 1 2 3 4 5km



Future Freight
Integrating Community, Environment and Engineering

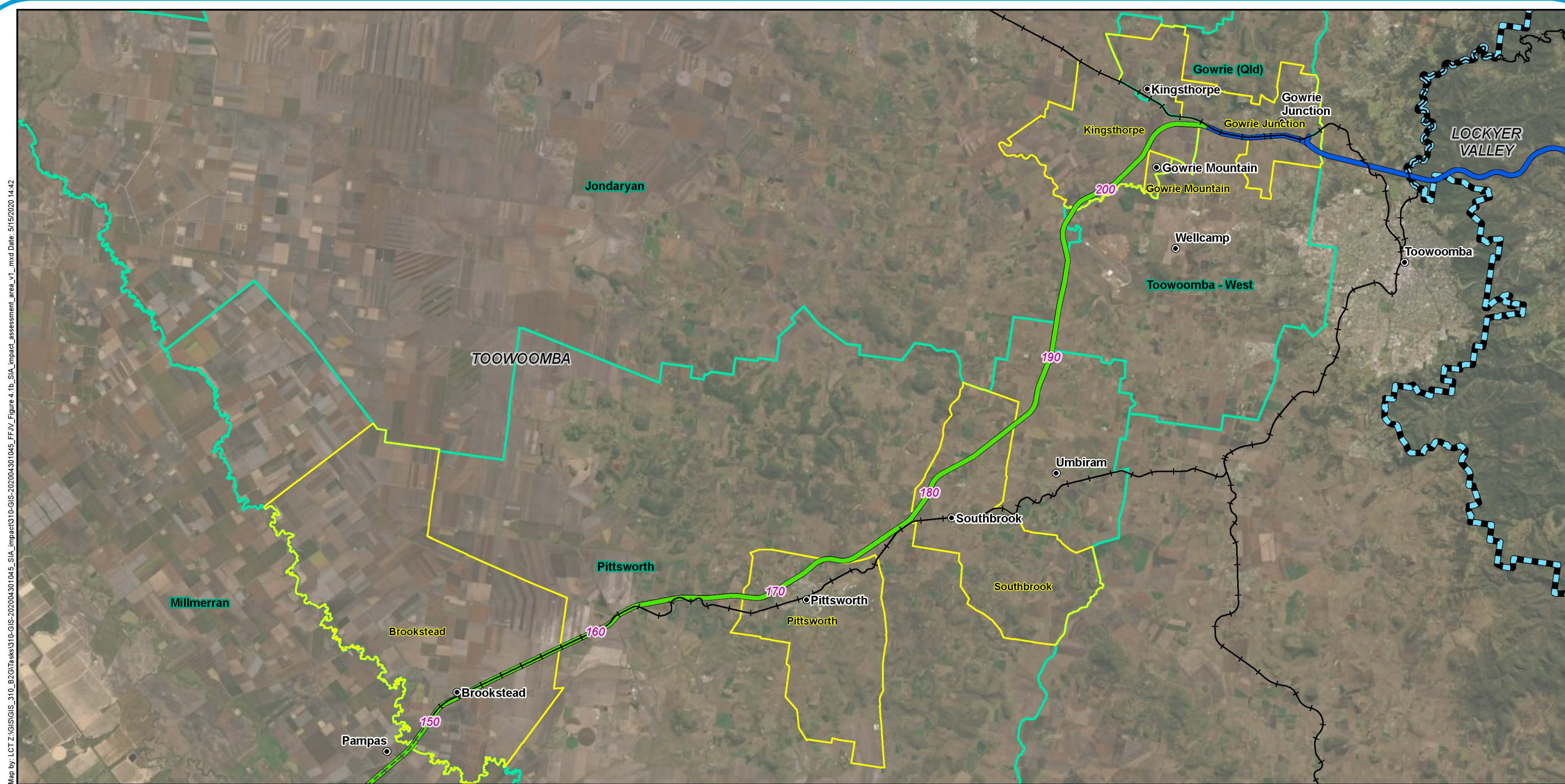
Issue date: 13/05/2020 Version: 1
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

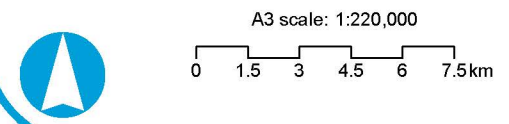
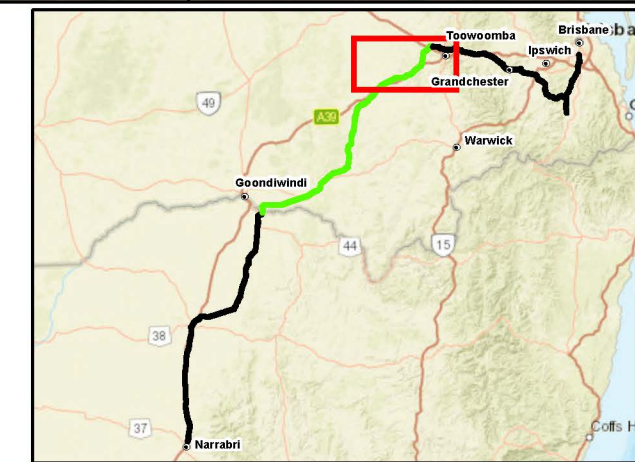
Figure 4.1c:

SIA impact assessment area - mid section

Map by: LCT Z:\GIS\GIS_310_B2\GIS\GIS-2020\4301045_SIA_Impact\310-GIS-2020\4301045_SIA_Impact_assessment_area_v1.mxd Date: 5/15/2020 14:42



- Legend**
- 5 Chainage (km)
 - Localities
 - Border to Gowrie alignment
 - Gowrie to Helidon alignment
 - Existing rail (operational)
 - Existing rail (non-operational)
 - State Suburb (SSC) boundary
 - SA2 boundary
 - SIA Study Area
 - Local Government Areas



The SIA includes analysis of key social characteristics in the Project footprint, and the potential for impacts on land holders and other community members within and adjacent to the Project footprint.

4.2.2 Potentially impacted communities

The Project's impacts on local communities will depend primarily on the physical relationship of the Project to towns and other land uses. 'Potentially impacted communities' include towns and rural areas traversed by or near the Project footprint, where there is potential for impacts on e.g. land use, environmental qualities (such as the noise environment or air quality), or the amenity of towns and rural residents.

The Project extends in a generally northeast direction:

- Through rural Kurumbul and the town of Yelarbon, with non-resident workforce accommodation proposed to be located near Yelarbon
- Through the rural locality of Whetstone and on the fringe of the Whetstone State Forest
- Approximately 2.5 km north of the town of Inglewood, extending into Bringalily State Forest. Non-resident workforce accommodation is proposed to be located near Inglewood
- Through the Bringalily, Millwood and Clontarf rural localities
- Approximately 3 km southeast of the town of Millmerran, with non-resident workforce accommodation proposed to be located in Turallin, northwest of Millmerran
- Through the rural localities of Canning Creek, Yandilla and Pampas, and across the Condamine River floodplain
- Through the town of Brookstead
- Through the rural locality of Yarranlea
 - Along the northern outskirts of the town of Pittsworth and then to approximately 1 km west of the town of Southbrook
- Through the rural localities of Umbiram, Athol and Westbrook. The Westbrook township is approximately 10 km to the east of the Project footprint with no potential for specific impacts
- Along the border of the rural locality of Biddeston and Wellcamp, to approximately 900 m west of Toowoomba Wellcamp Airport
- Approximately 700 m west of the rural living settlement of Gowrie Mountain and 1 km south of the town of the town of Kingsthorpe
- Approximately 1 km southwest of the urban area of Gowrie Junction and within the rural locality of Charlton.

The population of each community and locality as defined by the corresponding State Suburbs (SSCs), is shown in Table 4-2.

Section 5 describes the characteristics of towns and rural localities as the basis for understanding the consequence of social changes resulting from the Project. It includes select demographic indicators for Statistical Area Level 1 (SA1s) within and near the Project footprint, and detailed socio-economic data for towns, urban settlements and the Goondiwindi and Toowoomba LGAs. Detailed socio-economic data are not provided for rural localities as the consistency of data is constrained by their small populations and Australian Bureau of Statistics' (ABS) confidentiality protocols, however their characteristics are captured as part of the SA1 and SA2 level data, and as part of the SIA impact assessment area as a whole. Definitions of the ABS's statistical geographies are provided in Section 4.2.4.

Table 4-2: Potentially impacted communities

State suburbs	Population 2016
Towns and urban settlements	
Yelarbon	367
Inglewood	955
Millmerran	1,565
Brookstead	224
Pittsworth	3,293
Southbrook	601
Gowrie Junction	2,115
Gowrie Mountain	229
Kingsthorpe	1,867
Westbrook	3,879
Rural localities	
Kurumbul	46
Whetstone	65
Canning Creek	5
Bringalily	83
Millwood	23
Clontarf	25
Pampas	62
Umbiram	139
Athol	134
Biddeston	284
Wellcamp	295
Yarranlea	90
Charlton	120

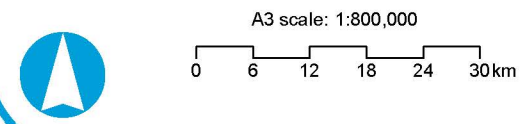
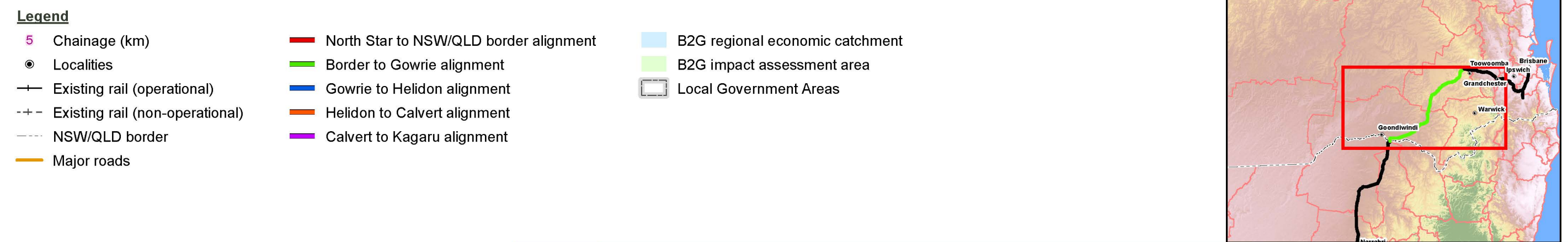
Source: ABS Census 2016a: General Community Profiles for State Suburbs

4.2.3 Local government areas

The Project is within the Goondiwindi and Toowoomba LGAs, which represent the SIA impact assessment area as a whole. The Project crosses the LGA boundaries approximately 25.5 km northeast of Inglewood.

The Project is located within the broader Darling Downs-Maranoa Statistical Area 4s (SA4) which is relevant with regard to the regional workforce.

Potential benefits for other regional communities and/or the State of Queensland relate primarily to the Project's potential to catalyse regional development and economic benefits. Economic assessment of the Project is provided in Appendix V of the EIS (KPMG, 2020).



Border to Gowrie
Figure 4.2:
SIA impact assessment area and Darling Downs - Maranoa SA4

4.2.4 Statistical geography

ABS statistical areas used in this report (ABS.2016) include:

- Statistical Areas Level 1 (SA1) with an average population size of approximately 400 people
- SSCs which aggregate one or more SA1s, and approximate gazetted localities (with no average population size available)
- Statistical Areas Level 2 (SA2) which aggregate two or more SA1s and have an average population of about 10,000 people, and are then aggregated to form Statistical Areas Level 3 (not used in this report)
- Statistical Areas Level 4 (SA4) which aggregate SA3s, are the largest sub-State regions in the Australian Statistical Geography Standard (ASGS), are designed for the output of ABS Labour Force Survey data, and generally have a population of at least 100,000 persons.

The social baseline includes analysis of key demographic characteristics in the Statistical Area 1 areas (SA1s) within which the Project is located, and detailed demographic analysis for nearby towns and the two LGAs which constitute the SIA impact assessment area.

ABS Statistical Areas which correspond to local towns (including the urban settlement of Gowrie Mountain) and the two LGAs are shown in Table 4-3. Where specific data are not available for suburbs, they have been provided for the relevant Statistical Area 2 (SA2s). Analysis of labour force data also references the broader labour force region as represented by the of Darling Downs-Maranoa SA4. The State of Queensland is used as a comparator for demographic indicators.

Table 4-3: Statistical geography of the Project

Statistical Area	Area	Name	Land area (km ²)
Statistical Area 1 (SA1)	Project footprint	SA1s as show in Figure 5-1	
State Suburbs (SSC)	Potentially impacted towns	Yelarbon	441.8
		Inglewood	357.1
		Millmerran	143.6
		Brookstead	150.7
		Pittsworth	59.1
		Southbrook	65.8
		Kingsthorpe	53.7
		Gowrie Mountain	2.0
		Gowrie Junction	25.6
Statistical Area 2 (SA2)	Communities within the SIA impact assessment area	Gowrie	81.0
		Inglewood-Waggamba	17,515.6
		Jondaryan	2,130.3
		Millmerran	4,517.0
		Pittsworth	1,054.9
		Toowoomba-West	161.3
Local Government Area (LGA)	SIA impact assessment area	Goondiwindi	19,258.1
		Toowoomba	12,957.2
Statistical Area 4 (SA4)	Broader labour force region	Darling Downs-Maranoa	166,340.1
Queensland (State)	Comparator for demographic analysis	Queensland	185.3 million

Source: ABC Census 2016

4.3 Community survey inputs to SIA scope

The Inland Rail Border to Gowrie Project SIA Community Survey was undertaken from 7 November to 21 December 2018, to enable description of community values in the SIA impact assessment area and capture community views about potential Project impacts and benefits. The survey was promoted to residents in the SIA impact assessment area (as described in Section 6.3.1) and hosted online using the Survey Monkey platform, supported by hardcopy survey administration at Project Community Information Sessions during November 2018.

A total of 121 people returned completed community surveys during the six-week period. Of these, a total of 97 respondents provided input about how they expected the Inland Rail Project would affect local people, businesses and communities by rating their response to a series of value statements. This sample included 84 respondents from the Toowoomba LGA, seven from Goondiwindi LGA and six other respondents. The limited response from Goondiwindi LGA residents is expected to be due to the fact that the Project does not affect population centres other than Yelarbon, but also to cynicism within the local community about whether the Project will proceed.

Figure 4-3 presents the weighted average of their responses (using a scale of 1= strong negative effect; 2 = some negative effect; 3= no effect; 4=some positive effect; and 5=strong positive effect).

Of note, the average response rating to each value statement ranged between strong negative effect (1) and no effect (3). The lowest average rating of 1.8 was recorded in relation to:

- The amenity or enjoyment of towns or farms
- Housing or property use
- Community well-being.

The highest average response rating (2.5) was recorded in relation to industry and economic development, and employment and training, followed by local business (2.4).

Community surveys of this nature generally draw a larger response from people who oppose the Project or its location or have concerns about its potential impacts. The responses reflect fears that the Project will result in significant environmental or social impacts, and a lack of confidence that Project employment or supply opportunities will eventuate.

The community survey was undertaken early in the Project's design phase to inform scoping of social impacts. Some survey respondents noted that more information about the Project (e.g. the proposed alignment, structures, commercial use arrangements, employment and supply arrangements) was needed for them to determine the social impacts and benefits for their community. ARTC has undertaken extensive consultation with landowners, Traditional Owners, businesses, community members and organisations, and Queensland Government agencies during 2019 as part of the draft EIS process, as described in Section 6.1. SIA-specific engagement is described in Sections 6.2 to 6.3.

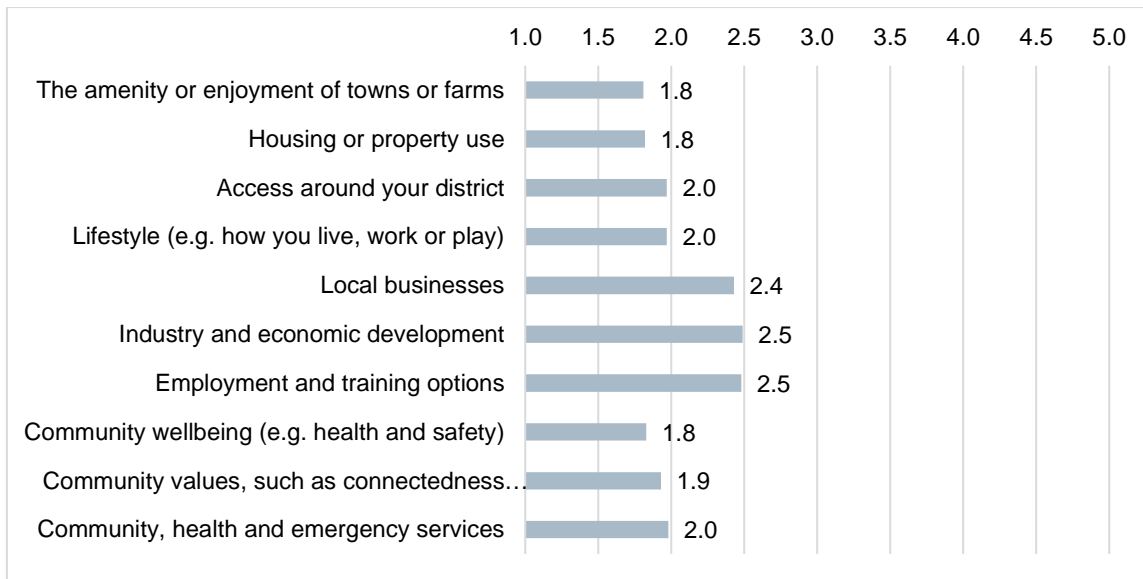


Figure 4-3: SIA impact assessment area survey respondents' ratings of Project social impacts and benefits

4.4 Project stakeholders

SIA stakeholder engagement commenced with identification of stakeholders and their interests, which included:

- Reviewing the outcomes of ARTC's stakeholder engagement to date
- Participation in community information sessions to identify stakeholders' interests and locations
- Desktop analysis of social infrastructure provision and management in potentially impacted communities and nearby regional centres
- Identification of Councils and Government agencies with an interest in the SIA.

SIA stakeholders, locations and key issues identified in consultation are shown in Table 4-4.

Table 4-4: Stakeholder Profile

Stakeholder Groups	Locations	Key Issues
Bigambul People	Native title determination area	<ul style="list-style-type: none"> ■ Engagement in EIS process ■ Availability of jobs for Bigambul People ■ Effects on cultural heritage sites and values ■ Bigambul People's existing workforce development and business development strategies ■ The need for cultural immersion training for all Project personnel working on Bigambul country ■ Potential for erosion during construction or operations to affect Country ■ Cultural water flows ■ Effects on physical fabric of shared cultural heritage

Stakeholder Groups	Locations	Key Issues
Western Wakka Wakka People	Native title claim area	<ul style="list-style-type: none"> Impact on native title interests or cultural heritage Land severance or changes to landscapes affecting cultural heritage values or sense of place Potential exacerbation of flooding impacts on native title interests Opportunity to improve Indigenous employment participation
Aboriginal Parties		<ul style="list-style-type: none"> Land severance or changes to landscapes affecting cultural heritage values or sense of place Cultural heritage management with endorsed Aboriginal parties Opportunity to improve Indigenous employment participation
Landowners in Project footprint	Yelarbon Inglewood Millmerran Brookstead Pittsworth Southbrook Kingsthorpe Gowrie Mountain Gowrie Junction Kurumbul Whetstone Canning Creek Bringalily Millwood Clontarf Yandilla Pampas	<ul style="list-style-type: none"> Acquisition of properties resulting in displacement of households Severance and disruption of agricultural properties Potential to exacerbate the extent or duration of flooding Impacts of property severance on families, employment and infrastructure Concern regarding the movement of cattle and machinery across the railway line - formal and informal crossings Decrease in amenity from noise or dust Loss of property amenity due to noise or dust Potential for deterioration of the local road network during construction Decrease in land values Potential for the changes to flooding patterns Noise, vibration, visual and connectivity impacts Potential for flooding patterns to affect farms, homes or environmental values
Landowners near Project footprint	Yarranlea Athol Umbiram Biddeston Wellcamp	<ul style="list-style-type: none"> Noise, vibration, visual and connectivity impacts on outdoor amenity Potential for flooding patterns to affect farms, homes or environmental values Traffic network connectivity Property values Condamine River floodplain crossing potential to increase flooding
Community members (including landowners) and groups		<ul style="list-style-type: none"> Impacts on connectivity as the result of road re-alignments or level crossings Potential for dust to impact on residential amenity or water tanks Changes to flooding patterns Impacts on property values or plans Safety, rail-related hazards and firefighting access Impacts on traffic safety during construction or operation Impacts on scenic values
TRC	All potentially impacted communities except Kurumbul, Yelarbon and Inglewood	<ul style="list-style-type: none"> Impacts of property severance on farmers and other landowners Potential for impacts on the amenity of residential communities and rural residential areas Effects of disruption to local roads and services

Stakeholder Groups	Locations	Key Issues
		<ul style="list-style-type: none"> Ensuring local communities benefit through employment and supply opportunities, and through legacy values
GRC	Kurumbul Yelarbon Inglewood	<ul style="list-style-type: none"> Short-term accommodation is in high demand Reduction in truck freight vehicles would be a distinct community benefit if it occurred Opportunity to get more local produce on the South Western Line Potential benefit for local communities and businesses i.e. workers, borrow puts, steel workers and fabrications. Implications for movement of machinery and stock across the rail alignment Impacts on access and community safety at level crossings Local employment opportunities and on-the-job training Opportunity to catalyse regional community benefit
Community and Government agencies, including education, health and community services	Toowoomba and Goondiwindi LGAs	<ul style="list-style-type: none"> Implications of Project for community mental health Limited resources in rural hospitals to cope with increased demand Existing mental health issues following the impacts of the floods Concern about how property severance will affect people
Police and emergency services	Toowoomba and Goondiwindi LGAs	<ul style="list-style-type: none"> Need for community rail safety awareness. Impacts to community safety and Project security risks associated with access to tracks, trespass, vandalism, accidental injury and theft. Early establishment of relationships with Queensland Police Service (QPS) and Queensland Fire and Emergency Services (QFES) to mitigate impacts on community safety and demands for service Potential for protest activity – a police resourcing issue Traffic safety issues with commuters who aren't familiar with the roads or rail crossings Wide load escorts are likely to require considerable resources Potential for increased calls for service Need to maintain access for Fire and Rescue Services around the Project footprint and to nearby communities
Businesses and business organisations	Toowoomba and Goondiwindi LGAs	<ul style="list-style-type: none"> Increased employment options desired Opportunity for local businesses to supply Project Potential for noise and traffic disruptions to affect use of or access to local businesses

4.5 Scope of potential impacts and benefits

The scope of assessment has been defined based on the considerations outlined in previous sub-sections. Impacts and benefits to be assessed are summarised in Table 4-5.

Table 4-5: Potential social impacts and benefits

Potential impacts/benefits	Section
Community values	
Impacts on Aboriginal cultural values	7.1.1
Effects of property acquisition on individuals, families and communities	7.1.2, 7.1.3
Potential to exacerbate social disadvantage	7.1.3
Changes to rural lifestyle and amenity due to noise, dust or visual impacts	7.1.4
Changes to the amenity of towns near the Project footprint	7.1.5
Impacts on connectivity within the SIA impact assessment area	7.1.6
Loss of community cohesion	7.1.7
Changes to sense of place (sense of belonging to local areas)	7.1.8
Community concerns about impacts on property values	7.1.9
Employment	
Potential for employment during the pre-construction and construction phases	7.2.1
Benefits of Project training and development	7.2.2
Impacts on employment in other industries	7.2.3
Potential for workforce behaviour to impact on community values	7.2.4
Housing and accommodation	
Potential to change the settlement pattern of communities or the SIA impact assessment area	7.3.1
Population change leading to housing demands	7.3.2
Impacts and benefits of non-resident workforce accommodation for local communities	7.3.3
Potential to affect housing or accommodation supply and affordability	7.3.4
Community health and well-being	
Changes to service demands or amenity of and access to community facilities	7.4.1
Stress and anxiety due to the acquisition process or concern about Project impacts	7.4.2
Changes to environmental qualities that could affect health	7.4.3
Concern about potential for Project to change flooding patterns	7.4.4, 7.4.5
Impacts on access to natural resources such as water or recreation reserves	7.4.6
Community safety, including traffic safety	7.4.7
Legacy benefits from the Project	7.4.8
Business	
Impacts on farms and agribusinesses	7.5.1
Impacts on other business sectors, including skills and labour shortages	7.5.2
Local supply opportunities	7.5.3
Indigenous business opportunities	7.5.3
Regional economic development	7.5.4

5. Social environment

This section describes the social environment in the SIA impact assessment area, including local and regional communities, community values, demographic characteristics, housing, social infrastructure, employment and business, as the basis for understanding how Project impacts and benefits may change the social environment.

5.1 Settlement pattern

5.1.1 Traditional ownership

Tenure within the SIA impact assessment area is predominantly freehold, where native title rights have been extinguished. A search of the relevant Native Title Register identified one native title determination, QCD2016/012, over the southern portions of the Project footprint. Native title claims and determinations relevant to the SIA impact assessment area are summarised in Table 5-1. Aboriginal parties with interests in the SIA impact assessment area include:

- Bigambul People - Cultural Heritage Management Plan (CHMP) area extends from the north west of Inglewood, towards Whetstone following the existing south western rail system past Yelarbon south to Macintyre River to the south east of Goondiwindi.
- Western Wakka Wakka People - CHMP area commences to the east of Toowoomba at Wards Hill, extending west and intersecting Gowrie Junction, stretching south west at Gowrie View where the area intersects the northwest edge of the Toowoomba Wellcamp airport, then intersecting the Gore Highway at Athol, where it then extends south west along the highway to Pampas
- Endorsed Aboriginal parties - CHMP area extends from Pampas to the south east of Millmerran adjacent to the eastern most edge of the Bringalily State Forest north west of Inglewood).

Table 5-1: Native Title determinations and claims for the SIA impact assessment area

Native Title Status	Name	Summary
Native Title Determined	QCD2016/012 – Bigambul People Part A	Native title exists in the entire determination area.
Application struck out	QC99/4 – Western Wakka Wakka People	The Western Wakka Wakka People lodged a native title claim which included the northern part of the SIA impact assessment area to just south of Brookstead on 27 January 1999. Their application was struck out in Beattie on behalf of Western Wakka Wakka Peoples v State of Queensland [2007] FCA 596 (27 April 2007) and is not currently listed as active by the National Native Title Tribunal.

5.1.2 Regional communities

The Project traverses predominantly rural communities in the LGAs of Goondiwindi and Toowoomba.

Goondiwindi LGA

The Goondiwindi LGA is located on the border between Queensland and NSW and covers an area of approximately 19,300 km². In Queensland, the Goondiwindi LGA is bounded by the LGAs of Balonne to the west, Western Downs to the north and Toowoomba and Southern Downs to the east. In NSW, the Goondiwindi LGA is adjoined by the Moree Plains and Gwydir Shires to the south.

Goondiwindi is the main urban centre of Goondiwindi LGA, located on the banks of the Macintyre River at the border with NSW, and at the juncture of five major inland highways (the Barwon, Cunningham, Gore, Leichhardt and Newell highways). The bridge over the Macintyre River was first built in 1878 to allow for goods transport from NSW. The South Western Line was established in 1906, enabling grain to be transported more efficiently to export markets in the east.

The local economy is driven by strong agricultural production from the fertile floodplains of the Border Rivers basins of Macintyre Brook and the Macintyre and Weir Rivers. The land is mostly characterised as Priority Agriculture Area and was founded on sheep and wheat farming. It has since become diversified to include beef cattle, cotton, oats, barely, sorghum and chickpeas, meat sheep, pigs, chickens and dairy (Goondiwindi Regional Council, 2014).

The Goondiwindi LGA promotes a welcoming community with opportunity and lifestyle for the more than 10,630 residents. Its strategic goals include community safety and health, fair and reasonable access to services, recognition of culture, identity and heritage, inclusivity and effective disaster management (Goondiwindi Regional Council, 2014).

Toowoomba LGA

The Toowoomba LGA is located on the Great Dividing Range and has a population of more than 160,000 people within an area of almost 13,000 km². The LGA is bounded by the LGAs of Lockyer Valley to the east, Southern Downs to the south, Somerset, Western Downs and South Burnett to the north and west, and Goondiwindi to the west.

Toowoomba City is the main urban centre, founded in the mid-19th century, and is the commercial and urban centre for south western Queensland. The region grew quickly with the establishment of new farm holdings and a range crossing. A rail connection to Ipswich was completed in 1867 and other connections to the outlying townships followed, including a branch line to Millmerran in 1885. The Warrego Highway creates a range crossing that links Brisbane to the inland regional centre of Charleville. The Toowoomba Bypass has recently opened and will alleviate congestion caused by freight haulage by road through the city centre.

Toowoomba City is the westernmost extent of the ShapingSEQ (State of Queensland, 2017) and is identified as part of South East Queensland's urban footprint. The education and training industry has shown strong growth in the last decade, particularly focussed on international students and research in the Toowoomba region's growth industries of fibres, energy, construction and agriculture (Toowoomba Regional Council, 2017).

TRC promotes a vibrant, inclusive, environmentally rich and prosperous region that embraces the future whilst respecting the past. After the destruction caused by the 2010/11 floods, a focus has been placed on building resilient infrastructure to preserve life in the community (Toowoomba Regional Council, 2017).

5.1.3 Towns

This sub-section introduces the potentially impacted communities in the SIA impact assessment area.

Yelarbon and Inglewood are within the Goondiwindi LGA, and the remaining communities are within the Toowoomba LGA.

Yelarbon

Yelarbon is a small town located 43 km east of the regional centre of Goondiwindi. Under the Goondiwindi Regional Planning Scheme, the Yelarbon area includes Township and Industrial Precinct Zones and the surrounding area is zoned as Rural - Kumbarilla Rises Precinct (Goondiwindi Regional Council, 2018). Yelarbon population in 2016 was approximately 360 people. Originally established as a coach/teamster stop, it is a small town offering limited services, and is home to workers in Goondiwindi, Inglewood and on farms in the district.

The predominant land uses in the Yelarbon area are residential and recreational areas within the township boundaries, and grazing within the town's surrounds. The AE Girle and Sons sawmill has been in operation since 1917 (north of the rail line) (Kerr, 1998).

The township has areas adjacent to Macintyre Brook which have been defined as extreme and high flood hazard areas under the Goondiwindi Regional Planning Scheme. The township has a levee that extends around its eastern and southern sides. The Project will need to raise this levee to mitigate hydrological impacts in the Yelarbon township.

The Yelarbon-Keetah Road and Merton Road comprise a north/south running stock route supported by a reserve to the east of the township, south of the South Western Line (State of Queensland, 2018). The township is dissected by the Cunningham Highway and the South Western Line and is bounded in the south and east by Macintyre Brook.

Inglewood

The town of Inglewood is approximately 80 km east of Goondiwindi and 130 km southwest of Toowoomba and was the seat of local government for the Inglewood Shire before its amalgamation with the Goondiwindi Shire (Inglewood Shire Council, 2008). In 2016, Inglewood had a population of approximately 950 people. Areas within the township are zoned Urban, Urban Investigation, Possible Future Industrial and Rural Residential, with the surrounds zoned as Rural Area (Goondiwindi Regional Council, 2018). Inglewood is also the crossroad for stock routes joining Texas to the south, Millmerran to the north east via Canning Creek and through the state forest, with four secondary reserves (State of Queensland, 2018).

Local agricultural uses include sheep and cattle grazing, timber milling and the farming of fodder, grains and horticulture crops (2017/18). The surrounding land use is predominantly production forestry (Bringalily State Forest), grazing on native vegetation, irrigated pasture close to Macintyre Brook, and dryland production with limited industrial areas. A significant water reservoir, Lake Coolmunda, is located 13 km east of the township.

Inglewood and its surrounds are bounded by Catfish Creek to the south and Bringalily State Forest to the north, and are dissected by Macintyre Brook and Canning Creek, the South Western Line and Cunningham Highway.

Millmerran

Millmerran is located 75 km southwest of Toowoomba and in 2016 had a population of approximately 1,560 people. The township's land uses are largely low-medium density residential, community spaces including sport and recreation and a main street Commercial Zone, with some medium impact manufacturing/industrial uses. An industrial area located to the north of town is zoned for High Impact Industry (Toowoomba Regional Council, 2018).

Millmerran surrounds are almost entirely designated as Strategic Cropping Land and surrounding land uses include grazing, irrigated cropping, mining, intensive animal production (piggery, feedlot and poultry) and an airstrip. In 1911 the railway from Pittsworth was extended to Millmerran primarily to transport grain, but a rail passenger service also operated between 1928 and 1969 (when there were stations. (Stationspast.net. No date (n.d.)). The dairy industry was established in the early twentieth century but was overtaken mid-century by cereal and cotton production.

Millmerran and its surrounds are dissected by Back Creek and its tributaries, the Gore Highway, the Millmerran Branch Line, and roads leading to Inglewood (south) and Cecil Plains (north). Captains Mountain and Domville State Forest lie to the south of the township.

Brookstead

The small town of Brookstead is located approximately 60 km southwest of Toowoomba and is dissected by the Millmerran Branch Line and Gore Highway. In 2016 Brookstead had a population of approximately 217 people. Brookstead includes residential, community and industrial uses, with the surrounding area being predominantly irrigated agriculture and cropping, supported by the Brookstead rail station and associated silos. The Toowoomba Regional Planning Scheme designates the town into Township, Limited Development and Community Facilities/Government precincts. The remaining area is Rural Zone (Toowoomba Regional Council, 2018).

The Brookstead township and surrounds are bounded by the Condamine River (North Branch) and Longhurst Road to the east.

Pittsworth

The township of Pittsworth is located approximately 37 km southwest of Toowoomba. In 2016 Pittsworth had a population of approximately 3,290 people. The township and a buffer of up to 3 km have been identified in the ShapingSEQ as Priority Living Areas, with the remainder as Priority Agricultural Area. Pittsworth developed by serving the agricultural industry (originally sheep, dairy farming and cheese production) and was a centre for itinerant rural workers and local land holders, with the railway connecting it to other areas in 1887.

Under the Toowoomba Regional Planning Scheme, Pittsworth includes Low-Medium Density Residential, Major Centre (Commercial), Community Facilities, Sport and Recreation and Open Space, with margins adjacent to the rail and highway to the west zoned for Medium and High Impact Industry. The surrounding area is zoned as Rural (Toowoomba Regional Council, 2018). The town has a well-defined commercial/retail corridor flanking the railway, and surrounding low density residential area with community facilities and an air strip. The surrounding land use includes production from dryland agriculture and grazing, with several intensive animal production uses.

Pittsworth is dissected by the Millmerran Branch Line and Gore Highway. The township is a watershed between Fourteen Mile Creek and Perrier Gully (and tributaries).

Southbrook

The township of Southbrook and surrounds are located 26 km southwest of Toowoomba. In 2016 Southbrook had a population of approximately 600 people. The township and an approximate 2 km buffer have been designated as Priority Living Area in the ShapingSEQ, with the remainder as Priority Agricultural Area. The land uses outside of the township include dryland cropping, grazing and limited irrigated agriculture. The Toowoomba Regional Planning Scheme designates a Township zone, with Special Purpose and Community Facilities and the surrounding area as Rural (Toowoomba Regional Council, 2018).

The Southbrook area is dissected by the Millmerran Branch Line and Gore Highway.

Westbrook

Westbrook, originally a rural town, is a suburb of Toowoomba located 6 km southwest of the Toowoomba City centre and extending west towards the rural locality of Biddeston. Originally a pastoral run, closer urban development commenced in the late 19th century. In 2016, Westbrook had a population of 3,878 people.

Westbrook's urban centre and land to its north and west is identified in the ShapingSEQ as Urban Footprint, with Regionally Significant Greenspace located in the suburb's west. Under the Toowoomba Regional Planning Scheme, Westbrook includes Urban Areas (Low-Medium Density Residential), Future Urban Areas (greenfield expansion), Agricultural Land, Sport and Recreation and Nature Conservation and Open Space. The town centre includes a range of retail and service businesses, schools, parks, community facilities and a hotel. The suburb is dissected by Toowoomba Athol Road (east-west) and by the Toowoomba Bypass (north-south in the suburb's western portion).

Kingsthorpe

Kingsthorpe is a town located 16 km northwest of Toowoomba and in 2016 had a population of approximately 1,870 people. The area is bounded by Westbrook Creek to the south and the Western Line Railway to the north, and is dissected by the Warrego Highway and Gowrie Creek. Kingsthorpe's rural area is partially covered by the ShapingSEQ and that portion is designated as regional landscape and rural production area. The entire area is designated as Priority Agricultural Area under the ShapingSEQ. Land uses include residential and community uses, cropping, irrigated cropping and grazing. The Toowoomba Regional Planning Scheme provides for Township, Rural Residential, Community and Sports and Recreational Zones within the township and the surrounding area is zoned as Rural with some limited Community Facilities (Toowoomba Regional Council, 2018). A shopping centre has recently been built in Kingsthorpe.

Gowrie Mountain

Gowrie Mountain is a small residential locality on the western side of the topographical feature known as 'Gowrie Mountain' which stands at 674 metres high. In 2016 Gowrie Mountain had a population of approximately 220 people. The residential lots are large lifestyle blocks with views across the plains to Oakey and Kingsthorpe.

The eastern side of Gowrie Mountain is part of Charlton. The locality is bounded by Dry Creek to the south and the Warrego Highway to the north. Jannuschs Road dissects the area.

Gowrie Mountain is covered by the ShapingSEQ and is designated as Regional Landscape and Rural Production Area. The Toowoomba Regional Planning Scheme zones the area as Rural with the exception of Open Space and Community Facilities for the Rowland Court Bushland Park (Toowoomba Regional Council, 2018).

Gowrie Junction

The Gowrie Junction township is bounded by the South Western Line to the south and ridges of Mount Kingsthorpe to the north and is dissected by Gowrie Creek (Department of Natural Resources and Mines, n.d.). In 2016 Gowrie Junction had a population of 2,120 people. Land uses include residential and intensive uses in the township, and grazing, irrigated cropping and cropping with some limited conservation and natural environments in the surrounds.

The Toowoomba Regional Planning Scheme provides for Township, Residential, Rural Residential and Community Facilities/Sports and Recreation zones. The locality is wholly covered by the ShapingSEQ and is designated as Urban Footprint, Rural Living Area and Regional Landscape and Rural Production Area.

5.1.4 Rural localities

Rural localities have no population centre or designated township but include rural properties which support farming and grazing households, and for more intensive businesses, employees.

Kurumbul

A rural locality approximately 18 km southeast of Goondiwindi, Kurumbul is bounded by the Macintyre/Dumaresq River to the south and the Cunningham Highway to the north, and is dissected by South Western Line, Brigalow Creek and Kildonan Road. In 2016, the locality's population was approximately 50 people. Kurumbul is in a Rural Zone under the Goondiwindi Regional Planning Scheme. The margins of the Macintyre River and Brigalow Creek are considered general flood hazard areas under the scheme. Land uses are predominantly irrigated cropping, cotton, grain and oilseed, with significant water entitlements issued to land holders, as well as sheep and cattle grazing, a cotton gin and quarries. Under the ShapingSEQ the locality is identified as Strategic Cropping Land, and the area from the border to the South Western Line is characterised as Priority Agricultural Area (State of Queensland, 2018).

Whetstone

Whetstone is a rural locality approximately 30 km southwest of Inglewood and in 2016 had a population of approximately 65 people. Whetstone is bounded by Macintyre Brook to the south, and is dissected by the South Western Line and Cunningham Highway. The Whetstone State Forest is a prominent land use and feature of the area. The remaining land use is grazing, production from dryland agriculture and limited irrigated agriculture and perennial horticulture. The Whetstone area includes a dairy, a feedlot and a sand and gravel quarry. The Goondiwindi Regional Planning Scheme designates the entire area as Rural Zone.

Canning Creek

The Canning Creek locality is located approximately 110 km southwest of Toowoomba on the boundary between the Goondiwindi and Toowoomba LGAs and is dissected by Millmerran-Inglewood Road and Canning Creek. In 2016 the locality had a population of approximately five people. The Canning Creek locality is zoned Rural under the Toowoomba Regional Planning Scheme and Goondiwindi Regional Planning Scheme and is mostly comprised of Bringalily State Forest and grazing, with some dryland agriculture in the northern (Millmerran) area. Canning Creek Station located north of the forest on the Millmerran-Inglewood Road was established in the 1840's (Centre for the Government of Queensland, 2018).

Bringalily, Millwood and Clontarf

The localities of Bringalily (with a 2016 population of 83 people), Millwood (population 23 people) and Clontarf (population 25 people) are approximately 100 km southwest of Toowoomba. The area is zoned Rural under the Toowoomba Regional Planning Scheme with the predominant land uses being dryland production and grazing. There are also limited intensive agriculture, piggeries and feedlots and extractive industries. The southernmost pits of the Commodore Mine extend into Clontarf.

Yandilla

The Yandilla locality (with a 2016 population of 46) is 7 km east of Millmerran and approximately 70 km southwest of Toowoomba. It is bounded by the Condamine River to the east, and is dissected by Grass Tree Creek, the Millmerran Branch Line and the Gore Highway. The locality is designated Priority Agricultural Area under the ShapingSEQ (State of Queensland, 2018). The Toowoomba Regional Planning Scheme zones the area as Rural and the dominant land use is cropping, with some areas of production from relatively natural environments and intensive animal production (Toowoomba Regional Council, 2018). The location includes a rail siding with grain silos on the Millmerran Branch Line.

Pampas

The rural locality of Pampas (with a 2016 population of 62 people) is located approximately 65 km southwest of Toowoomba, and is bounded by two branches of the Condamine River to the north and south. The area is dissected by the Gore Highway and the Millmerran Branch Line. A cluster of rural residential premises is located at the highway/rail and Pampas Road intersection. The rail station has been closed since the 2010/11 floods. The locality is designated Priority Agricultural Area (Centre for the Government of Queensland, 2018). Land use is predominantly irrigated agriculture and cropping with significant off-stream water storage.

Umbiram

The locality of Umbiram is located approximately 25 km west of Toowoomba on the Gore Highway. The locality is partially covered by the ShapingSEQ, with this portion designated as a Regional Landscape and Rural Production Area (State of Queensland, 2018). Land uses include cropping, and grazing, the Oaklands Horse Stud and poultry farms. The area is zoned Rural under the Toowoomba Regional Planning Scheme Athol

The locality of Athol (with a 2016 population of 134 people) is located 24 km southwest of Toowoomba along the Gore Highway. The locality is partially covered by the ShapingSEQ, with this portion designated as a Regional Landscape and Rural Production Area (State of Queensland, 2018). Land uses include rural residential dwellings, cropping and grazing native vegetation, with some and intensive animal production (horse stud and poultry). The area is zoned Rural under the Toowoomba Regional Planning Scheme.

Biddeston

The locality of Biddeston (with a 2016 population of 284 people) is located 23 km west of Toowoomba along the Toowoomba-Cecil Plains Road, and includes some rural residential dwellings. The locality is identified as a Priority Agricultural Area and part of the locality is designated as Regional Landscape and Rural Production Areas under the ShapingSEQ (State of Queensland, 2018). Local land uses include cropping, dairying, dryland production, grazing and intensive animal production (horse stud and feedlots). The Toowoomba Regional Planning Scheme identifies the locality as within the Rural Zone (Toowoomba Regional Council, 2018).

Wellcamp

The locality of Wellcamp (with a 2016 population of 295 people) is located 15 km west of Toowoomba along the Toowoomba-Cecil Plains Road, and is bounded by Dry Creek to the north and Spring Creek to the south. The Toowoomba Regional Planning Scheme includes the Charlton Wellcamp Enterprise Area Local Plan over the Toowoomba Wellcamp Airport and surrounding industrial uses. The remaining area is Open Space, Community Facilities (road corridor) and Rural (Toowoomba Regional Council, 2018).

Athol

The locality of Athol (with a 2016 population of 134 people) is located 24 km southwest of Toowoomba along the Gore Highway. The locality is partially covered by the ShapingSEQ, with this portion designated as a Regional Landscape and Rural Production Area (State of Queensland, 2018). Land uses include rural residential dwellings, cropping and grazing, with some and intensive animal production (horse stud and poultry). The area is zoned Rural under the Toowoomba Regional Planning Scheme (TRC, 2018).

5.1.5 Other major projects

The Project is part of the Inland Rail Program which has inter-regional, State and National social impacts and benefits. The status of other major projects in or near the SIA impact assessment area which may interact with those of the Project is shown in Table 5-2. Major rail projects in South East Queensland are also considered in the assessment of cumulative social impacts (refer Section 7.6).

The range of major transport and logistics projects linked to newly operational airport and road infrastructure highlights the Toowoomba LGA's emerging position as a major freight hub. The strength of agribusinesses is also evident in the Goondiwindi and Toowoomba LGAs.

Table 5-2: Major projects in or near SIA impact assessment area

Project	Description	Status
New Acland Coal	Expansion of the existing New Acland open-cut coal mine to up to 7.5 Mtpa. The mine is located approximately 25 km northwest of the Project.	EIS Approved with conditions
InterLinkSQ	A 200 ha transport, logistics and business hub located on the narrow gauge regional rail network and interstate network, at the junction of the Gore, Warrego and New England Highways and adjacent to the Project footprint.	Construction
Toowoomba Wellcamp Airport	The airport operates as an international cargo hub connecting Australia's leading primary producers and processors with growing consumer markets across the globe. The airport was constructed over 19 months from 2012 to 2014 and is the first major greenfield public airport development in Australia in over 50 years. (Toowoomba Wellcamp Airport, 2018). The airport is located approximately 1 km east of the Project footprint.	Operational
Wellcamp Business Park	Part of the Toowoomba Enterprise Hub. 500 ha industrial and commercial estate surrounds Brisbane West Wellcamp Airport and is becoming the commerce and industry hub of Toowoomba and regional South East Queensland. The business park is located 1.5 km east of the Project footprint.	Operational – subject to continuing construction and expansion
Witmack Industry Park & Charlton Logistics Park	Part of the Toowoomba Enterprise Hub (TEH)., Witmack Industry Park (WIP), is one of Toowoomba's largest industrial land developments and offers industrial land parcels from 2 to 5 ha. Charlton Logistics Park (CLP) is the most recent addition to the TEH and provides level and fully serviced 2 ha sites. Due to its Warrego Highway location combined with easy access to the Toowoomba Bypass, CLP is well suited for transport and logistics operators. WIP is located 3 km southeast of the Project footprint. CLP is located 3 km south of the Project footprint.	Operational – subject to continuing construction and expansion
Commodore Mine and Millmerran Power Station	The Commodore Mine is an open pit coal mine, located in the Surat Basin and began supplying coal to the 850 MW Millmerran Power Station in February 2003. The Mine intersects the Project footprint, located primarily to the east. Millmerran Power Station is a coal-fired power station that supplies base-load power and came online early in 2003. It supplies enough electricity to power approximately 1.1 million home.	Operational, but subject to expansion in future
Pittsworth Industrial Precinct & PIP Enabling Project (Pittsworth)	New road and sewerage infrastructure at Pittsworth Industrial Precinct will open up industrial land for industries servicing agriculture and the wider region. The precinct is located 500 m to the south of the Project footprint.	Operational
Wyemo Piggery, Texas-Yelarbon Rd, Glenarbon	The piggery is an intensive animal industry which would comprise 55,000 standard pig units and be located approximately 8 km south of the Project footprint	Approved with conditions
Yarranlea Solar	100MW solar farm located at Yarranlea	Operational
Goondiwindi Abattoir	A new beef abattoir located on the outskirts of Goondiwindi with beef processing of up to 72,000 tonnes per year. The abattoir would be located 13 km north of the project footprint.	Approved with Conditions
Asterion Medical Cannabis Facility	Three stage construction of a 40 hectare glasshouse to produce medicinal cannabis. The facility would be located near the Toowoomba Wellcamp Airport and adjacent to the Project footprint.	Construction

5.2 Community profile

This section provides analysis of populations and community characteristics in local and regional communities. ABS Census data are provided for:

- The SA1s and SSCs (also referred to as suburbs) traversed by the Project footprint
- Potentially impacted communities as defined in Section 4.2.2
- The LGAs of Goondiwindi and Toowoomba.

To protect confidentiality of data, the ABS makes small random adjustments to all cell values which may cause the sums of data in rows or columns to differ by small amounts from totals in the tables provided.

5.2.1 Project footprint

Key characteristics of SA1 areas near the permanent Project footprint were identified in order to understand population distribution and potential community vulnerabilities. SA1s in Table 5-3 include those traversed by the Project and those within approximately 1 km of the Project.

Key characteristics of the SA1s are shown in Table 5-3. The SA1s represent a total area of 5,823 km, with 2,886 dwellings and a population of 7,284 people in 2016 (an increase of 558 people since the 2011 Census). Given its rural nature, the impact assessment area has a very low population density of 0.8 people per km², although densities are higher in the townships (Pittsworth, Millmerran and Inglewood and Yelarbon).

The Socio Economic Index for Areas (SEIFA) scores for the Index for Relative Socio-economic Advantage and Disadvantage (IRSAD) are area-based scores generated by the ABS using Census data. Analysis of IRSAD scores for the SA1s corresponding to potentially impacted communities indicates that areas north of Inglewood, near Millmerran and in Yandilla and Pampas have higher potential for social disadvantage, as shown in Figures 5-1a to 5.1c.

Further detail on SEIFA scores is provided in Section 5.2.4.

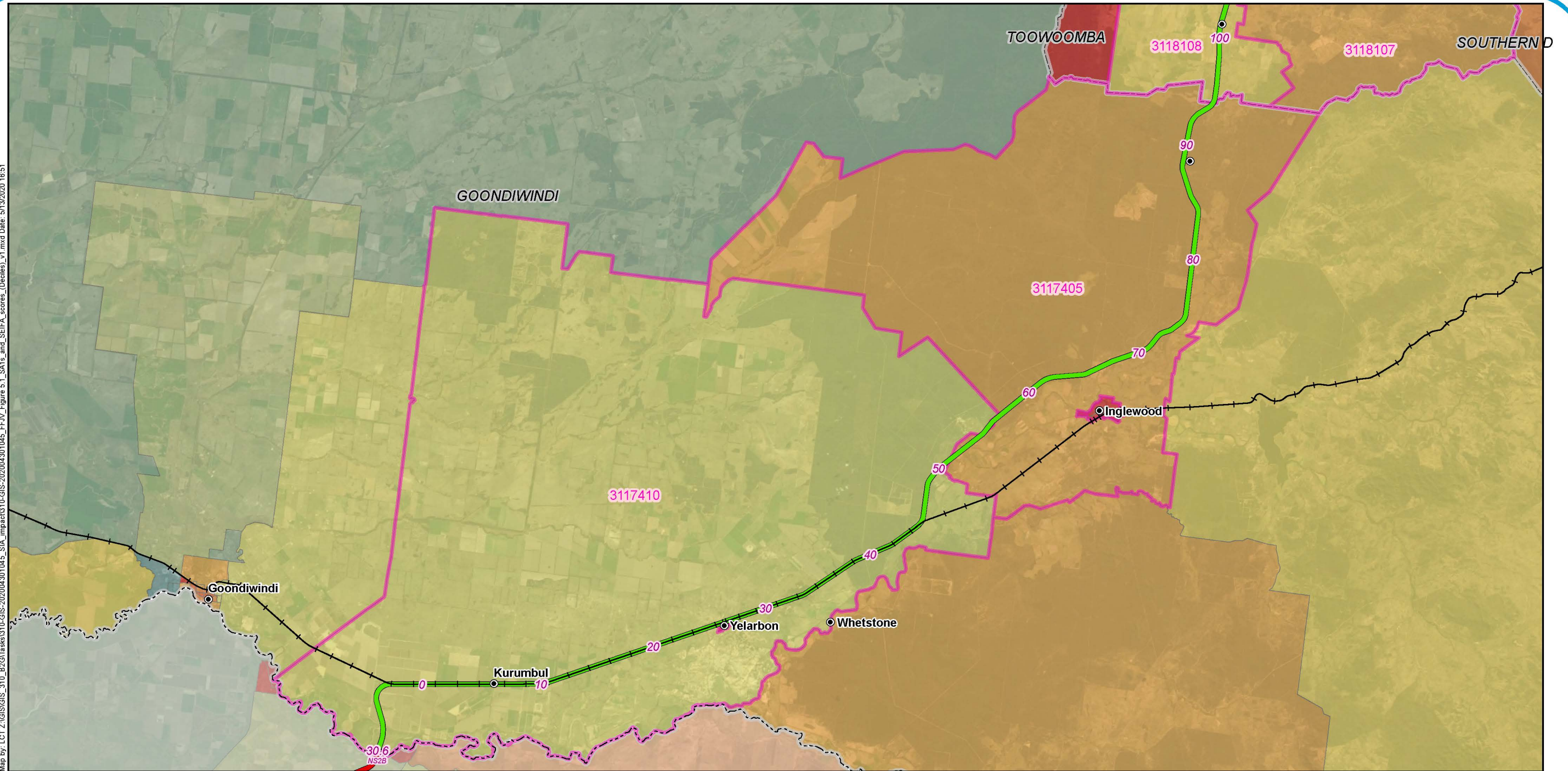
Table 5-3: SA1 Characteristics, 2011 and 2016

SA1	Area (km ²)	Population		No. dwellings
		(2011)	(2016)	
3117410	1,731.5	276	315	132
3117405	972.8	248	202	97
3118108	507.8	188	206	88
3118107	886.1	284	305	147
3118105	247.9	236	269	87
3118106	215.5	151	153	73
3118211	291.5	305	297	116
3118210	158.6	221	226	94
3118217	20.1	261	222	83
3118212	0.6	504	503	230
3118208	0.5	411	438	169
3118209	0.4	247	295	103
3118207	88.7	283	302	120
3118202	205.8	244	290	130
3118206	71.1	257	273	94

SA1	Area (km ²)	Population		No. dwellings
		(2011)	(2016)	
3118204	63.8	264	286	108
3118203	2.0	257	310	125
3118205	63.5	276	270	93
3145816	58.4	643	436	159
3118018	74.1	328	284	116
3145817	48.9	302	292	109
3118016	81.1	220	234	92
3144916	13.2	-	636	226
3145818	22.2	320	240	95

Source: ABS 2016a

Map by: LCT Z:\GIS\GIS_310_B203\Tasks\310-GIS-202004301045_SIA_Impact\310-GIS-202004301045_SIA_scores_(Deciles)_v1.mxd Date: 5/13/2020 16:51



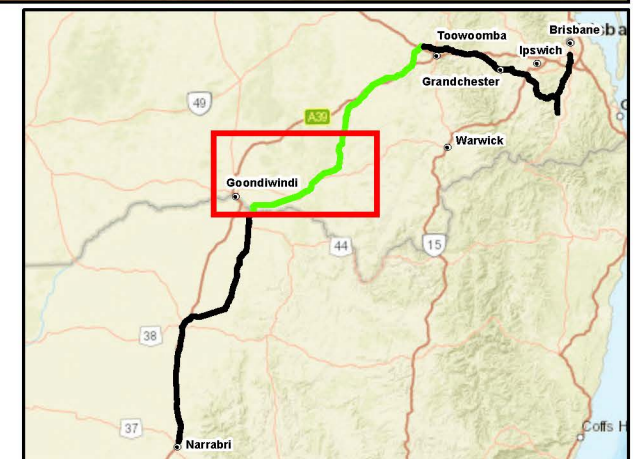
Legend

- 5 Chainage (km)
- Localities
- North Star to NSW/QLD border alignment
- Border to Gowrie alignment
- Existing rail (operational)
- NSW/QLD border
- Local Government Areas
- SA1 boundary

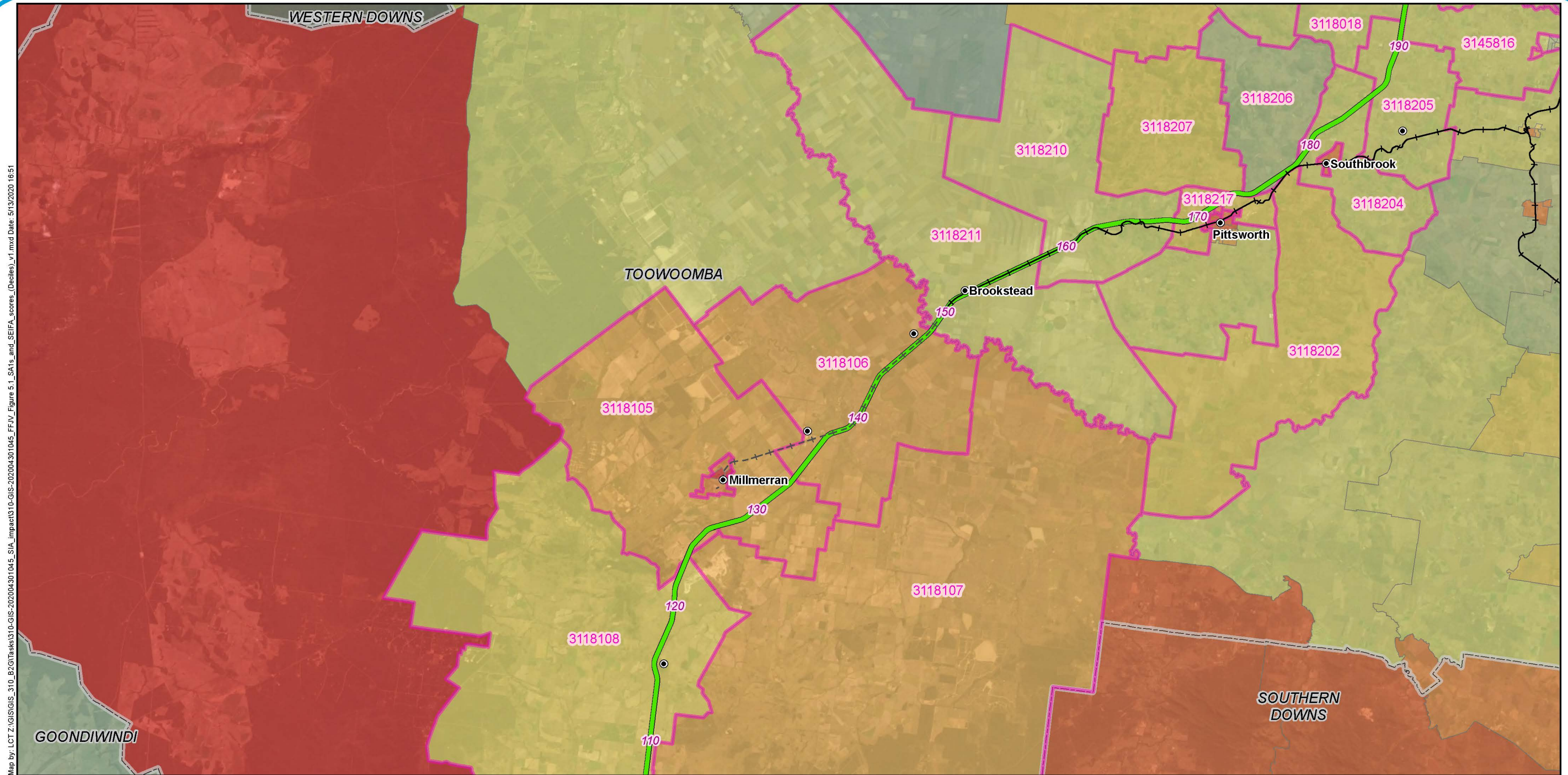
SA1 IRSAD

- Decile 1 (most disadvantaged)
- Decile 2
- Decile 3
- Decile 4
- Decile 5

- Decile 6
- Decile 7
- Decile 8
- Decile 9
- Decile 10 (most advantaged)



A3 scale: 1:350,000
0 2.5 5 7.5 10 12.5km



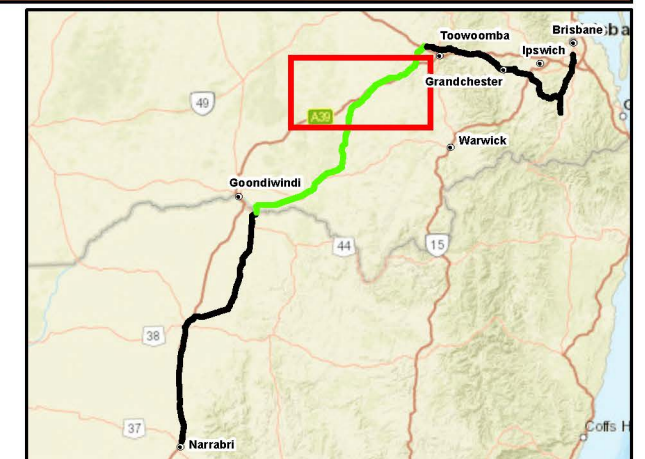
Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- - - Existing rail (non-operational)
- Local Government Areas
- SA1 boundary

SA1 IRSAD

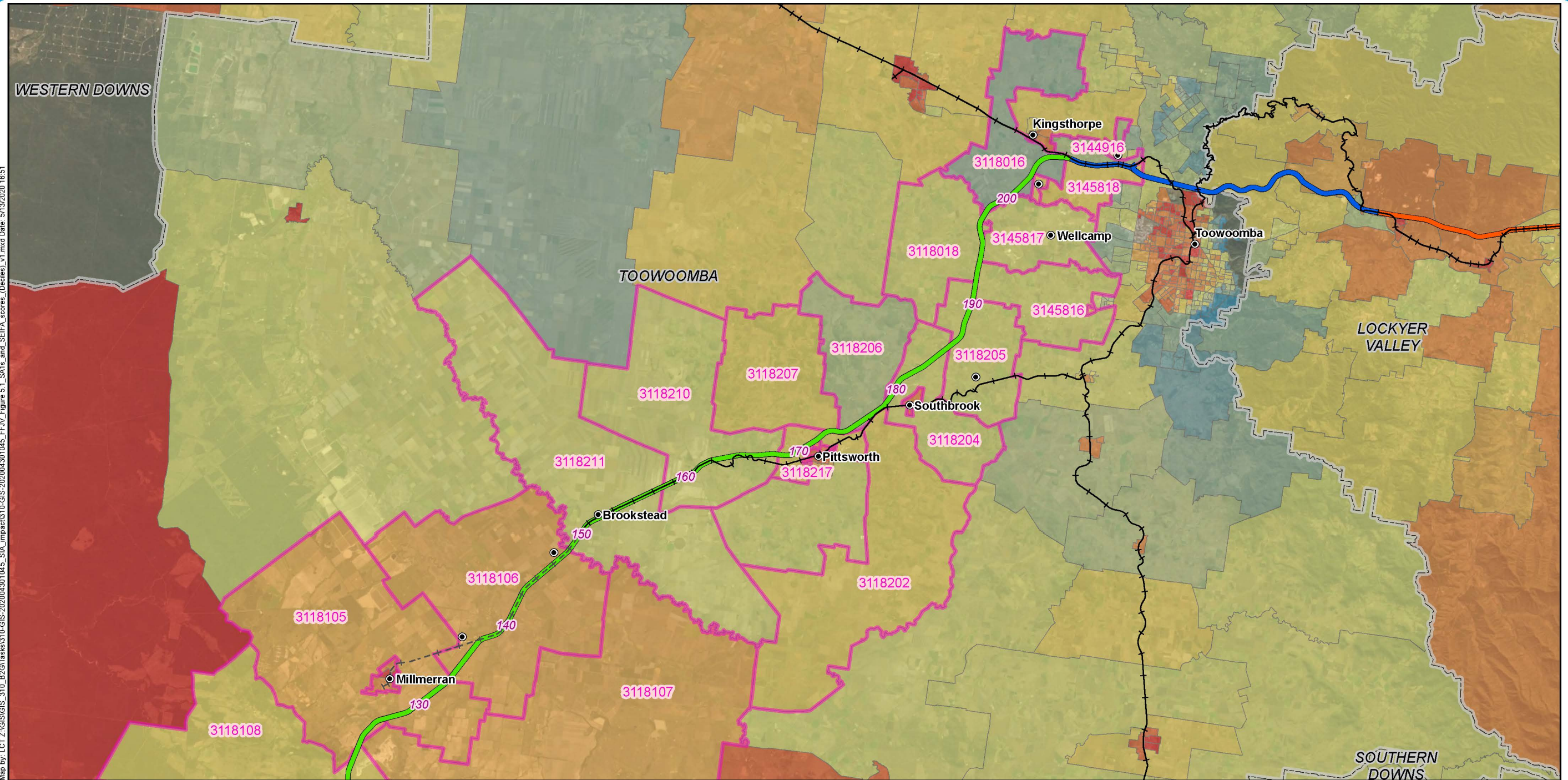
- Decile 1 (most disadvantaged)
- Decile 2
- Decile 3
- Decile 4
- Decile 5

- Decile 6
- Decile 7
- Decile 8
- Decile 9
- Decile 10 (most advantaged)



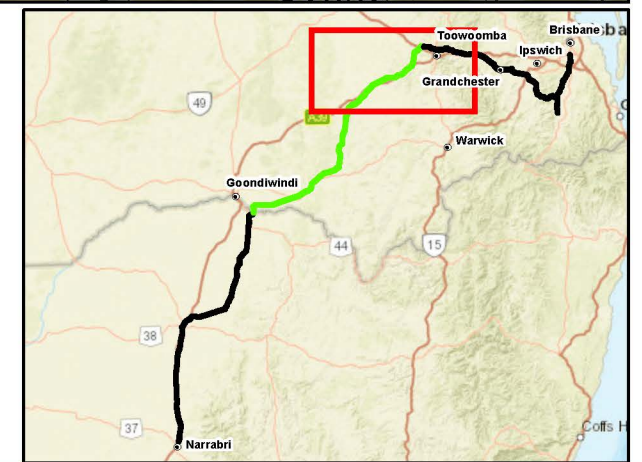
A3 scale: 1:300,000
0 2 4 6 8 10km

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Legend

- | | | |
|---------------------------------|-------------------------------|-----------------------------|
| 5 Chainage (km) | SA1 IRSAD | Decile 6 |
| Localities | Decile 1 (most disadvantaged) | Decile 7 |
| Border to Gowrie alignment | Decile 2 | Decile 8 |
| Gowrie to Helidon alignment | Decile 3 | Decile 9 |
| Helidon to Calvert alignment | Decile 4 | Decile 10 (most advantaged) |
| Existing rail (operational) | Decile 5 | |
| Existing rail (non-operational) | | |
| Local Government Areas | | |
| SA1 boundary | | |



A3 scale: 1:350,000
0 2.5 5 7.5 10 12.5km



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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

Figure 5.1c:

SA1s and SEIFA scores (Deciles) - northern section

5.2.2 Regional and local populations

Current population

The total population for the SIA impact assessment area was 171,402 people in 2016.

Growth rates during 2011-2016 varied significantly between the Toowoomba and Goondiwindi LGAs. The population for the Goondiwindi LGA totalled 10,629 people in 2016, unchanged since 2011. By comparison, Toowoomba LGA's population increased 6.34 per cent, growing to 160,777 people by 2016 (refer Table 5-4). While significant, this was less than that experienced by Queensland, which had population growth of 8.6 per cent. Of note, the service and business catchments for towns such as Goondiwindi, Millmerran, Pittsworth and Inglewood extend beyond the State suburb boundaries, so the total populations serviced by these towns are larger than that indicated by the SSC estimates.

The largest of the potentially impacted communities was Westbrook, which had 3,879 people, which also saw the greatest population increase of 17.9 per cent from 2011 to 2016 (Table 5-4). The Westbrook urban area is located approximately 10 km east of the Project footprint and is not expected to experience any direct Project impacts. Southbrook, with a 2016 population of 601 people, had also experienced significant growth at 14.7 per cent over the five years. Pittsworth and Gowrie Junction had populations of 3,293 and 2,115 respectively. Both suburbs experienced population growth with Pittsworth seeing an 11 per cent increase and Gowrie Junction a 9.1 per cent. Population decline occurred in Brookstead (26.8 per cent) and Yelarbon (26.2 per cent), which may be attributed to the outmigration against the small population sizes within these suburbs. The total population for the suburbs in the SIA impact assessment area was 15,095 people, an increase of 6 per cent from 2011.

The QGSO estimates that the population of Goondiwindi LGA decreased slightly during 2016-2018 (from an estimated 10,813 people in 2016 to 10,728 people in 2018) while the Toowoomba LGA's population grew slightly (from 164,168 in 2016 to 167,657 people in 2018). The QGSO and ABS use differing methodologies and assumptions, so there is some variance between their respective estimates for 2016.

Table 5-4: Local and Regional Populations, 2011 and 2016 (Number and Percentage Change)

Statistical Area	2011	2016	Number	Change (%)
State Suburb				
Brookstead	306	224	-82	-26.8
Gowrie Junction	1,939	2,115	176	9.1
Gowrie Mountain	256	229	-27	-10.5
Inglewood	1,072	955	-117	-10.9
Kingsthorpe	1,820	1,867	47	2.6
Millmerran	1,569	1,565	-4	-0.3
Pittsworth	2,966	3,293	327	11.0
Southbrook	524	601	77	14.7
Westbrook (Qld)	3,289	3,879	590	17.9
Yelarbon	497	367	-130	-26.2
Total	14,238	15,095	857	6.0
Local Government Area				
Goondiwindi	10,628	10,629	1	0.01
Toowoomba	151,191	160,777	9,586	6.34
Total	161,819	171,402	9,583	5.92
Queensland	4,332,739	4,703,193	370,454	8.6

Source: ABS Census 2011 and 2016a

Projected population

Medium series population Projections for SA2s in the SIA impact assessment area are shown in Figure 5-2.

Growth is expected in the Toowoomba-West SA2, consistent with the regional population growth Projections for the Toowoomba LGA. Other SA2s will experience slight population growth, except in Inglewood-Waggamba and Millmerran which are forecast to experience negative and or no growth, respectively.

The Goondiwindi LGA's population is estimated to increase slightly by approximately 1 per cent to 3 per cent out to 2026, while Toowoomba LGA will experience growth of approximately 4.5 per cent to 5 per cent.

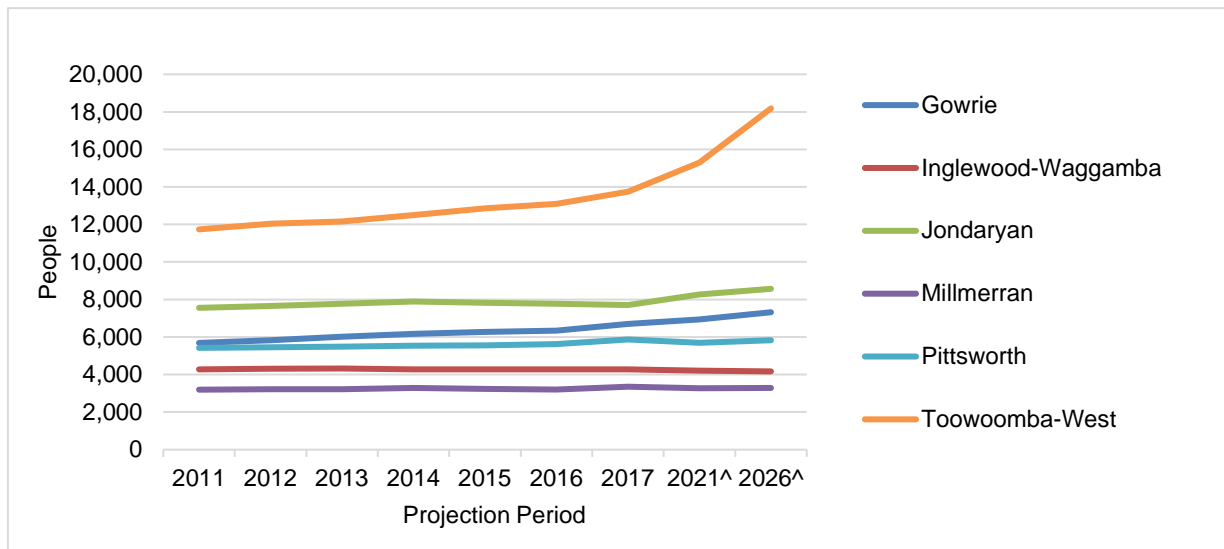


Figure 5-2: Population Projections, 2011 to 2026 – SA2 (Number)

Source: Queensland Government Statistician's Office. Projected population (medium series), Queensland 2011 to 2036.

Indigenous population

Figure 5-2 shows the percentage of people that identify as Indigenous in each suburb, which varies from 1.9 per cent in Brookstead (SSC) to 7.6 per cent in Inglewood (SSC). From the ten SSCs reported, six have an Indigenous population which is greater than the Queensland percentage of 4.0 per cent (Inglewood 7.6 per cent, Kingsthorpe 5.8 per cent, Yelarbon 5.3 per cent, Millmerran 4.4 per cent, Gowrie Junction 4.0 per cent and Gowrie Mountain 3.9 per cent). Both the LGAs have higher Indigenous populations than the State, with Goondiwindi experiencing the highest at 5.4 per cent.

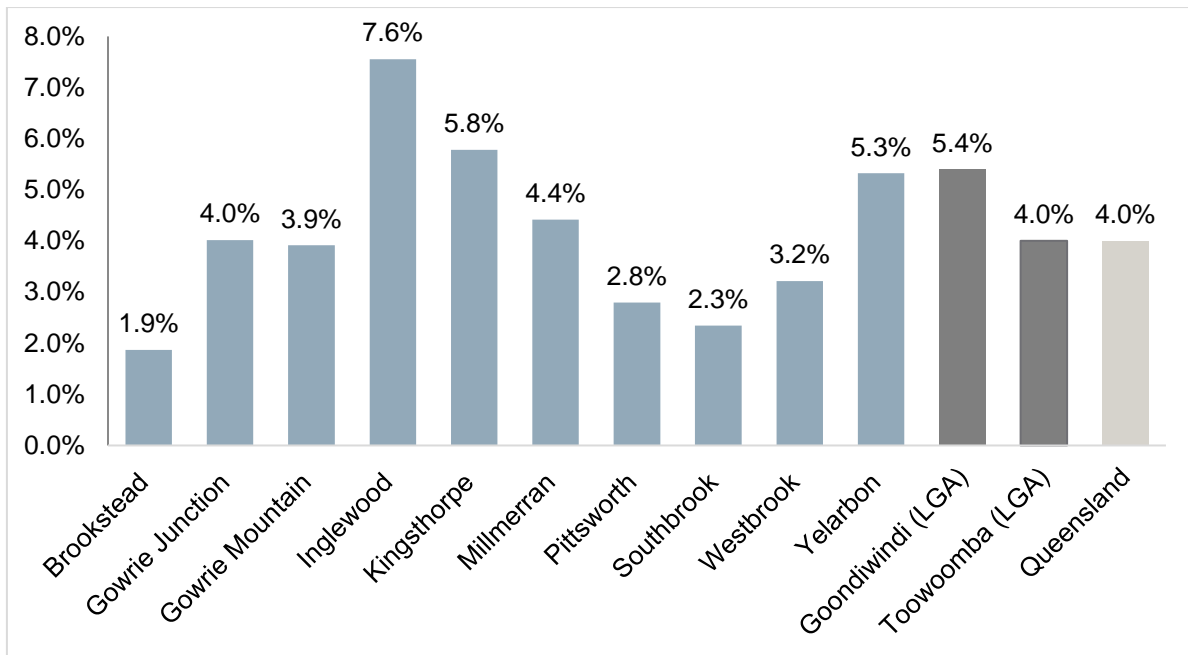


Figure 5-3: Aboriginal and Torres Strait Islander Population, 2016 – SSC, LGA and Qld (Percentage of total population)

Source: ABS Census 2016a

5.2.3 Families and households

Family types

The family composition in the SIA impact assessment area differs to that which is typical for Queensland. Across the region, couple families with no children are more highly represented, whereas in Queensland couple families with children are more predominant. This reflects a common pattern in rural areas where younger people moving into adulthood are pursuing educational or employment opportunities that are not available within the SIA impact assessment area (Charles-Edwards, Bell et al. 2018)

While overall the two LGAs show a similar percentage each of couple families with and couple families without children, the suburbs show a somewhat different pattern. With the exception of the small communities of Brookstead (224 people) and Gowrie Mountain (229 people), the suburbs closer to Toowoomba have a higher representation of couple families with children (including Westbrook, Kingsthorpe and Gowrie Junction). Couple families with no children are more dominant in rural suburbs and towns, including Pittsworth, Millmerran, Inglewood and Yelarbon (refer Figure 5-4). The representation of one parent families varies across the region but remains generally below Queensland's rate of 17 per cent of all families. The exception to this is in Inglewood, which has a much higher representation at 20 per cent.

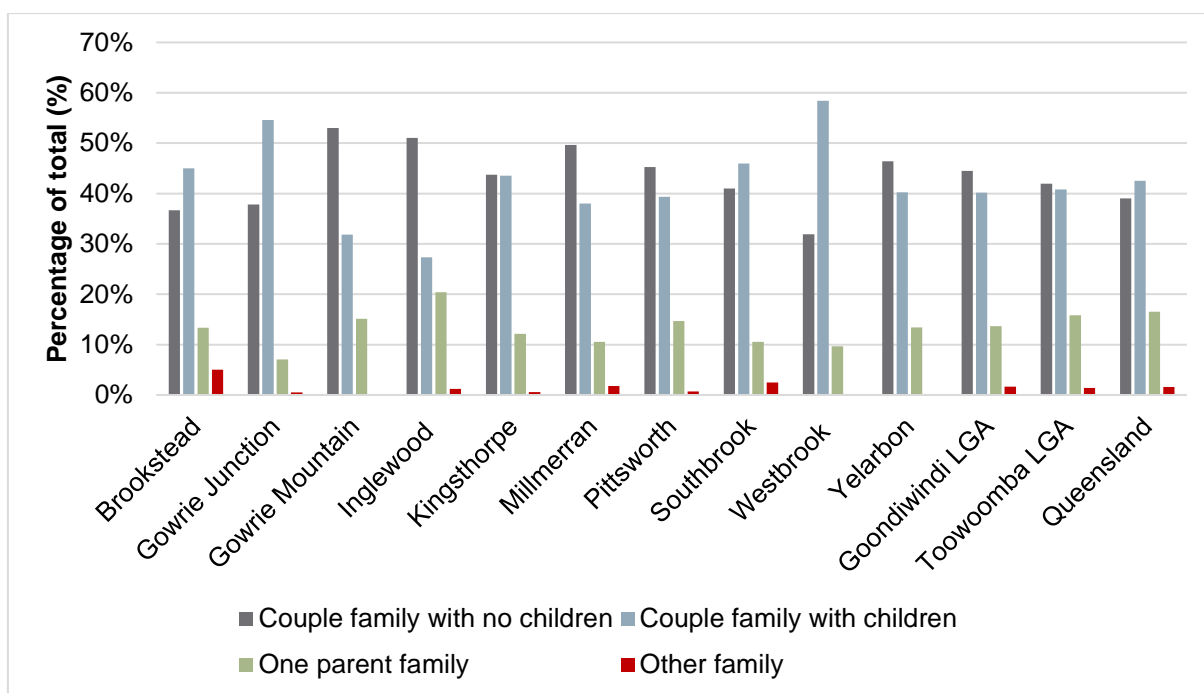


Figure 5-4: Family Composition, 2016 – SSC, LGA and Queensland (percentage)

Source: ABS Census 2016a

Household type

Family households were the most dominant household type across the SIA impact assessment area, but at slightly lower levels than for Queensland (refer Figure 5-4 and Table 5-5). In Goondiwindi LGA, 61.0 per cent of households were families, lower than Toowoomba at 66.1 per cent, with both lower than Queensland's 71.8 per cent. The highest proportion of family households was in Westbrook (84.6 per cent), followed closely by Gowrie Junction (84.4 per cent), Brookstead (84.3 per cent) and Gowrie Mountain (82.9 per cent), similar to the distribution of families discussed above. Inglewood had the largest proportion of lone person households at 32.4 percent, significantly higher than Queensland at 23.5 per cent.

Table 5-5: Household Type 2016 – SSC, LGA and Queensland (percentage)

Statistical Area	Family Household (% of total)	Lone Person Household (% of total)	Group Household (% of total)	Other ^(a) (% of total)
State Suburb				
Brookstead	84.3	15.7	0.0	0.0
Gowrie Junction	84.4	10.9	1.7	2.9
Gowrie Mountain	82.9	17.1	0.0	0.0
Inglewood	55.4	32.4	3.1	9.2
Kingsthorpe	75.1	18.0	3.0	3.9
Millmerran	62.6	24.9	3.4	9.1
Pittsworth	69.3	21.8	2.1	6.8
Southbrook	71.7	16.5	1.3	10.4
Westbrook	84.6	9.2	1.8	4.4
Yelarbon	65.2	24.4	0.0	10.4

Statistical Area	Family Household (% of total)	Lone Person Household (% of total)	Group Household (% of total)	Other ^(a) (% of total)
Goondiwindi	61.0	23.9	2.5	12.7
Toowoomba	66.1	24.7	3.2	6.1
Local Government Area				
Goondiwindi	61.0	23.9	2.5	12.7
Toowoomba	66.1	24.7	3.2	6.1
Queensland	71.8	23.5	4.7	0.0

Source: ABS Census 2016a and Quickstats (Queensland data)

^(a) Other household includes visitors and non-classifiable households

5.2.4 Demographic characteristics

Age

The population in the SIA impact assessment area is aging as shown by the increase in median age between 2011 and 2016 (refer Table 5-6) with Toowoomba increasing by one year to 38 years and Goondiwindi by two years to 40 years old. Both LGAs recorded slightly higher median ages than Queensland which had a median age of 37 years in 2016. Just over half the potentially impacted communities had median ages higher than the Queensland median. This reflects the rural-urban drift of younger people discussed previously. Some suburbs have notably older populations, including Inglewood at 48 years, Gowrie Mountain at 45 years. By contrast, Westbrook saw its median age decrease the most out of all suburbs from 37 years to 32 years old. All other suburbs experienced some fluctuation in median ages within their populations, except for Kingsthorpe, which remained the same at 37 years old.

Seniors make considerable contributions to local communities; however aging populations can have implications for health and housing provision (ABS, 2017) and can have greater difficulty adjusting to change. Communities with the highest median ages include Gowrie Mountain, Yelarbon, and Southbrook.

Table 5-6: Median Age, 2011 and 2016 (years)

Statistical Area	Median Age (years)		Change 2011-2016 (number)
	2011	2016	
State Suburb			
Brookstead	37	36	-1
Gowrie Junction	35	36	1
Gowrie Mountain	40	45	5
Inglewood	43	48	5
Kingsthorpe	37	37	0
Millmerran	39	43	4
Pittsworth	39	43	4
Southbrook	43	42	-1
Westbrook	37	32	-5
Yelarbon	40	44	4

Statistical Area	Median Age (years)		Change 2011-2016 (number)
	2011	2016	
Local Government Area			
Goondiwindi	38	40	2
Toowoomba	37	38	1
Queensland	36	37	1

Source: ABS Census 2016

Gender

Male to female ratios were reasonably evenly distributed throughout the SIA impact assessment area as shown in Table 5-7, but with a slightly higher representation of males in the Goondiwindi LGA than in Toowoomba LGA or Queensland (at 50.2 per cent, compared with 48.6 per cent and 49.4 per cent respectively). The highest variation was seen in Brookstead where 54.1 per cent of the population identified as being male and 45.9 per cent identified as being female. Westbrook experienced an even number of male to female ratios within its population.

Table 5-7: Gender, 2016 (percentage)

Statistical Area	Male (% of total)	Female (% of total)
State Suburb		
Brookstead	54.1	45.9
Gowrie Junction	50.1	49.9
Gowrie Mountain	49.6	50.4
Inglewood	50.2	49.8
Kingsthorpe	49.1	50.9
Millmerran	48.8	51.2
Pittsworth	47.6	52.4
Southbrook	51.1	48.9
Westbrook	50.0	50.0
Yelarbon	51.5	49.5
Local Government Area		
Goondiwindi	50.2	49.8
Toowoomba	48.6	51.4
Queensland	49.4	50.6

Source ABS Census 2016a

Table 5-8 shows the SIA impact assessment area's representation of age groups that are potentially vulnerable to changing social conditions, including children, young people and seniors. Children under 15 years are well represented in both LGAs at levels similar to, or higher, than Queensland.

Older people over the age of 65 years are overrepresented in some of these same communities, in Inglewood (23.2 per cent), Millmerran (21.9 per cent), Pittsworth (26.6 per cent) and Yelarbon (27.2 per cent), compared with Queensland (15.3 per cent). Lone person households were also highly represented in Inglewood, Millmerran and Yelarbon, suggesting that many of these older people may be living alone. This is an important factor to consider when considering their ability to adapt to change.

Table 5-8: Selected Age Groups, 2016 (number and percentage)

Statistical Area	<15 yrs No.	15-24 yrs No.	>65 yrs No.	<15 yrs (% of total)	15-24 yrs (% of total)	>65 yrs (% of total)
State Suburb						
Brookstead	53	32	18	23.7	14.3	8.0
Gowrie Junction	537	247	186	25.5	11.7	8.8
Gowrie Mountain	45	33	24	19.8	14.5	10.6
Inglewood	157	83	217	16.8	8.9	23.2
Kingsthorpe	413	230	256	22.3	12.4	13.8
Millmerran	312	156	344	19.9	9.9	21.9
Pittsworth	682	370	875	20.7	11.3	26.6
Southbrook	113	80	72	18.9	13.4	12.0
Westbrook	1,075	478	330	27.7	12.3	8.5
Yelarbon	90	30	100	24.5	8.2	27.2
Total	3,479	1,746	2,444	23.1	11.6	16.2
Local Government Area						
Goondiwindi	2,267	1,143	1,866	21.3	10.8	17.6
Toowoomba	32,594	20,841	28,552	20.3	13.0	17.8
Total	34,858	21,984	30,438	20.3	12.8	17.8
Queensland	912,697	613,144	717,951	19.4	13.0	15.3

Source: ABS Census, 2016a

Level of education completed

As shown in Table 5-9, the Goondiwindi and Toowoomba LGA's recorded higher percentages of people who did not go to school or attended to Year 8 or below, compared to Queensland (6.5 per cent, 5.7 per cent and 5.4 per cent respectively). Year 11 or 12 (or equivalent) was the highest level of schooling completed for 41.4 per cent of the population within the Toowoomba LGA and 35.8 per cent in the Goondiwindi LGA, both below the 58.9 per cent in Queensland.

The lower level of educational attainment within the Goondiwindi LGA may be attributed to the rural nature of the area and distance from high schools, the greater proportion of elderly persons (education is more accessible to the current generation) and the higher proportion of employment in farming and trades.

Table 5-9: Non-school Qualifications by Level of Education, 2016 (number and percentage)

Statistical Area	Did not go to school, or Year 8 or below		Year 9 or 10 or equivalent		Year 11 or 12 or equivalent		Total
	No.	(% of total)	No.	(% of total)	No.	(% of total)	
Goondiwindi LGA	690	6.5	2,785	26.2	3,809	35.8	7,284
Toowoomba LGA	9,218	5.7	40,606	25.3	66,530	41.4	11,6354
Queensland	196,488	5.4	964,903	26.5	2,146,809	58.9	3,643,834

Source: ABS Census 2016a

Non-school qualifications by level of education, 2016

Overall, there is a lower attainment of tertiary and vocational qualification evident in the SIA impact assessment area than in Queensland. Table 5-10 shows that in 2016, a relatively low proportion of the population in the Goondiwindi and Toowoomba LGAs obtained a bachelor's degree or higher, compared to Queensland (8.3%, 12.8% and 18.3% respectively), and similarly with Advanced Diploma or Diploma, and Certificate (vocational) qualifications. The most prevalent qualification level in each of Goondiwindi LGA, Toowoomba LGA and Queensland was the Certificate (vocational) level.

Table 5-10: Non-school Qualifications, 2016 (number and percentage)

Statistical Area	Bachelor's degree or higher		Advanced diploma or diploma		Certificate	
	No.	(% of total)	No.	(% of total)	No.	(% of total)
Goondiwindi LGA	878	8.3	588	5.5	1,581	14.9
Toowoomba LGA	20,635	12.8	10,223	6.4	27,699	17.2
Queensland	693,410	18.3	330,619	8.7	807,105	21.3

Source: ABS Census 2016a

Disability

The LGAs in the SIA impact assessment area show similar levels of disability to the Queensland level of 5.2 per cent of the population who need assistance with core activities (refer Figure 5-5). The suburbs with a higher percentage of people needing assistance reflect those with older populations, including Yelarbon, Pittsworth and Inglewood (at 8.6 per cent, 7.5 per cent and 6.5 per cent). Brookstead also had a higher representation at 6.3 per cent.

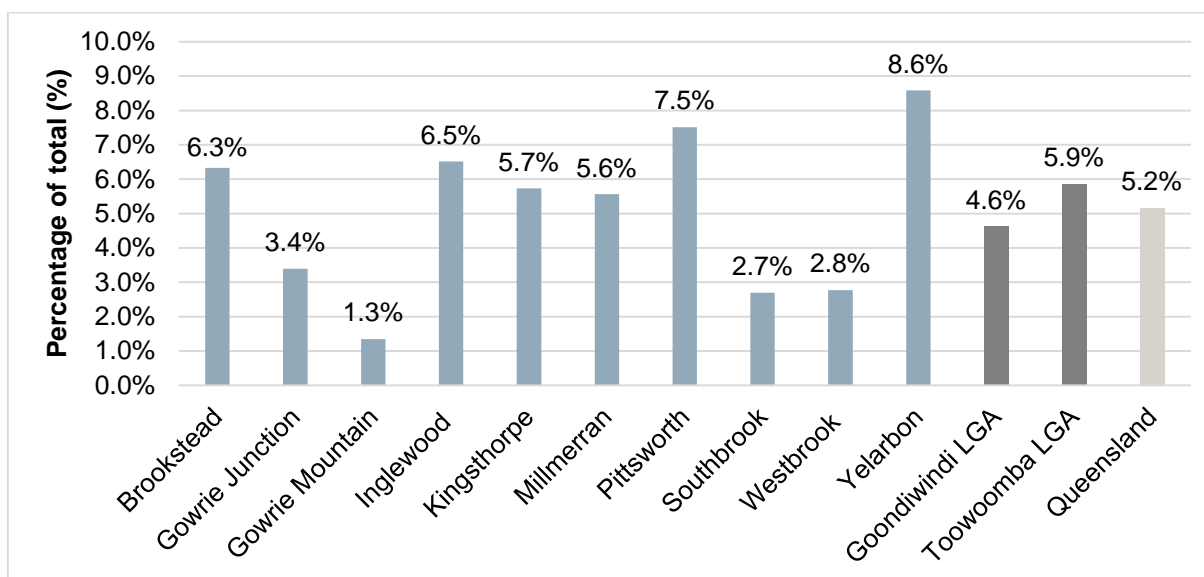


Figure 5-5: Need for Assistance with Core Activities, 2016 (percentage)

Source: ABS Census 2016a

Incomes

Most communities across the SIA impact assessment area earn have lower median household incomes than is typical for Queensland. Median household weekly incomes in the Goondiwindi and Toowoomba LGAs (\$1,212 and \$1,269 respectively) were slightly lower than the Queensland median (\$1,402/week), as shown in Figure 5-6. Incomes were differentiated by proximity to Toowoomba City, with the SSCs that are closer (such as Brookstead, Gowrie Junction, Gowrie Mountain and Westbrook) tending to have higher median household incomes than Queensland, while the rural suburbs had lower median household incomes.

The highest median weekly household's incomes were in Westbrook and Gowrie Junction (\$2,010 and \$1,879/week respectively). The lowest were in Yelarbon and Inglewood (\$776 and \$937 per week respectively).

The extended drought has affected the financial resources of families and businesses throughout the Project region, and the 2021 Census may reveal decreases in incomes and socio-economic indicators.

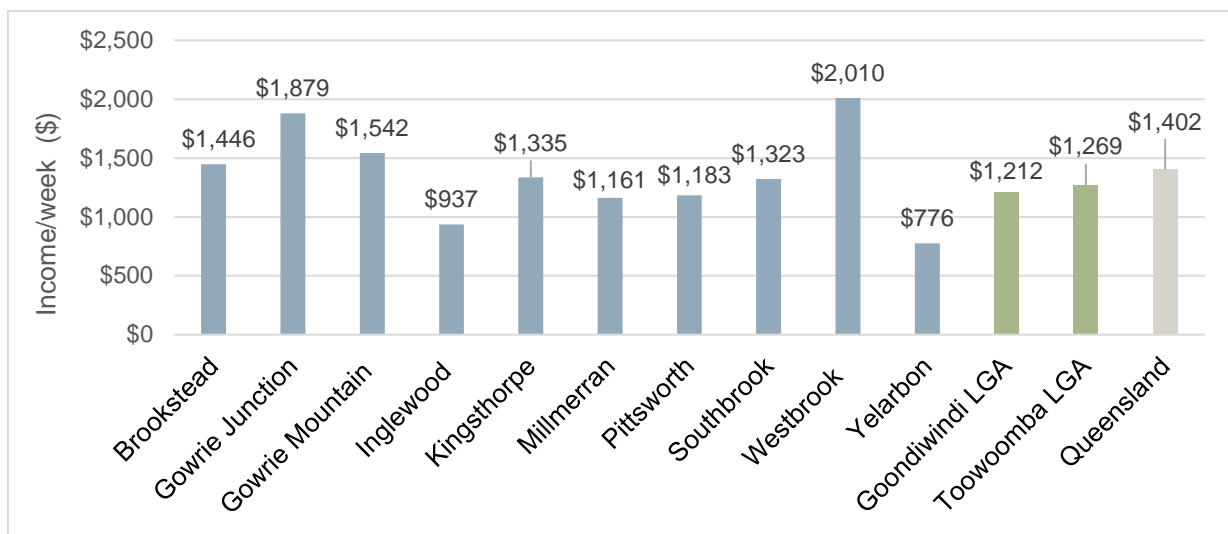


Figure 5-6: Median Weekly Household Incomes, 2016 (SSC, LGA and Queensland)

Source: ABS Census 2016a

Relative socio-economic advantage and disadvantage

SEIFA Indices

The Index for Relative Socio-economic Advantage and Disadvantage (IRSAD) is an area based index generated by the ABS using Census data. It measures both socio-economic advantage and disadvantage in terms of peoples' access to material and social resources, and their ability to participate in society (ABS SEIFA, 2016). SEIFA scores are compared to the standardised baseline (State) score of 1,000 with a low score indicating relatively greater disadvantage. The indices are also clustered into deciles and ranked so that relativity with other areas can be understood.

SEIFA indices used in the SIA include:

- IRSAD - high ranking and lower scores and low deciles reflect to a community with higher socio-economic disadvantage
- Index of Education and Occupation (IEO) - high ranking and lower scores and low deciles reflect a community with more unskilled workers or people with fewer qualifications.

The indices are reported here for SA1, SA2s and LGA geographies to reveal regional relativities, as well as potential small pockets of disadvantage. It is also important to note that disadvantage may occur in any community, but not be in sufficient numbers to show in the indices.

Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)

According to the IRSAD Index, at the regional level both Toowoomba and Goondiwindi LGAs are relatively advantaged (refer Table 5-11). Consistent with Toowoomba LGA's higher median income and level of non-school qualification reported earlier, it falls within a higher decile and is ranked as more advantaged than Goondiwindi LGA. Toowoomba-West SA2 was among the SIA impact assessment area's most advantaged SA2s with a decile of 6 and a rank of 298 (in a field of 526 SA2s in Queensland). This was followed by Gowrie as the second most advantaged SA2. The least advantaged SA2s were Millmerran, Jondaryan and Inglewood-Waggamba, which all shared a decile of 3, and ranked amongst the 100 to 150 most disadvantaged SA2s in Queensland (in a field of 526).

SA1s provide a more fine-grained view allowing pockets of disadvantage to be identified. Table 5-12 shows that most SA1s were either reasonably advantaged or neutrally placed in their deciles and rankings (in deciles 4 – 6). The exceptions were in Pittsworth where two SA1s fall within deciles 2 and 3 (SA1-3118208 in decile 2, and SA1-3118209 decile 3), and one SA1 fell within decile 3 in Southbrook (SA1-3118203) indicating pockets of disadvantage in these areas.

Index of Education and Occupation

As with the IRSAD, at the regional level both Toowoomba and Goondiwindi LGAs are advantaged in terms of labour skills and education according to the IEO Index, with Toowoomba LGA leading Goondiwindi LGA (refer Table 5-11). At the SA2 level, Toowoomba-West displayed the strongest position among the SA2s with a decile of 5 and ranking of 234 in a field of 526 SA2s in Queensland, while Millmerran and Jondaryan SA2s ranked in the top 100 most disadvantaged SA2s at positions 65 and 70 respectively. The most disadvantaged SA2s on the IEO were Jondaryan and Millmerran SA2s, both sharing a decile of 2. The SA1 data takes in localities that are within one kilometre of the Project, presents a slightly different picture with only one locality in Pittsworth indicated as being mildly disadvantaged (SA1-3118212 in decile 4) as shown in Table 5-12.

Table 5-11: SEIFA Index of Relative Socio-Economic Advantage and Disadvantage and Index of Education and Occupation, 2016 – SA2 and LGA

Statistical Area	Relative Socio-economic Advantage and Disadvantage			Index of Education and Occupation		
	Score	Decile	Rank in Qld	Score	Decile	Rank in Qld
Statistical Area 2	Position in 526 SA2s			Position in 526 SA2s		
Gowrie	1,002	6	283	945	4	194
Inglewood-Waggamba	932	3	132	944	4	190
Jondaryan	932	3	131	898	2	70
Millmerran	921	3	105	897	2	65
Pittsworth	966	4	201	939	4	170
Toowoomba-West	1,010	6	298	963	5	234
Local Government Area (LGA)	Position in 80 LGAs			Position in 80 LGAs		
Goondiwindi	957	7	50	950	7	55
Toowoomba	974	8	63	969	9	65

Source: ABS SEIFA 2017a

Table 5-12: SEIFA IRSAD and IEO, 2016 – Statistical Area 1

Statistical Area 1	Index of Relative Socio-Economic Advantage and Disadvantage		Index of Education and Occupation	
	Score	Decile	Score	Decile
3117410	1,013	6	1,049	7
3117405	964	4	1,032	6
3118108	1,001	5	1,070	8
3118107	974	4	1,039	7
3118105	969	4	1032	6
3118106	965	4	987	5
3118211	1,014	6	1,023	6
3118210	1,013	6	1,071	8
3118217	998	5	1,043	7
3118212[^]	-	-	963	4
3118208	917	2	1,005	5
3118209	954	3	1,025	6
3118207	993	5	1,047	7
3118202	990	5	1,025	6
3118206	1,041	7	1,104	9
3118204	1,030	6	1,086	9
3118203	935	3	1,002	5
3118205	1,016	6	1,071	8
3145816	1,022	6	1,074	8
3118018	1,009	6	1,044	7
3145817	1,009	6	1,057	8
3118016	1,063	8	1,102	9
3144916	1,041	7	1,107	9
3145818	994	5	1,054	7

Source: ABS SEIFA 2017a ^ Data not reported for this SA1

Internet access

Half of the suburbs in the SIA impact assessment area had relatively high levels of access to the internet when compared to Queensland (refer Table 5-13). Gowrie Mountain, Westbrook, Gowrie Junction, Brookstead and Kingsthorpe all had access at higher rates than Queensland (96.2 percent, 92.6 per cent, 92.0 per cent, 89.9 per cent and 87.0 per cent respectively, compared with 85.8 per cent).

However, both LGAs experienced percentages less than Queensland, the lowest being Goondiwindi which saw 74.8 per cent of the population with internet in their dwellings. A lower level of internet access was experienced in Yelarbon with just 56.8 per cent of residents having a dwelling with internet connected.

Table 5-13: Access to the Internet, 2016 (Percentages)

Statistical Area	Internet accessed from dwelling (% of total)	Internet not accessed from dwelling (% of total)
State Suburb		
Brookstead	89.9	8.7
Gowrie Junction	92.0	8.3
Gowrie Mountain	96.2	13.9
Inglewood (Qld)	65.4	33.8
Kingsthorpe	87.0	12.4
Millmerran	72.2	28.5
Pittsworth	76.5	23.0
Southbrook	82.9	17.1
Westbrook (Qld)	92.6	7.2
Yelarbon	56.8	46.2
Local Government Area		
Goondiwindi	74.8	25.2
Toowoomba	82.6	17.4
Queensland	85.8	14.1

Source: ABS Census 2016a

5.2.5 Travel behaviour

Transport networks

The main road networks in the SIA impact assessment area are the Cunningham, Warrego and Gore Highways, which are part of the national highway network providing connections between Melbourne and Brisbane and are key road-based freight routes.

The Cunningham Highway passes through the south eastern part of the SIA impact assessment area, linking the Darling Downs region with the urbanised outskirts of Ipswich (via Warwick), and in proximity to the Project between Yelarbon and Inglewood.

The Gore Highway links Goondiwindi and Toowoomba, running through the west/north-western part of the SIA impact assessment area and in proximity to the Project between Millmerran and north of Southbrook.

The Warrego Highway connects southwestern Queensland communities with coastal areas and is the key access route in the northern part of the impact assessment areas.

The South Western Line operates from Warwick westward to Dirranbandi in south west Queensland, via Inglewood and Goondiwindi. Passenger services are no longer operated, but the line is still used for freight transport as far as Thallon, 148 km west of Goondiwindi).

Public transport

Consistent with its regional location, there are no public transport services in the SIA impact assessment area outside of Toowoomba. Commercial bus services operated by Bus Queensland and Crisps Coaches provide daily services between Goondiwindi and Toowoomba. TransLink has contracts with coach services around rural and remote Queensland. Beyond these services, reliance is on private transport for mobility.

School bus services operate on eight routes in the potentially impacted communities, servicing the towns and suburbs of Gowrie Junction, Kingsthorpe, Westbrook, Brookstead, Pittsworth, Southbrook, Millmerran, Inglewood, Yelarbon and Goondiwindi.

Vehicle ownership

Given its rural and regional setting, there is a high dependency on the private car for travel in the SIA impact assessment area. Not surprisingly, vehicle ownership levels are higher than is typical for Queensland, ranging between 2.1 to 2.3 motor vehicles per dwelling in all SA2s, compared to 1.8 vehicles in Queensland (refer Table 5-14). However, there are some localities where vehicle ownership is lower: Inglewood recorded only 1.7 vehicles per dwelling, while Pittsworth and Yelarbon recorded 1.9 vehicles per dwelling each. This may reflect the higher proportion of single person households in these communities and single parent households in Pittsworth.

Table 5-14: Vehicle Ownership, 2016 (number per dwelling)

Statistical Area	Motor Vehicles per dwellings (number)
State Suburb	
Brookstead	2.4
Gowrie Junction	2.3
Gowrie Mountain	2.2
Inglewood	1.7
Kingsthorpe	2.2
Millmerran	2.0
Pittsworth	1.9
Southbrook	2.4
Westbrook	2.3
Yelarbon	1.9
Statistical Area 2	
Gowrie	2.3
Inglewood-Waggamba	2.1
Jondaryan	2.2
Millmerran	2.2
Pittsworth	2.2
Toowoomba-West	2.2
Local Area Government	
Goondiwindi	2.0
Toowoomba	1.9
Queensland	1.8

Source: ABS Census 2016c

Journey to work

Consistent with the high level of vehicle ownership noted above, seven of the ten SSCs in the SIA impact assessment area showed a higher rate of car use to access work in 2016 than Queensland, while both LGAs also had higher usage than Queensland (Toowoomba LGA at 69.5 per cent, Goondiwindi at 65.1 per cent and Queensland at 64.1 per cent – refer Figure 5-7). The lowest recorded reliance on car to access work was in Yelarbon with 47 per cent of the workforce driving to work; the highest was at Gowrie Mountain with 77.6 per cent driving to work.

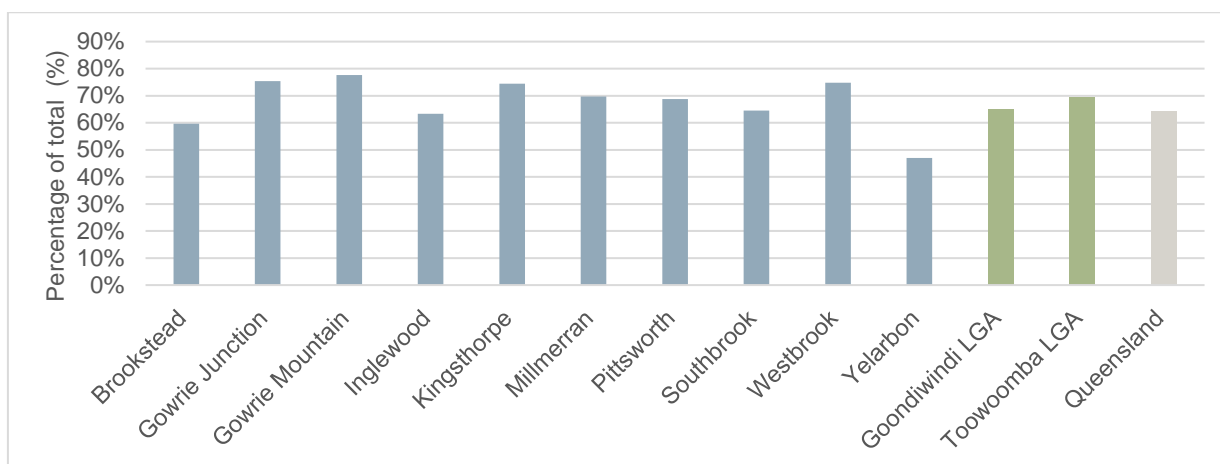


Figure 5-7: Journey to Work, Car as Driver, 2016 – SSC, LGA and Queensland (percentage)

Source: ABS Census 2016c

Working from home was the second most common place of work in 2016, reflecting the prevalence of farming in the region. However, 24 per cent of Yelarbon's small workforce (181 people) also worked from home. Goondiwindi LGA experienced a high proportion of people working from home at 10.7 per cent, almost double that of Queensland's 5.7 per cent. Walking to work was most common in Yelarbon and Inglewood, at 10 per cent and 9.4 per cent of journeys respectively, and much higher than Queensland's rate of 3.3 per cent.

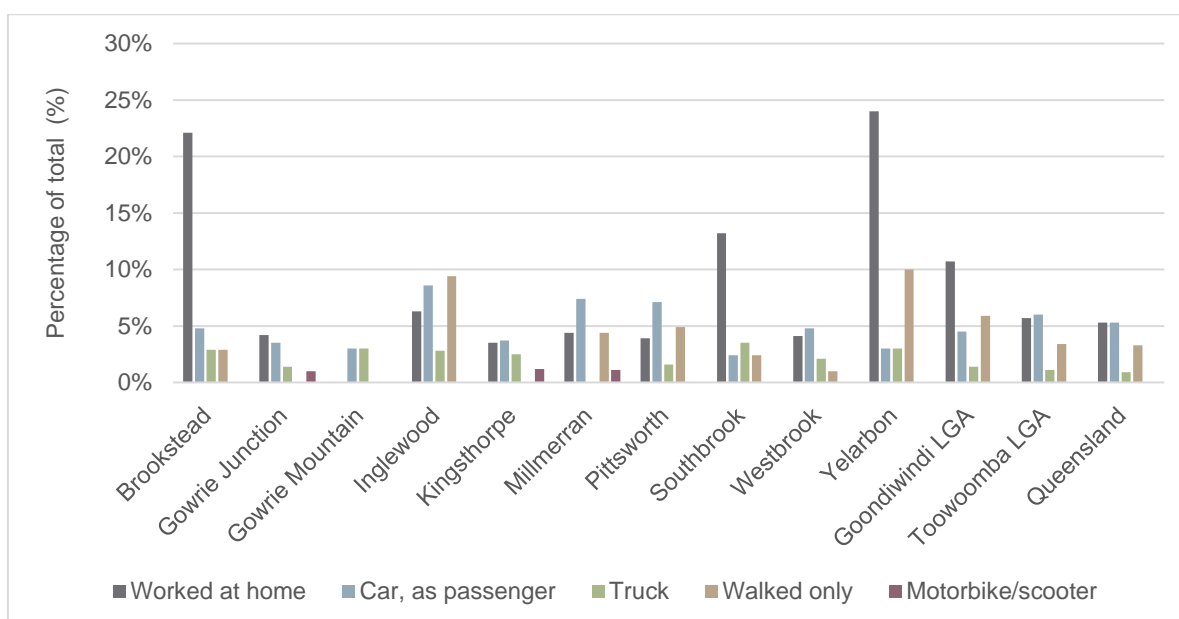


Figure 5-8: Journey to Work, 2016 – SSC, LGA and Queensland (percentage)

Source: ABS Census 2016c

Stock routes

Stock routes in Queensland are parcels of Crown land reserved under legislation for the use by travelling stock and provide pasture reserves for travelling or grazing stock. Their functions include allowing graziers access to a food source for cattle (which is particularly important during times of drought), environmental values, and access to markets (e.g. the Roma stockyards). The Project footprint interfaces with the State stock route network in 12 locations, as detailed in the Border to Gowrie EIS Chapter 5: Project description.

5.2.6 Summary of key demographic features

Analysis of socio-economic characteristics reveals the following features of local and regional populations:

- The Project potentially impacts on a population of 171,400 people in the broader region defined by the two LGAs of Toowoomba and Goondiwindi
- More people live in the northern reaches of the SIA impact assessment area in Toowoomba LGA (160,777 people) than in the southern reaches in Goondiwindi LGA (10,629 people)
- The main population centres near the Project footprint are Pittsworth (3,293 people), Gowrie Junction (2,115 people), Kingsthorpe (1,867 people) and Millmerran (1,565 people)
- Toowoomba LGA is anticipating population growth of between 4.5 per cent to 5 per cent to 2026, while Goondiwindi LGA is anticipating 1 per cent to 3 per cent over this period
- Indigenous populations are more highly represented in most communities in the SIA impact assessment area than is typical for Queensland (4.0% of the population), including at Inglewood (7.6 per cent), Kingsthorpe (5.8 per cent), Yelarbon (5.3 per cent), Millmerran (4.4 per cent), Gowrie Junction (4.0 per cent) and Gowrie Mountain (3.9 per cent).
- Family households were the most dominant household type across the SIA impact assessment area, at 61.0 per cent in Goondiwindi LGA and 66.1 per cent in the Toowoomba LGA but at lower levels than for Queensland (71.8 per cent)
- The population in the SIA impact assessment area is aging with the median age increasing between 2011 and 2016, reflecting the rural-urban drift of younger people to larger cities in search of education and employment
- There is an under representation of youths and young adults (15-24-year old) in the Goondiwindi LGA compared to both Toowoomba LGA and Queensland (10.8 per cent compared with 13.0 per cent and 13.0 per cent respectively)
- Older people over the age of 65 years are over-represented in communities such as Inglewood (23.2 per cent), Millmerran (21.9 per cent), Pittsworth (26.6 per cent) and Yelarbon (27.2 per cent), compared with Queensland (15.3 per cent). Lone person households were also highly represented in Inglewood, Millmerran and Yelarbon, suggesting that many of these older people may be living alone
- Disability occurs in the SIA impact assessment area at similar levels to the Queensland level of 5.2 per cent. Not surprisingly, the suburbs with a higher percentage of people needing assistance reflect those with older populations
- Cultural diversity is evident, particularly in Millmerran, and is increasing in line with the Toowoomba LGA's reputation as a region which welcomes refugees
- Overall, there is a lower attainment of tertiary and vocational qualification evident in the SIA impact assessment area than in Queensland
- According to the IRSAD, at the regional level both Toowoomba and Goondiwindi LGAs are relatively advantaged. However, there are pockets of disadvantage evident in Pittsworth and Southbrook
- At the regional level both Toowoomba and Goondiwindi LGAs are advantaged in terms of labour skills and education according to the IEO, with Toowoomba LGA leading Goondiwindi LGA.

- Given its rural and regional setting, there is a high dependency on the private car for travel in the SIA impact assessment area.

5.3 Community values

5.3.1 Community survey inputs

The SIA community survey for the Project identified local community values by asking respondents to respond to a series of value statements about their community. Figure 5-9 presents the weighted average of all community responses (n=107) to a series of value statements regarding their community's identity, core values and resilience (based on a scale of 1= strongly disagree; 2 = disagree; 3= neutral; 4= agree; and 5=strongly agree).

Given the small sample size from Goondiwindi LGA, average results by LGA have not been provided.

Of note from the Project's survey results, the majority of respondents generally agreed that:

- Their community is family oriented and safe (both receiving an agreement average of 4.3 out of 5),
- The community sticks together when times are tough, and looks after its members (both with an average score of 4.1)
- Communities are harmonious and accepting different cultures and lifestyles (with average scores of 3.8 and 3.7 respectively).

Fewer respondents agreed their community was able to adapt to change (with a response average of 3.2 out of 5) indicating some concern about community resilience.

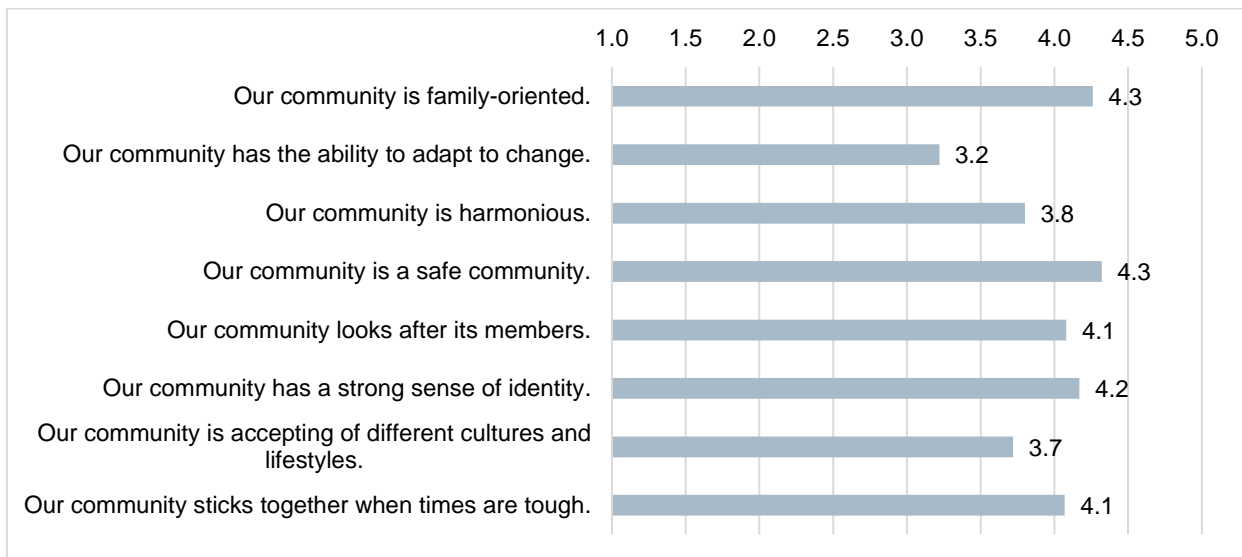


Figure 5-9: SIA impact assessment area community Survey – Community Values (average ratings)

When asked what things make communities in Goondiwindi LGA a valued and special place to live, Goondiwindi respondents emphasised the value of unique town characters, the natural environment and strong community identities, including:

- “Our community is a safe and caring place to raise a family and I am very proud of my community”
- “Our community has soil that is advantageous for agriculture, weather that is not too wet, highway access”
- “Very low crime rate, no vagrancy, people help each other, located close to other towns”

- “Accessible with the Cunningham Highway through town, town streets all sealed, clean town water, police station, fire brigade, men’s shed, and church groups”
- “People help each other look out for each other.”

Toowoomba LGA respondents described a rural way of life, valued peace and quiet, an appreciation of local wildlife and picturesque surrounding environment, away from major towns and industry activity but within close proximity of main service hubs of Toowoomba and Brisbane. Below is a selection of representative comments made in relation communities within the Toowoomba LGA:

- “The majority of communities in or near the corridor are heavily focused on agriculture”
- “The area has substantial natural beauty and a wonderful climate”
- “People are unhurried and friendly”
- “As a rural residential community, we enjoy the quiet and quality of life that acreage living provides with close proximity to a major rural city. Love and protect the wildlife”
- “It is our place of retirement over the coming years”
- “I love my community because when times are tough, we all stick together and support those in need”.
- “I feel like a member of the family with many people in my town...children have a happy and safe environment with a great little school”
- “It’s a great community offering all ages quality lifestyle and affordable housing. It’s a safe community. Surrounded by small farms that live harmoniously makes it a tranquil place. The town has little noise pollution so it is a place you can relax”
- “It’s a friendly, relaxed community with good job opportunities, rich agricultural and resources sectors”
- “It’s a peaceful place to live and conduct our business, but we know we live in an ocean when it floods.”

5.3.2 Cultural heritage

The original inhabitants of the region were Aboriginal people including the Bigambul People, the Western Wakka Wakka people and members of other Traditional Owner groups.

ARTC have held preliminary consultations with the statutory Aboriginal parties for the area covered by the Project to provide an overview of the Project and discuss cultural heritage sensitivities and processes.

SIA consultation with Aboriginal people identified concerns including:

- Bigambul People are concerned about the effect of changes to flooding patterns on cultural flows of water, and on the potential to affect cultural heritage which is valued by both Bigambul and non-Indigenous people.
- Gowrie Creek and Gowrie Mountain are culturally important areas for Western Wakka Wakka people, with Gowrie Creek an important site managed by the Western Wakka Wakka people
- The alignment may affect Gowrie Creek,
- Potential for the Project to affect cultural sites such as bora rings, kippa rings or sites associated with ancestors’ graves
- There is concern about the cumulative effects that infrastructure projects (including Warrego Highway, Toowoomba Bypass and the proposed Inland Rail projects) have on the cultural landscape, in relation to making it more difficult for Aboriginal people to relate to the landscape.

Aboriginal Cultural Heritage will be managed under approved Cultural Heritage Management Plans (CHMPs) as outlined in Section 7.1.1.

5.3.3 Cultural diversity

Cultural diversity in the SIA impact assessment area is represented at a broad level by the percentages of people born in Australia and of people who were not proficient in the English language, as shown in Table 5-15.

The SIA impact assessment area as a whole is less culturally diverse than is typical in Queensland, with a relatively high proportion of residents being Australian born (from 77.4 percent to 97.1 per cent of the population compared with Queensland's 71.1 percent). The most common countries of birth other than Australia were:

- In Toowoomba LGA - England 2.0 per cent, New Zealand 1.5 per cent, India 0.8 per cent, Philippines 0.7 per cent and South Africa 0.5 per cent
- In Goondiwindi LGA - New Zealand 1.0 per cent, England 0.9 per cent, Philippines 0.7 per cent, South Africa 0.5 per cent and India 0.3 per cent.

Table 5-15: Cultural diversity indicators, 2016 (Percentage)

Statistical Area	Born in Australia (% of total)
State Suburbs	
Brookstead	97.1
Gowrie Junction	90.3
Gowrie Mountain	85.2
Inglewood	83.2
Kingsthorpe	88.1
Millmerran	77.4
Pittsworth	81.8
Southbrook	83.2
Westbrook	87.3
Yelarbon	85.9
LGAs	
Goondiwindi	82.8
Toowoomba	81.0
Queensland	71.1

Source: ABS 2016 a and c

The most common languages spoken at home other than English were:

- In Toowoomba LGA – Mandarin, Arabic, Tagalog, Dinka (Sudanese migrants) and Afrikaans
- In Goondiwindi LGA – Afrikaans, Filipino, Mandarin, Punjabi and Cantonese 0 (ABS, 2016a).

Recently Toowoomba has received attention in the media as a regional model for migrant settlement and is a Refugee Council of Australia 'welcome zone' i.e. recognised as an LGA has made a commitment in spirit to welcoming refugees into the community. This is likely to see increasing cultural diversity in future years. Consultations with local communities will need to consider the communication needs of these residents.

5.3.4 Amenity and lifestyle

Amenity refers to the use and enjoyment of private and public properties. Residential amenity in areas close to the Project footprint 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)
- Rural townships, offering a relatively quiet lifestyle and strong community connectivity
- Access to basic local facilities which support community interaction and healthy lifestyles
- Connections and mutual reliance between neighbours
- The rural and natural landscapes, characterised by hills, river plains, vegetation and vistas across rural land
- Strong identification with the Macintyre and Condamine rivers and their floodplains.

Community members near the Project footprint enjoy a rural lifestyle based on:

- A quiet environment
- Agriculture as a primary source of livelihood
- Active, self-generated outdoor recreation (such as bike riding, horse riding and trail walking)
- Dependence on small towns to meet daily needs and social activities and regional centres (Goondiwindi and Toowoomba) for more specialised needs.

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.

5.3.5 Community identity

Community identity is derived from elements including community history, land uses, special features and community characteristics, and varies across the Toowoomba and Goondiwindi LGAs.

The Goondiwindi LGA is a primarily agricultural region located in the south-west Darling Downs. The main towns are Goondiwindi, Inglewood and Texas, where nearly three quarters of all residents live; the balance live in smaller townships and rural properties. Goondiwindi township is the administrative centre for the LGA, located just north of the NSW/QLD border on the Macintyre River, 223 km southwest of Toowoomba and 348 km southwest of Brisbane. Goondiwindi is also the main services centre and transport hub for the southwest Darling Downs and the northern tablelands in NSW. Inglewood is a smaller service centre supporting communities further north.

Residents of the Goondiwindi LGA identify with the cultural landscape, which holds particular significance to local Aboriginal communities, and the fertile agricultural lands that support pastoralism and agriculture. Community identity is strongly embedded in this region's rural industry with the Macintyre, Dumaresq and Weir Rivers and Macintyre Brook considered to be the 'lifeblood' of much of the region's agricultural industry and livelihood. These waterways are highly valued for their social, environmental and economic benefits, with their floodplains having been carefully managed over a long period of time to harvest water, manage flooding and support production.

The community has a relatively stable population and is characterised by strong social connections and community cohesion, also reflected in responses to the community survey conducted for the SIA.

Toowoomba LGA is home to both city and rural communities and occupies a large region west of the Toowoomba Range, some 130 km west of Brisbane. Toowoomba City, the main administrative and regional centre for the Northern and Western Darling Downs, sits on the eastern boundary of the LGA, at the edge of the Toowoomba Range. The region's diverse communities have a strong sense of place, based in their individual heritage and character, with the rural qualities of the townships and landscapes forming an intrinsic part of this region's character and identity. Natural assets such as parks, rural spaces and bushland are a valued feature of the whole region, as are the rich and fertile soils of the Condamine River floodplain, featuring some of the best quality soils in Australia, and supporting a vibrant and long established farming community.

Communities identify with the region's rural qualities, its relaxed country lifestyle, and the safe and family-friendly environment. Many of the rural communities and townships are self-contained, and enjoy strong community connections and cohesion (TRC, 2014 and 2018; see also Section 5.3.1).

5.3.6 Sense of place

Indigenous people have a particular relationship to land and their sense of community is strongly connected to natural elements of place. Aboriginal community members consulted for the SIA noted that development of major infrastructure such as highways, pipelines and roads in the SIA impact assessment area had damaged cultural landscapes and interfered with song lines, changed the nature of settlement and altered Aboriginal people's ability to recognise and care for Country.

Sense of place in the SIA impact assessment area as a whole is founded on relationship to the land (through farming and attachment to the landscape), the rural towns and localities, the environmental values and the social relationships between community members and communities. Factors of value to sense of place in the potentially impacted communities (and reflected in the community survey) include:

- Visual connections to the rivers, plains, ranges and peaks
- Homesteads, outbuildings and agricultural infrastructure providing constant reminders of the area's strong connections to farming
- Appreciation of local biodiversity and fauna and flora habitats
- Local roads and highways, which represent access to adjoining towns, regional centres and cities
- Community facilities, events and activities, which represent shared work, cultural customs and practices and recreational pursuits
- Local shops and services, which support self-reliance
- Industry, which supports vitality, self-sufficiency and local economy.

People who have lived in the area for a long time have a particularly strong attachment to place with families having lived there for generations and contributing to a deep local knowledge of the area's physical and environmental attributes.

5.3.7 Access to natural resources

The SIA impact assessment area is rich in natural resources offering a variety of landscapes and some of the nation's best agricultural land, and featuring urban and rural land holdings, scenic and natural amenity, State forests and reserves, and deposits of thermal coal and natural gas.

The area has an extensive network of river systems which support valuable agricultural production on the floodplains of the Condamine River that forms part of the Murray-Darling Basin in the north (Toowoomba LGA); and of the Border Rivers basins of Macintyre Brook and Macintyre and Weir Rivers in the south (Goondiwindi LGA). Prime agricultural land on these floodplains supports high yielding agriculture including irrigation, cropping and grazing, and has been designated as Priority Agricultural Area under the *Regional Planning Interest Act 2014* to prioritise its use for agriculture.

Condamine River floodplain

The Project includes a 12.5 km crossing of the Condamine River floodplain in the Millmerran/Brookstead area (based on the 1% AEP inundated floodplain width). The Condamine River floodplain is a prime grain and cotton growing region with high quality fertile land. The floodplain includes Priority Agricultural Areas and Strategic Cropping Zone areas, with pig and poultry farms and cattle feedlots interspersed between irrigated fields. The most common crops grown are wheat, sorghum, maize and barley, oilseeds, pulses and cotton. Brookstead is a major collection point for the area's grain.

Over decades, land holders, farmers and agribusinesses in the Condamine River floodplain have developed a finely calibrated land management system which maximises productivity, whilst respecting the floodplain's hydrological and ecological values. As part of the Murray-Darling Basin, access to water is heavily regulated, and production levels are dependent upon the harvesting of floodwaters to support the seasonal growth of crops.

Forests

State forests in the region include:

- Western Creek, Bulli, Wondul, Dunmore, Domville and Millmerran State Forests near Millmerran
- Whetstone and Yelarbon State Forests near Whetstone
- Bringalily and Devine State Forests near Inglewood
- McEwan State Forest near Pittsworth.

Recreational reserves

The SIA impact assessment area's natural assets support a variety of cultural and outdoor recreational values and activities for residents and visitors. This has benefits for local businesses such as cafes and restaurants that service tourists to the area. In the northern reaches of the SIA impact assessment area these assets include:

- Mount Kingsthorpe, providing a graded walking track to a lookout at the summit, providing views over the Rosalie Plains and Darling Downs
- Gowrie Mountain - Rowland Court Bushland Park providing open space for general enjoyment
- Mount Basalt Reserve, (18.4 km south of Millmerran, 6 km east of alignment) featuring rare volcanic formations and walking tracks and lookouts
- Wondul Range National Park, 32 km south-west of Millmerran, protecting woodland species typical of the Western Downs, holding cultural and landscape values important to the Bigambul People and offering a remote park experience for naturalists and bird watchers.

In the southern reaches of the SIA impact assessment area these assets include:

- Yarramalong Weir Reserve, located on the banks of the Condamine River, 30 km east of Millmerran
- Lake Coolmunda, 13 km east of Inglewood – a reservoir on Macintyre Brook, and a popular spot for picnics, water sports, fishing, bird watching, hiking and camping
- A number of walkways and bikeways including, including a 3 km walkway along the Macintyre River in Goondiwindi township, and a 2.2 km historical, interpretive circuit in Inglewood (Olive Walkway)
- The Natural Heritage and Water Park, a 210 ha recreational water park in Goondiwindi supporting water skiing, wakeboarding, canoeing, boating, picnicking and swimming
- Rainbow, Gibinbell and Bengalla Reserves between Goondiwindi and Yelarbon, providing a range of camping, bird watching and fishing activities

- Bengalla Reserve and Yellowbank Reserve (camping and fishing) 5 km and 4 km south of the Project
- Yarramalong Weir 7 km south east of the Project, known for camping and fishing.

5.4 Employment, business and industry

This section provides an overview of labour force characteristics in the SIA impact assessment area. Of note, Census data sets differ slightly for different tables providing small variations in total workforce numbers.

5.4.1 Labour force characteristics

The Australian Government's quarterly regional estimates indicate that at the December quarter 2019, the labour force in the SIA impact assessment area included 5,939 people in the Goondiwindi LGA and 74,127 people in the Toowoomba LGA (refer Table 5-16), or a total of 80,066 people. Labour force participation rates were lower at 72.1 percent in the Goondiwindi LGA and 72.9 percent in the Toowoomba LGA than the Queensland rate of 78.3 percent in 2016 (refer Table 5-16).

The unemployment rate was higher in the Toowoomba LGA at 4.2 percent than in the Goondiwindi LGA (2.6 percent) at the December quarter 2019, but the rate in both LGAs was lower than the Queensland average (6.1 percent). Over the 12 months to December 2019, unemployment had decreased in both LGAs, by 0.7 percentage points in the Goondiwindi LGA and by 1.6 percentage points in the Toowoomba LGA.

At the December quarter 2019, there were 154 people in the Goondiwindi LGA and 3,113 people in the Toowoomba LGA who were unemployed, which represented a total of 3,267 people.

Table 5-16: Labour force and unemployment (number and percentages) December 2019

Area	Labour force	Participation rate*	Unemployed persons	Unemployment rate	12 month unemployment rate change
Goondiwindi	5,939	72.1%	154	2.6%~	- 0.7%
Toowoomba	74,127	72.9%	3,113	4.2%~	-1.6%
QLD	2,707,000^	78.3%	154,800	5.7%#	0.4%

Source:

~Australian Government's Small Area Labour Markets, Labour Force Survey, Australia, December 2019 *ABS 2016 Census of Population and Housing. Participation rate for working age population 15 to 64 years June 2016, Place of Usual residence.

^ ABS, 2020. 6202.0 Labour Force, Australia provides round numbers for Queensland labour force and unemployment estimates.

Australian Government Labour Market Information Portal, 2020

5.4.2 Employment by industry

Table 5-17 provides the number and percentage of the Project's region's workforce employed by each industry in 2016. In Goondiwindi, the agriculture, forestry and fishing industry employed over a quarter of the working population (27.7 percent). the next highest employing industries included health care and social assistance (at 9.2 percent), followed by education and training (8.3 percent) and construction (7.2 percent).

In Toowoomba, the largest proportion of workers were employed in service based industries such as health care and social assistance (14.7 percent), education and training (11.0 percent) and retail trade (9.5 percent), followed by construction at 7.2 percent.

The construction workforce in the SIA impact assessment area as a whole numbered 6,403 workers, of whom 6,053 workers lived in Toowoomba and 233 workers lived in Goondiwindi.

Table 5-17: Employment by industry (number and percentages) 2016

	Goondiwindi No.	Goondiwindi % of total	Toowoomba No.	Toowoomba % of total	Qld % of total
Agriculture, Forestry and Fishing	1,343	27.7%	4,535	6.4%	2.3%
Mining	31	0.6%	1,285	1.8%	1.2%
Manufacturing	167	3.4%	4,840	6.8%	1.1%
Electricity, Gas, Water and Waste Services	53	1.1%	836	1.2%	1.6%
Construction	350	7.2%	6,053	8.5%	2.8%
Wholesale Trade	132	2.7%	2,130	3.0%	2.0%
Retail Trade	478	9.8%	6,756	9.5%	2.5%
Accommodation and Food Services	278	5.7%	4,230	5.9%	3.5%
Transport, Postal and Warehousing	204	4.2%	3,000	4.2%	2.6%
Information Media and Telecommunications	23	0.5%	497	0.7%	3.9%
Financial and Insurance Services	63	1.3%	1,878	2.6%	6.3%
Rental, Hiring and Real Estate Services	36	0.7%	1,033	1.5%	7.3%
Professional, Scientific and Technical Services	159	3.3%	3,170	4.5%	6.6%
Administrative and Support Services	98	2.0%	1,733	2.4%	5.1%
Public Administration and Safety	171	3.5%	4,738	6.7%	9.0%
Education and Training	402	8.3%	7,806	11.0%	6.0%
Health Care and Social Assistance	449	9.2%	10,500	14.7%	9.9%
Arts and Recreation Services	17	0.4%	668	0.9%	9.0%
Other Services	198	4.1%	2,908	4.1%	13.0%
Inadequately described	151	3.1%	1,894	2.7%	3.1%
Not stated	58	1.2%	703	1.0%	1.0%
Total	10,628	100.00%	160,779	100.0%	100.0%

Source: Census of Population and Housing, 2016, TableBuilder. Based on Place of usual residence

5.4.3 Occupation

Table 5-18 shows the number and percentage of people by occupation in the SIA impact assessment area. In the Goondiwindi LGA, managers were the most common occupation, reflecting the large number of farm managers. Labourers are also well represented at 15.3 percent (compared to 10.3 percent in Queensland), followed by technicians and trade workers at 12.6 percent compared the Queensland average of 14.3 percent). The proportion of machinery operators and drivers (10.0 percent) was also above the Queensland average.

In the Toowoomba LGA, the largest proportion of workers are employed as professionals, reflecting the large health and education sectors in the LGA, followed by technicians and trade workers which at 15.1 percent) was slightly higher than the Queensland average. The representation of machinery operators and drivers (at 6.9 percent) reflected the Queensland averages (refer Table 5-21).

Table 5-18: Employment by occupation (number and percentages) 2016

Occupation	Goondiwindi	Goondiwindi	Toowoomba	Toowoomba	QLD
Managers	1,017	20.9%	8,854	12.4%	12.1%
Professionals	571	11.8%	13,271	18.6%	19.8%
Technicians and Trades Workers	610	12.6%	10,757	15.1%	14.3%
Community and Personal Service Workers	449	9.2%	7,918	11.1%	11.3%
Clerical and Administrative Workers	538	11.1%	9,501	13.3%	13.6%
Sales Workers	387	8.0%	6,435	9.0%	9.7%
Machinery Operators and Drivers	485	10.0%	4,888	6.9%	6.9%
Labourers	741	15.3%	8,659	12.2%	10.5%
Inadequately described	46		472		
Not stated	23		432		
Total	10,628		160,779		

Source: Census of Population and Housing, 2016, TableBuilder. Based on Place of usual residence. 'Inadequately described' and 'not stated' excluded from percentages.

5.4.4 Unemployment

Unemployment in local towns

The 2016 Census provides more granular data on unemployment in local towns and whilst this data is now three years old, provide an indication of towns where numbers of unemployed people may be higher, and there is the possibility of sourcing Project workers without disrupting other industries' access to labour.

Figure 5-10 and Table 5-19 show that in 2016, all SSCs had unemployment rates below that for Queensland and the wider SIA impact assessment area, except for Yelarbon, which had a very high rate of 12.5 per cent. However, percentages can appear exaggerated in small communities – of Yelarbon's workforce of 120 people, 15 are unemployed, up from 5 people in 2011 (refer Table 5-19). Brookstead, another small community, experienced the lowest unemployment rate among SSCs, with no unemployment recorded in its workforce of 111 people in 2016. Brookstead also experienced a decrease from 2011 figures while all other suburbs saw a rise in unemployment.

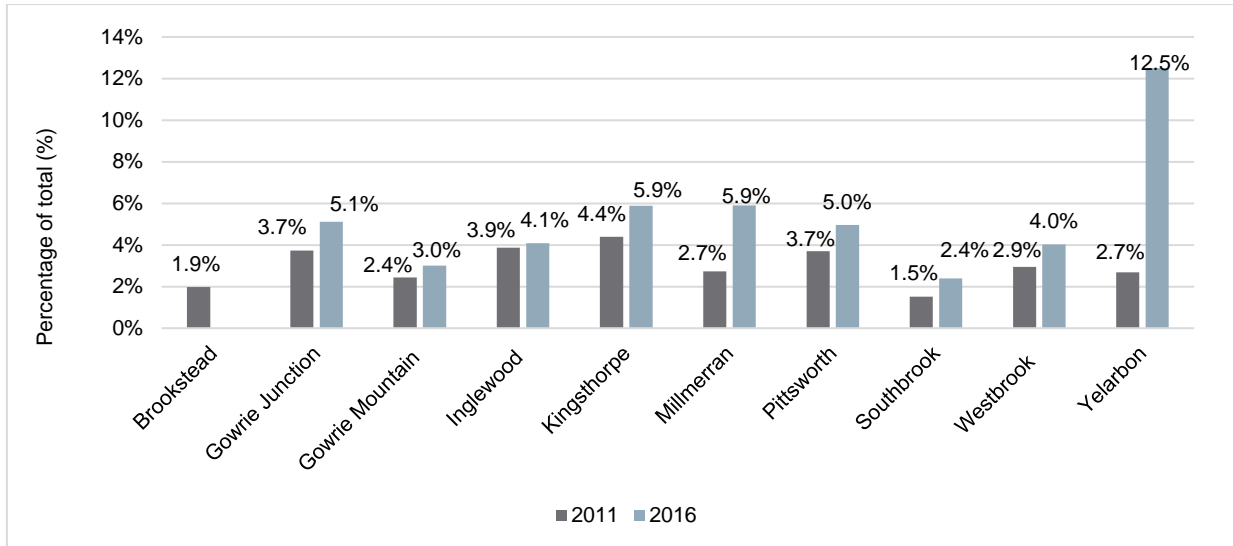


Figure 5-10: Unemployment, 2011–2016 – State Suburb (percentage)

Source: ABS Census, 2011 and 2016a

Table 5-19: Unemployment numbers - State Suburb, 2011-2016 (number)

Statistical Area	Employed	Unemployed	Total Labour Force	Not in Labour Force	Employed	Unemployed	Total Labour Force	Not in Labour Force
2011				2016				
State Suburb								
Brookstead	149	3	152	66	111	0	111	47
Gowrie Junction	1,004	39	1,043	359	1,074	58	1,132	372
Gowrie Mountain	120	3	123	61	129	4	133	45
Inglewood	448	18	466	314	399	17	416	299
Kingsthorpe	872	40	912	425	863	54	917	465
Millmerran	711	20	731	448	670	42	712	407
Pittsworth	1,303	50	1,353	799	1,321	69	1,390	915
Southbrook	260	4	264	124	286	7	293	126
Westbrook	1,682	51	1,733	562	1,983	83	2,066	563
Yelarbon	181	5	186	133	105	15	120	145
Total	6,730	233	6,963	3,291	6,941	349	7,290	3,384
Local Government Area								
Goondiwindi	5,058	156	5,219	2,252	4,855	187	5,043	2,455
Toowoomba	68,825	3,427	72,257	40,115	71,188	5,149	76,338	42,492
Total	73,883	3,583	77,476	42,367	76,043	5,336	81,381	44,947
Statistical Area 4								
Darling Downs-Maranoa	55,503	2,273	57,775	31,241	54865	3199	58062	33346
Total	119,645	5,626	125,269	67,922	121,251	8,227	129,471	72,683

Source: ABS Census, 2011 and 2016a

Indigenous unemployment

In 2016, Indigenous unemployment in the region was high at 12.6 percent in the Goondiwindi LGA and 18.8 percent in the Toowoomba LGA compared to the general unemployment rate but slightly lower than the Queensland Indigenous unemployment rate of 20.1 per cent (refer Table 5-20). In the Toowoomba LGA this represented 420 unemployed people, and in Goondiwindi, 23 people.

For the broader labour force region, Indigenous unemployment was also higher than the general average but slightly lower than the Indigenous average for Queensland at 17.8 per cent in the Darling Downs-Maranoa SA4.

Table 5-20: Indigenous Unemployment, 2016 (Number and percentage)

Location	Indigenous Person
Local Government Area	
Goondiwindi LGA	23
(% of total)	12.6
Toowoomba LGA	420
(% of total)	18.8
Statistical Area 4	
Darling Downs-Maranoa	400
(% of total)	17.8
Queensland (% of total)	20.1

Source: ABS Census 2016e

Youth unemployment

Youth unemployment amongst 15 to 24 year olds is lower in the SIA impact assessment area than in Queensland. The highest youth unemployment in the SIA impact assessment area was 14.9 per cent (2,055 people) in Toowoomba LGA compared with 15.8 per cent in Queensland (refer Table 5-21).

Table 5-21: Youth Unemployment, 2016 (number and percentage)

Location	Youth (15-24 years)
Local Government Area	
Goondiwindi	53
(% of total)	7.3
Toowoomba	2,055
(% of total)	14.9
Statistical Area 4	
Darling Downs-Maranoa	1,049
(% of total)	11.6
Queensland (% of total)	15.8

Source: ABS Census 2016 a

Recent increase in Jobseeker recipients

COVID-19 restrictions have affected employment levels in Queensland and other Australian states during 2020.

The number of Goondiwindi LGA residents receiving Jobseeker or Youth Allowance increased from 376 people to 584 people (an increase of 55.3 percent) between March 2020 and July 2020, and the number of Toowoomba LGA residents receiving these benefits increased from 7,175 people to 10,995 people (an increase of 53.2 percent over the same period). This was largely due to decreased economic activity resulting from COVID-19 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.

Table 5-22: Jobseeker recipients, Goondiwindi and Toowoomba LGAs, change March – July 2020

LGA	July 2020		March 2020		Change	
	JobSeeker and youth allowance recipients	% of 15-64 age population	JobSeeker and Youth allowance recipients	% of 15-64 age population	No.	%
Goondiwindi	584	9.1	376	5.9	208	55.3
Toowoomba	10,995	10.6	7,175	6.9	3,820	53.2

Source: id.profile, 2020

5.4.5 Business profile

As Toowoomba is a regional service centre and gateway to the Surat Basin gas fields, it hosts a large proportion of the SIA impact assessment area's businesses, with most of the SIA impact assessment area's large employers also based here. Across the SIA impact assessment area, agriculture, forestry and fishing are the most common types of industry. The region has seen a small increase in the overall number of businesses in each of the LGAs from 2015-17 (3.8 per cent in Goondiwindi LGA and 2.8 per cent in Toowoomba LGA).

Table 5-23 shows that in 2016 in Toowoomba LGA more than a fifth of all businesses were associated with the agriculture, fishing and forestry sector (21.3 per cent). The next most common industry sectors were construction (16.3 per cent of all businesses); rental, hiring and real estate (10.2 per cent); and financial and insurance businesses (7.2 per cent). Goondiwindi LGA is even more heavily oriented towards agriculture and forestry, with almost half of all businesses in this sector (45.5 per cent). The next most common industry sectors are rental, hiring and real estate (9.8 per cent of all businesses); construction (8.3 per cent); and transport, postal and warehousing (5.2 per cent).

The Commodore Mine south of Millmerran supports the Millmerran Power Station, and these two operations are also major local employers.

While small-scale coal seam gas exploration is occurring within the Goondiwindi LGA, the SIA impact assessment area has not experienced significant development in the resources and energy sector.

Table 5-23: Registered Businesses by Industry Type, 2017- Local Government Area (number and percentage)

Type of Industry	Goondiwindi LGA			Toowoomba LGA			Goondiwindi LGA	Toowoomba LGA
	2015	2017	Change (no.)	2015	2017	Change (no.)	2017 (% of total)	
Agriculture, Forestry and Fishing	832	864	32	3,292	3,330	38	45.5	21.3
Mining	10	7	-3	53	51	-2	0.4	0.3

Type of Industry	Goondiwindi LGA			Toowoomba LGA			Goondiwindi LGA	Toowoomba LGA
	2015	2017	Change (no.)	2015	2017	Change (no.)	2017 (% of total)	
Manufacturing	57	57	0	594	592	-2	3.0	3.8
Electricity, Gas, Water and Waste Services	10	10	0	36	33	-3	0.5	0.2
Construction	154	158	4	2,444	2,539	95	8.3	16.3
Wholesale Trade	47	46	-1	370	390	20	2.4	2.5
Retail Trade	89	78	-11	863	847	-16	4.1	5.4
Accommodation and Food Services	51	51	0	462	482	20	2.7	3.1
Transport, Postal and Warehousing	92	99	7	901	936	35	5.2	6.0
Information Media and Telecommunications	3	3	0	65	65	0	0.2	0.4
Financial and Insurance Services	76	79	3	1,019	1,120	101	4.2	7.2
Rental, Hiring and Real Estate Services	173	187	14	1,594	1,592	-2	9.8	10.2
Professional, Scientific and Technical Services	65	66	1	1,074	1,088	14	3.5	7.0
Administrative and Support Services	26	36	10	457	454	-3	1.9	2.9
Public Administration and Safety	0	0	0	29	32	3	0.0	0.2
Education and Training	12	13	1	145	154	9	0.7	1.0
Health Care and Social Assistance	49	46	-3	774	851	77	2.4	5.4
Arts and Recreation Services	3	4	1	160	172	12	0.2	1.1
Other Services	77	85	8	717	748	31	4.5	4.8
Currently Unknown	23	26	3	138	142	4	1.4	0.9
Total Businesses	1,831	1,900	69	15,200	15,619	419	100.0	100.0

Source: ABS, 2017a

While the region recorded 15,619 businesses in 2017, nearly two thirds of these (63.8 per cent) were small businesses with no employees, while around one third (34 per cent) employed less than 20 people each (refer Table 5-24). Only 2.2 per cent (388 businesses) have more than 20 employees, with most of the larger employers located in Toowoomba LGA. This suggests a heavily reliance in the local economy on small family and sole operator enterprises (including family farming).

Table 5-24: Registered businesses by number of employees, 2017 - Local Government Area (number and percentage)

Local Government Area	Non-employing	1-19 Employees	20-199 Employees	200+ Employees	Total
Number					
Goondiwindi	1,203	673	27	3	1,900
Toowoomba	9,981	5,281	348	10	15,619
Total	11,184	5,954	375	13	17,519
Percentage of total					
Goondiwindi	63.3	35.4	1.4	0.2	100.0
Toowoomba	63.9	33.8	2.2	0.1	100.0
Total	63.8	34.0	2.1	0.1	100.0

Source: ABS, 2017a

The Darling Downs region is a popular tourist destination, with a wide range of natural and cultural heritage tourism attractions, and iconic community events such as the Toowoomba Carnival of Flowers and the Australian Camp Oven Festival at Millmerran (which was cancelled in 2020 due to COVID-19 restrictions).

Goondiwindi is a popular stop-over for interstate travellers, located at the junction of five highways, and on the Macintyre River, it offers historical sites, bird watching, botanic gardens, a riverside park and other local attractions. Remote bushland, bird watching, outdoor recreation and regional heritage are popular attractions elsewhere, with heritage museums and facilities located in Goondiwindi, Inglewood, Millmerran and Pittsworth. Some of these attractions form part of the Toowoomba Region Transport Heritage Trail.

The SIA impact assessment area's SA2s host only 10.4 per cent of the Darling Downs Tourism Region's tourist accommodation premises estimated at 13 premises (ABS 2016e). The primary supply of short term accommodation servicing the region is in Toowoomba and Goondiwindi (refer Section 5.5.3 for more details).

Indigenous businesses

At September 2019, there were approximately 23 Indigenous businesses registered as servicing the Toowoomba LGA, including construction, plumbing, maintenance, printing, crash repair, equipment hire and accounting firms (Black Business Finder, 2019). Indigenous businesses registered as servicing the Goondiwindi LGA at September 2019 included five businesses offering e.g. drilling, concreting and construction services (*Ibid.*). These businesses will be identified on the Project's local business register. Consultation has indicated that some small Indigenous businesses in the region are struggling and need assistance to build capacity to participate in the Project.

Agribusinesses

The Project traverses areas of agricultural land which are used for cropping, irrigated cropping and grazing (refer Border to Gowrie EIS Chapter 7: Land use and tenure). The SIA impact assessment area also includes several major agribusinesses.

Table 5-25 identifies key agricultural businesses located near the Project footprint.

Table 5-25: Agricultural businesses near the Project

Locality	Features and approximate locations
Kurumbul	Sapphire Feedlot near the Project footprint
Yelarbon	AE Girle and Sons sawmill located on Taloom Street, Yelarbon within approximately 100 m of the Project footprint
	GrainCorp silos in the Project footprint at Sawmill Road
Whetstone	Yarranbrook Feedlot within the Project footprint
Bringalily, Millwood and Clontarf	D M Fletcher Feedlot in the Project footprint (Bringalily)
	Boondooma Country Pork Piggery near the Project footprint (Millwood)
	R Sydney and KM Stevens Feedlot in the Project footprint (Millwood)
Millmerran	Bannock Brae Meats (Piggery) on Commodore Peak Road 1.2 km north of Project footprint
	Millmerran Meats (abattoir) south of golf course, 600 m north west of Project footprint
	Rail siding with grain silos on the Millmerran Branch Line
Pampas	Irrigated agriculture and cropping within the Project footprint
Yandilla	DA Hall and Co Poultry and eggs farms Pfeffer Road (and Hall Road)
Yandilla	Moyness Piggery off Lindenmayer Road (owned by Doug Hall Poultry) within the Project footprint
Brookstead	Silos within the and near the Project footprint
Pittsworth Athol	FarmHaul Pty Ltd livestock transport (Gap Road) 600 m from the Project footprint
	"Markham" Horse Stud Wegener Road 800 m east of the Project footprint
Southbrook	Inghams Enterprises Pty Limited TF3 Farm (Layer Hens) 3.7 km east of the Project footprint
Biddeston	Piggery off Berghofer Road 1 km west of Project footprint

5.4.6 Labour skills and availability

The Project's major requirement for labour and skills will be during the construction phase. As shown in Table 5-17, in 2016, there were 350 people in the Goondiwindi LGA and 6,053 people in the Toowoomba LGA who were employed in the construction industry, or a total of 6,103 people across the SIA impact assessment area.

As noted in the previous section, there were almost 2,600 registered construction industry businesses in the Goondiwindi and Toowoomba LGAs in 2017. These are likely to include businesses with appropriately skilled personnel, services and equipment for the Project's construction phase. However, as there were few businesses with more than 20 employers, the capacity of these businesses may be limited.

The AI Group Construction Outlook November 2018 Survey (Australian Industry Group and Australian Constructors Association, 2018a) found that the construction industry is experiencing widespread and increasing difficulties in sourcing skilled labour and materials. Respondents were not expecting this situation to ease, with continued growth in the construction sector forecast into 2019/20, including strong growth prospects in transport infrastructure and civil works projects, expected to continue to draw heavily on labour and materials.

Respondents to AI Group's Workforce Development Needs Survey listed construction trades workers, electricians and mechatronics/automation trades workers as the top three job roles experiencing skill shortages (Australian Industry Group, 2018b). The National Skills Needs List (showing shortages in trade workers) indicates that all engineering trades were experiencing skills shortages at the national level in 2017, with the labour market tighter than at any point since 2008. However, it did anticipate that employment in this sector would retract in the longer term. Trades of potential interest to the Project experiencing shortages include electrical equipment trades workers, metal fabricators and welders (Department of Jobs and Small Business, 2017c).

Queensland labour market research conducted in 2017 (Dept. Jobs and Small Business, 2017a) also identified shortages for occupations within the construction cluster (with the exception of carpenters, joiners and fibrous plasters), but noted that regional employers had more success filling vacancies than metropolitan based employers. In contrast to national findings, it found no shortages for structural steel and welding trades (Dept. Jobs and Small Business, 2017b). Locally, consultation participants noted difficulties recruiting cooks, diesel mechanics and health service workers.

At the regional level, over the 2018-2023 period:

- The Darling Downs region (which includes Toowoomba) and the South West region (which includes Goondiwindi) were projected to have an average annual average surplus of construction workers relative to the supply from residents between 2018 and 2028
- The West Morton region (which includes Ipswich) is projected to have an average annual average surplus in construction workers, however a shortage was predicted for 2023-2028 (National Institute of Economic and Industry Research [NIEIR], 2018).

With a construction industry labour force of more than 6,100 people in 2016, and with the most recent unemployment estimates indicating that there were 3,267 unemployed people in the SIA impact assessment area in December 2019 (refer Table 5-16), this indicates the likely availability of experienced construction workers and labourers from within the SIA impact assessment area for the Project's construction.

5.4.7 Training and employment policies

Government strategies and programs are summarised below. A number of the training programs offered as part of these programs are market driven, with needs identified and addressed as they emerge.

Regional Skills Investment Strategy

The Regional Skills Investment Strategy (RSIS) is a Department of Small Business Employment and Training (DESBT) initiative funded over four years. RSIS will support regional communities to identify current and emerging jobs in key industries, and ensure local people are supported to develop the skills to meet this demand (Queensland Government, 2019a). RSIS projects aim to:

- Promote and tailor existing vocational education and training investment opportunities to better link individuals to local training and employment
- Improve alignment of training solutions with local workforce needs
- Identify gaps in service delivery and develop regional training opportunities to address local training needs
- Provide local industries with skilled local people to meet the LGAs' industry growth and innovation demands.

Both GRC and TRC are participating in the RSIS. In the Goondiwindi LGA, the identified priorities for skills development have been identified in food production, health and community services, and transport and logistics. In the Toowoomba LGA, the identified priorities are advanced manufacturing, health care and social assistance, and transport and logistics

ARTC has commenced consultation with the RSIS coordinators in each Council, towards alignment of Inland Rail training initiatives with RSIS strategies.

Skilling Queenslanders for Work

SQW (Queensland Government, 2016a) is an initiative providing training to people who are under-utilised or under-employed in the labour market, and building the skills of young people, Indigenous people, people with a disability, mature-age job seekers and people from culturally and linguistically diverse backgrounds. Local community ownership of projects is a cornerstone of the initiative, with funding primarily available for community-based not-for-profit organisations. The range of programs offered by Skilling Queenslanders for Work includes:

- Community Work Skills, which delivers tailored support and assistance to towards nationally recognised skills and qualifications.
- Work Skills Traineeships, which funds paid work placements on community, public works and environmental projects
- Ready for Work, which funds community-based organisations to deliver basic job preparation and employability skills courses
- Get Set for Work, which delivers intensive employment and training assistance to early school leavers and disadvantaged young people.

ARTC has engaged with GRC and TRC regarding the potential for joint applications for SQW projects.

Jobs Queensland

Jobs Queensland is an independent statutory entity established by the Queensland Government to provide strategic advice to the Government on future skills requirements, workforce planning and development issues and the apprenticeship and traineeship system.

Queensland Government programs that support apprentices and trainees include:

- Registered Trades Skill Pathway and Trade Skills Assessment and Gap Training which help existing workers to gain trade qualifications
- User Choice which funds the training of eligible apprentices and trainees
- Industry Pre-Apprenticeship Programs which work in partnership with industry to develop tradespeople in priority trade occupations
- Work Start, which provides a one-off payment of \$10,000 to private sector employers who employ a recent participant of particular Skilling Queenslanders for Work (SQW) programs into a traineeship or apprenticeship.

The Project's Principal Contractor will determine the applicability and utilisation of Jobs Queensland programs as part of its workforce development and training plans.

Back to Work Regional Employment Package

The Back to Work package (Queensland Government, 2016b) is aimed at increasing business confidence and employment prospects for regional jobseekers. Employers, jobseekers, and the Back to Work Teams work together to build regional networks, build regional capacity, and create local opportunities. This initiative includes:

- Support payments of \$10,000-\$20,000 for employers to take on jobseekers in regional Queensland
- Training for eligible jobseekers to gain the skills including Certificate 3 qualifications
- Back to Work Teams working with local employers and jobseekers.

The Project's Principal Contractor will determine the applicability and utilisation of Back to Work package programs as part of its workforce development and training plans.

Workforce diversity

The Queensland Women's Strategy 2016-21 (Queensland Department of Communities, Child Safety and Disability Services, 2016) provides a framework for Government, the private sector and the wider Queensland community to take significant action to achieve gender equality in Queensland. The Strategy's four priority areas include participation and leadership; economic security; safety; and health and well-being. The plan provides a list of initiatives that government, business and the community have committed to delivering, working together to achieve gender equality in Queensland.

ARTC will require its Principal Contractor to set goals for female employment and report on progress towards those goals (refer to Section 8.3.3).

Advancing Indigenous education and training

The Department of Education and Training (DET) has released a draft action plan for Advancing Aboriginal and Torres Strait Islander Education (DET, 2016b), aimed at driving higher expectations and achieving better outcomes for Queensland's Aboriginal and Torres Strait Islander communities across early childhood education, school education, vocational education and training, and higher education.

Highlights from the draft action plan with relevance to the SIA include:

- Prioritising participation of Aboriginal and Torres Strait Islander people under the Annual Vocational Education and Training (VET) Investment Plan to engage in training that offers social and economic benefits
- Funding for Aboriginal and Torres Strait Islander-specific projects under Skilling Queenslanders for Work to provide skills development, nationally recognised training and job opportunities.

The Clontarf Foundation provides two academies in the region, at high schools in Toowoomba and Goondiwindi, to promote educational and life skill achievement for young Aboriginal and Torres Strait Islander male students to help equip them for employment and meaningful participation in society (Clontarf Foundation 2019).

ARTC has a commitment to ensuring Indigenous people are able to access Project-related training, employment (refer Section 8.3.2) and will require its Principal Contractor to set goals for Indigenous participation in employment and report on progress towards those goals (refer Section 8.3.3).

5.5 Housing and accommodation

This section outlines housing access, cost trends, housing stress and social housing in potentially impacted communities and the two LGAs. Data for Goondiwindi SSC have been included as the result of consultation which identified the potential for impacts on housing in Goondiwindi. The Goondiwindi SA2 shares the same geography as the SSC.

5.5.1 Housing access

Occupied and unoccupied dwellings

The Toowoomba LGA has a much larger supply of housing than the more rural Goondiwindi LGA (61,954 dwellings compared with 4,352 dwellings), Goondiwindi town has a larger housing supply (at 2,548 dwellings in 2016) than the other communities (refer Table 5-26). The next largest housing supplies are in the SSCs of Westbrook (1,215 dwellings) and Pittsworth (1,177 dwellings).

Private dwelling occupancy rates in the Goondiwindi LGA are similar to those for Queensland (87.5 per cent of dwellings occupied compared with 89.4 per cent), but higher in Toowoomba LGA where 90.7 per cent of private dwellings are occupied.

Within the SSCs, Yelarbon and Inglewood SSCs recorded a higher percentage of unoccupied private dwellings (17.3 per cent and 11.2 per cent), suggesting some under occupancy in these locations. In the Goondiwindi SSC 8.0 per cent of private dwellings were unoccupied (equivalent to 223 dwellings).

Table 5-26: Occupied Private Dwellings, 2016 (percentage)

Area	Total Private Dwellings	Occupied (% of total)	Unoccupied (% of total)
State Suburb			
Brookstead	72	91.1	8.9
Goondiwindi	2,548	92.0	8.0
Gowrie Junction	690	96.6	3.4
Gowrie Mountain	79	95.2	4.8
Inglewood	430	88.8	11.2
Kingsthorpe	673	92.2	7.8
Millmerran	630	92.1	7.9
Pittsworth	1,177	93.5	6.5
Southbrook	221	95.7	4.3
Westbrook	1,215	95.0	5.0
Yelarbon	143	82.7	17.3
Local Government Area			
Goondiwindi	4,352	87.5	12.5
Toowoomba	61,954	90.7	9.3
Queensland		89.4	10.6

Source: ABS 2016a

Housing type

There is a greater dominance of separate houses in the SIA impact assessment area than for Queensland, and more so in Goondiwindi LGA where 85.3 percent of dwellings were separate houses in 2016, compared with 81.4 per cent in Toowoomba LGA and 76.6 per cent in Queensland (refer Table 5-27). Within the suburbs of Gowrie Junction, Gowrie Mountain, Kingsthorpe and Southbrook, all housing stock was separate housing.

While Toowoomba LGA recorded a higher percentage of semi-detached, row or terrace housing than Goondiwindi and Queensland (11.9 per cent compared with 2.1 per cent and 10.6 per cent respectively), it had a lower percentage of flat or apartments (5.1 per cent compared to 6.8 per cent and 11.3 per cent respectively).

Whilst Goondiwindi State Suburb has a predominantly low density settlement pattern, it had a significantly higher representation of flats and apartments at levels similar to Queensland (10.3 per cent compared with 11.3 per cent in Queensland), with the next highest level in Millmerran at 3.3 per cent of stock. Pittsworth had the highest representation of semi-detached, row or terrace house stock at 4.3 per cent.

Table 5-27: Housing Type, 2016 (percentage)

Statistical Area	Separate house (% of total)	Semi-detached, row or terrace house, townhouse (% of total)	Flat or apartment (% of total)	Other^ (% of total)
State Suburb				
Brookstead	94.9	0.0	0.0	5.1
Goondiwindi	85.9	2.5	10.3	1.0
Gowrie Junction	100.0	0.0	0.0	0.0
Gowrie Mountain	100.0	0.0	0.0	0.0
Inglewood	88.1	0.8	2.3	3.1
Kingsthorpe	100.0	0.0	0.0	0.0
Millmerran	93.8	0.0	3.3	3.0
Pittsworth	91.5	4.3	2.9	0.9
Southbrook	100.0	0.0	0.0	0.0
Westbrook	97.3	2.0	0.2	0.0
Yelarbon	89.2	0.0	0.0	10.8
Local Government Area				
Goondiwindi	85.3	2.1	6.8	4.6
Toowoomba	81.4	11.9	5.1	0.9
Queensland	76.6	10.6	11.3	1

Source: ABS 2016a

Housing tenure

The SIA impact assessment area has a higher level of home ownership than is typical in Queensland. In 2016, more homes were owned outright in Goondiwindi LGA (32.0 per cent), compared to the Toowoomba LGA (30.7 per cent) and Queensland (28.5 per cent) (refer Table 5-28). Renting is less prevalent than in Queensland, but slightly higher in Goondiwindi LGA than in Toowoomba LGA (31.7 per cent compared with 30.0 per cent). Especially high levels of renting occurred in Brookstead, Goondiwindi and Millmerran SSCs (42.3 per cent, 32.3 per cent and 31.2 per cent respectively).

High levels of home ownership are evident in a number of SSCs, including Yelarbon (49.0 per cent), Gowrie Mountain (41.1 per cent) and Brookstead (38.0 per cent). Home ownership was lowest in Westbrook (22.0 per cent), well below that for Queensland (28.5 per cent).

The SSC of Gowrie Junction recorded the highest percentage of properties owned with a mortgage, compared to the lowest percentage recorded in Yelarbon (60.2 per cent and 18.6 per cent respectively).

Table 5-28: Housing Tenure, 2016 (percentage)

Statistical Area	Owned Outright (% of total)	Owned with a Mortgage (% of total)	Rented (% of total)	Other/Not Stated (% of total)
State Suburb				
Brookstead	38.0	19.7	42.3	0.0
Goondiwindi	39.2	23.9	32.3	4.6
Gowrie Junction	25.9	60.2	8.6	5.3
Gowrie Mountain	41.1	45.2	13.7	0.0
Inglewood	36.2	22.4	28.7	12.6

Statistical Area	Owned Outright (% of total)	Owned with a Mortgage (% of total)	Rented (% of total)	Other/Not Stated (% of total)
Kingsthorpe	29.6	50.8	15.5	4.2
Millmerran	32.3	25.8	31.2	10.7
Pittsworth	33.5	29.2	26.4	10.8
Southbrook	33.5	35.2	18.1	13.2
Westbrook	22.0	54.9	17.5	5.6
Yelarbon	49.0	18.6	26.9	5.5
Statistical Area 2				
Gowrie	25.2	58.2	11.9	4.7
Inglewood-Waggamba	39.1	18.3	29.7	12.9
Jondaryan	33.1	28.3	29.4	9.2
Millmerran	36.1	21.8	26.0	16.1
Pittsworth	35.3	30.5	24.3	9.9
Toowoomba-West	28.5	38.0	26.1	7.4
Local Government Area				
Goondiwindi	32.0	23.2	31.7	13.2
Toowoomba	30.7	30.6	30.0	8.7
Queensland	28.5	33.7	34.2	3.6

Source: ABS 2016a ^Excludes percentages for 'not stated'

Housing stress

Housing stress is widely accepted to occur when the lowest 40 per cent of income earners pay more than 30 per cent of their gross income on rent or mortgage costs (National Shelter, 2018). Households in housing stress do not have enough disposable income left after paying for housing costs to meet their food, medical, education and other essential costs of living.

The data in Table 5-30 is taken from the PHIDU Social Health Atlas (Torrens University, 2018) with data reported by Primary Health Area for groupings of SA2's. Data reported across such a large area will mask variations that are likely to occur at a more localised level.

Housing stress amongst renters occurs at lower levels in most of the SIA impact assessment area's SA2s than is typical for Queensland (at 28.0 per cent), but at similar levels to Queensland in Jondaryan SA2 where 28.2 per cent of low income households are in rental stress. The lowest recorded rental stress was in Balonne/Goondiwindi/Inglewood - Waggamba/Tara SA2s (22.5 per cent).

There is also a higher level of mortgage stress in the Crows Nest - Rosalie/Jondaryan SA2s, affecting 9.7 per cent of low income households, while the balance of the SIA impact assessment area has rates slightly higher and lower to Queensland's 8.5 per cent.

Table 5-29: Housing Stress, 2016 - Combined SA2s

SA2s (bolded SA2s are in impact assessment area)	Low income Households in Mortgage Stress		Low income households in Rental Stress	
	Number	(% of total)	Number	(% of total)
Balonne/ Goondiwindi / Inglewood - Waggamba /Tara	163	9.6	421	22.5
Cambooya - Wyreema/ Gowrie / Toowoomba - West	272	6.7	393	23.0
Crows Nest - Rosalie/ Jondaryan	166	9.7	377	28.2
Millmerran / Pittsworth /Wambo	265	9.6	653	24.2
Queensland	47,606	8.5	157,071	28.0

Source: Torrens University (PHIDU), 2018

Social housing

As shown in Table 5-30, in 2016 the supply of social housing in the SIA impact assessment area was low compared to the State-wide supply, with the exception of Goondiwindi SSC which had a similar level (3.6 per cent of housing supply compared with Queensland's 3.7 per cent).

Just 2.6 per cent of housing stock in the Goondiwindi and Toowoomba LGAs was social housing, while the Pittsworth SA2 recorded the lowest percentage of social housing stock (0.6 per cent), and six suburbs had no social housing (Brookstead, Gowrie Junction, Gowrie Mountain, Pittsworth, Southbrook, Westbrook and Yelarbon). The five remaining suburbs had levels of provision of social housing well below that for Queensland (with Inglewood and Millmerran both at 1.6 per cent, Kingsthorpe at 1.2 per cent and Pittsworth at 1.1 per cent).

There is no emergency housing available in the Goondiwindi LGA. Care Goondiwindi, a community service organisation based in Goondiwindi, provides support to victims of family and domestic violence and other people experiencing homelessness. Using emergency relief funding, they provide temporary accommodation for consumers in motels and/or transfer them to shelters in either Toowoomba or Moree (NSW).

Table 5-30: Social Housing Supply (number and percentage)

Location	Total Dwellings	Social Housing ^(a)	
	No.	No.	(% total)
State Suburb			
Brookstead	71	0	0.0
Goondiwindi	2,210	79	3.6
Gowrie Junction	683	0	0.0
Gowrie Mountain	73	0	0.0
Inglewood	428	7	1.6
Kingsthorpe	666	8	1.2
Millmerran	619	10	1.6
Pittsworth	1,184	13	1.1
Southbrook	227	0	0.0
Westbrook	1,205	0	0.0
Yelarbon	145	0	0.0

Location	Total Dwellings	Social Housing ^(a)	
	No.	No.	(% total)
Total	7,511	117	1.6
Statistical Area 2			
Gowrie	1,779	26	1.5
Inglewood-Waggamba	2,741	46	1.7
Jondaryan	1,360	11	0.8
Millmerran	2,040	17	0.8
Pittsworth	44,75	26	0.6
Toowoomba-West	14,529	138	0.9
Local Government Area			
Goondiwindi	61,949	1,591	2.6
Toowoomba	66,297	1,696	2.6
Queensland	1,656,831	61,533	3.7

Source: ABS 2016a.

^(a) Defined as rented from State or territory housing authority, housing co-operative, community or church group

Homelessness

Data on homelessness are available at the SA2 and LGA levels. Across the SIA impact assessment area there were 523 people recorded as being homeless at the 2016 Census. Of these, the majority were in the Toowoomba LGA (493 people). However, Goondiwindi LGA experienced the largest increase in the intercensal period, increasing from 18 people in 2011 to 30 people while Toowoomba numbers remained relatively steady increasing by only 4 people over the same period (as shown in Table 5-31).

Amongst the SA2s, homelessness was highest in Toowoomba-West (40 people), Goondiwindi (20 people), Millmerran (18 people) and Inglewood-Waggamba (16 people), while the numbers grew most strongly in Goondiwindi (up by 12 people) and Inglewood-Waggamba (up by 11 people), and declined most in Jondaryan (down by 11 people) and Toowoomba-West (down by 10 people).

Table 5-31: Homeless Persons, 2011 and 2016 (number)

Location	LGA	Homeless Persons (Estimate)^		Change No.
		2011 No.	2016 No.	
Statistical Area 2 (SA2)				
Goondiwindi	Goondiwindi	8	20	12
Gowrie	Toowoomba	11	7	-4
Inglewood-Waggamba	Goondiwindi	5	16	11
Jondaryan	Toowoomba	19	8	-11
Millmerran	Toowoomba	9	18	9
Pittsworth	Toowoomba	7	7	0
Toowoomba-West	Toowoomba	50	40	-10
Total		109	116	7

Location	LGA	Homeless Persons (Estimate)^		Change No.
		2011 No.	2016 No.	
Local Government Area (LGA)				
Goondiwindi		18	30	12
Toowoomba		489	493	4
Total		507	523	16

Source: ABS 2016b

^ Homelessness estimates are derived from Census data collected on Census night and may not be a true representation of actual homelessness.

5.5.2 Housing trends

Purchase price

In July 2018 the Toowoomba LGA recorded a higher median house purchase price (\$342,000) with a five year price increase of 27.9 per cent (shown in Table 5-32) compared with Brisbane LGA's 30.1 per cent (REIQ, 2018).

The median house price in Goondiwindi LGA was lower (\$265,000), with five year increases also lower at 15.2 per cent.

Comparing the larger centres, the median house price in Goondiwindi suburbs (postcode 4390) was only six percent lower than prices in Toowoomba (postcode 4350), while median unit prices were similarly priced in both (just one per cent lower in Goondiwindi).

Kingsthorpe and Gowrie Junction showed the highest median house prices at \$415,300 and \$496,000 respectively). Yelarbon (with a median house price of \$130,000) and Brookstead (\$161,900) had the lowest median house prices.

Three-year price trends for postcodes showed a price rise for units of 19.5 per cent in the Goondiwindi postcode area (4390) and in the Inglewood postcode area (4387) of 17.1 per cent. This volatility may be due to variations between the small number of properties sold and may not reflect actual market movement.

Table 5-32: Median Dwelling Price (House and Units), 2018

Statistical Area	Suburb	House Price \$	1 Year Change %	Other Change %	Unit Price \$	1 Year Change %	Other Change %
Postcode^				3-year change			3-year change
4390	Goondiwindi	352,400	-0.1	12.7	275,100	-1.7	19.5
4350	Gowrie Mountain, Westbrook#	376,000	0.2	-2.4	278,000	-0.4	-0.7
4352	Gowrie Junction	496,000	1.6	1.8	330,700	3.4	-1.8
4356	Pittsworth	308,900	-15.8	-15.5	280,000	-5.0	17.1
4357	Millmerran	220,000	-3.0	-13.4	157,100	-33.2	-15.1
4363	Southbrook	283,900	-7.7	3.0	270,000	-10.7	8.0
4364	Brookstead	161,900	-14.8	-14.6	-	-	-
4387	Inglewood	210,200	-6.3	-3.5	174,800	0.1	76.5

Statistical Area	Suburb	House Price \$	1 Year Change %	Other Change %	Unit Price \$	1 Year Change %	Other Change %
4388	Yelarbon	130,000	-0.1	0.0	39,600	-19.5	-19.5
4400	Kingsthorpe	415,300	11.1	12.0	-	-	-
Local Government Area*				5-year change			5-year change
Goondiwindi		265,000	-5.4	15.2	-	-	-
Toowoomba		342,000	-6.9	27.9	300,000	-2.9	17.6

Note wide variations can occur in small housing markets and should be interpreted with caution.

^SQM Research 2018 (asking price) * REIQ 2018 (sold price)

#Includes metropolitan area of Toowoomba

Rental cost and vacancy rates

As shown in Table 5-33, in June 2018 the Gowrie Junction postcode (4352) had the highest median rent for a house at \$417/week, followed by Goondiwindi postcode (4350) at \$352 per week, however Goondiwindi also had the lowest median rent for a unit (\$175.50 per week). The Gowrie Junction postcode (4352) recorded the highest median rent per week for a unit (\$289 per week).

The lowest median weekly rent for a house was recorded in Yelarbon postcode (4388) in Goondiwindi LGA (\$220 per week).

Vacancy rates in all relevant postcodes were relatively low at July 2018, indicating tight real estate markets in almost all areas (considered to occur where vacancy levels fall below 2.5% vacancy – REIQ, 2018). These data indicate that there is little local capacity to provide housing for Project workers without displacing other residents.

Table 5-33: Median Weekly Rent, July 2018 - Postcode

Post Code	Suburb	Vacant Dwellings No.	Vacancy Rate %	House \$/week	1 Year Change %	3 Year Change %	Unit* \$/week	1 Year Change %	3 Year Change %
4390	Goondiwindi	5	0.8	352.3	23.3	29.3	175.5	-14.8	-2.6
4350	Gowrie Mountain, Westbrook	322	1.8	347.20	5.6	3.2	280.70	5.8	-2.7
4352	Gowrie Junction	28	1.6	417.00	2.5	7.4	289.90	-4.7	-14.6
4356	Pittsworth	14	2.5	280.30	-7.5	-7.7	267.90	.5.5	3.0
4357	Millmerran	0	0.0	287.50	7.2	23.3	192.40	-11.5	19.0
4363	Southbrook	0	0.0	272.50	17.9	30.6	-	-	-
4364	Brookstead	1	2.9	245.00	-3.0	4.4	-	-	-
4387	Inglewood	1	0.5	250.00	28.2	21.9	180.00	0.0	-15.3
4388	Yelarbon	0	0.0	220.00	0.0	21.9	-	-	-
4400	Kingsthorpe	0	0.0	297.40	9.0	12.1	-	-	-

Source: SQM Research 2018 * No reportable data available in some locations

Note: There are some suburbs where the price is quite volatile. This normally occurs in locations where there are fewer listings and/or there is considerable variation between the top end of the market and the bottom end.

Dwelling approvals

As shown in Table 5-34, the Toowoomba LGA recorded 1,201 dwelling approvals in 2016-2017, making up 98.7 per cent of total new dwellings within the SIA impact assessment area. Toowoomba-West SA2 recorded the highest number of new dwelling approvals (272 approvals) among the SA2s, associated with the growth of Toowoomba. New dwelling approvals were relatively low elsewhere, with the lowest recorded in Inglewood-Waggamba (four approvals).

Table 5-34: Dwelling Approvals, 2016-17

Location	LGA	New Dwellings (No.)
Statistical Area 2 (SA2)		
Inglewood-Waggamba	Goondiwindi	4
Goondiwindi	Goondiwindi	11
Gowrie	Toowoomba	38
Jondaryan	Toowoomba	16
Millmerran	Toowoomba	8
Pittsworth	Toowoomba	28
Toowoomba-West	Toowoomba	272
Total		377
Local Government Area (LGA)		
Goondiwindi		15
Toowoomba		1,201
Total		1,216

Source: ABS 2018

5.5.3 Short term accommodation

Table 5-35 shows data on short term visitor accommodation in the SIA impact assessment area (including hotel, motel, bed and breakfast, boarding house and caravan park accommodation), derived from Census 2016 data and a desktop search (online short stay platforms were not included). The data shows that short term accommodation is in relatively low supply in most potentially impacted communities (estimated at 33 premises).

Consultation indicated that accommodation in Millmerran and Pittsworth is in very short supply whilst the Commodore Coal Mine is conducting shut-downs and major maintenance, and accommodation across the district is in higher demand during harvest periods, which vary across crops. These data indicate that there is little local capacity to provide short term accommodation for Project workers without displacing other residents.

Within the Goondiwindi LGA, an online scan indicates that the largest supply of short-term accommodation is in Goondiwindi with 17 premises (refer Table 5-34). The latest tourism accommodation data provided by the ABS were produced for June 2016 and represent establishments with more than 15 rooms (ABS, 2016c). A total of ten establishments including 230 rooms were identified in Goondiwindi, with the June 2016 data indicating an occupancy rate of 49.8 percent. However, consultation indicated that occupancy by business travellers and tourists had increased significantly in the past few years, with changes by season (e.g. larger tourism numbers in winter months, and seasonal harvest-related demands throughout the year), and community and industry events resulting in occasional high demands for accommodation.

Toowoomba LGA has a significantly larger supply than Goondiwindi LGA, (with a total of 88 premises including hotels, motels, guest houses and short term rental apartments identified through online scanning) but this is predominantly based in Toowoomba City.

ABS tourism accommodation data (ABS, 2016c) identify a total of 34 hotels, motels and serviced apartment establishments with more than 15 rooms in the Toowoomba LGA, including one each in the Toowoomba East, Wilsonton, and Highfields SA2s, two each in the Newton and North Toowoomba-Harlaxton SA2s, three in the Drayton/Harristown SA2, eight in the Toowoomba East SA2 and 16 establishments in Toowoomba - Central SA2.

Limited data are available on room numbers and vacancy rates. The 16 establishments in Toowoomba-Central SA2 offered a total of 588 rooms, whilst Toowoomba East SA2's eight establishments had 245 rooms and Drayton-Harristown SA2's three establishments offered a total of 97 rooms. As each of the other establishments had at least 15 rooms each, a minimum total of 1,035 rooms were offered within the Toowoomba LGA at June 2016.

A new 55 room hotel opened in Toowoomba Central in 2017, and an additional establishment with 102 suites is planned to open in Toowoomba Central in 2020 (HTL Property, 2019), so the total number of rooms offered would be at least 1,192 rooms by 2021.

The occupancy rate for Toowoomba-Central SA2 establishments was 58.4 per cent in the June 2016 quarter, and applying this rate to the total number of rooms identified above, approximately 495 vacant rooms would be available. Accommodation demand fluctuates, with tourism accommodation demands increasing around major events such as Toowoomba's Carnival of Flowers (held in September) CRT FarmFest (June, in Kingsthorpe) and Queensland-wide events held occasionally in the region (e.g. Queensland PGA Championship which were held in Toowoomba in February 2020).

Table 5-35: Short term accommodation

Area	Hotel, motel, bed and breakfast	Boarding house, private hotel	Other Identified^ (Desktop Search)	Total
State Suburb				
Brookstead	0	0	1	1
Goondiwindi	13	0	4	17
Gowrie Junction	0	0	0	0
Gowrie Mountain	0	0	0	0
Inglewood	5	0	0	5
Kingsthorpe	0	0	1	1
Millmerran	0	0	5	5
Pittsworth	0	0	3	3
Southbrook	0	0	0	0
Westbrook	0	0	0	0
Yelarbon	0	0	1	1
Total	18	0	15	33
Local Government Area				
Goondiwindi	24	0	n/a	24
Toowoomba	78	10	n/a	88
Total	102	10	n/a	112

^ Includes: hotels, motels, bed and breakfast and caravan park accommodation additional to Census count

Source: ABS 2016a and Google search engine (14 December 2019)

5.6 Social infrastructure

Social infrastructure includes childcare, educational facilities, aged care services, health facilities, emergency services, cultural services and recreational facilities in potentially impacted communities.

5.6.1 Childcare

In July 2018 there were 112 early childhood education and care services in the Toowoomba LGA, 52 of which were long day care services (refer Table 5-36). Within the Goondiwindi LGA, there were 11 early childhood education and care services, five of which were long day care services (Office for Early Childhood Education and Care, 2019).

The greater number of early childhood services within the Toowoomba LGA, compared to the Goondiwindi LGA, is due to the higher proportion of young persons and families as well as the larger population.

Table 5-36: Childhood education and care services, 2018

Local Government Area	Family day care	Kindergartens	Long day care	School aged care	Limited house care	Total
	Number					
Goondiwindi	1	3		2	0	11
Toowoomba	1	20	52	35	2	112

Source: Office for Early Childhood Education and Care, 2019

Note: Total includes other service types (for example Child and Family Support Hubs and Community Services).

5.6.2 Primary and secondary education

Primary and secondary education facilities in potentially impacted communities are shown in Table 5-37. Primary schools are located in most townships in proximity to the Project. The only high school offering tuition to Year 12 is in Pittsworth, with junior high schools offering tuition from year 7-10 located in Inglewood and Millmerran. Students can complete schooling at public senior high schools located in Goondiwindi, Pittsworth or Toowoomba, or at private schools in Toowoomba or Brisbane.

Table 5-37: Primary and secondary education facilities, 2018

School	Enrolment 2018		Total Enrolment	LGA	Proximity to the Project
	Male	Female			
Primary Schools					
Yelarbon State School	23	18	41	Goondiwindi	Existing rail line is approximately 225 m to the north
Inglewood State School (P-10)	81	75	156	Goondiwindi	Proposed new rail line is approximately 2.2 km to the north
St Maria Goretti School (Inglewood)	15	8	23	Goondiwindi	Proposed new rail line is approximately 2 km to the north
Millmerran State School (P-10)	155	168	323	Goondiwindi	Proposed new rail line is approximately 3.5 km to the south east
St Joseph's School (Millmerran)	34	30	64	Goondiwindi	Proposed new rail line is approximately 3.5 km to the south east
Brookstead State School	11	14	25	Goondiwindi	Existing rail line is approximately 50 m to the south

School	Enrolment 2018		Total Enrolment	LGA	Proximity to the Project
	Male	Female			
Pittsworth State School	153	152	305	Toowoomba	Proposed new rail line is approximately 1.5 km to the north
St Stephen's School (Pittsworth)	63	78	141	Toowoomba	Proposed new rail line is approximately 1.7 km to the north west
Kingsthorpe State School	92	114	206	Toowoomba	Proposed new rail line is approximately 2.4 km to the south east
Southbrook Central State School	31	3	8	Toowoomba	Proposed new rail line is approximately 1 km to the north west
Secondary Schools					
Inglewood State School (P-10)	81	75	156	Goondiwindi	Proposed new rail line is approximately 2.2 km to the north
Millmerran State School (P-10)	155	168	323	Goondiwindi	Proposed new rail line is approximately 3.5 km to the south east
Pittsworth State High School	221	218	439	Toowoomba	Proposed new rail line is approximately 1.5 km to the north

Source: Queensland Government Schools Directory, 2018

5.6.3 Further education and training

TAFE Queensland operates campuses in Toowoomba and Goondiwindi, providing services across the region, with courses in hospitality, business, early education, horticulture and construction (TAFE Queensland, 2018). TAFE services in the SIA impact assessment area are actively planning to assist the Project to develop training and employment pathways for local residents.

TAFE Queensland has developed a strategy focused on positioning local jobseekers for major Project employment. The strategy will enable access to technical trades skills including civil construction, rail infrastructure and advanced telecommunications as well as trades licences and Project management skills. The strategy includes skills training pathways beginning with job readiness, through certificate and apprenticeship opportunities to tertiary qualifications.

The University of Southern Queensland's main campus is in Toowoomba, approximately 4.5 km to the south of Toowoomba's town centre. The campus has on-site residential colleges, a range of student and staff support services and a wide range of facilities and recreational areas. (University of Southern Queensland, 2018)

5.6.4 Hospital and health services

Health services in the potentially impacted communities are presented in Table 5-38 and Table 5-39. The communities are also serviced by a small number of General Practitioner (GP) clinics (Australian Government, Department of Health, 2018).

Table 5-38: Primary health services

Town	Facility/Service	Number of Practitioners
Inglewood	Inglewood Medical Centre	2
Goondiwindi	Goondiwindi Medical Centre	6
Millmerran	Millmerran Medical Centre	1
Yandilla Street, Pittsworth	Pittsworth Medical Centre	2
Weale Street, Pittsworth	Pittsworth Platinum Medical Centre	4
North Street, Kingsthorpe	Downs Rural Medical – Kingsthorpe	2

Source: Australian Government, Department of Health, National Health Services Directory 2018. * The number of practitioners is subject to change.

Goondiwindi, Inglewood and Millmerran hospitals are the key health facilities near the Project, offering basic hospital care and a wide range of community health services.

Patients who require treatment beyond basic services are sent to Toowoomba, where there are a number of major hospitals, offering a range of specialist services.

Public mental health services are provided in the SIA impact assessment area by the Darling Downs Hospital and Health Service, delivering specialised assessment, clinical treatment and rehabilitation services. It focuses on people with the most severe forms of mental illness and behavioural disturbances. Services work in collaboration with primary health professionals (including GPs, community health workers, nurses, allied health professionals, school health nurses, counsellors and community support groups). An acute mental health unit is based in the Ballie Henderson Hospital in Toowoomba, with community mental health services (general, child and mental health, including outreach services) based at Toowoomba, Goondiwindi and Millmerran. Child and Youth Mental Health Service (CYMHS) are also located in Toowoomba, supporting children and young people aged 0 to 17 years who have or are at risk of developing severe and complex mental health issues.

Health service providers consulted, including hospital, mental health, first response and retrieval services i.e. Queensland Ambulance Service (QAS) and LifeFlight) have advised that there is adequate capacity to accommodate increased demand, but that this would need to be monitored during construction. Goondiwindi hospital has the relevant infrastructure and capacity to meet additional demand that may be generated by the Project and has an established risk management plan.¹ General practitioners in Goondiwindi service South West Queensland and northern NSW, with wait times for booked appointments reported by the community to be between 3 days and 3 weeks. GP access is reported to be more readily available in Inglewood.

¹ Director of Nursing, Goondiwindi Hospital (pers. comm. 7 March, 2019)

Table 5-39: Hospital and health service profile

Service Type	Goondiwindi Hospital	Inglewood Multi-Purpose Health Service	Millmerran Hospital	St Andrew's Toowoomba Hospital	Baillie Henderson Hospital	St Vincent's Hospital	Toowoomba Hospital
Hospital services	General medicine and surgery, obstetrics, paediatrics, emergency, palliative and acute care 33 beds	Emergency, Palliative Care Antenatal and Postnatal Care, Limited Radiography 12 beds	Emergency, X-Ray, Pharmacy, Palliative Care, Antenatal and Postnatal Services 16 beds	Private Hospital – 137 bed capacity. Cancer care centre, cardiac, diabetes, head and neck clinic, ICU, medical ward, operating theatre, palliative care, renal dialysis unit, sleep studies, surgical ward, mental health unit 114 beds	Psychiatric hospital – providing short- and long-term mental health services 100- 199 beds	Private hospital – cancer services, oncology unit, palliative care, obstetrics and gynaecology, children's ward, emergency centre, cardiac care, maternity, intensive care unit and radiology 191 beds	Public hospital – full range of hospital services including medical, surgical, orthopaedic, theatre, obstetrics and gynaecology, paediatrics, specialist care and palliative care 384 beds
Allied health	Physiotherapy, occupational therapy, radiography, social work, speech pathology and visiting rural health team	Dietetics Occupational Therapy Physiotherapy Social Work Speech Therapy Podiatry Dental	Child health, visiting women's health, visiting physiotherapy, visiting Podiatry, Aged Care services	Visiting allied health services	N/A	Range of allied health services	Full range of allied health services
Community health	Child health, school health, women's health, Indigenous health and health promotion	Child health, Indigenous health, domiciliary care, school health, health promotion,	School Health, pre and post-natal services, health promotion	N/A	Community mental health services	N/A	Full range of community health services
Mental Health Services	Mental health services (general, child and youth)	N/A	Adult and older persons' mental health services	Mental health unit	Comprehensive short- and long-term mental health services	N/A	Mental health unit (general, child and youth)

Source: Department of Health, 2018. N/A = none available

5.6.5 Aged care services

There were 52 aged care services in the Toowoomba and Goondiwindi LGA's in 2018 (refer Table 5-40). The Toowoomba LGA had a total of 46 aged care services and 1,673 operational home, residential and restorative care places. The Goondiwindi LGA had six aged care services within the LGA in 2018 and 142 home, residential and transition care places (Australian Government Department of Health, Regional Health Profiles, Queensland Government Statistician's Office, 2018).

Queensland Health has identified the need for consideration of the amenity and therapeutic environment of aged care facilities which are planned as part of the new Toowoomba Hospital on the Baillie Henderson campus, which is being considered as part of the Project's design in this area. The Project is unlikely to result in any increased demands for aged care places, or any impacts on the amenity of other aged care facilities, so other aged care facilities are not further considered in the SIA.

Table 5-40: Aged care services, Goondiwindi and Toowoomba LGAs, 30 June 2018

LGA	Aged care services Number	Number of operational places by care type			
		Home care	Residential aged care	Restorative care	Total Places
Goondiwindi	6	21	121	0	142
Toowoomba	46	3	1,618	52	1,673

Source: Queensland Government Statistician's Office, 2018a

5.6.6 Police, emergency services and justice

Police, ambulance and fire services are co-ordinated in the SIA impact assessment area from command centres in Toowoomba and Goondiwindi. Operational bases (police, ambulance and fires stations) are provided in Pittsworth, Millmerran, Inglewood and Goondiwindi, with some services also available at smaller stations at Yelarbon, Gowrie Junction and Millmerran Downs. Large scale emergencies within the SIA impact assessment area are serviced from Goondiwindi or Toowoomba. However, the SES catchment extends only as far as Inglewood, and the SES assumes only a backup role to other agencies beyond Inglewood.

Police and emergency service agencies are well organised and well-coordinated to respond to major projects and consider they have generally access to the resources needed to attend to any incidents related to the Project.

Table 5-41 profiles QPS, Ambulance and Fire stations in the Toowoomba and Goondiwindi LGAs. There were significantly more emergency services located within the Toowoomba LGA, which is likely due to the higher population (QGSO, 2018).

Table 5-41: Emergency services, June 2018

LGA	Police stations	Ambulance stations	Fire stations	Justice
Goondiwindi	5	4	4	Goondiwindi Courthouse
Toowoomba	14	11	11	Toowoomba Courthouse

Source: QGSO, 2018b

The SIA impact assessment area is within the Southern District of the QPS, where the District Office and Southern Regional Office is located. Services are provided through local stations at:

- Yelarbon Police Station
- Inglewood Police Station
- Millmerran Police Station

- Pittsworth Police Station
- Drayton Police Station
- Goondiwindi Police Station

The Queensland Ambulance Service operates throughout the SIA impact assessment area as part of the Darling Downs Local Ambulance Service Network, with stations located near the Project footprint at:

- Inglewood
- Millmerran
- Highfields
- Goondiwindi.

Fire and emergency services are provided throughout the SIA impact assessment area, co-ordinated by the South Western Region of QFES with command bases at Toowoomba (Area 1) and (Goondiwindi (Area 4), and bases at the following locations servicing communities near the Project footprint (rural fire services are supported by volunteer firefighters):

- Inglewood Fire Station – Cunningham Highway, Inglewood
- Pittsworth Fire Station
- Yelarbon Rural Fire Station
- Goondiwindi Fire Station
- Millmerran Rural Fire Station
- Scrubby Creek Rural Fire Brigade (Millmerran Downs)
- Gowrie Little Plain Rural Fire Brigade (Gowrie Junction)

The South Western Region QFES also co-ordinates the State Emergency Service (SES) from its headquarters in Toowoomba.

Consultation with emergency services as part of the SIA indicated that services are generally adequate to current demand, however early and ongoing engagement with services is needed to ensure they can plan for any increased demand relating to the Project. QPS and QFES representatives were confident that, with cooperative planning between them and ARTC, the impacts of stationary trains or level crossing operation on response times could be managed through use of alternative routes, however QAS representatives noted that medical response times were more critical and required close cooperation with ARTC, particularly with regard to potential disruptions to QAS services when trains are stationary or passing through level crossings.

5.6.7 Community and civic services

Goondiwindi and Toowoomba are the bases for provision of community services across their respective LGAs.

Community support services and groups based in Goondiwindi and providing outreach services to surrounding communities include:

- Care Goondiwindi Ltd, which provides Goondiwindi and surrounding communities with a range of services including community development, disability support services, community legal services, family support, services for seniors and a youth access program
- Centacare, providing a range of services including counselling, general support services, mental health service access, and family and relationship programs

- Bluecare, which provides support, services and social interaction programs for people with disability and seniors
- Rural Financial Counselling Service Southern Queensland which provides rural financial counselling services across Southern Queensland, assisting eligible agricultural business owners and small rural-related business owners who are experiencing financial hardship
- Rural Sky, a private practice delivering services and activities focused on building the capacity, resilience and wellbeing of people of Goondiwindi residents
- Tie Up the Black Dog Inc., a community group raising awareness and promoting support for people with mental health issues
- Gundy Men's Shed which provides social activities and interaction for men.

Toowoomba's key service providers (which also extend outreach services to surrounding communities) include:

- Lives Lived Well, which offers a range of community and residential programs and services including drug and alcohol support services and rehabilitation, counselling youth and family support,
- Relationships Australia, which is a community based organisation offering individual, couple and family relationship counselling and education, and family support
- Lifeline Darling Downs, which provides counselling, family and community support, and services for people with disability
- Uniting Care, which provides services including child protection, supported accommodation, intervention services domestic violence programs, disability services, services for children and young people and emergency support
- Mercy Family Services, which offers support services for vulnerable and disadvantaged children, young people and their families including Foster Care, Counselling, Family Intervention, and Supported Independent Living our Multi-cultural Worker Program
- CatholicCare, which provides counselling, Family Dispute Resolution and mediation, support and participation services for Aboriginal young people, refugees and migrant support, and child protections services
- Richmond Fellowship of Queensland, which provides mental health support, suicide prevention, recovery support services for people with insecure housing
- Creating Options Program, which offers alcohol and other drug support including counselling and care coordination
- A range of National Disability Insurance Scheme service providers and aged care providers.

The capacity of services changes over time in response to community needs, Government funding priorities and the requirements to respond to disasters (e.g. floods, bushfires, drought and the current pandemic). ARTC's measures to monitor the capacity of services are outlined in Section 7.4.1 and in Section 8.6.

Table 5-42 details community and civic facilities and community support services in the potentially impacted local communities.

Table 5-42: Community and civic and support services

Location	Community and Civic Facilities and Services	Community and Family Support
Yelarbon	Yelarbon & District Soldiers Memorial Hall	Yelarbon Men's Shed
Pampas	Pampas Memorial Hall	
Inglewood	Community Health Centre Inglewood Fishing Restocking Association Inc Lions Club of Inglewood Inc Inglewood Show Society Inglewood SES	Inglewood Mates Shed Inc Inglewood Community Recreation Centre Association Inc People in Prostate Awareness
Millmerran	Millmerran Commerce and Progress Inc. Millmerran Arts Council Inc Millmerran Service Centre	Millmerran Men's Shed Millmerran Community Support Service Millmerran District Hospital Auxiliary Inc Millmerran Senior Citizens Inc
Pittsworth	Pittsworth Service Centre	Pittsworth Branch Leukaemia Foundation Pittsworth Senior Citizens Beauaraba QCWA
Kingsthorpe	Kingsthorpe War Memorial Hall Committee Inc Glencoe Medieval Re-enactment Group	Queensland Country Woman's Association Kingsthorpe Progress Association
Gowrie Junction	Gowrie Junction Progress Hall	Gowrie Junction Progress Association

Source: My Community Directory, 2018

5.6.8 Recreation and cultural facilities

A number of sport and recreational spaces and groups were noted within each community. Table 5-43 summarises the sport and recreations facilities and arts, culture and amenity facilities and groups within potentially impacted communities.

Table 5-43: Recreation and cultural facilities and groups

Location	Sport and Recreation	Arts, Culture, Amenity
Yelarbon	Yelarbon Recreation Association Inc	Yelarbon RSL Memorial Hall Restoration Committee Inc
Inglewood	Inglewood Fishing Restocking Association Inc Inglewood and District Junior Rugby Football Club Inc Inglewood Rodeo Association Inc Inglewood Tennis Club Inglewood Showgrounds	Inglewood and District Historical Society Inc Inglewood Chamber of Commerce Inglewood Children's Theatre Inglewood Little Theatre Macintyre Brook Irrigators Association Inc
Millmerran	Scouts Millmerran Millmerran Tennis Association Millmerran Showgrounds	Cecil Plains Memorial Hall Millmerran Arts Council Millmerran and District Historical Society Inc Millmerran Show Society
Pittsworth	Pittsworth Rotary Club Pittsworth Showgrounds Pittsworth has many sports related clubs for adults and children	Pittsworth Senior Citizens Association Pittsworth Garden Club Pittsworth Art Gallery and Visitor Information Centre Pittsworth Function Centre

Location	Sport and Recreation	Arts, Culture, Amenity
		Pittsworth and District Historical Society Gardens of the Downs Inc Lions Club of Pittsworth Pittsworth Show Society
Kingsthorpe	Kingsthorpe Recreation Reserve Kingsthorpe Recreation Reserve Management Committee Kingsthorpe Tennis Association	Kingsthorpe War Memorial Hall Committee Inc
Gowrie Junction	Gowrie Little Plains Tennis Club	

Source: My Community Directory, 2018

5.7 Health and well-being

5.7.1 Data quality

A significant source of data for profiling the population health and well-being in the SIA impact assessment area is Social Health Australia (PHIDU, 2018). The data is reported by Population Health Area (PHA), comprised of a collection of SA2s, and includes areas outside the SIA impact assessment area (refer Table 5-44). The confidence level in the data reported varies according to the percentage of the potentially impacted population resident in the PHA. Because of the low confidence level in data for Gowrie SA2, only selective use of this data has been made.

The other primary data source for the profiling of community health and well-being is from the 2016 Census (including the SEIFA and IEO Indices) which carries a high level of confidence.

Table 5-44: Confidence level in PHA data based on data geography

PHA Code	SA2 (Bolded SA2s are in SIA impact assessment area)	Percentage of population in potentially impacted communities	Confidence level
30128	Balonne, Goondiwindi, Inglewood – Waggamba, Tara	28%	Low
30205	Cambooya-Wyreena, Gowrie, Toowoomba-West	74%	High
30130	Crows Nest – Rosalie, Jondaryan	47%	Medium
30131	Millmerran, Pittsworth, Wambo	22%	Low

5.7.2 Community survey inputs

The SIA community survey requested respondents to comment on their perceptions of attributes of community well-being in the SIA impact assessment area. Figure 5-10 presents the weighted average of community responses to a series of value statements regarding their community's well-being (based on a scale of 1= strongly disagree; 2 = disagree; 3= neutral; 4= agree; and 5=strongly agree).

Figure 5-10 shows respondents mostly agreed they had a good quality of life and a clean environment in and around their community (with weighted averages of 4.1 and 4 respectively). There was least agreement about the adequacy of local job options (2.8).

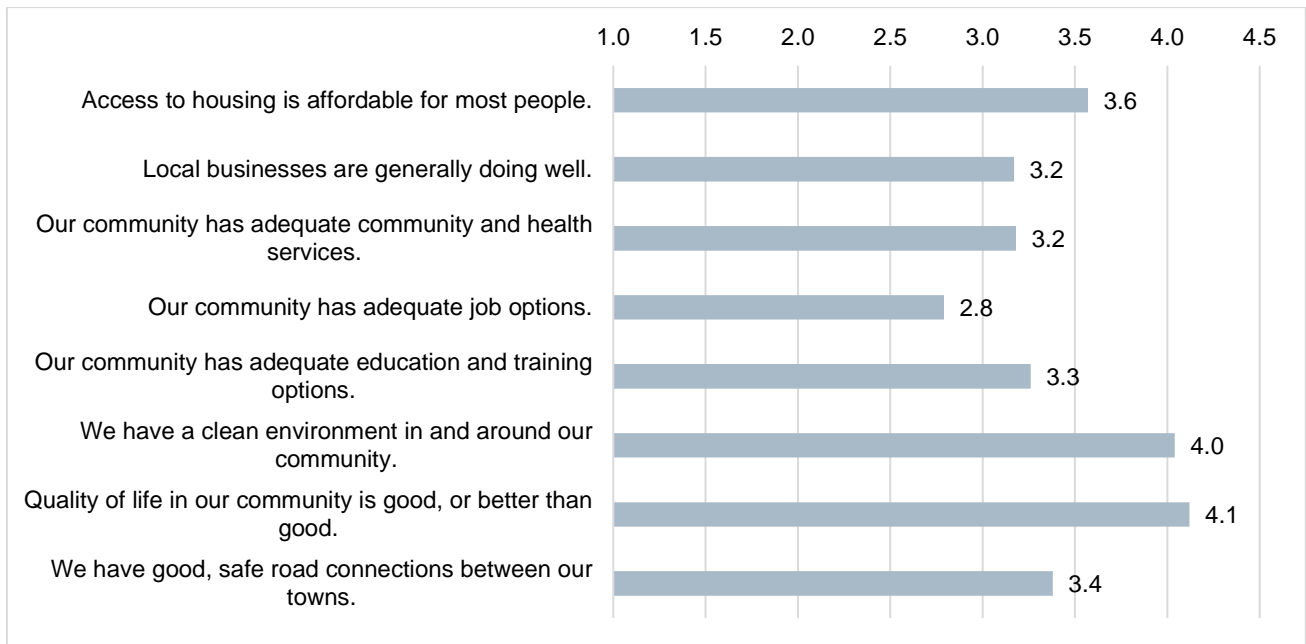


Figure 5-11: Community well-being – SIA survey inputs (average weighted ratings)

Representative comments included:

- Housing:
 - “Rent not as high as close by towns”
 - “There are houses available to rent in rural towns”
 - “Our population is static. Housing is cheaper in comparison to other places”
- Local business:
 - “Local businesses and farmers doing it tough in the drought”
 - “Farms are doing it tough. Pressure of losing part of your farm with no option to sell is hurting people”
 - “Since the GFC businesses have struggled. This is compounded by the current drought”
 - “Grain and cotton are suffering from dry weather, reduced cropping opportunities, and low irrigation water levels.”
- Community and Health Services:
 - “All services are located in Toowoomba”
 - “Smaller towns such as Yelarbon and Southbrook have very limited health facilities”
 - “Millmerran has health services, but dental and mental health services are lacking”
 - “Youth Services are also non-existent”
- Job Options:
 - “Very few jobs with a lack of businesses in town only property work”
 - “Most work on farms or travel to town”
 - “Need to travel out of the area ... but we’re close enough to Toowoomba and other regional employers and industries”
- Education and Training:
 - “Often people have to leave the district for furthering their education”
 - “Yelarbon school only goes to Grade 6, and Millmerran only goes to Year 10”
 - “There are no tertiary training facilities”
 - “Close to Toowoomba for numerous [education] and training options”

- Environment:
 - “Our towns and surrounds kept clean and tidy”
 - “Many landowners care for the roadsides, slash grass, pick up rubbish”
 - “Farmers look after their farms”
- Quality of Life:
 - “People’s health is generally good”
 - “Access to a wide range of facilities requires travel”
 - “Safe, friendly communities”
- Roads and connections
 - “More needs to be spent on all roads in and around the area”
 - “We have sealed main roads and local government roads are mostly all weather unless major flooding occurs.”

5.7.3 Socio-economic factors

A complex interaction of social, economic, environmental, behavioural and genetic factors helps to shape a population’s health and well-being, with social and economic conditions amongst the most important. A safe environment, adequate income, meaningful social roles, secure housing, higher levels of education and social support are all associated with better health (Queensland Health. McKiernan et al. 2005).

Advantage and disadvantage

Research into the social determinants of health consistently establishes that the most disadvantaged people carry the greatest burden of poor health. As discussed in Section 5.2.4, the IRSAD shows the SIA impact assessment area includes a mix of relatively advantaged and disadvantaged communities.

There is a distinct geographic difference in access to advantage within the SIA impact assessment area, with the rural SA2s being amongst the 40 per cent most disadvantage SA2s in Queensland (in the 3rd and 4th deciles, ranked in positions 105 to 201 of 526 SA2s), while the urban SA2s in and near Toowoomba are moderately advantaged in the 6th decile (and ranked in positions 283-298). The most disadvantaged community is in Pittsworth in decile 2, while the most advantaged is in Kingsthorpe in decile 8.

Ageing

Ageing is a key determinant of health as the risk of poor health and disability increases with age. Older people living alone have poorer health outcomes (Queensland Health. McKiernan et al. 2005). The region’s population is ageing, with a higher proportion of people aged over 65 years than is typical for Queensland (17.8 per cent compared with Queensland’s 15.3 per cent), with particularly high representations of older people in Inglewood and Yelarbon in the Goondiwindi LGA (at 23.2 per cent and 27.2 per cent respectively), and Millmerran and Pittsworth in the Toowoomba LGA (at 21.9 per cent and 26.6 per cent).

Disability

People with disabilities face greater challenges across most of the social determinants of health, including finding work, participating in community activities, accessing housing, health and support services, and reliance on a low income.

At the last Census 748 people had a core disability, representing 4.7 per cent of the SIA impact assessment area's population, and low compared with Queensland's rate of 5.2 per cent². The highest concentrations of people with a core disability correspond to a large degree with the ageing, and occur in Brookstead, Inglewood and Yelarbon (affecting 6.3 per cent, 6.5 per cent and 8.6 per cent of the suburb's populations), and Millmerran and Pittsworth (affecting 5.6 per cent and 7.5 per cent of the suburb's populations).

Economic status

There is a strong association between economic status and health, with economic status being a function of access to work, education, housing and income. Specific population groups affected commonly include Indigenous people, young people, seniors, migrants and refugees, people with disabilities and homeless people (Queensland Health. McKiernan et al. 2005).

The distribution of low median household income follows a similar pattern to ageing, with the lowest incomes in the SSCs of Inglewood and Yelarbon (at \$937 and \$776 per week respectively, and well below the State median of \$1,402), and Millmerran and Pittsworth (at \$1,161 and \$1,183 per week). The highest median household incomes were in Westbrook (\$2,010) and Gowrie Junction (\$1,879).

Entitlement to a Pensioner Concession Card is a proxy for low socio-economic status, and includes aged pensioners, people with disabilities, carers and sole parents who are in receipt of a pension or benefit. With the exception of Cambooya-Wyreema/Gowrie/Toowoomba West PHA, the balance of the SIA impact assessment area has a high representation of Pension Concession cardholders than is typical for Queensland (from 25 per cent to 29.8 per cent of the population over 15 years of age, compared with 21.7 per cent). There is also a higher representation of Seniors Health Card holders in the region than is typical for Queensland (8.3 per cent to 10.2 per cent compared to 7.6 per cent for Queensland) with the highest being in Pittsworth (Torrens University. PHIDU 2018, referencing 2014 data). Taking into consideration the high level of disadvantage noted previously, this indicates that the older population of Pittsworth may be particularly vulnerable and may struggle to adjust to the changes resulting from the Project.

The SEIFA IEO is an area based index that measures and ranks relative advantage or disadvantage for educational attainment or accessing skilled work. Millmerran and Jondaryan SA2s are amongst the 20 per cent most disadvantaged SA2s in Queensland, ranked in position 65 and 70 out of 526 SA2s. Pittsworth, Inglewood-Waggamba and Gowrie SA2s are moderately disadvantaged (in decile 4 and ranked in positions 170, 190 and 194 of 526 SA2s). (ABS SEIFA Index, 2016). The balance of the area is mid-range, neither particularly advantaged nor disadvantaged.

Unemployment is generally associated with lower income, reduced life opportunities and poorer health and well-being. Long-term unemployment and intermittent unemployment can have negative effects on health and well-being, especially on the emotional and mental health of unemployed people and their families (Torrens University. PHIDU. 2018). The potentially impacted community generally has low rates of unemployment compared with Queensland, with the exception of the small community of Yelarbon which had a high rate of 12.5 per cent compared with 7.6 per cent for Queensland (ABS, 2016a).

The presence of vulnerable groups is an indicator of the level of social disadvantage experienced in the community. There is a higher percentage of jobless families with children across most of the PHAs, ranging from 14.0 per cent in the Millmerran/Pittsworth/Wambo PHA to 16.7 per cent in Crows Nest-Rosalie/Jondaryan PHA, compared with 12.8 per cent for Queensland. However, the rate is much lower in the Cambooya-Wyreema/Gowrie/Toowoomba-West PHA at 7.7 per cent of families. (Torrens University. PHIDU, 2018).

² ABS Census 2016. Disability is defined as people needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a long-term health condition (lasting six months or more), a disability (lasting six months or more), or old age.

Housing stress and homelessness increase the risk of poor health outcomes and reduce psychological well-being. The prevalence of severe and persistent mental illness amongst people experiencing homelessness, and people whose housing tenure is marginal, is significantly higher than in the general population (Mental Health Council Australia, 2014). Housing stress, housing insecurity and homelessness can also be significant barriers to accessing education, employment and health services.

The Rental Affordability Index is a useful proxy for housing affordability and shows that rental housing is affordable to minimum waged households³ in the potentially impacted community, with these households paying less than 30 per cent of their gross household income on rent (SGS EP 2018). However, housing stress is present in some locations, but at relatively low rates. Census 2016 data showed that rental stress amongst low income earners⁴ in the Cambooya-Wyreema/Gowrie/Toowoomba-West and Millmerran/Pittsworth/Wambo PHA's, affected 23.0 per cent and 24.2 per cent of rental households, compared to 28.0 per cent for Queensland (Torrens University. PHIDU, 2018). The Crows Nest - Rosalie/Jondaryan PHA had levels of rental stress similar to Queensland at 28.2 per cent.

Based on the 2016 Census Estimates of Homelessness, 104 people were homeless across the area's seven SA2s (including Goondiwindi SA2) and concentrated mainly in Toowoomba-West SA2 (ABS 2016b).

5.7.4 Population health and well-being

The following indicators provide an overview of the health and well-being of the SIA impact assessment area's population.

Physical activity

The potentially impacted communities are within the Darling Downs Primary Health Network and have one of the highest recorded rates of physical inactivity in Australia (Darling Downs and West Moreton PHN, 2018). Inactivity is a key risk factor for disease or poor health condition and premature mortality.

Self-assessed health

Self-assessed health status provides a proxy measure of health status and relates to how strongly respondents experience illness and disability. The rate of people who assessed their health as being fair or poor was generally higher than that for Queensland (ranging from 18.0 – 19.8 people/100 compared with 15.4 people/100) in all but Cambooya-Wyreema/Gowrie/Toowoomba – West PHA which had better self-assessed health than typical for Queensland (at 13.9 people/100) (Torrens University. PHIDU, 2018, referencing 2014 data).

Community strength and cohesion

Strong communities exhibit resilience and have well-developed social connections and supports, contributing to community health and well-being. The level of volunteering by residents is a measure of community strength. The level of volunteering in the region is high with 21.2 per cent of the population volunteering, compared with 18.8 per cent in Queensland, suggesting that these are generally strong communities (ABS Census, 2016a). However, the same may not be the case in Kingsthorpe, where volunteering levels are much lower at 15.6 per cent, potentially reflecting its relative social vulnerability indicated by higher rates of disability and unemployment.

³ Minimum wage based on a gross income of \$75,000 per year.

⁴ Households in the bottom 40% of income distribution.

The ability to access support in times of crisis is a further indicator of the strength of social connections in a community. The estimated levels of people who are able to access general support when needed across the region's PHAs is similar to levels typical for Queensland, at 93 people/100. Residents in the Cambooya-Wyreema/Gowrie/Toowoomba-West PHA appear more readily able to raise financial support at short notice than is typical for Queensland (estimated at 86.2 people/100 who are able to raise \$2,000 within a week, compared with 81.9 people/100 in Queensland). While lower in the other PHAs, Balonne/Goondiwindi/Inglewood-Waggamba/Tara is the only PHA that has a notably lower rate at 79.5 people/100 (Torrens University. PHIDU, 2018, referencing 2014 data).

Respondents to the SIA community survey commented widely on the strength and cohesion in their respective rural communities, and how readily people support each other in times of need.

Developmental vulnerabilities

Developmental vulnerabilities in childhood provide a useful indicator of potential long term effects on a child's later health, well-being and academic success. Balonne/Goondiwindi/Inglewood - Waggamba/Tara and Crows Nest - Rosalie/Jondaryan PHAs have a higher proportion of school age children who are developmentally delayed than is typical for Queensland (30.8 per cent and 32.9 per cent compared with 26.1 per cent). The Millmerran/Pittsworth/Wambo PHA has a similar rate (27.2 per cent) to the Queensland average. The rate was much lower elsewhere in the region at 8.1 people/100,000 in Cambooya - Wyreema/Gowrie/Toowoomba - West PHA and 8.6 people/100,000 in Millmerran/Pittsworth/Wambo PHA.

Self-harm and suicide

Death from suicide and self-inflicted injury is an indicator of mental well-being, particularly among people between 15 and 34 years of age, for whom suicide is a major cause of death. There is a significantly higher rate of suicide in the south-western part of the region than is typical for Queensland. The rate in Crows Nest-Rosalie/Jondaryan PHA was 26.6 people/100,000 and in the Balonne/Goondiwindi/Inglewood-Waggamba/Tara PHA, 18.0 people/100,000, compared with Queensland's rate of 14.1 people/100,000 (Torrens University. PHIDU, 2018, referencing 2015 data). The rate was much lower elsewhere in the region at 8.1 people/100,000 Cambooya - Wyreema/Gowrie/Toowoomba - West PHA and 8.6 people in Millmerran/Pittsworth/Wambo PHA.

Circulatory and respiratory diseases

Health indicators relevant to the population at risk of air pollution from fine particulate matter (PM_{2.5} and PM₁₀) include:

- The level of current respiratory system disease (asthma, chronic obstructive pulmonary disease, bronchitis and other conditions) as an indicator of the population potentially at risk of air pollution from PM₁₀
- Coronary heart disease as an indicator of the potential impact of PM_{2.5} (noting however that data is currently only reported for all circulatory diseases).

Available information shows that there may be a predisposition to a number of these illnesses in the Balonne/Goondiwindi/Inglewood – Waggamba/Tara PHA, which has higher rates of hospital admissions for circulatory and respiratory system diseases than is typical for Queensland (refer Table 5-45).

Table 5-45: Hospital Admissions by Type

Population Health Area	Rate per 100,000 people	
	Circulatory System Diseases	Respiratory System Diseases
Balonne, Goondiwindi, Inglewood – Waggamba, Tara	2,891.0	3,128.9
Cambooya-Wyreena, Gowrie, Toowoomba-West	2,050.8	1,976.7
Crows Nest – Rosalie, Jondaryan	1,964.1	2,168.8
Millmerran, Pittsworth, Wambo	2,286.7	2,365.6
Queensland	2,476.9	2,227.5

Source: PHIDU, 2018. Referencing 2014-15 data. Rates are age standardised.

At present, modelled estimates for asthma are only available based on 2012 data. Accordingly, they can only be considered a crude indication of the population likely to be sensitive to air pollution. Estimated rates of asthma were slightly higher than Queensland in the Crows Nest - Rosalie/Jondaryan and Millmerran/Pittsworth/Wambo PHAs (at 11.1 people/100,000 compared with Queensland's 10.2 people/100,000), similar in Balonne/Goondiwindi/Inglewood - Waggamba/Tara PHA (at 10.3 people/100,000), and lower in Cambooya - Wyreema/Gowrie/Toowoomba – West PHA (at 9.9 people/100,000) (Torrens University. PHIDU, 2018).

Community members have raised concerns about the potential for polluting emissions from the rail operation to affect their health.

Diesel emissions contain concentrations of particulate, generally measured and reported as PM2.5 and PM10. PM2.5 are fine particles and are associated with harmful health effects including cardiopulmonary and respiratory disease (NSW Environmental Protection Authority, 2018). Diesel emission associated with the Project are documented in Appendix O: Air Quality of the EIS.

Available lung cancer incidence data is based on 2010 information and, as with asthma, can only be considered a crude indicator. The incidence of lung cancer in Balonne/Goondiwindi/Inglewood - Waggamba/Tara PHA is higher than is typical for Queensland (affecting 54.3 people/100,000 compared with Queensland's 51.4/100,000 people) and may indicate a predisposition to air quality sensitivity. Elsewhere in the region the rate of incidence is much lower (ranging from 33.9/100,000 to 37.3 people per 100,000) (Torrens University. PHIDU, 2018).

5.7.5 Access to health services

Barriers to accessing services and facilities due to a lack of transport, limited financial resources, lack of service capacity or feeling unsafe can prevent or delay people accessing medical care, affecting their health and well-being.

The Darling Downs and West Moreton Public Health Network (PHN) report that there is a substantial workload for health professionals across the region and difficulty in recruiting and retaining the health workforce, particularly in rural areas and West Moreton (Darling Downs and West Moreton PHN, 2018, p 15).

The SIA impact assessment area lies within the wider West Moreton Hospital and Health Service Region. Health services available to local communities are described in detail in Section 5.6.4 and include general practitioner clinics in Inglewood, Millmerran, Pittsworth and Kingsthorpe; and hospital, allied health and community health services in Goondiwindi, Inglewood, Millmerran and Toowoomba. Patients requiring treatment beyond basic services are sent to Toowoomba, where there are a number of major hospitals, offering a range of specialist services. LifeFlight, a medical evacuation service, also provides services in the SIA impact assessment area.

Public transport services are not available in the SIA impact assessment area, and most residents are reliant on private transport to access health services. This is consistent with the Accessibility/Remoteness Index of Australia's classification of the area as Inner Regional, characterised as having some restricted access to some goods, services and opportunities for social interaction (ABS Accessibility and Remoteness Index, 2018). Residents living close to Toowoomba in the Cambooya-Wyreema/Gowrie/Toowoomba-West PHA find it easier to travel to health services than typical for Queensland, with only 2.9 people per 100 having difficulty travelling to services, compared 3.8 people per 100 across Queensland. However, difficulties are more common elsewhere in the SIA impact assessment area and at similar to levels to those for Queensland, affecting 3.6 to 3.9 people per 100 (Torrens University. PHIDU, 2018, referencing 2014 data). Other barriers to accessing health services, such as cost, are less common across the SIA impact assessment area when compared with Queensland, affecting 2.1 people per 100 compared with 2.7 across Queensland.

The Home and Community Care (HACC) Program provides services to assist frail older people and younger people with disabilities to continue living in their home and in their communities. HACC services are provided in the home or in the local community, community health centre or local council. Queensland-wide data indicates that nearly 75 per cent of HACC clients are older than 65 years of age and around 74 per cent live in their own home (HACC Program Minimum Data Set 2013-14). Consistent with the older age profile in much of the SIA impact assessment area, Balonne/Goondiwindi/Inglewood - Waggamba/Tara PHA has a significantly higher rate of home and community care assistance than is typical for Queensland, with 116.5 instances/1,000 people compared with 106.3 instances. Rates of assistance elsewhere in Millmerran/Pittsworth/Wambo and Cambooya - Wyreema/Gowrie/Toowoomba - West PHAs were more similar to Queensland (at 108.1 and 116.5 people per 1,000), but much lower in Crows Nest - Rosalie/Jondaryan at 91.3 people per 1,000 (Torrens University. PHIDU, 2018).

5.7.6 Indigenous health

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, reference year 2011). The AMA Report Card on Indigenous Health (AMA, 2018) reported a widening gap between Indigenous and non-Indigenous health in the past 10 years. Chronic diseases were the biggest health challenge, while suicide and mental health gaps have also widened. Injury, including suicide, is the second leading cause of death amongst males and has increased by 21 per cent since 2011 (AMA, 2018:9).

At the 2016 Census, Indigenous people make up a similar proportion of the population in the SIA impact assessment area as across Queensland (3.9 per cent of total population compared with 4.0 per cent). However, there are particular concentrations of Indigenous people in the SSCs of Inglewood, Kingsthorpe and Yelarbon (at 7.6 per cent, 5.4 per cent and 5.3 per cent of the population respectively).

Unemployment is associated with poorer health and well-being. Like many areas in Queensland, unemployment in the SIA impact assessment area amongst Indigenous residents is high, at 12.6 per cent in Goondiwindi LGA and 18.8 per cent in Toowoomba LGA, but lower than the Queensland-wide unemployment rate of 20.1 per cent for Indigenous people.

Aboriginal and Torres Strait Islander residents in the Darling Downs Hospital and Health Service Region experienced 2.1 times the expected burden of disease and injury that of Queensland's non-Indigenous population and have a shorter average life expectancy of 11.8 years. Cardiovascular disease, mental disorders and diabetes were the largest contributors to the gap in disease and injury burden between Indigenous and non-Indigenous residents (Queensland Health, 2017).

5.7.7 Mental health

Mental health is a pervasive issue with one in five Australians experiencing a mental health issue in any one year, and almost one in two people in their lifetime (Mental Health Australia and KPMG, 2018). The most common mental illnesses are depressive, anxiety and substance use disorders, often occurring in combination. Environmental factors can increase the risk of mental illness, including trauma and stress (Australia Health Direct, 2018). Drought is a particular risk factor for farmers who experience significant stress about the effects of drought (Austin et al. 2018; Kunde et al. 2017).

Recent data which would allow comparisons of mental and behavioural problems across regions are not available. However, Table 5-46 shows population-wide data on mental health service contacts with specialist mental health services⁵ for the SA2's in the SIA impact assessment area. This represents the base case for the region, prior to the occurrence of the current drought. While a range of factors may influence the base case, the drought is likely to have increased the number of contacts since these records were taken as drought increases the level of psychological distress (noting that more common stress related mental health issues are typically dealt with by general practitioners and are not recorded here).

Research literature suggests that young farmers living on their farms and young people in rural areas are particularly vulnerable, with employment and social networks playing an important protective role in drought-affected areas (Austin et al. 2018). General practitioners play a key role in helping people manage severe stress. Research into drought affected communities highlights the importance of educating general practitioners about stress and supporting the health and safety of farming communities (Austin et al. 2018).

Table 5-46: Mental health service contacts (incidences) by location, 2012-2015 (number)

Statistical Area 2	2012/13	2014/15
Inglewood - Waggamba	961	939
Jondaryan	3,469	3,451
Millmerran	702	1,099
Pittsworth	1,033	1,657
Toowoomba - West	1,963	2210
<i>Total Contacts</i>	<i>8,128</i>	<i>9,356</i>

Source: Queensland Health, 2018

5.7.8 Community safety

Feeling unsafe can influence levels of anxiety and can be a barrier to community participation and accessing services. Residents in the SIA impact assessment area enjoy a higher rate of perceived personal safety than their Queensland counterparts. The estimated number of adults who feel safe to walk alone after dark in the region ranges from 53.7 to 62.5 people/100, compared with 50.9 people per 100 in Queensland (Torrens University. PHIDU, 2018, referencing 2014 data).

Crime rates are also significantly lower than for Queensland as seen in Table 5-47. In 2016/17 the highest incidence of reported crimes occurred in the Inglewood-Waggamba and Jondaryan SA2s, with the lowest rate in Gowrie SA2; with rates of crime in all three SA2s well below that typical for Queensland (7,745 offences/100,000 people and 2,176 offences/100,000 people compared with 10,142 offences/100,000 people).

⁵ A service contact refers to a clinically significant service by a specialised mental health service provider(s) for patients/clients, other than those patients/clients admitted to psychiatric hospitals or designated psychiatric units in acute care hospitals, and those resident in 24 hour staffed specialised residential mental health services, where the nature of the service would normally warrant a dated entry in the clinical record of the patient/client in question. (Queensland Health, 2018)

These indicators of community safety are validated by the SIA community survey with community safety and friendliness recorded as highly valued qualities by survey respondents across the SIA impact assessment area (refer Section 5.3.1).

Table 5-47: Reported Offences (Total Reported Offences), 2017

Statistical Area 2	LGA	2016/17 Rate per 100,000 people
Gowrie	Toowoomba	2,176
Inglewood-Waggamba	Goondiwindi	7,542
Jondaryan	Toowoomba	7,745
Millmerran	Toowoomba	3,503
Pittsworth	Toowoomba	3,176
Toowoomba-West	Toowoomba	5,732
Queensland		10,142

Source: Queensland Government Statistician's Office, 2018b

5.7.9 Domestic and family violence

Domestic and family violence refers to physical, sexual, economic, psychological, verbal or emotional abuse. It has a significant immediate and longer-term impacts on the health and well-being of victims, with exposure leading to poorer physical health overall, and an increased risk of health problems (WHO, 2000). Research shows that both men and women experience substantial levels of domestic and family violence, with women the most frequently affected (ANROWS, 2018). The reasons for domestic violence are complex. However, contributing factors include drug and alcohol abuse, irregular or intermittent work, mental health issues (including anxiety), stress and historical trauma (such as racial discrimination and disadvantage).

Queensland Magistrates Courts data reports on applications for Domestic Violence Orders (DVO) (Queensland Courts, 2018). The two courts servicing the SIA impact assessment area are in Toowoomba and Goondiwindi. Court statistics show that in 2017-18, 868 DVO applications were lodged in the Toowoomba Magistrates Court (data are not reported for the Goondiwindi Magistrates Court). However, the true scale of the family and domestic violence is likely much greater as only a small proportion of victims ever reports violence (COAG, 2016).

5.7.10 Traffic safety

Road safety

The more remote PHAs in the SIA impact assessment area have a high rate of death from road traffic injuries, far in excess of Queensland's rate of 5.4 people/100,000 per year. The highest death rate is in the Balonne/Goondiwindi/Inglewood-Waggamba/Tara PHA at 25.0 people/100,000 per year, followed by Millmerran/Pittsworth/Wambo PHA at 16.2 people. Crows Nest – Rosalie/Jondaryan PHA is lower at 11.2 people/100,000 per year and 9.0 people in Cambooya-Wyreema/Gowrie/Toowoomba-West PHA (Torrens University. PHIDU, 2018, referencing 2015 data).

Rail safety

The main traffic safety risks associated with rail transport include derailments, level crossing accidents with road-based vehicles, accidents associated with passenger/pedestrian slips and falls, and railway fatalities.

In the decade from 2001 to 2012 Queensland had the second highest rate of serious rail injuries, averaging 17.1 injuries a year (after Victoria at 58.5 and followed by West Australia at 5.1- no data reported for NSW). There were 145 road vehicle collisions at level crossings in Queensland in the decade to June 2012. This equates to a normalised rate 0.4 collisions per million train kilometres travelled per year, and was the fourth highest rate in Australia, following Tasmania at 3.77, Northern Territory at 0.61 and Victoria at 0.53; NSW was significantly lower at 0.16 (Australian Transport Safety Bureau, 2012).

In the five years to 2013 in Queensland there were six serious injuries and eight fatalities from running line and level crossing collisions with people; and 67 serious injuries and eight fatalities from people slipping, tripping or falling (no data is reported for suicide). Most incidents occurred within the greater Brisbane network, with none recorded in the SIA impact assessment area (Queensland Government Data, Rail Safety Fatalities and Hospitalisations 2009-2013).

There is over 7,000 km of freight and passenger rail track throughout Queensland (Queensland Rail, 2018). The Project would add approximately 145 km of new rail track and corridor and upgrade 71.2 km of existing track, with a consequent small increased risk of rail/road accidents.

6. Stakeholder engagement

6.1 ARTC Consultation

ARTC values active engagement with stakeholders and the community. A wide range of consultation activities have been undertaken for the Project since March 2016, including consultation with landowners, local Councils, communities, businesses, Indigenous groups, agricultural and freight industry stakeholders.

A brief summary of ARTC's consultation which has informed the SIA is provided below. A stakeholder engagement report for the Project is presented as Appendix C to the Border to Gowrie Project EIS (ARTC, 2019).

6.1.1 March 2016 – September 2017

The purpose of engagement completed between March and May 2016 was primarily to ground-truth desk-top studies through field studies, establish effective relationships with key stakeholders and raise awareness of the Inland Rail Program with the broader community. Stakeholder groups engaged included Councils (Goondiwindi and Toowoomba), landowners (where field access was needed), peak bodies (relevant to field studies) and regional communities.

In October 2016 the Australian Government determined four possible Inland Rail corridor options between Yelarbon and Gowrie would be assessed, and the assessment process would be overseen by the Yelarbon to Gowrie Project Reference Group (PRG). The PRG process was established in November 2016 by the (then) Department of Infrastructure and Regional Development (DIRD) to provide local community input into review of the four alignment options. The PRG met seven times between 14 December 2016 and 10 April 2017. The PRG Chair Mr Bruce Wilson AM also conducted four public meetings to enable community members to engage with the engineering consultants and DIRD officers.

Following the meetings of the PRG and the public meetings, a Corridor Options Report (AECOM, 2017) was developed and submitted to DIRD in April 2017. This report was one of several inputs considered by the Australian Government and informed the decision on the impact assessment area for the Border to Gowrie Project.

6.1.2 September 2017 – August 2018

On 21 September 2017, the Minister for Infrastructure and Regional Development announced the preferred two-kilometre wide impact assessment area for the Project. Following this announcement, the focus of ARTC's engagement was to inform the community about the concept alignment and impact assessment area, the proposed Project assessment and approvals process, and securing future access to private properties in order to carry out environmental and technical investigations.

Stakeholder groups engaged during this process included GRC and TRC, landowners (where field access was desired) and those within the proposed impact assessment area, relevant peak bodies and organisations (e.g. Queensland Farmers Federation, Toowoomba Chamber of Commerce and Toowoomba Surat Basin Enterprise TSBE), interested community groups and local communities.

ARTC has undertaken extensive consultation with stakeholders during this time for the Project's design and EIS process, including:

- Four rounds of meetings with the CCCs regarding the project, including the Condamine River floodplain crossing and draft Terms of Reference for the draft EIS
- Two community information sessions in Millmerran and Brookstead regarding feasible Condamine River floodplain crossing options

- Seven community information sessions in key towns along the alignment on the draft Terms of Reference for the draft EIS
- Regular consultations with GRC and TRC
- One-on-one meetings with landowners, particularly those situated within the Condamine River floodplain
- Targeted community group meetings to discuss localised alignment options within the impact assessment area
- Meetings with relevant peak bodies and organisations including Interger (Millmerran Power Station/Commodore Mine), GrainCorp, Queensland Farmers Federation, Cotton Australia, DA Hall & Co. (Doug Hall Poultry), Smithfield Cattle Co. (Sapphire Feedlot) and John Dee Pty Ltd (Yarranbrook Feedlot).

6.1.3 September 2018 to December 2018

From September to December 2018, ARTC delivered a communication and engagement program to engage with key stakeholders, landowners and the community regarding the development of the Project's design and EIS.

To provide more clarity to the impacted landowners, ARTC narrowed the two-kilometre-wide impact assessment area to a 'focused area of investigation' in which the proposed rail alignment is expected to fall. This enabled stakeholders to identify the likelihood that they or their properties would be affected by the Project.

In addition to seeking feedback on potential impacts and benefits through community information sessions, engagement included a focus on:

- Alignment refinements near Millmerran, Millwood and Whetstone to minimise impacts on key infrastructure including significant agricultural infrastructure in Whetstone, Millwood and near Millmerran, and the Commodore Mine/Millmerran Power Station
- Progress on the Condamine River floodplain crossing solutions.

Stakeholders consulted during this stage are summarised in Table 6-1.

Table 6-1: Stakeholder engagement (September to December 2018)

Stakeholder groups	Objectives	Participation
Landowner meetings	<ul style="list-style-type: none"> ■ To discuss focused area of investigation and property impacts ■ Gather landowner input for private level crossing design ■ To discuss alignment development ■ To discuss Condamine River floodplain crossing ■ To secure land access agreements 	187 people
Key stakeholder briefings	<ul style="list-style-type: none"> ■ To discuss focused area of investigation and property impacts ■ To discuss alignment development ■ To discuss Condamine River floodplain crossing 	10 people

Stakeholder groups	Objectives	Participation
CCC meetings	<ul style="list-style-type: none"> To discuss focused area of investigation and property impacts To discuss alignment development To discuss Condamine River floodplain crossing 	4 meetings: Inner Darling Downs CCC (2 meetings) Southern Darling Downs CCC – (2 meetings)
Drop in sessions	<ul style="list-style-type: none"> Inform community members about the focused area of investigation Inform community members about the Condamine River floodplain crossing options Advise community members about opportunities to provide input and timeframes Promote community survey Gather landowner input for private level crossing design. 	Eight sessions (with a total of 150 attendees) at: <ul style="list-style-type: none"> Millmerran Pittsworth Southbrook Brookstead Inglewood Yelarbon Gowrie Junction Toowoomba
Department of Education	<ul style="list-style-type: none"> Provide information to the Department of Education based on the 70 percent reference design and discuss consultation with schools regarding potential noise and impacts and road realignments 	One meeting with Regional Director in Toowoomba

6.1.4 January to September 2019

During 2019, ARTC's engagement which informed the SIA included:

- Ongoing community engagement with landowners and broader community on design development, including public and private level crossings, and the Project footprint
- Ongoing community engagement with landowners to develop the Condamine River floodplain crossing solution
- Engagement with landowners about the hydrology modelling for Gowrie Creek, Dry Creek and Westbrook Creek
- Ongoing engagement with landowners on the property acquisition process and timing
- Ongoing community engagement with landowners and the broader community to inform the draft EIS, including on topics of visual amenity and noise
- Ongoing engagement with Traditional Owners and custodians regarding cultural heritage issues
- Engagement with broader local community on regional benefits, including sponsorship, legacy projects, community development, local industry participation, and safety programs
- Engagement with a wide range of State and Federal Government agencies, including individual briefings and two forums with Government agencies.

Table 6-2 summarises ARTC stakeholder engagement between January and September 2019.

Table 6-2: Stakeholder engagement (January to September 2019)

Stakeholder groups	Objectives	Participation
Federal Government Departments	<ul style="list-style-type: none"> Provide updates on the Inland Rail Program 	<ul style="list-style-type: none"> 10 briefings/meetings <ul style="list-style-type: none"> Department of Infrastructure, Transport, Cities and Regional Development Department of Transport and Main Roads
Federal Government Elected Representatives	<ul style="list-style-type: none"> Inform elected representatives about the Project and the draft EIS process Gain an understanding of the issues and opportunities currently facing the electorates Identify the potential impacts, benefits and mitigation measures for the Project Provide updates about the proposed rail alignment and Project footprint 	<ul style="list-style-type: none"> Two briefings/meetings <ul style="list-style-type: none"> Member for Groom Hon. Dr. John McVeigh MP Member for Maranoa Hon. David Littleproud
State Government Elected Representatives		<ul style="list-style-type: none"> Two briefings/meetings <ul style="list-style-type: none"> Member for Condamine Pat Weir Member for Southern Downs James Lister
State Government Departments	<ul style="list-style-type: none"> Discuss Project and EIS See feedback on issues for assessment 	<ul style="list-style-type: none"> 16 briefings <ul style="list-style-type: none"> Office of the Coordinator-General Department of Environment and Science Department of Housing and Public Works Department of Natural Resources, Mines and Energy Department of Transport and Main Roads Department of Agriculture and Fisheries Queensland Treasury Queensland Police Service Queensland Fire and Emergency Services
	<ul style="list-style-type: none"> Present the technical impact assessments methodologies and preliminary findings to Government agencies (see Section 6.1.7) 	<ul style="list-style-type: none"> Department of Premier and Cabinet Department of Education Department of Agriculture and Fisheries DNRME DTMR TRC
TRC – Councillor briefings/meetings	<ul style="list-style-type: none"> Inform Councils about the Project and the draft EIS process Facilitate the councils' input into the design development 	<ul style="list-style-type: none"> 4 meetings/briefings – 32 attendees
TRC – Officers/Technical Working Group		<ul style="list-style-type: none"> Eight monthly meetings, various numbers of attendees
GRC – Councillor briefings		<ul style="list-style-type: none"> Three meetings - 15 attendees

Stakeholder groups	Objectives	Participation
GRC – Officers/Technical Working Group	<ul style="list-style-type: none"> Gain an understanding of technical constraints in the region Gain an understanding of the issues and opportunities currently facing the regions Identify the potential impacts, benefits and mitigation measures for the Project. 	<ul style="list-style-type: none"> Five meetings – various numbers of attendees
Landowners	<ul style="list-style-type: none"> Gain feedback about potential road changes Share information about flood modelling process and results 	<ul style="list-style-type: none"> Four workshops - 47 attendees <ul style="list-style-type: none"> Brookstead Dry, Westbrook and Gowrie creeks Pampas Road (2 workshops)
Landowner meetings	<ul style="list-style-type: none"> Discussions about <ul style="list-style-type: none"> Alignment, to seek feedback on land use and property access to inform the design Local road usage to inform public road crossing design outcomes of hydraulic investigations and flood mapping Updates on design development and release of reference design Addressing issues and concerns raised by landowners Requests to initiate land access agreement 	<ul style="list-style-type: none"> 191 meetings, various locations
Inner Darling Downs CCC	<ul style="list-style-type: none"> Facilitate broader community involvement in the Project Seek community feedback and input to project outcomes Increase awareness and understanding for the project by providing communities with 'one-point of call' for project information Act as a conduit between the project team and the community to provide information or address issues and concern. 	<ul style="list-style-type: none"> Chair and 15 committee members 115 community observers at three meetings (10 + 20 + 85 observers)
Southern Darling Downs CCC		<ul style="list-style-type: none"> Chair and 15 committee members 32 community observers at three meetings (13 + 7 + 12)
Local communities and groups	<ul style="list-style-type: none"> Discussions about the alignment development (reference design) Discussions about sentiment and community involvement 	<ul style="list-style-type: none"> Meeting with Pittsworth Alliance Meetings with Gowrie Junction Progress Association

Stakeholder groups	Objectives	Participation
	<ul style="list-style-type: none"> Gather information on local road use and public road crossings 	<ul style="list-style-type: none"> Eight pop-up consultation sessions (with a total of 94 attendees) at: <ul style="list-style-type: none"> Toowoomba Brookstead Pittsworth Southbrook Millmerran Yelarbon Inglewood Pampas
	<ul style="list-style-type: none"> Share information on project status and timeframes Gather feedback Provide information on supplier network and opportunities 	<ul style="list-style-type: none"> Six community event stalls: <ul style="list-style-type: none"> Downstream Farm fest Goondiwindi Show Toowoomba Show Inglewood Show Millmerran Show One residents' committee meeting One community open day One presentation at a community association
Business events	<ul style="list-style-type: none"> Share general project update Business and supplier opportunities Local procurement and employment opportunities Regional project benefits 	<ul style="list-style-type: none"> Four business events <ul style="list-style-type: none"> Goondiwindi Chamber of Commerce Pittsworth Chambers of Commerce Millmerran Commerce and Progress Association Toowoomba Surat Business and Enterprise
Traditional Owners	<ul style="list-style-type: none"> Discuss Project, potential impacts, cultural heritage, and Statement of Commitments Meetings to discuss Project, potential impacts, cultural heritage, and Statement of Commitments 	<ul style="list-style-type: none"> Bigambul People

6.1.5 January to September 2020

ARTC has continued to meet with community members and stakeholders throughout January 2020 – September 2020. This has included:

- A noise consultation campaign (November 2019 to January 2020), including:
- Presentations to the two CCCs on noise assessment findings
- Calls and the offer of meetings with the owners of properties where noise exceedances may be experienced to enable landowners to understand the potential for impacts and establish communication between the Project and landowners
- Provision of written information including a fact sheet and e-news updates about noise impacts (refer EIS Appendix C: Consultation Report)

- A meeting with TRC (in March 2020) to explain the noise modelling
- The fifth of five flood workshops, to present the findings of the updated LiDAR surveys and impacts on alignment options (the preferred option and Option A) in February 2020
- A series of meetings with Councils and Government agencies regarding construction water sourcing, road-rail interfaces, a stock route interface and Matters of National Environmental Significance
- Community outreach engagement sessions in Gowrie, Pittsworth, Millmerran and Goondiwindi.
- Three meetings of the Inner Downs CCC and one meeting of the Southern Downs CCC to discuss a range of topics including flood modelling, impacts on water availability, the Project's alignment, and design issues
- Phone calls to owners of quarries and borrow pits regarding the sourcing of materials.

During 2020, ARTC also met with Council and Government stakeholders about development of skills and business capacity strategies, including:

- Two meetings with DSDTI during July 2020, regarding existing DSDTI programs focused on working with major projects and opportunities for DSDTI and Inland Rail to collaborate on elements of business capability development
- Two meetings with GRC's RSIS Coordinators (April 2020) focussed on cooperation on skills development and identification of opportunities as part of DESBT's SQW program
- Four meetings with GRC (May, June, July and August 2020) to provide Project updates including the schedule, which identified Council priorities for local training and business capability development
- An update to TRC (September 2020) on the SIA management measures with a particular focus on local and indigenous participation, alignment with TRC-community initiatives, and the planned process for development of Health and Community Wellbeing initiatives
- A meeting with TRC's Regional Economic Development Officer and RSIS Coordinator during September 2020 to provide an update in Inland Rail Skills Academy planning and discuss TRC initiatives currently planned.

The outcomes of these discussions are included in Sections 6.3.3 and 6.3.6.

6.1.6 Community Consultative Committee inputs

ARTC established two CCCs – the Inner Darling Downs CCC in the north of the SIA impact assessment area and Southern Darling Downs CCC in the south – in December 2017. The CCCs are chaired independently. Members were appointed following a publicly advertised nomination period and independent assessment of nominees and come from a range of backgrounds. The role of the CCCs is to act as a conduit between the community and ARTC, to provide input and feedback on community issues and concerns during the planning and design regarding of the rail alignment.

CCCs are renewed after two years to ensures diverse viewpoints are represented and provide a platform for community concerns to be raised with ARTC. In December 2019 a call for new members was put out and the new committees were announced in February 2020.

The Inner Downs CCC has met 12 times and the Southern Downs CCC had met 11 times as of the date of this report. CCC members have raised a range of issues as summarised in Table 6-3 and Table 6-4. Concerns have centred on:

- The location of the Project alignment in regard to effects on agricultural properties, the amenity of towns, landowner amenity and flooding
- Risks to farm operations including effects of land severance on properties' viability, bio-security risks, stock management, and third-party access to properties

- Impacts on directly affected landowners, including disruption of agricultural properties, compensation relating to land acquisitions, and availability of early acquisitions due to hardship
- The potential for impacts on Indigenous cultural heritage
- Community access to detailed information about the Project as it develops
- The potential for the Project to impact on flooding and hydrology, including the need for independent oversight of flood modelling
- Impacts on amenity including construction noise and vibration, rail noise and changes to the road network
- Long term use of good agricultural land by the Project
- Potential impacts of changes to air quality on community health
- The impacts of road closures, both public roads and on properties
- Regional benefits, and how local workers and businesses will be supported to access Project opportunities.

Members have also voiced the need to ensure there are benefits from the Project for the local communities including jobs for local people and participation of local businesses in the Project's supply chain.

Mitigation measures suggested by CCC members have been considered in the development of measures to address social impacts. Suggestions which have not been addressed in the SIA include:

- Changing the alignment (as this is beyond the scope of the SIA and is discussed in Appendix C: Stakeholder Engagement Report of the EIS)
- Increasing the width of the corridor to accommodate other infrastructure (as this is beyond the scope of the Project).

Table 6-3: Inner Darling Downs CCC Meeting Outcomes

Key issues	Suggested mitigation measures	ARTC Response
<ul style="list-style-type: none"> ■ Impacts on farming properties ■ Biosecurity concerns/weed management ■ Uncertainty about the effects of the Project alignment on individual properties ■ Livestock management during construction, e.g. whilst fences are down, and impediments to crossings between properties ■ Need for hardship policy which considers age and health of affected residents in relation to land acquisition ■ Impact on property values and for retiring landowners, the ability to afford retirement ■ Methodology for compensation for land take ■ Effects on water bores 	<ul style="list-style-type: none"> ■ Avoid impacts on agricultural properties ■ Change the alignment 	<ul style="list-style-type: none"> ■ Enviro/biosecurity/social investigations – develop understanding of how people use their properties ■ Each property access can have individual arrangements ■ Weed management policy/washdown policies to be distributed ■ ARTC to consider livestock management in management plans ■ Consider potential for hardship to be a basis for property acquisition ■ ARTC will consult with all directly affected landowners before releasing public information on the Project alignment ■ Compensation is based on the market value of any land that is take, and ARTC will fund the services of a second valuer chosen by the landowner ■ Effects on water bores are being investigate in the draft EIS in regard to the Project design

Key issues	Suggested mitigation measures	ARTC Response
<ul style="list-style-type: none"> Impacts of property acquisition (stress and disruption of families) Stress and distress in the community regarding potential or perceived impacts 		<ul style="list-style-type: none"> Training in identifying stress and referral to support services provided to ARTC staff and offered to CCC members ARTC has initiated a mental health partnership to provide locally accessible services
<ul style="list-style-type: none"> Noise impacts from construction or operation Effects of blasting/vibrations on properties i.e. damage Effects of rail noise on the amenity of Brookstead, Pittsworth and Millmerran Transport of coal with potential for coal dust to affect people houses or tank water 		<ul style="list-style-type: none"> Environmental impacts are being investigated and will be reported as part of the draft EIS Dilapidation surveys will be undertaken for properties where there is potential for e.g. damage caused by vibration
<ul style="list-style-type: none"> Frustration about community access to Project design and information about impacts 	<ul style="list-style-type: none"> More timely provision of information and community ability of to influence the alignment 	<ul style="list-style-type: none"> As investigations continue, alignment can be narrowed down and communicated to landowners and other community members Project design discussed with CCC as it develops
<ul style="list-style-type: none"> Potential to exacerbate flooding risks and affect community health and safety 	<ul style="list-style-type: none"> Residents to provide insight about flooding history in region 	<ul style="list-style-type: none"> Specialist sub-consultants addressing hydrology, water, geotechnical and other issues that may affect the floodplain Flood modelling is state of the art – utilising Bureau of Meteorology and TRC data ARTC held five flood workshops to consult with landowners and other stakeholders about the flooding model and the results of modelling, including the results of independent review
<ul style="list-style-type: none"> Concerns about boom-bust effects as were seen in Gladstone and Chinchilla 		<ul style="list-style-type: none"> Housing impacts will be assessed in the SIA The Project will include non-resident workforce accommodation to mitigate impacts on the housing market
<ul style="list-style-type: none"> Lack of perceived local benefit Concern about whether jobs would be available to local residents 	<ul style="list-style-type: none"> Sponsorship/social investment Ensure jobs are advertised locally 	<ul style="list-style-type: none"> The SIA is addressing local employment issues ARTC has initiated a Community Donations and Sponsorship Program
<ul style="list-style-type: none"> Potential for traffic impacts on the broader region 		<ul style="list-style-type: none"> Modelling of long-term traffic changes is being undertaken as part of the draft EIS
<ul style="list-style-type: none"> Interest in Project's procurement model and how it will engage local businesses Difficulties faced by small businesses in accessing major Project opportunities 	<ul style="list-style-type: none"> Ensure local business can benefit from Project supply opportunities Protection for the rights of small businesses engaged by major contractor 	<ul style="list-style-type: none"> Consultation with local business chambers as part of planning business engagement and capacity building Incorporation of acceptable standards and targets for engaging small businesses in construction contracts Partnership for business capacity building are planned

Source: Inner Darling Downs Meeting Minutes <https://inlandrail.artc.com.au/community-consultative-committees>

Table 6-4: Southern Darling Downs CCC Meeting Outcomes

Key issues	Suggested mitigation measures	ARTC Response
<ul style="list-style-type: none"> ▪ Opposition to land access ▪ Opposition to Project alignment due its impacts on farming properties and concern regarding exacerbation of flooding ▪ Design considerations for the movement of large farming machinery and stock across the corridor ▪ Severance of land supporting farming businesses ▪ Impacts of road closures and road interface treatments such as level crossings ▪ Impacts of heavy vehicles on the Gore Highway ▪ Potential benefits of non-resident workforce accommodation near Millmerran if business supply opportunities are established 	<ul style="list-style-type: none"> ▪ Change the alignment ▪ Avoid or at least minimise road closures ▪ May be benefit in making corridors wide enough to facilitate other infrastructure (i.e. water for irrigation) 	<ul style="list-style-type: none"> ▪ ARTC will not force access if landowner is not willing ▪ Project alignment is the result of extensive investigations and consultations over several years ▪ EIS will consider effects on agricultural land and businesses ▪ Environment/biosecurity assessments and consultation are assisting to develop an understanding of how people use their properties ▪ EIS will consider noise, air quality, vibration and traffic impacts ▪ Potential benefits of local procurement and non-resident workforce accommodation considered in SIA
<ul style="list-style-type: none"> ▪ Concern about whether Project jobs would be available to local residents 	<ul style="list-style-type: none"> ▪ Ensure jobs are advertised locally 	<ul style="list-style-type: none"> ▪ The SIA is addressing local employment issues
<ul style="list-style-type: none"> ▪ Potential to impact on Aboriginal cultural heritage sites or values 		<ul style="list-style-type: none"> ▪ ARTC is working with Aboriginal parties to identify and manage the potential for impacts on cultural heritage
<ul style="list-style-type: none"> ▪ Potential for local businesses to supply the Project 	<ul style="list-style-type: none"> ▪ Ensure local business can benefit from Project supply opportunities 	<ul style="list-style-type: none"> ▪ This will be addressed in the SIA
<ul style="list-style-type: none"> ▪ Concern regarding crossing loop locations and noise or air quality impacts 		<ul style="list-style-type: none"> ▪ Environmental impacts are being investigated and will be reported as part of the draft EIS
<ul style="list-style-type: none"> ▪ Brookstead community concerns about impact on GrainCorp silos 		<ul style="list-style-type: none"> ▪ Consultation with GrainCorp has assisted to minimise impacts on grain silos
<ul style="list-style-type: none"> ▪ The design of bridge structures across the Condamine River floodplain ▪ Particular concern regarding effects on agricultural land in the Condamine River floodplain, and potential to exacerbate major flood events in the floodplain ▪ Concern about the potential for the Project to increase flooding risks to affect homes and farms ▪ Concern about the potential for increased flooding to cause road closures 	<ul style="list-style-type: none"> ▪ Consideration of residents' inputs on flood modelling ▪ The need for independent technical advice on hydrology modelling and flooding impacts 	<ul style="list-style-type: none"> ▪ The Condamine Floodplain Solutions Report has been subject to independent verification at the request and approval of the CCC ▪ Flood modelling is state of the art – utilising Bureau of Meteorology and TRC data and applying Australian Rainfall and Run-off 2016 guidelines. ▪ Landowners have been engaged and consulted regarding flood modelling, and road-rail interfaces
<ul style="list-style-type: none"> ▪ Potential for threats to Biosecurity which could damage farming livelihoods 		<ul style="list-style-type: none"> ▪ Biosecurity addressed in EIS and as part of individual property access agreements

Key issues	Suggested mitigation measures	ARTC Response
		<ul style="list-style-type: none"> Weed management policy/washdown policies to be followed
<ul style="list-style-type: none"> Ability for pedestrian traffic to cross the railway line in Yelarbon 	<ul style="list-style-type: none"> Pedestrian path provided in Yelarbon across the rail corridor 	<ul style="list-style-type: none"> There is currently no pedestrian path across the existing rail Yelarbon, and this is not part of the Project design

Source: Southern Darling Downs Meeting Minutes <https://inlandrail.artc.com.au/community-consultative-committees>

6.1.7 ARTC consultation with Councils and Government agencies

As outlined in previous subsections, ARTC has conducted extensive engagement with Government department, TRC and GRC.

Government agency forums were held in August 2019 (Toowoomba) and October 2019 (Brisbane) to update agencies on the Project and EIS studies, and seek feedback on issues of interest. Key issues of relevance to the SIA and ARTC responses are summarised in Table 6-5. Further details on participation are provided in Appendix C: Stakeholder Engagement Report of the EIS.

Table 6-5: Government Forums to discuss EIS findings

Issues	ARTC Responses
Toowoomba Forum – August 2019	
Impacts of potential lighting of dark landscapes	<ul style="list-style-type: none"> Permanent lighting is to be provided for road realignments to address safety guidelines and standards.
Cultural landscapes	<ul style="list-style-type: none"> The SIA includes consideration of stakeholder input on cultural landscapes.
Potential impacts of road noise, cumulative rail and road noise	<ul style="list-style-type: none"> The EIS includes assessment of potential operational noise impacts as a result of proposed road alignments. Sensitive receptors perceive and respond to road traffic and railway noise differently, hence the application of separate and different noise criteria and management principles.
Potential noise impacts on state schools	<ul style="list-style-type: none"> Potential noise impacts on schools have been assessed on the basis of the reference design to identify exceedances. In circumstances where operational railway noise exceeds the relevant noise criteria, further assessment will be undertaken based on architectural plans and audit of site layout during detail design.
Rail noise assessment methodology	<ul style="list-style-type: none"> Assessment was undertaken with consideration of the DTMR Interim Guideline – Operational Railway Noise and Vibration and ARTC's noise and vibration management approach for the Inland Rail Project, which is more stringent than current Queensland environmental railway noise criteria.
Stock routes	<ul style="list-style-type: none"> ARTC has consulted with GRC and DNRME in relation to interfaces with the proposed Project alignment too maintain the connectivity of travelling stock routes.
Waste management	<ul style="list-style-type: none"> Key management measures include assessment of reuse opportunities, agreements to access waste management facilities and inclusion of ISCA tracking credits.
Cumulative Impacts	<ul style="list-style-type: none"> Cumulative impacts are addressed for each discipline and in the standalone chapter of the draft EIS.
Brisbane Forum – October 2019	
Project Alignment	<ul style="list-style-type: none"> Functionality of stock routes maintained. Rail interfaces discussed with DNRME and GRC and consultation ongoing.
	<ul style="list-style-type: none"> Interfaces with Millmerran-Inglewood Road include one level crossing and two grade separated crossings.

Issues	ARTC Responses
	<ul style="list-style-type: none"> ▪ Sidings provided for GrainCorp facilities at Brookstead and Yelarbon.
Non-indigenous Cultural Heritage – Protest Art	<ul style="list-style-type: none"> ▪ Cultural heritage surveying identified protest art within the Project corridor near Pampas as state significant under the cultural heritage significance guidelines. Opportunities for mitigation will be subject to consultation with the artist.
Indigenous Cultural Heritage – Story Lines	<ul style="list-style-type: none"> ▪ To date no story lines of relevance to the Project had been raised by Aboriginal Parties.
Non-resident workforce accommodation	<ul style="list-style-type: none"> ▪ Based on the construction methodology, temporary non-resident workforce accommodation will be required in proximity to the alignment in the locality of Millmerran, Inglewood and Yelarbon.
Land Use	<ul style="list-style-type: none"> ▪ Land used for temporary construction activities will be reinstated as agreed with the landowner.
Waste Management	<ul style="list-style-type: none"> ▪ Waste management will include onsite reuse where practically possible. Goondiwindi landfill will accept regulated waste. ▪ Truck movements generated for waste disposal to be addressed in the traffic impact assessment.

Additional ARTC consultation with Government agencies included two meetings with DSDTI regarding the potential for collaboration on business capability development (July 2020) and a meeting with DESBT staff to discuss Inland Rail and DESBT programs which support skills and business development.

ARTC has also consulted with the Department of Education regarding the potential for Project impacts on schools near the alignment, including a meeting in December 2018, the Department's participation in the EIS Government agencies workshop in 2019, and a telephone meeting in November 2020, as discussed further in Section 6.3.6.

ARTC's forum with TRC (September 2019) and meetings with GRC during March, May and October 2019 identified the following issues and responses regarding construction issues and impact management.

ARTC meetings with Councils have continued during 2020 with a primary focus on design issues including the location of the alignment, road realignments and level crossing design.

Table 6-6: Issues and responses - Council consultation 2019

Issues	ARTC Responses
Construction water requirements	<p>Water demand is based on the proposed construction activities and addressed in the project description chapter of the draft EIS. The hierarchy of preference for construction water is:</p> <ul style="list-style-type: none"> ▪ Public water storages i.e. dams and weirs ▪ Permanently (perennial) flowing watercourses ▪ Privately held water storages i.e. dams, dams or ring tanks, under private agreement ▪ Use of existing sustainable allocated water entitlements/existing registered and licensed bores (under agreement) ▪ Mains water – required for concrete batching due to water quality requirements <p>Assessment of the suitability of each source will be conducted as part of the detail design phase.</p>
Hydrology and surface water methodology	<p>Assessment of hydrology and flooding (Appendix Q1 and Q2 of the EIS) has considered the proposed rail alignment, road reconfigurations and associated drainage structures. A LIDAR (aerial laser scanning) survey was undertaken to verify catchments.</p> <p>Assessment included simulation of flooding events up to Probable Maximum Flood (PMF) events. ARTC/FFJV engaged with potentially affected landowners to undertake an independent verification of the model from landowner records. Feedback has generally been positive.</p>

Issues	ARTC Responses
	Separate afflux mapping was included to identify modelled impacts from 12% climate change.
Groundwater	Aquifer dewatering/seepage at deep cuts will be managed in accordance with legislative requirements, including through engineering design. Appendix R: Groundwater Technical Report of the EIS identifies two registered bores within the modelled drawdown area. A more detailed assessment of registered and unregistered bores is recommended to identify potential drawdown impacts and consultation with affected landowners to identify mitigation strategies.
Landscape and visual impacts LVIA – Pittsworth	The Appendix I: Landscape and Visual Impact Assessment Technical Report of the EIS provides an assessment of landscape and visual impacts. It will address the introduction of large infrastructure on the character of Yelarbon, and design and textural structural solutions (e.g. near Brookstead) and opportunities for treatments for embankments. The alignment traverses the outskirts of Pittsworth to avoid potential amenity impacts that would have resulted from upgrade to current alignment and is partially screened from the view of Pittsworth residents.
Non-indigenous Cultural Heritage	Protest art recognised at Yandilla is recognised as place of state heritage value and assessed in Appendix W: Non-Indigenous Cultural Heritage Survey Report of the EIS.
Cumulative impacts	Minimal potential impacts on most services are expected during construction because non-resident accommodation will be self-sufficient. Existing health facilities will not have adequate facilities to respond to serious cases which will be transported to major centres. Consultation with emergency services i.e. QFES, Ambulance, LifeFlight, SES and hospitals through Queensland Health is ongoing. The EIS identifies projects in the region that share competing timeframes and considers cumulative impacts in each technical area, including traffic impact assessment. ARTC is considering Project scheduling and resource sharing to reduce the potential for cumulative impacts.
Kildonan Road	The Project requires a crossing of Kildonan Road This has been proposed as an active level crossing to achieve safety design requirements.

6.1.8 Consultation with community groups

ARTC has involved a wide range of community groups in Project consultation through various means, e.g. letters, invitations to community information sessions and one to one and group meetings, as detailed in Appendix C: Stakeholder Engagement Report of the EIS. These groups included:

- Gowrie Junction Progress Group
- Kingsthorpe and District Progress Group
- Millwood Farmers Group
- Inglewood Community Advisory Group
- Yelarbon Community Consultative Committee
- Macintyre Brook Irrigators Association
- Darling Downs Regional Organisation of Councils
- Friends of the Escarpment Parks Toowoomba Inc.
- Goondiwindi and District Historical Society
- Highfields and District Business Connection Incorporated
- History Pittsworth

- Pittsworth District Alliance
- Rotary Club of Toowoomba North
- Macintyre Valley Cotton Growers Association Inc
- Millmerran Commerce and Progress Inc
- Murray Darling Association
- Wylahra Grove Progress Association
- A range of catchment care, water management, Landcare and conservation groups.

ARTC has also given numerous presentations to industry, business and community groups. These presentations provided information about project scope and potential opportunities for access to the alignment. Consultation with community, industry and business is ongoing. Presentations/ forums held to date include:

- Southern Queensland Landscapes
- Economic Development Officer forum
- TAFE Centre of Excellence focus group
- RDA regional issues forum
- DITRDC forums to discuss regional benefits and infrastructure investment program
- Darling Downs and South Western Queensland Council of Mayors
- Murray Darling Association
- Toowoomba and Surat Basin Enterprise
- University of the Third Age
- International Association for Public Participation.

Given the close knit nature of local communities, many community members who participated in Community Information Sessions and the CCC are members of multiple local groups. Key issues raised by members of community groups included:

- Health issues, including the potential for dust generated by construction works and the effects of stress and anxiety on mental health, particularly in the context of the extended drought
- The potential for noise or vibration during construction and/or operation to reduce residents' amenity
- Environmental management issues including the potential to mobilise contaminated material, weed and pest control, protection of endangered flora and fauna, biodiversity offsets and waste management
- Issues associated with water use and quality, including the potential to affect groundwater access for other use and the potential for the Project to compete with other water users for allocations
- The potential to increase the risk of flooding impacts with risks to community safety, particularly with respect to the Condamine River floodplain and local creeks
- Impacts to agricultural activities, including land acquisition and severance of agricultural properties
- Concerns about disruption to traffic and increased traffic volumes
- The need to ensure local people benefit from Project employment and supply opportunities
- Project justification, route selection, alignment and design issues
- The need for respectful and honest engagement as the Project progresses.

6.1.9 Consultation on noise impacts

During September 2019 to February 2020, ARTC delivered a noise consultation campaign for the Project. A wide variety of communication tools were used to engage with stakeholders including the CCCs, landowners and elected representatives as detailed in Appendix C: Stakeholder Engagement Report of the EIS. Key themes identified included:

- Social impacts such as impacts on liveability, property values and lifestyle
- Types of mitigation measures and when more detail will be made available
- Route selection and proximity to sensitive receptors
- Approvals process and next steps
- Property impacts, compensation and the acquisition process, particularly where rail infrastructure does not directly impact the property.

The SIA considers the potential for noise to affect amenity and liveability, property impacts and compensation and acquisition processes. Noise mitigation measures are addressed in Chapter 22: Outline Environmental Management Plan of the EIS.

6.2 SIA engagement process

The SIA engagement process was designed to ensure the involvement of a broad range of stakeholders. SIA stakeholder engagement commenced with stakeholder analysis, which included:

- Reviewing ARTC's stakeholder register and the outcomes of ARTC's stakeholder engagement in the years preceding EIS commencement
- Meeting with ARTC's consultation team to identify the issues raised in each locality to date
- Participating in community information sessions to identify the location of interested community members and their key issues
- Scanning public media and social media to identify interested groups and businesses
- Desktop analysis of social infrastructure provision and management in the potentially impacted communities
- Identification of Council departments and Government agencies with an interest in the SIA.

The SIA engagement process was integrated with the draft EIS engagement process. SIA and EIS team members participated in ARTC-led Project engagement including:

- Seven community information sessions (at Yelarbon, Inglewood, Millmerran, Brookstead, Southbrook, Pittsworth and Gowrie) to provide information about the SIA and EIS process, seek input on the scope of potential impacts, and interview local residents about potential social impacts
- Attendance at the Inner Downs CCC meeting (February 2019) and Southern Downs CCC meeting (June 2019) to provide a briefing on the SIA process and key issues being assessed, and hear committee members' concerns about social and environmental impacts
- Analysis of community queries and ARTC responses during CCC meetings, to identify suggested mitigation or management measures.

Residents' capacity to participate in consultation varies, primarily in line with their other commitments, travel distances to engagement opportunities and access to the internet. The EIS consultation process was made broadly accessible to community members through:

- Provision of an Inland Rail office in Toowoomba and more recently in Goondiwindi (since 2020) so that community members could access face to face contact with Project team members

- Extensive advertising and promotional campaigns to support awareness of the Project and consultation options
- Invitations to a diverse range of community, economic and environmental groups to participate in consultation (refer Appendix C: Stakeholder Engagement Report of the EIS)
- Regular community information sessions, at different times of the day and week, in a range of locations, to enable community members, groups and organisations to access Project information and provide their feedback
- The CCCs, with members having demonstrated knowledge of the area, membership of community groups and organisations, and the ability to bring representative views to the work of the Committee
- Inviting community members to observe CCC meetings (held in various locations) to hear Project updates and community views first-hand
- Communication channels including fact sheets, newsletters, an EIS free call number, email and postal address
- Use of social media including Facebook, YouTube, Instagram and LinkedIn, and provision of a fly-through video demonstrating the Project's interaction with landholdings and communities, available online
- Provision of an online, interactive Project map enabling people to obtain detailed information about the Project, ask questions, provide comments and receive feedback.

The SIA-specific stakeholder engagement process is shown in Table 6-7 and included:

- A community survey as described in Section 6.3.1
- Workshops with community and government agencies
- Meetings with Traditional Owners
- Meetings with GRC and TRC
- Workshops and meetings with business organisations.

Table 6-7: SIA Stakeholder Engagement

Stakeholder Groups	Objective	Mechanism	Timing
Landowners community members and community organisations	Enable community members to contribute their views on potential social impacts and benefits	■ Participation in ARTC information sessions	November 2018
	Collect information on social baseline values, community concerns about social impacts and potential mitigation measures	■ Community survey	November-December 2018
	Seek input on social impacts and benefits from community members and community organisations	■ Briefings to and discussion with Inner Downs and Southern Downs CCCs	February to September 2019
GRC	Brief Council managers on the results of stakeholder engagement and preliminary assessment findings, and seek input on community issues, social impacts and mitigation measures	■ Meeting with Council CEO and managers	November 2018
	Provide a briefing on the draft SIA findings and seek Council feedback on impact assessment and mitigation measures	■ Meeting with Council CEO and managers	May 2019

Stakeholder Groups	Objective	Mechanism	Timing
TRC	Brief Council managers on the results of stakeholder engagement and preliminary assessment findings, and seek input on community issues, social impacts and mitigation measures	<ul style="list-style-type: none"> Meeting with Council managers Participation in Pittsworth SIA workshop 	March 2019
	Provide a briefing on the draft SIA findings and seek Council feedback on impact assessment and mitigation measures	<ul style="list-style-type: none"> Meeting with Council Managers 	May 2019
Indigenous community members	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 Bigambul Native Title Aboriginal Corporation (BNTAC) Integration of ARTC consultation with BNTAC Phone interview with Western Wakka Wakka elder Phone interview with another local Aboriginal Party 	April –June 2019
Community and Government agencies	Identify social infrastructure capacity and gaps Seek input on social impacts and opportunities for social infrastructure providers and vulnerable groups	<ul style="list-style-type: none"> SIA Workshops (Toowoomba, Goondiwindi and Pittsworth) Participation in community information sessions Interviews with social infrastructure providers in potentially impacted communities unable to attend workshops 	February 2019
Office of Coordinator-General	Discuss the proposed SIA scope and consultation inputs	<ul style="list-style-type: none"> Meeting with OCG officers 	May 2019
	Discuss the SIA's preliminary assessment findings with OCG	<ul style="list-style-type: none"> Meeting with OCG officers 	September 2019
Businesses and business organisations	Identify businesses' views on potential impacts and opportunities, and identify strategies to support local suppliers to participate	<ul style="list-style-type: none"> Meeting with representatives of Goondiwindi Chamber of Commerce Workshop with Pittsworth Chambers of Commerce, Millmerran Commerce and Progress Association and Inner Downs Inland Rail Action Group Meeting with Toowoomba Surat Business and Enterprise Consideration of results of ARTC meeting with Toowoomba Chamber of Commerce 	February 2019
Government Agencies	Seek agency input on the preliminary SIA findings and proposed mitigation strategies	<ul style="list-style-type: none"> Workshops with Government agencies in Toowoomba and Goondiwindi 	May 2019

6.3 Engagement outcomes

This section details the results of key engagement activities which have informed the SIA.

6.3.1 Community survey

The Inland Rail Border to Gowrie SIA community survey was undertaken over a six week period (7 November to 21 December 2018), hosted online using the Survey Monkey platform, supported by hardcopy survey administration at Project Community Information Sessions during November 2018.

The survey was promoted through local media outlets, the Project's stakeholder distribution lists, and the ARTC website. A hard copy of the community survey was mailed to 215 landowners in the focused area of investigation. It was also introduced at the two CCC meetings held on 7 and 8 November 2018, and hard copy surveys were provided at community information sessions during November 2018. The survey specifically sought input from landowners, community members, business owners and community organisations in the Toowoomba and Goondiwindi LGAs.

A total of 121 survey responses was received, of which 114 respondents identified a residential location. Approximately 83% of surveys of these were from residents of the Toowoomba LGA (101 surveys), with 7% from the Goondiwindi LGA (nine surveys) and the balance from other LGAs. Given the range of methods used to promote the survey, the low participation rate in Goondiwindi may be due to lack of confidence that the Project will proceed, or lack of interest given the distance between Goondiwindi and the alignment. Respondents key industries of employment included agriculture (32), followed by transport (12), government and professional services (each identified by 7 respondents).

More than half of the total respondents (55 per cent or 66 respondents) identified as having property in the 'focussed area of investigation' as defined by ARTC for consultation purposes in November 2018. A further 40 per cent of the sample (48 respondents) were members of local communities, while the balance skipped the question. Respondents from Pittsworth made up 14 per cent of the total survey sample, followed by respondents from Gowrie Junction (11 per cent), Millmerran (11 per cent) and Gowrie Mountain (9 per cent). The remainder were from a broad variety of communities within the Toowoomba and Goondiwindi LGAs.

With a population of approximately 160,779, survey results from the Toowoomba LGA sample have very limited statistical validity, while the small sample for Goondiwindi LGA has no statistical validity, however the survey still provided insights into local community characteristics and views.

Survey respondents' views on community values indicate strong agreement regarding community safety, family oriented communities, and mutual help (refer Section 5.3.1). Of note, fewer respondents agreed their community was able to adapt to change indicating some concern about community resilience and vulnerability to the Project's potential impacts.

With regard to social impacts, community members were most concerned about effects on the amenity of towns and farms, effects on homes and properties, and effects on community well-being.

Representative comments in relation to the Project's potential impacts which indicate key reasons for negative perceptions about Project impacts included:

- "The Inland Rail Line dissects small freehold farming blocks that people have spent all their lives paying off and creating the infrastructure to make the farms viable"
- "Major disruption to Yarranbrook Feedlot and agricultural businesses the rail line goes through"
- "House prices will plummet leaving people with lesser assets"
- "We will get additional minimum 150 mm of floodwater through the house"
- "Noise and pollution will affect quality of life"
- "This is affecting a lot of people mentally already; it has resulted in community arguments"

- “Significant increase in the number of level crossings present risks of increase of road vehicle versus train accidents. Especially concerning is the number of times farm equipment/machinery may have to cross the line at all hours.”

Comments about potential Project benefits included:

- “More people will live and work in rural areas”
- “More rail jobs/fast rail/better mental health because of the job created”
- “Could be beneficial to local businesses and contractors and secondary industry as it is developed, and this is likely to have significant long term benefits”
- “More trucks off road and congestion caused by long, heavy vehicles.”

6.3.2 Community information sessions

During October and November 2018, ARTC facilitated community information sessions in Brookstead, Inglewood, Kingsthorpe, Gowrie Junction, Millmerran, Pittsworth, Southbrook, Yelarbon and Toowoomba. The purpose of the sessions was to provide information about the draft EIS and SIA process, and seek stakeholders’ views on potential social and environmental impacts.

Key themes identified with respect to social impacts and opportunities included:

- Growing community stress and desire for better information and support
- Concerns about direct impacts on properties, including loss of property value, severance of properties and uncertainties about acquisition and compensation processes and outcomes
- Impacts on the operation and viability of impacted rural enterprises
- Impacts of noise, vibration, air quality and visual effects on community well-being
- Risks of flooding and erosion as a result of earthworks and rail infrastructure, particularly on the Condamine River floodplain
- Impacts on farm management and operations, farm infrastructure (dams, bores and water troughs), stock safety and movement of stock and machinery across the alignment
- Concerns about altered road network/access arrangements, travel delays and road safety
- Impacts on native vegetation and koala habitat
- Concerns about the route selection
- Need for effective engagement with the community in the draft EIS process.

Table 6-8 provides a summary of issues raised in relation to potentially impacted communities.

Table 6-8: Summary of issues raised at Community Information Sessions

Session Location	Issues Raised
Brookstead	<ul style="list-style-type: none"> ■ Better community access to information ■ Concerns about design and location of bridges and embankments ■ Movement of large machinery across the corridor ■ Concerns about flooding impacts on farms and residences ■ Impacts of noise, vibration and intrusion on scenic quality ■ Property severance ■ Stock safety ■ Road safety, particularly during construction and harvest periods

Session Location	Issues Raised
Kingsthorpe	<ul style="list-style-type: none"> ▪ Direct impacts on property and farm operations ▪ Access to properties ▪ Possible impacts on groundwater bores
Gowrie Junction	<ul style="list-style-type: none"> ▪ Impacts of road and rail works on local connectivity ▪ Potential noise impacts of construction and operation ▪ Concerns regarding property acquisitions and access to properties
Southbrook	<ul style="list-style-type: none"> ▪ Growing anxiety amongst landowners and others ▪ Delays to response times for emergency services (e.g. ambulance) ▪ Visual and noise impacts on rural character ▪ Impacts on property values ▪ Impacts on egg laying and processing farms ▪ Impacts on road network, property access and traffic safety ▪ Need for more information about compensation and mitigation measures ▪ Air quality (coal transport)
Millmerran	<ul style="list-style-type: none"> ▪ More information required about the Project, including visual impacts ▪ Business opportunities for local suppliers ▪ Increased flood risks ▪ Observation that views in the community are mixed ▪ Rail provides potential alternative to moving produce to market by road ▪ Impacts on school bus routes
Pittsworth	<ul style="list-style-type: none"> ▪ Impacts on livelihoods of landowners ▪ Concerns about impacts of blasting on houses ▪ Stock and machinery movements across the alignment ▪ Cumulative impact of railway and highway noise ▪ Impact on cohesive and culturally active community ▪ Potential for traffic impacts on Gore Highway ▪ Extent of Project 'unknowns' is generating fear in the community ▪ Impacts on lifestyle and quality of life (noise, vibration, air quality) ▪ Impacts on property values
Inglewood	<ul style="list-style-type: none"> ▪ Direct impacts on properties ▪ Access to properties ▪ Concerns about possible noise impacts on residents
Yelarbon	<ul style="list-style-type: none"> ▪ Flooding impacts ▪ Land acquisition impacts on viability of properties ▪ Noise impacts ▪ Access to property ▪ Air quality ▪ Lack of certainty about alignment and potential property impacts ▪ Accessibility across rail line and speed of trains ▪ Noise impacts

6.3.3 Local governments

TRC

The SIA team meet with TRC in March 2019 to discuss the SIA scope. Issues raised included:

- The question of whether buffers would be required between the rail line and residential development to protect amenity with respect to noise, noting there are no buffers around existing rail lines
- The potential for noise from crossing loops to affect nearby residents

- Concerns about road closures during construction in the event of a flood event, leading to isolation of some communities
- Concern that, as for the Toowoomba Second Range Crossing (now known as the Toowoomba Bypass), additional lighting may affect visual amenity
- Potential severance by alignment of stormwater drainage and overland flow.

Potential opportunities identified included:

- School-based opportunities for students
- Potential for a short-term increase in economic activity during construction
- Support for the development of Toowoomba as a freight and logistics hub
- Legacy benefits in the form of community facilities (e.g. a district park at Millmerran)
- Contribution to community facilities to improve the impacted towns

Council officers noted that TRC has a Regional Skills Investment Strategy Project funded by the Queensland Government to engage with industry to identify vocational training requirements. Freight and logistics are a current focus.

The SIA team presented a summary of the SIA's key findings and proposed mitigation measures to senior Council officers in May 2019. Council feedback included:

- Support for avoidance of level crossings on public roads, where they can be avoided
- Potential for legacy values of non-resident workforce accommodation for communities that would host them, e.g. accommodation supply
- The need to avoid rapid change in e.g. population or housing demands, particularly considering the potential for cumulative impacts with other Inland Rail projects
- Labour draw from local businesses is likely to be an issue, with upskilling of the local labour force a potential mitigation/offset
- Workers with families could be encouraged to settle locally
- Opportunity to have a welcome event for construction personnel to assist with community integration
- Potential for visual impacts e.g., during construction due to laydown areas and during operation due to bridge structures, with concern regarding the rehabilitation of laydown areas to reduce visual amenity impacts
- Potential for engagement of social enterprises in the supply chain, including involvement of new migrants, with job readiness programs required
- Community opposition to the Project alignment could constrain business participation
- Potential for investment in community facilities in local towns to address existing issues and/or Project impacts on community cohesion
- The need for management of Project housing/accommodation impacts to avoid draining local accommodation supplies which are used for major events
- The need for consideration of major community events (e.g. Millmerran Camp Oven Festival) in scheduling noisy or disruptive construction works and managing impacts on traffic
- The need for ongoing consultation with TRC regarding infrastructure investments, place making outcomes, community facility investments and driving economic development.

With respect to the proposed locations for non-resident workforce accommodation, TRC advised that workforce accommodation facilities had been approved in the past (in Millmerran and Oakey) and would be assessed on a site-specific basis. The potential for the location of non-resident workforce accommodation near Millmerran to bring business opportunities to Millmerran and potentially provide legacy benefits to support regional tourism was identified. ARTC plans further consultation with TRC to confirm the suitability of the proposed location for the non-resident workforce accommodation facility on Turallin Road, Turallin.

ARTC met with TRC's RSIS Coordinator in August 2019 regarding local priorities for skills development, identified as including skills for the advanced manufacturing and transport/logistics industries. The opportunity for cross-skilling for construction and advanced manufacturing was identified and has been considered as part of Inland Rail Skills Academy program development. In particular, the opportunity to develop joint skilling programs for applications to the DESBT Skilling Queenslanders for Work initiative

During September 2020, ARTC provided an update to TRC on the SIA management measures with a particular focus on local and indigenous participation, alignment with TRC-community initiatives, and the process for development of Health and Community Wellbeing initiatives. Council officers noted the need to ensure employment and business opportunities are adequately communicated to the business community (TRC is able to assist) and the need to build community awareness of the skills and capacities required in building a rail line. Lessons from the Toowoomba Bypass' construction noted by Council included involvement of businesses in ongoing consultation e.g. through an advisory group, the need for the procurement portal to be established early, and the value of 'procurement nights' to brief business owners. The opportunity for cooperation with Energy Skills Qld on a SQW program to support the development of skills for working within a rail corridor was also noted.

ARTC also met with TRC's Regional Economic Development Officer and RSIS Coordinator during September 2020 to provide an update in Inland Rail Skills Academy planning and discuss TRC initiatives currently planned or being explored which ARTC could support as part of its community development program. This identified:

- Support for initiatives in Millmerran and Pittsworth which may encourage workers to relate to the region once the Project has finished
- An opportunity to support the Gowrie P&C in fitting out its Community Hub facility, which has been developed to foster community identity and provide a space for community groups
- Potential for cooperation and/or support for tourism initiatives in and around Millmerran e.g. trail development
- Potential for cooperation and/or support for recreation initiatives in and around Pittsworth e.g. rail trail
- The opportunity to cooperate with Oakey Training College (planned for development by Council) to offer construction skills training.

These and other opportunities will be explored as part of future Project stages as detailed in Sections 8.2 and 8.5.

GRC

Consultation with GRC officers for the SIA identified the following baseline values:

- The community is sceptical about the Project going ahead, given its long history
- There is limited spare capacity in short term accommodation with consistently high occupancy levels
- Low local unemployment means workers will typically come from outside the region
- The community's catchment and identity extend beyond the border well into northern New South Wales.

Whilst GRC has concerns about the alignment, Council is open to the opportunities that Inland Rail could facilitate for its communities and expressed a willingness to work cooperatively with ARTC to achieve these benefits. Issues raised by GRC officers included:

- Concern about loss of affordability of rental housing and displacement of low income households
- Businesses need advance notice to be able to plan ahead, and ARTC will need to overcome scepticism that the Project will happen
- The likelihood of increased demand for rental housing in Goondiwindi driving up rents
- Potential for increased wait times to see local general practitioners
- Road traffic safety during construction, particularly during harvest time with large machinery movements by farmers
- Preference for non-resident workforce accommodation to be located at Goondiwindi and Inglewood, with adequate lead time provided for Council to plan relevant infrastructure (e.g. water and waste management)
- Project effects on the Macintyre River, with potential for exacerbation of flooding
- Strong community concerns regarding impacts on agricultural land

Potential opportunities identified included:

- Potential for Goondiwindi to be a regional rail hub for produce distribution, and to link Inland Rail to the rail line between Goondiwindi and Thallon
- Achieving a rail distribution point in Goondiwindi
- Potential to benefit local businesses (in construction as well as retail and service delivery) and related increased job opportunities, including the possibility of locating non-resident workforce accommodation at Goondiwindi
- Opportunity for off-farm income for local residents
- Potential for legacy projects (e.g. community facilities or augmentation of housing and accommodation supply).

The SIA team presented a summary of the SIA's key findings and proposed mitigation measures to senior Council officers in May 2019. Council feedback included:

- Community scepticism about flood modelling
- The potential for an influx of young workers (due to the proposed non-resident workforce accommodation camp) to change social conditions in Inglewood, e.g. feelings of safety and familiarity
- The need for the draft EIS to consider the diversion of water, including during droughts and flooding events, which would affect farmer /irrigators' access to water. This has been addressed as part of the Appendix P: Surface Water Quality Technical Report of the EIS and is not addressed in the SIA
- Acknowledgement that the use of the brownfield sections had reduced the number of properties that would be affected
- The need for ongoing engagement with local businesses to advise them off the Project schedule, how to qualify for supply opportunities, and opportunities for capacity building
- The need to avoid creating false expectations of long term benefits for businesses, given construction is time-limited, to avoid over-capitalisation
- The need for protection for small businesses in dealing with major contractors so that they don't get 'ripped off'

- The benefit of mentoring advice for businesses
- The need to avoid 'boom-bust' population changes which affect housing, property values and social infrastructure access
- Over-subscribed water allocations in the Yelarbon area which may limit Project access to water, and the potential for a water bore to be constructed in Yelarbon to supplement the water supply.

Council has indicated that the Project's complexity is a challenge given the town's size and location near the juncture of two Inland Rail sections. Consideration of how to work effectively within Council's resources and support its involvement will be needed by ARTC.

ARTC met with GRC four times during May-August 2020 to provide Project updates including the schedule and identify Council priorities which include the availability of locally available training and business capability development opportunities in the area, the importance of opportunities for small businesses and the potential for labour draw from local businesses to the Project.

ARTC has also met with GRC's RSIS Coordinators (in August 2019 and twice during April 2020). These discussions have focussed on cooperation on skills development and resulted in the identification of opportunities as part of DESBT's SQW program including:

- A shared Inland Rail, GRC and DESBT initiative addressing land management and biosecurity skills development
- Potential to undertake construction training at Goondiwindi Showgrounds whilst improving the showgrounds facilities.

6.3.4 Traditional owners

Traditional Owners have been consulted by ARTC through the cultural heritage process and with respect to Indigenous employment and training opportunities.

A series of meetings have been held with the Bigambul People to discuss issues including native title, cultural heritage, employment, business opportunities, Project use of a property owned by BNTAC, and ongoing cooperation between ARTC and Bigambul People. The most recent meeting was held in January 2020. To date, Western Wakka Wakka people have not responded to ARTC's offers to provide a Project update, however they have regularly engaged with the Project team regarding cultural heritage. ARTC held two meetings with representatives of Endorsed Aboriginal Parties in February - March 2020.

The SIA team met with the BNTAC, and conducted an interview with a Western Wakka Wakka elder and an interview with two representatives of Endorsed Aboriginal Parties, which provided further information for the SIA as follows.

Bigambul

Key issues raised in ARTC and SIA team consultation with the BNTAC identified the following key issues:

- The need for more comprehensive engagement in the draft EIS process
- The need to ensure access to job readiness programs (e.g. White Card training, health and safety training) and skills training, noting that BNTAC has an existing workforce development strategy
- Interest in business opportunities, noting that BNTAC has a business development strategy and is developing a business register
- The potential to affect cultural heritage sites and values
- The need for cultural immersion training for all Project personnel working on Bigambul country
- Potential for erosion during construction or operations to affect Country

- Potential for changes to flooding patterns or to surfaced or groundwater to affect cultural water flows
- Effects on physical fabric of shared cultural heritage.

During 2020, ARTC has met with BNTAC and CSQ three times (during January, April and May) to progress discussions on Indigenous skills development, including the design and delivery of training and development programs for Indigenous workers and businesses. This has enabled CSQ to ensure that the job readiness and construction skills programs consider the needs and aspirations of local Indigenous people. An option being considered by BNTAC in cooperation with ARTC is the delivery of a tailored two to three week training program focussed on working within a rail corridor and construction work skills, followed by work experience with contractors working in construction projects.

Other skills programs being considered with Bigambul People include an agricultural skills program and a SQW program to provide specific training to Indigenous people in the Project region.

Western Wakka Wakka

Issues raised by in an interview with a Western Wakka Wakka representative included:

- Concern about the impact of infrastructure projects on cultural landscapes and the stories bound to them
- Gowrie Creek and Gowrie Mountain hold creation stories and are culturally important areas
- Concern that local job commitments should be honoured, and include employment targets for local Indigenous people
- Concern about safety and delays for children needing to cross the alignment at level crossings
- The risk of the Project reducing housing availability and affordability, with the likelihood that Indigenous people would be particularly vulnerable to housing shortages
- The need for early engagement with the Indigenous community regarding job and supply opportunities so they have time to build capacity.

Potential opportunities identified included:

- Indigenous people are ready to seize opportunities, but need timely engagement to be able to participate effectively
- Engagement with Indigenous businesses with existing capacity, formed through joint ventures
- Adopting the historical precedent for naming rail sidings after Indigenous people
- Creating a legacy by addressing the need for an effective Indigenous keeping place for history, art and culture.

Endorsed Aboriginal Parties

Two Aboriginal people connected to the area between Inglewood and Pampas participated in an interview for the SIA. Issues identified included:

- Worry that the storyline which stretches from the NSW/QLD border to the Bunyas has been damaged by existing infrastructure and that the Project would represent a further 'cut' to the storyline
- The need for culturally appropriate training and capacity building programs
- Indigenous people's greater vulnerability to displacement from housing.

6.3.5 Social infrastructure providers

A range of government and non-government social infrastructure providers took part in social impact workshops held in Toowoomba, Millmerran and Goondiwindi in February and March 2019. Others who were unable to attend were interviewed by telephone. The agencies who participated were:

- QAS, QFES, State Emergency Service (SES) and QPS
- DESBT
- DITRDC
- Department of State Development, Tourism and Innovation (DSDTI)
- Department of Housing and Public Works (DHPW)
- TAFE Queensland
- TMR
- Queensland Health
- Pittsworth State High School
- Gowrie Junction Progress Association
- Kingsthorpe and District Progress Association
- TRC
- SW Training
- Best Employment
- NEATO Employment
- Darling Downs and West Moreton Primary Health Network
- Care Goondiwindi
- LifeFlight.

Participants identified the following issues:

Education, training and employment:

- Need for definition of local employment and targets (including Indigenous people and women), to ensure that contractors employ people who live locally
- Cater for the spectrum of job seekers, including people with barriers to employment
- Integrate Project with local high schools' strong focus on skills development and work experience
- Allow sufficient lead time for training, and prescribe that contractor training provide for skill development as well as certification
- Manage business expectations and support effective preparation by communicating clearly about Project elements, time frames and contracting requirements.
- There is a risk of labour draw from existing businesses in Goondiwindi.

Emergency services:

- Road closures can alter response times, but most issues can be overcome with alternative routes
- For QAS, response times are critical but rolling trains are less of a concern than stationary trains
- Emergency access points would be required across the alignment

- A monthly liaison group was recommended (which was reported to have worked well during construction of the Toowoomba Bypass)
- QFES concerned about safety management of goods transported, including arrangement of materials on carriages
- Ensure connectivity is maintained by providing alternative road routes during construction and clear communication with residents

Population, housing and accommodation:

- Housing is scarce in Goondiwindi and Millmerran, there is very little social housing and no emergency accommodation for people experiencing homelessness
- Millmerran is eager to attract new residents and want more permanent housing
- Millmerran Power Station has a shut down twice a year with accommodation in Millmerran and Pittsworth fully occupied by contractors during this period
- Growth pressure is occurring in Pittsworth from population overflow from Millmerran
- Pittsworth High School has limited capacity for growth (expected to reach operational capacity of 530 students in next two years)
- Kingsthorpe is also growing, largely driven by population increases related to development of gas fields
- Concern that the experience of families being displaced by contractors in the gas fields might be replicated in Millmerran and Pittsworth
- Occasional issues experienced in Millmerran with outside contractors in town, although many local people are also Fly-in Fly-out or Drive-in Drive-out workers in other regions, so town is accustomed to a contractor presence.

Health and well-being:

- The community has a deeply embedded rural identity
- Stress is evident in the Millmerran, Pittsworth and Gowrie Junction communities reflecting fear and anxiety about the impact of Inland Rail
- Introduction of non-resident workforce would change the community profile and the equipment/medication supplies required at local hospitals
- Concern for possible noise and vibration impacts of the Project on aged care facilities at Millmerran
- DDHHS advised that there is sufficient capacity in regional hospitals to treat any workers transported to Goondiwindi or airlifted to Toowoomba
- An ambulance service will be required during construction and potentially along the alignment during operation
- Perceived impacts can cause as much stress as real impacts if not managed well
- Yelarbon residents are concerned given the proximity of the line to the township
- Importance of not leaving communities worse off
- Importance of maintaining honest communication and responsiveness to community concerns
- Communicate transparently about the full rollout of the Project (including 3.6 km length trains and crossing loops)
- Project should leave lasting legacy benefits for local communities.

- Community feel they are not getting enough information and are not being listened to by government decision makers

Accommodation:

- Mixed views on whether workforce accommodation should be located in town (maximising increased benefit for businesses) or out of town (minimising any amenity, security or traffic concerns)
- Need to continue to consult with host communities regarding proposed sites for workforce accommodation
- Mixed views about whether workforce accommodation facilities should sell alcohol – ‘wet camps’ (those where alcohol is available for sale) reduce excessive use of local hotels while ‘dry camps’ (those where alcohol is not available for sale) are considered easier to manage but poor for worker morale
- An influx of workers would place pressure on existing community and family support services
- There is no social, health or physical infrastructure in Yelarbon to support an increase in the Yelarbon population due to non-resident workers
- Non-resident workforce accommodation places extra demand on police resources and require a good relationship between facility management and QPS. QPS prefer ‘dry camps’, onsite security and strict workforce management.

6.3.6 Government agencies

Regionally based government agencies participated in the SIA workshops reported above. Workshops were also held in May 2019 in Goondiwindi and Toowoomba to provide agencies with an overview of SIA findings and seek their feedback on mitigation measures and enhancement strategies. May workshop participants included:

- Department of Education
- DESBT
- Department of Aboriginal and Torres Strait Islander Partnerships
- Queensland Health
- Department of Communities, Disability Services and Seniors
- QPS, QAS, QFES and SES
- DITRDC.

ARTC also consulted TransLink and Bus Queensland, however no particular issues were identified with respect to the SIA impact assessment area.

Key issues raised by agencies based in or servicing Goondiwindi included:

- Observation of the cumulative impacts that resulted in the Surat region during and after the gas fields expansion, with concerns that this boom-bust effect would also occur in the SIA impact assessment area
- Concerns that Project housing demands could cause increases in rental costs and displace local residents
- Management of workforce behaviour to avoid impacts on local values
- Provision of information about the skills required so that training organisations can tailor training accordingly
- Inclusion of KPIs for working with Indigenous businesses would assist contractor accountability

- The value of linking with the DESBT- funded Regional Skills Investment Strategies being implemented through Councils
- Concern regarding the effect of people moving to the region 'on spec' (hoping to get a job) resulting in housing impacts or increased need for support services
- Health agencies have not received feedback on stress-related issues but consider this is more likely to present when the Project commences. Preventative measures are needed, including on ground support and regular monitoring
- General health and mental health services in the area have some capacity to meet increased demand
- Need to inform agencies in advance of planned closures and heavy equipment transportation (and for QPS – emergent social problems) and maintain regular and ongoing engagement
- The value of ongoing consultation with:
- DHPW in development of the accommodation management plan
- Community Advisory Networks (representing e.g. health, emergency and education services) in implementing their social performance (community development and engagement) programs
- Schools and Department of Education to address potential noise impacts on schools
- DESBT regarding information on skills development and business capacity
- Support for proposed collaboration with QPS and emergency services
- Government agencies willingness to continue to engage with ARTC in developing management plans which address social impacts and benefits.

Key issues raised in the May 2019 workshop with agencies based in or servicing Toowoomba included:

- The potential for blasting during construction to affect water bores which support farms
- Support for proposed collaboration with QPS and emergency services, including agreement about how information will be circulated to officers and stations
- The Toowoomba Bypass construction has had very minimal impacts on local housing markets
- Concerns for the security of farms with recent increases in theft
- Concern regarding the potential for impacts on traffic on the Gore Highway as the result of the road-rail grade separation
- The need for consideration of biosecurity to avoid impacts on farms and agribusinesses
- Millmerran has had experience with workforce accommodation facilities so should cope well with the proposed temporary non-resident workforce accommodation in this area
- The need for careful management of workers' behaviour to avoid issues such as good order offences and assaults
- Acknowledgement that the Project's operation could result in improved traffic safety through less wear and tear on roads and fewer large freight trucks on local roads and highways
- Government agencies willingness to continue to engage with ARTC in developing management plans which address social impacts and benefits.

Additional ARTC consultation with Government agencies

A meeting with Brisbane DESBT staff in October 2019 to discuss Inland Rail and existing DESBT programs which may support skills and business development identified the RSIS program as a key opportunity for alignment with local priorities. This has been pursued through consultation with the two Councils' RSIS coordinators.

During July 2020, ARTC met twice with DSDTI regarding existing DSDTI programs focused on working with major projects and opportunities for DSDTI and Inland Rail to collaborate on elements of business capability development. DSDTI provides online business capability training programs which Inland Rail will promote to businesses interested in supplying the Project. The potential for a joint forum with other major projects in the Project region to provide information about a range of projects and their supply requirements was also identified.

ARTC has consulted with the Department of Education regarding the potential for noise impacts or road realignments to affect schools. The Department of Education requested that consultation on the draft EIS findings as relevant to schools be coordinated through the Department. Consultation with Department of Education included a meeting in December 2018 to discuss the Project's reference design and the potential for impacts on schools near the alignment, a briefing on the noise impact assessment as part of an EIS workshop with Government agencies in August 2019, and a phone meeting in November 2020 to provide an update on the Project, the assessment of noise impacts, road realignments and the process for confirming noise mitigation measures.

The Department of Education has experience in managing the impacts of major projects on schools and their surrounds, and has not raised any issues of concern that can't be addressed through cooperation between the Department and ARTC. The agreed approach is to work with the Department of Education during the detail design phase to confirm noise mitigation measures based on an audit of the schools' site layouts, to determine in-corridor or at-property noise treatments. ARTC has also advised Department of Education about the permanent road realignments proposed at Brookstead and Yelarbon, and committed to consultation with the Yelarbon and Brookstead communities in the development of more detailed traffic management measures during the detail design phase.

6.3.7 Business Groups

The SIA team held consultations with:

- Toowoomba Surat Basin Enterprise
- Goondiwindi Chamber of Commerce
- Pittsworth District Alliance
- Millmerran Commerce and Progress Association.

The SIA also incorporates the results of ARTC's consultation with the Toowoomba Chamber of Commerce and the two Councils' Regional Skills Investment Strategy (RSIS) officers.

Inner Downs Inland Rail Action Group (IDIRAG), representing farmers and residents opposed to Inland Rail, also participated in a workshop with the Millmerran Commerce and Progress Association and the Pittsworth District Alliance. Acknowledging that IDIRAG's key objective is a change to the Project's alignment, the members who participated in the workshop contributed inputs on the Project's potential effects on farming businesses.

Inputs included:

- Support for the Project from Goondiwindi and Toowoomba-based businesses
- Businesses are hesitant about making decisions about investments due to uncertainties about the Project
- Concern about the impact of property acquisitions on farmers' livelihoods and flooding patterns

- The importance of securing local benefits by ensuring that local suppliers have genuine opportunities to provide goods and services to the non-resident workforce accommodation
- Indigenous businesses will need particular support to help them access opportunities with the Project
- Concern about the impact that additional flooding could cause road closures and affect connectivity
- Concerns about impacts on biosecurity and the ability to move machinery and equipment across the alignment
- Concern that local businesses will over capitalise and be left in a difficult position if expectation not managed properly
- The workforce has skills capacity for construction in both Toowoomba and Goondiwindi LGAs
- The community may suffer the loss of residents who need to relocate away from the Project
- Opportunity to encourage youth to stay in the area for work
- Lots of projects planned for the area including an abattoir and a solar farm
- Some local businesses have been exposed to Project work through contracting to the recent highway upgrades, but there have been no major projects previously in the area, so there is limited knowledge of what to expect.

Potential opportunities identified included:

- The Project would provide a boost to businesses in Toowoomba, which will experience a slowdown following completion of recent infrastructure projects
- Opportunity for Project to build capacity across skills and business in the Goondiwindi region, which can then be transferred across to other industries
- Millmerran has previous experience with major projects (the Commodore Mine and Millmerran Power Station) which have built capacity to enable them to participate in Project supply
- Millmerran businesses are keen to work with ARTC to ensure local benefits, including potential benefits that a non-resident workforce accommodation facility in proximity to Millmerran would bring
- Inglewood business community is locally focused, with the exception of a couple of businesses, but interested in opportunities
- Opportunity for peer to peer learning with local businesses learning from other small to medium enterprises that have worked with big projects
- Opportunity and interest in capacity building activities, with interest in a collaborative approach
- Benefits in businesses forming joint ventures to be more competitive
- The Toowoomba region's small to medium businesses are very interested in the Project's supply opportunities relating to construction works, non-resident workforce accommodation and workers' expenditure
- Increased opportunities for work, but need information and support to know how to tap into opportunities
- Potential legacy values from non-resident workforce accommodation infrastructure
- Encouraging construction workers to relocate and stay in Millmerran
- The Toowoomba and Goondiwindi Chambers of Commerce are keen to work with the Project to maximise local benefits.

During August 2020, ARTC conducted a Business Capability Development workshop in Goondiwindi, focused on business capability statements and to provide local businesses with visibility to major contractor requirements. Further business capability development workshops will be implemented in the Goondiwindi and Toowoomba LGAs prior to and during the Project procurement processes.

6.4 Stakeholder issues addressed in SIA

A wide range of issues was raised in SIA consultation. Issues such as the capacity of local roads and highways, biosecurity, effects on surface water and groundwater, air and noise impacts are discussed in detail in other EIS technical reports. The SIA has sought to incorporate the relevant results of other reports, where they are relevant to social impacts. Key issues that were raised in consultation and are addressed in the SIA are summarised in Table 6-9.

Table 6-9: Stakeholder issues addressed in SIA

Issues	SIA Section
Indigenous community interests (native title and cultural heritage)	7.1.1
Severance of properties and uncertainties about acquisition and compensation processes	7.1.2
Potential for negative impacts on property values	7.1.9
Changes to the landscape and visual amenity affecting rural character	7.1.8
Rural amenity and general quality of life may be negatively impacted by noise or dust	7.1.4
Potential to affect the amenity of local towns through noise, dust and traffic disruption	7.1.5
Traffic delays resulting from level crossings, or road closures	7.1.6
Impacts on properties of alignment and level crossings and concerns about altered road network/access arrangements	7.1.6
Access to employment and training for local people	7.2.1
How local workers and businesses will be supported to access Project opportunities	8.3, 8.6
Indigenous training and employment opportunities	7.2.2, 8.3
Need for locally oriented training and development in partnership with training providers	7.2.2, 8.3
Non-resident workforce accommodation impacts on service access (e.g. police, ambulance, health)	7.3.3, 7.4.1
The potential benefits of non-resident workforce accommodation to local businesses	7.5.3
The need for capacity building to ensure local businesses benefit from Project opportunities	7.5.3, 8.6
Impacts on local access to housing due to workforce demands	7.3.4
The potential for Project traffic to use school bus routes leading to safety issues	7.4.1
Need for cooperation with QPS and emergency services to address increased demands for services and changes to access routes	7.4.1, 8.5
Growing community stress and concerns for the mental health of people affected by stress related to the Project	7.4.2
Impacts of noise, vibration and air quality changes (including coal dust) on community well-being and quality of life	7.4.3
Effects on the Condamine River floodplain	7.4.4
Concern about the potential to increase flooding risks, with potential to affect agricultural land or homes	7.4.5
Impacts of construction on groundwater access (bores)	7.4.6
Potential for road safety impacts from increased traffic or roadworks, or in relation to level crossings during operation	7.4.7

Issues	SIA Section
Community benefits as the result of Project legacies	7.4.8
Impacts on farm management and operations, farm infrastructure (dams, bores and water systems) and stock safety	7.5.1
Potential for labour to be drawn away from other industries	7.5.2
Local and Indigenous business participation in Project supply	7.5.3
Consultation and cooperation with State agencies	8.2, 8.4, 8.5
Desire for better information about the Project	8.2
Cooperation with Regional Skills Investment Strategy initiatives	8.3
Project's contribution to local community well-being	7.2.2, 7.2.3, 7.7.5
Cooperation with current and planned Council/community initiatives	8.2, 8.5
Capacity building with local businesses to enable their participation	8.6

7. Potential impacts

7.1 Communities and stakeholders

This section describes the potential for impacts on Indigenous community values, impacts relating to property acquisition, the potential to exacerbate social disadvantage, effects of construction and/or operation on residential amenity, connectivity (community members' ability to move around the area), and community cohesion and sense of place.

7.1.1 Indigenous community interests

There are three Aboriginal parties with an interest in the SIA impact assessment area. They include

- Bigambul People - Cultural Heritage Management Plan (CHMP) area extends from the north west of Inglewood, towards Whetstone following the existing south western rail system past Yelarbon south to Macintyre River to the south east of Goondiwindi. The Bigambul nation's registered claim area is extensive at approximately 260,273 ha
- Western Wakka Wakka People - CHMP area commences to the east of Toowoomba at Wards Hill, extending west and intersecting Gowrie Junction, stretching south west at Gowrie View where the area intersects the north west edge of Wellcamp airport, then intersecting the Gore Highway at Athol, where it then extends south west along the highway to Pampas
- Endorsed Aboriginal parties - CHMP area extends from Pampas to the south east of Millmerran adjacent to the eastern most edge of the Bringalily State Forest north west of Inglewood). Research is being undertaken by Queensland South Native Title Services to determine the possible native title applicants. For the purposes of the Aboriginal Cultural Heritage Act 2003 (ACH Act) a group of five people was recognised under Part 7 of the ACH Act to speak for country, negotiate a Cultural Heritage Management Plan (CHMP) and assess and manage cultural heritage in the area.

Native title issues associated with the Project are described in the Border to Gowrie Project EIS Chapter 7: Land use and tenure. Where possible, the rail alignment for the Project has been positioned within the existing rail corridor for the South Western Line, and is predominately located on freehold land where Native title has been extinguished.

The Project traverses ten properties, including eight under Reserve tenure and two under State land tenure where native title may exist, and has potential to impact on the native title rights and interests on these land parcels., (refer Border to Gowrie Project EIS Chapter 7: Land use and tenure for more detail). Additional areas where native title may continue to exist include watercourses and unlinked parcels. Native title will be dealt with through the land acquisition process and/or revocation of State Forest land. Compensation will be addressed on a case by case basis.

Consultation with Aboriginal parties as part of the SIA identified the following issues:

- Interest in Project jobs, but cynicism that they would be available to local people (addressed in Section 7.2)
- The risk of the Project reducing housing availability and affordability (addressed in Section 7.3)
- The need for early engagement and cooperation with the Indigenous community regarding job and supply opportunities so they have time to build capacity (addressed in Sections 8.3 and 8.6)
- Cultural values attaching to Gowrie Creek and Gowrie Mountain, and the existing cumulative impacts of major infrastructure on storylines and cultural landscapes (addressed as part of cultural heritage management discussions).

CHMPs for the Project have been negotiated and agreed between ARTC and the relevant individual Aboriginal parties and approved under the Aboriginal Cultural Heritage Act (2003) (ACH Act). Impacts on Aboriginal cultural heritage will be managed under approved CHMPs and are not discussed in detail in the SIA.

The potential for impacts on cultural landscapes is acknowledged in the SIA (Section 7.1.8). ARTC has developed a Statement of Commitments with the Bigambul People which recognises their ongoing connection to Country and Culture and commits ARTC to working in partnership with the BNTAC to support a shared vision for a sustainable and thriving Bigambul Nation.

ARTC has also committed to cultural tours which will involve the Project team in touring the impact assessment area with Bigambul People and Western Wakka Wakka people to learn more about their culture, understand more about the importance of particular areas, and further develop the relationship between the Project and the traditional owners.

Potential opportunities identified included:

- Indigenous people are ready to seize opportunities, but need timely engagement to be able to participate effectively (addressed in Sections 8.3 and 8.5)
- Engagement with Indigenous businesses with existing capacity, potentially formed through joint ventures (discussed in Section 7.5.3)
- The need for training and development strategies to specifically involve local Indigenous people
- Creating a legacy by addressing the need for an effective Indigenous keeping place for history, art and culture (not addressed in the SIA, and subject to further discussions with Aboriginal parties as part of cultural heritage management)
- Adopting the historical precedent for naming rail sidings after Indigenous people.

7.1.2 Land acquisition

The Project has also been designed to, where possible:

- Utilise the properties held in ownership by Queensland Rail within the existing South Western Line and Millmerran Branch Line rail corridors, to minimise the extent of 'new' properties to be acquired
- Align with existing roads and property boundaries to reduce the severance of land parcels
- Reduce potential impacts on property access, services or farm operational arrangements
- Avoid positioning major infrastructure on agricultural properties.

Additional land required for the Project will mostly be acquired through a compulsory land acquisition process, also known as land resumption. The land resumption will commence following the approval of the Project by the Coordinator-General for the DSDTI.

Land resumption processes in Queensland are undertaken by acquiring government agencies in accordance with the *Acquisition of Land Act 1967* (ALA), which sets out the process for acquisition and the assessment of compensation.

If land is required only for the construction phase of the Project, and not for the ongoing operation of the rail Project, where possible it will be leased from landowners who will receive a financial benefit from its use.

Compensation process

Landowners will be entitled to claim compensation for the loss of a legal interest in land or estate in land, in accordance with the ALA.

Compensation is assessed on an individual basis. If eligible for compensation, the compensation payable includes highest and best use market value of the land taken at the date of resumption.

Compensation for disturbance caused by the resumption may also apply, and may include:

- Reasonable legal costs, valuation or other professional fees
- Costs related to purchase of replacement comparable land
- Storage and removal costs
- Other reasonable financial costs incurred that are a direct consequence of the resumption of the land.

Where only part of a land parcel is acquired, compensation for damage caused by the severance of land the resumed land and the impact upon the remaining land may also apply.

The process for claiming compensation is set out in the ALA. If the parties do not agree on compensation, a dispute about compensation can be referred to the Land Court.

Impacts on stakeholders

Consultation with affected landowners and communities has been central to understanding individual property operational arrangements and the potential for Project impacts. ARTC is meeting with all directly affected landowners (where partial or full acquisition of land would be required) and those adjacent to the Project to identify their specific needs and concerns, and to provide information to assist landowners to identify their options for impact mitigation, management or offset.

Consultation with landowners found that many held significant fears about impacts such as property severance, flooding, reduced agricultural productivity, and impacts on property values (refer Section 7.1.9), with some landowners feeling anxious about potential land acquisitions, and the potential need to relocate.

On the basis of the proposed project reference design, ARTC anticipates the land acquisition requirement will include approximately 20 residential properties which may require affected households to relocate. This would include the potential need to acquire small numbers of properties in Whetstone, Kurumbul, Pittsworth, Southbrook and Athol. Land acquisition would also affect properties where the predominate land uses are agricultural, as further discussed in Section 7.5.1.

Landowners whose properties would be wholly acquired will be compensated for the loss of their legal interest in the property and disturbance costs where applicable.

Landowners whose properties would be wholly acquired have identified impacts including:

- Distress about having to leave their properties, abandoning future plans and the loss of family heritage such as land management practices and gardens, and potential impacts on the mental health of affected residents, as discussed in Section 7.4.2
- Potential to exacerbate social disadvantage, as discussed in Section 7.1.3
- Disruption to lifestyles, including farming activities and social links, e.g. neighbourhood networks and participation in social and sporting groups, as discussed in Section 7.1.7.

For landowners whose properties would be subject to partial acquisitions, potential impacts identified included:

- Impact on properties' amenity as the result of noise, dust, vibrations or changes to views or vistas (discussed in Section 7.1.4)
- Impacts on farm infrastructure, such as dams, yards and fences, and impacts of property severance on the movement of agricultural commodities, stock, feed, water and equipment (further discussed in Section 7.5.1).

Individual property management agreements are being developed in consultation with landowners for the management of property severance, including any required adjustments to access, impacts on farm infrastructure and built structures, and agreed noise mitigation measures.

Support for affected residents

Consultation with landowners and occupants will be undertaken in accordance with the communication plan for the Project, to ensure that all potentially impacted owners and occupiers are informed about the timing and scope of activities in their area, and any potential property impacts or changes, particularly in relation to potential impacts to access, services, or farm operational arrangements.

ARTC's strategies to reduce the impacts of property acquisition on landowners and their families include:

- Meeting with all directly affected landowners and tenants who would need to relocate as the result of the Project's land acquisitions, to identify their specific needs and concerns, and refer them to services which can support them in the relocation process if required
- Training for Inland Rail staff working with impacted landowners and their families regarding mental health and referral to services
- Training for CCC members in identifying mental health issues and supporting people experiencing stress and anxiety
- Establishment of a partnership with the Darling Downs and West Moreton Primary Health Network (PHN) to support mental health services in the Project region and address any additional demand resulting from Inland Rail
- Provision of funding for community organisations that can provide community and individual support services to support people with their relocation and adjustment to new circumstances.

7.1.3 Disadvantage

Acquisition of residential properties to accommodate the Project is likely to displace approximately 20 households from their current homes, and potentially from within their local communities. As noted in previous sub-sections, financial compensation arrangements will be in place for landowners whose homes or business operations would be directly affected, however changes related to the Project may place pressure on the resilience of affected individuals and the community's resources for mutual support.

As identified in Section 5.2.4, SEIFA data reveals that two pockets of relative disadvantage exist within the Project footprint, in Pittsworth township and in Southbrook, where there is potential for the Project to require acquisition of residential land. People who are socio-economically disadvantaged (such as people receiving government benefits and unemployed people) are likely to face greater pressure, with fewer personal, social and economic resources to draw on to help them cope with change. It is also likely that the effects of drought have reduced incomes and that other areas may be identified as relatively disadvantaged following collection of Census 2021 data.

ARTC is consulting with directly affected landowners to develop an understanding of each household's circumstances, including those who may need support to adjust to changes brought about by the Project. Some residents who are affected may need specific support, including practical assistance to understand the acquisition process and to relocate from their current homes. ARTC has initiated an early acquisition process with landowners who are experiencing hardship in relation to land acquisition.

There is also potential to affect the amenity of properties within and near the Project footprint, in areas where some residents have low levels of social resources to help them cope with change, as a result of noise during construction or operation. Elderly people and people with disability are well represented in some communities, particularly in Inglewood, Millmerran, Pittsworth, Brookstead and Yelarbon (refer Section 5.2.4). Indigenous people are also well represented in Inglewood, Millmerran, Yelarbon, Kingsthorpe and Gowrie Junction and are more likely to experience socio-economic disadvantage.

ARTC will continue to engage with nearby residents to identify amenity and connectivity concerns, and work with them to mitigate any impacts.

During the construction phase, the Project would provide funding for locally based community development programs to support residents needing additional support, and to help sustain strong and viable community networks.

While English is the main language spoken across the SIA impact assessment area, there is a small population of people who do not speak English well or at all, predominantly in Millmerran (where German and Tagalog are the most common other languages). As a general rule, Project communications seek to be easy to access, and easy to read and understand. Provision of information in relevant languages other than English will be provided during the draft EIS exhibition period and during construction through telephone interpreter services, to ensure all residents are able to access information about the Project.

The Project will offer significant opportunities for training, employment and business supply, with the potential to improve the socio-economic circumstances for disadvantaged community members who may currently be unemployed and who gain work through the Project (discussed further in Section 7.2.).

7.1.4 Landowner amenity and lifestyle

As described in Section 5.3.4, residential amenity in and near the Project footprint is characterised by enjoyment of the outdoors, privacy, a quiet rural environment, and access to local villages and towns. Local lifestyles are based on farming, access to other forms of employment in local towns and cities, appreciation of outdoor activities, and close connections between neighbours.

Residents' concerns about potential impacts on amenity and lifestyle include:

- Construction noise
- Vibration impacts
- Dust
- Construction traffic and roadworks on local roads
- Loss of privacy whilst construction activities are near homes.

Potential impacts on amenity and lifestyle are discussed below.

Construction noise and vibration

Project construction will include the operation of earth moving machinery, cranes, trucks, placement of ballast and tracks, and the use of sundry plant and equipment.

'Sensitive receptors' (as identified in Appendix S: Construction Noise and Vibration and Operational Road Traffic Noise Technical Report of the EIS) include residential dwellings, community facilities (including libraries, early learning centres, and education, health and aged care and facilities), community buildings including places of public worship, courts of law, premises which provide accommodation to the public, and protected areas under the *Nature Conservation Act 1992*.

The number of sensitive receptors affected by noise or vibration at any one time will vary depending on the location of activities and progress of works along the alignment for each stage. The discussion below refers primarily to impacts on dwellings, noting that the total number of sensitive receptors for construction noise includes all sensitive receptors. Potential noise impacts in relation to community facilities are discussed in Section 7.4.1, and impacts in relation to businesses are discussed in Section 7.5.2.

Appendix S: Construction Noise and Vibration and Operational Road Traffic Noise Technical Report of the EIS indicates that earthworks and rail civil works are predicted to have the greatest impact from construction noise, however, other construction stages may have greater overall impact depending on actual timing and duration of each construction stage.

For standard working hours, before mitigation measures, noise impacts could include exceedances of the lower noise limit of 50 decibels (dB(A)) at up to 1,533 sensitive receptors over the course of the construction period as a consequence of earthworks activities, and up to 1,111 sensitive receptors as a consequence of rail civil works activities. Of note, this assessment is representative of the worst case 15-minute period of construction activity, and does not represent ongoing day to day noise impact at noise sensitive receivers for an extended period.

Construction noise may impact on amenity and discourage people from participating in outdoor activities whilst areas are affected by noise and/or vibration. Impacts from construction of major structures such as bridges have the potential to impact on local amenity for extended periods, whilst laydown areas and borrow pits may also be required for extended periods, as discussed below.

Over the full construction period, construction traffic noise is also predicted to exceed the criteria for up to 44 roads within the impact assessment area, primarily in rural locations. For these 44 roads, the maximum predicted increase in noise level is greater than the 3.0 dB(A) criterion.

Works which will create vibration (e.g. piling and vibratory rolling) will also be undertaken as part of construction. Appendix S: Construction Noise and Vibration and Operational Road Traffic Noise Technical Report of the EIS indicates that, without mitigation, the lower night-time vibration human comfort limit is predicted to be exceeded at up to 346 receivers adjacent to the Project footprint.

Measures to mitigate noise and vibration impacts are provided in Chapter 22: Outline Environmental Management Plan of the EIS, and include:

- Designing and constructing the Project with the aim of achieving the operational noise and vibration criteria identified by the noise and vibration assessment
- Development of a Noise and Vibration Management Sub-plan as part of the Construction Environment Management Plan (CEMP)
- Residents and occupants within 2 km of the Project footprint will be provided with information to enable them to understand the likely nature, extent and duration of noise and vibration impacts during construction
- The results of refined construction noise and vibration modelling will be communicated to potentially impacted residents and occupants (sensitive receptors)
- Construction progress and upcoming activities will be communicated to local residents and stakeholders, particularly when noisy or vibration generating activities are planned
- Details of ARTC's complaints management handling procedure will be provided to members of the public to enable them to notify ARTC of issues to enable members of the public to notify ARTC of issues, including the generation of excessive noise and/or vibration
- Building condition/dilapidation surveys should be undertaken at receptors identified as being particularly sensitive to vibration
- Vibration monitoring will be undertaken at locations where the potential for building/structural damage risk has been identified.

Advance notice will also be provided prior to construction activities which may result in excessive noise generating and for blasting activities, to all residents that could be affected, by these activities, as identified in the Noise and Vibration Management Sub-plan. The potential for blasting to impact on building structures, human comfort or water bores was a concern for some consultation participants living near the Project footprint. Blasting will be required as part of the construction methodology where the Project encounters basalt. The potential for blasting to cause vibration which could affect human comfort or built structures is considered in Appendix S: Construction Noise and Vibration and Operational Road traffic Noise Technical Report of the EIS, which notes that a detailed blasting assessment will be completed once blasting locations have been finalised through detail design, and will consider the potential for structures and other receptors in proximity to the works to be affected by blasting. Chapter 22: Outline Environmental Management Plan of the EIS has identified measures with respect to mitigation of blasting impacts (e.g. noise, vibration, dust or damage to buildings) including:

- Vibration impacts from blasting will be assessed by the contractor once the locations and depths of blasting and the charges to be used are confirmed. This assessment will confirm which receptors at which blasting impacts are expected to exceed the blasting vibration criteria, if any
- Where blasting impacts are expected to exceed the vibration limits, a range of measures are recommended where practicable, including consideration of alternative construction methods, reducing the charge size, ensuring adequate blast confinement, and avoiding blasting during heavy cloud cover or during strong winds
- Establishing a blasting timetable through community consultation for example, blasts times negotiated with surrounding sensitive receptors
- Residents, occupants and other stakeholders within 2 km radius of a blast location will be notified a minimum of three days in advance of a blast occurring.

Laydown areas and bridges

Noise, dust and privacy impacts as the result of track construction are expected to be transitory as works move along the alignment but would last for longer periods in relation to bridge construction and laydown areas.

Project construction would require temporary laydown areas, including approximately 39 track laydown areas (situated next to the corridor to facilitate direct access to/from the alignment) and 35 bridge laydown areas. Establishing temporary laydown areas will generally involve clearing, grubbing, topsoil stripping, installing environmental controls, laying hardstand material, and constructing parking areas and access tracks.

The laydown areas will act as a centralised point for material storage. Some laydowns will include fuel storage areas and site office compounds. Flash butt welding sites (which include a large shed housing machinery to weld track sections together and heavy vehicles to place track sections) would also be required in proximity to the proposed rail alignment to facilitate transport within the rail corridor, minimising haulage on public roads wherever practically possible.

Laydown areas and access tracks will be located within the Project's temporary footprint and/or attached to Queensland Rail's (QR) existing rail corridor, however temporary use of properties for laydown areas could also be by negotiated lease arrangements with landowners. Factors considered in identifying the properties to be utilised include the availability of properties already acquired by the Constructing Authority, utilisation of properties which will be severed or alienated by the Project, access to main roads, avoidance of land used for intensive livestock or cropping land uses, and avoidance of environmentally sensitive areas.

Laydown areas have the potential to impact on local amenity through increased traffic, noise, increased dust or temporary impacts on scenic character. The following laydown areas are located within approximately 500 m of dwellings (distances between laydown areas and dwellings are approximate):

- Ch 45.4 km, Whetstone Access Road (flash butt welding site) within 200 m of two dwellings
- Ch 54.0 km, Cremascos Road within 450 m of a dwelling
- Ch 97.4 km at 420 m from a dwelling
- Ch 114.6 km, within 50 m of a dwelling
- Ch 114.8 km, opposite a dwelling
- Ch 180.6 km, Linthorpe Valley Road, within 150 m of a dwelling
- Ch 184.6 km, Gore Highway, opposite a dwelling
- Ch 185 km, Gore Highway which is opposite business premises
- Ch 116.4 – Ch 117.2 km, where a road realignment at the intersection of Millmerran-Inglewood and Heckendorf Roads is adjacent to a dwelling
- Ch 171.0 km, Quibet and Dallman Roads within 50 m of two dwellings
- Ch 175 km – Ch 175.4 km, Linthorpe Road within 380 m of a dwelling
- Ch 178.2 km, Geitz Road, with six dwellings within 500 m
- Ch 206.9 km (adjacent to the Project's most easterly extent at Draper Road) which is within 500 metres of a dwelling.

The Project involves the construction of 34 new bridge structures to accommodate topographical variation, crossings of waterways and other infrastructure. Bridges include:

- Three road-over-rail bridges (Cunningham Highway, Gore Highway and Linthorpe Road)
- 11 rail-over-road bridges
- 20 rail-over-watercourse bridges (includes one bridge that also goes over a road)

Construction of bridges would require earthworks, piling, formwork, cement pouring and track construction, which may result in noise impacts for nearby dwellings, facilities or businesses. Each bridge location along the alignment will have a dedicated laydown/work area, which may also include crane pads for the lifting of the bridge members. These areas are primarily for the bridge works; however, larger areas have been provided for locations requiring the storage of other materials that are not associated with the construction of the bridge.

Construction noise and vibration will be managed in accordance with the measures outlined under 'Construction noise' above, and dust will be managed in accordance with the Project's Outline Environmental Management Plan as referenced below (Air Quality).

Residents living on roads from which laydown areas would be accessed would also experience increased heavy vehicle and commuter traffic. A Road Use Management Plan (RUMP) will be developed in consultation with DTMR, QPS and local councils, and in accordance with DTMR requirements, to identify, where required, appropriate traffic and transport management strategies for the use of roads during Project construction (refer Chapter 22: Outline Environmental Management Plan of the EIS). Where they interact with public roads, bridge construction sites would be subject to traffic management and temporary works restrictions to ensure traffic safety.

Residents within a radius of approximately 500 m of laydown and bridge construction sites will require ongoing engagement prior to and during construction to:

- 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.

Laydown areas and demountable buildings used for sites offices during construction would be progressively decommissioned and the affected area rehabilitated as their use is completed. Some office facilities may be left within the Project footprint for the commissioning and or operational phases.

There is potential for some laydown areas to be left in place for their legacy value to property owners or businesses. This would be determined as part of ongoing engagement with local stakeholders.

Quarry and borrow pit operation

The operation of quarries (extraction of rock) and borrow pits (extraction of soil, gravel or sand) has the potential to impact on the amenity of nearby neighbours through creating noise, dust or increases in the number of heavy vehicles using local roads.

Twenty-three potential material source locations have been identified by ARTC as potentially suitable for use during construction activities, including seven operational quarries and 12 potential borrow pit sites. The viability and feasibility of accessing material from these locations will be confirmed during the detail design phase of the Project (post-EIS).

Potential borrow pit locations have been located in the Yelarbon, Inglewood, Millmerran, and Pittsworth areas, between Inglewood and Millmerran, and between Southbrook and Gowrie Junction (refer Chapter 5: Project description of the EIS). Appendix S: Construction Noise and Vibration and Operational Road Traffic Noise Technical Report of the EIS indicates that where sensitive receptors are within 500 m of a proposed borrow pit location, significant operational noise mitigation would be required. Assessments of each borrow pit location will be undertaken during the detail design phase of the Project (post-EIS) to determine material usability and volumes and will include consultation with the owners of sensitive receptors regarding mitigation of noise impacts identified as part of these assessments.

Seven nearby quarries have been identified that may potentially supply the Project, including:

- Inglewood Quarry
- Captains Mountain Quarry
- Bland Quarries, Pittsworth
- Quarry Road Quarry
- Toowoomba Quarry
- Wellcamp Downs Quarry
- Toowoomba Wellcamp Quarry.

The proposed use of existing licenced quarries is not expected to affect the amenity of nearby property owners. However, an increase in truck movements may result for access roads leading to and from these quarries. As described for laydown areas, measures to mitigate impacts of traffic are provided in Chapter 22: Outline Environmental Management Plan of the EIS.

Air quality during construction

The Project goals for air quality are based on protecting health and well-being, health and biodiversity of ecosystems and protecting agriculture environmental values. Assessment of the potential for dust and/or diesel emissions to affect air quality is detailed in Appendix O: Air Quality Technical Report of the EIS. The results of the qualitative air quality risk assessment indicate that the unmitigated air emissions from the construction of the Project pose a 'low' risk of human health impacts but a 'high' risk of dust soiling. Particulate matter deposited as dust has the potential for nuisance impacts if not correctly managed. Recommended mitigation measures provided in Chapter 22: Outline Environmental Management Plan of the EIS include, in addition to detailed measures regarding the management of activities which may generate dust or emissions:

- Develop an Air Quality Management Sub-plan, as a component of the CEMP. The objective of the Sub-plan will be to specify controls and procedures for the avoidance or minimisation of impacts relating to dust and emissions during construction of the Project, including monitoring requirements and complaint response procedures
- Landowners will be notified in advance of the commencement of activities with potential to generate dust
- Details of ARTC's complaints management handling procedure will be provided to members of the public to enable them to notify ARTC of issues, including the generation of excessive dust during construction.

Operations

The peaceful and quiet nature of the environment and townships was a common theme in community engagement, with noise and vibration impacts of the Project a significant matter of concern amongst consultation participants.

Many residents living near the alignment are concerned about the potential for the Project's operation to have a long term impact on their ability to relax and enjoy the places where they live and recreate, and in relation to potential for sleep disturbance (which is further discussed in Section 7.4.3). Issues of concern identified in consultation include:

- Noise from locomotive engines, track and wheel squeal, including potential for noise to carry long distances where the track is on bridges
- Horn noise and noise from crossing signal operation
- Whether noise from trains using crossing loops (braking, idling and accelerating) or diesel emissions could affect the amenity or health of nearby residents
- Vibration impacts from passing trains
- Visual impacts on rural scenery and town character.

The results of the relevant technical reports as they relate to amenity are summarised in the following (noting that potential visual impacts are discussed in Section 7.1.8).

Noise

During operations, noise would result from locomotives and from the track, whilst in some areas train horns would also be used.

Assessment of rail noise is detailed in Appendix T: Operational Railway Noise and Vibration Technical Report of the EIS (SLR, 2020) which indicates that the predicted noise levels would exceed the noise assessment criteria requiring mitigation measures to be investigated for up to 108 sensitive receptors at Project opening in 2026, including four non-residential sensitive receptors being the Brookstead State School, Yelarbon State School, Pampas Memorial Hall and the Pittsworth and District Assembly of God/Harvest New Life Church (refer Section 7.4.1). The assessment presented in Appendix T also identifies the potential for sleep disturbance for some sensitive receptors, as further discussed in Section 7.4.3. The rail noise and vibration assessment did not identify sensitive receptors where the ground-borne vibration criteria are expected to be triggered for receptors, outside of those that are within 10 m of the track and would likely be resumed as part of the Project.

At the townships of Brookstead and Pittsworth, the predicted noise levels and location of the nearby sensitive receptors triggered an investigation of rail noise barriers. In other locations, the sensitive receptors where predicted noise levels were above the assessment criteria were distributed throughout the alignment and were generally within 300 m of the permanent Project footprint. The assessment presented in Appendix T of the EIS concludes that 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. Sensitive receivers located on land within the Project footprint would be acquired to enable construction of Project. Beyond this distance, noise mitigation measures will be investigated and implemented in consultation with affected property owners.

Five crossing loops would be constructed as part of the Project to allow trains travelling in opposite directions to pass, initially catering for 1,800 m long trains. The passing loops would be located within 500 m of eleven dwellings (refer Table 7-1). Crossing loops may be extended in the future to accommodate 3,600 m trains with the potential to affect a very small additional number of properties.

Table 7-1: Proximity of crossing loops to dwellings

Location	Chainage (Ch)	Approximate No. Dwellings within 500 m
Yelarbon	Ch 16.3 km – Ch 18.5 km (future-proofed to Ch 20.3 km)	1
Inglewood	Ch 50.1 km to Ch 52.4 km (future-proofed to Ch 54.2 km)	0
Canning Creek/Kooroongarra	Ch 89.2 km to Ch 91.4 km (future-proofed to Ch 93.2 km)	0
Yandilla	Ch 129.8 – Ch 132.0 future-proofed to Ch 129.3 km and to Ch 133.3 km)	2
Broxburn/Brookstead	Ch 174.9 – Ch 177.1 km future-proofed to Ch 178.9 km).	8

Appendix T: Operational Rail Noise and Vibration Technical Report of the EIS found that the predicted noise levels from the crossing loops were well within the ARTC noise management criteria and would be substantially lower than the railway noise levels from the daily train pass-by events on the adjacent main line.

With respect to noise near crossings, analysis of the predicted noise levels (*Ibid.*) determined that, where sensitive receptors are located within approximately 200 m of each level crossing or train horn location (100 m either side of level crossings), noise from the crossing alarm bells and train horns would potentially contribute to noise levels above ARTC's noise management levels, and noise mitigation measures may need to be investigated for receptors near some of the crossings.

The potential noise impacts of the operation of new roads and the proposed upgrade of roads (refer Appendix S: Construction Noise and Vibration and Operational Road Noise Technical Report of the EIS). One of the proposed new roads, Bengalla Street, Yelarbon, is predicted to result in an exceedance of the relevant noise criteria and will need to be assessed in more detail during detail design of the Project to confirm exceedances against relevant legislation. The operation of other new roads and upgraded roads would not exceed relevant noise criteria.

Air quality

The potential for air quality impacts such as dust or diesel emissions to result from the operation of the rail corridor, including crossing loops, was identified as a community concern. This included concern about the potential for dust or emissions to settle in water tanks.

Air quality assessment of the Project's construction and operation is discussed in Appendix O: Air Quality Technical Report of the EIS, as previously referenced. Atmospheric dispersion modelling undertaken as part of the assessment predicts cumulative background plus Project air quality pollutants to be below Project goals at sensitive receptors.

Investigations into the deposition of emissions in water tanks showed that predicted concentrations of potential contaminants would also be significantly lower than Australian Drinking Water Guidelines.

Appendix O: Air Quality Technical Report of the EIS indicates that with implementation of the proposed mitigation measures described in the EIS, the residual impacts related to air quality can be effectively minimised.

Lifestyle

As described in Section 5.3.4, amenity in the potentially impacted communities is characterised by enjoyment of a rural way of life, rural scenery and access to local towns with closely-knit communities. Lifestyles are generally based around outdoor activities, family life and neighbourhood and community activities.

As outlined earlier in this sub-section, there is potential for construction noise to affect a large number of dwellings during construction. Standard and Project-specific noise and vibration mitigation strategies will be used to enable the Project to meet its approval conditions with respect to noise (refer Chapter 22: Outline Environmental Management Plan of the EIS). However, construction noise may still be experienced as intrusive and annoying, particularly in outdoor areas, whilst construction activities are near homes.

There is also potential for residents' informal access patterns (such as walking and bike tracks) across or between rural properties to be severed by the Project in greenfield sections of the alignment, which may effect on-property recreational activities or ease in visiting neighbours. ARTC is consulting with all potentially impacted land holders living within close proximity to the Project footprint, to identify property-specific mitigation measures (such as the relocation of property accesses and the location of access roads in relation to on-property recreation areas) which could reduce amenity impacts on elements supporting local lifestyles.

During Project operation, there is potential for rail noise to exceed the Project's noise goals for an estimated up to 104 residential receptors, which may affect residents' lifestyle e.g. use of outdoor areas. ARTC will implement the mitigation measures recommended in Chapter 22: Outline Environmental Management Plan of the EIS to maintain the amenity of noise-affected sensitive receptors. ARTC will also provide specific engagement mechanisms with residents of properties exposed to noise impacts, to ensure the potential for impacts on amenity is clearly explained, and where relevant, to obtain their inputs to the development of property-specific mitigation measures. Regardless of compliance with noise criteria, rail noise may be experienced as intrusive on everyday life or disruptive to outdoor social activities.

7.1.5 Amenity of towns

The Project would pass through the small settlement of Kurumbul, along the Yelarbon township's northern border and through the rural locality of Whetstone, which are located on the South Western Railway Line. Consultation with GRC indicated that businesses in Yelarbon are 'doing it tough' and the potential impacts of increased noise resulting from the Project's operation would be of concern to business owners.

The Project will intensify the use of the existing rail corridor, enabling its use for larger and more frequent trains. The Project will also increase the width of the existing rail corridor and increase the scale of infrastructure within it, with potential to affect the scenic character of land near the Project footprint.

North of Whetstone, a greenfield corridor will be constructed, passing approximately 2.5 km north of Inglewood and approximately 3 km southeast of Millmerran. With the exception of travel interruptions due to the operation of level crossings, residents of the Millmerran and Inglewood townships are not expected to experience impacts on their amenity.

Within the existing rail corridor, the Project would then pass through the rural locality of Pampas and the town of Brookstead, which has potential to result in rail noise and visual impacts (due to the intensification of infrastructure and frequency of trains) for Pampas and Brookstead residents.

The Project, in a greenfield corridor, would travel north to traverse the northern outskirts of Pittsworth and Southbrook. The Pittsworth and Southbrook town centres are not expected to experience impacts on amenity, but residents may see the Project as intruding on the towns' scenic character.

The Project avoids Kingsthorpe, passing approximately 1 km south of the nearest houses there, and is unlikely to affect amenity in Kingsthorpe.

The Project would pass through the localities of Athol, Biddeston, and Wellcamp and approximately 1 km west of Gowrie Mountain. Gowrie Mountain and Athol residents have expressed opposition to the Project because they anticipate that its operation would cause noise impacts on residential communities, and detract from the quiet and scenic character in this area. Gowrie Mountain residents' preferred alignment was to the south of the mountain; however, this was not considered technically feasible nor was it considered to be an optimal alignment. Assessment of noise impacts indicates that there is potential for audible noise to affect residents within close proximity to the rail corridor.

The Project ends (and connects with the Gowrie to Helidon Project) approximately 1 km southwest of Gowrie Junction. Project impacts on the amenity of Gowrie Junction are not anticipated.

In summary, the Project's operation has the potential for the following impacts on the amenity of towns:

- Intensification of the rail corridor along Yelarbon's northern border, with increases in rail noise, and changes to scenic character of the area near the Project footprint
- Potential for rail noise and changes to local scenic character for Brookstead, Pittsworth and Southbrook residents
- Noise and impacts on views to and from Gowrie Mountain.

Management measures designed to reduce noise impacts (as discussed in Section 7.1.4) and impacts on visual amenity are detailed in Chapter 22: Outline Environmental Management Plan of the EIS. With respect to the visual amenity of townships, management measures include:

- The design of Project components in an urban context are to consider the appearance and careful integration of new structures, fencing and noise barriers
- Providing enhanced planting and habitat creation to benefit the local community and support health and well-being, for example streetscape strategies within the vicinity of the rail alignment and street tree planting within the settlements of Yelarbon (including upgrade of the Yelarbon rest stop adjacent to the alignment), Brookstead and Pittsworth.

ARTC will also work with the residents of affected towns, GRC and TRC to identify and fund community programs which seek to offset impacts on the amenity of towns.

7.1.6 Connectivity and travel behaviour

Construction

Disruption to traffic can be expected during the Project's construction stages as equipment, materials and people are transported to and along the rail corridor, and as roads are closed for site works. Stakeholders have raised concerns about connectivity and risks to isolation during flood events. Communities impacted by the construction of the Toowoomba Bypass have also urged ARTC to be aware of local movement patterns to plan effectively for community connectivity and reduce the risk of community grievance. These communities expressed great frustration and anger at the lack of alternate routes provided during the Toowoomba Bypass construction period.

Localised impacts are expected due to interfaces with the Project and the existing traffic and transport networks as construction progresses. The construction of bridges and level crossings at the interface with public roads would require detours, causing some delays to travel. There would also be an increase in heavy and light vehicle movements on local roads associated with construction.

The Project requires the crossing of State-controlled roads, local government (GRC and TRC) roads and private/occupational roads and access tracks. A summary of the number of interfaces with each road type included in the reference design is as follows:

- State-controlled roads: Seven roads in nine locations
- TRC roads: 26 crossings and 15 relocations, diversions or consolidations
- GRC roads: 18 crossings and seven relocations, diversions or consolidations
- Private/occupational, unformed access roads or tracks: 153
- Private/occupational, formed access roads or tracks: 62

Treatments for public road rail interfaces can be categorised as:

- Grade separated crossings – road and rail cross each other at different heights so that traffic flow is not affected. Grade separations are either road over rail, or rail over road.
- Level crossings – road and rail cross each other at the same level. Level crossings have either passive or active controls to guide road users:
- Passive – have static warning signs (e.g. stop and give way signs) that are visible on approach. This signage is unchanging with no mechanical aspects or light devices.
- Active – flashing lights with or without boom barriers for motorists, and automated gates for pedestrians. These devices are activated prior to and during the passage of a train through the level crossing.
- Crossing consolidation, relocation, diversion or realignment – existing road rail interfaces may be closed, consolidated into fewer crossing points, relocated or diverted. Roads will only be closed where the impact of diversions or consolidations is considered acceptable, or the existing location is not considered safe and cannot reasonably be made safe. Approval for closures, where required, will be progressed in accordance with the requirements of the relevant legislation.

The final number of private/occupational crossings within private property will be determined during detail design. ARTC has consulted with impacted landowners to obtain an understanding of property access requirements and to present potential private access solutions based on the reference design. Each property solution will be designed on a case-by-case basis through on-going consultation with landowners and further design refinement.

Where level crossings are required, ARTC will consult with landowners to determine the design which best fits their requirements. For example, in areas where farmers use large machinery, the design of the level crossing including gate widths, crossing surface and approach grades will need to accommodate this. Alternatively, where there is stock on a property, the focus will be on installing appropriate fencing and gates to keep the stock out of the rail corridor.

ARTC will work with each landowner to find access solutions that minimise the number of level crossings for the Project, consistent with the safety objectives of the State and National Rail Safety guidelines and policies.

Design and layout of occupational crossing solutions will be determined based on the following considerations:

- Feedback from consultation with landowners on specific property requirements
- Safety standards, including criteria for minimum sight distances for trains and vehicles
- Alternative access arrangements
- Rail design and landform
- Stock movements
- Vehicle access requirements (for example farm machinery, frequency of use).

Typical treatments include:

- Underpass (stock passage, multiple use vehicles). This will be subject to topography.
- At grade level crossing
- Diversion to adjacent public road/public road crossing.

The Project may impact on connectivity across and between rural properties where crossing consolidation, relocation, diversion or realignment occurs.

Private access to individual properties will also be temporarily disrupted during construction, and restricted where land is required temporarily for construction activities. The Project will result in the severance of driveways and informal private access roads to properties. Legal access to properties will be retained through the provision of alternative access roads, grade separation or a level crossing where appropriate. ARTC is consulting with affected land holders to determine appropriate measures to mitigate potential property access impacts.

During November 2018 to February 2019, ARTC consulted with landowners and road users for feedback on how they use local roads to inform the design of rail crossings on public roads. This feedback was considered, together with traffic counts and information from local councils and Queensland Government departments on current and expected future transport needs, in designing the crossings (refer Appendix C: Stakeholder Engagement Report of the EIS).

Impacts on connectivity and travel behaviour on public roads during the construction phase are likely to include:

- An increase in light and heavy vehicle traffic on the Cunningham, Gore and Warrego Highways, the Inglewood-Millmerran Road and local roads, associated with the transportation of construction workers, materials and equipment
- Changes to access on local roads that may include temporary road closures or detours
- Some potential for degradation of local roads due to construction traffic, which would be monitored and remediated in compliance with the Project's agreements with the relevant Councils

The detail design and construction method for the Project will be developed in combination with continued consultation with road network managers (TMR, TRC and GRC), road users and landowners adjacent to the Project, as described in Chapter 22: Outline Environmental Management Plan of the EIS. The Outline Environmental Management Plan includes detailed measure to manage potential impacts on traffic safety and connectivity, including:

- The detail design will ensure that access for private properties is maintained
- Consultation with relevant stakeholders throughout the detail design process to ensure that appropriate access and egress solutions are incorporated into the detail design to enable movements across the rail corridor
- Road safety audits will be undertaken pre-construction at level crossings in accordance with the Austroads guidelines
- Ongoing consultation with local Council/TMR and asset owners will be undertaken to ensure safety concerns and issues are addressed
- Relevant emergency services will be notified of changes to the road network and of construction activities prior to construction commencing
- A travel demand management campaign should be developed to inform the public on the proposed construction works and its potential effect on local road network operations
- Safe corridor access and vehicle turnaround points will be provided for maintenance work

The Outline Environmental Management Plan also notes the requirement for a Traffic Management Sub-plan to be prepared prior to construction as a joint effort between the Principal Contractor, DTMR, local governments and an accredited road safety auditor once preferred construction routes are confirmed.

Operation

Residents of local communities have identified concerns regarding road-rail safety (e.g. the potential for accidents at level crossings) and changes to the connectivity of the road network as the result of Project operation.

With the exception of Yelarbon and Brookstead, the Project bypasses the main townships in the region, avoiding impacts on connectivity within towns. Yelarbon residents requested via a CCC member that a pedestrian path be provided across the line. No current pedestrian path is available across the existing rail line, and as there are only two houses in Yelarbon which are north of the proposed alignment, the Project design has not included a pedestrian path. This will not be a change to the current connectivity of the area. There are also two houses in Brookstead which are south of the proposed alignment, with access to town provided via an existing level crossing over the rail line at Scrubby Creek Road, which would be preserved.

The Project's operation will impact on public roads, including local roads managed by local Councils, and State-controlled roads managed by DTMR. Key access roads affected include Kildonan Road, Cunningham Highway, Yelarbon-Keetah Road, Millmerran-Inglewood Road, Kooroongarra Road, Millmerran-Leyburn Road, Gore Highway, Geitz Road, Mann Silo Road, Yarranlea Road, Linthorpe Road, Biddeston-Southbrook Road, Toowoomba-Cecil Plains Road and the Warrego Highway.

The Project would require a number of grade separated crossings (overpasses or underpasses), proposed to promote safety and avoid permanent disruption to traffic. Road-over-rail bridges would be required at:

- Cunningham Highway
- Millmerran-Inglewood Road
- Gore Highway.

Rail-over-road bridges would be required over:

- Millmerran-Inglewood Road (in two places)
- Yarranlea Road
- Roche Road
- Oakey-Pittsworth Road
- Lochaber Road
- Biddeston-Southbrook Road
- Warrego Highway
- Toowoomba-Cecil Plains Road
- Brimblecombe Road
- Chamberlain Road.

Grade separated crossings would avoid travel delays and prevent interactions between road vehicle and trains.

The road layout and number of road-rail interfaces has been carefully considered with the aim of minimising the number of rail crossings. The designation of active and passive level crossings has been undertaken with consideration of safety requirements.

Where it was determined that a road-rail interface point was unable to provide for a grade separation, active level crossings or passive level crossings are proposed. In total, the reference design for the Project includes 17 active level crossings and 20 passive level crossings (refer Border to Gowrie EIS Chapter 5: Project description), with the likelihood of a small increase in travel times and waiting times. The Project is unlikely to significantly alter travel patterns or preferred modes of travel.

During operations, level crossings will result in periodic disruptions to traffic. It is estimated that once operational, the Project will involve an annual average of about 14 train services per day in 2026. This is likely to increase to an average of 20 trains per day in 2040, and up to 25 per day during peak operational periods. The maximum wait time at a level crossing has been calculated at approximately 2-3 minutes. Traffic delays at level crossings are commonly experienced throughout Australia and are not expected to cause significant inconveniences or frustration for residents, outreach service providers or businesses.

The potential to affect emergency services' response times due to construction works or delays at level crossings was a concern for local residents and is discussed in Section 7.4.1.

Appendix X: Traffic Impact Assessment of the EIS provides further details on potential construction and operational impacts on roads and traffic.

7.1.7 Community cohesion

Community cohesion refers to a community's connectedness, and its capacity for sustaining social relationships and providing mutual support. Small rural communities such as those in the SIA impact assessment area rely on community connections to help each other in times of need, and to provide the social resources needed to support community organisations and activities (from running school tuckshops to sustaining sports and other community activities).

The SIA community survey indicated that respondents lacked confidence about their communities' capacity to cope with change, and social indicators such as higher proportions of ageing people and pockets of disadvantage (refer Section 5.2.4) denote the potential for a lack of resources to adapt to change. Conflict within the community associated with the Project also has potential to impact on community cohesion, with some respondents commenting that the Project was causing anxiety to a lot of landowners, and has caused arguments in the community. Local residents have also expressed concern that residents may chose to leave the community to avoid any loss of amenity, impacting school enrolments, community participation, and overall cohesion. The Project largely avoids local towns, and ARTC is working with landowners who may be affected by noise or other impacts to address potential impacts on their amenity, so this currently appears to be a low risk to community cohesion.

The acquisition of private properties required for the Project will see some households relocating. Whilst some would be able to relocate their dwellings on the same property, some would leave the area. For the purposes of assessment, and on the basis of ARTC's consultation with affected landowners to date, the SIA has assumed that 20 households (or approximately 50 people, applying the average household size) would leave the immediate area and potentially, the affected communities. Within the context of the SIA impact assessment area's overall population this would not be a significant impact on community cohesion. However, at the local level, impacts on community cohesion would include severance between neighbours, diminished neighbourhood networks and the potential for community members to be lost from community, sporting and business associations. As noted in Section 7.1.6, the Project may also disrupt movements across the rail corridor in the short term while the community adjusts to the change, which may affect their willingness to travel to social and community activities.

Severance between properties, changes to road networks and displacement of residents through property acquisition would be inevitable as a result of the Project, and may reduce cohesion in affected localities in the short term. This will require particular attention in ARTC's community engagement and social investment programs. ARTC's investments in local communities will also need to focus on programs and services which strengthen local social networks and provide opportunities for people to meet and participate in community activities.

The ability of individuals and communities to adapt to change (their resilience) is influenced by a variety of economic, social, information, communication and personal/community competencies (Sherrieb K et al. 2010). Communities are considered to have good adaptive capacity where economic resources (such as access to education, employment, affordable housing) are distributed fairly, and where strong social relationships, networks and community organisation exist, along with the presence of trust, cooperation and reciprocity (Sherrieb K et al. 2010; Ross H et al. 2010).

While the communities in the SIA impact assessment area generally exhibit adaptive capacities, and under regular circumstances would be likely to adapt well over time, the SIA impact assessment area includes high numbers of seniors, and community members who participated in the survey were not confident that communities had the resources to cope with change related to the Project. Community engagement and community investments to help strengthen the community's ability to adapt to the multiple stresses to which they may be exposed are outlined in Sections 8.2 and 8.5 respectively.

7.1.8 Local character and sense of place

Communities across the SIA impact assessment area have reported strong connections to the character of rural townships, natural and rural landscapes, and environmental values (refer Section 5.3.6) which provide residents with a sense of belonging and of being 'home'. Emotional, historical and cultural connections to place, the quiet rural amenity and the rural way of life combine to create their sense of place.

In areas where a greenfield corridor is required, stakeholder feedback indicates that the Project will introduce a new element to the landscape which some residents see as incongruent with local character, particularly as it will sever rural properties and bushland. Some residents of local towns and rural localities including Pittsworth, Athol, Southbrook, Umbiram, Biddeston and Gowrie Mountain are strongly opposed to the Project as it would introduce rail noise as an intrusion on their quiet environment, and change the rural landscape.

Community members who participated in Project consultation also identified a concern that the Project would result in unacceptable lighting impacts on the area's rural character. During construction, temporary lighting will be associated with the non-resident workforce accommodation near Yelarbon, Inglewood and Millmerran, site offices and fuel storage areas, and potentially at bridge laydown areas. The only proposed permanent lighting for operations is associated with safety lighting at the controlled active level crossings, and there would also be transient lighting associated with train headlights.

Appendix I: Landscape and Visual Impact Assessment Technical Report of the EIS (Lat27, 2020) includes assessment of lighting impacts, and concludes that the proposed alignment and associated infrastructure are unlikely to create any significant obtrusive lighting into the external environment as a result of construction activities or permanent Project lighting.

During construction, the Project would temporarily impact on local character through the removal of vegetation and clearing of sites for laydown areas, the removal of rural homes and outbuildings within the permanent and temporary footprints, and the relocation of fences and farm infrastructure which contribute to scenic views.

Appendix I: Landscape and Visual Impact Assessment Technical Report of the EIS (Lat27, 2020) has identified visual impacts of moderate significance during the construction period for viewpoints relevant to the Yelarbon rest area, Commodore Peak picnic area, the Gore Highway near the service station at Pampas, near the Brookstead State School, on Pittsworth-Felton Road near the Pittsworth Motor Inn, on the Gore Highway near Southbrook, the view from Athol, and the view from the Mount Kingsthorpe summit lookout.

Construction noise may also detract from the enjoyment of natural and rural environments near the Project footprint. Changes to the road network also have potential to disorient motorists, and affect their connection to way-finding points, however people are likely to adapt to the changes over time.

Potential visual impacts with respect to the Project's operations were assessed as:

- Of moderate significance for viewpoints relevant to:
 - Rainbow Reserve
 - Millmerran-Inglewood Road towards the level crossing and Rail Bridge, and near a private dwelling
 - Brookstead State School
 - Toowoomba-Cecil Plains Road from a private dwelling
 - Linora Court, Gowrie Mountain
- Of high significance for viewpoints relevant to:
 - Yelarbon rest area
 - Near Brookstead State School
 - Pittsworth-Felton Road
 - Gore Highway near Southbrook
 - Athol
 - Mount Kingsthorpe summit scenic lookout.

The likely significance of impacts on some areas was assessed as variable dependent on the mitigation measures applied.

Whilst construction impacts on visual amenity would be temporary, impacts during operation represent a long term change to local character in areas including Rainbow Reserve, Yelarbon, Brookstead, Athol and Gowrie Mountain.

Cultural heritage also contributes strongly to local character and sense of place. Indigenous community members consulted for the SIA noted that development of major infrastructure such as highways, pipelines and roads in the SIA impact assessment area had damaged song lines and cultural landscapes, changed the nature of settlement (opening up the region and making it 'busier'), and altered Indigenous people's ability to recognise and care for Country. The addition of the Project as an additional piece of major infrastructure will also alter the landscape and may exacerbate losses of connection to place. As noted in Section 7.1.1, ARTC's Project team is committed to undertaking cultural tours with Bigambul People and Western Wakka Wakka people to gain a better understanding of the cultural landscape.

Assessment of Project impacts on non-Indigenous cultural heritage is documented in Appendix W: Non-Indigenous Cultural Heritage Survey Report of the EIS. Appendix W identifies the potential for removal of the remaining elements of structures including defunct railway sidings and stations, and of other structures such as a homesteads, sheds and outbuildings at various locations along the rail alignment. Where structures and the remnants of structures are visible, they contribute to rural character, and for residents who know of the sites' history, to sense of place.

In the Yelarbon area in particular, there is potential for the destruction or removal of remnants of structures with local heritage significance including a shearing complex, the Yelarbon Railway Complex and the Yelarbon Mill 2. There is also potential for dust and vibration from construction and operation to accelerate the dilapidation the former Yelarbon Presbyterian Church. Appendix W: Non-Indigenous Cultural Heritage Survey Report of the EIS recommends measures to mitigate significant impacts on cultural heritage. Notwithstanding, the loss of heritage structures and remnants, in combination with changes to visual amenity, is likely to be experienced by Yelarbon residents as a negative impact on local character.

In Brookstead, the location of the corridor through town and the potential for audible noise during construction and operation may also affect local character.

There is also potential for the Project's Condamine River floodplain crossing to affect sense of place in this area as the crossings would include extensive bridge structures which would be prominent in the landscape.

In summary, temporary changes to local character would commence during pre-construction, with clearing of vegetation, and continue during construction in areas near the Project footprint. Noise exposure during construction may also affect local amenity or character and sense of place, which are strongly related to the peaceful rural and natural environments. The intensification of the rail corridor in the Project's brownfield sections and the location of Project infrastructure in greenfield sections may affect residents' enjoyment of local character and their sense of place, leading to distress.

7.1.9 Property values

Some landowners near the Project are concerned that property values could be affected by Project impacts on visual amenity, noise or severance impacts, diminishment of agricultural properties' carrying capacity or productivity, disruption to water supplies, or perceived or actual increases in flooding risk. This was a source of considerable anxiety about their future financial security.

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. Studies which have examined the effect of infrastructure on property values are summarised below. Research on the effects of freight rail lines on property values in Australia was not identified.

A study examining the effect of traffic noise (including road and rail traffic noise) on property values in areas around the airport in Memphis, Tennessee (Ozdenerol, Huang Javadnejad and Antipova, 2015) noted that two previous studies had found a level of around 55 dB(A) as the ambient noise level that starts to influence house prices, however Ozdenerol et al's study found that traffic noise levels of 45 dB could affect housing prices in the urban areas surrounding the airport, with properties losing additional value as decibels increased. The relevance of this study to a rural context is unknown.

A study undertaken in Cuyahoga County, Ohio (USA) (Simons and Abdellaziz 2004) evaluated the impact of freight railroad tracks on housing markets between 1996 and 1999, using a hedonic price model. The researchers noted that most of the studies they reviewed for the research measured the frequency and level of noise to assess their impact on residents or property values, rather than the effect of proximity to a rail track in terms of distance. Simons and Abdellaziz's findings indicated an average loss in value between \$3,800 and \$5,800 (5-7 per cent) for smaller houses located within 750 feet (approximately 230 m) from a freight railroad track. Again, the relevance of this study to the local context is unknown.

A study conducted as part of the Western Sydney Airport EIS (JLL, 2016) analysed the effect that aircraft and airport operations (primarily aircraft noise) may have on property prices for residential and large lot land holdings in Sydney, Adelaide, Brisbane and Melbourne. For residential properties, the study identified a strong relationship between house prices and noise exposure in the house sale price data for Adelaide and Brisbane, with an average negative effect on price of around 7 per cent in Adelaide and 11 per cent in Brisbane. For Sydney and Melbourne, the data was far less strongly correlated and indicated that house pricing was not related to or significantly influenced by aircraft noise. Analysis of impacts of aircraft noise on large lot residential properties suggested that there was no discernible or statistically significant relationship between large lot land holdings exposed to aircraft noise and the sale price.

Property values may be affected by a mix of factors related to the Project, including direct impacts on land and infrastructure (which will be addressed through commercial agreements between ARTC and landowners) or impacts on amenity (e.g. increased traffic or dust during construction, or noise during operation). Impacts would be differential depending on potential buyers' perceptions about potential impacts as well as the actual impacts (such as rail noise). Values may also be affected by factors which are unrelated to the Project, such as supply and demand, agricultural commodity prices, or the effects of other projects.

Landowners' concerns about the Project's potential to change property values are acknowledged, however assessment of the likelihood and magnitude of change 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 landowners. Stress and anxiety about the potential for negative impacts on property values is likely to result for some residents near the Project footprint.

7.2 Workforce

This section discusses the Project's likely employment and training benefits, workforce management and the potential for the Project's labour requirements to impacts on other stakeholders.

7.2.1 Estimated Project employment

Construction personnel

Consultation with potentially impacted communities, Councils, Indigenous organisations and businesses has identified strong interest in the employment opportunities offered by the Project and has emphasised the availability of personnel and business capacity which will support employment of local people.

As described in Section 4.1.4, Project construction would require an estimated peak workforce of up to 950 personnel during 2021-2026.

Commencing in 2021, the construction workforce is expected to increase rapidly to peak at approximately 950 personnel in week 60. On average over the construction period, 400 FTE personnel would be required.

The following occupations and trades are anticipated to be engaged during construction:

- Mobile plant operators
- Welders
- Concrete worker/concreter
- Road worker
- Construction worker
- Truck Drivers
- Crane operator
- Dogger
- Rigger
- Construction Manager
- Engineering Manager
- Scheduler/planner
- Rail designer
- CAD operator
- Construction Foreman
- Construction trade worker
- Telecommunications worker
- Electrician
- Driller/Blaster
- Labourer
- Clerical and administration workers
- Workplace, health and safety officer
- Engineering Manager
- Civil Engineer
- Electrical Engineer
- Horticultural trades workers
- Chef
- Kitchen hands
- Housekeeping
- Fencing
- Architectural, building and surveying technicians
- Camp manager
- Paramedic
- Traffic control.

Construction labour availability

Consultation with Councils and the business community in the SIA impact assessment area indicates that there is a skilled workforce available as the result of workforce participation in other major infrastructure projects in the region (including construction of the gas fields in the Western Downs and the Toowoomba Bypass).

A proportion of the construction workforce is expected to be drawn from the Goondiwindi and Toowoomba LGAs, and possibly from within northern NSW in the Moree Plains and Gwydir LGAs.

The number of people in these LGAs employed in directly relevant industry sectors is shown in Table 7-2.

Table 7-2: Labour force by industry sector - Local Government Area, 2016 (number)

Industry sector	Toowoomba LGA	Goondiwindi LGA	Moree Plains LGA	Gwydir LGA
Heavy and civil construction	574	57	51	57
Construction services	2744	176	197	176
Manufacturing	4693	165	152	165
Professional, Scientific and Technical Services	3143	160	205	160

Source: ABS Census 2016h

While Toowoomba LGA has the largest labour pool, each LGA has a small heavy and civil construction labour force, with higher numbers employed in construction services, manufacturing and professional, scientific and technical services. These skills are likely to be applicable to Project construction. However, this labour pool may be constrained by low availability. As noted in Section 5.4.5, two thirds of businesses in the region are small businesses with no employees, and only 2.2 per cent of businesses employ more than 20 people. This suggests a heavy reliance in the local economy on small businesses and sole operator enterprises (including family farming), reducing workforce mobility.

Appendix V: Economic Impact Assessment of the EIS (KPMG, 2020) notes that on current labour market trends, and industries and occupations of the local workforce, there may be latent capacity and capability within the Project region and the regional economic catchment (the Darling Downs – Maranoa SA4) to support the construction and operation of the Project, in isolation of adjacent rail and other major transport infrastructure projects. At the northern extent, Appendix V notes labour supply is likely to be sourced locally within the Toowoomba region and surrounds. At the southern extent of the Project alignment, workers may be drawn from regional communities including those across the NSW state border, reflecting the local labour market conditions, with tight labour market conditions in Goondiwindi compared to Toowoomba.

As noted in Section 5.4.6, the Darling Downs region (which includes Toowoomba) and the South West region (which includes Goondiwindi) were projected to have an average annual average surplus of construction workers relative to the supply from residents between 2018 and 2028. At the 2016 Census, the SIA impact assessment area had a construction industry labour force of more than 6,100 people in 2016, and December 2019 unemployment estimates indicate that there were 3,267 unemployed people in the SIA impact assessment area (refer Table 5-16).

ARTC is working with Construction Skills Queensland (CSQ) to identify skills and labour shortages, noting that the availability of labour may change as the result of changes to economic conditions during the COVID-19 epidemic.

This will support ARTC's identification of priority areas for consideration as part of the Inland Rail Skills Academy programs (refer Section 7.2.2), offset demands which could otherwise affect local access to labour and leave a legacy of increased local workforce skills. As detailed in Sections 7.2.2 and 8.3.1, Inland Rail Skills Academy programs will include:

- Science, technology, engineering and maths (STEM) and trades education in schools
- University scholarships into Inland Rail related professions, e.g. engineering, project management,
- Apprenticeships, traineeships and industry accreditation to support employment into Inland Rail projects and other major regional industries

- Business capacity building programs for small-to-medium enterprises.

At the national level the construction industry is experiencing labour and material shortages, with growth forecast to continue during 2019/20 (discussed in Section 5.4.6). Construction trades workers, electricians and mechatronics/automation trades workers were the top three job roles experiencing skill shortages (Australian Industry Group, 2018b). There is also a national skills shortage in all engineering trades, which was expected to ease in the longer term (*Ibid.*). At the State level, skills shortages have also been identified for occupations within the construction cluster (with the exception of carpenters, joiners and plasterers), although regional employers have more success filling vacancies than metropolitan based employers. In contrast to national findings, no shortages were identified for structural steel and welding trades (Department Jobs and Small Business, 2017b).

In the context of regional labour supply, (refer Section 5.4.1) the Project's requirement for construction personnel alone is not expected to place undue pressure on the regional labour market. However, the availability of construction labour changes rapidly in response to economic conditions (e.g. level of investment in infrastructure projects) and the cumulative impacts of major project construction. The Project may compete for labour with other infrastructure projects, including other Inland Rail projects, with the potential for labour shortages in specific trades. Cumulative demands for labour are discussed in Section 7.6.

Local employment

Community feedback has included the need for contracts to specify targets, including targets for Indigenous people and females, and be clear that 'local' means people who live locally, with the perception that the construction of the Toowoomba Bypass offered few opportunities for local people. Consultation has also revealed a concern for employment opportunities to be available to the spectrum of job seekers, including entry-level workers, Indigenous people, young people, women, people with disabilities and cross-border job seekers in NSW.

Updated analysis of the likely availability of construction labour from the SIA impact assessment area will be required prior to construction, to enable the refinement of local and regional recruitment and training strategies.

ARTC will engage with its contractors to set targets and performance measures for local employment and Indigenous employment, and will monitor contractors' progress towards employment targets. The proportion of personnel to be drawn from the SIA impact assessment area will be determined by the contractor based on the availability of personnel across the range of occupations and trades required prior to construction commencing, and by agreement with ARTC regarding local employment goals.

Local businesses and community members in Toowoomba recommended that the Project learn from the experiences of the Toowoomba Bypass with respect to achieving local employment and business participation. ARTC has received a briefing from personnel involved in the construction of the Toowoomba Bypass and will apply the knowledge shared in developing recruitment and business supply arrangements.

Work in Project construction is likely to be a strong positive opportunity for those personnel who gain employment, and may be particularly beneficial for people who are experiencing unemployment (including young people and Indigenous people) or the financial effects of drought.

Indigenous employment

Consultation with the BNTAC and an Elder of the Western Wakka Wakka people indicated strong interest in employment opportunities for Indigenous people with the Project, and emphasised the need for early engagement with Indigenous communities so that people can be job-ready.

ARTC undertook a skills survey with Bigambul young people as part of a September 2019 youth summit. The results indicate keen interest in working as part of the Project on country, and that key skills and development needs include obtaining licences and operators' certificates, and mentoring and peer support to help them succeed in employment.

ARTC has developed the Inland Rail Indigenous Participation Plan as the foundation of its commitments to Indigenous employment and training opportunities for Indigenous people. Further information on ARTC's training commitments is provided in Section 8.3.3.

Opportunities associated with non-resident workforce accommodation

There would be an opportunity for local employment in staffing and servicing the non-resident workforce accommodation facilities. ARTC will require its non-resident workforce accommodation provider to liaise with TRC, GRC and employment agencies in the SIA impact assessment area regarding employment opportunities available in the accommodation facility (e.g. accommodation management, maintenance, cleaning and kitchen services) and require the contractor to invite and consider job applications from residents in the SIA impact assessment area.

Operations

ARTC estimates that the Inland Rail Program will employ approximately 700 people nationally during operations. A workforce of approximately 10-15 personnel is expected for the Project when operational, however the workforce may be shared with adjoining Inland Rail projects, resulting in a larger shared workforce. Occupational groups required would include management and maintenance staff for the track and associated infrastructure.

A proportion of the operational workforce and contractors are likely to be drawn from within the SIA impact assessment area. This would require development of targeted training programs designed to help equip local residents for employment in the operational workforce. Through the Inland Rail Skills Academy, ARTC has a partnership with the Australasian Rail Association aimed at developing skills related to rail operations.

7.2.2 Training and development opportunities

The Project's construction phase represents an important source of potential training and career pathway development for young people in the SIA impact assessment area.

Consultation with community members, Councils and training providers in the SIA impact assessment area has identified a strong interest in the Project and its potential to create employment for local residents. They have emphasised the need for training to include both certification and skill development, with recruitment closely following training. Training agencies advised the need for early information about the nature of skills required by the Project to allow them to customise their training, and with sufficient lead-time (up to 24 months) to enable trainees to be job ready. Local high schools also have a strong focus on skills development and work experience to help create pathways to employment and are wanting to work with ARTC.

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

- Increase the number of skilled local people eligible for employment on Inland Rail and associated regional industries
- Increase school student awareness and capability by connecting students with industry best practice
- Create opportunities for local businesses to participate in new supply chains
- Equip Inland Rail employees with world-class skills.

The partnerships and projects which make up the Inland Rail Skills Academy are in progress, with a comprehensive program to be developed during 2020. Further details are provided in Section 8.3.1.

ARTC consultation with Councils has also identified the Queensland Government-funded RSIS initiatives being undertaken by Councils as a key resource (refer Section 5.4.7 for more detail). ARTC has consulted the two Councils' RSIS Coordinators to identify opportunities to align Inland Rail's skills development and business participation objectives with RSIS objectives and activities, which are likely to include cross-industry training and certification programs relevant to the agricultural industry. The nature of local priorities may have changed due to social and economic changes as a result of the COVID-19 pandemic. ARTC will continue to engage with Councils' RSIS Coordinators to refine and implement alignment opportunities after the Project's approval.

As part of Inland Rail Skills Academy partnerships, Inland Rail has a Memorandum of Understanding (MOU) with Construction Skills Queensland (CSQ), an independent body funded by the Building and Construction Industry Training Fund. Under the MOU, CSQ will:

- Provide information and advice on skills shortages to ARTC
- Work with ARTC to broker and enable training responses to address identified shortages
- Provide targeted construction skills training to Indigenous people, in cooperation with major contractors
- Support ARTC and potential contractors to develop and deliver targeted skills development in the Goondiwindi and Toowoomba LGAs
- Work with ARTC to deliver CSQ's Try a Trade' program.

ARTC will also work 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. ARTC's Indigenous Participation Plan provides a framework for Indigenous participation in employment and business supply to the Project, as further outlined in Section 8.3.2.

Training pathways and creation of opportunities for the development of skilled local and Indigenous workers through the Project's construction and operation will be achieved by:

- Providing information about the nature of skills required with sufficient lead-time to enable local training programs to be customised
- Cooperating with high schools in the SIA impact assessment area and training providers, to provide appropriate training and skill development, and identify available employment pathways
- Working with Indigenous community networks, to encourage applications and increase the number of Indigenous people applying for jobs
- Working with key partners, to link training and development programs with other projects and local industries to provide the greatest regional benefit
- Working with Queensland and Australian Governments, to provide long term outcomes through training, mentoring and other support programs.

ARTC's training partnerships as part of the Inland Rail Academy will help to ensure that young people and Indigenous people in the SIA impact assessment area 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 an increase in the skilled labour force in the SIA impact assessment area which will be positive community legacies.

As many social impacts and opportunities associated with Inland Rail will emanate from Principal Contractor activities, procurement processes and construction contracts will contain targets relating to social performance. The Principal Contractor will utilise the Academy's programs to support meeting its commitments. ARTC will work with its Principal Contractor and other stakeholders including training providers to ensure the Project achieves employment of local residents (refer Section 8.3).

7.2.3 Impacts on employment in other industries

Community members have raised concerns about the potential for acquisition of agricultural land (used for grazing or cropping) to displace farming uses and affect the availability of employment in the agricultural industry. As further discussed in Section 7.5.1, the Project would wholly acquire properties which are used for cropping and grazing. Partial acquisitions would also be required, resulting in a reduction in properties' land areas and property severance. This may impact on employment if productivity is reduced, however the potential effect cannot be quantified. The Project may also impact on the availability of casual workers at harvest time if casual workers employed in the agricultural industry take up employment in the Project instead. ARTC is working with directly affected landowners to minimise impacts on farming properties, grazing properties and agribusinesses that could affect employment availability.

As described in Appendix V: Economic Impact Assessment of the EIS (KPMG 2019), the industrial and consumption effects of the Project will result in the creation of indirect jobs through stimulation of businesses and the expenditure patterns of employees), primarily in the Professional, Scientific and Technical Services and Wholesale Trade sectors.

There may also be a draw of existing staff or tradespeople away from some businesses. The SIA impact assessment area has had relatively low levels of unemployment (refer Section 5.4.1) however this may have changed in response to the COVID-19 pandemic. The extent of potential labour draw can't be further assessed, but attraction of works from existing businesses may cause temporary inconvenience to business owners.

7.2.4 Workforce behaviour

Construction personnel would 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 cause residents concern regarding safety or privacy.

ARTC will employ the following strategies to reduce concerns about, and the potential for, any impacts on community safety or residential privacy:

- Enforcing a Code of Conduct containing requirements for positive behaviours and respect for local residents and businesses for all contractor and Project personnel
- Enforcing a protocol for responsible drug and alcohol use supported by strict penalties for breaches, and adopting mentally healthy workplace practices on site and in non-resident workforce accommodation
- Ensuring that the Principal Contractor has appropriate workforce conduct policies and procedures, and complaints mechanisms which ensure fast and effective resolution to any issues experienced
- Employment of strict protocols for entering private property, developed in consultation with land holders.

As outlined in the Chapter 22: Outline Environmental Management Plan of the EIS, all employees, contractors and subcontractors will also receive an environmental induction which will include:

- CEMP requirements
- Relevant imposed conditions of approvals

- Statutory duties in regard to notification of environmental harm
- Environmental incident notification procedures
- Complaints management procedures
- Key environmental issues
- Location of sensitive receptors and environmentally sensitive areas
- Permissible hours of work
- Construction traffic routes
- Key environmental contacts.

Notwithstanding, it is possible that a small number of workforce personnel may exhibit behaviours which are not in keeping with the courteous way that locals interact, for example in local hotels or on local roads. The contractor will be required to monitor this through consultation with local police and community members, and ensure that any behaviour by groups or individuals that offend local values is addressed through communication and contractual arrangements with the Principal Contractor.

7.2.5 Workforce travel

Project personnel will travel between their homes or temporary non-resident workforce accommodation and work sites using passenger vehicles such as utes and four-wheel drives.

The Project will locate proposed non-resident workforce accommodation in reasonable proximity to worksites to minimise kilometres travelled and manage workforce fatigue (refer Section 7.3.3). The Project will also investigate and implement best industry practices with respect to journey management, and investigate the potential for shared driving arrangements to reduce traffic volumes and the potential for fatigue. The results of these investigations will inform development of the Principal Contractor's Workforce Management Plan.

Where necessary, laydown areas will incorporate parking facilities for workers' vehicles. Carparking will only occur in designated areas within non-resident workforce accommodation facilities, construction compounds, laydown and work areas, with designated areas selected to minimise the potential for noise impacts.

7.3 Housing and accommodation

This section describes the Project's potential to constrain the settlement pattern of the local towns in the SIA impact assessment area, or change housing demands, and the potential social impacts of temporary non-resident workforce accommodation.

7.3.1 Settlement pattern

There are no interfaces between the Project and towns that would be likely to alter the SIA impact assessment area's settlement pattern i.e. existing or planned land uses which support human settlements including the potential for population growth. The corridor intersects with only three settlements:

- Yelarbon where the alignment is within the existing rail corridor forming the northern perimeter of the town
- Brookstead where the alignment is within the existing rail corridor forming the southern perimeter of the town
- Pittsworth where the alignment follows the alignment of the Gore Highway forming the northern perimeter of the town.

As such, there would be no changes to the existing urban development pattern. The Pittsworth SA2 is expected to experience minimal population growth to 2026, and the Project is not expected to lead to any constraints on the settlement pattern which would affect population growth. Population projections for Yelarbon and Brookstead are not available, however, changes to the settlement pattern in these towns as a result of the Project are not expected.

During SIA consultation, TRC raised the question of whether buffers would be required between the rail line and residential development to protect amenity with respect to noise, noting there are no buffers around existing rail lines. Appendix T: Operational Railway Noise and Vibration Technical Report of the EIS (SLR, 2020) provides detailed information about potential noise exposure that may assist Councils to consider the potential need for buffers around rail lines as part of revising regional and local planning instruments.

7.3.2 Population change resulting in housing demand changes

Assuming up to 20 households would need to relocate from within the Project footprint as the result of property acquisitions for the Project (refer Section 7.1.2), approximately 50 people may need to relocate. There is a possibility that displaced residents may relocate elsewhere within the region, such that, in the context of the SIA impact assessment area's population of more than 170,000 people, changes to the regional population are likely to be negligible.

Project construction would require a peak workforce of up to 950 personnel, likely to be drawn both from within the SIA impact assessment area and beyond, resulting in a temporary increase in the population during the construction phase. The number of non-local personnel (from outside a safe daily driving distance, as determined by the contractor) would not be known until labour force verification prior to construction, however scenarios are useful for providing insights about the implications for population change. For example:

- Where 60% of the peak workforce is recruited from within a safe daily driving distance, 380 temporary resident personnel would be required
- Where 40% of the peak workforce recruited within a safe daily driving distance, 570 temporary resident personnel would be required
- Where 20% of the peak workforce recruited within a safe daily driving distance, 760 non-local personnel would be required.

Non-resident personnel would generally stay in the proposed temporary non-resident workforce accommodation leading to temporary population influxes to local communities (refer below), but would be distributed across the SIA impact assessment area. With a maximum of 950 non-local personnel at peak, this would be a negligible increase (0.005 per cent) on the SIA impact assessment area's population.

Construction workers are highly mobile, and accustomed to returning to their home bases when rostered off. A small number of construction personnel (those who would have extended contract periods rather than those pertaining to peak requirements) may choose to move to the SIA impact assessment area. Assuming 5% of the average workforce (20 people) chose to resettle in the SIA impact assessment area (based on the percentage of construction personnel recently reported by a local government to have settled locally for a major construction project in Queensland), and if housing is available, the Project may result in a permanent population increase of up to 50 people (assuming 2.5 people per household).

This would not impact significantly on the SIA impact assessment area's permanent population, and consultation indicates that local residents would welcome new residents as a boost to communities local and economies. Millmerran and Pittsworth community representatives in particular highlighted a desire to attract construction workers to live in town permanently, but highlighted a current lack of rental housing, and identified a need for TRC to actively plan for expansion of the town's residential areas. The potential for construction personnel's housing requirements to impact on local housing access is discussed in Section 7.3.4.

With a requirement for approximately 10-15 personnel during operations, the operational phase is not expected to significantly increase local populations or affect housing demand.

7.3.3 Workforce accommodation

Short term accommodation

The Project's construction workforce will include locally based personnel and personnel from outside the SIA impact assessment area. Non-resident personnel working at the northern end of the Project may access short term accommodation in Toowoomba. The analysis presented in Section 5.5.3 indicates that an average of approximately 495 vacant rooms may be available in the Toowoomba LGA (accounting for the most recent data on room numbers and occupancy rates, and more recent short term accommodation developments). This does not account for the proliferation in bed and breakfast establishments over the past few years.

As some personnel would be locally based, and the Project is offering low cost/free accommodation at non-resident workforce accommodation facilities (refer below), the number of personnel using short term accommodation in Toowoomba is expected to be low and is unlikely to place pressure on short term accommodation supply in Toowoomba.

The town of Goondiwindi had approximately 10 short term accommodation premises with an average room occupancy rate of approximately 50% in the June quarter 2016 (Section 5.5.3). Consultation with Goondiwindi stakeholders indicated that motel occupancies have been higher of late, and motels are full during large community events. Smaller motel premises and holiday parks catering to tourism and business travellers are located in Pittsworth, Millmerran, Brookstead and Inglewood.

There is insufficient short or long term accommodation in the local towns to sustain the accommodation needs of the Project's construction workforce without displacing tourists, particularly if compounded by the cumulative effect of other projects in the area.

Non-resident construction workforce accommodation

To mitigate potential impacts on local housing access and short-term accommodation, and due to the distances that personnel would be required to travel to access construction sites, the Project proposes three temporary non-resident workforce accommodation facilities. The non-resident workforce accommodation would:

- Reduce the travel distance for construction workers who live outside a safe daily driving distance
- Minimise demands for local rental housing which could displace other residents
- Minimise demands on short term tourism accommodation
- Enable the Principal Contractor to provide a safe, health and inclusive environment for the Project's personnel
- Promote road safety by enabling coordination and management of workers' transport to and from worksites by bus, minimising pressure on the region's roads
- Support management of workforce behaviour.

Non-resident workforce accommodation locations are proposed in the vicinity of Turallin, Inglewood and Yelarbon. Each facility would have a capacity of 300 beds. While it is likely that the non-resident workforce accommodation facilities would operate concurrently, they would not be fully occupied at the same time, as workers would move between facilities as construction proceeds along the alignment.

Stakeholder inputs

GRC inputs on the proposed non-resident workforce accommodation in the Yelarbon and Inglewood areas included:

- Preference for non-resident workforce accommodation to be located at Goondiwindi and/or Inglewood, noting that Goondiwindi -with a larger population and a range of retail and other services would have more capacity to integrate non-resident workers
- Council will need enough forward notice to plan ahead for water, sewer and waste management infrastructure if required
- Various locations on private land have potential to accommodate non-resident workforce accommodation, subject to water and waste management infrastructure availability
- Non-resident workforce accommodation facilities would be beneficial for local businesses and job seekers but may put pressure on GP services.

TRC inputs on the proposed non-resident workforce accommodation in the Millmerran area included:

- Council has no specific preference for locations in town versus out of town and would assess proposed non-resident workforce accommodation sites on a case-by-case basis. Site specific information would be needed to support assessment
- ARTC would need to consult further on water and sewerage infrastructure when proposed accommodation sites are selected
- Council may not have capacity for waste management for a non-resident workforce accommodation facility, but local operators would be likely to have capacity and may benefit from the business opportunity
- The non-resident workforce accommodation has the potential to provide an ongoing legacy of accommodation to support development of tourism.

Preliminary consultations regarding locations for non-resident workforce accommodation with the Goondiwindi and Toowoomba Councils also addressed the capacity of waste management, sewage treatment, water requirements and road use. Non-resident workforce accommodation facilities are likely to require self-sufficient provision of potable water, sewage treatment, paramedic services, and gym and dining facilities in order to avoid placing undue pressure on local services.

Consultation undertaken during the SIA process with TRC and GRC, QPS and Queensland Health regarding non-resident workforce accommodation anticipated that the facilities would bring the benefits of local supply opportunities and workforce expenditure, and also noted the potential for non-resident workforce accommodation to leave legacy values which would increase town amenity and/or tourism potential, however limitations on waste, water and sewerage infrastructure were noted.

The potential for non-resident workforce accommodation to be located near Millmerran, Inglewood and potentially Yelarbon was also discussed during workshops with community and government agencies, and local business groups. Potential issues identified in workshops included:

- The potential for noise or privacy issues if non-resident workforce accommodation is located close to dwellings, schools and other sensitive land uses
- Concerns about workforce behaviour with potential to affect local behaviours, character, and/or perceived or actual community safety
- Capacity of local emergency, health, community and recreational facilities and services to absorb potential workforce demands
- The visual impact of the non-resident workforce accommodation, and the amenity of the vacated sites following decommissioning of the facilities

- The ongoing use of the sites and the potential to create legacy facilities for the benefit of the host community (such as accommodation, halls, sporting or other facilities)
- The opportunity for local businesses to benefit from non-resident workforce accommodation operation (supply and servicing), as well as through increased trade from accommodation residents.

GRC's preference is for non-resident workforce accommodation to be located at Goondiwindi rather than Yelarbon. This was not considered feasible due to the distance to the Project, which would result in increased travel times for the workforce, fatigue management concerns and reduced efficiencies.

Preferred non-resident workforce accommodation locations

ARTC has applied the following criteria for selecting preferred non-resident workforce accommodation sites:

- Fatigue management requirements, i.e. minimising the distance between potential non-resident workforce accommodation sites and the Project footprint, with the maximum desirable commute of 30 minutes
- Availability of a sufficient land area, of a suitable tenure type, to enable buffering of the non-resident workforce accommodation from adjoining land uses
- Potential for negative social impacts on nearby communities, e.g. noise or air quality impacts originating from the non-resident workforce accommodation, or impacts on town amenity
- The requirement for flood-free land
- Avoidance of cultivated land
- Potential to benefit nearby communities through expenditure with local businesses or through provision of a positive social legacy
- Proximity to supporting infrastructure and services, such as water and electricity
- Likelihood of disturbing significant vegetation communities, threatened species or heritage sites
- Road access
- Potential for planned future developments to impact on the non-resident workforce accommodation, or vice versa.

ARTC has consulted with the owners of suitable land parcels in the Millmerran, Inglewood and Yelarbon areas. The owners of the preferred sites have agreed to their nomination as preferred sites in the draft EIS. The preferred sites are:

- On Turallin Road/Ellerslie Road in the rural locality of Turallin on a property of 57.7 ha where the existing uses include a caretaker's residence, meeting room and disused demountable sleeping quarters, approximately 8 km by road and 7 minutes' travel time northwest of Millmerran
- On Millmerran-Inglewood Road, on a property of approximately 207 ha where the predominate use is cattle grazing, located approximately 12 km by road north and 14 minutes' travel time of Inglewood, and surrounded by the Bringalily State Forest
- On the Cunningham Highway, on a property of approximately 161 ha where the predominate use is grazing, located approximately 2.5 km north west by road and 3 minutes' travel time by road from Yelarbon.

Initial consultation with GRC regarding the sites near Yelarbon and Inglewood did not identify any specific concerns, noting GRC would prefer that non-resident workforce accommodation be located at Goondiwindi rather than Yelarbon.

ARTC is consulting with TRC and DTMR regarding the proposed Turallin site, near Millmerran, which will include discussing the need for any improvements to the nearest road intersections.

ARTC also consulted local community members regarding non-resident workforce accommodation locations during Community Information Sessions in October 2019. Representatives of the Millmerran Commerce and Progress Inc. expressed their support for non-resident worker accommodation to be located in proximity to the township of Millmerran to provide economic benefits to the town.

The following subsections discuss potential social impacts and benefits of the non-resident workforce accommodation.

Related issues include effects on local emergency and health service access (refer Section 7.4.1).

Non-resident workforce accommodation near Millmerran and Inglewood townships

Community feedback on locating non-resident workforce accommodation near Millmerran and Inglewood included:

- Millmerran has previously accommodated non-resident workforce accommodation within town, with no negative impacts reported and with positive impacts for businesses
- Community members would like to see permanent structures built as part of the non-resident workforce accommodation facilities, providing a potential legacy value to local communities
- Potential for local businesses to benefit from supply opportunities to the non-resident workforce accommodation facilities
- Potential for employment of local people in non-resident workforce accommodation facilities
- The possibility that Project personnel would use local health services, affecting residents' waiting times for services
- Concern about the potential for increased substance abuse associated with a well-paid, itinerant workforce.

The location of the proposed non-resident workforce accommodation near Millmerran and Inglewood, and the buffering afforded by the large parcels of land on which they are proposed, would help to prevent direct impacts on the amenity and character of the towns or adjacent landowners.

The proposed site near Millmerran is owned by BNTAC. Consultation with BNTAC indicates that 40 ha (of the total 57.7 ha site) would be available for the camp, with existing uses on the site to be maintained. The site near Inglewood is also privately owned. All non-resident workforce accommodation sites would be utilised under lease agreements with the owners, which would result in a financial benefit to the owners.

Non-resident workforce accommodation would largely be self-sufficient with respect to dining, recreation and paramedic services, and with respect to water, waste and sewage treatment.

Occupancy of up to 300 beds is possible in each non-resident workforce accommodation facility at different times. At peak occupancy, non-resident workforce accommodation would temporarily and significantly increase the population in the Millmerran area by approximately 25 per cent and in the Inglewood area by approximately 42 per cent. There is potential for non-residents workers to change the profile of health service needs which is further discussed in Section 7.4.1.

GRC identified the potential for an influx of young workers to change social conditions in Inglewood, e.g. feelings of safety and familiarity. Workers visiting the towns will be required to behave with respect for local residents and in accordance with local community values, such as traffic safety with particular regard to children and elderly residents, and the close, safe small community feel in these towns.

The Project will offer to host a welcome event for personnel and local residents in Millmerran and Inglewood, to communicate the commencement of construction and introduce workers to the town, the residents, local businesses and local values, and support the development of mutual respect between Project personnel and local residents.

Businesses in Millmerran and Inglewood (such as hotels, clubs, shops and cafes) would be likely to benefit from an increase in trade from workers who would stay in the camp. This may be a significant benefit for local businesses given the small populations they are serving. Local business representatives consulted as part of the SIA were supportive of hosting non-resident workforce accommodation and the potential benefits they can bring to the local economy.

The potential for non-resident workforce accommodation to leave a legacy of additional accommodation or facilities in the town was identified by consultation participants, however the preferred sites are privately owned and would be leased by the Project, so legacy benefits may only pertain to the landowners and will be discussed with them.

Community representatives in Pittsworth and Millmerran were also interested in attracting Project personnel to relocate and settle permanently in the towns. This is discussed in Section 7.3.4.

There is also a likelihood that Millmerran and Inglewood residents could access employment at the non-resident workforce accommodation facilities, as discussed in Section 7.2.1.

Non-resident workforce accommodation near Yelarbon/Whetstone

Yelarbon has limited service capacity to absorb an influx of up to 300 temporary residents, requiring the non-resident workforce accommodation to be self-sufficient, as described in previous subsections. The potential for large numbers of workers to visit the General Store and Oasis Hotel in Yelarbon could change the existing quiet village character whilst they are in town, and cause concerns regarding community safety related to having non-local people in the area.

Goondiwindi as the regional centre may also experience occasional demands from non-local workers staying near Yelarbon, for example for health services, emergency services and basic daily supplies. As a larger settlement with an estimated population of 10,770 people, this level of increased demand would be unlikely to impact significantly on residents' access to services and facilities, or to alter town values, customs or lifestyle. However, community consultation suggested that while the community is accustomed to welcoming newcomers, careful engagement is needed to facilitate a harmonious mix.

Consultation with Yelarbon, Whetstone and Goondiwindi residents during the non-resident workforce accommodation planning process will address these issues and identify measures to be included in the contractor's Accommodation Management Plan (AMP) and Code of Conduct to avoid impacting on the 'village feel' of Yelarbon and the country town values of Goondiwindi.

ARTC will also consult with Yelarbon and Whetstone residents regarding community investments to support Yelarbon residents' resilience and community activities. This could include, for example, community safety and empowerment programs, and community events to bring people together. The Yelarbon/Whetstone community and/or GRC may also consider cooperating with ARTC to deliver a 'welcome event' to introduce workers to residents and businesses, and identify any potential for integration of personnel to the local community e.g. through participation in community events or sporting activities.

The General Store and Oasis Hotel in Yelarbon may derive a substantial benefit from a temporary increase in trade from accommodation residents, but may also be overwhelmed by the volume of trade, with the risk that local residents' access to local goods and services could be affected. As the non-resident workforce accommodation would be self-sufficient for personnel's needs such as basic health care and meals, this impact would be reduced. Engagement with Yelarbon businesses will be undertaken during the detail design stage to enable them to gauge the need to increase their offerings.

7.3.4 Housing supply and affordability

Some personnel might choose to purchase or rent homes and resettle in the SIA impact assessment area, however these numbers are likely to be minimal, given that the number of personnel required will change according to the construction activities being undertaken, the construction period for the Project is time limited, and ARTC proposes to establish non-resident workforce accommodation to support Project construction.

Social infrastructure providers consulted as part of the SIA indicated that the Toowoomba Bypass project's construction (with a peak workforce of approximately 900 personnel) had negligible impacts on local housing markets, as the LGA's housing stock has sufficient capacity to absorb the minimal housing demands that resulted from construction personnel. Given Toowoomba is outside the desired maximum daily driving distance for the majority of the Project alignment, any demands for housing for Project personnel in Toowoomba are also likely to be well within the capacity of the LGA's housing market.

Pittsworth, Millmerran, Inglewood and Goondiwindi are closer to the Project alignment and have smaller housing markets which would be more vulnerable to any Project demand. Potential impacts on housing in these towns are discussed below.

Potential impact in Pittsworth, Millmerran and Inglewood

It is not possible to predict the Project's housing impacts with any certainty. However, it is possible to test how the housing choices of Project personnel may impact on the market. Whilst Toowoomba has a large housing market with capacity to absorb a small additional demand (as happened during the construction of the Toowoomba Bypass, with no effects detected locally), impacts on the housing markets in smaller centres are possible. For the purposes of this exercise, it has been assumed that 5 per cent of the average workforce (20 people) would choose rental housing over non-resident workforce accommodation, and that all personnel settling locally would be 'family status' (bringing a partner and/or dependents) and require one dwelling each.

Based on these assumptions this would generate demand for up to 20 dwellings. Demand is likely to be spread between towns, but if concentrated in one town, and with comparison to the housing stock available in larger towns, this level of demand would:

- In Pittsworth – equate to 6.7 per cent of all private rental housing stock (300 dwellings), absorb 1.4 times the vacant 14 rental properties and compete in a rental market with the low vacancy rate of 2.5 per cent (at July 2018)
- In Millmerran – equate to 10.9 per cent of all private rental housing stock (183 dwellings) and compete in a rental market with no vacancies (at July 2018)
- In Inglewood – equate to 17.2 per cent of all private rental housing stock (116 dwellings) and compete in a rental market with no vacancies (at July 2018).

Under this scenario it is possible that a temporary boost in demand for rental housing during Project construction may lead to the inflation in rental prices and rental housing shortages in Pittsworth (shortages already exist in Millmerran and Inglewood).

As discussed in Section 5.5, housing is relatively affordable in Pittsworth, Millmerran and Inglewood, with a low level of rental stress compared to that for Queensland. This is also reflected in the Rental Affordability Index (National Shelter et al. 2018) which indicates that at November 2018, rents were affordable to a minimum waged household⁶ with an index score of 160 in Pittsworth and 177 in Millmerran (data was not available for Inglewood), well above the benchmark of 100 for affordability and suggesting that the risk of eroding the affordability of housing is low.

⁶ Defined in the Rental Affordability Index as a household with a gross annual income of \$75,000.

On its own, the Project is unlikely to boost demand to levels that would cause rental housing to become unaffordable to the average income earner, but could place low income renters at risk of displacement (such as pensioners and other benefit recipients). This would be exacerbated if combined with the cumulative effect of other projects in proximity to these towns, for example in Millmerran which hosts a large temporary workforce twice a year during maintenance shut-downs at the Millmerran Power Station. Consultation with the community has revealed that accommodation is fully occupied by contractors during these periods (estimated at 6 weeks at a time) with overflow into Pittsworth.

Potential impacts in Goondiwindi

Consultation indicates that one reason for low unemployment in the Goondiwindi LGA is because many workers and younger people leave the area to pursue employment and studies elsewhere. In the past, locals have returned to the town when work is available. Consultation with GRC, Care Goondiwindi and Goondiwindi Chamber of Commerce also indicated that newcomers have been attracted by major projects (including by the current upgrade to the Newell Highway in NSW), boosting demand for housing. Project personnel preferring to rent housing in town rather than staying in non-resident workforce accommodation are also likely to boost demand for housing.

Given the juncture of two separate Inland Rail sections near Goondiwindi, and depending on the timing of both, there is potential for the Project to draw newcomers and returning locals to re-settle in Goondiwindi, attracted to the prospect of work and the town's lifestyle and service availability.

Baseline data (Section 5.5.2) indicates that Goondiwindi has a tight rental market with limited availability of rental housing 5 dwellings (at July 2018) and a vacancy rate of just 0.8 per cent. In such a tight rental market with limited supply, Project demand may inflate rental prices. While the current median asking rent of \$352 per week remains affordable to minimum waged households (National Shelter et al. 2018), median rents in Goondiwindi have increased by 23.3 per cent in the previous year and 29.3 per cent in previous 3 years (refer Table 5-30). At the 2016 Census the rate of unoccupied dwellings was lower than typical for Queensland (8.0 per cent compared with 10.6 per cent), which may suggest that there is not a significant latent supply that could be brought to market. Further pressure on Goondiwindi's rental housing market could see rents become unaffordable for low income households, with the consequential risk of displacing them from secure and appropriate housing and potentially from the community.

In each quarter from October 2017 to 2018, property listings indicate a minimum of 120 dwellings for sale in the Goondiwindi postcode area (SQM Research, 2018b). New dwelling growth has been limited with just 11 new dwelling approvals reported in 2016-17, and median house prices are lower than Toowoomba prices (Section 5.5.2). The town has a very low rate of housing stress amongst home purchasers compared with Queensland (5.4 per cent of households compared with 6.4 per cent. ABS 2016c). On this basis and should the assumptions regarding Project personnel resettling in the town eventuate, there appears to be capacity within the market to absorb the additional demand for home purchase housing without reducing housing affordability or availability. It may even have a beneficial impact on the home purchase market by stimulating demand.

Housing impacts may be compounded with the cumulative effect of seasonal workers in the agricultural sector and other concurrent projects in the area (such as the NS2B Inland Rail Project, new abattoir and solar farm). Cumulative impacts are discussed further in Section 7.6.

To mitigate potential negative effects of the Project on housing affordability and availability (including short term accommodation), ARTC would provide the timely information to Councils about workforce size and the likely timing for the build and decline in the Project workforce. The Project will provide free or subsidised accommodation to construction workers in the non-resident workforce accommodation facilities, and as part of the AMP, require the Principal Contractor monitor the number of non-local personnel choosing to live outside the non-resident workforce accommodation facilities, as well as the availability and cost of rental housing in Goondiwindi, Inglewood, Millmerran and Pittsworth. It will also consider the potential cumulative impact of concurrent projects on housing demand. If rental vacancy rates remain low (as is expected), ARTC would take steps to mitigate negative impacts by requiring workers to take up occupancy in the non-resident workforce accommodation provided, rather than in the rental market or short term accommodation premises (as appropriate).

Potential housing demand from jobseekers

Community agencies have raised the concern that people may move to the SIA impact assessment area seeking work 'at the Project gate', leading to an increase in demand for short term or emergency accommodation or an increased need for support services. ARTC and its contractors will provide clear information through their websites and other channels regarding how to apply for a job and the accommodation options on offer to Project personnel to reduce this risk. ARTC will also monitor rental housing availability in potentially impacted communities to enable any corrective actions required of the contractor (such as strengthening Project communications about how to access employment and Project employment-related accommodation) if these issues arise. This monitoring process will include engagement with the Project's Community Reference Group (CRG) which is described in Section 8.2, and with the DHPW in regard to emergency housing.

7.4 Health and well-being

A community's health and well-being are shaped by a complex interplay of personal, social, economic, and environmental influences. A safe environment, adequate income, meaningful social roles, secure housing, higher levels of education and social support are all associated with better health. This section examines the impacts of the Project on aspects which influence health and well-being.

7.4.1 Social infrastructure

Social infrastructure (community services, facilities and networks) have a vital function in supporting communities' health, education, cultural and social development needs. The main urban centres providing education, health, civic and recreational facilities in the SIA impact assessment area are Pittsworth, Millmerran and Inglewood. Regional level services are accessed at either Toowoomba or Goondiwindi. Other smaller centres provide State Schools and/or community halls, including Gowrie Junction, Kingsthorpe and Yelarbon. This section describes the potential for Project demands (relative to the known state of their capacity) to alter the availability of or accessibility to social infrastructure for local communities.

The Project footprint avoids most towns, reducing the exposure of most community services and facilities to amenity impacts.

Community and recreational services

Project construction would not significantly alter the population of the SIA impact assessment area resulting in increased demand for community services and facilities, except in relation to health and emergency services, as discussed below. With shifts of 12 hours, and as non-resident workforce accommodation will be self-sufficient and located outside of towns, there is little likelihood of accommodation residents 'crowding out' other resident from community and recreational facilities.

There is a possibility of increased demand for services such as counselling, and family support as the result of stresses and anxiety related to the Project, or in regard to relocation of directly affected households. Additional service demand could also be generated for community service agencies providing emergency relief, homelessness and other support if people were to arrive in local towns in search of work and want to stay.

As noted in Section 5.6.7, the capacity of services changes over time in response to community needs, Government funding priorities and the requirements to respond to disasters (e.g. floods, bushfires, drought and the current pandemic). In addition to ARTC's support for increased access to mental health services (refer Section 7.4.2), ARTC will consult with DCDSS prior to construction commencing, and annually during construction, to identify any Project-related stresses on local services, and if stresses on services are identified, enable a cooperative response to community needs between DCDSS, ARTC and community organisations.

ARTC's Community Donations and Sponsorship program is available to a wide range of community organisations and groups which are supporting people affected by stress, anxiety or personal difficulties arising from the Project. The purpose of the funding 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. Eligible groups can apply for amounts between \$1,000 and \$4,000 for one-off, short-term projects or activities. Examples of funded projects may include community resilience-building days, establishing a mentoring program for young entrepreneurs in the area, and community development projects.

Schools

The Brookstead State School (near Ch 152.0 km) and Yelarbon State Schools (near Ch 26.2 km) are located within 200 m of the Project footprint (refer Table 7-3).

There is potential for construction noise to be audible within the schools' grounds. Track and corridor construction works would be transitory, potentially affecting the schools' amenity for a period of weeks or months. Works required to construct the road over rail bridge and road alignment for Yelarbon Kurumbul Road to the Cunningham Highway would be located with 250 m of the Yelarbon State School, which could result in traffic disruptions or noise or impacts over an extended period. Schools may also be concerned about the privacy or security of students, given the influx of non-local personnel.

Works required to construct the Gore Highway overpass would be located within 200 m of the Brookstead State School, with similar potential for traffic disruptions or noise or over an extended period.

Southbrook Central State School is located 900 m southeast of the alignment and may also experience noise during construction as well as disruptions to school bus routes as discussed below.

Assessment of the Project's potential operational noise impacts is detailed in Appendix T: Operational Railway Noise and Vibration Technical Report of the EIS (SLR, 2020). The assessment indicates the potential for noise to exceed the assessment criteria at the Brookstead State School and the Yelarbon State School where noise mitigation measures may be required.

ARTC met with Department of Education in December 2018 to discuss the location of the Project near schools and the potential for noise to affect the schools, and provided further information on the findings of noise and traffic studies as part of a technical workshop for government agencies in August 2019. Consultation via a phone meeting with Department of Education in November 2020 included an update on the Project and the assessment of noise impacts, and the potential need for mitigation measures to address operational noise impacts. The Department of Education will be invited to participate in engagement during the draft EIS display period to discuss the EIS findings, and provided with a copy of the draft EIS if required.

The agreed approach is to work with the Department of Education during the detail design phase to confirm appropriate noise mitigation measures based on an audit of each affected schools' site layout, to determine the applicability of in-corridor or at-property noise treatments. ARTC has also advised Department of Education about the need for permanent road realignments at Brookstead and Yelarbon, and committed to consultation with the Yelarbon and Brookstead communities in the development of more detailed traffic management measures during the detail design phase.

ARTC will consult with the Department of Education and Yelarbon, Brookstead and Southbrook State schools (facilitated by the Department) during the development of the detail design and confirmation of construction methodology to:

- Confirm the location of the rail alignment, road-realignments and associated laydown areas and access tracks
- Describe the construction schedule and the nature of road-rail interface treatments, temporary disruptions to local traffic during construction within the Brookstead, Southbrook and Yelarbon communities, any disruptions to school bus routes and traffic management measures e.g. supervised crossings, traffic flow and speed control measures or relocation of pedestrian pathways
- Conduct an audit of the affected schools' sites layouts, to determine in-corridor or at-property treatments to mitigate operational rail noise impacts, which may include façade treatments, fence treatments or air conditioning
- Confirm all relevant school bus services and contact details for their operators to enable consultation with the operators
- Identify any specific considerations (e.g. off-campus sports or activities) which should be considered in the Project's RUMP and Traffic Management Sub-plan.

Community halls and churches

The Project footprint would be adjacent to the Yelarbon & District Soldiers Memorial Hall and the adjoining Anzac Memorial Garden, and approximately 800 metres from Pampas Memorial Hall. Construction works may result in noise and vibration which could affect the amenity of the halls and the Memorial Garden. Potential for rail noise to exceed Project criteria was identified in relation to the Pampas Memorial Hall. The Yelarbon & District Soldiers Memorial Hall is located approximately 50 m from the rail corridor, with the likelihood of rail noise affecting amenity when trains are passing.

The halls are structures of local heritage value, are valued as a symbol of remembrance and community spirit, and are in use for community activities, meetings and events. Potential vibration impacts will be managed in accordance with Outline Environmental Management Plan provisions and in accordance with the respective Councils' local heritage management requirements to avoid impacts on the hall's structures.

Assessment of construction noise has also identified potential for construction noise to affect the amenity of the Pittsworth and District Assembly of God Church/Harvest New Life Church, which is located 150 m south of the alignment at Ch 171.5 km. There is also potential for the Pittsworth and District Assembly of God Church/Harvest New Life Church and Pampas Memorial Hall to experience rail noise which would exceed Project criteria. The Pittsworth and District Assembly of God Church/Harvest New Life Church will require specific consultation to identify concerns about construction noise, dust or access impacts and potential mitigation measures to reduce impacts on the Church's use and amenity.

ARTC will consult with the management committees/trustees of the Yelarbon & District Soldiers Memorial Hall and Pampas Memorial Hall, and Pittsworth and District Assembly of God Church/Harvest New Life Church leaders, to identify mitigation measures to reduce the impacts of noise and dust on the facilities' amenity. Subject to stakeholders' feedback, this could include temporary relocation and reinstatement of the halls, and/or other mitigation measures to reduce the impacts of noise on amenity.

Table 7-3: Potential impacts on community facilities

Locality	Facility	Proximity to Project footprint	Potential impact on facility	Potential impact on access
Yelarbon	Yelarbon State School	200 m south of the alignment at Ch 2.0 km	Noise impacts during construction and operation	Potential disruption to access during construction for Yelarbon residents travelling west along the Cunningham Highway to Goondiwindi.
	Yelarbon & District Soldiers Memorial Hall	Adjacent to Ch 26.1	Noise impacts during construction	Potential disruption to traffic and pedestrian access during construction for Yelarbon residents
Pampas	Pampas Memorial Hall	900 metres north of the alignment at Ch 145.0 km	Noise impacts during construction and operation	Impacts on access unlikely
Southbrook	Southbrook Central State School	900 m southeast of the alignment at Ch 178.8 km	Potential for audible noise during construction	Impacts on access unlikely
Brookstead	Brookstead State School	100 m north of the alignment at Ch 152.0 km	Noise and visual impacts during construction and operation	Potential disruption to access during construction for Brookstead residents travelling along the Gore Highway.
Pittsworth	Pittsworth and District Assembly of God Church/ Harvest New Life Church	150 m south of the alignment at Ch 171.5 km	Noise impacts during construction and operation	Potential disruption to access during construction for residents accessing the church from the Gore Highway

Community facility access

During construction, the Project's temporary footprint would directly impact on sealed roads, unformed roads and unsealed roads in the Toowoomba LGA and the Goondiwindi LGA. Residents travelling to access schools and community facilities services may experience travel delays or increased traffic during construction, (due to the movement of large vehicles and oversize loads accessing worksites and laydown areas, or due to works at road/rail interfaces). Routes to the following centres would potentially be affected:

- Kingsthorpe and Toowoomba for residents of Gowrie Mountain (at the interface with the Warrego Highway)
- Southbrook (at the interface with Geitz Road and Linthorpe Valley Road)
- Pittsworth (at the interface with Oakey-Pittsworth Road, Lochaber Road and McEwan Lane)
- Brookstead (at the interface with the Gore Highway)
- Millmerran (at interfaces with Millmerran-Inglewood Road)
- Inglewood (at interfaces with Millmerran-Inglewood Road, Thornton Road, Lovells Crossing Road, Schofields Boundary Road and Bybera Road)
- Yelarbon (at the interface with the Cunningham Highway and Suttons Road).

Local roads which would be closed during the construction period (and remain closed during operations), potentially affecting residents' access to services include formed roads and unformed roads, which will also have potential to cause small increases in travel times to schools and community facilities. The Project will ensure that all schools and community facilities in the potentially impacted communities are aware of the construction program, and are provided with regular updates about road closures and roadworks, to allow school community members to plan their travel to minimise delays.

Delays to access to service centres of approximately two minutes would be likely to occur on secondary and local roads when encountering trains at level crossings. As grade separated crossing are proposed at the Gore, Cunningham and Warrego highway interfaces, no disruption is anticipated on these routes.

School bus routes

Interfaces between school bus routes and the Project footprint are outlined in Table 7-4. Disruptions to school access routes, travel times and school bus scheduling are anticipated during construction with most routes interfacing with the Project alignment. There is also potential for short delays to school bus services as the result of level crossing operation.

The only school bus routes that do not appear to interface with the Project footprint are those servicing Gowrie Junction and Goondiwindi, however this will be confirmed in consultation with Department of Education and school bus operators during the detail design period.

Management measures identified in the Outline Environmental Management Plan include:

- Construction traffic on known school bus routes will be restricted to only essential movements during pick-up and set-down times on school days
- Relevant emergency services should be notified in advance prior to the movement of all hazardous/dangerous or oversize construction material and equipment
- Temporary traffic management to be implemented, for example road signs stipulating reduced speed limits as per the Traffic Management Plan
- Consultation with school bus operators in relation to temporary and permanent traffic arrangements to enable adjustments to be made to service timetables.

Table 7-4: Alignment interface with school bus routes

Bus route	Interface with alignment
Gowrie Junction	■ No Interface
Kingsthorpe/Gowrie Mountain	■ One interface at Warrego Hwy
Westbrook	■ One interface at Athol School Road.
Brookstead	■ Two interfaces at Gore Hwy and Yarranlea Road.
Pittsworth	<ul style="list-style-type: none"> ■ One route with two interfaces at Oakley-Pittsworth Road and Lochaber Road ■ One route with one interface at Lochaber Road ■ One route with two interfaces at Lochaber Road and Linthorpe Road
Southbrook	■ Two interfaces at Biddeston-Southbrook Road and School/Linthorpe Valley Road
Millmerran	<ul style="list-style-type: none"> ■ One route with two interfaces at Millmerran-Leyburn Road and Fysh-Elsden Roads. ■ One route with two interfaces both on Millmerran-Inglewood Road. ■ One route with one interface at Kooroongarra Road ■ One Route with two interfaces at Kooroongarra Road and Owens Scrub Road.
Inglewood	■ One route with one possible interface on Millmerran-Inglewood Road
Yelarbon	■ One Route with one interface at South Kurumbul Road
Goondiwindi	■ No interfaces

Health and emergency services and facilities

Construction

The workforce of up to 950 personnel (at peak) may generate an increase in demand for health, ambulance and police services. The nature of demand may also differ from current demands on services, due to the workforce's younger age profile compared to the existing population. Paramedic staff would be employed at major work sites and non-resident workforce accommodation facilities, in accordance with the Principal Contractor's established ratios for paramedic care. This will reduce demands on local services and reduce impediments to community members access to local health services.

It is likely that, for the most part, workforce demands on local health services would involve minor injuries and illnesses attended to by local GPs and allied health services. Personnel requiring basic hospital care would be treated at the Goondiwindi, Inglewood or Millmerran hospitals. Patients requiring more complex treatment would be transferred to Toowoomba where there are a number of hospitals and specialist services.

Consultation between ARTC and the Darling Downs Health and Hospital Service (DDHHS) commenced in December 2018 and is ongoing. This identified the need for advance notice of the construction program and scheduled workforce build up, to enable forward planning by DDHHS for any service adjustments that may be required. For example, smaller hospitals at Millmerran and Inglewood would not have capacity to service the non-resident workforce accommodation without affecting locals' access and would need supplementation, and other health services may require adjustments (such as additional prescription drugs and equipment) to meet the needs of a construction workforce.

Police, Ambulance and Fire Services are co-ordinated in the SIA impact assessment area from command centres in Toowoomba and Goondiwindi. Operational bases (police, ambulance and fires stations) are provided in Pittsworth, Millmerran, Inglewood and Goondiwindi, with some services also available at smaller stations at Yelarbon, Gowrie Junction and Millmerran Downs. Large scale emergencies within the SIA impact assessment area are serviced from Goondiwindi or Toowoomba. Agencies are well organised and consider they have access to the resources needed to attend to any incidents. However, the SES has capacity only as far as Inglewood and assume only a backup role to other agencies beyond Inglewood.

It is expected that the Project would have the following impacts on emergency services during construction:

- Delays to emergency response vehicle times at road/rail interface construction sites and when encountering heavy haulage and large load vehicle (this is a matter of significant concern for community members especially in relation to ambulance response times)
- Increased demand for police services associated with traffic control assistance associated at major construction sites (such as bridges and viaducts), and escorting oversize vehicles or loads (co-ordinated from Toowoomba)
- Possible increase in ambulance service demand in the event of road and/or workplace accidents at construction sites
- Manageable impacts on response times provided alternate routes are available (stationary trains would present a greater problem than rolling stock)
- Non-resident workforce accommodation would create greater demand for police services (Goondiwindi has 15 officers and is seeking to upgrade to a 24/7 station, Inglewood has two officers and is operating at capacity, and Millmerran is a single officer station with limited capacity).

Measures to reduce the potential impacts of Project construction on emergency services include:

- Consultation with Toowoomba and Goondiwindi Local Disaster Management Groups, in addition to QPS and QAS will continue through the detail design process to ensure that appropriate access and egress solutions are incorporated into the detail design to enable movements across the rail corridor

- Early advice to providers about pre-construction works, the construction schedule, the number and nature of vehicles and plant to be used, construction hours and construction personnel numbers
- Provision of a forward schedule for construction activities requiring oversized vehicle escorts to police services and all emergency services bases
- Early engagement with emergency service providers to develop co-operative mechanisms and protocols for emergency responses (first response and recovery), and the maintenance of regular liaison meetings from pre-construction through to Project operation.

Operation

The operational workforce would not create any significant population increase and is therefore unlikely to increase demand for local health services. However, any incidents such as level crossing accidents, derailment, load loss, hazardous goods spill or other major incident, would place a significant demand on local and regional, emergency services (including police, ambulance and rural fire services).

Accessibility and response times for emergency services may be impeded when the railway is operational, due to the likelihood of encountering passing trains at level crossings.

The impact of travel delays may alter the following current ambulance response times in the region for Darling Downs QAS (Dept of Health, 2016):

- Emergency (Code 1 potentially life threatening event) - 50% of responses are achieved in 8.1 minutes
- Urgent (Code 2A requiring undelayed response) - 50% of responses are achieved in 11 minutes.

Assuming only one level crossing is encountered, the worst case scenario would be a delay of approximately two to three minutes. In an emergency, such a delay can have serious consequences. For example, delays of three minutes can halve the chance of survivability for a patient in cardiac arrest (Wiltshire, 2015).

As noted above, the design process will ensure that appropriate access and egress solutions are incorporated into the detail design to enable movements across the rail corridor, in consultation with QPS and QAS.

Prior to the Project's commissioning, arrangements between ARTC and emergency service providers, defining appropriate and co-ordinated responses and communication in the event of accidents and other emergencies, will assist the efficacy and efficiency of emergency service responses. Ready access to train schedules and alternate route options may also be appropriate. Communication with potentially impacted communities regarding risk and safety management, and cooperation with emergency service providers, would also be required to reduce community concerns about emergency services' capacity and response times.

Utilities

The interaction of the proposed rail alignment and associated road works with existing utilities has been a key consideration for the Project's design.

The Project footprint interfaces with 674 utilities, including communication, energy, water utilities and sewerage infrastructure. Of these, 579 are proposed to be relocated, 53 will require appropriate protection, and 42 will remain in place with no treatment required. During construction, surrounding residences and businesses may experience temporary disruption to services from time to time as these services are relocated or upgraded. Consultation has commenced with the various utility providers regarding their requirements for relocation or protection of the services impacted by the Project. Procedures will be developed and implemented in cooperation with utility providers to minimise the potential for service interruptions. Affected businesses and residences will be notified one week in advance of any planned interruptions.

Once operational, the Project will not impact on services and utilities within the area. ARTC is consulting with the owners of utilities which include overhead powerlines, pipes and optic fibre lines to identify potential impacts and develop strategies which will reduce impacts on public and private assets and maintain their benefits to local communities.

7.4.2 Mental health

Anxiety is the most common mental health condition in Australia and can have a temporary or prolonged effect on a person's quality of life and day-to-day functioning (Beyond Blue, 2018). Whilst most people can cope well with a level of stress and anxiety, there is potential for stress related to the Project to affect individual and family well-being or trigger a pre-existing mental health condition. Research indicates that the impacts of major projects for people who oppose them can include increased stress levels, a sense of things happening beyond one's control and distress induced by environmental change (University of Melbourne, 2018).

Community members, particularly by those in proximity to the alignment, are worried about the risk of harm to their physical environment, their sense of place and quality of life, and some landowners are worried about their future financial security.

The Project is likely to have both positive and negative effects on the mental health of community members, through bringing benefits such as employment or new business opportunity, and through disadvantages such as disruption to quality of life or business operations. Risks to mental health may be moderated where benefits could also be gained.

Pre-construction

Consultation conducted for the SIA indicate that drought is affecting farmers and other businesses in the potentially impacted communities. Pre-construction impacts such as anxiety about changes to amenity are compounding this, with stress and anxiety already evident within the community, with respect to potential impacts on livelihoods, property values and uncertainty. Participants in the community engagement have noted increased evidence of stress amongst some community members and have highlighted the need for appropriate support to be available immediately to support those who are struggling with stress. Stress is also evident in communities suffering the residual negative effects felt during construction of the Toowoomba Bypass.

The Project would require property acquisitions that would commence prior to the construction period. Uncertainty about the acquisition process, its implications for business operations and/or future living arrangement is a source of stress and anxiety for people who are affected. As described in Section 7.1.2, ARTC is consulting with residents whose properties would be acquired, and will work closely with them to reduce Project-related stress and any practical difficulties with their transition to new living arrangements.

While health agencies advise they have not seen escalated service demands from Project-related stress, it was their view that stress may be more evident when the likelihood of the Project proceeding increases (such as at Project approval and/or commencement of property acquisitions).

Construction

Employment opportunities during construction would be likely to have positive mental health benefits for the individuals employed, particularly if previously unemployed. This would be particularly important where unemployment levels are high, such as in Yelarbon, and amongst particular population groups such as Indigenous people and young people. Employment in this phase may also benefit individuals and families struggling financially as a result of drought. It would be important to ensure that training and employment opportunities are targeted to people in the region experiencing such hardships to increase their prospect of being engaged.

Disturbance to farming properties and alterations to floodplain hydrology (affecting flooding and water storage) as a result of construction are also stress factors. ARTC worked closely with affected land holders in the design of flood modelling, and the design and engineering of the proposed alignment. ARTC and the Project's design team are consulting with affected land holders to modify design, develop appropriate mitigation measures and discuss land acquisition where appropriate.

Construction noise and vibration disturbances may cause stress and anxiety for residents near construction sites, particularly if those sites require extended periods of activity (as discussed in Section 7.1.4). These impacts will be mitigated by measures set out in Chapter 22: Outline Environmental Management Plan of the EIS, as referenced in 7.1.4, and supported by the Inland Rail Complaint Management Handling Procedure.

Concern was raised during consultations about the risk of increased substance abuse due to high disposable incomes amongst Project personnel, the influx of temporary workers, and stress related causes. ARTC will adopt mentally healthy workplace principles and practices, and apply strict protocols for the management of workforce substance use and behaviour (discussed in Section 7.2.4). It will also invest in community education programs in responsible drug and alcohol use.

There is a likelihood of increased demand for support services (such as counselling and family support) during the construction phase in response to the stresses and changes resulting from Project acquisitions or perceived Project impacts. These will be supported by community development initiatives as outlined in Section 8.5 and the program-wide mental health partnership described below.

Operation

The community survey and community information sessions revealed anxiety about operational impacts of the Project. Participants held a broad range of concerns about impacts on the rural character and amenity of their environment, property values and aspirations, severance of landholdings and impacts on farming operations, road safety, dust, noise and vibration impacts. The community also perceives change to be difficult, rating their capacity to adapt to change lower than other community attributes.

Potential stress factors during Project operation which were identified in consultation include:

- Fear of increased flooding risks
- Delays at level crossings, which can generate stress, with potential health consequences for some (Morant 2015), or trigger risky behaviours to try to 'beat the train'
- Disruptions to farming activities and travel delays
- Concern for the safety of children, young drivers, elderly and disabled community members in relation to level crossings
- Noise and vibration disturbance for residents close to the alignment
- The potential impacts on property values and re-sale.

Stress and anxiety about disturbances to people's quality of life can persist even if disturbances fall within regulated standards.

Police consulted for the SIA noted that rail suicides had occurred in the Toowoomba region. Railway-based suicide is a risk, as evidence shows that access to a lethal means is a key factor in turning thoughts of suicide into actual suicide, and a rail line provides such lethal means (Toronto Public Health, 2014).

Managing impacts on mental health

While the extent and nature of mental health impacts from the Project is difficult to estimate, due to the complex interplay of factors that influence mental health, it is likely that most Project-related impacts would be felt at an individual level, affecting smaller numbers of people, rather than having a population-wide effect.

Most cases would be likely to involve high prevalence stress disorders (such as anxiety, sleep disorders and depression) which are generally managed by GPs. Less common would be instances where the Project may trigger more complex, persistent mental health disorders that would be managed by specialist mental health services through the DDHHS.

While the number of Project-related contacts with GP services since the Project was announced are not known, DDHHS was not aware of any referrals made to their services at the time of interview. DDHHS does not anticipate the Project would significantly increase demand for their mental health services and has advised that services in the region have the capacity to absorb any additional demand that may be triggered. However, it was suggested that ARTC ensure GPs are well informed about the Project, and that Project staff are trained in identifying and responding appropriately to signs of stress in the community⁷.

The Darling Downs Suicide Prevention Plan was commissioned by the Darling Downs and West Moreton PHN and completed in June 2018 but had not yet been released as of January 2020. Its purpose is to help address the high rate of suicide, attributed in part to ready access to firearms, relationship breakdowns, domestic violence and financial stress (Tuffield D, cited in Newton M, 2017). ARTC will access the report when available and work with the PHN in refining its mental health partnership projects to be delivered within the SIA impact assessment area.

ARTC has a strong focus on creating a safe environment for all and supporting community well-being during the changes the Project would bring. Measures initiated to date to support to mental health in the potentially impacted communities include:

- A program-wide mental health partnership with independent specialist services to support the mental well-being of community members
- Providing training for Project staff who have direct contact with community members (land access personnel community engagement personnel, and complaints staff) in how to recognise and respond appropriately to signs of stress
- Offering training to CCC members (focussed on assisting them (as community members based in and trusted by local communities) to recognise stress and support residents to access support services
- Disseminating accurate, transparent and accessible information about the Project to the community, including addressing community information needs about the acquisition process, the draft EIS process and outcomes
- Communicating transparently with the community about the full rollout of the Project (including 3.6 km length trains and passing loop locations) to alleviate uncertainty
- Engaging 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
- Identifying beneficial impacts and opportunities to promote community well-being, developed in consultation with the local community
- Supporting mentally healthy workplace practices on site and in non-resident workforce accommodation facilities
- Monitoring use of services funded as part of the mental health partnership
- Listening to and responding to community concerns and anxieties.

⁷ Executive Director Mental Health, Alcohol and Other Drugs at Darling Downs Hospital and Health Service (pers. comm. 19/12/18)

The Project is expected to lead to the establishment of new and/or expanded businesses and industries, increasing employment opportunities for people in the SIA impact assessment area, with the potential for mental health benefits for the individuals involved.

7.4.3 Environmental qualities

Construction

As outlined in Section 7.1.4, construction activity is expected to generate noise and vibration impacts on sensitive receivers. Construction noise or vibration may affect daytime amenity and cause sleep disturbance for people (e.g. shift-workers, elderly people and children) who sleep during the day. Assessment of the potential for construction noise and vibration levels (refer Appendix S: Construction Noise and Vibration and Operational Road Traffic Noise Technical Report of the EIS) indicates that a large number of dwellings may be exposed to noise during the construction period, requiring a suite of noise and vibration mitigation measures.

Assessment of the potential for Project construction to increase dust for properties near the Project footprint (refer Appendix O: Air Quality Technical Report of the EIS) indicates that the unmitigated air emissions from the construction of the Project pose a low risk of human health impacts. However, dust may cause a nuisance for residents near construction sites and may also cause anxiety about potential health impacts.

The measures that would be adopted to mitigate noise, vibration and air quality impacts are outlined in the Outline Environmental Management Plan prepared for the Project (Chapter 22 of the EIS) as referenced in Section 7.1.4 and will be incorporated into the Project's CEMP prior to the commencement of construction.

Operation

With respect to operations, residents have raised concerns about the potential for noise, vibration and dust to impact their health.

Rail noise, including locomotive engine noise, wheel squeal and brake squeal, locomotive horns and the operation of signalled crossings was raised as a concern by residents and businesses near the Project footprint.

Appendix T: Operational Railway Noise and Vibration Technical Report of the EIS (SLR, 2020) presents an assessment of the potential for rail noise to cause sleep disturbance. The assessment identified a total of 136 sensitive receptors (131 residential and 5 non-residential) where the predicted noise levels are expected to be above the noise assessment criteria adopted for the Project without the implementation of mitigation.

Appendix T: Operational Railway Noise and Vibration Technical Report of the EIS references the WHO guideline Night Noise Guidelines for Europe (World Health Organisation, 2009) which recommends that indoor noise levels are not above L_{Amax} 42 dB(A) to preserve sleep quality, which the Appendix T indicates corresponds to a conservative external (outdoor) level of L_{Amax} 49 dB(A) (SLR, 2020). Based on a conservative assessment, the assessment found that the noise levels from rolling stock could be above L_{Amax} 49 dB(A) within approximately 1 km from the rail corridor. As noted in Appendix T, individuals respond to noise differently and audible railway noise may not cause disturbance or annoyance impacts for all residents. There is however potential for rail noise to disturb residents' sleep. This will require mitigation measures to reduce noise levels, as outlined in Chapter 22: Outline Environmental Management Plan of the EIS.

In some locations, residents may feel that there is a disparity between noise criteria which are considered acceptable to protect human health, and noise levels or noise types which can be experienced as intrusive or stressful. As noted previously, stress and anxiety in response to disturbances to people's quality of life can persist even if the disturbances (such as noise or vibration) fall within regulated standards, and particularly if they currently enjoy a mostly quiet rural soundscape.

Diesel emissions may affect air quality where concentrations occur. Overall, there is limited research on concentrations of and human exposure to PM_{2.5} (fine particle) emissions from diesel trains (Jaffe et al. 2015). The limited studies regarding emissions from diesel trains as a potential health hazard found that they may only be significant in rail yards and enclosed rail stations (Jaffe et al. 2015; Rail Safety Standards Board, 2016; van Essen, 2008).

The results of the air quality assessment of Project operations (Appendix O: Air Quality Technical Report of the EIS) indicate that cumulative background plus Project air quality pollutants to be below guideline levels at all sensitive receptors, and the deposition of emissions in water tanks predicted that concentrations of potential contaminants would also be significantly lower than Australian Drinking Water Guidelines.

Local residents have raised concerns that the alignment could be used in future to transport coal, potentially affecting community health. There is presently no foreseeable market-driven demand for coal to be transported on the Inland Rail network, between the NSW/QLD border and Gowrie. However, the transportation of coal on this section of the network cannot be precluded in future operational years.

If coal is to be transported in future operational years, the potential for coal dust generation would require management via a Coal Dust Management Plan (CDMP). The measures included in the CDMP would aim to minimise surface lift-off of materials in transit and establish protocols to minimise spillage onto external areas of wagons. If a CDMP was required to support future operations, the plan would be prepared in consultation with the relevant regulatory agency at that time.

Community concerns about dust emanating from the rail corridor indicate the need to provide information to the community about how dust from the Project's construction and operation will be minimised. If residents living adjacent to the Project footprint identify health concerns regarding dust during the construction phase, and investigation identifies reasonable causes for concern, ARTC will provide air quality monitoring mechanisms (e.g. dust deposition gauges or testing of water tanks) and if the results indicate it is required, provide additional dust mitigation measures.

For the operational period, ARTC will establish communication mechanisms that are accessible to all residents living near the Project footprint, including implementation of ARTC's Complaints Handling Management Procedure (refer Section 8.2.6). If complaints about rail noise or dust indicate that a particular section of the rail line or a specific freight rail service is contributing to unacceptable levels of noise or dust, ARTC will investigate and implement measures to address the cause of the concern.

7.4.4 Condamine River floodplain

The Project involves a significant (12.5 km based on 1% AEP inundated floodplain width) crossing of the Condamine River floodplain, including cuts, embankments, bridges, and viaducts, between Ch 137.0 km and Ch 150.0 km. The southern end of the floodplain for the Project crossing is just to the south of Grasstree Creek near the locality of Yandilla. The northern end of the floodplain for the Project is just to the north of Elsdon Road near the township of Brookstead.

The floodplain crossing would pass through highly productive agricultural areas with unique soils and carefully managed water flows. One of the floodplain's important functions is to reduce water flow velocities, by temporarily storing water to reduce flood peaks and downstream impacts of flooding. Local landowners include inter-generational farming families and major agribusinesses that have endured through floods, droughts and the intrusion of other land uses, using sophisticated farm and water management knowledge built over decades.

Farmers and community members in the Condamine River floodplain raised concerns that the Project could result in:

- Permanent alienation of high-quality agricultural land within the Project footprint
- Changes to water flows that may impact on flood irrigation and potentially on productivity

- Increased high velocity overland water flows, resulting in loss of topsoil/black soils, streambank erosion or sand and silt deposition
- Loss or damage to crops and farm infrastructure
- Reduced access to land or water which supports farms due to changed flooding patterns
- Unanticipated flooding effects due to debris blocking culverts
- Changes to flooding patterns upstream or downstream of the floodplain crossing.

Assessment of impacts on agricultural land (refer EIS Chapter 7: Land use and tenure) indicates that high quality agricultural land within the Condamine River floodplain and outside of the existing Millmerran Branch Line rail corridor would be required to accommodate elements of the Project.

ARTC has developed a detailed flood model of the Condamine River floodplain catchment area in accordance with the Australian Rainfall and Runoff Guidelines 2016, using multiple data sources including the results of consultation with landowners, and considering the predicted future impacts from climate change.

Based on the modelling, a preliminary design solution has been developed to minimise impacts on existing water flows, while maintaining connectivity to existing infrastructure. The preliminary design solution includes five bridges with nearly six kilometres of bridge openings, and embankments with more than 540 large culverts.

The preliminary solution was selected to minimise impacts to landowners and stakeholders and was presented to directly affected individual landowners in one on one consultations during October 2018. Following this, the results were presented at the Southern Downs CCC on 7 November 2018, and at community information sessions during November 2018. Several CCC members raised concerns about the alignment, the bridge designs, culvert size and impacts on land and homes due to the potential for increased flooding. The information and feedback received from the community and stakeholder engagement has led to further running and refinement of the hydrology model and preliminary design solution using different combinations of embankment and viaduct structure to achieve an optimised preliminary design solution.

The results of the Project's flooding and hydrology assessment are presented in Appendix Q1: Hydrology and Flooding Technical Report of the EIS and indicate that alterations to the Condamine River floodplain would result in changes in peak water levels under the 1% AEP event that exceed the flood impact objectives adopted by the Project at:

- Five dwellings between Pampas and Yandilla
- One shed at Pampas
- Three commercial buildings (grain silos) at Yandilla.

ARTC will continue consultation with land holders whose properties are directly affected by the Project footprint or by the potential for increased flooding, to identify management measures which will reduce impacts on the use and amenity of their properties, and the safety of humans and stock.

In combination, loss of agricultural land, the operation of rail bridges across the floodplain and community and concerns about flooding may result in anxiety about potential impacts on the floodplain's functions or environmental qualities.

7.4.5 Flooding

Stakeholders have concerns about the potential for the Project to result in changes to the duration and extent of flooding impacts on farms, businesses and homes. For some, there is a high degree of anxiety about potential flood impacts. Concerns about impacts on stormwater drainage were also raised by TRC.

The Project has undertaken comprehensive consultation with stakeholders as part of calibrating the flooding model and identifying potential impacts on properties and dwellings. As noted above, flood sensitive receptors that are projected to be impacted by changes in peak water levels under the 1% AEP event that exceed the flood impact objectives adopted by the Project include nine dwellings, one shed three grain silos. One State-controlled road (Cunningham Highway at Yelarbon) and one local public road (Leesons Road between Kingsthorpe and Gowrie Junction) may also be impacted by changes in peak water levels under the 1% AEP event.

This may affect feelings of security, potentially the amenity of homes, and the use and condition of sheds, silos and other infrastructure on affected properties. ARTC is working with the owners of affected properties to develop effective flood mitigation solutions and/or acquisition agreements for increased flooding potential.

In order to avoid increasing flooding in Yelarbon, the Project proposes to raise the existing levee on the southern side of Yelarbon. This would direct water flows away from homes and reduce flooding impacts on the GrainCorp's operations by increasing cross-drainage in this area. Raising the levee would not solve the existing flooding situation, but is predicted to provide a reduction in flood levels of an average 30 millimetres across town.

7.4.6 Access to natural resources and active recreation

Consultation identified significant stakeholder and community concern about the Project's potential impacts on water availability as the result of disturbance to bores or competition for water allocations. This is of particular relevance given the current drought.

The Project will require access to water during construction for earthworks, conditioning of material, maintenance, concrete batching and dust suppression. As detailed in the Chapter 22: Outline Environmental Management Plan of the EIS, construction water requirements will be confirmed through the construction approach refinement process, and a construction water strategy will be developed as a component of the Construction Management Plan, in consultation with DES, GRC, TRC, SunWater, other relevant bulk water suppliers and potentially impacted landowners and community groups. Licenses, approvals and agreements to access water from sources identified in the finalised construction water strategy will be obtained. These may include water licenses under the Water Act 2000 or access agreements with bulk water suppliers or private landowners.

Where private water sources are utilised for construction purposes, monitoring will be undertaken during extraction to ensure volumes and conditions stipulated by license requirements and/or private landowner agreements are met.

Potential impacts on landowners' bores were assessed in Appendix R: Groundwater Technical Report of the EIS, which concluded that:

- There are 30 registered bores within the Project footprint. These bores, plus unregistered bores that also occur within the Project footprint, are likely to be decommissioned for the progression of the Project.
- Impact modelling indicates that no registered bores located outside of the Project footprint are expected to experience groundwater drawdown as a consequence of Project activities.

As noted in Chapter 22: Outline Environmental Management Plan of the EIS, registered bores that may experience drawdown impacts as a result of Project activities will be confirmed. Where drawdown impacts are anticipated in bores that would not otherwise be decommissioned by the Project, ARTC will engage with each licensed user to determine and agree an appropriate mitigation approach (e.g. monitoring with bore-specific impact thresholds for intervention and 'make good' agreements).

During the construction phase, impact mitigation measures relevant to surface water quality are expected to be sufficient to mitigate most potential conceivable impacts, such that the residual significance would be low for all but one specific impact (Appendix P: Surface Water Quality Technical Report of the EIS). This specific impact was the potential for an increase in saline discharge into proximal waterways during construction, potentially remaining at a moderate residual impact. An increase in saline discharge into proximal waterways, if not mitigated, could affect water quality and suitability for agricultural or residential use. Appendix P: Surface Water Quality Technical Report identified the need for strict vigilance and adherence to ARTC controls around management of problem soils and sediments to reduce this risk.

For the operational phase, the ARTC-approved impact mitigation measures were assessed to be sufficient for the purposes of mitigating impacts that could cause impacts to the receiving surface water environment.

The Project is not expected to impact on communities' access to or enjoyment of the SIA impact assessment area's parks or hiking trails for recreational use with one exception. Between Ch 33.4 km and Ch 35.4 km, the Project traverses the eastern boundary of the Rainbow Reserve, which is a small reserve available for camping and fishing at the junction of Eukabilla Road and Kildonan Road. There are no facilities in the reserve that would be affected, however the peaceful ambience of the reserve may be affected by noise whilst construction activities are nearby, and during operations, whilst trains are passing. Rainbow Reserve is one of six fishing and camping reserves along the border rivers to the east of Goondiwindi (Freerange Camping, 2019) so this is not expected to have a significant impact on the availability of recreational resources.

7.4.7 Safety

Feeling unsafe can influence levels of anxiety and be a barrier to community participation and accessing services. There is a high level of perceived community safety and friendliness amongst communities across the SIA impact assessment area, along with low crime levels (refer Section 5.7.8).

Construction

Non-local workers

The Project is likely to generate an influx of new people to local areas, and it is possible that perceptions of safety ('stranger danger') would change for residents near the Project footprint as a result. It is also anticipated that residents of towns selected to host non-resident workforce accommodation would have some safety concerns related to such a significant influx of newcomers to their small community. Landowners have also raised concerns about the ability to identify personnel who have been authorised to access to their properties.

ARTC will employ the following strategies to reduce concerns about and potential impacts on community safety:

- Enforcing a Code of Conduct containing requirements for positive behaviours and respect for local residents and businesses applying to all contractor and Project personnel
- Ensuring that the Principal Contractor has appropriate workforce conduct policies and procedures, complemented by complaints mechanisms which ensure fast and effective resolution to any issues experienced
- Appropriate authorisation procedures and means of identification for personnel accessing private property.

ARTC will also engage the Project's CRG in discussion of a welcome event for construction personnel to support relationship building between the construction workforce and local residents. Additional measures would apply to the operation of non-resident workforce accommodation (refer Section 8.4).

Domestic and family violence

Domestic and family violence (DFV) has significant impacts on the health and well-being of victims. While the reasons for domestic violence are complex, contributing factors include drug and alcohol abuse, irregular or intermittent work, mental health issues (including anxiety), stress and historical trauma (such as racial discrimination and disadvantage).

Improved access to employment could remove one trigger for DFV, potentially reducing occurrences. However, heightened stress related to disrupted accessibility, travel times, noise and other disturbances associated with the Project could also increase the risk of violence. The initiatives for managing impacts on mental health outlined in Section 7.4.2 would help to reduce this risk.

Traffic safety

During construction, the workforce will be encouraged to move within the Project footprint where practically possible, to minimise use of public roads. Non-resident workforce accommodation is proposed to be located within reasonable proximity to worksites (refer Section 7.3.3) to manage personnel fatigue which could otherwise lead to accidents, and shared transport arrangements will also be investigated. Selection of the proposed locations for non-resident workforce accommodation has considered road access, which will be further considered in consultation with Councils and DTMR.

Construction would involve large and oversize loads including deliveries of equipment, building supplies and steel. This would necessitate interaction between Project traffic and public traffic, including school buses, which operate on several of the roads affected by the Project. There would also be increased traffic movements generated by employees from within the region driving to work sites. Potential risks (prior to mitigation) are presented in Appendix X: Traffic Impact Assessment of the EIS and may include:

- Potential for an increased risk of road accidents
- 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.

Appendix X: Traffic Impact Assessment of the EIS includes consideration of increased traffic and road/rail interfaces. And rated the residual risks to traffic safety as low. Mitigation measures are provided in Appendix X of the EIS and include preparation of a RUMP and Traffic Management Sub-plan in consultation with DTMR and local Councils.

The Project's Outline Environmental Management Plan (Chapter 22 of the EIS) outlines strategies to mitigate potential impacts on road safety, including:

- Input will be sought from relevant stakeholders prior to finalising the detail design of those aspects of the Project that impact on the operation of road infrastructure under the management of these stakeholders
- Identification of suitable detour routes will be undertaken for all of the affected school bus services
- A Traffic Management Sub-plan is to be prepared prior to construction as a joint effort between the Principal Contractor, DTMR, local governments and an accredited road safety auditor once preferred construction routes are confirmed. The Traffic Management Sub-plan is to be implemented and reviewed annually for effectiveness, including review by road asset managers (DTMR and local governments)
- A RUMP will be prepared for the Project
- The community will be notified in advance of any proposed road and pedestrian network changes through signage, the local media, and other appropriate forms of communication

- Travel demand management campaign will be delivered to inform the public on works and its effect on network operations
- Ongoing consultation with relevant councils, , DTMR, Police, emergency services and affected property owners/occupiers will be conducted.

This will be supported by 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 staff in the event of any concerns.

Contaminated land management

Project activities, particularly through construction, have the potential to disturb existing contaminated soil or groundwater, or to cause land contamination through leaks or spills or through the transport and movement of existing contaminated soil or groundwater. The transport and movement of people, vehicles and machinery through construction, or the transport and movement of goods in operation, also have potential to increase biosecurity risks relating to the spread of weeds.

Land contamination risks have the potential to impact on agricultural land, with potential effects including reduced soil quality, reduced productivity, and increase in costs to agricultural operations.

Assessment of the potential for the Project to interface with contaminated land is presented in the Border to Gowrie EIS at Chapter 8: Land Resources (ARTC, 2019) indicates that potential sources of contamination in the vicinity of the Project include agricultural activities, quarries, hazardous materials storage and landfilling. As outlined in the Outline Environmental Management Plan (Chapter 22 of the EIS), measures for mitigating risks relating to contaminated land will address the following criteria:

- Minimise and manage the disturbance of problem soils (i.e. erosive, dispersive, reactive, acidic, saline, sodic, alkaline) to avoid or minimise impacts to land, water and ecosystems
- Assess, classify, manage and dispose of soil, spoil, ballast and waste in accordance with the relevant regulatory requirements
- Avoid the introduction of new contamination risk or ongoing management issues through the import of contaminated fill or other construction activities
- Minimise the import and disposal of fill material
- Prevent the contamination of soil as a direct result of construction activity
- Minimise and manage the environmental and health impacts arising from disturbance of pre-existing contaminated and/or hazardous soil and materials
- Avoid the unanticipated disturbance of unexploded ordinances.

Assessment of potential for risks to human health and the environment indicates that with appropriate mitigation measures as recommended in Project's Outline Environmental Management Plan (Chapter 22 of the EIS), risks to human health would be negligible.

Biosecurity

Detailed assessment and mitigation of biosecurity issues was undertaken as part of the Appendix J: Terrestrial Ecology Technical Report of the EIS, finding that, without appropriate management strategies, the Project activities have the potential to disperse weeds into areas of remnant vegetation where weed species are currently limited or occur in low densities. A Biosecurity Management Sub-plan will be developed as part of the CEMP, which complies with the Project/conditions of approval, relevant regulatory requirements and guidelines. This is expected to include, as summarised in the Chapter 22: Outline Environmental Management Plan of the EIS:

- Requirements for pre-clearing surveys, including weeds, pest animal presence or risk of presence - map existing extent and severity of weed infestation and to determine weed management requirements

- Pest animal management (including fire ants in fire ant biosecurity zones)
- Site hygiene and waste management to deter pest animals
- Weed surveillance and treatment during construction and rehabilitation activities
- Pesticide and herbicide use, documentation and limitations on use i.e. not used in sensitive environmental areas, drainage lines that flow to waterways and aquatic habitats, broadscale use does not result in an increased erosion and sediment risk.
- Vehicle, machinery and imported fill hygiene protocols and documentation
- Erosion and sediment control risk associated with broadscale weed removal or treatment.

This is expected to significantly reduce the likelihood that Project activities will result in biosecurity risks.

Operation

Traffic safety

Potential impacts on traffic safety during operations include:

- Disruption to familiar travel routes due to road re-alignments and delays at level crossings
- Running line and level crossing collisions with motor vehicles, pedestrians and cyclists
- Heightened risk exposure for young males, young drivers, school children, older pedestrians and people with disabilities in crossing the rail corridor.

Queensland has the fourth highest normalised rate of level crossing collisions in Australia, at 0.4 collisions per million train kilometres travelled per year. Most of the serious injuries reported in Queensland occurred within the greater Brisbane network (Queensland Government Data, 2013).

A Queensland study has shown that driver decision making at level crossings is affected by the amount of time needed to wait, with frustration and risky behaviour more pronounced when drivers had to wait for longer times (Larue, 2016). Risky behaviours include driving through flashing lights to beat the train, driving around boom gates, and performing U-turns or back-up movements. The study found that the longer the wait time, the greater the frustration and increased likelihood of risky behaviour. The study also noted that although collisions at level crossings are relatively infrequent, the severity of collisions is high, and collision risk increases with an increase in the number of level crossings and magnitude of traffic flowing through them.

Studies in North America have found that gender and age are also factors influencing behaviour at level crossings, with young male pedestrians more likely to cross against activated warning signals and drivers aged 25-35 years more likely to commit violations at level crossings (Morant, 2015). School children, older pedestrians and those with disabilities were also found to be disproportionately represented in railway crossing fatality databases (Morant, 2015).

Level crossings will be provided with warning signage, line marking, and other relevant controls, in accordance with the relevant national and ARTC standards ARTC will develop a safety education program which has a clear focus on interactions between the rail corridor, roads and other access tracks, interactions with rural roads and rural traffic.

Hazards and risks

The Project's hazard and risk assessment identifies potential hazards falling into medium to high risk levels including incidents related to dangerous goods freight transport, trespass, pedestrian and community safety, interface with live trains and derailment, or involving travelling stock route, private access route, overbridges, emergency access and connectivity during floods.

In SIA consultation, QFES stakeholders requested that hazard management measures also consider the arrangement of materials on carriages of good transported in relation to hazard risk reduction.

ARTC operations are required to comply with a range of legislation in Queensland, as outlined in the Border to Gowrie EIS Chapter 3: Legislation and Project approvals process and including with respect to management of safety risks the Explosives Act 1999 (Qld), Rail Safety National Law (Queensland) Act 2017 and Work Health and Safety Act 2011 (Queensland).

As described in EIS Chapter 19: Hazard and risk, the residual risk of potential bushfire incidents was rated as medium. Proposed mitigation measures provided in Chapter 22: Outline Environmental Management Plan of the EIS include:

- The rail corridor will be designed to be kept clear of woody vegetation, thereby acting as a firebreak in bushfire risk areas, e.g. Whetstone and Bringalily State Forests
- This aspect of the design will be supported by consultation with DAF to ensure sufficient access is available for emergency access and firefighting activities
- A Rail Maintenance Access Road (RMAR) strategy has been developed as a part of the design to provide access to the rail corridor during construction and operation for emergency service vehicles. Where provided, the RMAR will be designed to be suitable for use by emergency response vehicles.

Further consultation with the QFES and local rural fire brigades will confirm the location of access tracks which may be affected by the Project's detail design, and the actions required of the Project in order to ensure firefighters' continued access to areas that they are currently able to service.

ARTC is also required to comply with the specific operational rail conditions that are required in both in Queensland and Australia for ARTC to remain an accredited railway manager. ARTC operates under its Safety Management System which includes safe operations protocols of the network including incidents and has direct contact with emergency services in all states of ARTC operations.

Hazard mitigation measures have been developed for the Project and will be applied throughout its lifecycle. Controls include mitigation measures incorporated into engineering and design development, in addition to management strategies and procedures for construction and operations. The management of hazard risk throughout the life of the Project will involve ongoing reporting, monitoring, reviewing and documenting the risks. The Project will also ensure that the requirements of the safety management system are implemented and communicated to all personnel.

At the national level, the Inland Rail Business Case (ARTC, 2015) anticipates that the Inland Rail Program as a whole would change the nature of truck movements (e.g. reducing the need for long-haul freight movements) and result in improved road safety and reduced truck volumes in regional towns. The Inland Rail Business Case (*Ibid.*) notes that analysis has shown that the Inland Rail Program will reduce the nation's reliance on road transport, and as a consequence, reduce road congestion, lower carbon emissions, reduce road traffic noise, and reduce deaths and injuries from road accidents.

7.4.8 Legacy benefits

A consistent theme throughout engagement with the community has been concern about how the Project would benefit local communities. A number of stakeholders have commented that creating legacy benefits would help to compensate for some of the stress and disruption the Project is likely to generate.

The provision of employment and training opportunities will build the SIA impact assessment area's skills base, and may enable businesses to improve their trading levels and diversify their offerings, which will leave a positive legacy for local communities.

The Inland Rail Program is planning telecommunications systems as part of construction requirements and ongoing safe rail operations. The Project is working with telecommunications carrier network operators to provide services for construction site offices, non-resident workforce accommodation and the railway corridor. While the focus will mainly be for the provision of voice and high speed data services in the vicinity of the rail corridor, it is envisaged that the extended wireless telecommunications network coverage and optical fibre systems will benefit the local communities in those areas where such services did not previously exist.

Other stakeholders' suggestions have included:

- Creating a keeping place for Indigenous history, art and culture
- Naming rail sidings after Indigenous people
- Providing community facilities
- Capturing an opportunity for non-resident workforce accommodation to augment long term housing supply
- Sponsoring expanded emergency health retrieval services
- Facilitating the development of town infrastructure (waste, roads, water).

ARTC will consider opportunities for the Project to contribute legacy benefits that have a relevance to the Project and will consult with the communities affected to develop appropriate responses.

7.5 Business and industry

This section discusses the Project's potential impacts and benefits for businesses and local industries.

7.5.1 Impacts on farms and agribusinesses

The proposed alignment would follow the brownfield corridor (i.e. South Western Line and the Millmerran Branch Line) for approximately a third of its length, however the construction of a new rail corridor and associated infrastructure, road realignments and laydown areas would impact on a range of farms and agribusinesses.

As described in EIS Chapter 7: Land use and tenure, it is assumed that productive land within the existing South Western System and Millmerran Branch Line rail corridors and within existing road corridors has already been sterilised., so the assessment only considers the areas within the Project footprint that are located outside of these corridors. The permanent and temporary footprints will traverse less than 0.1 per cent of the Class A agricultural land and land within an Important Agricultural Area (IAA) within the Goondiwindi LGA. The permanent disturbance footprint will traverse 0.5 per cent and the temporary disturbance footprint will traverse 0.1 per cent of the Class B land mapped within the Goondiwindi LGA. In the Toowoomba LGA, the permanent footprint will traverse 0.2 per cent of Class A agricultural land, Class B agricultural land or land within an IAA within the Toowoomba LGA. The temporary footprint will traverse less than 0.1 per cent of Class A, Class B or land within an IAA.

At the regional level, these are very small decreases in the availability of agricultural land. However, at an individual property level, the loss of agricultural land along with severance or isolation of parcels of agricultural land may lead to reductions in productivity. This may have an impact on the economic output of potentially impacted communities, which may be offset by a potential uplift in productivity due to the reduction in transportation costs afforded by the Project (*Ibid.*).

The Project's land requirements are detailed in the Border to Gowrie EIS Appendix F: Impacted Properties. Based on the current Project design, within the Toowoomba LGA, land acquisition for the Project would affect approximately:

- 11 properties, where the predominate use is irrigated cropping. For five of these properties the land area required for acquisition less than 2 per cent of the property, and for the remaining six properties is equivalent to between 10 percent and 18.9 per cent
- One property where the predominate use is intensive animal production, where less than 0.2 per cent of the property is required
- 181 properties where the predominate land use is cropping including approximately:
 - 30 Land lease, Reserve land or State land properties
 - Seven easements used for dryland cropping
- 144 freehold properties. For approximately 57 of these properties, the land area required would be equivalent to less than five per cent of the properties' areas, and for a further 33 properties, would be equivalent to less than 10 per cent of the land area. For 43 properties the land requirement would be between 10 per cent and 50 percent, and eleven properties would have a requirement for more than 50 percent of the properties' land areas
- 96 properties where the predominate land use is grazing, including approximately:
 - Eight easements, of which three could be wholly required, with percentages of the other easements required ranging between 0.1 per cent and 14.3 percent
- 16 land leases or reserve properties, where the alignment would require use of most or all of the properties
- Two freehold properties where the predominate use is grazing modified pastures, requiring 2.6 percent of the land area for one property and 8.0 per cent of the land area for the other

- 70 freehold properties where the predominate use is grazing, with land areas required including less than 5 per cent for 20 properties, between 5 and 10 per cent for 12 properties, between 10 and 50 per cent for 25 properties, between 50 and 80 per cent for five properties, and the total land area for eight properties.

In the Goondiwindi LGA, land acquisition for the Project would affect approximately:

- 13 irrigated cropping freehold properties, five of which would require acquisition of land areas equivalent to less than 1 per cent of the properties, with up to 9 per cent of the land area required on the remaining eight properties
- Eight cropping freehold (non-irrigated) properties with the land area required for acquisition less than 1 per cent in all cases
- 77 properties where the predominate use is grazing, including approximately nine lands lease properties and easements used for grazing and 68 freehold grazing properties. Of these the Project's proposed land acquisitions are equivalent to less than 5 per cent of the property areas for 39 properties, less than 10 per cent for an additional 13 properties, and between 10 per cent and 22.3 per cent for the remaining 16 properties.

Potential impacts on agricultural properties, which may commence during construction, may include:

- Direct impacts on the productivity and use of land, which are addressed as part of ARTC's arrangements with directly affected properties
- Severance of landholdings and intrusion on cropping land and paddocks, potentially leading to reduced productivity of land parcels and/or businesses
- Intrusion or dissection of farm infrastructure, including homesteads and outbuildings, stock holding yards and irrigation plant and equipment
- Effects on water access, drainage or storage dams
- Concerns about impacts on organic production certification
- The need to find alternative agistment areas whilst fences or other property infrastructure are disrupted
- Impacts on on-farm and off-farm movements including:
 - Disruption to holding yards and loading facilities
 - Reduced ability to move machinery, stock and supplies across the corridor, with particular concern regarding the movement of very large machinery through level crossings
 - Temporary disruptions to access to landholdings and/or business operations, with alternative access arrangements provided for all properties.

The Project would traverse land owned by the Yarranbrook (Whetstone), D M Fletcher (Bringalily) and R Sydney and KM Stevens (Millwood) feedlots, the Moyness Piggery at Yandilla, and the Doug Hall Poultry Farm at Yandilla, with partial or full land acquisitions required.

Impacts such as severance or loss of land area may affect the operations of these businesses and therefore farmers' or business owners' incomes, which will be considered as part of acquisition and compensation agreements. There may also be potential for the loss of employment for farm workers if operations are significantly disrupted or reduced, however this is unquantifiable. Given low unemployment rates in the SIA impact assessment area, the location of other agribusinesses within the region and the likelihood of additional employment becoming available at the Wyemo Piggery, the Goondiwindi Abattoir and/or other major projects as described in Section 7.6, this appears unlikely to have a substantive effect on unemployment rates.

ARTC has met with directly affected landowners and the owners of agricultural businesses traversed by or adjacent to the Project footprint. Design responses developed as part of stakeholder engagement processes includes:

- Refining the alignment to minimise impacts on farm access routes, productive land, infrastructure, connectivity and water access
- Minimising impacts on feedlots, and provision within the Project footprint for a new access track and road to service to replace access to a feedlot which would otherwise be severed
- Development of an alignment which endeavours to minimise impacts on poultry farms' current operations and productivity
- Refining the alignment to minimise the impact to the Yandilla GrainCorp site operations and achieve a more suitable clearance to the Yandilla siding
- Adjusting the alignment to the east away from the Gore Highway to protect the GrainCorp operations in Brookstead and community access to Elsdens Road, with potential for more beneficial arrangements for GrainCorp and its customers
- Shifting the alignment to the east to create a potential siding off the mainline to the Yarranlea grain silos if required in the future
- Locating the alignment primarily to the northwest of Millmerran-Inglewood Road to minimise impacts to the mining lease at the Commodore Mine.

The permanent footprint traverses Cremascos Road, which is the main access road to the Yarranbrook feedlot. An active level crossing is proposed at Cremascos Road, with potential for periodic disruption to traffic.

ARTC will continue to consult with farmers, graziers and owners of agricultural businesses which are directly affected or adjacent to the Project footprint during the detail design phase to develop measures to mitigate impacts including:

- Direct impacts on properties e.g. severance and loss of productive land
- Impacts on property accesses and connectivity, including the location of level crossings on private roads
- Impacts on the movement of stock, water, produce and equipment.

Disruption to travel patterns

Construction of crossings and road realignments on private land may disrupt on-farm connectivity and property operations. ARTC will ensure an appropriate level of access is maintained for landowners across existing crossings or through their property where affected by the rail corridor. Close consultation will be required with potentially impacted landowners to identify existing stock and equipment movement paths. Crossings of roads on private properties will be designed in consultation with the landowners and will include consideration of the need to move stock, large equipment and vehicles across the corridor, but may result in delays for property owners using private roads across properties. Provision of a timetable of train movements to property owners will assist to plan movement around properties to reduce these delays.

The Project may affect agribusinesses' and farmers' access to supplies or markets. Agricultural businesses for whom temporary disruptions to travel patterns are possible during construction include poultry farms, dairies, piggeries and egg farms. The impacts on movement of stock and product to market during construction potentially include:

- Increased transport costs and delays to market associated with disruptions to the road network during construction, particularly where the alignment crosses local and secondary roads, and the major market connectors of the Gore, Warrego and Cunningham Highways

- Changes to access arrangements for animal production businesses depending upon the final resolution of rail/road interfaces.

During operations, farmers and business owners would experience the same periodic delays to travel as other motorists, as described in Section 7.1.6.

Impacts on stock routes

Stock routes in Queensland are parcels of Crown land reserved under legislation for the use by travelling stock and provide pasture reserves for travelling or grazing stock. Their functions include allowing graziers access to a food source for cattle (which is particularly important during times of drought), environmental values, and connectivity to access to markets (e.g. the Roma stockyards).

As described in the Border to Gowrie EIS Chapter 5: Project description, the Project footprint interfaces with the State stock route network in 12 locations. The continuity of stock routes would be maintained through the provision of underpasses, realignments, or level crossings or grade separated crossings. Impacts on use of stock routes are therefore expected to be minimal. Further information is provided in the Border to Gowrie EIS Chapter 6: Land use and tenure.

7.5.2 Impacts on other businesses

Retail and other local businesses

The Project has the potential to negatively affect the amenity and accessibility of some businesses while benefiting others by generating increased trade.

The Project avoids most towns, reducing direct impacts on local business centres and their amenity. Businesses where amenity could be affected by construction noise or operational noise include:

- General Store, Yelarbon (50 m south of the Project footprint at Ch 26.4 km)
- Oasis Hotel, Yelarbon (50 m south of the Project footprint at Ch 26.2 km)
- The Brookstead Store and Post Office, Brookstead (140 m north of the Project footprint at Ch 151.5 km)
- Caltex Pampas, Pampas (130 m north of the Project footprint at Ch 146.5 km)
- Brookstead Hotel, Brookstead (140 m north of the Project footprint at Ch 151.6 km)
- Pittsworth Motor Inn, Pittsworth (220 m south of the Project footprint at Ch 170.6 km).

It is also likely that these businesses would benefit from increased trade from patronage by the additional workforce in the SIA impact assessment area during the construction period.

Businesses to which access may be disrupted during construction include:

- General Store, Yelarbon (60 m south of alignment at Ch 26.4 km)
- Oasis Hotel, Yelarbon (60 m south of alignment at Ch 26.2 km)
- Pittsworth Motor Inn, Pittsworth (22 m south of the alignment at Ch 170.6 km) – access from the north along Oakey-Pittsworth Road).

ARTC will consult with affected businesses to explain the result of EIS studies, as relevant, and work with business operators to reduce the potential for impacts on their amenity. During construction, impacts would be managed through the measures outlined in relevant sections of the Outline Environmental Management Plan (Chapter 22 of the EIS) e.g. noise and vibration management measures, traffic management measures and regular communication between ARTC and affected stakeholders. For the operational period, impacts will be managed through the implementation of the imposed conditions to the Project's EIS approval and ARTC's operational management standards.

There is also potential for changes to road access during construction to interrupt road access to major community events, however this is likely to have a minimal impact on event visitation as it is common to encounter roadworks in South East Queensland. Temporary access arrangements will be agreed with DTMR and local Councils as is the standard approach normally adopted by linear transport projects.

There is potential for some businesses to lose staff to the Project. This may be difficult to overcome due to the relatively low level of unemployment in the SIA impact assessment area.

There is also potential for local retail businesses, cleaning and maintenance businesses, and labour supply businesses to benefit directly from the operation of non-resident workforce accommodation. ARTC will require its non-resident workforce accommodation provider to identify and contact local businesses who could supply the non-resident workforce accommodation facilities, and to give them full and fair opportunities to tender for services and supplies. The location of non-resident workforce accommodation in Millmerran, Inglewood and Yelarbon is also likely to see increased trade for local businesses including cafes and hotels that would be frequented by workers.

Forestry

The Project will traverse the outer fringes of the Whetstone and Bringalily State forests. As the areas required for the Project's operation are relatively small in comparison to the total area of the State forests, and effects such as changes to noise or dust levels are not expected to affect forestry operations, the potential for adverse impacts to production within the State forest is expected to be low.

ARTC has engaged with Department of Agriculture and Fisheries (DAF) to confirm their requirements and potential impacts of the Project on State forest resources. As a result of this early engagement, ARTC is working with DAF to:

- Assist them to plan for early harvesting of the cypress plantation to supply local and district timber mills well in advance of construction
- Ensure adequate access for bushfire management is accommodated in the Project design
- Ensure forestry haul routes are maintained
- Ensure lessee requirements are considered in the detail design process.

ARTC are also engaging with the Department of Environment and Science to understand and commence the process for revocation of State forest land.

Honey production

ARTC met with a Queensland Beekeepers' Association Inc (QBA) representative to identify any impacts on beekeeping, which includes commercial operations and recreational beekeeping. Members of the QBA sub-lease sites in the Bringalily State Forest which, when not in drought, is very suitable for beekeeping, with up to 150 hives on each sub-lease.

QBA advised that the Project would not have as significant an impact as if the route had traversed the steeper sections of the Bringalily State Forest occupied by Ironbark trees, and it did not appear that the Project would result in a major impact on ongoing operation of the apiaries in the State forest. Loss of vegetation or light pollution may require a small number of beekeeping sites to be relocated.

ARTC advised the QBA that said they were working with DAF to maintain access to the State forest whilst Project construction is active in that area. ARTC is also undertaking further consultation with QBA on potential issues to be addressed by the Project during construction and operation.

Energy and mining

The Yarranlea Solar Farm, a large-scale solar farm under construction is located 1.5 km north of the Project and may experience some access impacts during Project construction at the interface of Yarranlea Road and the Project (Ch 160.8 km). The Maryborough Solar Farm (near Pittsworth) on Roche Road (north of Ch 172.6 km) may also experience temporary delays to access during Project construction.

The Project footprint is located near the boundary of the Commodore Mine near Ch 131.0 – 135.8 km, however the Project does not encroach on the mine or land currently being mined. The permanent footprint also traverses two private roads which provide access to the Commodore Mine Road. Grade separation and a level crossing are proposed at these interface points. Where the grade separation is proposed, impacts are minimised. Where the level crossing is proposed, delays to traffic due to waiting times may occur at the interface of the Project footprint with the Millmerran-Inglewood Road, affecting access to the southern area of the Commodore Mine (at Ch 123.5 km).

Vehicle access to the Millmerran Power Station, located 3.6 km east of the Project footprint at Ch 130.0 km, and fuelled by coal from the Commodore Mine, may also experience temporary disruptions from heavy traffic and oversize loads. The road traffic assessment in Appendix X: Traffic Impact Assessment of the EIS indicates that a satisfactory design solution is available to avoid impacts on traffic safety.

The Wetalla Water Pipeline servicing New Acland Coal Mine is located in the Project footprint at Kingsthorpe. The pipeline would be aligned to avoid any impacts on water availability for the New Acland Coal Mine.

Transport and logistics

The Growth Action Plan for Millmerran identifies Inland Rail as an opportunity to enhance the town's transport industry (TRC, 2015). Similarly, the Growth Action Plan for Pittsworth (TRC, 2017b) identifies business and investment opportunities for the town associated with the Inland Rail and Toowoomba Enterprise Hub.

Transport or logistics businesses in Goondiwindi may benefit from significant opportunities during construction to transport construction materials to laydown areas and remove waste materials and recyclables from construction compounds and non-resident workforce accommodation. Benefits may also accrue in the long term if a regional rail distribution point is established on the alignment at Goondiwindi.

Transportation businesses in the SIA impact assessment area are likely to experience temporary disruptions to travel routes during the Project's construction and will experience delays at level crossings during operations.

Rail sidings including those at Kurumbul, Yelarbon and Brookstead will also be disrupted during construction, however the operational phase will offer superior facility access to rail transport.

During operations, there will be a decrease in long haul road freight volumes over time affecting levels of trade for local transport businesses. The business case for Inland Rail (ARTC, 2015) noted that there may be potential for the creation of new and expanded regional industries, including rail based warehousing and associated freight precincts.

ARTC will consult with local and regional businesses in the SIA impact assessment area to ensure they have access to current information about Inland Rail and promote government services and programs which are available to businesses considering investment in related projects.

Tourism

Tourism is a relatively small industry sector in the potentially impacted communities (refer Section 5.4.5), however the SIA impact assessment area offers tourists a range of tourism attractions based in heritage, access to the natural environment, and rural hospitality.

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 whilst construction activities are undertaken in particular areas, but some tourists may be deterred from visiting during these periods. ARTC has proposed non-resident workforce accommodation to minimise potential demands on tourist accommodation.

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.

There is also potential for diminished scenic amenity due to the Project's location within the rural landscape, particularly where the rail line would be elevated. Assessment of the Project's impacts on visual amenity the Appendix I: Landscape and Visual Impact Assessment Technical Report of the EIS (Lat27, 2020) found that the operation of the Project could result in potentially significant impacts viewpoints from the Yelarbon rest area and the Mount Kingsthorpe summit scenic lookout.

Whilst some visitors will see the Project as diminishing the rural character, others will find interest in Project structures, and again the occurrence of rail lines is common in rural areas. Significant decreases in visitation as a result of changes to visual amenity seem unlikely.

When the Project's detail design is confirmed, ARTC will consult with tourism-related businesses (accommodation facilities, farm stays, restaurants, cafes and specialty shops) located within five km of the Project to ensure there is a full understanding of how impacts resulting from road works, changes to the road network, and how noise/vibration may affect individual businesses such as those located in Yelarbon. ARTC will then develop a strategy, working with local Chambers of Commerce, tourist information centres and the Goondiwindi and Toowoomba Regional Councils, to ensure that any potential impacts on tourism visitation are mitigated, which could include support for tourism marketing campaigns targeting potentially impacted communities. This is expected to offset the deterrence of tourists.

7.5.3 Local supply opportunities

ARTC is committed to providing local and Indigenous businesses and social enterprises with full, fair and reasonable opportunity to participate in the supply of goods and services to Inland Rail.

The Inland Rail Program is subject to the *Australian Jobs Act 2013* requirement to develop an Australian Industry Participation Plan (AIPP). This commitment extends to ARTC's supply chain for Inland Rail. ARTC expects all contractors on Inland Rail to demonstrate the same level of commitment to providing local and Indigenous businesses and social enterprises with the opportunity to compete for work. Upholding this supply chain commitment supports ARTC's social licence to operate.

Proponents for Inland Rail construction projects are required to prepare and submit an Industry Participation Plan that addresses the requirements of the Inland Rail AIPP.

In line with the AIPP, ARTC has also developed a Sustainable Procurement Policy which will ensure that local, regional and Indigenous businesses (as well as other Australian businesses) will have opportunities to supply the Project.

ARTC commitments relating to the AIPP and Sustainable Procurement Policy are provided in Section 8.6.

ARTC hosted the Inland Rail Conference that was held in Toowoomba during August 2019 was attended by a range of key stakeholders including Councils, Australian Government agencies, businesses that are potential suppliers, community organisations and training providers. The conference involved discussion of key issues of skills, connectivity, supporting regional growth opportunities and community consultation processes and provided an opportunity to discuss a wide range of aspects relating to Inland Rail and the rail industry generally, to assist businesses and service providers to prepare for participation in the Inland Rail Program.

The Project is likely to provide significant opportunities for local and regional businesses to participate in its supply chain as discussed below.

Construction

Supplies and services which will be required during the Project's construction will include:

- Pre-cast concrete
- Ballast material
- Concrete sleepers
- Pre-built and panelled turnouts
- Steel
- Fencing
- Electrical components
- Fuels and oils
- Rehabilitation supplies (e.g. mulch and trees).

Pre-cast concrete may be sourced within the Project region, ballast material will be sourced from local quarries and borrow pits, and other components such as rehabilitation supplies and fencing may also be sourced within the SIA impact assessment area. Inland Rail is currently undertaking a procurement process for the manufacture and supply of sleepers for the Inland Rail Program. The outcomes of this procurement will determine where the sleepers are supplied from. Project construction will also require a range of services which may be sourced from within the SIA impact assessment area including:

- Tree clearing
- Electrical installation and instrumentation
- Rehabilitation and landscaping
- Trades services (e.g. boiler makers and welders)
- Professional services (e.g. environmental scientists, engineers, human resources)
- Traffic management and security services
- Earthworks.

The SIA impact assessment area has a heavy reliance on small and sole operator enterprises (with just 388 or 2.2 per cent of businesses having more than 20 employees). It is likely that small businesses would need to develop their current capacity to participate in the Project's supply chain. For example, the GRC has commented that few businesses in Goondiwindi would have experience in dealing with large tenders. Consultation with TRC identified the potential for engagement of social enterprises in the supply chain, including involvement of new migrants, with job readiness programs required.

Project supply opportunities during the construction phase may represent a substantial source of trade and an opportunity for local business growth. The Project would provide a boost to businesses in Toowoomba which is experiencing a slowdown following completion of recent infrastructure projects. Businesses across the SIA impact assessment area are positive about opportunities through direct involvement in the Project's construction (including the rail corridor and non-resident workforce accommodation), as well as opportunities in secondary service and supply industries (such as retail, hospitality and other support services).

Stakeholders have expressed concern that businesses have realistic expectations about potential benefits and that local suppliers have a genuine opportunity to participate in the Project. Businesses would also need sufficient advance notice and effective information about Project elements, time frames and contracting requirements to help them prepare. Particular consideration by ARTC will be needed to facilitate capacity building amongst smaller businesses and Indigenous businesses.

Consultation has also identified concern that small businesses may be exploited or unfairly treated by major contractors. ARTC has advised that it is engaging with large contracting companies regarding acceptable standards for subcontracting and will also work with small business to provide information about how to engage with major contractors and how to protect their rights.

ARTC has developed a Sustainable Procurement Policy which will ensure that local, regional and Indigenous businesses (as well as other Australian businesses) will have opportunities to supply the Project. The Sustainable Procurement Policy commits that environmental, community and economic considerations will be embedded in the procurement process, as detailed in section 8.3.6.

Strategies which ARTC will utilise to assist local businesses to develop their capacity are being developed as part of the Inland Rail Skills Academy and are outlined in Section 8.6.

Indigenous business opportunities

The Project offers the potential to increase Indigenous employment and business opportunities. As noted in Section 5.4.5, Indigenous businesses registered as servicing the SIA impact assessment area include construction, plumbing, maintenance, printing, crash repair, equipment hire, accounting, drilling, concreting and construction services (Black Business Finder, 2019). These businesses will be identified in the Project's local business register. Consultation has indicated that some small Indigenous businesses in the region are struggling and need assistance to build capacity to participate in the Project.

Indigenous community members and businesses in the SIA impact assessment area are also likely to have capacity for involvement in the construction phase through cultural heritage management services and supply to non-resident workforce accommodation.

ARTC has developed an Indigenous Participation Plan for the Inland Rail Program, which includes the following commitments:

- Provision information and access to support in a range of formats, including Inland Rail's website, industry and employment events and a network of regional and project offices
- Working in Project planning stages to understand the opportunities that will come from Inland Rail and the capacity of local Indigenous communities to take up these opportunities
- 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 with key partners to link training and development programs with other projects and local industries to provide the greatest regional benefit
- Ensuring Indigenous participation is included as a key element of all tender assessments
- Including Indigenous participation targets in contracts and work closely with contractors to achieve agreed outcomes.

Operation

For the operational period, services will be required for:

- Track maintenance
- Rehabilitation

- Maintenance of electrical and signalling infrastructure
- Level crossing and access track maintenance.

The benefits of supply would be more modest during the operation phase but would still represent a very long term opportunity which would support the viability of businesses and contribute indirectly to increased employment opportunities. Further information on economic benefits of the operational period is provided in Appendix V: Economic Impact Assessment of the EIS.

7.5.4 Regional economic development

Opportunities to support the agricultural industry

Inland Rail will improve connections between the Darling Downs and South East Queensland regions to domestic and international markets and will support associated future industries. While the Project will impact on agricultural land, it has potential to create beneficial impacts for the agriculture sector within the SIA impact assessment area, including more efficient access to domestic and international markets.

Toowoomba Enterprise Hub

The Project runs via the Toowoomba Enterprise Hub, which combines an internationally capable airport with a major freight facility and over 2,000 hectares of industrial land on the western fringe of Toowoomba LGA. The Toowoomba Enterprise Hub is a major industrial precinct supporting Toowoomba and regional south Queensland, involving aviation, logistics, transport, corporate and mining services. The Toowoomba Enterprise Hub is privately owned and managed and includes Toowoomba Wellcamp Airport, Wellcamp Business Park, InterLinkSQ, Witmack Industry Park and Charlton Logistics Park. The airport became operational in 2014 and provides domestic passenger and international freight transportation. Development of the industrial precinct is ongoing.

The Project's route via the airport and industrial precincts may provide the opportunity to supplement airfreight movements with access to the national rail freight network, facilitate access to efficient rail transport for businesses in the region and at the Toowoomba Enterprise Hub, and stimulate business development in the Toowoomba Enterprise Hub.

Facilitation of business and industry development

The Inland Rail Program is a nationally significant transport initiative and will provide a high-capacity freight link between Melbourne and Brisbane through regional Australia to better connect cities, farms and mines via ports to domestic and international markets.

A Business Development Manager for Darling Downs and Northern New South Wales works with industry to understand where there may be opportunity to put freight on rail when Inland Rail is operational post 2026. The Business Development Manager acts as a conduit to ARTC to support businesses as they consider standard and dual gauge rail solutions for their operations.

The Inland Rail Business Case (ARTC, 2015) identified several benefits which would support regional economic development, including:

- Improved linkages and reduced distances travelled within the national freight network
- Improved access to and from regional markets
- Reduced rail costs, improved reliability and greater certainty for freight travelling between Melbourne and Brisbane.

The Project will improve access to and from regional markets and may act as a significant catalyst for development within the SIA impact assessment area, particularly in relation to rail dependent industries and support industries associated with transport, freight handling, warehousing and logistics.

The Inland Rail Business Case (*Ibid.*) notes that Inland Rail would be a catalyst for complementary supply chain investments, including fleet upgrades, new metropolitan and regional terminals and integrated freight precincts, as well as the potential for creation of new and expanded regional industries, including rail based warehousing and associated freight precincts.

More generalised benefits identified by the Inland Rail Business Case include the increased capacity of the rail network, resulting in improved road safety, reduced truck volumes in regional towns, and a reduction in carbon production of 750,000 tonnes per year.

Community benefits assessment

The Appendix V: Economic Impact Assessment of the EIS (KPMG, 2020) includes an assessment of estimated community benefits relating to crash cost savings, cost savings from environmental externalities (such as air pollution, greenhouse gas emissions and other environmental disruptions) and road decongestion benefits. The assessment indicates the Project's community benefits represent a community benefit of \$157.84 million (net present value, at a 7 per cent discount rate) over a 50-year analysis period. The value of freight benefits (including travel time savings, operating cost savings and improved availability and reliability of freight transport) was estimated at incremental \$516.52 million (net present value, at a 7 per cent discount rate) in present value terms over a 50 year analysis period.

7.6 Cumulative impacts

Cumulative impacts are those that result from the successive, incremental and/or combined effects of an action, project or activity when added to other existing, planned and or reasonably anticipated future projects (International Finance Corporation [IFC] 2013).

Twenty three projects were initially identified as having potential to contribute to cumulative impacts in combination with the Project. These projects are either currently operational, expected to undergo future expansion or are currently going through an approval process.

The assessment has considered the following aspects of relevant projects:

- Spatial distribution i.e. projects would be located in relation to the Project and nearby communities
- Temporal distribution i.e. the time period in which each Project may have an effect on the social environment.

For the purpose of social impacts and benefits, projects that meet one or more of the following criteria were considered to have potential to result in cumulative impacts:

- Major projects located within the SIA impact assessment area or that may draw on the labour force in the impact assessment area
- Freight and passenger rail projects being constructed in South East Queensland including projects that would be constructed as part of the Inland Rail Program but excluding metropolitan public transport projects.

Table 7-5 identifies projects that meet these criteria and may have cumulative impacts on the social environment in the SIA impact assessment area. The list includes five other Inland Rail projects from northern NSW to Brisbane. Table 7-6 provides the timing of projects relative to one another.

Other projects within the SIA impact assessment area that are not considered relevant to this assessment as they are already completed or are unlikely to have relevant impacts include the Toowoomba Bypass, Wetalla Water Pipeline, Toowoomba Wellcamp Airport, Pittsworth Industrial Precinct, Australia Pacific LNG Project (Walloons gas fields), Doug Hall Poultry (Millmerran), Yarranlea Solar Farm, Yarranbrook Feedlot (Inglewood) and Sapphire Feedlot (Kildonan).

Metropolitan public transport projects, such as Brisbane Metro and Gold Coast Light Rail Stage 3A, have been excluded from assessment on the basis that these projects have a different labour skill requirement to the Border to Gowrie Project, with bulk earthworks being a substantial task.

Assessment of cumulative labour demands is speculative as construction personnel are highly mobile within and across Australian states, and project schedules will vary from current estimates. Of note, the COVID-19 pandemic has resulted in significant job losses across Queensland and other states, so the availability of labour is likely to increase over current levels, however data supporting analysis of changes to labour availability are not yet available.

Table 7-5: Projects considered for cumulative SIA

Projects	Location	Description	Status	Construction dates	Construction jobs (peak)	Operation years	Operation jobs
New Acland Coal Mine Stage 3	35 km northwest of Toowoomba 18 km north of the Project footprint	Expansion of the existing New Acland open-cut coal mine to up to 7.5 Mtpa	EIS approved with conditions in 2014, but currently subject to legal challenge	The mine is operational. Stage 3 expansion works will proceed if legal proceeding end favourably for New Acland Coal.	260	Sequential development of resource areas expected to extend coal production until 2042	435
InterLinkSQ	13 km west of Toowoomba Adjacent to south of the Project footprint	A 200 ha transport, logistics and business hub. Located on the narrow gauge regional rail network and interstate network. Located at the junction of the Gore, Warrego and New England Highways.	Under construction	2018 to unknown Assumed to continue development until Inland Rail is operational	N/A	Ongoing once complete	1,500 Up to 4,000 including indirect jobs
Wellcamp Business Park	Wellcamp, QLD 1.5 km east of the Project footprint	A 500 ha industrial and commercial park that forms part of the Toowoomba Enterprise Hub. The Business Park is located in close proximity to the Toowoomba Wellcamp Airport and other major transportation infrastructure.	Operational	2013 to 2014	>20	Ongoing	Unknown
Witmack Industry Park and Charlton Logistics Park	Wellcamp, QLD 3 km southeast of the Project footprint (Witmack Industry Park) Charlton, QLD 3 km south of the Project footprint (Charlton Logistics Park)	The Witmack Industry Park is a large industrial land development that offers large size industrial land parcels. Businesses situated within the Witmack Industrial Park include the Toowoomba Pulse Data Centre. The Charlton Logistics Park is part of the Toowoomba Enterprise Hub and provides fully serviced 2 ha sites and is well situated for potential transport and logistics operators due to its proximity to transport infrastructure.	Operational	2016 to 2018	30	Ongoing	30

Projects	Location	Description	Status	Construction dates	Construction jobs (peak)	Operation years	Operation jobs
Asterion Medicinal Cannabis Facility	Wellcamp, QLD Adjoins the Project footprint 1 km south of Toowoomba-Cecil Plains Road	A high-tech medicinal cannabis cultivation, research and manufacturing facility. The project involves construction of a 40 ha glasshouse to produce 20,000 plants per day at full capacity. Medicinal grade cannabis grown at the facility will be manufactured into a range of medicinal products, including single patient packs, cannabis oils, gels, salts and related products, destined solely for the medicinal market. This facility is anticipated to be the largest facility of its kind in the world.	Under construction	2020 to 2021	800	Ongoing once complete	150
Commodore Mine and Millmerran Power Station	Domville, QLD Intersects the Project footprint, located primarily to the east	The Commodore Mine is an open cut coal mine which provides coal for the 850 MW Millmerran Power Station. The Millmerran Power Station is a coal-fired power station that supplies enough electricity to power approximately 1.1 million homes.	Operational	Subject to annual maintenance shutdown and pit expansion.	N/A	Ongoing	50
Wyemo Piggery	Glenarbor, QLD 8 km south of the Project footprint	Piggery with approval for 55,000 pig units	Approved with conditions by GRC	Unknown	Unknown	Ongoing once complete	Unknown
Goondiwindi Abattoir	Goondiwindi, QLD 13 km north of the Project footprint	A new beef Abattoir located on the outskirts of Goondiwindi with beef processing of up to 72,000 tonnes per year	Approved with conditions by GRC	Unknown	Unknown	Ongoing once complete	380
North Star to NSW/QLD Border (Inland Rail)	Rail alignment from North Star, NSW to the NSW/QLD border Adjoins the Project footprint to the south	New 37 km rail corridor to connect North Star (NSW) to the QR South West Rail Line just north of the NSW/QLD border	Reference design and draft EIS	2021 to 2024	300	>100 years	15
Gowrie to Helidon Project (Inland Rail)	Rail alignment from Gowrie to Helidon, QLD Adjoins the Project footprint to the north	New 26 km dual gauge track between Gowrie (north-west of Toowoomba) and Helidon (east of Toowoomba), extending through the LGAs of Toowoomba and Lockyer Valley. The project includes a 6.38 km tunnel to create an efficient route through the steep terrain of the Toowoomba Range.	Reference design and draft EIS	2021 to 2026	596	>100 years	15

Projects	Location	Description	Status	Construction dates	Construction jobs (peak)	Operation years	Operation jobs
Helidon to Calvert (Inland Rail)	Rail alignment from Helidon to Calvert, QLD 26 km to the east of the Project footprint	New 47 km dual gauge rail line connecting Helidon (east of Toowoomba) with Calvert (near Ipswich), via Placid Hills, Gatton, Forest Hill, Laidley and Grandchester, extending through the LGAs of Lockyer Valley and Ipswich City. The project includes a 1.1 km tunnel to create an efficient route through the steep terrain of the Little Liverpool Range.	Reference design and draft EIS	2021 to 2026	410	>100 years	15
Calvert to Kagaru (Inland Rail)	Rail alignment from Calvert to Kagaru, QLD 70 km to the southeast of the Project footprint	New 53 km dual gauge track from Calvert to Kagaru to provide convenient access for freight to major proposed industrial developments at Ebenezer in the City of Ipswich, and at Bromelton near Beaudesert in the Scenic Rim Region. The project includes a 1.1 km tunnel through the Teviot Range.	Reference design and draft EIS	2021 to 2026	660	>100 years	15
Kagaru to Acacia Ridge (Inland Rail)	Rail alignment from Kagaru to Acacia Ridge, QLD 113 km to the southeast of the Project footprint	Enhancements to, as well as commissioning of, dual gauge operations along the existing interstate track between Kagaru and Acacia Ridge. The project involves 49 km of existing track to be enhanced enabling double-stacking capability along the existing interstate route both south from Kagaru to Bromelton and north from Kagaru to Brisbane's major intermodal terminal at Acacia Ridge. It extends across three LGAs of Scenic Rim, Logan and Brisbane.	Reference design and EIS	2023 – 2025	100	>100 years	15
Cross River Rail	Dutton Park to Bowen Hills in the Brisbane LGA 120 km to the east of the Project footprint	New 10.2 km passenger rail line from Dutton Park to Bowen Hills, which includes 5.9 km of tunnel under the Brisbane River and the CBD. The Project will include four new underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street, and upgrades to Dutton Park and Exhibition stations.	Construction	2019 to 2024	2,200	>100 years	Unknown

Table 7-6 provides the estimated overlap of construction periods (grey shading) and project operations (green shading).

Table 7-6 Cumulative project timing

Project	Construction timeframe	Overlap in construction periods – by project year					
		2021	2022	2023	2024	2025	2026+
Border to Gowrie (Inland Rail)	Construction 2021-2026						
New Acland Coal Mine Stage 3	The mine is operational. Stage 3 expansion is yet to commence						
InterLinkSQ	Assumed to continue development until Inland Rail is operational						
Wellcamp Business Park	Operational						
Witmack Industry Park and Charlton Logistics Park	Operational						
Asterion Medicinal Cannabis Facility	Proposed, construction from 2021 possible						
Commodore Mine and Millmerran Power Station	Operational but subject to annual maintenance shutdown and pit expansion						
Wyemo Piggery	Construction yet to commence. Unknown timeframes.						
Goondiwindi Abattoir	Unknown						
North Star to NSW/QLD Border (Inland Rail)	Construction 2021 – 2024						
Gowrie to Helidon Project (Inland Rail)	Construction 2021 – 2026						
Helidon to Calvert (Inland Rail)	Construction 2021 – 2026						
Calvert to Kagaru (Inland Rail)	Construction 2021 – 2026						
Kagaru to Acacia Ridge (Inland Rail)	Construction 2023 – 2025						
Cross River Rail	Construction 2019 – 2024						

7.6.1 Local impacts

For the purpose of this section, the local area of influence for assessment of cumulative social impacts has been defined as including the Project footprint and potentially impacted communities, on the basis that the interface of multiple projects may have impacts on social conditions e.g. housing availability, access to services or access to tradespeople.

Local amenity, character and traffic

Cumulative social impacts may occur in the Kingsthorpe/Gowrie Junction area where construction of the Project, Gowrie to Helidon project and InterLinkSQ could all coincide, where traffic may increase, construction activities and laydown areas may temporarily detract from local character. With respect to the interface between the project and the North Star to Border project, the combined impacts of rail construction and road works may impact on scenic character in a localised area west of Kurumbul.

The Asterion Medicinal Cannabis Production Facility is proposed for a site near the Toowoomba Wellcamp Airport and the Project and would have an estimated peak construction workforce of 800 personnel. If the construction program coincides with the Project's construction program, this could result in an increase in construction activities and the number of non-resident workers in the Wellcamp area, and consequent increases in traffic on major roads if construction traffic routes coincide.

Project workforce management strategies which address potential concerns about community safety include enforcing a Code of Conduct containing requirements for positive behaviours and respect for local residents and businesses and ensuring that the Principal Contractor has appropriate work conduct policies and procedures, implemented for all Inland Rail work sites.

Accommodation impacts

Up to three non-resident workforce accommodation facilities have been proposed to primarily service the accommodation requirements of workforce for the Project. However, if established, the non-resident workforce accommodation in Yelarbon may also be utilised by personnel working on the North Star to NSW/QLD Border project. Sharing of temporary accommodation across these projects would help to minimise any contributions to demands on local housing and accommodation in the local area.

Concurrent projects such as other Inland Rail projects in Queensland, Cross River Rail and New Acland Coal Stage 3 may compete with the Project for construction personnel. This may result in a large proportion of personnel being recruited from outside the region. If this were to occur, there is potential for increased pressure on housing supplies in the impact assessment area. However, the potential for this constraint has been recognised by ARTC and non-resident workforce accommodation is proposed to minimise possible pressures on existing accommodation.

Social infrastructure requirements

A cumulative increase in construction workers within local communities has the potential to affect demands for policing and emergency services with respect to traffic management, site security (e.g. responding to incidents of theft from work sites), road safety policing. Government funding for police, fire and ambulance services available to local communities may require review by the relevant State Government agencies, informed by delivery plans provided by ARTC, to ensure cumulative project demands do not impact on local community access to services.

It is anticipated that non-resident personnel's health service requirements would primarily be met in their home communities, therefore significant cumulative demands on health services are less likely. However, there is potential for workers to be transported to major hospitals in Toowoomba or Goondiwindi if treatment is required. This is not expected to be a significant drain on hospital services. ARTC will provide workforce ramp-up estimates to the QPS, QAS, QFES and Queensland Health to assist with their planning.

There is potential for stresses associated with Inland Rail and other construction projects to increase local demands for support services. As outlined in Section 8.1.3, Inland Rail has developed partnerships with the Darling Downs and West Moreton PHN, to strengthen local access to services delivered in the Project region. The Project will also consult with DCDSS to identify any existing service shortfalls and monitor any increases in service demands resulting from the Project, to enable cooperative solutions to address any strain on services resulting from the Project.

Community benefits

Potential local benefits if a number of projects are constructed concurrently include:

- Potential for increased trade for businesses in Gowrie Junction and Goondiwindi with concurrent Inland Rail projects, and in Millmerran and Pittsworth with regard to Millmerran Power Station's regular maintenance shutdowns
- A substantial increase in the number and diversity of jobs available to local residents
- Facilitation of long-term employment opportunities and regional development, with potential to support development of the Charlton Wellcamp Enterprise Area.

7.6.2 Regional impacts

The Project region is considered as the regional level for assessment of cumulative social impacts, with consideration to adjacent LGAs where other Inland Rail projects may be constructed in the same timeframe.

Traffic

The coincidence of construction of projects listed in Table 7-5 would have cumulative impacts on traffic volumes and potentially lead to traffic delays during the construction period, throughout the SIA impact assessment area. Impacts would depend on the timing and location of the works of multiple projects at that time. A large range of mitigation measures relating to safety, intersection impacts, link road impacts, pavement impacts, and road/rail interface impacts have been proposed for construction and operation of the Project and are expected to mitigate the Project's contribution to cumulative impacts on traffic. Such measures include:

- Development and implementation of a RUMP and Traffic Management Sub-plan
- Development and implementation of traffic control plans for localised short-term activities requiring traffic control
- Consultation with DTMR and TRC through the detail design and construction phases of the Project to identify newly occurring issues and risks to the road network that will be used by Project traffic
- Maximising opportunities to move materials, plant and workforce within the Project footprint, instead of using the public road network
- Implementation of a travel demand management awareness campaign to inform the public on the proposed construction works and its potential effect on local road network operations. The purpose of this awareness campaign would be to relieve congestion by encouraging travel outside of peaks and increase public awareness of planned construction works.

Employment opportunities and labour draw

The Project has potential to contribute to significant cumulative increases in employment opportunities in the Project region, both directly through construction employment opportunities, and through involvement of local businesses in the supply chain.

If the six Inland Rail projects listed in Table 7-5 were constructed simultaneously, and all workforce peaks coincided, a total of approximately 3,016 construction personnel could be required across several LGAs (Goondiwindi, Toowoomba, Lockyer Valley, Ipswich, Scenic Rim, Logan and Brisbane). This represents a maximum case as the likelihood that all workforces would peak simultaneously is low. Given existing strengths in the construction industry, particularly in Toowoomba, and the increase in unemployment which has resulted from COVID-19 restrictions, employment opportunities relating to Inland Rail and other projects are likely to be a significant social and economic benefit to residents in LGAs where Inland Rail projects will be constructed.

Coincidence of construction for projects such as Charlton Wellcamp Enterprise Area projects and the Toowoomba Medicinal Cannabis Production Facility is possible. If multiple additional projects as listed in Table 7-5 were constructed in the same time frame, there may be a significant draw on trades and construction labour contributing to labour shortages across the region.

The expansion in the construction sector would support additional flow-on demand through the construction industry supply chain and additional spending on consumer orientated products by the construction workforce in the region. The associated supply of construction materials, the development of associated external infrastructure and complementary services will also require additional workforce beyond those directly associated with the Inland Rail and other major projects, stimulating job creation and economic development in the region.

The Project has the potential to catalyse positive impacts for industrial development by attracting rail-dependent industry to the Charlton Wellcamp Enterprise Area, and possibly also to Goondiwindi. This would generate significant positive cumulative employment opportunities in the impact assessment area.

Social infrastructure

Cumulative increases in construction workers across the Project region have the potential to affect demands for policing and emergency services with respect to traffic management, site security (e.g. responding to incidents of theft from work sites), road safety policing, and potentially community protests against Inland Rail or other projects. Government funding for police, fire and ambulance services available to local communities may require review by the relevant departments to ensure cumulative project demands do not impact on community access to services. The Project will provide workforce ramp-up estimates to the QPS, QAS, QFES, DCDSS and Queensland Health to assist with their planning.

As personnel's health service requirements would primarily be met in their home communities, cumulative demands on health services are less likely, but there is potential for workers to be transported to major hospitals in Toowoomba or Ipswich if treatment is required. This is not expected to be a significant drain on hospital services.

Broader regional labour requirements

The construction period for Cross River Rail (Dutton Park to Bowen Hills in the Brisbane LGA) may overlap with construction phases for the Queensland Inland Rail projects. Cross River Rail has a stated average construction workforce number of 1,600 personnel and a peak of 2,200 personnel. If the peak labour demand for Cross River Rail (2,200) was to coincide with the peak labour demand period for all of the Queensland Inland Rail projects (approximately 2,716 personnel), then approximately 4,916 construction personnel would be required for rail projects in southern Queensland. This is an unlikely scenario, as it is not likely that construction peaks for all projects will coincide, but represents a 'maximum case' estimate in relation to the demands on labour and in relation to employment opportunities.

In combination, the cumulative impacts of railway construction projects in southern Queensland could lead to significant demands for construction personnel, significantly increasing employment opportunities, but potentially affecting access to labour and tradespeople for residents, businesses and other industries. The potential contribution of the Project to the cumulative labour demand will be managed through the implementation of the SIMP, particularly those elements that pertain to the provision of training and development opportunities for local personnel (e.g. Inland Rail Skills Academy).

7.6.3 Summary of cumulative impacts

Potential cumulative impacts have been evaluated in relation to their likelihood and consequence to the social environment applying the criteria defined in Table 7-7 and Table 7-8, and summarised in Table 7-9. The likelihood of social impacts and opportunities occurring has been assessed with reference to the social baseline (e.g. findings regarding community vulnerabilities to impacts), stakeholder inputs and findings of technical assessment of specific matters in the Border to Gowrie EIS. The nature of impacts is designated as negative (-) or positive (+).

Table 7-7: Social risk assessment matrix

			Consequence Level				
			1 Minimal	2 Minor	3 Moderate	4 Major	5 Catastrophic
Likelihood	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						

Source: NSW DP&E 2017.

‘Consequence’, as defined in Table 7-8, has been assessed based on how the social impact may be experienced by the relevant stakeholders.

Table 7-8: Consequence Criteria

Rating	Impact (-)	Benefit (+)
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 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 recoverable changes to social characteristics and values 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 recoverable changes to social characteristics and values 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 7-9: Potential cumulative social impacts

Projects	Potential cumulative social impacts	Likelihood	Consequence	Significance
Inland Rail—North Star to NSW/QLD Border	Combined impacts of rail construction and road works may impact on scenic character in a localised area west of Kurumbul	C	1	C1 Low (-)
	Goondiwindi and Yelarbon businesses are likely to benefit from Project and personnel expenditure of the combined Inland Rail projects	B	3	B3 High (+)
Inland Rail—Gowrie to Helidon	Combined impacts of rail construction may affect rural character between Gowrie Mountain and Kingsthorpe, particularly with additional proximity to InterLinkSQ site	B	1	B1 Moderate (-)
	Potential for increased trade for businesses in the Gowrie Junction area	C	3	C3 High (+)
Other Inland Rail projects in Queensland	Substantial increase in the availability of employment in the impact assessment area	B	3	B3 High (+)
	Potential labour draw in SIA impact assessment area affecting access to labour by businesses, industries and households during construction	C	2	C2 Moderate (-)
	Potential for incremental increases in demands on health, police and emergency services	B	2	B2 High (-)
Goondiwindi Abattoir Wyemo Piggery	Requirement for civil construction labour, resulting in reduced access to skilled trades and construction labour in the Goondiwindi LGA	C	3	C3 High (+)
	Increase in the availability of employment in the Goondiwindi LGA	C	3	C3 High (+)
	Potential for incremental increases in demands on health, police and emergency services in the Goondiwindi LGA	C	2	C2 Moderate (-)
InterLinkSQ Wellcamp Business Park Witmack Industry Park and Charlton Logistics Park New Acland Coal Mine – Stage 3 Commodore Mine and Millmerran Power Station Asterion Medicinal Cannabis Production Facility	Substantial increase in the availability of employment, facilitation of development and future job growth in the Toowoomba LGA	B	3	B3 High (+)
	Requirement for civil construction labour, resulting in cumulative demand for skilled trades and civil construction labour, however development likely to be incremental over a longer period	C	2	C2 Moderate (-)
	Potential for incremental increases in demands on health, police and emergency services in the Toowoomba LGA	C	2	C2 Moderate (-)
Cross River Rail	Potential labour draw in South East Queensland affecting access by businesses, industries and households	C	2	C2 Moderate (-)

8. Social Impact Management Plan

This section details the Project's SIMP and describes how the Project will engage with communities and stakeholders, mitigate social impacts, enhance Project benefits and opportunities for the Project region, and monitor and report on the delivery and effectiveness of management measures.

8.1 Introduction

The SIMP provides a detailed 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 measures
- Support adaptive management of social impacts, by enabling communication between stakeholders and the Project, to identify any need for improvements to management measures
- Describe ARTC's initiatives and partnership opportunities which will maximise local employment and business opportunities and bring about long-term benefits for local communities.

Management measures are provided for five sub-plans:

- Community and Stakeholder Engagement
- Workforce Management
- Housing and Accommodation
- Health and Community Wellbeing
- Local Business and Industry.

Each sub-plan includes:

- An overview of the key impacts and opportunities identified in Section 7
- Objectives and desired outcomes
- Measures to mitigate social impacts and enhance Project opportunities
- The timing for delivery of mitigation measures, i.e. detail design, pre-construction and construction stages.

A monitoring program is provided in Section 8.7 to support tracking of SIMP delivery and effectiveness and enable adaptive management if there are changes to the Project or social baseline values, and to address any emerging or unanticipated issues. Section 9 provides an evaluation of social impacts and opportunities, prior to and following the implementation of the measures outlined in the SIMP.

8.1.1 SIMP implementation

During the EIS process, ARTC has worked with a range of stakeholders to identify their priorities and develop mitigation and measures to be included in the SIMP. Management measures addressing training and development, business awareness of Project opportunities, mental health service capacity and contributions to community development were initiated during the EIS phase. Engagement with Councils and Government agencies will continue during the remainder of the EIS phase to review the proposed management measures, develop further detail of initiatives to be implemented in cooperation with stakeholders, and agree specific outcomes, strategies and performance metrics for partnerships (refer Sections 8.1.4 and 8.2.3).

The Project's delivery will involve ARTC contracting with suitably experienced construction management companies for a range of work packages. The Principal Contractor role is defined in EIS Chapter 22: Outline Environmental Management Plan as including:

- Prepare, maintain and implement the CEMP
- Deliver the Project in accordance with all laws, including conditions of approvals
- Provide notifications and reports, as required by law, including conditions of approvals
- Ensure the construction workforce are properly and regularly trained in environmental responsibilities, including cultural heritage responsibilities, in accordance with the CEMP
- Establish and maintain a complaints management system, to receive and respond to complaints.

The Principal Contractor will be required to implement SIMP commitments. Section 8.2.4 outlines ARTC and contractor responsibilities for community and stakeholder engagement. Further details regarding respective responsibilities for ARTC and the Principal Contractor as part of other sub-plans will be developed as part of the tendering and contracting process. ARTC will have dedicated personnel to coordinate and monitor SIMP implementation.

Detail pertaining to implementation in each Project phase is provided below.

Detail design and construction planning

The Project is currently in the reference design stage and if approved, will undergo a detail design and construction planning phase. Changes to the reference design or construction methodology are possible and may result in changes to social impacts and mitigation measures, e.g.:

- Design refinements or decisions by the Constructing Authority may result in a change to the number or nature of property acquisitions
- Decisions regarding construction methodologies may result in changes to the location or duration of environmental impacts such as noise
- Construction contractors' innovations in impact management may change the frequency or level of impacts.

ARTC will review changes to the design or construction methodology which have potential to change social impacts, and if a material change in impacts is foreseen, revise the SIMP measures to address the change in social impacts.

During detail design, ARTC and the Principal Contractor will also collaborate with relevant stakeholders to detail and refine the measures described in each sub-plan, and agree specific outcomes, strategies and performance metrics for partnerships which address potential impacts on town amenity and community cohesion, community facilities and service capacity (as described in Section 8.6). This will inform the Principal Contractor's implementation of SIMP commitments and ARTC's social performance program delivery including:

- Partnerships and projects to support mitigation and enhancement of benefits
- The respective responsibilities of the Project and other stakeholders
- The program for implementation
- SIMP monitoring.

Social impacts such as anxiety about land acquisitions or environmental changes are likely to occur during the detail design phase.

Measures provided for the detail design phase include those addressing local residents' anxiety about environmental changes and land acquisition impacts, which would commence during this phase, as well as other measures which require a collaborative process or a 'lead time' to be effective e.g. workforce development, community development and business capacity building.

Pre-construction

Project activities commencing during the pre-construction phase include land clearing and establishment of laydown areas and access tracks, which may result in noise and change the character of the land within the disturbance footprint. Measures which address these impacts are included in the action plans. As for the detail design phase, measures which require a 'lead time' ahead of the construction phase are also identified for the pre-construction phase.

Construction

Based on the Project's reference design, SIA has identified a range of potential social impacts and opportunities during the construction phase as detailed in Section 7. Many of the measures pertaining to the construction phase will be initiated during preceding stages and implemented during construction as detailed in Sections 8.2 to 8.6. Measures to be initiated during the construction phase also include actions to prepare for the operations phase.

Operations

The SIA has identified potential impacts of the Project's operation including periodic traffic delays at level crossings, potential for rail noise and/or changes to local character to affect the amenity of properties near the rail corridor, including potential for rail noise to affect the Brookstead and Yelarbon State Schools and the Pittsworth Assembly of God/Harvest Life Church. The potential for an increased risk of road-rail accidents and rail fatalities was also identified.

Prior to commissioning the Project, a SIMP for rail operations will be developed in accordance with ARTC's established management frameworks for rail operation, including:

- Road-rail safety management
- Rail noise management
- Workforce development
- Stakeholder engagement and complaints management.

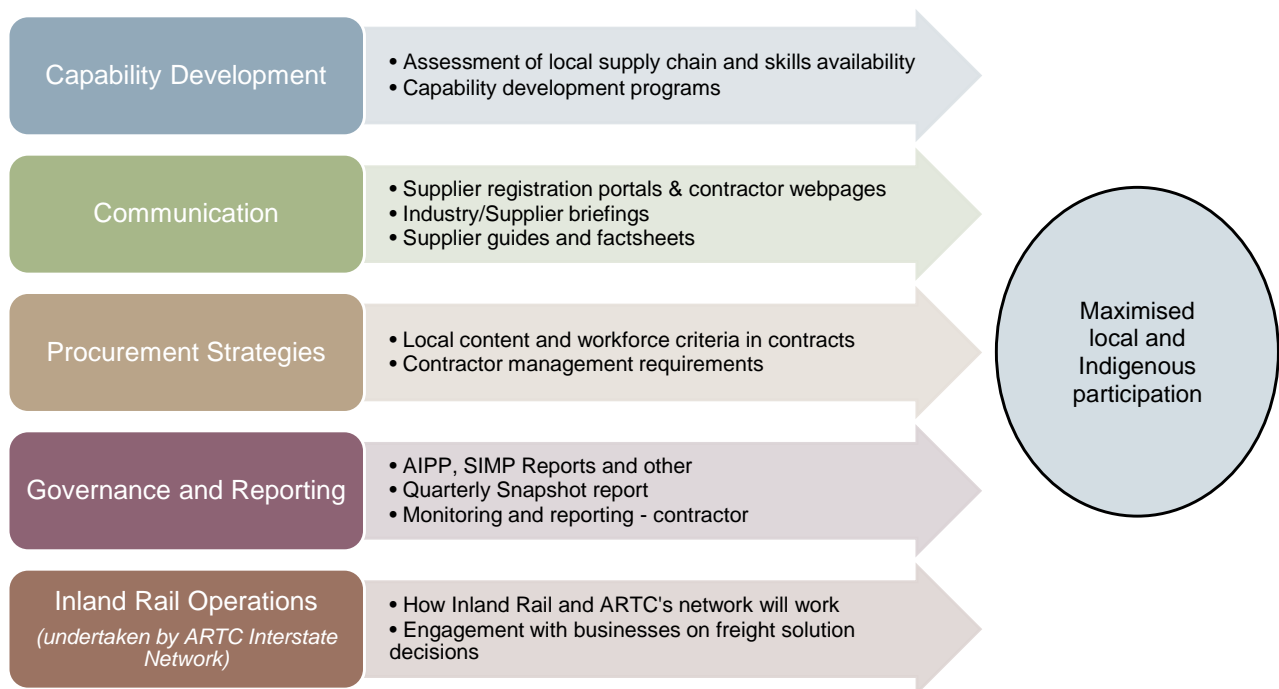
This will be informed by the monitoring undertaken during the construction phase (refer Section 8.7), which includes stakeholder engagement in monitoring impacts and the effectiveness of mitigation measures.

The SIMP for operations will include community and stakeholder strategies for the commissioning and operational phases as outlined in Section 8.2.5. The SIMP for operations will be implemented during the first three years of operation. Any need for a SIMP following Year 3 of operations will be identified in consultation with the OCG.

8.1.2 Inland Rail's social performance program

Inland Rail's social performance program has developed in response to SIA/SIMP requirements for Inland Rail projects, Commonwealth guidelines and expectations, stakeholder feedback, and corporate policies/approaches being established to support Inland Rail's delivery. Figure 8-1 provides an overview of Inland Rail's social performance approach to maximising local and Indigenous participation.

Figure 8-1: Inland Rail social performance approach to maximising local and Indigenous participation



The social performance program has five themes (aligned to the SIMP sub-plans), each with associated desired outcomes as shown in Table 8-1, and with a clear focus on maximising local benefits. At Project level, the objectives of Inland Rail's social performance program have been contextualised to address the findings of the SIA and ensure that management measures are targeted to the Project region. This includes a focus on the Goondiwindi and Toowoomba LGAs, and impacted communities in proximity to the alignment.

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 which the alignment directly passes through
- 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.

Table 8-1: Social performance outcomes and links to SIA/findings/SIMP measures

Themes	Outcomes	Link to SIA findings/SIMP	Section
Stakeholder and Community Engagement	Inland Rail actively engages with communities on what matters to them and resolves issues swiftly and respectfully	The SIA has been informed by the results of engagement with stakeholders. ARTC continues to consult with key stakeholders in the review and finalisation of the EIS. The SIMP details ARTC's ongoing engagement with stakeholders during the pre-approval and detailed design phase to develop and implement mitigation measures, and to involve stakeholders in the SIMP monitoring process during the construction phase.	8.2
Workforce management	Inland Rail provides employment opportunities for local and Indigenous jobseekers and contributes to building skills in the communities we impact	Employment of local residents from the Goondiwindi and Toowoomba LGAs is a key local benefit and a major priority for local stakeholders. The SIMP describes ARTC's focus on local employment including the requirement for the Principal Contractor to develop contractual targets and commitments in consultation with ARTC for the employment of Goondiwindi and Toowoomba LGA residents, Indigenous people, young people and women. The Inland Rail Skills Academy will facilitate local skills development to maximise the local workforce's capacity for involvement in Inland Rail and other major projects. For example, the scholarship program initiated with USQ is accessible to residents in the Project region, and ARTC has agreed with GRC and TRC that Inland Rail Skills Academy training programs will identify cross-over skills with RSIS priorities in each LGA, and work to develop those skills. ARTC's Indigenous Participation Plan has a clear focus on enabling Indigenous participation in Project employment. ARTC is engaged in ongoing consultation with Traditional Owners, DATSIP and CSQ to target training and development programs to local Indigenous people.	8.2.7
Housing and Accommodation	Inland Rail accommodation solutions minimise negative impacts to local housing markets	The Project proposes three non-resident workforce accommodation facilities to mitigate any potential for impacts on local housing or accommodation availability. The Principal Contractor will be required to deliver an AMP which meets ARTC principles for housing and accommodation management and reflects inputs from GRC, TRC and the Yerlarbon, Inglewood and Millmerran communities on accommodation management.	8.4
Health and Community Wellbeing	Inland Rail recognises its role in supporting and positively contributing to community wellbeing during the changes that Inland Rail will bring	The potential for impacts on amenity, connectivity, local character and mental health is identified in the SIA. The Project has committed to the development of a Community Wellbeing Plan in cooperation with Councils and other stakeholders to define, develop and implement measures to support community resilience and wellbeing. Inland Rail Community Sponsorships and Donations Program will also support community wellbeing in local communities.	8.5

Themes	Outcomes	Link to SIA findings/SIMP	Section
Local and Indigenous Industry Participation	Inland Rail is committed to supporting local and Indigenous businesses to ensure they are prepared for and provided full, fair and reasonable opportunity to participate in Inland Rail	<p>The Project region's businesses have strengths in the construction industry for major infrastructure projects, and the SIA process identified strong interest in Project supply chain opportunities.</p> <p>ARTC's Australian Industry Participation Plan and Sustainable Procurement Policy have a key focus on supporting local industry and procurement. ARTC has commenced development of business capability strategies in cooperation with DSDTI and will deliver early activities post approval. Additionally, ARTC will require its construction contractor to deliver business capability development strategies in the Goondiwindi and Toowoomba LGAs.</p> <p>Inland Rail's Indigenous Participation Plan guides cooperation with Traditional Owners and Indigenous community members with respect to Indigenous business participation.</p>	8.6

8.1.3 Stakeholder inputs on mitigation measures

ARTC responses during EIS process

ARTC's consultation with stakeholders and communities has identified potential impacts which have been addressed as part of the Project's proposed design or through social performance partnerships, as summarised in Table 8-2.

Table 8-2: Project responses to key issues

Impact Area	Project responses
Severance and amenity impacts	<ul style="list-style-type: none"> ▪ Project aligned to be co-located within existing rail and road corridors where possible, minimising the need to develop land that has not previously been subject to disturbance for transport infrastructure ▪ Project positioned along the border of private properties wherever possible to limit property severance ▪ Consultation with property owners to ensure that a satisfactory level of access between adjoining properties is maintained, and to identify action which will minimise or offset changes to connectivity ▪ Consultation with landowners to identify specific measures that include, as relevant: <ul style="list-style-type: none"> ○ Provision of crossing points or underpasses to maintain access to fragmented properties ○ Maintaining access to water supply ○ Relocation of dams or irrigation infrastructure ○ Relocation of existing private infrastructure and utilities ○ Noise mitigation measures
Local businesses	<ul style="list-style-type: none"> ▪ Implementation of a Sustainable Procurement Policy and AIP Plan to ensure Project supply opportunities are available to local businesses ▪ Identification of businesses within 125 km of the Project with potential capacity to supply the construction phase ▪ Engagement with local business to identify opportunities to develop and promote local business participation ▪ Refinement of the Project alignment to avoid or reduce impacts on businesses near the Project footprint ▪ Engagement with DSDTI to develop business capacity building strategies

Impact Area	Project responses
Employment opportunities	<ul style="list-style-type: none"> ▪ Providing a clear and efficient process for people to seek information about employment opportunities and to register their interest in Inland Rail (promoting the availability of the ARTC jobs portal) ▪ Working with local communities, government stakeholders and private training providers to identify education and training pathways, and support access to employment opportunities for local residents during and post construction ▪ Project aligned to avoid impacts on the operation of the Commodore Mine, a major local employer
Community well-being	<ul style="list-style-type: none"> ▪ Consultation with landowners whose properties would be severed or bordered by the Project to identify mitigation measures addressing impacts on farm management, access and residential amenity ▪ Establishment of a mental health partnership to provide access to mental health support (and referral as required) for local residents ▪ Implementation of the Inland Rail Community Sponsorships and Donations Program

Integration in SIMP

The SIMP includes measures which address stakeholder suggestions as follows:

Stakeholder engagement (refer Section 8.2):

- Need for ongoing community access to information about the Project and its impacts
- Need for ongoing cooperation with landowners to mitigate impacts
- Ongoing consultation with Councils and Queensland Government agencies regarding road network planning, social infrastructure, driving economic development, and partnerships to address impacts on local amenity and character, and community cohesion

Local and Indigenous employment (refer Section 8.3):

- Skilling the local workforce for Project jobs
- Access to job readiness programs
- Enabling training and employment opportunities for Indigenous people, including Traditional Owners
- Partnerships with local training providers
- Ensuring jobs are advertised locally
- Opportunity to have a welcome event for construction personnel to assist with community

Housing and accommodation (refer Section 8.4):

- Management of Project accommodation impacts to avoid impacting on local housing and accommodation access
- Monitoring of Project housing demands
- Consultation with Councils and DHPW in development of the AMP

Community well-being (refer Section 8.5):

- Sponsorships and social investment (initiated)
- Collaboration with QPS and emergency services
- Mental health partnership (initiated)
- Early advice to health and emergency service providers regarding the construction workforce ramp-up and anticipated service requirements

- Provision of paramedic services to support workforce wellbeing and minimise demands on local services
- Consultation with schools and Department of Education to address potential noise impacts on schools

Business benefits (refer Section 8.6)

- Ensure local business can benefit from Project supply opportunities
- Protection for the rights of small businesses engaged by major contractors
- Businesses need advance notice to be able to plan ahead
- Potential for engagement of social enterprises in the supply chain
- Managing business expectations and supporting effective preparation
- DESBT engagement regarding skills development and business capacity.

8.1.4 Engagement with Councils

The Project has consulted extensively with GRC and TRC regarding a range of issues which are linked to social outcomes, including design issues, road-rail interfaces, flooding risks, environmental management measures, traffic management, waste management and impacts on Council utilities. Both Councils were engaged in SIA-specific meetings and community workshops, and have had regular meetings with ARTC staff during 2020.

As detailed in EIS Appendix C: Consultation report, ARTC's responses to Council inputs on mitigation of Project impacts have included:

- Development of hydraulic design criteria, bridge and culvert structure design and design refinements addressing Councils concern about changes to flooding patterns and debris from flood events
- Identification of suitable road access alternatives for all formed roads that would be impacted during construction and operation in consultation with Councils, emergency services, landholders and DTMR
- Confirmation of emergency access and fire and life-safety requirements for the Project
- Incorporation of future road planning requirements into the Project design and ensuring that rail access is not precluded for proposed adjoining third-party industrial hubs
- Design responses to specific areas of concern including a process of consultation with Councils, DTMR, and local communities during detail design. This will inform the location, preferred treatment and temporary management of road-rail interfaces and road re-alignments.

The results of SIA-specific consultation with Councils on social impacts and benefits and proposed management measures are reflected in the:

- Workforce management sub-plan (Section 8.3), which includes a strong focus on local employment and training opportunities, Indigenous employment opportunities, and alignment with Council on RSIS regional development priorities and Skilling Queenslanders for Work (SQW) programs
- Housing and accommodation sub-plan (Section 8.4), which addresses avoidance of workforce demands on short-term accommodation and rental housing, and provision of self-sufficient infrastructure for water and sewage management within non-resident workforce accommodation facilities,

- Health and community wellbeing sub-plan (Section 8.5), which includes the framework for cooperation with Councils and other stakeholders to offset impacts on social values such as amenity and local character, and make positive contributions to community cohesion and resilience
- Local business and industry sub-plan (Section 8.6), which reflects Councils' priorities for maximising the involvement of local businesses in the Project's supply chain.

8.1.5 Adequacy of proposed mitigation measures

The mitigation and management measures outlined in the SIMP include:

- ARTC commitments that are being implemented as part of the Project's design
- Measures provided in the Chapter 22: Outline Environmental Management Plan of the EIS
- Strategies that are being developed as part of Inland Rail's Social Performance program
- Measures that have been identified as part of the SIA, including through stakeholder engagement.

The following sub-sections describe expected adequacy of mitigation and management measures.

Design response

ARTC's design responses have included:

- Locating the Project alignment within existing rail or road reserves and along property boundaries wherever possible to reduce land acquisitions, severance and impacts on property use and management
- Avoidance of towns, with the exception of Yelarbon and Southbrook which are located on the existing rail line
- Designing road-rail interfaces (and stock route interfaces) to maintain connectivity
- Bridge, viaduct and culvert designs were informed by stakeholders' feedback about previous flooding events
- Property-specific design elements which respond to landowners' inputs regarding access to and within properties, and avoidance of farm infrastructure where possible.

ARTC design responses have reduced, but not removed, the potential for impacts such as the need for residents to relocate due to land acquisition, property severance, disruption of agricultural businesses, and impacts on rural amenity. ARTC has committed to continued engagement with directly affected and nearby landowners to address their specific concerns.

Environmental impacts

Measures outlined in Chapter 22: Outline Environmental Management Plan of the EIS are designed to avoid or mitigate environmental impacts that could result in social impacts, e.g. noise and vibration, changes to air quality, changes to the road networks and visual amenity impacts. The SIA assumes that the measures identified in the Outline Environmental Management Plan will be effective in reducing environmental impacts to acceptable levels. Uncertainty exists in that, whilst changes to environmental qualities may be within regulatory criteria, individuals react differently to environmental changes, and issues such as noise and dust may still be experienced as diminishing amenity or affecting lifestyles. The Project will ensure the availability of a proactive responsive stakeholder engagement program and a responsive complaints management process to support identification of any issues which may require refinement of mitigation measures.

Social performance

Inland Rail's Social Performance program is developing in response to the findings of SIA undertaken for Inland Rail projects, stakeholder feedback, and corporate policies being developed to support Inland Rail's delivery. Inland Rail Initiatives to be implemented for the Project are referenced in SIMP sub-plans as detailed in Section 8.1.2. ARTC has set clear social performance requirements for its contractors to support its social performance strategies.

Social performance strategy implementation will be a collaborative process with various stakeholders, and the success of strategies will be partially dependent on the outcomes of those collaborations.

ARTC's social performance strategies are expected to increase the value of Project benefits to local communities.

Measures identified through SIA

Additional mitigation measures which are outlined in following sections have been developed in response to stakeholder inputs (refer Section 8.1.3), and based on the SIA consultants' experience. The measures are proposed to:

- Reduce the likelihood that impacts will occur by:
 - Identifying issues to be considered during the detail design phase, in order to avoid or minimise impacts through the design and contracting process
 - Enabling local participation in employment, thereby minimising additional demands on infrastructure and services
 - Managing workforce accommodation demands and workforce behaviour
- Reduce the consequence of social impacts through:
 - Engagement with stakeholders to refine mitigation measures such as site-specific (e.g. laydown area) and property-specific measures to avoid or reduce impacts on amenity, property access and connectivity
 - Partnerships and projects which will offset impacts on amenity, community cohesion and local character, and strengthen community resilience
 - Provision of information and engagement strategies which will assist stakeholders to anticipate and cope with changes to environmental qualities, road access or service demands
- Increase the likelihood and local value of Project benefits by:
 - Highlighting employment, training, business and community investment priorities
 - Describing ARTC's existing initiatives which will maximise community benefits.

The risk ratings provided in Section 9 indicate the SIA team's evaluation of the degree to which the likelihood and consequence of social impacts will be reduced by the mitigation measures proposed, considering:

- Stakeholder inputs and vulnerabilities within local communities
- Project design responses to issues raised by stakeholders
- ARTC commitments and social performance strategies
- Measures outlined in the Chapter 22: Outline Environmental Management Plan of the EIS.
- Measures identified through the SIA process.

The monitoring framework provided in Table 8-13 will enable ARTC and stakeholders to track the effectiveness of the SIMP and develop corrective actions (i.e. additional or refined mitigation measures) if required, and will be supported by the monitoring frameworks developed for each partnership strategy.

8.1.6 Links to State and local planning

Links between mitigation measures discussed in the SIMP and State and local planning priorities (identified in Sections 2.4 and 5.4.5) are summarised in Table 8-3.

Table 8-3: Mitigation measures' links to planning priorities

Plan/Policy	Link with mitigation measures	Section
ShapingSEQ	<ul style="list-style-type: none"> The Project's cooperation with Traditional Owners, including engagement to support employment opportunities, cultural awareness tours and ongoing cultural heritage management activities, recognises Indigenous cultural knowledge and connection to land 	8.2
	<ul style="list-style-type: none"> Measures to maximise local employment and local business participation will support ShapingSEQ goals such as 'grow', 'prosper' and 'sustain' in the Project region 	8.3, 8.6
Darling Downs Regional Plan	<ul style="list-style-type: none"> Measures to maximise local employment and local business participation will support skills development and diversification of local economies 	8.3, 8.6
RDA Darling Downs South West Roadmap	<ul style="list-style-type: none"> Measures to maximise local employment and local business participation provides support for diversifying local economies Measures to mitigate impacts on tourism as a highly valued industry are provided 	8.3, 8.6
Goondiwindi Corporate Plan 2019-2024	<ul style="list-style-type: none"> Measures to maximise local employment and local business participation provides support for diversifying local economies 	
Toowoomba Regional Community Plan	<ul style="list-style-type: none"> The AMP will address potential impacts on access to affordable, suitable and good quality housing 	8.4
	<ul style="list-style-type: none"> Measures which address potential impacts on visual amenity will support local character 	8.2.8, 8.5.6
Millmerran Community Growth Action Plan	<ul style="list-style-type: none"> Business capacity building strategies will include businesses in Millmerran and Pittsworth and will support the retention and development of local businesses 	8.6. 8.5.6
Pittsworth Community Growth Action Plan	<ul style="list-style-type: none"> Engagement with TRC will include a focus on identifying opportunities to support place making and tourism initiatives 	
Employment and training programs	<ul style="list-style-type: none"> Inland Rail is cooperating with RSIS officers in each Council to identify opportunities for cooperation in skills development Inland Rail will continue consultation with DESBT, including a focus on alignment with the Queensland Government's training and employment policies as relevant to the Project region and the project Inland Rail is working with Councils to plan programs and apply for SQW funds to support the involvement of under-represented groups in training and skills development initiatives 	8.3

8.2 Community and stakeholder engagement

EIS Chapter 22: Draft OEMP and the relevant EIS appendices provide detailed measures to mitigate environmental impacts which may result in impacts on social values. Notwithstanding, community members may experience impacts on amenity and local character due to changes to the landscape, the noise environment and the road network, effects on community cohesion, and/or fear and stress about the Project's potential impacts.

The Community and Stakeholder Engagement plan outlined in the following sub-sections aims to support mitigation and adaptive management of:

- 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 which help them understand the nature, duration and effect of Project works, and how to resolve issues if they arise
- Concerns about property values, by sharing information about environmental impacts and management measures.

The plan includes:

- The objectives and performance measures for engagement
- Stakeholders to be engaged
- Partnerships and agreements which are in progress or being developed
- Responsibilities for engagement implementation
- Proposed communication tools and activities
- Engagement measures
- Complaints management
- An action plan which includes:
 - ARTC commitments to stakeholder engagement
 - Actions ARTC will undertake and/or require of the Principal Contractor to take to support adaptive management of social impacts
- The timing for each action i.e. detailed design, pre-construction and construction phases
- Monitoring and reporting
- Mechanisms for incorporation of stakeholder inputs in refinement of management measures.

8.2.1 Objectives and performance measures

ARTC recognises that ongoing engagement with landowners, traditional custodians, communities businesses, Councils and other stakeholders that will be impacted by or stand to benefit from Inland Rail is central to the Project's success.

The objectives and performance indicators for community and stakeholder engagement are shown in Table 8-4.

Table 8-4: Engagement objectives, desired outcomes and performance measures

Objective	Desired outcomes	Performance measures
Establish and maintain engagement mechanisms which build relationships between ARTC and its stakeholders	Community and stakeholder relationships facilitate information sharing to support adaptive management of social impacts	<ul style="list-style-type: none"> A majority of landowners are satisfied with the management of Project impacts on their properties Number of complaints about Project impacts
	Cooperative and respectful relationships exist between ARTC, the Principal Contractor, construction personnel and community members	<ul style="list-style-type: none"> CRG feedback confirms ARTC has engendered positive relationships
Enable adaptive management of impacts on amenity, connectivity and community values during construction	Community members have access to information and support to assist adaptation to changes resulting from the Project	<ul style="list-style-type: none"> Mitigation measures are refined where necessary in response to stakeholder feedback CRG feedback confirms satisfactory access to timely information about the Project and management measures Landowners who need to move from within the Project footprint have access to support, if required Mental health partnership is maintained during the construction phase
Support mitigation of impacts on amenity, community cohesion and local character through stakeholder engagement and delivery of local community programs in partnership with community and government stakeholders	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 and outcome measures (to be determined with partners) for community partnerships and programs in potentially impacted communities
	Stakeholder issues and grievances are identified, evaluated, addressed and recorded	<ul style="list-style-type: none"> ARTC responds to complaints from community members as per the ARTC Complaints Management Handling Procedure Complaints and their resolution are recorded and reported as part of SIMP reports

8.2.2 Stakeholders

The key stakeholders addressed by this engagement plan include:

- Landowners in and adjacent to the Project footprint
- Residents and community organisations in potentially impacted communities
- Traditional owners and other Indigenous community members
- Businesses in potentially impacted communities and the Project region
- GRC, TRC and government agencies.

The measures detailed in Table 8-7 will support adaptive management of social impacts during the Project's construction including:

- Anxiety and stress about the potential for the Project to affect local amenity or quality of life as the result of property acquisition, noise and/or visual amenity impacts
- Land acquisition and property disturbance
- Noise from track construction and traffic disruptions which may reduce enjoyment of homes' outdoor areas, with potential for effects on quality of life
- Detractions from local amenity and character due to noise and traffic delays, changes to the landscape and loss of structures which contribute to rural character
- Diminished community cohesion, due to the relocation of residents or differences of opinion about the Project
- Changes to movement patterns across the Project footprint, with community members likely to adapt to changes in the road network over time
- Changes to land use in the Project footprint, with potential to displace residential and farming uses

Landowners living near the disturbance footprint are also concerned that their property values will decrease as the result of the Project's construction or operation. ARTC will communicate its commitments to environmental management and EIS approval conditions to local and regional community members, to reduce the likelihood of negative perceptions about the amenity of properties near the rail alignment.

Positive social impacts during construction which are addressed in other sub-plans include:

- Access to training and employment opportunities, which will build the local skills base and support the well-being of personnel and families (Section 8.3)
- Opportunities for local businesses to supply goods and services to the Principal Contractor, opportunities for Traditional Owners to work or do business on Country and potential to support business development (Section 8.6)

Without mitigation, potential impacts during Inland Rail's operations include the potential for rail noise to affect the amenity of homes or community facilities, changes to rural character near the rail corridor, short traffic delays at level crossings and the potential for road-rail accidents or rail-related fatalities. Project operations have potential for broader regional and State benefits, including support for regional economic development which will sustain employment and business activity for the long term. Operational social impacts and opportunities will be managed through development of a SIMP for operations as described in Section 8.1.1.

Section 8.2.5 outlines ARTC commitments and the engagement actions ARTC will undertake and/or require of its Principal Contractor during the detail design, pre-construction and construction phases to support mitigation of impacts on community values including amenity, connectivity and local character. Measures which aim to reduce residents' stress and anxiety regarding the Project and its potential impacts are supported by measures provided in Section 8.5.

Key stakeholders that are also addressed as part of other SIMP sub-plans include:

- Education and training providers (Section 8.3)
- The managers of potentially impacted community facilities (Section 8.5)
- Government agencies who plan or provide social infrastructure or economic development including:
 - Queensland Health, QPS, QAS, QFES and Department of Education (Section 8.5)

- DESBT and DSDTI (Sections 8.3.7 and 8.6)

- Businesses and business and industry organisations (Section 8.6).

ARTC will maintain a stakeholder register, building on the register developed during previous Project phases, to ensure regular and consistent engagement with stakeholders. Stakeholder interactions will be documented in order to monitor the success of engagement and identify issues to be addressed as part of implementing the Project's environmental management strategies.

8.2.3 Partnerships and agreements

During the draft EIS process, ARTC has been working with a range of stakeholders to develop partnerships and agreements to support management of social impacts and opportunities.

Partnerships and agreements will be progressed with stakeholders during the remainder of the EIS process and the detail design phase. The Project will be delivered by the Principal Contractor who will have a significant role in implementing specific activities and agreements. The current status of partnerships and agreements with stakeholders is outlined below.

Table 8-5: Status of partnerships and agreements

Impact/benefit	Detail	Status
Use of private property	ARTC has engaged with directly affected landholders to discuss property access, hydrology, water access, mitigation of impacts on property infrastructure, and minimising impacts to connectivity across the rail corridor. This has enabled refinement of the design and hydrological modelling, and identified the range of measures that will be required to address property-specific impacts (refer Section 8.2.5). ARTC will continue engagement with landholders during the EIS display period, to encourage their access to the EIS and discussion of its findings. ARTC will provide information about the properties within the corridor to the Constructing Authority, including the results of any relevant property-specific agreements with landholders.	Current and ongoing throughout EIS phase.
	With the exception of early acquisitions by ARTC based on demonstrated hardship, the majority of land required for the Project will be acquired through Constructing Authority. The Constructing Authority will not begin to acquire land until the corridor is confirmed, the Project is approved, and the gazetted corridor is finalised. During the construction phase, the construction contractor will assume responsibility for relationships with landholders.	Post EIS approval
Effects on cultural landscapes	CHMPs for the Project have been negotiated and agreed between ARTC and the relevant individual Aboriginal parties and approved under the Aboriginal Cultural Heritage Act (2003) (ACH Act). ARTC has developed a Statement of Commitments with BNTAC which recognises their ongoing connection to Country and Culture and commits ARTC to working in partnership with the BNTAC to support a shared vision for a sustainable and thriving Bigambul Nation	Agreements negotiated and executed implementation ongoing
Impacts on local amenity and connectivity	The Project initiated a Technical Working Group with TRC which has operated throughout 2019-2020, enabling discussion of Council priorities for management of impacts on local amenity and connectivity, including road re-alignments, construction management, crossing design, road use management, waste management and utilities. Since 2019, ARTC has had an established working relationship with GRC and in mid-2020 established a Technical	Commenced during EIS phase and continuing

Impact/benefit	Detail	Status
	<p>Working Group which meets regularly to discuss design and infrastructure issues.</p> <p>ARTC meets on a monthly basis with both the GRC mayor and chief engineer to discuss community concerns and sentiment. Community concern and sentiment is also discussed at monthly meetings with TRC's engagement team. TRC and GRC are also regular observers of the Inner and Southern Darling Downs CCC meetings. GRC are a member of the North Star to the Border CCC.</p>	
	<p>Training to maximise local employment and business capacity development have been a key focus for TRC and GRC to date. Discussion of cooperative actions to offset impacts on amenity, local character and community cohesion commenced in September 2020 and will be a focus during the pre-approval and post-approval periods.</p>	Further engagement planned for Q4 2020. Additional definition of measures to be undertaken post-approval.
	<p>Councils will be consulted regularly about the outcomes of community development, accommodation and local procurement strategies, invited to participate in annual SIMP reviews, and provided with annual reports on the SIMP's delivery. Regular engagement with Councils (to a schedule agreed with them) will enable their participation in developing adaptive management measures to address any emerging or changing needs, throughout the construction process.</p>	Commencing during construction
	<p>ARTC has engaged with DTMR, TRC and GRC extensively throughout 2020 on the B2G traffic impact assessment and potential traffic management solutions. Appendix C Stakeholder Engagement Technical Report provides detailed records of these engagements.</p>	Current/confirmed
Training and development opportunities	<p>As part of Inland Rail Skills Academy partnerships, Inland Rail has a Memorandum of Understanding (MOU) with CSQ, to:</p> <ul style="list-style-type: none"> Provide information and advice on skills shortages to ARTC Work with ARTC to broker and enable training responses to address identified shortages Provide targeted construction skills training to Indigenous people, in cooperation with major contractors Support ARTC and potential contractors to develop and deliver targeted skills development in the Goondiwindi and Toowoomba LGAs in line with SIMP commitments and Project needs Work with ARTC to deliver CSQ's 'Try a Trade' program to be initiated post approval. <p>Inland Rail Skills Academy partnerships will enable:</p> <ul style="list-style-type: none"> University scholarships with a focus on courses which facilitate STEM and regional development outcomes, e.g. engineering and project management, with a partnership with USQ to offer scholarships initiated in 2020. Scholarships are only available to applicants located in communities along the Inland Rail alignment in Queensland. One scholarship has been awarded to date and a second round is current. University of Newcastle to deliver a STEM education program in high schools along the Project alignment, including linkages to USQ Science and Engineering Challenge for schools in SEQ 	<p>Initiatives agreed and commenced/in progress as noted</p> <p>Further initiatives to be identified during detailed design phase</p>

Impact/benefit	Detail	Status
	<ul style="list-style-type: none"> Development of an online rail skills program available to school and university students in the region, including access to Inland Rail innovation, exposure to rail professions and micro-competencies being explored Business capacity building programs with small-to-medium enterprises to strengthen capacity in the region for both this Project and other future projects. Programs are being developed in cooperation with DSDTI and DESBT for delivery post-approval Apprenticeships, traineeships and facilitation of industry accreditation to support employment into Inland Rail projects and other major regional industries, to be progressed when Project is approved Training programs focused on developing skills in rail operation and working in a rail corridor, to be commenced during the construction phase. 	
	Engagement with DATSIP and CSQ to identify specific training programs for Indigenous people, to be implemented as part of the Inland Rail Skills Academy.	Current engagement
	Cooperation with Goondiwindi and Toowoomba RSIS project officers to align Project training and development strategies provided as part of the Inland Rail Skills Academy with RSIS activities where possible, with a particular focus on transferrable skills which will be retained in the region post construction.	Preliminary discussions held, engagement to be renewed during approval process
	Partnership between Bigambul People, Western Wakka Wakka People and Endorsed Aboriginal parties and Inland Rail to encourage Indigenous people to participate in construction skills training program prior to Inland Rail construction commencing.	Discussions ongoing
Health and safety	Mental health partnerships with the Darling Downs and West Moreton PHN to promote free local access to mental health services and provide resources and services to mitigate any increased demand caused by Inland Rail.	Delivery commenced in 2019 and is ongoing
	Lifeline supported to deliver Lifeline's Community Connections program in the Project region to support community cohesion and resilience (delivered through PHN partnership).	Delivery commenced in 2019 and is ongoing
	Potential for additional services to be included within the PHN partnership agreements.	To be explored in detailed design phase
	Partnership with emergency services to build skills and cooperation in emergency responses.	To be commenced post approval
	Partnership with 'Mates in Construction' focused on supporting mental health outcomes of construction workers on the Project.	Discussions in progress
Local procurement	<p>Engagement with DESBT to discuss potential skills training partnerships to support individuals and businesses to be ready for opportunities associated with Inland Rail Projects.</p> <p>Engagement with DSDTI and Industry Capability Network to collaborate on business capacity development in the Project region, to prepare small to medium businesses to participate in major projects, foster relationships between suppliers and help match suppliers to Inland Rail opportunities.</p> <p>Cooperation with DITRDC to align Project initiatives with DITRDC's regional development initiatives.</p>	Agreements to cooperate initiated, to be implemented when Principal Contractor is confirmed

Impact/benefit	Detail	Status
	Information exchange regarding businesses within the Bigambul, Western Wakka Wakka and Endorsed Aboriginal Parties communities and the business offerings and skills that contractors require, in support of the development of capacity building programs.	

8.2.4 Engagement responsibilities

During the remainder of the EIS phase, Inland Rail staff will continue to work with community members and other stakeholders to encourage access to the draft EIS and community participation in the public submission process (refer Section 8.2.6).

Both ARTC and the Principal contractor will maintain roles in community and stakeholder engagement during the detailed design and construction phases. Table 8-6 summarises key responsibilities for each party by Project phase. Detailed communication and engagement measures are provided in Section 8.2.5.

Table 8-6: Engagement responsibilities

Phase	Engagement mechanism	Responsibility
Remainder of the EIS phase	Public notification, display and submission process	OCG
	Provide communications collateral (website updates and fact sheet) and opportunities for engagement (community information sessions, Council briefings and CCC meetings) to encourage access to the draft EIS and community participation in the public submission process	ARTC
	Review public submissions and provide further information/clarification in response to submissions in Final EIS	ARTC
Detail design	Engage with TRC, GRC, DDWM PHN, DCDSS, and the owners of community facilities that would be affected by noise during the detail design phase to seek input to the Community Wellbeing Plan and Accommodation Management Plan, continue implementation of partnerships and agreements, and initiate management measures with long-lead times	ARTC and Principal Contractor
	Write to directly affected landholders when the Constructing Authority is appointed and seek landholder construction for ARTC to advise Constructing Authority of landholders' wishes identified in engagement to date	ARTC
	Undertake engagement with directly affected landholders regarding land acquisition process and compensation arrangements	Construction Authority and ARTC
	Cooperation with Traditional owners in cultural heritage management	ARTC and Principal Contractor
	Establish and operate the CRG/s, including provision of public access to CRG minutes where appropriate	Principal Contractor with ARTC
Construction	Provide oversight and monitoring role to ensure consultation activities are delivered in accordance with EIS commitments and relevant approval conditions, including engagement of a Community and Stakeholder Engagement Manager and provision of Community Relations Monitor	ARTC
	Develop and maintain Inland Rail Skills Academy partnerships	ARTC
	Maintain communication between stakeholders and ARTC including: <ul style="list-style-type: none"> Provision of regular updates about the progress and status of the Project through the Inland Rail website 	ARTC

Phase	Engagement mechanism	Responsibility
	<ul style="list-style-type: none"> Free call telephone line Reply-paid address for written correspondence from community members Maintain the Project's webpage, including feedback mechanisms and an enquiry facility <p>Road/rail safety campaigns addressing the operations phase</p>	
	Cooperate with Traditional Owners in cultural heritage management and to optimise Indigenous employment and business outcomes	ARTC and Principal Contractor
	<p>Provide and implement a Communication and Stakeholder Engagement Management Plan (CSEMP) that:</p> <ul style="list-style-type: none"> Demonstrates the ability to develop and maintain a proactive, collaborative and effective working relationship with the community, stakeholders and ARTC Complies with ARTC policies and procedures Includes a communication control plan for key proposed construction sites along the alignment Details business engagement mechanisms Describes the process for identifying and establish community initiatives, partnerships and legacy proposals 	Principal Contractor
	<p>Establish and implement a complaints and enquiries process which is consistent with ARTC's Complaint Management Handling Procedure.</p> <p>The Principal Contractor will promote the availability of its complaints management system, receive complaints, report all complaints to ARTC and be responsible for resolving complaints which relate to Project construction.</p> <p>ARTC will maintain and promote the availability of its Complaints Handling Management Procedure.</p>	Principal Contractor with ARTC
	<p>Establish and implement communication and information strategies about the construction program and activities including:</p> <ul style="list-style-type: none"> Email addresses to ensure community members have direct access to the Project team Notification letters and/or email updates Public notices Factsheets addressing specific works, impacts or changes to conditions Website and SMS updates Provide and promote contact details for availability of a Project representative by phone 24/7 	Principal Contractor with ARTC
	<p>Implement community engagement strategies including :</p> <ul style="list-style-type: none"> Training for on-the-ground workforce in community engagement protocols and requirements Day-to-day stakeholder liaison relating to construction activities and management of environmental impacts, including notifications landholders and public notices Meetings with Councils and other stakeholders with respect to implementation of agreed management measures (refer Table 8-7 and Section 8.5) Engagement with community members, community organisations and Councils to implement community initiatives, partnerships and legacy proposals 	Principal Contractor with ARTC

Phase	Engagement mechanism	Responsibility
	<ul style="list-style-type: none"> Partnerships as agreed with the relevant stakeholders (e.g. community organisations and training providers) Business engagement Road/rail safety campaigns addressing the construction phase 	
	Documentation of stakeholder interactions and identification of issues to be addressed as part of implementing the Project's environmental management strategies	Principal Contractor and ARTC

Community Reference Group

One or more Project CRG/s will be established during the detail design phase and will replace the CCCs that have operated during the reference design and EIS phase of Project development. The CRG/s 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 CRG/s 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 which need to be reconsidered or refined
- Enable CRG members to participate in monitoring the effectiveness of social and environmental management measures (refer Section 8.7).

Community members and other stakeholders will have access to CRG proceedings via provision of endorsed copies of minutes and other meeting records for the public record and for display on the Project's webpage, where appropriate.

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

Community Liaison Officer staff will be provided during the construction phase, to:

- Support communication between the contractor, nearby landowners, community members and other stakeholders
- Provide community feedback to the Principal Contractor in relation to the impacts of construction activities on the community, and suggested refinements to environment management measures
- 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.

Depending on the Principal Contractor's Community and Stakeholder Engagement Plans, one or more Community Liaison Officer/s may be provided, which will be determined by the Project during the detail design phase.

Contact details for the Community Liaison Officer/s will be provided to all landowners in and adjacent to the Project footprint and will be made available to other community members through the Project's website and ARTC's other communication channels.

Community Relations Monitor

ARTC will engage appropriately skilled and experienced personnel to act as the Community Relations Monitor 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 detail in the Chapter 22: Outline Environmental Management Plan of the EIS and include:

- Communicate with ARTC and the Environmental Monitor with regard to community consultation strategies and community concerns
- Inform affected entities about complaints procedures and the resolution of complaints and corrective actions as necessary
- To the extent reasonable and practicable, resolve community complaints not resolved by the complaints process
- Facilitate discussions between the ARTC and the contractor and affected entities about mitigation measures as required by either the ARTC or affected entity
- Provide advice to the Environmental Monitor in relation to complaints
- Provide a point of contact for the community for complaints and Project information.

8.2.5 Measures for ongoing engagement

ARTC's commitments to community and stakeholder engagement for the Project include:

- Building a dialogue between landowners and ARTC about land access and acquisition processes
- Implementation of a Community and Stakeholder Engagement Plan that ensures due consideration of all Project-related opportunities and concerns and maintains productive relationships and communication between ARTC inland Rail, the contractor, landowners, Traditional Owners and all levels of government
- Engagement with GRC and TRC on the Project schedule and progress, potential impacts and mitigations, and partnership opportunities to maximise social opportunities
- Establishment of a CRG to meet regularly with the purpose of providing timely, open advice, representation of community issues and concerns arising from the works throughout the construction phase
- Providing support to stakeholders and communities that are facing change due to Inland Rail
- Appointment of a Community Relations Monitor

- Maintain communication mechanisms throughout the approval, pre-construction and construction phases including a free call number, email addresses to ensure the community has direct access to the Project team, a reply-paid address for written correspondence from the community, and the Project webpage, including feedback mechanisms and an enquiry facility
- Identify emerging social issues that need to be addressed at the Project or Program level.

The following subsections describe the community and stakeholder engagement measures the Project will implement prior to the Project's approval and during the detail design, pre-construction and construction phases.

Pre-approval

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. The Project will support the process by undertaking the following activities:

- Provide information on the Project website and in social media about the timing of the submission period, locations where people can view the EIS (static and staffed displays and on ARTC's website) and how to make submissions to the draft EIS
- Provide a an EIS summary brochure distributed in hard copy and via e-news and the Project website
- Letters to directly impacted landholders and communities within the project area
- Provide static displays to support community discussion of key EIS topics
- Conduct briefings with government agencies
- Present the draft EIS findings to the two CCCs for discussion
- Conduct community information sessions to present and discuss the findings of the draft EIS
- Provide information to landowners including directly affected landowners through letters, e-news, and meetings as requested
- Meet with Traditional Owners to discuss the EIS funding and if requested, provide assistance with submissions by Traditional Owners

ARTC will also meet with TRC and GRC to discuss the draft EIS findings including proposed management measures outlined in the draft SIMP and seek further inputs on community initiatives which should be considered as part of the Project's Community Wellbeing Plan (refer Section 8.5.6).

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 B2G project will be made public via Department of State Development, Infrastructure and Planning's (DSDIP) and ARTC Inland Rail's websites.

Post approval

Following Project approval, the Project will commence the detail design phase. As shown in Table 8-7, ARTC and the Principal Contractor will meet with a wide range of stakeholders during the detail design phase, to seek their views on the implementation of management measures and their inputs to the development of management plans e.g. the TMP, AMP and Community Wellbeing Plan.

The Project will also initiate community and stakeholder engagement measures during the detail design phase which will be utilised throughout the pre-construction and construction phases.

The proposed communication tools and activities to be utilised throughout the detail design, pre-construction and construction phases include:

- Provision of regular updates about the progress and status of the Project through the Inland Rail website
- A free call telephone line
- Factsheets addressing specific works, impacts or changes to conditions
- Website and SMS updates
- Stakeholder meetings and briefings as discussed below.

From pre-construction, the Project will also provide:

- Notification letters and/or email updates prior to 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 and 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
- Community liaison staff to provide information about the Project
- The availability of a Project representative by phone 24/7 to enable immediate communication with the Project if residents are experiencing unexpected impacts e.g. noise, dust or disruption to property access
- A travel demand management awareness campaign to inform the public on the proposed construction works and potential effects on local road network operation.

Table 8-7 details the stakeholder engagement measures and actions to be implemented during each stage, structured according to five key strategies:

- Engage with directly affected and adjacent landholders to support the effectiveness of management measures addressing impacts on their households and properties
- Enable community members to access information about the Project, its impacts and management measures, and provide feedback to the Project
- Engage with businesses that may be negatively affected to optimise and monitor impact management measures, and optimise local benefits from Project supply arrangements
- Engage with Traditional Owners and Indigenous community members to support cultural heritage management and enable their access to Project employment and business supply opportunities
- Engage with Council and government agencies to confirm and implement management measures for impacts on community facilities, amenity, sense of place and community cohesion

Engagement measures supporting actions provided in other SIMP sub-plans are also noted in each action plan in Sections 8.2 – 8.6.

The Principal Contractor will be required to provide a CSEMP as outlined in Table 8-6 for ARTC acceptance.

Table 8-7: Ongoing engagement measures

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
Stakeholders	Landholders and tenants in and near the Project footprint		
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 		
Engage with directly affected and adjacent landholders to support to support the effectiveness of management measures addressing impacts on their households and properties	<ul style="list-style-type: none"> ▪ ARTC will implement appropriate authorisation procedures and means of identification for personnel accessing private property ▪ ARTC and the Principal Contractor will consider property owners' feedback regarding impact mitigation in the development of the detail design and CEMP ▪ ARTC will share information about the Project's approval conditions and environmental management measures through the Project's website to increase confidence that amenity impacts will be minimised ▪ Based on the detail design, ARTC and the Principal Contractor will meet with directly affected landowners to confirm property-specific management measures including, as relevant, property access arrangements, noise mitigation, avoiding/minimising impacts on agricultural uses, and access and egress solutions across the rail corridor, and referencing measures in the CEMP ▪ ARTC will provide appropriate written information and assistance to directly affected landowners during the land resumption process 	<ul style="list-style-type: none"> ▪ The Principal Contractor will continue engagement with landowners who are adjacent to the Project footprint to share information and identify any issues arising during pre-construction activities ▪ The Principal Contractor will engage with residents adjacent to and within 500 m of laydown areas and bridge construction sites via letter and through individual means as requested to <ul style="list-style-type: none"> ○ Communicate the measures provided in the CEMP ○ 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 ○ Identify any specific household concerns e.g. the presence of children or seniors who may be affected by noise, dust or change to property access, which need to be considered in implementation of environmental management measures 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> ▪ Maintain regular liaison with landowners adjacent to the Project footprint (to schedules and via means to be agreed with landowners) to hear and respond to their concerns ▪ Communicate the Project's land access protocols, construction hours, and commitments to workforce induction and the Code of Conduct to residents adjoining the temporary Project footprint ▪ Provide advance notice prior to construction activities which may result in excessive noise generation and for blasting activities, to all residents that could be affected, by these activities, as identified in the CEMP ▪ Provide ongoing driver and community safety education with respect to construction and operations ▪ Provide 24 hour access to Project representatives to assist residents and landowners to resolve any unexpected issues which arise ▪ Facilitate and promote access to Project information via a tele-interpretation service

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<ul style="list-style-type: none"> In consultation with the DDWM PHN, GRC and TRC, ARTC will identify community organisations that can provide support services for directly affected households, if required to support their relocation and adjustment to new circumstances, and provide funding for these services to be implemented during the detail design phase 	<ul style="list-style-type: none"> Establish and maintain consultation with potentially impacted communities, including monthly advance notices and updates to directly affected landowners and households adjacent to the disturbance footprint, and Regular (at least quarterly) updates to potentially impacted communities <p>Initiate and maintain communication and co-operation with local landowners during flood alert and recovery periods to support readiness and cooperation</p>	<ul style="list-style-type: none"> Implement a complaints management handling procedure which enables investigation and resolution of any complaints from nearby residents regarding privacy breaches or workforce behaviour
Stakeholders	Residents and businesses in potentially impacted 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 		
Enable community members to access information about the Project, its impacts and management measures, and provide feedback to the Project	<ul style="list-style-type: none"> ARTC will share information about the Project's approval conditions and environmental management measures with local communities, made available through local outlets (e.g. shops, local community websites and/or community organisations) and through the Project's website The Principal Contractor will establish the CRG/s 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, throughout the pre-construction and construction phases 	<p>The Principal Contractor will</p> <ul style="list-style-type: none"> Provide information to nearby communities regarding the construction timeframe, employment opportunities and how to express interest in employment or contracting opportunities Promote the Project's communication channels, engagement mechanisms and complaints process to members of potentially impacted communities Provide travel demand management awareness campaign to inform the public on the proposed construction works and potential effect on local road network operation 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Provide accessible information about the Project's impacts and mitigation measures, engagement process and complaints process to members of potentially impacted communities, through online and print methods, made available through local outlets (e.g. shops, local community websites and/or community organisations) Maintain regular communication with directly affected landowners, adjacent landowners potentially impacted communities, GRC and TRC regarding: <ul style="list-style-type: none"> The construction schedule

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<ul style="list-style-type: none"> ▪ The Principal Contractor will conduct community information sessions in Millmerran, Inglewood and Yelarbon to discuss the non-resident workforce accommodation facilities, identify business or employment opportunities relating to the accommodation facilities and identify specific issues to be addressed as part of the AMP ▪ ARTC and/or the Principal Contractor will conduct meetings or workshops with the Yelarbon, Millmerran, Inglewood, Pittsworth, Brookstead, Gowrie and Southbrook communities to identify and develop programs which increase opportunities for community participation, and focus on community safety, health and emergency services ▪ ARTC will disseminate accurate, transparent and accessible information about the Project to the community, including information about the land acquisition process and EIS outcomes, via newsletters and the Project's website ▪ ARTC and/or the Principal Contractor will engage with the Pittsworth and District Assembly of God Church/Harvest Life Church, and the management committee/trustees of the Yelarbon & District Soldiers Memorial Hall and the Pampas Memorial Hall, to explain the draft EIS results with respect to noise impacts during construction and operation and agree property-specific mitigation measures to reduce noise impacts 	<ul style="list-style-type: none"> ▪ Provide regular (at least quarterly) updates to potentially impacted communities e.g. through fact sheets and newsletters <p>ARTC and/or the Principal Contractor will</p> <ul style="list-style-type: none"> ▪ Consult with the Yelarbon community regarding their preferences for mitigation of impacts on non-Indigenous cultural heritage structures or remnants of structures as outlined in the Chapter 22: OEMP and incorporate their feedback in the CEMP or Community Wellbeing Plan as appropriate ▪ Engage with the Yelarbon and Brookstead communities and the respective Regional Councils to plan and implement community projects to offset impacts on the amenity and character of Yelarbon and Brookstead ▪ Provide clear information through ARTC and contractor websites and other communication channels regarding how to apply for a job and the accommodation options on offer to Project personnel ▪ ARTC will update the Project's webpage and other locally available communication materials to include the Project's OEMP and SIMP, quarterly construction updates and SIMP monitoring reports ▪ The Principal Contractor will implement a complaints management system including reporting and reporting provisions to be continued throughout the construction phase ▪ ARTC will implement Inland Rail's Complaint Management Handling Procedure 	<ul style="list-style-type: none"> ○ Impacts that may be experienced e.g. noise or traffic disruption, and how the Project is mitigating impacts ○ Road safety measures ○ How to communicate with the Project and the Principal Contractor <ul style="list-style-type: none"> ▪ Develop and implement Communication Action Plans for specific Project works that will impact the community and stakeholders outlining the scope of the works, expected impacts, impacted stakeholders, communication and engagement activities and timing of those activities ▪ Maintain the operation of CRG/s throughout the construction phase ▪ Continue engagement as part of partnerships and funding arrangements with the leaders or managers of community and Council initiatives ▪ Provide regular newsletter, website updates and fact sheets including information about construction activities, impacts and management measures and disruptions to the traffic network ▪ Respond to public requests, enquiries and complaints ▪ Facilitate and promote access to Project information via a tele-interpretation service

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
			<p>ARTC will:</p> <ul style="list-style-type: none"> Promote operational employment and supply opportunities to local and regional residents, via Inland Rail Skills Academy and business briefings, addressing both construction and operations Maintain implementation of the Complaints Management Handling Procedure Develop and implement driver and community safety education campaign addressing rail operations Maintain the availability of information about EIS approval conditions, and ARTC's compliance with conditions to local and regional community members, to reduce the likelihood of negative perceptions about the amenity of properties in or near the Project footprint Update the Project's webpage and other locally available communication materials to include the Project's Outline Environmental Management Plan, SIMP quarterly construction updates including detailed explanations of upcoming activities, workforce ramp-up and stakeholder engagement mechanisms, and annual SIMP monitoring reports (when available)
Stakeholders	Businesses including tourism, agricultural, construction, service and retail businesses near the Project footprint and in potentially impacted communities		
Impacts addressed	<ul style="list-style-type: none"> Impacts on tourism businesses Impacts on agricultural businesses Opportunities to supply the Project 		

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
Engage with businesses that may be negatively affected to optimise and monitor impact management measures and optimise local benefits from Project supply arrangements	<p>ARTC will:</p> <ul style="list-style-type: none"> Consult with local Chambers of Commerce, tourism associations and tourism service providers to explain management measures regarding amenity, road connections, and supply chain development and seek feedback Engage with local businesses, TSBE, chambers of commerce and DSDTI and DESBT to discuss existing skills, gaps in local capacity to work with major projects, and capacity building programs Continue to engage with DSDTI and the Industry Capability Network to collaborate on business capacity development in the Project region to prepare small to medium businesses to participate in major projects Based on the detail design, ARTC and/or the Principal Contractor will engage with businesses that may experience noise exceedances, dust or disruptions to access, to develop and implement mitigation measures to reduce impacts ARTC and/or the Principal Contractor will engage with business in Yelarbon, Inglewood and Millmerran to enable them to gauge the need to diversify their offering to benefit from proximity to non-resident workforce accommodation 	<ul style="list-style-type: none"> The Principal Contractor will provide a clear and efficient process for businesses to source information about the Project and potential supply opportunities, and to register their interest in Project supply through a procurement portal The Principal Contractor will provide regular Project updates which forecast road works, road realignments and closures, and explain alternative routes to enable farmers and other businesses to plan their travel to minimise disruptions ARTC and/or the Principal Contractor will work with local Chambers of Commerce, tourist information centres and the Goondiwindi and Toowoomba Regional Councils, develop a strategy to ensure that any potential impacts on tourism visitation are mitigated through support for tourism marketing campaigns targeting potentially impacted communities 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Maintain engagement with landowners and other business owners adjacent to the Project footprint (at least quarterly during the first year of construction or as agreed with landowners) to monitor the effectiveness of environmental and social impact management and support identification and implementation of any corrective actions required Provide regular briefings/procurement nights (at least annually) to businesses in Goondiwindi, Yelarbon, Inglewood, Pittsworth, Millmerran and Toowoomba regarding Project supply opportunities (pre-construction, construction and operation) Maintain a clear and efficient process for businesses to seek information about opportunities and register their interest in Project supply Maintain procurement portals throughout the construction phase

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<ul style="list-style-type: none"> ARTC and/or the Principal Contractor will engage provide business briefings in Goondiwindi, Yelarbon, Inglewood, Pittsworth, Millmerran and Toowoomba, to promote supply opportunities and provide information about how to engage with major contractors The Principal Contractor will communicate pre-qualification requirements to businesses in the Goondiwindi and Toowoomba LGAs <p>The Principal Contractor will develop agreements with the owners of properties on which borrow pits would be located including consideration of the amenity of other sensitive receptors and potential for increased traffic on rural roads</p>		
Stakeholders	Traditional Owners and Indigenous community members		
Impacts addressed	<ul style="list-style-type: none"> Impacts on cultural landscapes Training and employment opportunities Business opportunities 		
Engage with Traditional owners and Indigenous community members to support cultural heritage management enable their access to Project employment and business supply opportunities	<p>ARTC will:</p> <ul style="list-style-type: none"> Implement existing Statement of Commitments with BNTAC Initiate cultural awareness tours with Bigambul and Western Wakka Wakka people for Project team members In consultation with Aboriginal parties, consider naming Project components after Aboriginal people or with Aboriginal words for relevant places Enable meetings between Traditional Owner groups and the Principal Contractor to discuss employment, training and business strategies 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Continue to engage with Traditional Owners, DATSIP and Indigenous community members to support Indigenous businesses to understand Project opportunities and capacity building programs available to them, and encourage them to tender for Project supply contracts 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Engage with Indigenous community networks via written information and community forums to encourage Indigenous people's participation in training and employment opportunities, and support progress towards Indigenous employment goals agreed with the Principal Contractor Continue engagement with Indigenous community members to ensure operational roles are considered by Indigenous people

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<ul style="list-style-type: none"> Cooperate with Traditional Owners and other Aboriginal parties and organisations and the Principal Contractor to implement cultural heritage awareness actions 	<ul style="list-style-type: none"> Work with Indigenous communities, industry, DATSIP and DESBT to support the design and delivery of training and development programs to improve local capacity where this is needed, and link training and development programs with other projects and local industries to provide the greatest regional benefit. <p>ARTC will provide information and access to training and employment in a range of formats, including the Inland Rail website, industry and employment events and a network of regional and project offices to broaden Indigenous people's access</p>	
Stakeholders	GRC, TRC and Government Agencies		
Impacts addressed	<ul style="list-style-type: none"> Impacts on amenity and local character Social opportunities Training opportunities Community wellbeing Connectivity Traffic safety 		
Engage with Councils and government agencies to confirm and implement management measures for impacts on community facilities, amenity, sense of place and community cohesion	<p>ARTC and/or the Principal Contractor will:</p> <ul style="list-style-type: none"> Meet with GRC and TRC to discuss potential impacts on the amenity of towns and progress partnership opportunities and community initiatives which will offset impacts on the amenity of Yelarbon, Southbrook, Inglewood, Pittsworth and Millmerran, for incorporation in the Community Wellbeing Plan (refer Section 8.5.6) <p>In consultation with Councils, identify and invite the participation of social enterprises in business capacity building programs</p>	<ul style="list-style-type: none"> ARTC will consult with DCDSS to identify any Project-related stresses on local services, and if stresses on services are identified, enable a cooperative response to community needs between DCDSS, ARTC and community organisations <p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Ensure that all schools and community facilities in the potentially impacted communities are aware of the construction program, and are provided with regular updates about road closures and roadworks 	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> Maintain engagement with all schools, community facilities and school bus operators in potentially impacted communities regarding the construction program, road closures and roadwork, Engage with local high schools and training providers to provide information about the nature of skills required and develop and implement training pathways for Project construction and operation as part of the Inland Rail Skills Academy

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<ul style="list-style-type: none"> Continue engagement with Department of Education to confirm and implement management measures agreed with Department of Education and Yelarbon, Brookstead and Southbrook State Schools Continue consultation with local Council/DTMR and asset owners to ensure road safety concerns and road network management issues are addressed as part of the TMP and/or road use management plans ARTC and/or the Principal Contractor will provide early advice about pre-construction works, the construction schedule, the number and nature of vehicles and plant to be used, construction hours and construction personnel numbers to Queensland Health, the Darling Downs West Moreton PHN, QPS, QFES, QAS and SES services in the SIA impact assessment area, to enable forward planning for any service adjustments that may be required When the detailed design including road network changes and construction traffic routes are confirmed with DTMR and the two Councils, ARTC and/or the Principal Contractor will confirm the relevant school bus operators with Department of Education/DTMR and consult school bus operators about measures to be included in the Construction Management TMP e.g. limitation of construction traffic on school bus routes during morning and afternoon usage periods 	<ul style="list-style-type: none"> Consult with DTMR and GRC/TRC as relevant regarding temporary road access requirements, to identify measures to reduce any impacts on event participants Consult with Toowoomba and Goondiwindi Local Disaster Management Groups regarding planning for emergency response and recovery during construction Develop a protocol with emergency service providers, defining appropriate and coordinated responses and communication in the event of accidents and other emergencies Meet with QPS, QAS, QFES and SES to notify changes to the road network and construction activities, and orient them to the non-resident workforce accommodation facility and management protocols Provide a forward schedule for construction activities requiring oversized vehicle escorts to police services and all emergency services bases 	<ul style="list-style-type: none"> Provide regular updates to health and emergency service providers about construction works, the construction schedule, and construction personnel numbers Meet regularly with QPS, QAS and QFES 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 ARTC will consult with DCDSS annually during construction to identify any Project-related stresses on local services, and if stresses on services are identified, enable a cooperative response to community needs between DCDSS, ARTC and community organisations Prior to operations, ARTC will provide access to information to local communities regarding average wait times at level crossings and road safety in relation to rail operations

Engagement strategy	Actions - Detail design	Actions – Pre-construction	Actions - Construction
	<p>The Principal Contractor will:</p> <ul style="list-style-type: none"> ▪ Consult GRC, TRC, DHPW, Queensland Heath and QPS regarding the scope and management measures to be provided in the AMP ▪ Consult with Community Advisory Networks (representing health, emergency and education services) in planning investments in community projects ▪ Liaise or require the accommodation provider to liaise with TRC, GRC and employment agencies regarding employment opportunities available in the accommodation facility ▪ Engage with QPS, QAS and QFES in development of Emergency Response Plans, development of measures to mitigate impacts on emergency service response times and the location of fire management access tracks and actions required to ensure firefighters' continued access to areas that they can currently service ▪ Meet with DAF to assist them to plan for maintenance of timber supply, access for bushfire management and forestry haul routes, and lessee requirements <p>Consult with DAF and QBA regarding maintenance of honey producers' access to the State forest whilst Project construction is active in the Bringalily and Whetstone State Forests</p>		

Community and stakeholder engagement during rail operation

As noted in Section 8.1.1, upon the completion of the construction phase, the Project will be commissioned as part of the Inland Rail network. Before the completion of the construction phase, ARTC and/or its contractor will develop community and stakeholder engagement strategies for the commissioning phase and the first three years of operations, in accordance with ARTC's established practices for:

- Advice to community members and stakeholders that the railway will be operational, including the timing for operation of major components
- Communication and co-operation with landowners and residents who are adjacent to the rail network or who may experience impacts such as noise or vibration
- Travel safety awareness
- 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 management.

Community and stakeholder engagement strategies for operations will be reviewed in Year 3 of operations to determine any need for revision.

8.2.6 Complaints and feedback procedure

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 organisations 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, landowner 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. Complaints may be made by phone, email, letter or in person. 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 is conducted to determine whether the complaint is one which ARTC can resolve, or needs to be referred to another appropriate agency or party (for example a local council 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 be undertaken to 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.

The Principal Contractor will be required to implement its own complaints management process which will be required to align with ARTC's Complaint Management Handling Procedure.

8.2.7 Monitoring and reporting

Table 8-8 provides the framework for monitoring and reporting on community and stakeholder engagement including the impacts addressed, desired outcomes, performance measures, monitoring and reporting mechanisms and the timing for monitoring and reporting during the Project's construction.

The Project's Community and Stakeholder Engagement Plan will be reviewed annually during construction in consultation with the CRG/s, and updated as required.

Table 8-8: Community and stakeholder engagement monitoring

Impacts addressed	Outcomes	Performance measures	Mechanism	Timing
<ul style="list-style-type: none"> ■ Impacts of land acquisition ■ Impacts on residential and town amenity ■ Impacts on local character and community cohesion ■ Potential community benefits e.g. employment and business participation ■ Concern about property values ■ Potential to exacerbate disadvantage 	<ul style="list-style-type: none"> ■ Community and stakeholder relationships facilitate information sharing to support adaptive management of social impacts 	<ul style="list-style-type: none"> ■ A majority of landowners are satisfied with the management of Project impacts on their properties ■ Mitigation measures are refined where necessary in response to stakeholder feedback 	<ul style="list-style-type: none"> ■ Engagement with landowners to seek feedback ■ Project records 	Monthly monitoring, quarterly reporting to CRG, during construction phase
	<ul style="list-style-type: none"> ■ Cooperative and respectful relationships exist between ARTC, the Principal Contractor, construction personnel and 	<ul style="list-style-type: none"> ■ CRG feedback confirms ARTC has engendered positive relationships ■ Number of complaints about Project impacts 	<ul style="list-style-type: none"> ■ Request for feedback about stakeholder engagement and relationships as a regular item at CRG meetings ■ Complaints register 	Six monthly during construction phase

Impacts addressed	Outcomes	Performance measures	Mechanism	Timing
	community members			
	<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 and outcome measures (to be determined with partners) for community partnerships and programs in potentially impacted communities 	<ul style="list-style-type: none"> Records of partnership agreements Feedback from Council/ community/ government partners 	Six monthly during construction phase
	<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"> CRG feedback confirms satisfactory access to timely information about the Project and management measures Landowners who need to move from within the Project footprint have access to support, if required Mental health partnership is maintained during the construction phase 	<ul style="list-style-type: none"> Record of ARTC agreement with support services, if required Records of partnership agreements 	Quarterly during construction phase
	<ul style="list-style-type: none"> Stakeholder issues and grievances are identified, evaluated, addressed and recorded 	<ul style="list-style-type: none"> ARTC responds to complaints from community members as per the ARTC Complaints Management System 	<ul style="list-style-type: none"> Monitoring and reporting to CRG on complaints and their resolution 	Monthly monitoring, quarterly reporting to CRG during construction phase

8.2.8 Incorporation of stakeholder inputs in development of management measures

ARTC will continue engagement with GRC and TRC during the draft EIS public display phase and following review of Council submissions to the draft EIS. This will include discussion of the SIA's findings and in particular:

- Housing and accommodation: the scope of the AMP (as outlined in Section 8.4)
- Workforce management: obtaining an update on Councils' priorities as part of RSIS, SQW, and economic development/recovery initiatives, and confirm Council's interest in joint initiatives
- Community wellbeing:
- Seeking Council feedback on social issues and community needs in light of COVID-19-related impacts e.g. increased unemployment, population mobility and business conditions

- Discussion of Council and community initiatives which the Project could support (e.g. placemaking, community facility upgrades, community events) to strengthen local amenity, character and cohesion (refer to Section 8.5.6), Seeking input on Council's priorities and community or Council initiatives which could be considered as part of the Community Wellbeing Plan (refer Section 8.5.6) and the process for Council involvement in development of the plan
- Local business and industry: seeking advice on business and tourism conditions following COVID-19 restrictions, and refining Inland Rail Skills Academy business capability strategies to reflect Councils' advice
- Other Council priorities emerging from their consideration of the draft EIS.

As described in Section 8.2.6, ARTC will also conduct community information sessions and other meetings with stakeholders during the EIS display period to seek their feedback. The results of engagement during and after display of the draft EIS and the results of public and community submissions will be reflected in the information provided to OCG by ARTC prior to the Coordinator-General's evaluation of the EIS.

During the Project's detail design, pre-construction and construction phases, stakeholder feedback will be incorporated in the refinement of management measures as follows:

- Consideration of feedback from landowners on the effectiveness of design, environmental and social impact management measures of relevance to their properties
- Monthly recording of community complaints to identify any issues or trends that need to be addressed as part of implementing environmental management plans, with any changes reported as part of quarterly reports to the CRG
- Seeking feedback from CRG members on the effectiveness of stakeholder engagement and on SIMP implementation
- Involvement of Councils and CRG members in annual reviews of the SIMP.

8.3 Workforce management

The Project's construction phase offers the opportunity for employment of up to 950 people at peak, and an average of approximately 400 personnel throughout the construction period. The size and composition of the workforce will vary depending on the construction activities being undertaken and the staging strategy adopted. Employment opportunities will be available for professional staff and supervisors, trades workers and plant operators, earthworks crews, bridge structure teams, capping and track-works crews, safety and signalling systems installation crews, fencers, and labourers. Employment opportunities are also associated with the operation of the non-resident workforce accommodation.

One of ARTC's primary aims is to maximise employment opportunities for residents within the SIA impact assessment area, by:

- Facilitating skills development opportunities to build regional capacity in construction and rail operation
- Building partnerships with training providers to strengthen workforce skills in the SIA impact assessment area and reduce the potential for cumulative impacts to draw labour and skills from other businesses
- Requiring the Principal Contractor to employ locally, and to implement workforce training and diversity strategies.

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

- Analysis - a partnership with CSQ to identify skill shortages in the Project region and support the Inland Rail Skills Academy and Principal Contractor to develop locally applicable training pathways, with other training partners
- 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 online rail training programs, scholarships and SQW programs which provide training to people who are under-utilised or under-employed in the labour market
- 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 DSDTI and DITRDC (noting that discussions with DSDTI and DITRDC are ongoing)
- Communication – sharing information about Project opportunities with local businesses that employ local people through supplier registration portals and contractor webpages, industry/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 as described in Section 8.3.3.

This sub-plan describes how ARTC will maximise training and employment for residents in the Project region, manage the potential for impacts on other industries, and support workforce wellbeing.

8.3.1 Training and development

As noted in Section 7.2.2, ARTC has established the Inland Rail Skills Academy to facilitate local employment and procurement opportunities. The Inland Rail Skills Academy comprises four pillars:

- Education: science, technology, engineering and maths (STEM) and trades education in schools and university scholarships into Inland Rail related professions, e.g. engineering, project management,
- Skills and training: apprenticeships and traineeships and gaining industry accreditation to support employment into Inland Rail projects as well as other major regional industries
- Business capacity building: for small-to-medium enterprises to understand and meet major projects' supply chain requirements and enhance the value proposition of local business chambers and business groups
- Inland Rail staff training and inductions: opportunities for staff to increase skills in a range of areas including safety and sustainability.

Training opportunities provided as part of the Inland Rail Skills Academy will strengthen workforce capacity for both Project construction and Project operation.

Inland Rail Skills Academy's current initiatives being implemented in the SIA impact assessment area include:

- A Memorandum of Understanding with CSQ, to provide information and advice on skills shortages to ARTC and work with ARTC to broker and enable training responses to address identified shortages, provide information to job seekers and employers, develop introductory trade-readiness courses, and facilitate subsidised access to training, traineeships and apprenticeship in the building and construction industry, in partnership with Registered Training Organisations

- Partnership with USQ to offer scholarships that are only available to applicants located in communities along the Inland Rail alignment in Queensland, with one scholarship awarded to date and a second pending
- Partnership with University of Newcastle to deliver a STEM education program in high schools along the Project alignment
- Development of an online rail skills program available to school and university students in the Project region, including a focus on operational roles
- Business capacity building programs being developed in cooperation with DSDTI and DESBT for delivery post approval.

ARTC has engaged with economic development staff at GRC and TRC to ensure that Inland Rail Skills Academy initiatives are aligned with the priorities identified by Councils in their engagement with local communities and businesses as part of RSIS development. This has resulted in a focus on cross -industry skills training e.g. equipping experienced agricultural workers with skills which are relevant to both the construction and agricultural industries, including certification which will increase their job opportunities. ARTC is continuing to work with the Council's RSIS coordinators to align Inland Rail Skills Academy programs with local priorities, which is likely to include joint applications for local SQW programs and may include:

- A shared Inland Rail, GRC and DESBT initiative addressing land management and biosecurity skills development
- Potential to undertake construction training at Goondiwindi Showgrounds, contributing to showgrounds facility upgrading and skills training.

ARTC has also met with CSQ (during September 2020) to ensure that training and capacity development programs being developed with CSQ include support for skills development outcomes undertaken by contractors.

Consultation with CSQ indicates that the availability of construction skills training, recognised skills pathways and certification courses for construction in South East Queensland is good, however there are systemic issues with the availability of skills programs for operational skills and maintenance skills.

Following Project approval and appointment of the Principal Contractor, the program for apprenticeships, traineeships and facilitation of industry accreditation to support employment into Inland Rail projects and other major regional industries will commence. Training programs focused on developing skills in rail operation and working in a rail corridor will also be commenced during the construction phase in readiness for Inland Rail's operation.

Following Project approval, the Inland Rail Skills Academy will also cooperate with Department of Education, local high schools and training providers to develop training pathways for employment in Project construction and operation. Across the Inland Rail Program alignment, Inland Rail is working with DITRDC to develop program-wide training and development programs to equip SIA impact assessment area residents for construction and operational employment. There is also potential for a partnership with QR to access experienced rail operators and maintenance staff as trainers in the Project region, which will be further discussed with QR after the Project is approved.

8.3.2 Indigenous training and development

ARTC's commitments to training and development opportunities for Indigenous people include:

- 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 with schools and training providers to provide appropriate training for Indigenous people
- 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
- Providing a workplace that is inclusive and values the contributions of Aboriginal and Torres Strait Islander employees.

ARTC has agreed a Statement of Commitments with BNTAC which includes reference to participation in Project employment and the supply chain. ARTC's MOU with CSQ includes a specific focus on training programs targeted towards Indigenous jobseekers.

ARTC's Indigenous Participation Plan provides a framework for Indigenous participation on employment and business supply to the Project. Actions specified with respect to Indigenous employment and training include:

- Working in Project planning stages to understand the opportunities that will come from Inland Rail and the capacity of local Indigenous communities to take up these opportunities (in progress during the EIS phase)
- With BNTAC and DATSIP, developing an understanding of the Indigenous business profile in the SIA impact assessment area (in progress during the EIS phase)
- Providing information and access to support in a range of formats, including the Inland Rail website, industry and employment events and a network of regional and project offices to broaden Indigenous people's access
- 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, and link training and development programs with other projects and local industries to provide the greatest regional benefit.

As described below, ARTC will ensure that Indigenous participation is included as a key element of all tender assessments, will require Indigenous participation targets in contracts, and will work closely with contractors to achieve agreed outcomes.

Indigenous businesses are an important source of employment for Indigenous people and will be encouraged and supported to participate in the Project's supply chain, as discussed in Section 8.6. ARTC and/or its contractors will develop a business register which includes the Indigenous businesses noted in Section 5.4.5.

8.3.3 Local employment

The SIA has identified established strengths in major project construction within the labour force and businesses in the SIA impact assessment area. The availability of construction specialists and skilled labour changes rapidly in response to the cumulative demands of major projects. Analysis of the likely availability of construction skills and labour from the SIA impact assessment area is being undertaken as part of ARTC's MOU with CSQ, with consideration to the cumulative impacts of Inland Rail and other major infrastructure projects. This will enable the refinement of local and regional training partnerships to address skills gaps. It will also enable ARTC to refine management measures to address potential cumulative impacts on labour availability or housing if necessary (refer Section 8.4).

As noted in Section 8.1.2, ARTC has adopted a hierarchy for workforce recruitment strategies which defines 'local' as the LGAs which the alignment directly passes through i.e. the Goondiwindi and Toowoomba LGAs, with other regional residents within 125 km of the Project also a priority for recruitment.

To boost local workforce numbers, the Project's procurement process for the construction contract enables competitive bidding for local employment targets and procurement targets, incentivising the contractors to maximise local benefits. To ensure that tenderers are able to competitively bid for Project construction, they will be:

- Encouraged to familiarise themselves with the demographic, social and economic features of the Project region as outlined in the Social Chapter of the Project's EIS and the EIS Social Impact Assessment Technical Report, to assist in establishing appropriate social performance commitments and targets
- Required to consult with CSQ to understand skills analysis modelling and implications for labour requirements, and to look for opportunities to align skills development activities with broader CSQ and Inland Rail Skills Academy initiatives
- Required to detail the following which will form a key part of the tender evaluation:
 - Strategies for recruitment and training of personnel from the Goondiwindi and Toowoomba LGAs
 - Targets (numbers and percentages) for employment by location (i.e. Project Area/LGA) and demographic (e.g. participation by people under 25 years and Indigenous people)
 - Training strategies for the construction phase
 - Actions to ensure workforce gender diversity and participation of women in the project workforce
 - Workforce health and safety strategies
 - Workforce Code of Conduct
 - Indigenous participation
 - Local business engagement.

This will form a key input to the tender evaluation tender process. During the construction period, the Principal Contractor will be required to report to ARTC on the delivery and outcomes of training strategies and goals.

ARTC and its Principal Contractor will use multiple platforms to advertise and promote job opportunities to local and regional residents, including promoting the availability of employment Expression of Interest forms through community forums, newsletters and Inland Rail websites.

ARTC will also require its non-resident workforce accommodation provider to liaise with TRC, GRC and employment agencies in the SIA impact assessment area regarding employment opportunities available in the accommodation facility.

Inland Rail's Sustainable Procurement Policy will maximise the involvement of businesses with existing capacity, and includes a focus on building local businesses' capacity, to increase the number of businesses in the SIA impact assessment area that can successfully compete for Project supply opportunities (refer Section 8.6). This will also increase employment opportunities for workers and jobseekers in the SIA impact assessment area

There is also the potential for people from local communities to gain employment in Project operations. Actions initiated during the construction phase will 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 ARTC's established training and employment strategies.

8.3.4 Impacts on employment in other industries

There is potential for land acquisition to affect the productivity of agricultural properties and therefore access to employment on farms. ARTC is working with the owners of agricultural properties to minimise the impacts of land acquisition on their productivity and therefore on farming employment opportunities.

Tourism businesses may experience changes to visitation if tourists are deterred by road works during construction. Measures to address this potential impact are provided in Section 8.3.5.

There is also potential for cumulative demands for construction personnel for Inland Rail and other projects, to cause labour shortages in the SIA impact assessment area. During construction, ARTC will monitor Inland Rail projects' workforce ramp-up and the proportions of local and non-local personnel and consult with local Councils and Chambers of Commerce regarding any pressures they identify on local labour availability. This will provide the basis for refining recruitment and training strategies if the Project is exacerbating labour shortages.

8.3.5 Feelings of safety or privacy

In addition to strengthening the SIA impact assessment area's skills base and ensuring local employment in the Project, ARTC aims to ensure that the Project is constructed and operated in a manner which protects the health and safety of Project personnel and the local community.

Measures which will support feelings of community safety during construction include:

- The Principal Contractor will be required to ensure that Project personnel behave in accordance with a Workforce Code of Conduct approved by ARTC and ensure all personnel respect the privacy and safety of residents
- Appropriate authorisation procedures and means of identification for personnel accessing private property
- Adoption of a zero tolerance policy relating to anti-social behaviour for all work sites and the non-resident workforce accommodation facilities.

ARTC will also engage GRC, TRC and the Project's CRG in discussion of a welcome event for construction personnel to support relationship building between the construction workforce and local residents.

With respect to managing any potential impacts on traffic safety relating to workforce transport, ARTC will:

- Locate proposed non-resident workforce accommodation in reasonable proximity to worksites to minimise kilometres travelled and manage workforce fatigue
- Investigate and implement best industry practices with respect to journey management and investigate the potential for shared driving arrangements.

8.3.6 Workforce well-being

ARTC commits to providing a safe and healthy workplace for all personnel, and to ensuring that workforce behaviour avoids impacts on community safety and residents' privacy.

ARTC will fulfil its obligations under the *Workplace Health and Safety Act 2011* as will the Principal Contractor. To support workforce well-being and reduce demands on local services during construction, ARTC will:

- Employ or require its Principal Contractor to employ on-site paramedic from the commencement of construction, to manage minor health issues on site, and develop health and wellbeing programs focused on physical and mental health
- Provide medical and workplace health and safety services including health promotion programs and access to GP services for employees residing in the non-resident workforce accommodation
- Ensure personnel are made aware of the need to attend to routine health issues whilst they are off roster.
- Onsite paramedics will respond to minor injuries during construction. Arrangements/ ongoing consultation with LifeFlight will be required for serious accidents/ medical emergencies.

8.3.7 Management measures

Table 8-9 summarises workforce management and development objectives, outcomes and actions which will maximise the employment of people from the SIA impact assessment area and Indigenous people in the Project's construction workforce, increase the skills profile of the SIA impact assessment area's labour force, and minimise impacts on other businesses.

Table 8-9: Workforce management

Workforce management measures	
Objectives	<ul style="list-style-type: none"> ■ Enable residents of the SIA impact assessment area 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"> ■ Workers within 125 km of the Project including job seekers living in the SIA impact assessment area are involved in the construction workforce, with a particular focus on providing opportunities for residents in potentially impacted communities ■ Construction employment opportunities are available to Bigambul People, Western Wakka Wakka 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, landowners and motorists ■ Workplace health is supported, and accidents are minimised through a strong workforce safety culture ■ Impacts on agricultural or tourism employment opportunities are minimised ■ Labour draw from other businesses is monitored to enable corrective action if required
ARTC Commitments	<ul style="list-style-type: none"> ■ Development of a Workforce Management Plan that includes a comprehensive employee induction program addressing amongst other matters a code of conduct for employees and contractors regarding behavior, alcohol and drug use, cultural awareness and safety ■ The Principal Contractor will utilise the Inland Rail Skills Academy's programs to support meeting its commitments

Workforce management measures

	<ul style="list-style-type: none"> ▪ The Project's recruitment strategy would provide equitable access to employment opportunities and prioritise recruitment from Goondiwindi and Toowoomba LGAs ▪ ARTC does not propose a 100% fly-in-fly out for the Project. ▪ ARTC will provide access and evacuation maps for Emergency Services for the temporary non-resident workforce accommodation and construction compound facilities ▪ Minimum local employment targets will be negotiated and agreed between ARTC and the Principal Contractor ▪ ARTC will endeavour to ensure that contractors seek to encourage employment, training and skills development opportunities by: <ul style="list-style-type: none"> ○ Identifying the skills required for the building, construction, equipment and services fabrication and supply, maintenance, operation and support to the Inland Rail Program ○ Arranging timely training, and qualification arrangements to meet the needs of skills development to support all phases of the Project ○ Ensuring that training and qualification systems meet the requirements of the National Standards Framework ▪ The Project will: <ul style="list-style-type: none"> ○ Work with key partners to link training and development programs with other projects and local industries to provide the greatest regional benefit ○ Provide a clear and efficient process for people to seek information about employment opportunities and register their interest in Inland Rail ○ Work 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 and encourage applications from Indigenous people for Project-related jobs ○ Work with schools and local training providers to provide appropriate training including STEM initiatives and scholarship for students from potentially impacted communities ○ Work with the Australian Government to provide long term outcomes through training, mentoring and other support programs ▪ ARTC will investigate and implement best industry practices with respect to construction personnel, including journey management and the potential for shared driving arrangements
Measures – detail design phase	<p>Impacts on agricultural employment</p> <ul style="list-style-type: none"> ▪ Work with property owners as part of the detail design and construction planning process to reduce potential impacts on agricultural land, farm infrastructure and property accesses, which may otherwise affect the availability of employment on farms ▪ Implement training and development initiatives as part of the Inland Rail Skills Academy which will increase workforce skills that are also applicable to agricultural industry employment <p>Training and development</p> <ul style="list-style-type: none"> ▪ Align Inland Rail's workforce training and development initiatives with Councils' RSIS and SQW programs, including joint applications with Council for SQW-funded training programs ▪ Continue implementation of partnerships with USQ and University of Newcastle, making them available in the SIA impact assessment area ▪ Continue consulting with DESBT to confirm and implement programs to train local jobseekers for Project employment, including a focus on transferrable skills ▪ Establish partnerships with Department of Education, local high schools and training providers, to develop training pathways for employment in Project construction and operation ▪ Enable meetings between Traditional Owner groups and the contractor to discuss employment, training and business strategies

Workforce management measures

	<ul style="list-style-type: none"> Pending agreement with BNTAC, delivery of a tailored two to three week training program focused on working within a rail corridor and construction work skills, followed by work experience with construction contractors working in infrastructure projects within the region, and/or utilise the SQW program to provide a specific training program for Indigenous people in the Project region <p>Local employment</p> <ul style="list-style-type: none"> Engage with the Principal Contractor to set targets and performance measures and specify and implement strategies which address local and Indigenous employment, including: <ul style="list-style-type: none"> Proposed strategies for recruitment and training of personnel from the SIA impact assessment area Participation by people under 25 years Sustainable job creation Indigenous participation Participation of women in the project workforce, including actions to ensure workforce gender diversity Local business engagement. Work with local Aboriginal Parties and Indigenous training and employment service providers to develop employment and training strategies for Indigenous job seekers ARTC will require its non-resident workforce accommodation provider to liaise with TRC, GRC and employment agencies in the Project region regarding employment opportunities available in the accommodation facility, and require the contractor to invite and consider job applications from residents in the SIA impact assessment area
Measures – pre-construction phase	<p>Training and development</p> <ul style="list-style-type: none"> Consult with high schools and training providers within the SIA impact assessment area to develop training pathways for Project construction and operation Through the Inland Rail Skills Academy, implement training programs which equip local people for construction employment, on the Project, other rail projects and other infrastructure construction The Principal Contractor will implement a program of apprenticeships, traineeships, training roles e.g. graduate programs, and facilitation of industry accreditation to support employment into Inland Rail projects and other major regional industries, Continue to engage with Traditional Owners, DATSIP and Indigenous community members to support Indigenous businesses to understand Project opportunities and capacity building programs available to them, and encourage them to tender for Project supply contracts With Traditional Owners and DATSIP, develop an understanding of the Indigenous business profile in the SIA impact assessment area (in progress during the EIS phase) Provide information and access to support in a range of formats, including the Inland Rail website, industry and employment events and a network of regional and project offices to broaden Indigenous people's access Work with Indigenous communities, industry, DATSIP and DESBT to support the design and delivery of training and development programs to improve local capacity where this is needed, and link training and development programs with other projects and local industries to provide the greatest regional benefit. <p>Local employment</p> <ul style="list-style-type: none"> Provide information to nearby communities regarding the construction timeframe, employment opportunities and how to express interest in employment or contracting opportunities Establish a Local Employment Register to track and monitor participation in construction employment by people from the SIA impact assessment area, including identification of Indigenous personnel with their agreement Require the Principal Contractor to implement the Indigenous Participation Plan's commitments to Indigenous employment

Workforce management measures	
	<p>Impacts of workforce behaviour on feelings of safety or privacy</p> <ul style="list-style-type: none"> Implement authorisation procedures and means of identification for personnel accessing private property Require the Principal Contractor to implement a Workforce Code of Conduct which is consistent with ARTC's Code of Conduct
Measures – construction phase	<p>Training and development</p> <ul style="list-style-type: none"> Continue to implement Inland Rail Skills Academy training programs and partnerships to equip local and Indigenous people for construction employment Training programs focused on developing skills in rail operation and working in a rail corridor will be delivered in the Project region, during the construction phase in readiness for Inland Rail's operation. including an online rail skills program available to school and university students <p>Local employment</p> <ul style="list-style-type: none"> Monitor the Principal 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 SIA impact assessment area to identify young people and groups of young people who could be supported to obtain employment in the Project's operations Promote operational roles to residents within the SIA impact assessment area via Project communications, the Island Rail Skills Academy and briefings oriented to the operational phase Continue engagement with Indigenous community members to ensure operational roles are considered by Indigenous people <p>Labour availability</p> <ul style="list-style-type: none"> ARTC will monitor Inland Rail projects' workforce ramp-up and the proportions of local and non-local personnel, and consult with local Councils and businesses 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 Principal Contractor to refine the Project's recruitment and training strategies <p>Impacts of workforce behaviour on feelings of safety or privacy</p> <ul style="list-style-type: none"> Require the Principal Contractor to report on implementation of and compliance with the Code of Conduct Ensure that the Principal Contractor has appropriate workforce conduct policies and procedures, complemented by complaints mechanisms which ensure fast and effective resolution to any issues experienced Through consultation with QPS and regular monitoring of community complaints, ensure that any personnel behaviour that offends local values is addressed through communication and contractual arrangements with the Principal Contractor <p>Workforce wellbeing</p> <ul style="list-style-type: none"> Employ or require the Principal Contractor to employ an on-site paramedic from the commencement of construction, to manage minor health issues on site, and develop health and wellbeing programs focused on physical and mental health Provide medical and workplace health and safety services including health promotion programs and access to GP services for employees residing in the non-resident workforce accommodation Ensure personnel are made aware of the need to attend to routine health issues whilst they are off roster

8.4 Housing and accommodation

This section outlines the measures ARTC will undertake to ensure that impacts on housing access are mitigated, and to support management of the Project's non-resident workforce accommodation.

Measures to address concerns regarding the potential for impacts on property values are also outlined, acknowledging that the environmental management measures provided in the Project's Outline Environmental Management Plan are intended to mitigate impacts on amenity which could affect property values.

8.4.1 Property values

Landowners in and near the Project footprint are concerned that their property values will decrease as the result of the Project's construction or operation. ARTC has committed to a comprehensive range of environmental and social impact management strategies which will reduce the potential for impacts on amenity, use or environmental qualities of properties near the rail corridor. ARTC will also communicate its commitments to environmental management, and EIS approval conditions to local and regional community members, to reduce the likelihood of negative perceptions about the amenity value of properties or near the Project footprint.

8.4.2 Impacts on 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 is unlikely to result in a significant increase in demand for housing or short term accommodation in the SIA impact assessment area during either construction or operation, or to affect housing availability in nearby communities or the SIA impact assessment area, with the exception of removing an estimated 20 dwellings from the Project footprint.

The Project would provide free or subsidised accommodation to construction personnel within the non-resident workforce accommodation facilities. The construction and provision of additional accommodation for the operational workforce is not proposed as part of the Project given the small workforce proposed.

There is however potential for a small number of construction workers to settle locally, and for cumulative labour demands in the SIA impact assessment area to lead to demands for short term accommodation or rental accommodation.

ARTC will require the Principal Contractor to monitor the number of non-local personnel choosing to live outside the non-resident workforce accommodation facilities, as well as the availability and cost of rental housing in Goondiwindi, Inglewood, Millmerran and Pittsworth. It will also consider the potential cumulative impact of concurrent projects on housing demand. If rental vacancy rates remain low (as is expected), ARTC would take steps to mitigate negative impacts by requiring workers to take up occupancy in the non-resident workforce accommodation provided, rather than in the rental market or short term accommodation premises (as appropriate).

ARTC will require its Principal Contractor provide an AMP for ARTC's approval. The AMP will provide details of how non-local workers will be accommodated, including how the contractor will:

- Monitor the number of personnel to be recruited from outside a safe daily driving distance
- Provide an adequate number of non-resident workforce accommodation beds to meet peak demand
- Consult GRC, TRC and the Millmerran, Inglewood and the Yelarbon communities regarding the proposed non-resident workforce accommodation to identify any additional specific issues to be addressed as part of the AMP
- Engage with GRC and TRC regarding the accommodation facilities' water and waste management infrastructure to ensure that any additional requirements for Council services are mitigated
- Minimise impacts on rental availability in potentially impacted communities, e.g. by discouraging single status personnel from renting houses
- Monitor the number of non-local personnel choosing to live outside the non-resident workforce accommodation facilities, as well as the availability and cost of rental housing in Goondiwindi, Inglewood, Millmerran and Pittsworth.
- Avoid coincidence of workforce demands on short term accommodation with peak tourist and event visitor demands
- Minimise impacts on local health services (e.g. through provision of paramedics)

The AMP will also consider the potential cumulative impact of concurrent projects on housing demand.

ARTC and its contractors will also provide clear information through their websites and other channels regarding how to apply for a job and the accommodation options on offer to Project personnel to reduce the risk of people seeking jobs 'at the Project gate' and thereby straining local housing or support services.

ARTC will monitor the implementation and effectiveness of the AMP and provide the results of monitoring as part of the annual SIMP report.

8.4.3 Non-resident workforce accommodation management

Temporary non-resident workforce accommodation will be provided to support construction of the southern portion of the Project alignment in proximity to Yelarbon, Inglewood and Millmerran to manage the existing shortfall of available accommodation and impacts to the local rental market. Construction and provision of additional accommodation is not proposed during construction of the northern portion of the Project given the proximity to a large workforce in Toowoomba and available accommodation in Toowoomba.

ARTC is currently consulting with the owners of properties which could host the non-resident workforce accommodation, adjacent landowners, GRC and TRC about potential sites for non-resident workforce accommodation, and will consider stakeholder feedback in the planning, design and development of management procedures for the accommodation.

Consultation with the Millmerran, Inglewood and the Yelarbon communities regarding the proposed non-resident workforce accommodation is ongoing and will identify any additional specific issues to be addressed as part of the contractor's AMP.

The AMP will include a section detailing how the non-resident workforce accommodation will be managed to avoid impacts on nearby landowners and communities, including:

- Management of workforce behaviour to avoid impacts on local community values

- Cooperation with the QPS, QAS and QFES to orient them to non-resident workforce accommodation facilities' layouts and management protocols
- Minimising demands on local health services (e.g. through employment of a paramedic and security staff) and infrastructure (e.g. waste management and water supplies)
- Enabling local business participation in supply of good and/or services to the non-resident workforce accommodation.

The Project will monitor:

- The percentage of its total workforce requiring accommodation
- Occupancy rates of the non-resident workforce accommodation
- The number of people being accommodated in the SIA impact assessment area each month
- Rental vacancy rates in potentially impacted communities
- Complaints about workforce behaviour.

This will enable the development and implementation of any corrective measures to ensure that any impacts on housing and accommodation are minimised.

8.4.4 Management measures

Objectives, outcomes and measures which will support achievement of ARTC's accommodation principles are outlined in Table 8-10.

Table 8-10: Housing and accommodation

Housing and accommodation measures	
Objective	<ul style="list-style-type: none"> ■ Avoid adverse impacts on the availability of local housing and short-term accommodation ■ Avoid adverse social impacts on the communities near non-resident workforce accommodation ■ Ensure local communities benefit from the non-resident workforce accommodation operation
Outcomes	<ul style="list-style-type: none"> ■ Project demands do not result in displacement of local residents from rental housing ■ Non-resident workforce accommodation facilities do not impact on the amenity of nearby landowners or local towns ■ Workforce accommodation guests behave with respect for community safety and community values ■ Non-resident workforce accommodation facilities offer business and employment benefits to local communities
ARTC Commitments	<ul style="list-style-type: none"> ■ An AMP will be prepared and implemented for the Project to reflect the anticipated local/non-local workforce scenario for construction and operation of the Project ■ Temporary non-resident workforce accommodation will be provided to support construction of the southern portion of the Project alignment in proximity to Yelarbon, Inglewood and Millmerran (Turallin), to manage the existing shortfall of available accommodation and potential impacts to the local rental market ■ ARTC will require the Principal Contractor to provide sufficient, non-resident workforce accommodation beds to accommodate all non-local Project personnel ■ The Project's non-resident workforce accommodation will be self-sufficient with respect to water management and sewage treatment ■ Trained paramedic staff will be employed by the Project

Housing and accommodation measures

Measures detail design stage	Minimising impacts on housing and accommodation access <ul style="list-style-type: none"> ▪ The Principal Contractor will provide an AMP for ARTC approval, specifying how the contractor will: <ul style="list-style-type: none"> ○ Consult GRC, TRC and the Millmerran/Turallin, Inglewood and Yelarbon communities regarding the proposed non-resident workforce accommodation to identify any additional specific issues to be addressed as part of the AMP ○ Monitor the number of personnel to be recruited from outside a safe daily driving distance ○ Provide an adequate number of non-resident workforce accommodation beds to meet peak demand ○ Monitor the number of non-local personnel choosing to live outside the non-resident workforce accommodation facilities, as well as the availability and cost of rental housing in Goondiwindi, Inglewood, Millmerran and Pittsworth ○ Minimise impacts on rental availability ○ Monitor the local availability of personnel and short term and rental accommodation ○ Avoid coincidence of workforce demands on short term accommodation with peak tourist and event visitor demands ○ Minimise workforce demands on local health services ○ Avoid negative impacts on community facilities and facility users ○ Mitigate any Project contributions to cumulative impacts on housing availability ○ Cooperate with local emergency services (i.e. QPS, QAS and QFES) to orient them to the non-resident workforce accommodation layout and management protocols ○ Engage local businesses in the accommodation's supply chain ▪ As part of reviewing the contractors' draft AMP, ARTC will consult with TRC, GRC and QPS to identify any concerns which should be addressed in the AMP
Measures - pre-construction phase	Minimising impacts on housing and accommodation access <ul style="list-style-type: none"> ▪ The Principal Contractor will report on the number of non-local personnel (outside a safe daily driving distance as identified by the contractor) that are expected to be required over the duration of the construction period ▪ The Project will provide clear information through ARTC and contractor websites and other communication channels regarding how to apply for a job and the accommodation options on offer to Project personnel ▪ ARTC will implement Inland Rail's Complaint Management Handling Procedure to ensure fast and effective resolution to any issues relating to workforce use of housing or short-term accommodation
Measures - construction phase	Minimising impacts on housing and accommodation access <ul style="list-style-type: none"> ▪ ARTC will monitor the outcomes of the AMP to identify any strains on: <ul style="list-style-type: none"> ○ Local rental housing stock (as indicated by declining rental vacancy rates) ○ Short term accommodation providers' capacity to service tourists, as indicated by consultation with local tourism associations ▪ Monitor rental housing availability in potentially impacted communities to enable any corrective actions required of the contractor ▪ If any strains on housing or accommodation are identified, ARTC will work with its Principal Contractor to refine the AMP ▪ The outcomes of the AMP will be reported as part of the Project's annual SIMP report Legacy values <ul style="list-style-type: none"> ▪ ARTC will engage the owners of a non-resident workforce accommodation sites to discuss and agree legacy values to result from the accommodation facilities

8.5 Health and community well-being

Measures outlined in Chapter 22: Outline Environmental Management Plan of the EIS are designed to avoid or mitigate environmental impacts that could otherwise affect community health or wellbeing, e.g. noise and vibration, or changes to air quality. This sub-plan addresses the potential for impacts on community health, well-being and safety with respect to community facilities and services, mental health, and community safety, and the potential for impacts on amenity, community cohesion or local character to affect community wellbeing.

8.5.1 Community facilities and services

The Project's construction phase has potential to cause noise which may affect the amenity of schools in Yelarbon, Brookstead, and Southbrook, and of the Pittsworth and District Assembly of God/Harvest Life Church in Pittsworth. Construction noise may also affect the amenity of the Yelarbon & District Soldiers Memorial Hall and the adjoining Anzac Memorial Garden, and the Pampas Memorial Hall.

As discussed in Section 7.4.1, ARTC has engaged with the Department of Education to provide information on the findings of noise and traffic studies and agree the approach to ongoing engagement to confirm and implement noise mitigation measures. ARTC will consult with the Department of Education and Yelarbon, Brookstead and Southbrook State schools (facilitated by the Department) during the development of the detail design and confirmation of construction methodology to:

- Confirm the location of the rail alignment, road-realignments and associated laydown areas and access tracks
- Describe the construction schedule and the nature of road-rail interface treatments, temporary disruptions to local traffic during construction within the Brookstead, Southbrook and Yelarbon communities, any disruptions to school bus routes and traffic management measures e.g. supervised crossings, traffic flow and speed control measures or relocation of pedestrian pathways
- Conduct an audit of the affected schools' sites layouts, to determine in-corridor or at-property treatments to mitigate operational rail noise impacts, which may include façade treatments, fence treatments or air conditioning
- Confirm all relevant school bus services and contact details for their operators to enable consultation with the operators
- Identify any specific considerations (e.g. off-campus sports or activities) which should be considered in the Project's RUMP and Traffic Management Sub-plan.

Engagement with the Department of Education and Brookstead, Southbrook and Yelarbon schools will include agreement on the communication process between ARTC and the school communities during the construction phase. The Project will ensure that all schools and community facilities in the potentially impacted communities are aware of the construction program and are provided with regular updates about road closures and roadworks, to allow school community members to plan their travel to minimise delays.

ARTC will also engage with the Pittsworth and District Assembly of God/Harvest Life Church in Pittsworth, the Yelarbon & District Soldiers Memorial Hall and the Pampas Memorial Hall to explain the draft EIS results with respect to noise impacts during construction and operation and agree property-specific mitigation measures to reduce noise impacts.

Project personnel are likely to increase and change the nature of demands for health and emergency services in Inglewood, Millmerran and/or Goondiwindi (noting that there are no health services available in Yelarbon). ARTC will provide advance notice of the construction program and scheduled workforce build up to the DDHHS and the Darling Downs West Moreton (DDWM) PHN, to enable forward planning for any service adjustments that may be required.

There is also potential for increased demand for community services as the result of stresses and anxiety related to the Project, and service demand may also be generated by new arrivals in search of work, or non-resident personnel. ARTC will engage with local community and health services which are supporting people affected by stress, anxiety or personal difficulties to monitor any issues arising from the Project and provide Project funding to support local services if engagement indicates this is required.

ARTC has established the Inland Rail Community Sponsorships and Donations Program. The purpose of the funding 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. 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.

8.5.2 Environmental qualities

The Project's operation has potential to result in noise levels which could cause stress or sleep disturbance. ARTC will engage with the owners of dwellings where 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 indicate the need to provide information to the community about how dust from the Project's construction and operation will be minimised. Complaints about dust during the construction phase will be investigated and air quality monitoring mechanisms provided if necessary, to identify the need for any additional dust mitigation measures.

8.5.3 Mental health

The Project's EIS phase has involved stress and anxiety for some stakeholders, due to concerns about property acquisitions, amenity impacts, property values or environmental changes. The Project's construction activities will introduce noise, an increase in non-local people and changes to the character of areas within the temporary footprint, which may also cause stress for local residents and landowners.

ARTC has initiated a mental health partnership to support residents who may experience stress and anxiety in relation to the Project or unrelated factors to:

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

As part of the mental health partnership with ARTC, the Darling Downs and West Moreton PHN is working with the Richmond Fellowship Queensland and Lives Lived Well to increase local access to the New Access program. The New Access program provides mental health support for residents in communities along the Inland Rail alignment which can be easily accessed through a phone call. This program has been selected as it is utilising and strengthens existing mental health services rather than replicating and competing with existing providers.

Through the PHN partnerships, Lifeline's Darling Downs and South West Queensland has also been supported to deliver Lifeline's Community Connections program in the Project region to help strengthen community resilience and social networks, PHNs are also liaising with GPs in potentially impacted communities to ensure they are updated on the Project and aware of the services being supported through the mental health partnership.

There is also potential for additional services to be included within the partnership agreements e.g. support for residents who need to move from within the Project area. These will be developed during later phases of the Project.

As part of its detail design planning, ARTC will consult with Queensland Health and the DDWM Health and Hospital Service to identify cooperative actions to monitor health and well-being during construction, to enable any additional responses if required.

The Project will contribute to the Inland Rail Program's social and economic benefits including employment opportunities, skills development, wages and business supply opportunities, which will be experienced at local and regional levels and have the potential to support mental health.

ARTC will consider opportunities for the Project to contribute legacy benefits that have a relevance to the Project and will support community well-being and will consult with the impacted communities to develop appropriate responses, as noted in Section 7.4.8.

The SIA has also identified likely impacts on residential amenity, local character and connectivity during construction, the potential for Project impacts on community cohesion, and the potential for Project impacts to affect people who are experiencing disadvantage (refer Sections 7.1.3 to 7.1.8). These impacts could individually or collectively affect the quality of life of residents in potentially impacted communities.

8.5.4 Emergency services

The Project may cause delays to emergency response vehicles as the result of road works and increased traffic during construction and increases in demands for policing services would result from the need for traffic control assistance and escorting oversize vehicles or loads. Non-resident workforce accommodation may also increase demand for police services due to a temporary increase in the populations of Yelarbon, Inglewood and Millmerran. There is also a possibility of increases in demand for ambulance services.

During operations, there is potential for emergency services to be delayed at level crossings whilst trains are passing. Consultation with Toowoomba and Goondiwindi Local Disaster Management Groups, in addition to QPS, QAS and QFES will continue through the detail design process to ensure that appropriate access and egress solutions are incorporated into the detail design to enable movements across the rail corridor.

Additional measures to reduce the potential impacts of Project construction on emergency services are outlined in Section 8.5.6.

8.5.5 Impacts on community safety

The Project is likely to generate a temporary influx of new people to local areas, and it is possible that perceptions of safety ('stranger danger') would change for residents near the Project footprint as a result. It is also anticipated that residents of towns near non-resident workforce accommodation would have some safety concerns related to such a significant influx of newcomers to their small communities

ARTC will require the contractor to enforce a Code of Conduct and appropriate policies and procedures containing requirements for positive behaviours and respect for local residents and businesses applying to all contractor and Project personnel and will require adoption of a zero tolerance policy relating to anti-social behaviour for all work sites and the non-resident workforce accommodation facilities.

ARTC will also engage the Project's CRG in discussion of a welcome event for construction personnel to support relationship building between the construction workforce and local residents.

ARTC will deliver communications strategies to ensure stakeholders know about construction traffic routes, peak construction periods, the Project's workforce conduct policies, and how to contact the Project in the event of any concerns.

With respect to bushfire risks, further consultation with the QFES and local rural fire brigades will confirm the location of access tracks which may be affected by the Project's detail design, and the actions required of the Project in order to ensure firefighters' continued access to areas that they are currently able to service.

8.5.6 Community wellbeing

The SIA has identified a range of impacts which may negatively affect community well-being (e.g. through changes to local amenity character), as well as Project opportunities such as job creation and business supply to the project which will support community well-being. During the detail 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 or wellbeing as the result of Project impacts on amenity, character, cohesion or connectivity.

The Community Wellbeing Plan will include:

- Objectives and key performance indicators, drawing on the objectives and outcomes identified in the SIMP
- Measures to ensure that the level of service provided to the local community by existing social services, facilities and infrastructure is not reduced
- Measures to mitigate potential health and wellbeing impacts on local communities, and enhance potential benefits
- Emergency response arrangements and management measures agreed with emergency service providers, for incidents both on and off the project site
- Details of community development programs to be implemented, and the outcomes to be achieved
- A monitoring and reporting protocol.

The Community Wellbeing Plan will include relevant measures identified in the SIMP as well as measures identified in consultation with TRC, GRC, DDWM PHN, DCDSS, and the owners of community facilities that would be affected by noise during the detail design phase. 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. This will include exploration of initiatives raised by Councils e.g.
- Support for Gowrie Community Hub's fit out
- Opportunity to utilise Goondiwindi Showground for training while upgrading the facilities,
- Potential for cooperation and/or support for tourism initiatives in and around Millmerran

- Potential for cooperation and/or support for recreation initiatives in and around Pittsworth
- 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.
- Projects which 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.

8.5.7 Management measures

Table 8-11 provides the objectives, outcomes, ARTC commitments and management measures to mitigate impacts on community health and well-being during the Project's detail design, pre-construction and construction phases.

Table 8-11: Health and well-being

Health and well-being measures	
Objective	<ul style="list-style-type: none"> ■ Minimise and where possible avoid impacts which may affect community well-being 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 social impacts ■ Include a focus on vulnerable community members in Project engagement and social investment
Outcomes	<ul style="list-style-type: none"> ■ Noise impacts on the amenity of schools and churches is minimised ■ ARTC's social investments including sponsorships and donations increase resources available to local community organisations ■ Project has a strong focus on traffic safety, including specific measures for school bus routes ■ Mental health and community support services in the SIA impact assessment area 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
ARTC Commitments	<ul style="list-style-type: none"> ■ Development of 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

Health and well-being measures

	<ul style="list-style-type: none"> ▪ Consultation with QPS, QAS and QFES during the detail design process to understand scope/size of the Project and potential flash points to ensure appropriate emergency vehicle access is provided across the rail corridor. ▪ ARTC attendance at Local Disaster Management Group and District Management Group meetings during construction. ▪ To reduce demands on local services during construction. ARTC will: <ul style="list-style-type: none"> ○ Employ or require its Principal Contractor to employ on-site paramedic/s from the commencement of construction, to manage minor health issues on site, and develop health and wellbeing programs focused on physical and mental health. ○ Provide medical and workplace health and safety services including health promotion programs and access to GP services for employees residing in the non-resident workforce accommodation ○ Ensure personnel are made aware of the need to attend routine health issues whilst they are off roster ▪ ARTC will commit to annual review of the emergency response procedures during construction and annual review during the first three years of operation. ▪ Engagement with Government agencies to develop protocols, confirm the detail of mitigation impacts on social infrastructure and develop joint response arrangements with: <ul style="list-style-type: none"> ○ Department of Education ○ Queensland Health ○ QPS, QAS and QFES ▪ Continue to implement the mental health partnership to provide access to mental health support (and referral as required) for local residents ARTC will continue to work with all tiers of government and landowners regarding the provision of sustainable water sourcing and water allocations/ entitlements. ▪ Ongoing engagement with Indigenous communities, families and Elders to support Indigenous employees occurs, underpinned by a high level of coordination between contributing programs and agencies ▪ Implementation of Inland Rail Community Donations and Sponsorship program
Measures - detail design phase	<p>Mental health</p> <ul style="list-style-type: none"> ▪ Continue consultation with landowners whose properties are directly affected by the Project footprint or by the potential for increased flooding, to identify management measures which will reduce impacts on the use and amenity of their properties, and the safety of humans and stock ▪ Maintain a program-wide mental health partnership with an independent specialist service to support the mental well-being of community members in impacted communities ▪ Disseminate accurate, transparent and accessible information about the Project to the community, including information about the land acquisition process and EIS outcomes ▪ If landowners or tenants who would need to relocate and identify a need for support, ARTC will fund a locally based community organisation to assist residents to access alternative accommodation and support services ▪ 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 ▪ Establish and maintain a monitoring program of changes to levels of stress in the community in cooperation with the DDHHS and/or DDWM PHN ▪ Provide training for Inland Rail staff working with impacted landowners and their families regarding mental health and referral to services <p>Community facilities and services</p> <ul style="list-style-type: none"> ▪ Consult with Community Advisory Networks (representing health, emergency and education services) in planning the Project's investments in community projects

Health and well-being measures

- Consult with Department of Education and Yelarbon, Brookstead and Southbrook State schools (facilitated by the Department) to:
 - Confirm the location of the rail alignment, road-realignments and associated laydown areas and access tracks
 - Describe the construction schedule and the nature of road-rail interface treatments, temporary disruptions to local traffic during construction within the Brookstead, Southbrook and Yelarbon communities, any disruptions to school bus routes and traffic management measures e.g. supervised crossings, traffic flow and speed control measures or relocation of pedestrian pathways
 - Conduct an audit of the affected schools' sites layouts, to determine in-corridor or at-property treatments to mitigate operational rail noise impacts, which may include façade treatments, fence treatments or air conditioning
 - Confirm all relevant school bus services and contact details for their operators to enable consultation with the operators
 - Identify any specific considerations (e.g. off-campus sports or activities) which should be considered in the Project's RUMP and Traffic Management Sub-plan.
- Confirm and commence implementation of management measures relating to schools detailed in Section 7.4.1. Engage with the Pittsworth and District Assembly of God Church/Harvest Life Church, and the management committee/trustees of the Yelarbon & District Soldiers Memorial Hall and the Pampas Memorial Hall, to explain the draft EIS results with respect to noise impacts during construction and operation and agree property-specific mitigation measures to reduce noise impacts
- Consult with the Yelarbon, Millmerran, Inglewood, Pittsworth, Brookstead, Gowrie and Southbrook communities to identify and develop programs which increase opportunities for community participation, and focus on community safety, health and emergency services
- Engage with QPS, QAS and QFES in:
 - Development of Emergency Response Plans for construction and operation, including management of dangerous good transport
 - Development of measures which mitigate impacts on emergency service response times
 - Confirmation of the location of access tracks which may be affected by the Project's detail design, and the actions required to ensure firefighters' continued access to areas that they are currently able to service
 - Cooperative arrangements, to ensure effective communication and cooperation in emergency responses

Community wellbeing

- Provide funding through the Community Donations and Sponsorship Program to community organisations in potentially impacted communities that can facilitate activities, events and networks which support town amenity, community cohesion and sense of place
- Pending agreement with TRC/GRC as appropriate and the results of engagement with local community members, provide enhanced planting and habitat creation to benefit the local community and support health and well-being, for example streetscape strategies within the vicinity of the rail alignment and street tree planting within the settlements of Yelarbon (including upgrade of the Yelarbon rest stop adjacent to the alignment), Brookstead and Pittsworth

Safety

- Road access to proposed non-resident workforce accommodation locations will be considered in consultation with Councils and DTMR to identify the need for any upgrades

Health and well-being measures

Measures - pre-construction phase	<p>Environmental qualities</p> <ul style="list-style-type: none"> Establish consultative arrangements that are accessible to all residents living near the Project footprint, including implementation of ARTC's Complaints Handling Management Procedure (refer Section 8.2.6) Provide information to communities about how noise, dust and traffic delays from the Project will be minimised Work with the owners of affected properties to develop effective flood mitigation solutions and/or compensation agreements for increased flooding potential <p>Community facilities and services</p> <ul style="list-style-type: none"> Continue engagement with Department of Education to confirm and implement management measures agreed with Department of Education and Yelarbon, Brookstead and Southbrook State Schools Implement noise mitigation measures agreed with the Pittsworth and District Assembly of God Church/Harvest Life Church Ensure that all schools and community facilities in the potentially impacted communities are aware of the construction program, and are provided with regular updates about road closures and roadworks Consult with DCDSS prior to the construction phase commencing, and annually during construction, to identify any Project-related stresses on local services, and if stresses on services are identified, enable a cooperative response to community needs between DCDSS, ARTC and community organisations Provide clear information through ARTC websites and other channels regarding how to apply for a job and the accommodation options on offer to Project personnel to reduce the risk of people seeking jobs 'at the Project gate' and thereby straining local housing or support services <p>Health and emergency services</p> <ul style="list-style-type: none"> Provide early advice about pre-construction works, the construction schedule, the number and nature of vehicles and plant to be used, construction hours and construction personnel numbers to Queensland Health, the Darling Downs West Moreton PHN, QPS, QFES, QAS and SES services in the SIA impact assessment area, to enable forward planning for any service adjustments that may be required Provide a forward schedule for construction activities requiring oversized vehicle escorts to police services and all emergency services bases Develop a protocol between ARTC and emergency service providers, defining appropriate and coordinated responses and communication in the event of accidents and other emergencies Maintain regular liaison meetings during the construction phase Consult with Toowoomba and Goondiwindi Local Disaster Management Groups regarding planning for emergency response and recovery during construction
Measures – construction phase	<p>Community safety and well-being</p> <ul style="list-style-type: none"> Deliver communications strategies in the SIA impact assessment area regarding construction traffic routes, construction activities and sites, the Project's workforce conduct policies, and how to contact the Project in the event of any concerns Enforce a Code of Conduct containing requirements for positive behaviours and respect for local residents and businesses for all contractor and Project personnel Engage proactively with Queensland Health and QPS to ensure they are well informed about the Project and are aware of additional resources that may be available through the Project to support mental health in the affected communities Access the Darling Downs Suicide Prevention Plan when available and work with the PHN in refining its mental health partnership projects to be delivered within the SIA impact assessment area

Health and well-being measures

- Develop targeted rail and road safety programs including a traffic demand management campaign to inform the public on the proposed construction works and its potential effect on local road network operations, for delivery to local schools, local young people and communities in the SIA impact assessment area, including information about:
 - Construction traffic routes
 - Peak construction periods
 - The Project's workforce conduct policies
 - How to contact the Project personnel in the event of any concerns during construction
- As part of regular engagement with landowners and local authorities, the Project will consider potential fire risks and any site-specific measures required to reduce risks
- As part of planning for hazard management during operation, consider the arrangement of materials on carriages of good transported in relation to hazard risk reduction
- Support locally based community development programs to work with residents in and near the Project footprint and in potentially impacted communities, to:
 - Mitigate changes to local amenity and character e.g. through upgrades to parks or streetscapes
 - Identify and implement community events and activities to support community cohesion

Community facilities and services

- Provide regular updates to health and emergency service providers about construction works, the construction schedule, and construction personnel numbers
- Ensure that all schools and community facilities in the potentially impacted communities are aware of the construction program, and are provided with regular updates about road closures and roadworks, to allow school community members to plan their travel to minimise delays
- Contractors will employ paramedics to promote workplace health, wellness and safety, and treat personnel's minor injuries and health issues to reduce demands on local services
- Encourage community facility managers to apply for sponsorship/donations to support facility upgrades

Emergency services

- Provide a forward schedule for construction activities requiring oversized vehicle escorts to QPS, QFES, QAS
- Meet regularly with QPS, QAS and QFES 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.
- Provide emergency access points across the alignment and communicate this information to QPS, QFES, QAS and SES officers servicing in the Toowoomba and Goondiwindi LGAs
- From Year 3 of the construction phase, engage with emergency services providers to plan for the operational phase
- Plan for the provision of ready access to train schedules for QPS, QFES, QAS
- Undertake joint training and response exercises with QPS, QFES, QAS to build capacity for Project-associated incident management

Environmental qualities

- If complaints about noise or dust indicate that Project construction is contributing to unacceptable levels of noise or dust, or other impacts, ARTC will investigate and implement measures to address the cause of the concern

Health and well-being measures	
	<ul style="list-style-type: none"> ▪ Provide air quality monitoring mechanisms (e.g. dust deposition gauges or testing of water tanks) if residents living adjacent to the Project footprint identify health concerns regarding dust ▪ Ensure that the Principal Contractor has appropriate complaints mechanisms which ensure fast and effective resolution to any issues experienced

8.6 Local business and industry

This section addresses the potential for Project impacts on businesses including farms, agribusinesses and tourism-related businesses, and describes ARTC's commitments to ensuring that local and regional businesses benefit from the Project.

8.6.1 Impacts on farms and agribusinesses

The Project will require acquisition of agricultural land which may affect the operation of farms, including loss of productive land, disturbances to farm infrastructure such as fences, sheds, dams and bores, and changes to cross-corridor connectivity. Roadworks may also affect travel times to markets. ARTC is working with directly affected landowners to develop and implement property-specific measures to mitigate impacts on property access, agricultural land use, and the connectivity of farms and agribusinesses, reducing the potential for impacts on farmers' livelihoods or the availability of farm employment. The Project design also specifically addresses impacts on key GrainCorp silos and feedlots which are closely related to local farms' supply chains.

Impacts such as severance or loss of land area may affect the operations of these businesses, and therefore farmers' or business owners' livelihoods, which will be considered in the terms of the acquisition agreements. There may also be potential for the loss of employment for farm workers if operations are significantly disrupted or reduced, however this is unquantifiable.

The Project would traverse land owned by three feedlots located at Whetstone, Bringalily and Millwood, a piggery at Yandilla, and a poultry farm at Yandilla, with partial or full land acquisitions required, and with potential for impacts on employment availability in these businesses. The potential for job losses is not quantifiable. Given low unemployment rates in the SIA impact assessment area, the location of other agribusinesses within the region and the likelihood of additional employment becoming available at the Wyemo Piggery, the Goondiwindi Abattoir, and other major projects as described in Section 7.6, this appears unlikely to have a substantive effect on unemployment rates.

ARTC is committed to ongoing cooperation with all directly affected landowners to minimise impacts associated with the Project. This will include regular engagement to identify any unexpected impacts on agricultural operations which may affect employment opportunities, to support identification and implementation of any corrective actions required.

ARTC is also consulting with property owners 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.

During operations, ARTC's community liaison and complaints management mechanisms will be available to all businesses (and other stakeholders) to enable resolution of any issues relating to access, noise, dust or unanticipated impacts.

8.6.2 Impacts on other businesses

There is potential for construction noise or operational noise to impact on the amenity of businesses in Yelarbon, Brookstead and Pittsworth. ARTC will consult with businesses where property accesses or road connections may be disrupted or exceedances of noise criteria are expected, to explain the result of EIS studies, as relevant, and work with business operators to reduce the potential for impacts on their amenity. Engagement with Yelarbon, Inglewood and Millmerran businesses will also be undertaken to enable them to gauge the need to increase their offerings in relation to personnel's potential expenditure with local businesses.

During construction, impacts on the amenity of or access to businesses would be managed through the measures outlined in relevant section of the Outline Environmental Management Plan (Chapter 22 of the EIS) e.g. noise and vibration management measures, traffic management measures and regular communication between ARTC and affected stakeholders. For the operational period, impacts will be managed through the implementation of ARTC's operational management standards and engagement with local businesses where required to address any noise issues affecting their amenity.

When the Project's detail design is confirmed, ARTC will consult with tourism-related businesses located within 10 km of the Project to ensure there is a shared understanding of how road works, changes to the road network or noise/vibration may affect tourism-related businesses. Temporary access arrangements supporting road access to tourism sites and major events will be agreed with DTMR and local Councils as is the standard approach normally adopted by linear transport projects. If consultation indicates the potential for road works or other construction activities to deter tourists, ARTC will work with local Chambers of Commerce, tourist information centres and the Goondiwindi and Toowoomba Regional Councils to develop a strategy to support tourism marketing campaigns to benefit affected tourism businesses.

ARTC has engaged with DAF to confirm their requirements and potential impacts of the Project on State forest resources and is working with DAF to mitigate impacts on forestry operations. ARTC will also consult with the QBA and DAF regarding maintenance of honey producers' access to the State forest whilst Project construction is active in the Bringalily and Whetstone State Forests.

If several major projects are constructed concurrently, there is potential for their cumulative requirements to draw labour away from local businesses. ARTC's training initiatives are expected to increase workforce skills and capacity, not just for Inland Rail, but also for other industries, which may offset this impact. There is also potential for businesses in the SIA impact assessment area to benefit from Project supply opportunities which may also offset any impacts of labour draw.

8.6.3 Local and Indigenous business participation

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 SIA impact assessment area, are identified and supported to participate in the Project's supply chain, to be achieved as follows.

Australian Jobs Act requirements

The Inland Rail Program is subject to the *Australian Jobs Act 2013* requirement to develop an AIP Plan to identify 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.

The Australian Jobs Act defines 'local' as including Australian entities. As noted in Section 8.1.2, ARTC's focus for the social performance program is the 'Project Area' as LGAs through which the alignment directly passes and the 'Project Region' as LGAs outside the Project Area, but within a 125 km radius of the Project Area

A key requirement in delivering upon the Program's commitment is to ensure that ARTC commitments cascade through the supply chain and contractors understand their requirements. The Principal Contractor will be required to demonstrate compliance with the Inland Rail AIP Plan and Australian Jobs Act 2013 requirements. Contractors will also be required to prepare and submit to ARTC an AIP Compliance Report every three months in the format prescribed by the AIP Authority.

ARTC will work with its various service providers, consultants and contractors in their implementation of the AIP Plan. As part of implementing the AIPP, ARTC expects that its contractors and operators will:

- Ensure that commitments made within the Inland Rail AIP Plan are implemented by the supply chain
- Prepare an Industry Participation Plan during the tender stage for implementation during construction
- Implement a clear and efficient process for businesses to source information about the Project and potential supply opportunities, and to register their interest
- Ensure all procurement entities have a detailed understanding of business capability/capacity of the study area and region before seeking bids to supply
- Ensure design specifications take account of Australian standards and, where international standards shall be used, provide avenues for Australian entities to identify how they can comply
- Adopt a policy that all purchases will include consideration of at least one competitive local and/or Indigenous business, where local/ Indigenous businesses have proven capability
- Include local and Indigenous content criterion and clauses in project procurement processes and contract documents
- Report on local and Indigenous industry participation outcomes.

The Project's accommodation providers will also be required to ensure that tendering opportunities for supplies and services to non-resident workforce accommodation facilities are made available to local businesses.

Capacity building with local and Indigenous businesses

Capacity building programs that will be delivered as part of the AIP Plan, and within the Inland Rail Skills Academy, will include:

- Providing advance notice of supply opportunities through Chambers of Commerce and to businesses who have registered their interest in Inland Rail through the Inland Rail portal and/or ICN
- Working with supplier advocates to promote supply opportunities and identify capable local suppliers
- Hosting and/ or participating in supplier briefing and networking events
- Collaborating with government and industry stakeholders to develop and implement training and mentoring support that builds business capability
- Providing support to local and Indigenous businesses and social enterprises which enables them to understand the requirements of supplying to Inland Rail
- Providing formal feedback to suppliers that are unsuccessful in prequalification and/or tendering.

ARTC is working with Traditional Owners to ensure that they and other Indigenous community members benefit from Project employment and business supply opportunities, which to date has included information exchange regarding Indigenous businesses and the supplies and skills that the Principal Contractor requires, in support of the development of capacity building programs. When the Principal Contractor is appointed, ARTC will facilitate engagement between Traditional Owners in the SIA impact assessment area and the Principal Contractor and encourage their cooperation in building the Indigenous business supply chain to the Project.

ARTC is also:

- Engaging with DESBT and DSDTI identify programs which will support individuals and Indigenous businesses to be ready for opportunities associated with supply of goods, services, materials and labour to Inland Rail Projects
- Engaging with DSDTI and the Industry Capability Network to collaborate on business capacity development in the Project region to prepare small to medium businesses to participate in major projects, including Inland Rail
- Working with DITRDC to align Project initiatives with DITRDC's regional development initiatives.

Indigenous business participation will be tracked and reported as part of the SIMP annual report.

Sustainable Procurement Policy

ARTC will implement Inland Rail's 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. The Sustainable Procurement Policy commits that environmental, community and economic considerations will be embedded in the procurement process and Inland Rail will, wherever possible:

- Require suppliers to provide details of their environmental and sustainability policies and implementation during the tender phase
- Apply sustainability metrics to the evaluation of tenders received (including environmental, social and economic considerations)
- Choose suppliers and products with demonstrable positive environmental and social impacts
- Support procurement from local and indigenous businesses and suppliers
- Procure products and encourage our suppliers to procure products that have recognised environmental labels or are from sustainable supply chains
- Assess the program using the Infrastructure Sustainability (IS) Rating Scheme and target a strong performance for the scheme's procurement credits
- Commit to continuous improvements by reviewing our procurement outcomes and reviewing and updating the policy and appropriate procedures
- Communicate the policy to the public.

Consultation has identified concern that small businesses may be exploited or unfairly treated by major contractors. ARTC has advised that it is engaging with large contracting companies regarding acceptable standards for subcontracting and will also work with small business to provide information about how to engage with major contractors and how to protect their rights.

8.6.4 Business and industry opportunities development

The Inland Rail Program is a nationally significant transport initiative and will provide a high-capacity freight link between Melbourne and Brisbane through regional Australia to better connect cities, farms and mines via ports to domestic and international markets.

The Inland Rail Business Case (ARTC 2016) identified several benefits which would support regional economic development, including improved linkages and reduced distances travelled within the national freight network; improved access to and from regional markets; and reduced rail costs. It will also allow for improved reliability and greater certainty for freight travelling between Melbourne and Brisbane and anywhere within the Inland Rail alignment.

To assist regional businesses to prepare for Inland Rail once construction is complete, ARTC Interstate Network has a dedicated Business Development Manager to work with potential customers, rail freight owners, terminal owners and industry stakeholders. The Business Development Manager acts as a conduit to ARTC to support businesses as they consider rail solutions for their operations and has a dual focus: to explain and inform businesses how Inland Rail and ARTC's network will work, and to work with businesses and industry one-on-one, to understand where there may be opportunities to put freight on rail when Inland Rail is operational post 2026.

The Inland Rail Business Case (*Ibid.*) notes that Inland Rail would be a catalyst for complementary supply chain investments, including fleet upgrades, new metropolitan and regional terminals and integrated freight precincts, as well as the potential for creation of new and expanded regional industries. The Project may act as a significant catalyst for development within the Project region in relation to rail dependent industries, movement of agricultural commodities and/or support industries associated with transport, freight handling, warehousing and logistics.

8.6.5 Management measures

Table 8-12 provides the objectives, outcomes, performance management measures, ARTC commitments and management measures for mitigation of impacts on businesses and ensuring local and Indigenous business participation in the Project.

Table 8-12 Local business and industry participation

Local business and industry participation measures	
Objective	<ul style="list-style-type: none">Minimise impacts on farming, agribusiness, tourism businesses and businesses in townsMaximise local awareness of the Project's supply opportunities and build relationships with local businesses to support their involvement in the ProjectProvide 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 Outline Environmental Management PlanBusinesses in the SIA impact assessment area benefit from supply opportunitiesThe Project engages Indigenous businesses in its constructionAny cumulative labour draw impacts on local business are identified to enable refinements to recruitment or training strategies

Local business and industry participation measures	
ARTC Commitments	<ul style="list-style-type: none"> ▪ Disturbance/loss of agricultural activities, limited, or disrupted access to important infrastructure (e.g. groundwater bores or irrigation infrastructure), and options to access areas within properties are to be investigated in consultation with impacted landowners during detail design ▪ Prior to construction occurring alternative measures for stock access to watering points are to be finalised with the landowner and implemented ▪ ARTC continues to promote the business registration process on the ARTC website ▪ Development and implementation of an AIP Plan focusing on opportunities for involvement by local business in construction and operation of the Project that involves: <ul style="list-style-type: none"> ○ Identifying businesses within 125 km of the Project with potential capacity to supply the construction phase. ○ Engagement with local business to identify opportunities to develop and promote local business participation ▪ Engagement with DESBT and DSDTI to develop business capacity building strategies ▪ ARTC will continue to engage with TSBE, chambers of commerce and local business groups/ associations ▪ ARTC will consider providing the Local Content Report to the Australian Industry and Skills Committee when developed ▪ Implementation of ARTC's Sustainable Procurement Policy ▪ Indigenous participation and local participation are included as key elements of construction tender assessments ▪ ARTC will work with government stakeholders 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 ○ Link training and development programs with other projects and local industries to provide the greatest regional benefit
Measures - detail design phase	<p>Impacts on farms and agribusinesses</p> <ul style="list-style-type: none"> ▪ Work with directly affected property owners to mitigate potential impacts on farm and business operations, and develop cooperative strategies which will reduce impacts on productivity and connectivity, including the design of level crossings on private roads ▪ Consult with property owners 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 ▪ Consult with relevant stakeholders (including landowners/occupants) prior to construction in support of appropriate approvals and agreements for the extraction of water ▪ Develop property-specific measures in consultation with landowners, to address impacts on land use, property access, water infrastructure or access, other farm infrastructure or farm management ▪ Impacts such as severance or loss of land area which may affect the operations of these businesses, and therefore farmers' or business owners' livelihoods, will be considered by the Constructing Authority in the terms of the acquisition agreements <p>Impacts on other businesses</p> <ul style="list-style-type: none"> ▪ Engage with businesses that may experience noise exceedances, dust or disruptions to access to the business during construction or operation, to develop and implement feasible and effective mitigation measures to reduce impacts ▪ Access to services and businesses during construction will be maintained. Where alternative access arrangements are required, these will be developed in consultation with relevant property owners/occupants

Local business and industry participation measures

- Engage with business in Yelarbon, Inglewood and Millmerran to enable them to gauge the need to increase or diversify their service offering to benefit from proximity to non-resident workforce accommodation
- Continue engagement as part of tendering processes with major contractors regarding acceptable standards for subcontracting
- Provide local business briefings in Goondiwindi, Yelarbon, Inglewood, Pittsworth, Millmerran and Toowoomba, to promote supply opportunities ahead of the construction phase
- Work with small businesses in potentially impacted communities, Goondiwindi and Toowoomba to provide information about how to engage with major contractors and how to protect their rights
- Continue consultation with local and regional businesses to ensure they have access to current information about the Project
- Work with DAF to assist them to plan for early harvesting to maintain timber supply, ensure adequate access for bushfire management and forestry haul routes are maintained, and ensure lessee requirements are considered in the detail design process
- Consult with the QBA and DAF regarding maintenance of honey producers' access to the State forest whilst Project construction is active in the Bringalily and Whetstone State Forests

Impacts on tourism

- Consult with the Project's CRG, local Chambers of Commerce, tourism associations and tourism service providers in or near potentially impacted communities to:
 - Explain the Outline Environmental Management Plan measures which will mitigate impacts on amenity or road connections
 - Identify any additional, feasible strategies which would reduce or offset impacts on connectivity or scenic amenity during construction and/or operation
 - Discuss relevant supply chain development to support Project construction
- Identify the timing for major community events in potentially impacted communities (e.g. the Millmerran Camp Oven Festival) which require consideration in the construction schedule with respect to noisy works or traffic disruptions, and consult with DTMR and GRC/TRC as relevant regarding temporary road access requirements to identify measures which will reduce any impacts on event participants

Local and Indigenous business participation

- Complete a scan of Indigenous businesses in the Project region which could service the Project and develop an Indigenous business register for use by the Principal Contractor
- Liaise with the following stakeholders to identify local business capacities of relevance to the Project's supply chain:
 - DITRDC
 - Regional Development Australia
 - Chambers of Commerce in the Goondiwindi and Toowoomba LGAs
 - Aboriginal parties (Bigambul, Western Wakka Wakka and others as identified)
 - DATSIP
- Continue to engage with DSDTI and the Industry Capability Network to collaborate on business capacity development in the Project region to prepare small to medium businesses to participate in major projects,
- Continue to engage with DITRDC to align Project initiatives with DITRDC's regional development initiatives
- Ensure tenderers for construction contracts set appropriate targets and/or incentives to utilise local and Indigenous businesses
- Communicate pre-qualification requirements to businesses in the Goondiwindi and Toowoomba LGAs to allow local and regional businesses to achieve the relevant requirements

Local business and industry participation measures	
	<ul style="list-style-type: none"> ■ In consultation with Councils, identify and invite the participation of social enterprises in business capacity building programs ■ Provide a clear and efficient process for businesses to seek information about opportunities and register their interest in Project supply
Measures – pre-construction (as relevant) and construction phase	<p>Impacts on farms, agribusinesses and other businesses</p> <ul style="list-style-type: none"> ■ Maintain regular engagement with landowners and other business owners adjacent to the Project footprint (at least quarterly during the first year of construction or as agreed with landowners) to monitor the effectiveness of environmental and social impact mitigation measures, and identify any unexpected impacts on agricultural operations which may affect employment opportunities, to support identification and implementation of any corrective actions required ■ Provide regular Project updates which forecast road works, road realignments and closures, and explain alternative routes to enable famers and other businesses to plan their travel to minimise disruptions ■ Where private water sources are utilised for construction purposes, monitoring will be undertaken during extraction to ensure volumes and conditions stipulated by license requirements and/or private landowner agreements are met ■ Where drawdown impacts are anticipated in bores that would not otherwise be decommissioned by the Project, ARTC 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"> ■ Working with local Chambers of Commerce, tourist information centres and the Goondiwindi and Toowoomba Regional Councils, develop a strategy to ensure that any potential impacts on tourism visitation are mitigated through support for tourism marketing campaigns targeting potentially impacted communities <p>Local and Indigenous business participation</p> <ul style="list-style-type: none"> ■ Implement a clear and efficient process for businesses to source information about the Project and potential supply opportunities, and to register their interest ■ Implement capacity building strategies identified in cooperation with stakeholders during the detail design and pre-construction stages ■ Promote government services and programs which are available to businesses considering investment in related projects ■ Ensure that tendering opportunities for supplies and services to non-resident workforce accommodation facilities are made available to local businesses ■ Include local and Indigenous content criterion and clauses in project procurement processes and contract documents ■ Monitor and report on involvement of local businesses in line with AIP Plan requirements and ARTC's Sustainable Procurement Policy (refer Section 8.6.3)

8.7 SIMP monitoring, review and reporting

The purpose of SIMP monitoring is to:

- Track and enable reporting on delivery of measures which mitigate social impacts or increase community benefits
- Collect data on the effectiveness of mitigation and benefit enhancement measures
- Support identification of corrective actions to improve the effectiveness of management measures.

The monitoring framework for community and stakeholder engagement is provided in Table 8-8. Table 8-13 provides the monitoring framework for the workforce management, housing and accommodation, health and community wellbeing and local business and industry sub-plans and includes:

- Impacts addressed

- Desired outcomes and performance measures
- Monitoring mechanisms
- Monitoring frequency during construction.

ARTC will track SIMP 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/s at each meeting and a report against performance measures will be presented to the CRG/s, TRC and GRC annually during construction.

ARTC will review the SIMP annually during the construction phase, and where necessary update it 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 and/or monitoring. Annual SIMP reviews will include consultation with TRC, GRC and the Project's CRG/s. Reports on the annual SIMP review will be provided to the OCG, TRC, GRC and the Project's CRG during the construction phase.

A review of the SIMP and its implementation will be undertaken by an independent third party by the end of Year 1 of construction, prior to commissioning the Project, and again during Year 3 of operations. These reviews will include consultation with Councils, landowners adjacent to the Project footprint, community members and Queensland Government agencies. The independent SIMP reviews will identify the effectiveness of SIMP strategies, and any changes which 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.

Proposed roles for Councils in SIMP implementation and monitoring include:

- Involvement in the development of the Community Wellbeing Plan and the draft Accommodation Management Plan
- 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 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 8-13 Social monitoring framework

Impacts/benefits addressed	Outcomes	Performance Measures	Mechanisms	Monitoring Frequency
Workforce management				
<ul style="list-style-type: none"> Local and Indigenous employment opportunities Training and development opportunities Workforce behaviour /community safety Employment in other industries 	<ul style="list-style-type: none"> Workers within 125 km of the Project including job seekers living in the SIA impact assessment area are involved in the construction workforce, with a particular focus on providing opportunities for residents in potentially impacted communities 	<ul style="list-style-type: none"> Number of people from the SIA impact assessment area that are employed in construction in line with targets agreed between ARTC and the Principal Contractor 	<ul style="list-style-type: none"> Construction employment register recording employees and contractor's postcodes, and Indigenous identification by agreement with personnel 	Quarterly during construction phase
	<ul style="list-style-type: none"> Training partnerships strengthen workforce capacity for Project employment and other industries 	<ul style="list-style-type: none"> Number of trainees and apprentices Number of people from the SIA impact assessment area involved in training opportunities facilitated by the Project Traineeship completion/retention rate 	<ul style="list-style-type: none"> Trainee and apprenticeship register Training partnership records 	Annually during construction phase
	<ul style="list-style-type: none"> Construction employment opportunities are available to Bigambul People, Western Wakka Wakka people and other local Indigenous people 	<ul style="list-style-type: none"> Number of Indigenous people involved in construction employment in line with targets agreed between ARTC and the Principal Contractor 	<ul style="list-style-type: none"> Construction employment register identifying employees and contractor's Indigenous identification, by agreement with personnel 	Quarterly during construction phase
	<ul style="list-style-type: none"> All Project personnel behave with respect and courtesy towards residents, landowners and motorists 	<ul style="list-style-type: none"> Number of substantiated complaints regarding workforce behaviour 	<ul style="list-style-type: none"> Complaints register CRG feedback 	Monthly during construction phase
	<ul style="list-style-type: none"> Workplace health is supported, and accidents are minimised through a strong workforce safety culture 	<ul style="list-style-type: none"> Lost Time Incident rate in comparison to relevant national standard 	<ul style="list-style-type: none"> Non-resident personnel feedback Work Health and Safety Records 	Monthly during construction phase

Impacts/benefits addressed	Outcomes	Performance Measures	Mechanisms	Monitoring Frequency
	<ul style="list-style-type: none"> Minimal impacts on agricultural and tourism employment opportunities 	<ul style="list-style-type: none"> Management measures for agricultural properties are implemented in accordance with agreements with landowners to minimise impacts Hotel/motel occupancy rates show no significant change due to Project personnel's use Attendee rates as reported by major community events 	<ul style="list-style-type: none"> Engagement with directly affected landowners Engagement with tourism accommodation operators Engagement with TRC and GRC 	Six monthly during construction phase
Housing and accommodation				
<ul style="list-style-type: none"> Potential for cumulative demands to impact on housing access and affordability Potential to displace travellers from tourist accommodation Potential for non-resident workforce accommodation or workforce behaviour to impact negatively on community values 	<ul style="list-style-type: none"> Project housing demands avoid displacement of local residents from rental housing and tourist accommodation 	<ul style="list-style-type: none"> No increase in people seeking public/affordable housing attributable to Project Hotel/motel operators report adequate capacity for tourist trade 	<ul style="list-style-type: none"> Consultation with Toowoomba and Goondiwindi Regional Councils Consultation with DHPW Pricefinder/SQMResearch data on rental vacancy rates and rental price trend Chamber of Commerce feedback 	Quarterly during first two years of construction (or to workforce peak)
	<ul style="list-style-type: none"> Non-resident workforce accommodation facilities avoid impacts on the amenity of nearby landowners or local towns 	<ul style="list-style-type: none"> Number of complaints about the operation of non-resident workforce accommodation 	<ul style="list-style-type: none"> Complaints register 	Monthly during construction phase
	<ul style="list-style-type: none"> Non-resident workforce accommodation guests behave with respect for community safety and community values 	<ul style="list-style-type: none"> Number of complaints about non-resident workforce accommodation guests 	<ul style="list-style-type: none"> Complaints register 	Monthly during construction phase

Impacts/benefits addressed	Outcomes	Performance Measures	Mechanisms	Monitoring Frequency
	<ul style="list-style-type: none"> Non-resident workforce accommodation offers business and employment benefits to local communities 	<ul style="list-style-type: none"> Number of people from SIA impact assessment area employed in non-resident workforce accommodation Number of businesses in Inglewood, Yelarbon and Millmerran involved in tendering for provision of services and supplies to non-resident workforce accommodation 	<ul style="list-style-type: none"> Non-resident workforce accommodation provider's employment and supplier registers 	Quarterly during construction phase
Health and community wellbeing				
<ul style="list-style-type: none"> Impacts on the amenity of and access to community facilities Impacts of noise on lifestyles/sleep Increased demands for health and emergency services Impacts on mental health through stress and anxiety related to the Project Impacts on community/traffic safety 	<ul style="list-style-type: none"> Noise impacts on the amenity of schools and churches are minimised 	<ul style="list-style-type: none"> Number of complaints regarding noise impacts 	<ul style="list-style-type: none"> Complaints register CRG feedback Department of Education Queensland feedback 	Quarterly during construction phase as relevant
	<ul style="list-style-type: none"> ARTC's social investments including sponsorships and donations increase resources available to local community organisations 	<ul style="list-style-type: none"> Value of cash and in-kind contributions made to local organisations 	<ul style="list-style-type: none"> ARTC records of sponsorships, donations and partnerships Engagement with Councils to discuss and receive feedback on community development outcomes 	Annually during construction phase
	<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 Outline Environmental Management Plan measures relevant to school bus routes Number of traffic accidents involving Project sites/vehicles 	<ul style="list-style-type: none"> Engagement with Department of Education and school bus operators QPS feedback Work Health and Safety records 	Monthly during construction phase
	<ul style="list-style-type: none"> Mental health services in the SIA impact assessment area are adequate to any increased demand resulting from the Project 	<ul style="list-style-type: none"> Mental health partnership provides access to support services and referral for people experiencing stress or anxiety in relation to the Project 	<ul style="list-style-type: none"> Monitoring of community stress and use of mental health services, through Darling Downs West Moreton PHN liaison with Queensland Health 	Quarterly during construction phase

Impacts/benefits addressed	Outcomes	Performance Measures	Mechanisms	Monitoring Frequency
	<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"> Health, police and emergency services report that ARTC's advice on workforce ramp-up and cooperative agreements with ARTC are adequate to support planned responses 	<ul style="list-style-type: none"> QPS, QAS and QFES feedback 	Quarterly during the first two years of construction (to workforce peak)
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 Outline Environmental Management Plan in cooperation with landowners and business owners 	<ul style="list-style-type: none"> Ongoing engagement with directly affected landowners and business owners supports adaptive management of impacts on farms, businesses and grazing operations, to minimise the potential for decreases in agricultural employment Tourism visitation rates are monitored, and promotional strategies supported if Project impacts on visitation are confirmed 	<ul style="list-style-type: none"> Regular engagement (to schedules agreed with landowners) to monitor the effectiveness of management measures and if necessary undertake any corrective actions to address impacts on farm employment levels Engagement with Southern Country Queensland Tourism 	Annually during construction phase
	<ul style="list-style-type: none"> Businesses in the SIA impact assessment area benefit from supply opportunities 	<ul style="list-style-type: none"> Number and value of contracts with businesses located in the Goondiwindi and Toowoomba LGAs as a percentage of all supply contracts for the Project 	<ul style="list-style-type: none"> Contractor's supplier register Procurement records Engagement with Councils to discuss and receive feedback on local procurement outcomes 	Quarterly data monitoring during construction phase Engagement with Councils as part of regular meeting schedules
	<ul style="list-style-type: none"> The Project engages Indigenous businesses in its construction 	<ul style="list-style-type: none"> Number and value of contracts with Indigenous businesses in the Goondiwindi and Toowoomba LGAs, as a percentage of all supply contracts for the Project 	<ul style="list-style-type: none"> Contractor's supplier register Procurement records 	Quarterly during construction phase

Impacts/benefits addressed	Outcomes	Performance Measures	Mechanisms	Monitoring Frequency
	<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"> Engagement with GRC, TRC and Chambers of Commerce Engagement with training partners to monitor training outcomes 	Six monthly during construction phase

9. Impact assessment summary

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

- The likelihood that social impacts and benefits will occur
- The consequence of social impacts and benefits for affected stakeholders
- The potential risk of impacts to social conditions (such as residential amenity or access to services) prior to the application of Project-specific management measures as detailed in Section 8
- The risk of residual social impacts after management measures are applied (further discussed in Section 10).

The Queensland SIA Guideline does not include a significance or risk assessment matrix, so the social risk matrix from the NSW SIA Guidelines as shown in Table 9-1 has been applied to evaluate social risks.

Table 9-1: Social risk assessment matrix

			Consequence Level				
			1 Minimal	2 Minor	3 Moderate	4 Major	5 Catastrophic
Likelihood	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		Medium		High		Extreme
	Project benefits and opportunities						

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 to impacts), stakeholder inputs and EIS technical findings.

‘Consequence’, as defined in Table 9-2, 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.

The magnitude of benefits has been qualitatively assessed in relation to the number of people it would benefit, the potential to address inequities such as high unemployment amongst local and Indigenous people, and the duration of the benefit.

Table 9-2: Consequence Criteria

Rating	Impact (-)	Benefit (+)
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 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 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 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 9-3 summarises:

- Potential social impacts and benefits as a result of the Project
- Communities and stakeholders potentially impacted
- A preliminary evaluation of the significance of potential social impacts and benefits, after considering ARTC's existing commitments
- Project-specific social management measures (noting further detail is provided in Section 8)
- An evaluation of the residual significance of impacts, in consideration of Project-specific measures.

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
- 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.

Project benefits and opportunities are denoted by the symbol (+), and negative impacts are denoted by the symbol (-). Project phases are:

- 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 which commence in construction and continue for the Project's life.

Table 9-3: Summary of social impacts and benefits

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Communities and stakeholders							
Indigenous community values	The Project may extinguish or suppress native title on up to ten land parcels where native title may exist (e.g. Reserve and State land), within the Bigambul nation.	Bigambul People	C/O	-	A2	<ul style="list-style-type: none"> Acquisition of land to agreed terms 	A1
	In greenfield areas, the Project will introduce additional linear infrastructure to cultural landscapes, contributing to cumulative impacts on Indigenous peoples' feeling of connection with country.	Aboriginal community members	C/O		A3	<ul style="list-style-type: none"> Statement of Commitments with Bigambul People which recognises their ongoing connection to Country and Culture, and commits ARTC to working in partnership with the BNTAC Cultural tours ahead of detail design phase Engagement with Traditional Owners to maximise Project benefits to Aboriginal people 	A2
Property acquisition	Acquisition of freehold land is required to accommodate the Project, affecting landowners' use of properties. Landowners would be compensated for the loss of their legal interest in the property and disturbance costs where applicable.	Directly affected landowners	C/O	-	A3	<ul style="list-style-type: none"> Engagement with directly affected landowners to develop cooperative strategies to reduce impacts on residential and agricultural properties Property-specific agreements to mitigate impacts on property use 	A2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	Approximately 20 households would need to relocate as the result of property acquisitions, resulting in disruption to lifestyles and social networks. Impacts on agricultural properties would also occur (refer below – Local business and industry).	Directly affected households	C	-	A3	<ul style="list-style-type: none"> Ensure landowners receive appropriate information about the timing and process for land acquisition Work with directly affected landowners to minimise disruptions related to the acquisition Compensation agreements 	A2
Disadvantage	Residents with limited social and economic resources may be displaced by the Project, potentially exposing them to further disadvantage. There is also potential for construction noise to impact on the amenity of residents with low socio-economic resources.	Landowners and tenants within the Project footprint	C	-	C3	<ul style="list-style-type: none"> Agreements with community or government organisations to provide support for directly affected landowners' households if required Engagement with residents adjacent to the Project to establish communication regarding management of impacts on amenity 	C2
Landowners' amenity and lifestyle	The amenity of properties near the Project may be impacted by construction noise, dust or changes to the area's visual character, whilst works are occurring near homes. Amenity impacts resulting from bridge sites, laydown areas or non-resident workforce accommodation may last for extended periods.	Residents near the Project footprint	C	-	B3	<ul style="list-style-type: none"> Management measures as detailed in the Outline Environmental Management Plan Consult property owners near bridge and laydown sites to identify any sensitivities and potential measures for consideration in CEMP 	B2
	Without mitigation measures, predicted rail noise levels would exceed the noise assessment criteria requiring mitigation measures to be investigated for up to 136 sensitive receptors (including non-residential receptors).	Residents near the Project footprint	O	-	A3	<ul style="list-style-type: none"> Work with the owners of sensitive receptors where noise mitigation measures are triggered to identify and implement mitigation measures Complaints handling procedure 	B3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	The amenity of people living near the Project may be impacted by rail/train noise which may affect lifestyles e.g. willingness to use outdoor areas.						
	Some laydown areas may be retained for legacy value to property owners or businesses.	Local community members	C/O	+	C1	<ul style="list-style-type: none"> Consult affected and nearby landowners to identify potential legacy values 	C2
Amenity of towns	The amenity of residents in Yelarbon, Brookstead, and Pittsworth may be affected by rail noise and changes to scenic character. Gowrie Mountain residents may also experience rail noise and changes to views.	Local community members and businesses, Yelarbon, Brookstead, and Pittsworth	O	-	B4	<ul style="list-style-type: none"> Management measures as detailed in the Outline Environmental Management Plan Engage with GRC and TRC to identify partnership opportunities to address impacts on local character and the amenity of these towns 	B3
Connectivity and travel behaviour	Closure of private roads will affect connectivity across and between properties, and the Project could constrain movements of equipment and stock across the Project footprint.	Local community members, businesses and road users	C/O	-	A3	<ul style="list-style-type: none"> Work with landowners to mitigate impacts on connectivity and develop suitable corridor crossings as part of detail design 	A2
	Increased travel times may result due to construction works, particularly at rail-road interfaces including bridges and level crossings, and potentially due to an increase in vehicles on key routes such as the Cunningham, Gore and Warrego Highways.	Landowners, residents and Road users	C	-	B3	<ul style="list-style-type: none"> Community information regarding constructions schedules Communication strategy with a focus on staying safe during the construction period Travel demand campaign 	B2
	Temporary disruption to access to some private properties is likely due to rail corridor construction or roadworks.	Residents near the Project footprint	C	-	A2	<ul style="list-style-type: none"> Alternative property accesses provided where required 	A1

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	Level crossings will result in periodic disruptions to traffic lasting approximately two-three minutes at each crossing. Trains of 3.6 km in length may operate in future, which could result in longer traffic delays. Such delays are common on many rural roads and are likely to be tolerated.	Road users and emergency services	O	-	A3	<ul style="list-style-type: none"> Community information regarding average wait times and road safety in relation to rail operations 	A2
Community cohesion	The Project will place pressure on the community's resilience and ability to adapt to change, which is already under pressure as a result of the drought and the COVID-19 pandemic. Community cohesion may be reduced through displacement of residents, physical severance between properties, disruption to the road network or community conflict relating to the Project.	Local community members	C/O	-	A3	<ul style="list-style-type: none"> Social investment in community projects which strengthen cohesion 	A2
Local character/sense of place	Construction work sites will temporarily change local character in areas near the temporary footprint, potentially affecting people's enjoyment of natural and rural landscapes.	Local community members	C	-	A3	<ul style="list-style-type: none"> Social investment in community projects which strengthen sense of place 	A2
	The Project will require removal of structures which contribute to local character, intensify the rail corridor in brownfield sections and introduce a new element to the landscape in the greenfield sections, and rail operations will introduce a noise source, which may alter sense of place. The prospect of permanent changes to local character may contribute to stress..	Local community members	C/O	-	B4	<ul style="list-style-type: none"> Management measures to reduce noise and visual amenity impacts detailed in Chapter 22: Outline Environmental Management Plan of the EIS 	B3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	The removal of local heritage structures or remnants, construction noise and operational noise will contribute to adverse impacts on the local character of Yelarbon and Brookstead.	Yelarbon and Brookstead communities, GRC, TRC	C/O	-	B4	<ul style="list-style-type: none"> Mitigation of impacts on heritage structures as detailed in the Outline Environmental Management Plan, in consultation with local residents Engage with the respective Councils and Yelarbon and Brookstead communities to plan and implement community projects to offset impacts on amenity and character 	B3
Property values	Property owners have considerable anxiety regarding the potential for property values to decrease as a result of the Project's impacts e.g. noise, severance and visual amenity issues. There is uncertainty about the Project's potential impacts on property values.	Landowners near the Project footprint	C/O	-	A4	<ul style="list-style-type: none"> Comprehensive range of environmental and social impact management measures to reduce the potential for impacts Communication of ARTC commitments and EIS approval conditions to reduce uncertainty about management of impacts 	B3
Workforce impacts and benefits							
Project employment	The Project's construction phase will offer employment for up to 950 personnel, including local people and groups that are disadvantaged in the labour market.	Jobseekers, construction industry personnel, schools, training providers	C	+	A3	<ul style="list-style-type: none"> Locally targeted training and recruitment strategies and targets Inland Rail Skills Academy 	A4
	The Project's construction phase will offer employment opportunities to Indigenous people within the SIA impact assessment area, supported by specific training partnerships during the detail design and pre-construction phases.	Indigenous jobseekers	C	+	A2	<ul style="list-style-type: none"> Engagement with Bigambul nation, Western Wakka Wakka and members of other Aboriginal parties 	A3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
						<ul style="list-style-type: none"> Work with Indigenous communities, industry and government agencies to support the design and delivery of training and development programs, and strengthen community members' capacity for Project employment 	
	The operations phase will provide direct permanent employment for approximately 15 people, some of whom may be drawn from the SIA impact assessment area. Indirect employment benefits relating to transport of agricultural commodities or support for enterprise and industry precincts are likely to be substantial.	Jobseekers	O	+	B3	<ul style="list-style-type: none"> Inland Rail Skills Academy 	B3
Availability of personnel	Construction labour demand may contribute to shortages in specific trades and labour, particularly if a number of projects are constructed during the same period. The likelihood of this occurring may be reduced by the recent changes to economic conditions as the result of COVID-19.	Local businesses and farmers, residents, Councils in SIA impact assessment area	C	-	C3	<ul style="list-style-type: none"> Training strategies to increase workforce capacity in the SIA impact assessment area Promotion of Project supply opportunities to local businesses Corrective action to recruitment or training strategies if labour draw is identified as impacting local businesses 	C2
Privacy or perceptions of safety	Workforce behaviour may contribute to concerns about privacy or safety, or to amenity impacts e.g. noise.	Residents near the Project footprint, local community members	C	-	B3	<ul style="list-style-type: none"> ARTC Code of Conduct Engage Councils and Project's CRG in discussion of a welcome event for construction personnel to support relationship building Cooperate with local stakeholders to identify and address any adverse impacts on local towns or residents 	B2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Training and development	The Project would provide training and career pathway development for young people, Indigenous people and unemployed people in the SIA impact assessment area.	Jobseekers, including people marginalised from employment	C/O	+	A3	<ul style="list-style-type: none"> Inland Rail Skills Academy 	A3
Agricultural employment	Acquisition or severance of farms may affect productivity and the availability of agriculture-related employment.	Farmers and graziers, dependent businesses and employees	C/O	-	C3	<ul style="list-style-type: none"> Work with landowners to ensure impacts are mitigated to the extent possible Regular engagement to identify the need for any corrective actions 	C2
Housing and accommodation							
Population change	Acquisition of properties will displace an estimated 20 households, equivalent to approximately 50 people, resulting in population loss at the local level but negligible impacts on the SIA impact assessment area's population or housing requirements.	Residents in the Project footprint	C/O	-	A2	<ul style="list-style-type: none"> Social investment in community projects which strengthen cohesion and funding for community development projects 	A1
Workforce accommodation	Temporary non-resident workforce accommodation facilities are likely to be established in the Millmerran, Inglewood and Yelarbon areas, each accommodating up to 300 personnel, resulting in a temporary population influx to these areas and concerns about potential impacts on community safety e.g. road safety or the presence of non-local personnel in small towns.	Local community members – Millmerran, Inglewood, Yelarbon, GRC, TRC	C	-	B3	<ul style="list-style-type: none"> Consult GRC, TRC and the three nearby communities to identify expectations regarding non-resident workforce accommodation and workforce management, and incorporation in the AMP Self-sufficient non-resident workforce accommodation, including paramedic staff 	B2
	The Yelarbon community is small at less than 400 people and there is potential for the community and businesses to be overwhelmed or stressed by the influx of personnel due to the non-resident workforce accommodation proposed in this area.	Local community members – Yelarbon, GRC	C	-	B3	<ul style="list-style-type: none"> Early information and consultation with Yelarbon residents and GRC to identify and implement programs to support community cohesion 	B2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
						<ul style="list-style-type: none"> Self-sufficient non-resident workforce accommodation, including paramedic staff 	
	Local businesses are likely to benefit from increased trade from workers at the non-resident workforce accommodation and potentially from supply opportunities offered by the accommodation service provider.	Local businesses – Millmerran, Inglewood, Yelarbon, Goondiwindi, Toowoomba	C	+	B3	<ul style="list-style-type: none"> AMP will include measures to enable local business participation in supply to non-resident workforce accommodation Engagement with Yelarbon, Inglewood and Millmerran business owners to enable them to gauge the need to increase their offerings 	B3
	Council services such as water and road maintenance may experience increased demand in the Millmerran, Inglewood and Yelarbon areas.	TRC, GRC, waste management operators	C	-	B3	<ul style="list-style-type: none"> Self-sufficient non-resident workforce accommodation Consult GRC and TRC to confirm measures which will reduce impacts on Council services 	C2
	There is potential for legacy benefits from non-resident workforce accommodation upon decommissioning of the accommodation facilities.	Local community members – Millmerran, Inglewood, Yelarbon	O	+	C2	<ul style="list-style-type: none"> Consult hosting landowners to identify potential legacy values 	C3
Housing access	A small increase in housing demand, in Millmerran, Pittsworth and/or Goondiwindi is possible, with potential to inflate rents.	Local community members – Millmerran, Inglewood, Goondiwindi	C	-	C3	<ul style="list-style-type: none"> AMP which considers potential project impacts and cumulative impacts of concurrent projects Monitor housing availability and require Project personnel to use non-resident workforce accommodation if increases in rental costs are detected 	C2
	Jobseekers could visit local towns seeking Project work, placing stress on emergency support or housing support services.	Housing support services in Millmerran, Pittsworth,	C	-	C3	<ul style="list-style-type: none"> Provision of clear information through ARTC and contractors' websites regarding how to apply for a job and the accommodation options on offer 	C2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
		Inglewood, Yelarbon, DPHW				<ul style="list-style-type: none"> Engage with CRG and DHPW to identify any issues and identify corrective actions if stress on housing or services is identified 	
Health and well-being							
Social infrastructure	Community support services may experience increased demand for support for people to cope with Project-related changes.	Local community members, health and community support services, Queensland Health, QPS	C	-	B3	<ul style="list-style-type: none"> Social investments will include funding to augment community development and support services, if monitoring indicates Project-related impacts on service capacity 	B2
	Roadworks or construction traffic on school bus routes may affect travel times or cause concerns for the safety of children.	School students, schools, bus operators and families	C/O	-	B3	<ul style="list-style-type: none"> Consult Department of Education, DTMR, local schools and school bus operators to identify measures for inclusion in the Traffic Management Sub-plan Ensure all schools and community facilities in the potentially impacted communities are aware of construction program and provided with updates about road closures and roadworks 	B2
	Construction work relating to the rail track and rail bridges near the Brookstead and Yelarbon State Schools will result in noise exceedances which may impact on the learning environment of the schools. There is also potential for audible construction noise at the Brookstead State School.	School students, schools, Department of Education	C	-	A3	<ul style="list-style-type: none"> Consult Department of Education and school staff and communities to identify and mitigate noise impacts 	B2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	There is potential for rail noise exceedances to affect the Brookstead and Yelarbon State Schools.	School students, schools, Department of Education	O	-	B3	<ul style="list-style-type: none"> Engagement with Department of Education to implement mitigation measures to ensure learning environments at schools are protected 	B2
	Construction noise may impact on the amenity of the Pittsworth and District Assembly of God Church/Harvest Life Church, the Yelarbon & District Soldiers Memorial Hall and/or the Pampas Memorial Hall. Rail noise may also affect the amenity of the Church and the Yelarbon & District Soldiers Memorial Hall.	Pittsworth, Yelarbon and Pampas communities	C/O	-	B3	<ul style="list-style-type: none"> Engage Church leaders and hall management committee/trustees to explain EIS results and agree property-specific mitigation measures to reduce noise impacts 	B2
Health and emergency services access	Accessibility for emergency services may be impeded on routes near construction sites or when encountering heavy haulage and large load vehicles on roads.	QPS, QAS, QFES, community members, road users	C	-	B3	<ul style="list-style-type: none"> Consult QPS and QAS to identify specific issues to be addressed in the Traffic Management Sub-plan 	B2
	Increased traffic, policing requirements for over-sized load escorts, and disruption to road network could increase demands on police, ambulance and fire and rescue services	QPS, QAS, QFES	C	-	A3	<ul style="list-style-type: none"> Consult QPS and QAS to identify any specific issues which need to be addressed as part of the Traffic Management Sub-plan 	A2
	Project personnel may increase and change the nature of demands for health services in the Yelarbon, Goondiwindi, Inglewood and Millmerran areas.	Queensland Health, Inglewood Hospital, Millmerran Hospital, Goondiwindi Hospital,	C	-	B3	<ul style="list-style-type: none"> Construction contractor will provide qualified paramedics Engage with Queensland Health, QAS and QPS to advise on workforce ramp up and locations which may experience additional demand for services 	B2
	Accessibility for emergency service vehicles may be impeded at level crossings when encountering a passing train.	QPS, QAS, QFES, community members	O	-	A4	<ul style="list-style-type: none"> Early engagement with QPS, QAS and QFES to develop cooperative mechanisms and emergency access points 	B3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	Increased risk of road/rail accidents, causing personal and family trauma, creating additional demand on health and emergency services	QPS, QAS, QFES, community members and road users	O	-	C5	<ul style="list-style-type: none"> Rail-road safety campaigns Engage with QPS and QAS to develop cooperation agreements and potentially joint training exercises 	D5
Mental health	Anxiety about the Project's impacts on amenity, flooding and/or environmental qualities is causing stress for directly affected landowners, and for others living near the Project footprint, with potential to affect mental health.	Local community members	C/O	-	B4	<ul style="list-style-type: none"> Provision of clear information about impacts as assessed and management/mitigation measures Funding for community organisations which are able to provide emotional and practical support Delivery of ARTC's mental health partnership program in the SIA impact assessment area 	B3
	Employment opportunities will increase during the construction stage, with potential for increased business and industry opportunities during operations, with potential mental health benefits for the individuals employed, particularly if unemployed or irregularly employed.	Job seekers, local businesses, Local community members	C/O	+	B2	<ul style="list-style-type: none"> Require contractors to target and report on employment of people in the SIA impact assessment area 	A2
	The Project would increase the risk of rail-based fatalities, resulting in trauma for family and community members, and for rail personnel.	Local community members, QPS, QAS, Queensland Health, community support services	O	-	C5	<ul style="list-style-type: none"> Restrict access to the rail line Mental health partnership program 	D5

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Change to environmental qualities	Exposure to construction noise or vibration may affect the well-being and/or lifestyle of households near the Project footprint, particularly if noise inhibits daily activities or cause sleep disturbance. Noise impacts would generally be transitory, but may last for longer periods with respect to laydown areas or bridge construction sites.	Residents near the Project footprint	C	-	C4	<ul style="list-style-type: none"> Implementation of measures outlined in Outline Environmental Management Plan Consult potentially impacted households to identify mitigation measures which will reduce impacts on amenity or lifestyle, and avoid sleep disturbance 	C3
	If not mitigated, rail noise levels which exceed Project noise criteria have the potential to affect the sleep and stress levels of residents near the Project footprint, and therefore their well-being.	Residents of sensitive receptors	O	-	B4	<ul style="list-style-type: none"> Implementation of measures outlined in Outline Environmental Management Plan Consultation with landowners to identify and implement noise mitigation measures Establish communication mechanisms including implementation of Complaints Handling Management Procedure If complaints about rail noise indicate that the Project is causing unacceptable noise levels, investigate and implement measures to address the cause of concern 	C3
	There is potential for dust from Project construction sites to cause a nuisance and concern to community members regarding health impacts e.g. air quality or quality of tank water.	Residents near the Project footprint	C	-	C3	<ul style="list-style-type: none"> 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

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	There is potential for dust from rail operations to cause concern to community members regarding health impacts e.g. in relation to coal dust if the Project is utilised for coal transport.	Residents near the Project footprint	O	-	C3	<ul style="list-style-type: none"> Implementation of measures outlined in Outline Environmental Management Plan Establish communication mechanisms including implementation of Complaints Handling Management Procedure If investigation identifies unacceptable dust levels, investigate and implement measures to address the cause of the concern 	C2
Flooding	Alterations to the floodplain are anticipated to result in a small changes in peak water levels under the fa 1% AEP flooding event for nine dwellings, one shed and three grain silos near the Project footprint, for major floods. This may affect feelings of security, and the use of affected properties during or after major flooding events.	Affected landowners	C/O	-	C3	<ul style="list-style-type: none"> Work with affected landowners to develop effective flood mitigation solutions and/or compensation agreements for increased flooding potential 	C2
Access to water resources	Some landowners' bores may be destroyed, or access prevented as the result of direct Project impacts. There is also potential for groundwater drawdown to affect three registered bores and an unknown number of unregistered bores.	Landowners in and near the Project footprint, businesses or community members that access bores	C	-	A3	<ul style="list-style-type: none"> Process for sourcing of water for construction purposes as outlined in Outline Environmental Management Plan Property-specific agreements regarding make-good provisions for impacts on groundwater bores 	A2
Community safety	The location of work sites, laydown areas and non-resident workforce accommodation could engender anxiety about perceived safety of residents.	Local community members	C	-	C3	<ul style="list-style-type: none"> Identification of local values incorporated in contractor's Workforce Code of Conduct for all personnel 	C2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Traffic safety	Project-related traffic including large haulage and over-size vehicles could increase the risk of road accidents or hamper the safe movement of stock and farm machinery. A residual risk of decreased traffic safety was assessed in Appendix X: Traffic Impact Assessment of the EIS as low.	Local community members, farmers, graziers	C	-	C3	<ul style="list-style-type: none"> Traffic management measures outlined in the Outline Environmental Management Plan Code of Conduct applying to all personnel and contractors Community safety programs with a focus on traffic safety during construction 	C2
	Collisions associated with signal failure, risk taking or other accidents at level crossings may occur (with a potentially heightened risk for young drivers, school children, elderly people and people with disability).	Local community members, road users, QPS, QAS, QFES	O	-	C5	<ul style="list-style-type: none"> Community safety programs with a focus on safety relating to pedestrian, stock and vehicle interactions with the rail corridor Cooperation with QPS, QAS and QFES to support community safety 	D5
Positive legacies	Training and employment opportunities will create a positive legacy of workforce skills in the SIA impact assessment area. There is also potential to create positive legacies for the SIA impact assessment area through e.g. contribution to cultural, community or park facilities.	Local community members and Councils	O	+	N/A	<ul style="list-style-type: none"> Engagement with Councils and communities to identify and implement legacy benefits 	B3
Business and industry							
Impacts on farms and agribusiness	The Project will result in direct impacts on agricultural land uses, including severance of landholdings, relocation of on-farm infrastructure, changes to water access and temporary disruptions to property access. Roadworks may also increase travel times to markets.	Directly affected landowners and farm/property employees	C	-	A3	<ul style="list-style-type: none"> 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 landowners to ensure agreed mitigation measures remain effective 	A2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	The Project would traverse land used by feedlots, a piggery and a poultry farm, with partial or full land acquisitions required, which would impact on the operations of these businesses and therefore business owners' incomes. There may also be potential for the loss of employment for agribusiness workers if operations are significantly disrupted or reduced. This is unquantifiable, but is not expected to increase unemployment rates.	Directly affected landowners and farm/property employees	C/O	-	B3	<ul style="list-style-type: none"> Acquisition and compensation agreements addressing impacts on business operations 	B2
	Closure of informal crossings and private roads will constrain landowners' ability to move machinery, stock and supplies across the corridor	Directly affected landowners	O	-	A3	<ul style="list-style-type: none"> Design of level crossings/grade separated crossings to accommodate property owners' specific needs 	A2
	Disruptions to the road network during construction may result in increased transport times and costs. The continuity of stock routes would be maintained.	Farmers, graziers, transport businesses	C	-	B3	<ul style="list-style-type: none"> Provision of information on road works and potential delays to enable farmers and other businesses to plan their travel to minimise disruptions 	B2
Local businesses	The amenity of businesses near the Project footprint in Brookstead and Yelarbon may be affected by rail noise.	Business owners - Brookstead, and Yelarbon	O	-	B3	<ul style="list-style-type: none"> Noise mitigation measures as agreed with the owners or sensitive receptors where noise exceedances are likely 	B2
	Retail businesses in Millmerran, Inglewood, Yelarbon and possibly Goondiwindi may benefit from increased trade from patronage by workers in the non-resident workforce accommodation.	Business owners - Millmerran, Inglewood, Goondiwindi, Toowoomba, Yelarbon, Goondiwindi and Toowoomba Chambers of Commerce	C	+	B3	<ul style="list-style-type: none"> Work with local businesses and the Goondiwindi and Toowoomba Chambers of Commerce to encourage relevant supply chain development 	B3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
	The Project footprint extends into land located within the Whetstone and Bringalily State Forests and revocation of State forest land will be required. There is potential for minimal impacts on beekeepers with subleases within the Bringalily Forest.	DAF, QBA, DES	C	-	A2	<ul style="list-style-type: none"> Implementation of agreement with DAF Engagement with QBA to minimise impacts on beekeeping within the State forests 	A1
Transport and logistics businesses	Transport businesses may experience temporary disruptions to travel routes during construction, and delays at level crossings during operations	Transport businesses in the SIA impact assessment area	C/O	-	B2	<ul style="list-style-type: none"> Require contractors to ensure local transport businesses can tender for Project works 	B1
	Transport or logistics businesses in Goondiwindi and Toowoomba LGAs may benefit from significant opportunities during construction. A decrease in long haul road freight volumes over time may affect levels of trade for transport businesses, which may be offset by the creation of expanded regional industries or increased short haul freight volumes.	Transport and logistics businesses in the SIA impact assessment area	O	+	C2	<ul style="list-style-type: none"> Consult businesses in the SIA impact assessment area to ensure access to current information about Inland Rail and promote government services and programs available to businesses 	C3
Tourism	Road works, construction activities and laydown areas may affect tourists' experience and travel times during construction however this would be temporary. There is potential for construction works to interrupt road access to major community events..	Tourism businesses	C	-	C3	<ul style="list-style-type: none"> Consult with the Project's CRG, local Chambers of Commerce, tourism associations and tourism service providers in potentially impacted communities regarding potential impacts on visitation Identify any additional, feasible strategies such as tourism marketing campaigns Temporary road access arrangements will be agreed with DTMR and local Councils 	C2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Local supply opportunities	The Project provides significant opportunities for local and regional businesses to participate in its construction supply chain including transportation, construction supplies, fuel and consumables.	Local and regional businesses, employees, jobseekers	C	+	B3	<ul style="list-style-type: none"> Sustainable Procurement Policy Liaise with the following stakeholders to quantify and locate specific business capacities of relevance to the Project's supply chain Local business capacity building and local supply strategies being developed in cooperation with DESBT Complete a scan of Indigenous businesses in South East Queensland which could service the Project and develop an Indigenous business register Ensure tenderers for construction contracts set appropriate targets and/or incentives to utilise local and Indigenous businesses 	B3
	There is potential for smaller businesses to be disadvantaged as part of dealing with large companies.	Local and regional business owners	C	-	C3	<ul style="list-style-type: none"> Continued engagement as part of tendering processes with major contractors regarding acceptable standards for subcontracting Work with small business to provide information about how to engage with major contractors and how to protect their rights 	C2
	The Project has potential to increase Indigenous business opportunities and other enterprise development.	Indigenous businesses and employees	C	+	C3	<ul style="list-style-type: none"> Work with other stakeholders to deliver capacity building programs to increase Indigenous businesses' capacity to supply the Project 	B3

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Regional economic development	As part of the Inland Rail Program, the Project has potential to improve the agricultural industry's access to freight transportation and stimulate business and industry development, including at the Toowoomba Enterprise Hub	Local and regional businesses, employees, jobseekers	O	+	B4	▪ Nil required	B4
	Transport, logistics and warehousing industries are likely to be catalysed by the Project.	Local and regional businesses, employees, jobseekers	O	+	B3	▪ Nil required	B3
Cumulative impacts							
Employment opportunities	Combined with development of other major projects, the Project will contribute to significant cumulative employment opportunities in the region.	Local and regional businesses, employees, jobseekers	C/O	+	C3	▪ Nil required	C3
Local amenity	There is potential for a temporary change in character in the Gowrie Junction area due to the cumulative impacts of the project and Inland Rail's Gowrie to Helidon project.	Gowrie Junction	C/O	-	B3	▪ Engagement with residents to explain the nature and duration of the respective Project's works	B2
Health and emergency services	There is a likelihood of cumulative increases in demands on health and emergency services if the construction of major projects coincides.	Local community members, TRC, GRC	C	-	B3	▪ Cooperation with QPS, QAS QFES and Queensland health to advise on construction timeframes and workforce ramp-up	B2

Impact area	Impact description	Stakeholders	Phase	Nature of impact	Initial risk	Project-specific measures	Residual risk
Labour force	There is potential for proposed major projects to lead to cumulative demands on the construction labour force in the SIA impact assessment area, and in South East Queensland, causing labour to be drawn from other industries and businesses dependent on construction-related skills and labour	Local and regional businesses, farmers, other major Project proponents	C	-	C3	<ul style="list-style-type: none"> ▪ Maintain functionality of the Inland Rail Skills Academy. 	C2

10. Conclusions

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

10.1 Distributional equity

Distributional equity refers to the effect of differing impacts across groups and areas. 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 is keenly felt by residents in the impact assessment area who expect to experience negative impacts but do not expect significant benefits in the form of employment or business opportunities during construction, and are unsure of the potential for local communities to benefit during the Project's operation.

Distributional equity considerations for the Project include:

- Approximately 20 households within the Project footprint may need to relocate
- The operations and management of farms and agribusinesses could be affected while landowners adjust to land acquisition impacts, however there is potential for long term benefits of improved access to national and international markets
- Residents living near the Project footprint would experience noise, travel delays and changes to local character during construction
- Residents in the impact assessment area would have access to the Project's training and employment opportunities
- The Project's local supply arrangements will be experienced as an opportunity to develop and grow local businesses
- 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
- The Project will contribute to regional, State and National economic development, with potential to catalyse improved employment and business opportunities in the impact assessment area.

Communities in the impact assessment area have experienced long periods of severe drought, with effects on landowners' mental health and financial well-being, community resilience and business vitality. The current COVID-19 pandemic response has also affected local and regional employment opportunities and other factors such as business vitality and mental health. It is therefore particularly important that the Project's impacts are minimised and benefits for local communities are maximised.

10.2 Project benefits

The Project is part of the Inland Rail Program, which will make a strong contribution to regional, state and national development for up to 100 years. Inland Rail as a whole 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 which are currently dominated by trucks, with potential for traffic safety benefits.

Potential Project benefits and opportunities include:

- Employment for up to 950 personnel in Project construction, including local people and groups that are disadvantaged in the labour market

- Opportunities for local and regional businesses to participate in the Project's construction supply chain, and to benefit from increased trade from workers and non-resident workforce accommodation service providers
- Training and career pathway development for young people, Indigenous people and unemployed people
- An increase in Indigenous business opportunities, and other enterprise development
- Direct permanent employment for approximately 15 people, with employment growth also catalysed by Project-related business development
- Potential for legacy values from Project investments in local communities.

10.3 Residual risks

Residual risks to social values were identified in Table 9-3. Residual risks of moderate or major consequence are shown in Table 10-1, along with measures to address the residual risks. These measures will be detailed as part of the SIMP.

Table 10-1: Potential residual impacts of moderate or major consequence

Potential residual impact	Measures to address residual impacts
Landowners and others living near the Project footprint may experience stress or anxiety about the Project's impacts on amenity, flooding and/or environmental qualities, with potential to affect well-being.	<ul style="list-style-type: none"> ■ The Project will work with directly affected landowners to address their specific concerns about impacts on properties or amenity, and facilitate access to support if they require it ■ The Project will maintain open, honest and timely communication with stakeholders who may experience Project impacts, and consider their feedback in reviewing and refining environmental management measures ■ ARTC will monitor the delivery and uptake of mental health services in cooperation with the PHNs, and of community support services in cooperation with DCDSS, to allow adjustment of support for support service if this is required
Exposure to construction noise or vibration may affect the well-being and/or lifestyle of households near the Project footprint. The impacts of track construction would be transitory, but laydown areas or bridge construction sites have potential for longer lasting impacts.	<ul style="list-style-type: none"> ■ The Project's Environmental Monitor and Community Relations Monitor will provide feedback to ARTC on the effectiveness of environmental management measures as indicated by stakeholder engagement ■ The Project will implement a range of community information and engagement strategies as outlined in Section 8.2 to advise residents about potential impacts, and will provide a complaints handling procedure to receive and address complaints ■ The Project will communicate with residents within 500 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
The Project will change local character in areas nearest to the Project footprint through changes to the landscape, intensifying the rail corridor in brownfield sections, and introducing a rail corridor to the landscape in the greenfield sections. Rail noise source may also alter sense of place.	<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 ■ The Project will engage with GRC and TRC to identify and implement initiatives to offset changes to local character

Potential residual impact	Measures to address residual impacts
Property owners have anxiety about the potential for property values to decrease as a result of the Project's impacts e.g. noise, severance and amenity issues. There is uncertainty about the Project's potential impacts on property values, which would be differential based on factors relating to the Project and other economic factors.	<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 otherwise affect the amenity or use of properties, and consequently perceptions of property values ▪ ARTC will provide access to the draft 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 purchases
The amenity of residents in Yelarbon, Brookstead and Pittsworth may be affected by rail noise and changes to scenic character. Gowrie Mountain residents may also experience rail noise and changes to views.	<ul style="list-style-type: none"> ▪ The Project SIMP and Outline Environmental Management Plan include provision for adaptive management and corrective actions ▪ The Project will monitor the effectiveness of environmental management measures through engagement with the CRG and consider the CRG's feedback in reviewing management measures ▪ 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
If not mitigated, rail noise levels which exceed Project noise criteria have the potential to affect the sleep and stress levels of residents near the Project footprint, and therefore their well-being.	<ul style="list-style-type: none"> ▪ Chapter 22: Outline Environmental Management Plan of the EIS outlines the measures to be implemented to reduce rail noise ▪ 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
Accessibility for emergency service vehicles may be impeded at level crossings when encountering a passing train.	<ul style="list-style-type: none"> ▪ ARTC will work with emergency services to develop communication protocols supporting Project responses (such as provision of alternative access across the rail corridor) and enabling services to plan around interruptions
The Project could increase the risk of road/rail accidents, and increased risk of rail-based fatalities	<ul style="list-style-type: none"> ▪ Measures to address hazards and risks to safety are provided in Chapter 22: Outline Environmental Management Plan of the EIS ▪ Arrangements with QPS, QAS and QFES will enable cooperative responses to any incidents and monitoring of any specific safety risks to enable corrective action. ▪ The Project will continue its cooperation with QPS, QAS and QFES during operations to monitor and mitigate any hazards or risks to safety
There is potential for proposed major projects to lead to cumulative demands on the construction labour force, causing labour to be drawn from other businesses and industries	<ul style="list-style-type: none"> ▪ Monitoring cumulative impacts and the effectiveness of SIMP measures in cooperation with stakeholders, and where required, refining mitigation measures to maintain or enhance their effectiveness

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