CHAPTER 13

Social

ALBURY TO ILLABO ENVIRONMENTAL IMPACT STATEMENT

ARTC | INLAND RAIL
An Australian Government Initiative

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This chapter is a summary of the potential social impacts of the Albury to Illabo (A2I) section of the Inland Rail program (the proposal). The full assessment is provided in Technical Paper 4: Social.

13.1 Summary

During construction, the proposal would result in positive social impacts through the creation of opportunities for direct employment as well as procurement the supply of materials and services. The most substantial negative social impacts are associated with the impact of the construction workforce and accommodation requirements for the proposal on nearby towns and through, reduced mobility resulting from delays and diversions of existing transport routes. Other negative social impacts may include impacts to local amenity, health and wellbeing from the generation of noise and vibration, construction traffic, the visual presence of construction activity and potential changes to air quality. Impacts to Aboriginal and non-Aboriginal cultural values and/or identity was identified as a potentially significant social impact (in the absence of mitigation). There would be an unequal distribution of the potential impacts and benefits of the proposal within the community given the spatial characteristics of these impacts and benefits, with communities adjacent to the enhancement sites (particularly vulnerable groups) experiencing a larger number of negative impacts.

Mitigation measures would seek to address the potential social impacts of the proposal and to maximise social benefits. Key responses include a proposal-specific local industry participation plan (including Indigenous participation), workforce management plan and a community health and wellbeing plan. The performance of these outcomes would be tracked through a Social Impact Management Plan. ARTC would report on the delivery of these measures to mitigate and enhance community benefits to impacted communities.

During operation, the proposal would deliver broader social benefits through indirect business and employment benefits associated with Inland Rail, such as the diversification of businesses in the area and potential to increase Indigenous participation and employment through procurement from Indigenous businesses and services. Local benefits would also be delivered through improvements to safety and accessibility across the rail corridor through the provision of three new DDA-compliant pedestrian bridges in Albury and Wagga Wagga, and the inclusion of shared paths on the new road bridges in Wagga Wagga and Junee. However, the operation of the proposal would have some localised low to moderate adverse impacts (prior to mitigation) to health and wellbeing (primarily due to potential noise level changes at some enhancement sites), as well as impacts to community and surroundings (due to aesthetic changes associated with new bridge structures and/or the change in freight movements), and impacts to mobility and increased community severance (due to marginal increases in the frequency of level crossing closures and/or delays). A potential high impact to health and wellbeing during operation (prior to mitigation) during operation is associated with the exacerbation of existing safety and privacy concerns at residential properties adjacent to the Cassidy Parade pedestrian bridge, given the replacement bridge would be higher and due to the change to the ramp connection to Brookong Avenue. Measures identified during detailed design would be put in place to address the privacy and security concerns.

In response to these potential impacts, key initiatives would include a Community Investment Program, which would explore ways with the local community to enhance aesthetic value, cultural heritage and community identity and cohesion across the social locality. A communication and engagement plan would also be implemented to build community awareness of the rail corridor's operational characteristics, including information on the likely timing of level crossing closures, likely daily train movements, and ARTC's ongoing role after construction.

13.2 Approach

13.2.1 Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements (SEARs) related to social impacts, and where in the environmental impact statement (EIS) these impacts have been addressed, are detailed in Appendix A: Secretary's Environmental Assessment Requirements.

13.2.2 Relevant legislation, policies and guidelines

The assessment was undertaken in accordance with the SEARs and with reference to the requirements of relevant legislation, policies and/or assessment guidelines, including:

- *Australian Jobs Act 2013* (Cth)
- *Social impact Assessment Guideline for State Significant Projects* (Department of Planning, Industry and Environment (DPIE), 2021a), which has replaced the *Social Impact Assessment Guideline for State significant petroleum production and extractive industry development* (DPIE, 2017a)

- *Social Impact Assessment Scoping Tool* (DPE, 2017b)
- *Environmental Planning and Impact Assessment Practice Note: Socio-Economic Assessment* (Transport for NSW (TfNSW), 2020).

13.2.3 Methodology

Study area

The social locality for the assessment was determined according to ARTC assessment guidelines and the *Social Impact Assessment Guideline for State Significant Projects* (DPIE, 2017a). The approach used to determine the social locality considered who is most likely to experience direct and indirect socio-economic impacts and where those groups of people are located. The social locality is comprised of three study areas:

- a regional study area—which comprises the Wodonga, Albury, Greater Hume, Lockhart, Wagga Wagga and Junee local government areas (LGAs) and represents the broader area of potential social impact where the proposal could have an impact.
- a nearby townships study area—which includes towns that are either intersected or in close proximity to the proposal site.
- a local study area—which includes all statistical areas SA1, within and around 1 kilometre (km) from the proposed site and existing rail corridor, where direct impacts are likely. Statistical areas are geographical areas defined by the Australian Bureau of Statistics (ABS) and SA1 is the smallest unit for the release of census data (typically around 200 and 800 people).

Key tasks

Key steps in the social impact assessment methodology included:

- reviewing relevant NSW guidance documents (refer to section 13.2.2) and guidance documents prepared by ARTC for the Inland Rail Program (refer to Technical Paper 4: Social)
- completing initial scoping of potential social impacts though:
  - completing the SIA worksheet of the Social Impact Assessment Scoping Tool (DPIE, 2017b) to confirm the social impacts that are considered likely to occur and the proportionate recommended level of assessment
  - reviewing comparable project SIAs and relevant literature on predicted social impact to obtain an understanding of potential social issues arising from freight rail infrastructure and operations, including other Inland Rail Social Impact Assessments, such as:
    - *Inland Rail Narrabri to North Star Phase 1, Socio-economic Assessment* (GHD, 2017a)
    - *Inland Rail Narromine to Narrabri, Social Assessment* (Jacobs GHD, 2020)
    - *Inland Rail Parkes to Narromine, Socio-Economic Assessment* (GHD, 2017b)
  - reviewing Commonwealth, state and local government legislation and planning documents, and technical studies
  - reviewing publicly available media sources relating to the proposal and the Inland Rail Program
  - reviewing state-based social impact assessment (SIA) guidance, namely the SIA Guideline (DPIE, 2021a)
- describing the existing social environment by reviewing (refer to section 3.2.2 of Technical Paper 4: Social):
  - the 2016 ABS census data
  - DPIE's 2020 Population, Household and Implied Dwelling Projections by LGA
  - other data indicators, such as health data, local government planning policies, and local government consultation and online mapping tools
- community and stakeholder consultation, including:
  - reviewing the consultation carried out by ARTC from 2015–2018 and 2019–2020
  - the first Community Consultative Committee (CCC) held on the proposal in 2021
  - SIA-specific consultation between May and November 2021—face-to-face interviews as well as video conferencing and phone interviews (refer to Chapter 5: Engagement). An online survey was also distributed among stakeholders to capture general inputs and to identify potential impacts.

- predicting, identifying and evaluating potential social impacts of the proposal and the social implications of impacts identified in other technical assessments. The assessment considers the proportionate SIA principle to examining each impact depending on its nature and extent. Table 13-1 defines the magnitude of impact outcomes and Table 13-2 defines the likelihood levels for impacts. The level of impact is based on the Social Impact Significance (SIS) impact rating as established in the social risk matrix in Table 13-3. The impact rating ranges from a low impact to a very high impact.
- identifying appropriate mitigation and management measures for all impacts to address potential social impacts of the proposal.

Refer to Technical Paper 4: Social for a more detailed methodology undertaken for the SIA.

TABLE 13-1 DEFINING MAGNITUDE LEVELS FOR SOCIAL IMPACTS

Magnitude	Definition
Transformational	Substantial change experienced in community wellbeing, livelihood, amenity, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% of a community.
Major	Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time or affecting many people in a widespread area.
Moderate	Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time or affecting a group of people.
Minor	Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable.
Minimal	Little noticeable change experienced by people in the locality.

Source: DPIE, 2021a

TABLE 13-2 DEFINING LIKELIHOOD LEVELS OF SOCIAL IMPACTS

Likelihood level	Definition
Almost certain	Definite or almost definitely expected (e.g. has happened on similar projects)
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Source: DPIE, 2021a

TABLE 13-3 SOCIAL RISK MATRIX

		Magnitude				
		1 Minimal	2 Minor	3 Moderate	4 Major	5 Transformational
Likelihood level	A Almost certain	Low	Medium	High	Very high	Very high
	B Likely	Low	Medium	High	High	Very high
	C Possibly	Low	Medium	Medium	High	High
	D Unlikely	Low	Low	Medium	Medium	High
	E very unlikely	Low	Low	Low	Medium	Medium

Source: DPIE, 2021a

13.2.4 Key risks

An environmental risk assessment of the proposal was completed (refer to Appendix E: Environmental risk assessment). Social risks identified by this assessment with an assessed level of medium or above are:

- potential changes in the way of life for residents close to the enhancement sites
- temporary impacts on amenity for residents, visitors, businesses and other sensitive receivers, as a result of noise, dust, air and visual impacts during construction
- temporary impacts to, or temporary loss of, community facilities/open space due to construction activities and/or changes to access during construction

- detrimental effects on Aboriginal cultural values and community identity
- pressure on the housing and short-term accommodation market for construction workforce
- property acquisition or termination of existing leases and associated business impacts
- temporary impacts to access, visibility or amenity of businesses
- detrimental impacts on procedural fairness and people's capacity to decide over changes that may affect their lives
- unequal distribution of impacts on vulnerable groups and sensitive receivers.

Social impact risks with an assessed level of medium or above, identified by the environmental risk assessment during the operation of the proposal, included:

- impacts on amenity for residents, visitors, businesses and other sensitive receivers as a result of increased use of the freight line
- potential alterations to access, connectivity, visibility and amenity of business premises during operation.

The social impact assessment considered the potential risk identified by the environmental risk assessment in addition to potential risk and impacts identified by the scoping report, the SEARs and relevant guidelines and policies (as appropriate).

13.3 Existing environment

The proposal site consists primarily of the existing active rail corridor between Albury and north-east of Illabo, which is owned by the NSW Government and leased, managed and operated by ARTC. The rail corridor is part of the Main South Line, which is used for the transport of both freight and passengers between Melbourne and Sydney.

13.3.1 Regional study area

The regional study area spans six LGAs (refer to section 13.2.3) covering a total population of over 170,000 residents. More than one-third of these residents live in the town of Wagga Wagga, highlighting its significance to the region. Collectively, around 90 per cent of the population live within the Wagga Wagga, Albury and Wodonga LGAs.

The regional study area has undergone notable population growth between 2006 and 2016; however, the distribution of population growth has not been even. Most growth has been focused on LGAs with major centres, included in section 13.3.2. Only the Lockhart LGA experienced a decline in resident population between 2006–2016 (-1.9 per cent).

The region is expected to continue this growth, with an expected 19 per cent increase in population by 2036; the majority of which is expected in LGAs with major centres. Wodonga is expected to experience the greatest growth (46.9 per cent) followed by Albury (10.6 per cent) and Wagga Wagga (13.9 per cent). Some negative growth to minor growth (up to one per cent) is expected in Lockhart and Junee LGAs.

Age profiles

The regional study area had a similar age profile to NSW; however, with a slightly larger representation of younger aged up to 24 and older people aged over 60. LGAs with a smaller resident population tended to have a higher portion of older people. The Junee LGA was the exception; however, it had a relatively small resident population with a similar age profile to the regional study area.

Workforce

Labour force

Approximately 51.5 per cent of residents were either employed (full time or part time) or were seeking employment. Wagga Wagga, Albury and Wodonga LGAs had the highest portion of residents engaged in the labour force at around 53 per cent, 51 per cent and 52 per cent respectively. Junee LGA had the lowest proportion of residents engaged in the labour force—10 per cent lower than the regional study area.

More than a third of residents (39.4 per cent) in the Junee LGA were not in the labour force with the remaining either in the labour force (41.5 per cent) or under 15 years of age (19.1 per cent)—the highest representation of the six LGAs and 12.0 per cent higher than the regional study area at 27.4 per cent. The Junee Correctional Centre was a contributing factor to the high proportion of residents not in the labour force.

Unemployment

Approximately 5.9 per cent of the labour force was unemployed.

LGAs where unemployment rates were highest are Albury LGA (6.7 per cent), Wodonga LGA (6.0 per cent) and Wagga Wagga LGA (5.5 per cent). Unemployment rates were lowest in Junee LGA (4.9 per cent), Greater Hume

Shire LGA (4.6 per cent) and Lockhart LGA (4.2 per cent). This reflects the different age profile across the regional study area and there being more people of working age in LGAs with higher unemployment.

Workforce migration

Workforce migration identifies people's travel for work patterns considering a worker's place of work and usual residency. Most workers lived and worked within the regional study area (90.6 per cent). Albury, Wodonga and Lockhart LGAs had the highest percentage (over 60 per cent) of workers who lived and worked within the same LGA. Albury LGA and Wodonga LGA also share a strong economic and employment relationship with high levels of workforce migration between the two LGAs.

Employment

Main sectors in which the region's residents were employed in were:

- health care and social assistance at 14.9 per cent
- retail trade at 10.8 per cent
- public administration at 9.6 per cent
- education and training at 9.3 per cent
- manufacturing at 8.4 per cent.

Health care and social assistance is a major employment sector with base hospitals located in Albury and Wagga Wagga and smaller hospitals located in Henty and Junee. Retail employment was focussed around the commercial areas in Albury and Wagga with smaller commercial areas present in towns within the regional study area.

When considering the distribution of civil and heavy construction workers across the regional study area:

- there were 565 people employed in heavy and civil engineering and construction as well as bridge and road construction
- the majority of residents employed in relevant construction and professional services for the proposal lived in the Albury (9. 2 per cent), Wodonga (8.6 per cent) and Wagga Wagga (7.9 per cent) LGAs
- the number of residents engaged in civil and heavy construction was lower in Junee, Lockhart and the Greater Hume LGA (refer to section 6.3.10 for further detail).

The distribution of residents already employed in relevant civil and construction industries was limited to the major centres. This suggests that the potential local workforce would be located in Wagga Wagga, Albury and Wodonga LGAs rather than Junee, Lockhart and the Greater Hume Shire LGA.

Short-term accommodation

The region's hotels, motels, caravan parks and other short term accommodation options have the capacity to accommodate approximately 2,909 people, assuming single occupancy of rooms, with the Albury–Wodonga urban area hosting 1,718 of the total number. Motels are the most common accommodation type, there is also a large stock of hotel-type accommodation. Nearly all hotel accommodation is in larger regional centres such as Albury–Wodonga and Wagga Wagga.

Pub accommodation (102 pub rooms) has been excluded as a suitable option to accommodate workforce because of work health and safety restriction, reducing the total number of short-term accommodation rooms available to 2,807.

Consultation with nearby township's study area accommodation providers (refer to Technical Paper 4: Social) revealed that some have existing commercial arrangements with transport, civil construction and primary production companies to reserve certain rooms each year to accommodate their workers. These quotas may impact the availability of rooms. Data from the *Seasonal Recruitment in Regional and Remote Australia Study* (DoE, 2016) indicates that peak demand for seasonal workers in the Riverina region, including the study area, occurs from October through to April. Further consultation with local accommodation providers indicated strong demand for short-term accommodation by seasonal agricultural workers during the spring, early summer and autumn months. Many indicated occupancy rates around 80–100 per cent during these periods. This trend was more prevalent outside of major centres such as Wagga Wagga and Albury–Wodonga. Conversely, occupancy during the winter and peak summer months could reach as low as 20 per cent.

Visitors and tourist to the region also affect accommodation availability throughout the year, particularly around the urban areas of Albury-Wodonga and Wagga Wagga. Consultation with accommodation providers across the social locality indicated that the spring and autumn months are the peak times for tourism demand. Local occupancy rates also vary due to local events and activities. Key events in the social locality are focused on showcasing the local towns of Albury, Wagga Wagga and Junee, including agriculture, entertainment, and sporting events. Regional tourism is experiencing significant growth with international border closures due to the COVID-19 pandemic.

Table 13-4 shows the estimated occupancy rates across the study area, considering tourism data, seasonal worker demand and major events. These are estimates only and have not been confirmed with all providers. The urban occupancy rates are not variable to account for higher continuous demand throughout the year.

TABLE 13-4 ESTIMATED OCCUPANCY RATES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Regional	60%	70%	80%	70%	60%	40%	40%	60%	80%	90%	90%	80%
Urban	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%

Source: Technical Paper 4: Social

Table 13-5 shows the estimated number of available rooms across the study area during the calendar year.

TABLE 13-5 ESTIMATED AVAILABLE ROOMS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Regional	189	142	94	142	189	283	283	189	94	47	47	94
Urban	696	696	696	696	696	696	696	696	696	696	696	696
Total rooms available	**885**	**837**	**790**	**837**	**885**	**979**	**979**	**885**	**790**	**743**	**743**	**790**

Source: Technical Paper 4: Social

Advantage and disadvantage

Socio-Economic Indexes for Areas (SEIFA) from the 2016 Census are used to understand levels of advantage and disadvantage across the regional study area. SEIFA scores are presented as deciles that sort data into ten equal parts, reflecting relative distribution across Australia. For example, an LGA with a decile score of 1 is in the lowest 10 per cent nationally, while an LGA with a decile score of 10 is in the highest 10 per cent nationally. The national average was five. To understand social-economic advantage and disadvantage across the regional study area, the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) has been considered. A summary of IRSAD variables is included in Technical Paper 4: Social.

Across the regional study area, IRSAD varied between LGAs:

- Wagga Wagga LGA: IRSAD score of 7
- The Greater Hume Shire and Lockhart LGAs: IRSAD score of 6
- Albury and Wodonga LGAs: IRSAD score of 5
- Junee LGA: IRSAD score of 3.

Community identity

Aboriginal cultural heritage

The proposal lies within the traditional lands of the Wiradjuri language group. Gunnedah and Albury mark the northern and southern boundaries of Wiradjuri Country, while the eastern boundary is the Great Dividing Range, and the western boundary is approximately in line with the present towns of Hay and Nyngan.

The Wiradjuri people generally moved around in groups, using the river flats, open land and waterways with some regularity through the season, as indicated by the scattered archaeological evidence in the region. The arrival of Europeans in these areas in the early 1800s had a devastating impact on the traditional Wiradjuri lifestyle.

Despite the impacts of European settlement, Wiradjuri people continue to occupy their traditional Country, in the townships of Dubbo, Condobolin, Orange, Bathurst, Wagga Wagga, Albury, Young, Narrandera and Griffith, and are continuously involved in—and fight for—the protection of cultural heritage sites.

Consultation with Registered Aboriginal Parties (RAPs) identified that cultural values are generally related to the importance of Wiradjuri country, including the natural features, landscapes and ecosystems, and cultural significance associated to storytelling through songs (Chapter 10: Aboriginal heritage and Technical Paper 2: Aboriginal cultural heritage assessment report).

Non-Aboriginal cultural heritage

The NSW railway network is a significant feature of the history and culture in the study area. Between 1877 and 1881 the Main Southern Line was extended 290 km from Goulburn to Illabo, Junee, Bomen, Wagga Wagga, Uranquinty, The Rock, Yerong Creek, Henty, Culcairn, Gerogery, Table Top, Ettamogah, and Albury. The relevance of the railway network declined during the mid-twentieth century due to the sudden boom in the manufacturing of

cars and other personal motor vehicles. Between 1941 and 1977 no railway alignments were constructed, and branch railway lines and less popular stations were closed and demolished.

The proposal site encompasses a total of 28 heritage items, including five conservation areas. Many of these items were established with, or following construction of, the railway network and their heritage values have been influenced by the Main South Line. These heritage items are associated with the establishment of railway stations, the agricultural and commercial purposes of the railway network, and vehicle and pedestrian access over and within the railway precincts.

During community consultation (refer to Chapter 5: Engagement), key stakeholders raised concern about heritage issues at a number of locations, including Murray River Bridge, Albury Yard, Culcairn, Wagga Wagga and Junee.

Further detail on non-Aboriginal heritage is in Chapter 11: Non-Aboriginal heritage and Technical Paper 3: Non-Aboriginal heritage.

Values

Community consultation undertaken for the proposal as described in Chapter 5: Engagement identified the importance of local history to residents across the regional study area, specifically the region's rail history. This includes historical buildings and rail infrastructure such as existing rail corridor, train stations and bridges, and signal boxes.

There is also a strong appreciation for the rural lifestyle enjoyed by residents in the regional study area.

A review of the relevant community strategic plans (refer to Technical Paper 5: Economic) combined with community and stakeholder consultation results (Chapter 5: Engagement) indicate key and consistent community values in the regional study area:

- having access to and availability of quality education facilities and programs
- having access to and availability of recreational activities and health programs that enhance wellbeing and promote healthy lifestyles
- having access to and availability of local employment and career opportunities that welcome people from diverse cultures to live, work and settle in the council region
- being a part of and contributing to connected, inclusive, resilient and safe communities, with a strong network that supports families, celebrates and values diversity and heritage
- having the opportunity to contribute to a prosperous economy by enhancing the appearance of towns, improving services and infrastructure that supports rural business, creating a thriving tourism economy and developing the skills and employment opportunities for residents
- having the opportunity to contribute to the protection of the natural environment that explores opportunities to utilise renewable energy and water-saving practices
- having access to sustainable transport strategies, including improved road safety and transport outcomes that improve liveability, by providing easy and fast connections to neighbouring towns and cities, and improving the safety of all community members.

Events and activities

Local events and activities are key in building community identity and social values as they bring together local people and visitors to celebrate common interests and display what is on offer in rural towns. Major events and activities benefit the local economy by attracting both local residents and visitors to the area, increasing participation and spending for local businesses, accommodation and services.

Table 13-6 is a summary of key events in the regional study area. The diversity and nature of the events reflect on the inclusion and diversity values of the regional community, as well as the importance of attracting people to region and enhancing connectedness across different age groups.

TABLE 13-6 KEY REGIONAL EVENTS IN THE REGIONAL STUDY AREA

Month	Events
January	Australia Day celebrations
February	Minor events such as markets
March	Annual Junee Rhythm 'n' Rail Festival, Junee Albury Gold Cup Carnival, Albury Mardi Gras Festival, Wagga Wagga Travelling Film Festival, Wagga Wagga Fusion Festival, Wagga Wagga

Month	Events
April	Anzac Day commemorations Gindaymannha Sports Carnival, Albury Stone the Crows Festival, Wagga Wagga
May	Banff Mountain Film Festival, Wagga Wagga
June	Minor events such as markets and festivals
July	Minor events such as markets
August	Riverina Schoolboys Football Carnival, Junee
September	Spring Jam, Wagga Wagga Write Around the Murry, Albury, Sydney Comedy Festival in Wodonga
October	Gardenesque, Albury Gears and Beers Festival, Wagga Wagga The Junee Show The Illabo Show Octoberfest celebrations in various locations
November	Minor events such as markets
December	Christmas carols and New Year's Eve festivities in various locations Borderville Summer Circus Festival, Albury.

Decision-making systems in local government

Community consultation, engagement and participation are key aims of local government strategies in the regional study area, in particular:

- Albury City Council focuses on establishing strong government and regional networks and plans to lead with good governance by consulting the community on all major changes
- Greater Hume Shire focuses on engaging with the community to help improve community facilities and infrastructure while promoting the value of the natural environment
- Wagga Wagga City Council uses a long-term planning approach that undertakes community consultation and promotes shared values and opportunities.

Further detail is provided in section 6.3.13 in Technical Paper 4: Social.

Health

The regional study area falls within the Murrumbidgee Local Health District, with the exception of Wodonga LGA. The Murrumbidgee Local Health District (MLHD) reported ongoing health challenges for 2020, including an ageing population, Indigenous health, low health literacy and increasing cost of chronic disease. The COVID-19 pandemic contributed to further health challenges in the district including negatively impacting mental health.

According to the Population and Health Profile (MLHD, 2020), respiratory diseases contributed to six per cent of hospitalisations, higher than the NSW state average of 4.8 per cent. During the 2017–2018 period, respiratory disease deaths made up 10 per cent of all hospital deaths and between 2016 and 2018, approximately 9 people died per year from asthma. The death rate of respiratory deaths had been decreasing since the early 2000s but has increased in recent years. Between 2017–2019, 21 per cent of children and 10 per cent of adults reported suffering from asthma.

Additionally, during this reporting period, mental health contributed to 1.9 per cent of hospitalisations, lower than the NSW average of 5.1 per cent. There were reported 130 deaths on average per year due to mental and behavioural disorders (non-suicide) in 2017–2018. Hospitalisations for all mental health disorders (non-self-harm) totalled 2,356 in 2018–2019 at a rate significantly lower than NSW. The death rates and hospitalisations rates for mental and behavioural disorders have been increasing since early 2000 in both NSW and MLHD.

Further health issues such as heart disease, increasing cost of chronic disease and smoking are present in the region; however, are not detailed in this section as they are not relevant in the context of the proposal.

Indigenous people's health

As reported by the MLHD District Aboriginal Health Profile (2017), within the Murrumbidgee region, the most disadvantaged Indigenous communities are around the townships of Young, Deniliquin, Gundagai and Griffith. Some 33 per cent of Indigenous adults are daily smokers, while the rates of hospitalisation relating to smoking in NSW was triple the rate of non-Indigenous Australians. In the 2017 report, Indigenous communities have higher levels of psychological distress in adults (approximately 20 per cent) compared to non-Indigenous Australians (approximately 11 per cent). The most common causes of hospitalisation for Indigenous Australians in the Murrumbidgee is dialysis, injury and poisoning, and maternal and neonatal related causes.

Emergency services

Most urban centres within both the local study area and regional study area have designated police stations, Rural Fire Service (RFS), NSW Fire and Rescue services, ambulance services and State Emergency Services. Key emergency services include:

- Albury, Culcairn, Henty, Yerong Creek, The Rock, Wagga Wagga, Wodonga and Junee police stations
- Albury, Culcairn, Henty, The Rock, Wagga Wagga and Junee, Wodonga NSW Rural Fire and Rescue Service
- Lavington, Thurgoona, Henty, Yerong Creek, Uranquinty and Junee Rural Fire Service
- Albury Ambulance Service and Wagga Wagga and Junee NSW Ambulance Service
- Albury, The Rock and Wagga Wagga NSW State Emergency Services.

Transport and access/regional transport networks

The main features of the regional transport network include

- the existing Main South Line, connecting Sydney and Albury, is relied on for the supply goods and materials to regional centres on a regular basis and provides passenger transport services including stations Albury, Culcairn, Henty, The Rock, Uranquinty, Wagga Wagga and Junee The Main South Line
- the existing road network, which includes major highways (Hume, Riverina, Olympic and Sturt), linking NSW to Victoria and South Australia
- airport services at Albury and Wagga Wagga with passenger services to Sydney and Melbourne
- current or planned active transport networks, which are mainly located in the townships of Albury and Wagga Wagga.

A summary of the existing traffic and access characteristics of the regional study area, including the regional transport network, is included in Chapter 9: Transport and traffic.

13.3.2 Nearby township study area

Townships in close proximity to the proposal site, include Albury, Wodonga, Jindera, Walla Walla, Holbrook, Culcairn, Henty, The Rock, Tarcutta, Lockhart, Ladysmith, Uranquinty, Wagga Wagga, Forest Hill, San Isidore, Estella, Gundagai, Junee, Coolamon, Ganmain and Cootamundra.

The proposal intersects the major regional centres of Albury and Wagga Wagga and a number of smaller townships. These are generally smaller towns with populations less than 1,000 residents, except for Junee, which has a resident population of 4,762.

Wodonga, Albury and Wagga Wagga are described in this section with further detail on each township provided in Appendix C of Technical Paper 4: Social.

Wodonga

Wodonga (population 35,130) is an urban centre located in Victoria on the NSW–Victorian border. Wodonga and Albury (in NSW) have a dynamic cross-border relationship, sharing a range of services between the two states. Wodonga is the residential and commercial hub of the Wodonga LGA, with 89.3 per cent of the LGAs resident population.

Being the major commercial and residential hub of the LGA, the town contains a major hospital and a range of medical services; over 20 primary and secondary schools, and further education facilities such as a university and TAFE; as well as a unique, nationally and internationally recognised Flying Fruit Fly Circus training centre.

The town is also a key location of sporting and recreational, and community services in the LGA.

Albury

Albury (population 47,974) is regional city that is located on the banks of the Murray River and, as noted, has a dynamic cross-border relationship with the town of Wodonga in Victoria. The town of Albury represents 93.4 per cent of the resident population of the Albury LGA, and is a major manufacturing, retail, commercial, administrative and cultural centre for the region.

Being the major hub of the region (along with nearby Wodonga in Victoria), the town contains a major hospital and a range of medical services; around 15 primary, secondary, combined and special schools; and further education facilities such as a university and TAFE. The town is also a key location of sporting and recreational, and community services in the region containing a number community centres, an entertainment centre and museums.

Wagga Wagga

Wagga Wagga (population 48,263) is a major regional centre, which includes a regional airport with connections to Sydney and Melbourne. The town is the largest retail, commercial and administrative centre in the Riverina region and also a key economic and social hub, providing services to a catchment of over 185,000 people. Wagga Wagga City has regional health services, a diverse range of schools and tertiary institutions, sport and recreational facilities that can support elite sporting events, key government social services and core community facilities. The town represents 77.4 per cent of the LGA's resident population.

As the major regional hub, Wagga Wagga contains two hospitals (public and private) and a range of medical services, with 300,000 people annually accessing the health service.

The township contains 23 primary, secondary and special schools, and further education facilities including two universities (making it the higher education hub for the region) and TAFE facilities.

The town is also a key location of regional sporting and recreational facilities that can host elite sports. As a prominent regional centre, there is significant community infrastructure, which is reflected in the identification by Wagga Wagga City Council of these facilities being core to the growth of the city. To support Wagga Wagga as a key regional centre, multiple state agencies also have regional services operating in the town, as well as non-government organisation (NGO) services and not-for-profit organisations.

13.3.3 Local study area

The local study area consists of all Statistical Area Level 1s intersected by the proposal and those located within 1 km of the proposal site. Further detail on the local study area is in Technical Paper 4: Social.

13.4 Impact assessment—construction

This section describes and assess the potential social impacts are predicted as a result of construction of the proposal.

As detailed in Chapter 5: Engagement, the design process for the proposal has incorporated, where possible, stakeholder feedback directly into the design, to respond to community and stakeholder interests and values. The social impact assessment has assessed the proposal as described in Chapter 7: Proposal features and operation and Chapter 8: Construction of the proposal.

13.4.1 Way of life

Way of life is defined as how people live, get around, work, play and interact each day. The assessment of way of life considers the employment and economic impacts of the proposal's construction, including construction workforce, and housing and accommodation impacts.

Table 13-7 is a summary of the way of life impacts during the construction of the proposal. Further information is included in Technical Paper 4: Social.

TABLE 13-7 SOCIAL IMPACT ASSESSMENT: WAY OF LIFE—CONSTRUCTION

Impact	Impact summary
Employment and economic—construction workforce	▸ Construction workforce across all enhancement sites would peak at around 770 workers during the 17-month construction period (early 2024–mid 2025). This would include both skilled and unskilled workers from the heavy and civil construction and the general construction sectors. ▸ The actual number of workers would fluctuate, depending on the demand and construction activities being undertaken. The Junee precinct would require the largest peak workforce at 300 workers in March 2024, while the Wagga Wagga precinct would require 110 workers in March 2024 and 150 workers in September 2024. ▸ Peak workforce at each precinct would occur during possession periods, which are expected to last up to three days; however, inductions and commissioning of works would require the peak workforce to be available for up to a month. During off-peak construction periods, the workforce requirements would fluctuate between 10 and up to 58 workers. ▸ Employment statistics for the 2016 census identified that only 565 people, representing 0.6 per cent of the total labour force, worked in the heavy and civil construction sector and would have the required skills to support the construction of the proposal without significant training. Given current local employment conditions (refer to section 13.3.1), and the complex nature of the proposed construction methodology approximately 10 per cent of required workforce in each precinct are predicted to be sourced locally for the proposal, including Indigenous people, causing a minimal effect on local employment. ▸ ARTC has established the Inland Rail Skills Academy to help create opportunities for education, training, skills development for communities along the Inland Rail Program. The Inland Rail Skills Academy includes a number of partnerships and programs, including undergraduate scholarships, science, technology, engineering and maths (STEM) education, training programs, and a partnership between ARTC and the Australasian Railway Association. The early implementation of this program could increase the uptake of local employment. ▸ Given the construction schedule and limited number of workers available in each LGA (refer to section 13.3.1) it is likely that the realisation of this positive impact would cause a minimal effect across the social locality. As such, the pre-enhanced economic positive impact of the proposal's employment has been assessed as Low.
Employment and economic—business opportunities	▸ Construction of the proposal would create opportunities for the supply of materials and services in the regional study area. In addition, the demand for worker accommodations during peak periods would have a positive economic impact on accommodation providers and flow-on effect to other local business. ▸ Construction of the proposal would provide opportunities for Indigenous businesses, including clothing, environmental and cultural heritage field supervision, surveying and monitoring, as well as landscaping and land rehabilitation. A review of Supply Nation registry identified a number of existing businesses that could provide services to the proposal, including training, construction and landscaping. ▸ In general, given that most businesses that could potentially source materials and services to the proposal are located beyond the local study area, it is possible that the realisation of this positive impact without any enhancement measures would cause a minor to moderate effect at each precinct township. As such, the pre-enhanced economic positive impact of the proposal's business opportunities has been assessed as Medium.

Impact	Impact summary
Housing and accommodation	▸ The proposal is expected to result in increased demand for accommodation during construction in nearby towns. ▸ The temporary workforce would require accommodation; however, the peak requirements would be relatively short and spread over distinct packages of work packages. ▸ The private rental market indicates very low vacancy rates across the local study area at 0.58 per cent. A small number of workers (around five) would require long-term accommodation for a period of 18-24 months. ▸ Housing workers in private rentals would further reduce supply in an already constrained rental market. Further reductions in supply are likely to result in price rises, disproportionally affecting vulnerable and low-income residents. ▸ A total of 2,909 short term accommodation rooms were identified in the study area, however existing demand limits availability at certain times, and there are a number of criteria to consider when assessing accommodation suitability (such as the exclusion of pub accommodation as per the minimum standards outlined by Safe Work Australia). ▸ An assessment of the availability of rooms in the catchment for the northern works (Wagga Wagga and Junee) shows there would be insufficient supply to satisfy demand during the March 2024, with a gap of 77 rooms. Supply would also be constrained during September 2024 with 51 spare respectively after accounting for the demand by the proposal. ▸ An assessment of the availability of rooms in the catchment for the southern works (Lockhart – Greater Hume and Albury) shows there would be sufficient supply to satisfy workforce demand. The most constrained month would be March 2024 when 175 rooms would be available after workforce demand is satisfied. ▸ The proposal is unlikely to have an effect on vulnerable groups, however, it would temporarily limit the availability of short term accommodation for tourists, business and seasonal workers. ▸ The effects of temporary workforce on the availability of accommodation for visitors, seasonal workers and other industries would be experienced differently at each township. As such, it is almost certain that Wagga Wagga and Junee LGAs would experience a major change, resulting in a Very High pre-mitigated negative impact rating, while Albury and Greater Hume-Lockhart LGAs are likely to experience a moderate negative effect, resulting in a High impact rating.
Mobility	The proposal is expected to result in changes to how people move through the local study area during construction. Construction of the proposal would result in temporary impacts to traffic and access during level crossing works, enhancement works at shared use and pedestrian bridges, as well as a temporary increase in both heavy and light vehicle movements on the local road network. Adverse impacts to local movement are delays, detours and inconvenience for personal vehicles, operations vehicles, school buses and pedestrians caused by: ▸ temporary level crossing closures at Henty Yard Clearances and Junee to Illabo clearances enhancement sites ▸ road and pedestrian bridge closures ▸ temporary detours due to road bridge closures during traffic management operations ▸ temporary bus detours and relocation of bus stops at Edmondson Street bridge in Wagga Wagga precinct and Kemp Street bridge in Junee precinct ▸ temporary modified access to properties ▸ increased movement of construction-related vehicles along some local roads. An assessment of local mobility was considered in Technical Paper 4: Social and details of this assessment are discussed in Chapter 9: Transport and traffic. The assessment: ▸ identified no significant impacts to road and intersection operation and performance in most enhancement sites at each precinct, and predicted that at each precinct, construction traffic would have a minimal impact on the operation of bus services, as the heaviest period of construction workforce movements at the start and end of construction hours (6am to 6pm) is outside peak bus service periods (e.g. school times) ▸ found limited provision for active transport at the four precincts, with low demand for cycling and pedestrian travel in the surrounding land; consequently, traffic volumes generated by construction is predicted to have a minimal impact on cycling or pedestrian movements ▸ given the characteristics and duration of works at each precinct, as well as the location of key community services in each township, local road users would experience changes to traffic differently. As such, the impact of delays and accessibility for local residents due to the combined changes to road network connectivity during construction has been assessed as Very High in Wagga Wagga, High in Junee, Medium in Albury and Low in Greater Hume Lockhart.

13.4.2 Community

Table 13-8 is a summary of the potential impacts of the proposal during construction on community cohesion and character and sense of place.

Social cohesion refers to the strength of relationships and the sense of solidarity among members of a community, enabling multiple forms of social support, such as emotional and instrumental support. Social cohesion is determined by supporting networks and reciprocity, shared norms and values, capacity to participate and sense of safety.

Community sense of place is likely to be influenced by the proposal due to the combined impacts on people's mobility and capacity to places and reunions. Community events are a way of bringing local people together and boosting sense of place and belonging in rural areas, particularly for isolated families and vulnerable groups such as women, youth and Indigenous people. Cultural and recreational events are an opportunity to connect with community members and neighbours, and offer a much-needed social support and network.

Further information is included Technical Paper 4: Social.

TABLE 13-8 SOCIAL IMPACT ASSESSMENT: COMMUNITY—CONSTRUCTION

Impact	Impact summary
Community cohesion and character	Case study reviews (McKenzie, 2010) suggest that the temporary increase in working-age people (predominantly males and non-residents) may lead to an altered sense of community, in particular affecting peoples' perception of safety in their neighbourhood and community. Rural communities and vulnerable groups, including multicultural communities, Indigenous people and women, are more susceptible to changes to community cohesion. Socio-economic advantage and disadvantage in the townships can also provide an indication of the vulnerability that a community can have to social change. As outlined in section 13.4.1, during the overall 17-month construction period, Albury, Greater Hume Lockhart, Wagga Wagga and Junee townships may notice a minor temporary increase in people moving around the area for most of the construction period. The peak non-local workforce (estimated at approximately 90 per cent) would be distributed among the four precincts during up to four weeks in March 2024 and September 2024. Junee would receive the larger amount of workforce movement during construction. Consequently, the presence of large numbers of temporary workers could hinder the sense of safety, especially for women, multicultural groups and Indigenous people. During community consultation (refer to Chapter 5: Engagement), stakeholders exhibited positive reception to housing temporary workers, it was perceived as positive way for the townships to economically benefit from the proposal. This is paired with the following community values: attraction of new residents, work opportunities, diversity and integration. As a result, it could be inferred that community receptiveness to the migration workforce could result on community adaptability and resilience to population changes, noting Albury, Wodonga and Greater Hume currently experience high rates of migration workforce. Changes to community cohesion are likely to be experienced across the local study area and to a lesser extent in the region. Those townships with higher relative socio-economic disadvantage, such as Junee, followed by Albury, Greater Hume and Lockhart are more likely to experience changes to community cohesion. The assessment of community cohesion for each precinct is based on the township characteristic, as outlined in section 13.2.1 and in Technical Paper 4: Social, and the estimated time and number of the peak construction workforce (refer to section 13.4.1) that would be present. ▸ In the Albury precinct, it is possible the proposal would have a minor effect on community cohesion, resulting in a medium impact rating. ▸ In the Greater Hume-Lockhart and Wagga Wagga precincts, it is possible the proposal would have a moderate effect on community cohesion resulting in a medium impact rating. ▸ In the Junee precinct, it is possible that the proposal would have a major effect on community cohesion, depending on where the workforce is accommodated, resulting in a high impact rating. This rating is a result of the greater levels of socio-economic disadvantage, smaller population, and higher proportion of older workers, empty nesters and seniors in the community that may be sensitive to community changes.

Impact	Impact summary
Sense of place	During community consultation (refer to Chapter 5: Engagement), community events were highlighted as playing a significant role in the community and the local economy, with concerns raised regarding potential disruptions to events as a result of construction. A large number of events take place in the regional study area in March, April, September, October and December (refer to Table 13-6 in section 13.3.1). As peak construction work is planned to be undertaken between February and April 2024, and September 2024, the increase of people in the townships, as well as planned detours due to construction work, could potentially affect people's capacity to participate in events. These impacts are likely to be experienced differently in each precinct. ▸ In the Albury precinct: ▸ community events are predominantly during the first quarter of the year. Construction of the proposal is not expected to impact vehicle traffic; however, some minor impacts on pedestrians are expected due to temporary detours. The proposal would not require any use or impact to public space (except for ramp construction works at Albury Station pedestrian bridge); however, a number of parks are located near the proposal ▸ traffic impacts would be limited to specific streets in Albury and considered during event planning. Public space users may experience a minimal change in sense of place; however, this impact may be perceived differently by the older population and Indigenous residents who experience greater value on sense of place and belonging and therefore are likely to experience minor effects, resulting in a medium impact rating. ▸ In the Greater Hume–Lockhart precinct: ▸ August is the busiest time of year with the Riverina Schoolboys Football. However, the construction of the proposal would not result in significant impacts to traffic and public spaces would not be impacted ▸ as impacts due to the level crossing works (including the five day closure at Henty) would be short-term, public space users would experience minimal change of sense of place based on changes to traffic condition and access to public spaces, resulting in a low impact rating. ▸ In the Wagga Wagga precinct: ▸ March, April and May are the busiest times of the year in Wagga Wagga. Construction of the proposal would have isolated impacts on traffic and changes on 35 bus routes (refer to Chapter 9: Transport and traffic). The proposal would also result in a temporary, partial intervention to a number of public places (refer to Chapter 12: Land use and property) ▸ SIA consultation noted high value in pedestrian and vehicular access to events. The Wagga Wagga Show is held at the campground in November every year, although the area to be temporarily used during construction at this location is small, it could potentially affect access to the space ▸ due to the extent and timeliness of traffic impacts in the township, and temporal intervention at public places, it can be anticipated that a minimal deterioration to sense of place would possibly affect a local people, resulting in low impact rating. ▸ In the Junee precinct: ▸ March is one of the busiest times of the year in Junee with the Annual Junee Rhythm 'n' Rail Festival. Construction of the proposal is not expected to result in a significant increase in traffic; however, detours would be required as well as temporary changes to bus routes due to the closure of Kemp Street bridge. The Junee Sports and Aquatic centre is located directly to the east of Kemp Street bridge, and the proposal would require a permanent intervention of a small section of Endeavour Park (refer to Chapter 12: Land use and property) ▸ impacts to mobility and accessibility to public space in Junee would possibly result in a moderate effect on people's sense of place, resulting in a medium impact rating ▸ the residents located near the Endeavour Park would almost certainly experience a major loss of sense of place due to the permanent nature of the changes in the park, resulting in a very high impact rating.

13.4.3 Accessibility

The ability of the community to access community services and facilities is likely to be temporarily limited near the proposal sites and, to a lesser extent, in nearby townships. This is due to general movement constraints as a result of construction activities and an influx of non-resident workforce.

Table 13-9 is a summary of the potential impacts of the proposal during construction on how people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation.

TABLE 13-9 SOCIAL IMPACT ASSESSMENT: ACCESSIBILITY—CONSTRUCTION

Impact	Impact summary
Parking	Construction activities would require the use of offsite parking to accommodate construction site and parking of construction vehicles. Construction vehicle parking would be provided within the enhancement site at most locations and would therefore have minimal impact on parking facilities (further discussed in Technical Paper 1: Transport and traffic). ▸ In the Albury precinct: ▸▸ during the six-month program, Albury Station parking on Smollett Street and Railway Place would be closed, affecting the total 13 informal car park spaces to the north of Albury bridge and 14 out of 48 designated station car parks. Due to the limited number of car park spaces to be affected over this six-month period, it is possible that a minimal deterioration in access to facilities for a small number of people can be expected, resulting in low impact rating. ▸ In the Greater Hume–Lockhart Precinct: ▸▸ all parking would be provided within the enhancement sites and there would be no change experienced by people in the township. ▸ In the Wagga Wagga precinct: ▸▸ at the station enhancement site: – the closure of Erin Street would impact about two on-street parking spaces over nine months – off-street parking in Wagga Wagga Station would not be impacted; however, traffic management would be in place for road users entering and exiting the car park – access to the Multicultural Council of Wagga Wagga would be impacted for two days during the weekend – impacts to three private parking spaces at the Multicultural Council of Wagga Wagga – during the closure of Edmondson Street, existing school drop off areas on Edmondson Street would remain viable as parents would be able to drop off their children and undertake a U-turn under traffic management ▸▸ these car park limitations are likely to impact local business, shoppers, workers, residents and multicultural groups. These impacts would possibly result in a minimal deterioration of conditions for a small number of adaptable people, resulting in a low impact rating. ▸ In the Junee precinct: ▸▸ for works at the Junee Railway Station pedestrian bridge enhancement site, a portion of the Lorne Street carpark (27 spaces of 60) would be impacted due to the establishment of a site access and equipment set up in this location. School users, local businesses, shoppers and workers are the most likely to be affected by car park limitations ▸▸ due to the extent of impacts, and remaining availability, it can be anticipated that a minimal deterioration of conditions for a small number of people who are generally adaptable and not vulnerable would possibly occur, resulting in a low impact rating.
Utilities	▸ As outlined in Chapter 8: Construction of the proposal, some utilities would need to be relocated or adjusted as part of the proposal ▸ Utility relocations and adjustments would generally be contained within the proposal site; however, consultation with utility providers is ongoing and confirmation of the final treatment solution would occur during detailed design. For works outside the proposal site, the need for additional assessment and approval would be determined in line with the approach to design refinements of the proposal. Consequently, no changes are predicted to be experienced by people in the locality.

Impact	Impact summary

Educational Services	The influx of the temporary workforce (refer to section 13.4.1) and changes in traffic conditions have the potential to impact access to educational services by local residents. Given the short time in which the temporary workforce is required, it is unlikely that the non-local workforce would relocate with their families, therefore impacts due to an increase in demand for educational services would not occur.
	Educational service users are likely to be mostly affected by changes to bus routes and pedestrian access, such as the re-routing of bus services and temporary relocation of bus stops in Wagga Wagga and Junee (refer to Chapter 9: Transport and traffic and Technical Paper 1: Transport and traffic).
	▸ In the Albury precinct:
	  ▸ the proposal would require the closure of the Albury Station pedestrian bridge for around 6 months. Pedestrians would be diverted to the nearest crossings (160 m north or 460 m south)
	  ▸ these impacts would be mostly experienced by students, parents, workers who attend the Albury Primary School, and St Patrick Primary School, and would result in a maximum increase of around six minutes walking time, resulting in a low impact rating.
	▸ In the Greater Hume precinct:
	  ▸ the proposal would require the closure of Sladen Street in Henty for around 60 hours, which would require existing traffic to be diverted to the southern level crossing on Rosler Parade via Allan Street. Pedestrian access would be maintained
	  ▸ these impacts would mostly be experienced by school users and workers at Henty Primary School and St Paul Lutheran School who use bus services to travel to the schools; however, due to the limited time of closure, it is likely that no noticeable change would be experienced by people in the locality, resulting in a low impact rating.
	▸ In the Wagga Wagga precinct:
	  ▸ the closure of Edmondson and Erin streets and the associated changes to road network connectivity for n nine-month period is expected to directly impact four public bus services and 31 school bus services
	  ▸ the closures of the Wagga Wagga Railway Station pedestrian bridge (Mother's Bridge), and Cassidy Parade pedestrian bridge would also impact pedestrian connectivity between bus stops and land uses in the surrounding area. No pedestrian detour is possible for these bridge closures
	  ▸ workers and school users of South Wagga Wagga Public School, Kildare Catholic College, Wagga Wagga High School and the Bidgee School are most likely to be pedestrians and the primary users of bus services that would experience detours. SIA consultation noted high value and pedestrian reliance on the Wagga Wagga Station pedestrian bridge
	  ▸ due to the extent and duration of impacts it can be anticipated that it is almost certain that a major noticeable deterioration to access to educational services would affect vulnerable groups, such as school users and women. This would result in a very high impact rating.
	▸ In the Junee precinct:
	  ▸ road closures associated with the Kemp Street bridge enhancement site and the associated changes in road network connectivity for eight months is expected to directly impact four public bus services and two school bus services
	  ▸ the closure of the Kemp Street bridge for approximately eight months would impact active transport connectivity. During the closure period, cross-rail pedestrian movements will be diverted to the alternative rail crossing on Olympic Highway, located 700 m north. This is a potential additional diversion distance of 1.4 km as a worst-case scenario, as actual impacts would vary by individual origin and destinations
	  ▸ these impacts to four bus services and two school buses, in addition to a maximum increase of 20 minutes' walk over eight months, would be likely experienced as a noticeable deterioration by local residents who require access to St Joseph Primary School and Junee Public School. This would result in a high impact rating.

Impact	Impact summary

Health	Access to health services by local residents may be constrained due to an influx of non-permanent workforce and changes in traffic conditions and access.
	Health and safety protocols on worksites are likely to minimise the potential for injury on worksites, as well as strict driver-fatigue policies that minimise the risk of fatigue-related driving accidents if applied correctly; however, local service users would experience changes to access to health services differently across the local study area.
	▸ In the Albury precinct:
	  ▸ the workforce peak is estimated during the first three months, with 180 workers and an average of 50 temporary workers are expected in precinct for the other 13 months. Considering that the bed offer (337 in Albury Base Hospital) is greater than the number of temporary workers, and that the workforce would not require access to health services, unless incidents are reported (as well as medium impact on mobility across at the precinct) it is likely that minimal change may be experienced by people in the locality, resulting in a low impact rating.
	▸ In the Greater Hume–Lockhart precinct:
	  ▸ works at Culcairn are estimated to take place for four months, with a workforce that would fluctuate between 70 to 180 workers. Five workers for up to one month would be required for works at The Rock Yard clearances enhancement site. Consequently, due to the constrained number of beds available, it is possible that a minor deterioration of access to health services, for a short period of time, may be experienced by people in the locality, resulting in a low impact rating.
	▸ In the Wagga Wagga precinct:
	  ▸ the peak of workforce would occur during the first three months of construction and September 2024 with a peak of 110. During the remaining 15 months of construction, an average of 70 temporary workers would reside in Wagga Wagga or nearby townships. This includes the workers required for the Uranquinty, Wagga Wagga and Bomen Yard enhancement sites. Given that the number of available hospital beds is greater than the construction workforce, it is possible to that no noticeable change may be experienced by people. However, impacts to mobility would possibly result in minor delays to access to health service, resulting in a medium impact.
	▸ In the Junee precinct:
	  ▸ the peak of workforce would be during the first two months, with 300 workers, and an average of 50 workers are expected onsite for the remaining eight months. Consequently, given the workforce number is greater than available beds (yet service would be required only in the case of incidents) and that high impacts to mobility occur in the local area, it is possible that a moderate deterioration may be experienced by health users in the locality, resulting in a medium impact rating.

Emergency services	Access for emergency vehicles would be maintained at all construction sites and emergency response times are not expected to be impacted significantly during construction of the proposal. For the Albury, Greater Hume–Lockhart and Junee precincts, this would result in a Low impact rating. At Wagga Wagga precinct, a minor change would be experienced by emergency service response in the locality due to the closure of Edmondson Street bridge, resulting in a medium impact rating.
Rail network services	Construction work for the proposal that would require the suspension of passenger rail services would occur during scheduled possession periods or would be carried out under track occupancy authorisations (when works can occur between scheduled services) to minimise any potential impacts on the operation of the Main South Line. Therefore, no impacts to passenger rail services are anticipated. Replacement bus services would be provided to impacted customers during scheduled rail possessions.

13.4.4 Culture

Table 13-10 is a summary of the potential impacts of the proposal during construction on shared cultural beliefs, customs, values, connections to Country, land, waterways, places and buildings.

TABLE 13-10 SOCIAL IMPACT ASSESSMENT: CULTURE—CONSTRUCTION

Impact	Impact summary
Aboriginal cultural values	Technical Paper 2: Aboriginal cultural heritage assessment report identified strong cultural values associated with the importance of Wiradjuri County and the use of traditional pathways by the existing rail corridor; however, concluded that the potential for impacts by the proposal to Aboriginal cultural heritage was negligible, as the proposal would avoid direct impacts to known Aboriginal heritage sites and areas of archaeological potential would unlikely be impacted. At a landscape scale, Technical Paper 2: Aboriginal cultural heritage assessment report identified concern from two Representative Aboriginal Parties (RAPs) over two areas of significance and conservation status, as well as potential impacts during construction due to land disturbance and sedimentation. Consultation with Indigenous people highlighted the importance of making sure consultation is widely inclusive, timely, detailed and follows adequate cultural protocols would assist in managing any adverse impacts on Indigenous groups and Country. ▸ In the Albury Precinct: ▸▸ Albury Local Aboriginal Land Council (LALC) identified that the wildlife and environmental features around the rail corridor from Albury to Wagga (Table Top and The Rock), and Billabong Creek are all of cultural significance to Aboriginal people. Albury LALC recommended a list of initiatives that could enhance Aboriginal cultural values. As a result, the impact of effects on Aboriginal cultural values during construction has been assessed as a high impact rating. ▸ In the Greater Hume-Lockhart precinct: ▸▸ RAPs informed that Doodle Comer Swamp at Henty connected to a locally significant song line (refer to Technical Paper 2: Aboriginal cultural heritage assessment report). No consultation to Indigenous groups in Greater Hume–Lockhart was achieved; as a result, impact of effects on Aboriginal cultural values during construction has been assessed as a high impact rating. ▸▸ erosion and sediment control would be in place to manage any potential risks to Buckargingah Creek to the north, which could indirectly impact the Doodle Comer Swamp and its cultural values. ▸ In the Wagga Wagga precinct: ▸▸ the limited consultation of Indigenous groups in Wagga Wagga and lack of connection to Country features in the proposal, results in a potential impact on Aboriginal cultural values during construction assessed as high. ▸ In the Junee precinct: ▸▸ Reedy Creek, just to the north of Harefield Yard clearances and Jeralgambeth Creek in Junee to Illabo clearances enhancement site, was identified as a site of cultural significance in the vicinity to the proposal site, raising concern about environmental conservation and avoiding disturbance. RAPs expressed concern that work in this area might have the potential to indirectly impact the creek system if sediment and contaminant controls were not put in place as part of the proposal work. As a result, the impact of effects on Aboriginal cultural values during construction has been assessed as a high impact rating.
Non-Aboriginal heritage	The direct and indirect impacts on heritage by the proposal within a localised context are unlikely to result in a deterioration to cultural identity and values. Given that there would be an impact across multiple sites that would lead to a cumulative impact on railway heritage. As such, the proposal would result in a very high impact rating at each township.

13.4.5 Health and wellbeing

Table 13-11is a summary of the potential impacts to health and wellbeing as a result of the construction of the proposal. This assessment considers physical and mental health, especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, and changes to public health overall.

TABLE 13-11 SOCIAL IMPACT ASSESSMENT: HEALTH AND WELLBEING—CONSTRUCTION

Impact	Impact summary

Amenity	Construction activities would result in changes to amenity in the form of noise, vibration and air quality. The use of large machinery, increased construction vehicles and traffic diversions may impact the health and wellbeing of sensitive receivers by creating stress, anxiety and/or sleep disturbance.
	The primary hours of Monday to Sunday (6am to 6pm) extend beyond standard construction hours into night-time and evening and include hours on Sunday and public holidays as described in section 8.4 of Chapter 8: Construction of the proposal. These primary proposal construction hours would shorten the length of construction work, which would minimise the overall duration of associated disruptions to the community.
	Where a sensitive receiver is predicted to be noise affected for more than three months:
	▸ the primary construction hours would only apply for a maximum three-month period at that enhancement site, and
	▸ no work would be undertaken every alternative week between the hours of 1pm on Saturday and 7am Monday
	As the proposal is within an operational rail corridor, construction activities on, over or in close proximity to the main line track, would be required to be undertaken outside of the primary construction hours as well. The proposal would require use of rail possessions (approximately 60 hours in duration) or track occupancy authorisations (approximately five- to nine-hour windows). The louder and more intrusive works (such as piling or earthworks) would typically occur during possessions and track occupancy authorisations, which are usually short term with long respite periods.
	Work outside the primary proposal construction hours would be undertaken in accordance with the Inland Rail NSW Construction Noise and Vibration Management Framework and in accordance with an out-of-hours work protocol.
	▸ In the Albury precinct:
	  ▸ a substantial number of receivers are predicted to be impacted by construction noise during standard daytime hours (as defined by the ICNG) at each enhancement site, except for Murray River bridge, Billy Hughes bridge and Tabletop Yard clearances enhancement sites, where a lower number of receivers may be impacted. Based on worst-case noise assumptions, sleep disturbance impacts have been predicted to occur during all night-time work stages.
	  ▸ construction would present a medium- and high-risk impact from dust emissions (refer to Technical Paper 14: Air quality and Chapter 22: Air quality)
	  ▸ visual amenity impacts due to the presence of construction infrastructure
	  ▸ it is predicted that it is likely that amenity changes would be experienced as moderate deterioration on wellbeing, resulting in a High impact rating.
	▸ In the Greater Hume-Lockhart precinct:
	  ▸ nearby receivers are predicted to be impacted by construction noise during standard daytime hours at each enhancement site, excluding Henty Yard clearances, where a lower number of receivers may be impacted. Based on worst-case noise assumptions, residential receivers are expected to experience noise impacts and sleep disturbance.
	  ▸ potential dust emissions during earthworks.
	  ▸ visual amenity impacts due to the presence of construction infrastructure.
	  ▸ construction would present a medium risk impact from dust emissions (refer to Technical Paper 14: Air quality and Chapter 22: Air quality).
	  ▸ despite the limited amount of time in which construction activities would take place (from 15 up to 61 days in total at each enhancement site) it is likely that a noticeable deterioration on wellbeing would be experienced by a reasonably large group of people within the townships of Culcairn, Henty, Yerong Creek, and The Rock), resulting in High impact rating.
	▸ In the Wagga Wagga precinct:
	  ▸ a substantial number of receivers are predicted to be impacted by construction noise during standard daytime hours (as defined by the ICNG) at each enhancement site, except for Uranquinty Yard clearances and Bomen Yard clearances enhancement sites, where a lower number of receivers may be impacted. Based on worst-case noise assumptions, sleep disturbance impacts have been predicted to occur during all night-time work stages.
	  ▸ construction would present a medium- and high-risk impact from dust emissions (refer to Technical Paper 14: Air quality and Chapter 22: Air quality).

Impact	Impact summary
	▸ visual amenity impacts due to the presence of construction infrastructure. ▸ due to the extent and length of impacts it can be anticipated that it is likely that a major deterioration to wellbeing would affect a reasonably large group of people, which includes vulnerable groups, such as school users and multicultural groups, resulting in a High impact rating. ▸ In the Junee Precinct: ▸ a substantial number of receivers are predicted to be impacted by construction noise during standard daytime hours (as defined by the ICNG) at each enhancement site, except for Harefield Yard clearances and Table Top Yard clearances enhancement sites, where a lower number of receivers may be impacted. Based on worst-case noise assumptions, sleep disturbance impacts have been predicted to occur during all night-time work stages. ▸ construction would present a medium and high-risk impact from dust emissions (refer to Technical Paper 14: Air quality and Chapter 22: Air quality). ▸ while no noticeable changes may be experienced by people at most enhancement sites, it is likely that residents at Kemp Street bridge site would experience a noticeable deterioration of wellbeing, resulting in High impact.
Safety and hazards	Safety and hazard impacts associated with road and active transport were considered. Impacts to flooding during construction are not anticipated and stakeholders did not identify flooding impacts during construction as a concern. As such, social impacts associated with flooding are not expected. Increases in traffic volumes due to construction vehicles, introduction of temporary diversions and new access points to enhancement sites have an inherent safety risk to pedestrians, particularly for school-aged children and families accessing nearby schools and hospitals. Traffic control measures would be implemented to provide suitable safe access to public roads in accordance with relevant standards and guidelines. ▸ In the Albury precinct: ▸ Albury Primary School and St Patrick Primary School are located, together with a range of health service providers, in proximity to Albury Railway Station pedestrian bridge and Albury Station Yard clearances. Pedestrians in the local study area are likely to be predominantly students, parents, workers and health service users. Peak-hour flow is expected to take place out of school hour traffic. As a result, it is unlikely that a minor effect would be experienced by people, resulting in a Low impact rating. ▸ In the Greater Hume-Lockhart precinct: ▸ the Henty Primary School and St Paul Lutheran School are present, together with the Henty Hospital In proximity to Henty Yard clearances. School, workers and health users are most likely to be primary pedestrians. Peak construction movements are expected to take place out of school hour traffic. As a result, it is unlikely that a minor effect would be experienced by people, resulting in a Low impact rating. ▸ In the Wagga Wagga precinct: ▸ there are a wide number of businesses and services, as well as education facilities and health providers, including the South Wagga Public School, Kildare Catholic College, Wagga Wagga High School, The Bidgee School, Wagga Wagga Hospital, St George Medical Centre, among others, in proximity to Wagga Wagga Station pedestrian bridge, Pearson Street Bridge, Cassidy Parade pedestrian bridge and Edmondson Street Bridge enhancement sites. Workers, school and health users are most likely to be pedestrians. ▸ due to the extent and length of impacts, it can be anticipated that it is likely that a moderate deterioration would affect a group of people, which includes vulnerable groups, such as school users, resulting in a High impact rating. ▸ In the Junee precinct: ▸ businesses, services and education facilities, including the Junee Public School can be found in proximity to Kemp Street Bridge and Junee Station pedestrian bridge. Due to the extent of expected changes it is likely that no noticeable change would be experienced by people in the locality, resulting in a Low impact.

13.4.6 Surroundings

An increase in construction-related activities may impact the aesthetic values and amenity in the local study area and its quiet lifestyle, which are influenced by the combined changes to visual landscape and biodiversity, as well as the level of noise and air quality experience in people's daily lives. This includes consideration of the removal of vegetation for the purposes of the construction and its impacts on the landscape.

Table 13-12 details the visual, landscape, noise, and air quality impacts that are anticipated at each precinct and discusses an assessment of the social impact. The combined effects of these impacts would affect sensitive receivers that reside in proximity to enhancement sites differently to those that transit or visit the area for work, study or access to services.

TABLE 13-12 SOCIAL IMPACT ASSESSMENT: SURROUNDINGS—CONSTRUCTION

Impact	Impact summary

Surroundings	The majority of amenity impacts during construction are anticipated to be temporary and associated with construction vehicles, equipment, site compounds, vegetation removal and storage. The greatest potential for visual impacts would be at sensitive receivers with views towards construction compounds and bridge structures under construction (refer to Chapter 17: Landscape and visual amenity).
	▸ In the Albury precinct:
	  ▸ minor to high visual and landscape impacts are expected due to construction. Higher impacts are associated with more significant structure works (e.g. bridge demolition) or works in regionally significant landscape units (e.g. Albury Station).
	  ▸ as described in section 13.3.5, there would be potential noise and air quality impacts during construction.
	  ▸ the population is highly sensitive to changes. Due to a local appreciation of landscape it is likely that vulnerable groups would be affected by amenity changes in surroundings (refer to Technical Paper 4: Social). This would be experienced as a minor deterioration of their aesthetic values, resulting in a Medium impact rating.
	▸ In the Greater Hume-Lockhart Precinct:
	  ▸ minor visual impacts are anticipated in Culcairn rural town, Henty Rural Town Centre and Yerong Creek rural town centre, affecting local sensitive receivers. Minor visual impacts during the night are expected to affect local sensitive receptors in Henty rural town centre, Yerong Creek rural town centre, and low impacts in Culcairn rural town (refer to Chapter 17: Landscape and visual amenity).
	  ▸ as described in section 13.4.5, there would be potential noise and air quality impacts during construction.
	  ▸ Greater Hume comprises families with children and older residents who are transitioning or already in retirement, who have a deeper appreciation for tranquillity and visual landscape, and are more vulnerable to the combined effect of changes in landscape, noise and air quality. As a result, it is possible that changes in the surroundings would have a moderate effect on vulnerable groups of people, resulting in a Medium impact rating.
	▸ In the Wagga Wagga precinct:
	  ▸ local sensitive receivers may experience minor adverse visual impacts at Uranquinty rural town centre, Pearson Street and rail corridor, and moderate adverse visual impacts at Cassidy Street and Brookong Avenue residential area and Edmondson Street. During the night-time, moderate-minor visual impacts would affect local sensitive receptors in residences north of the rail corridor on Brookong Avenue and southeast of the Edmondson Street bridge on Erin Street (refer to Chapter 17: Landscape and visual amenity).
	  ▸ as described in section 13.4.5, there would be potential noise and air quality impacts during construction.
	  ▸ These changes would be likely perceived by residents. As the median age is 36, a percentage of the population would be likely to adapt to change, yet technical studies anticipated moderate visual impacts, high noise impacts and medium-to-high risk dust emissions (without mitigation) during construction. As a result, it is likely that the combined effect of changes in landscape, noise and air quality would result in a moderate deterioration in the local township, resulting in a High impact rating.
	▸ In the Junee precinct:
	  ▸ local sensitive receptors would experience high adverse visual impacts in Kemp Street bridge and south of Junee. Moderate visual impacts during the night-time would affect local sensitive receptors in Junee south suburban landscape, Junee town centre heritage landscape and Junee north suburban landscape (refer to Chapter 17: Landscape and visual amenity).
	  ▸ as described in section 13.4.5, there would be potential noise and air quality impacts during construction.

Impact	Impact summary
	▸ there is a high proportion of Indigenous residents (9.4 per cent). This group usually places a high value on landscape and tranquillity and can be more susceptible to changes in noise and air quality. It can therefore be anticipated that the combined effect of changes in landscape, noise and air quality would have a major effect on residents, in particular residents at Kemp Street bridge, resulting in a High impact rating.

13.4.7 Livelihood

This section will address if the proposal would impact people's livelihoods, which is defined as people's capacity to earn money to pay for the basic needs in life such as food, accommodation, health care, and clothing.

Table 13-13 is a summary of the livelihood impacts from the construction of the proposal.

TABLE 13-13 SOCIAL IMPACT ASSESSMENT: LIVELIHOOD—CONSTRUCTION

Impact	Impact summary
Property rights	Most of the proposal site is confined to the existing rail corridor; however, during construction it would temporarily occupy a small proportion of land used for agriculture, community and education facilities, infrastructure, and public recreation (refer to Chapter 12: Land use and property). These areas are located within the Wagga Wagga and Junee precincts: ▸ in the Albury and Greater Hume/Lockhart precincts, there are no requirements for the use of residential private property, and property access is expected to be maintained for the duration of construction. As such, there is no noticeable change expected to be experienced by people in the area. This would result in a low impact rating ▸ in the Wagga Wagga precinct, there would be a mild temporary impact experienced by people in the area due to reduction in on-street parking, temporary or disrupted access during construction in the vicinity of the bridge works. Residents adjacent to the existing Cassidy Parade pedestrian bridge have raised existing privacy and security concerns, and what could be done to address this concern (through design). For most areas in this precinct, there would be a low impacting rating ▸ In the Junee precinct, the proposal would result in temporary impacts to street parking and temporary adjustments to circulation; however, property access would be maintained. This would result in a low impact rating. A minor realignment of an internal access road in the vicinity of LX605 would be coordinated with the landowner.
Business	The proposal would require the temporary use of business and commercial areas outside the rail corridor that will be required for construction activities. Temporary affected land uses include agriculture, community and education facilities, infrastructure, and public recreation (refer to Chapter 12: Land use and property). Construction of the proposal would: ▸ temporarily occupy a small amount of land currently used for agricultural purposes at Billy Hughes Bridge site and Junee to Illabo clearances site. The proposal also has the potential to affect access arrangements in properties, including internal farm access tracks/roads as a result of temporary closures and any damage to roads from heavy vehicles. In addition, and as discussed in Chapter 12: Land use and property, the construction may impact farms adjacent to enhancement sites due to construction activities, such as dust affecting crops and pastures, noise and light affecting grazing patterns of livestock, among others ▸ restrict waterway access beneath the Murray River bridge for construction and safety purposes. This may have short-term impacts on watercraft using the river for activities such as kayaking, canoeing, fishing and tourism in the vicinity of the Murray River bridge enhancement site ▸ temporarily require land for accommodation, public recreation, telecommunication infrastructure and community and educational use. The areas of community and education services consists of landscaped areas and car parks, which would have a minor impact on use of the larger site; the same applies to industrial and commercial properties, where the use would be negotiated as to not impact the broader function of the property ▸ generate construction noise that would likely have an impact on accommodation businesses near to construction. This would have a medium impact on these businesses in the Albury, Greater-Hume-Lockhart, Wagga Wagga and Junee precincts. ▸ temporarily change access across the rail corridor at Wagga Wagga and Junee that may have a minor and temporary impact on passing trade, resulting in minor impacts on businesses. Given the property requirement and characteristics of works at each precinct, as well as the nature and characteristics of businesses, it can be argued that they will experience temporary land acquisition and changes to the environment differently at each precinct. The following impact ratings: ▸ medium impact for Wagga Show Campground at Pearson Street bridge enhancement site, Mount Erin Heritage Centre at Edmondson Street bridge enhancement site and Multicultural council of Wagga Wagga Centre at Wagga Wagga Station pedestrian bridge enhancement site. ▸ medium impact for one accommodation business owner at Kemp Street bridge enhancement site, one commercial operators at Olympic Highway underbridge enhancement site and agricultural operators along the Junee to Illabo clearances enhancement site

Impact	Impact summary
	▸ low impact for business owner of industrial and grassing land at Billy Hughes bridge enhancement site and tourism businesses at Murray River bridge enhancement site, Albury ▸ low impact for grain terminal adjacent to Culcairn Yard clearances enhancement site, Greater Hume ▸ low impact for grain terminal at Uranquinty Yard clearances enhancement sites and Telstra facility at Cassidy Parade pedestrian bridge enhancement site, Wagga Wagga ▸ low impact for grain terminal at Junee to Illabo clearances enhancement site and service station at Olympic Highway underbridge enhancement site, Junee. Acquisitions and lease arrangements would be carried out in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW).

13.4.8 Decision making

TABLE 13-14 SOCIAL IMPACT ASSESSMENT: DECISION MAKING—CONSTRUCTION

Impact	Impact summary
Engagement and consultation	Chapter 5: Engagement of this EIS includes a summary of the community consultation undertaken and future consultation proposed. Considering the outcomes and gaps in consultation at the time of writing this report, the likelihood of impacts on procedural fairness and people's capacity to influence changes that may affect their lives, especially of those residents located in the vicinities of enhancement sites across the social locality, is possible and the magnitude of the impact would be major. As such, the impact of effects on procedural fairness during construction has been assessed as a high impact rating.
Community sentiment and impact distribution	Community consultation undertaken for Technical Paper 4: Social (refer to Chapter 5: Engagement) identified: ▸ common aspirations regarding local employment and procurement opportunities that the proposal may bring to the local area across different groups, as well as aspirations of improved visual amenity and pedestrian access at footbridges as result of the proposal ▸ shared concerns regarding safety, restrictions to emergency services, pressure over accommodation services and housing, as well as increased waiting times at level crossings, were also identified and have been addressed in this chapter and other technical chapters of this EIS. Although those concerns were shared among different stakeholders and community members, increased concern was identified in women, elderly and Indigenous people ▸ elderly groups raised concerns about social severance, waiting times at level crossing and disruption to community events, while Indigenous people raised concern about the wellbeing of those community members living near the rail corridor and enhancement sites. The equitable distribution of social impacts is not guaranteed in major infrastructure delivery. The term refers to how different groups of people would experience social impacts differently. As discussed throughout this chapter, impacts would be perceived and experienced differently by vulnerable groups at each precinct. It is expected that residents and sensitive receivers living adjacent or nearby enhancement sites, especially lone households, elders and families with young children, would experience and feel more acutely negative impacts than those distributed in other areas of the township, and the same can be argued for the vulnerable groups. In addition, according to the outcomes of this assessment and due to the characteristics of construction activities, Wagga Wagga and Junee townships would experience high impacts across most social impact categories. Age, health, level of social capital and resilience, support networks and financial outlook may all be factors that influence the magnitude of the social impact for each individual group. These nuances should be considered in all future stakeholder engagements for the proposal. Moreover, positive social impacts of the proposal would not be experienced by the same people who are experiencing the negative social impacts. The level of inequity may not be avoided by ARTC; however, it may be minimised through a series of considered measures. As a result, residents living adjacent or nearby enhancement sites, and vulnerable groups in each township, would almost certainly experience more major effects than other more resilient groups in the township, resulting in ▸ a very high impact rating in Wagga Wagga and Junee precincts ▸ a high impact rating in Albury and Greater Hume–Lockhart precincts.

13.5 Impact assessment—operation

This section describes and assesses the potential social impacts that may eventuate as a result of the operation of the proposal. Table 13-15 is a summary of the social impacts as a result of the operation of the proposal.

TABLE 13-15 SOCIAL IMPACT ASSESSMENT—OPERATION

Impact theme	Impact	Impact summary
Way of life	Employment and economy	The proposal would be maintained by the existing workforce and no additional direct employment positions would be created by the proposal. Indirect employment through the stimulation of businesses that provide services to maintenance and driver crews. During consultation, in Junee, positive economic effects were perceived due to the stay over of drivers in the township, due to the use of accommodation and food services in the area. Consequently, it is possible that minor economic benefits from direct and indirect employment will be perceived during operation in the local and regional study area, resulting in a medium SIS impact rating. Technical Paper 5: Economic identified positive direct net economic benefits, driven by improvements in freight productivity, reliability and availability during the operation of the proposal, as it will offer a more efficient solution for intrastate freight operators who will be able to avoid inland and coastal road and rail networks. Moreover, Technical Paper 5: Economic indicates that the proposal would result in operating cost savings of $21.83 million in present value, with freight time savings representing $13.82 million in present value terms. The *Inland Rail Regional Opportunities Report for the Southern NSW Region* (Ernst & Young, 2020) details the economic benefits associated with the proposal, including enhancement of investment opportunities and supporting the formation of industry hubs by taking advantage of the proximity to safe, reliable and efficient freight transport (refer to Technical Paper 4: Social). Given the industry characteristics of the regional study area, it is almost certain that there will be increased economic benefits due to improvements in freight productivity, reliability and availability causing a moderate effect in the regional study area; resulting in a high SIS impact rating.
	Mobility	Operation of the proposal would not result in significant impacts to the road network performance, have no impacts on passenger train services and no impact to active travel times. In addition, no impacts are anticipated to emergency vehicle access. Operation of the proposal would have a positive impact on the road network as the number of freight trains is expected to from a current average of up to 12 per day in 2021 to 18 per day in 2025, further increasing to about 20 per day in 2040. During operation, frequency of level crossing closures would increase as well as the likelihood of experiencing the maximum duration associated with a level crossing closure for a 1,800 m freight train. Except where a level crossing is upgraded from a passive to an active crossing, the delay and queues associated with level crossing closures (for a peak-hour closure) would be the same with or without the proposal. Where a level crossing is upgraded to an active crossing (within the Junee to Illabo clearances enhancement site), there would be an increase of around 15 seconds in delay compared to current operations. Enhancement to pedestrian bridges are expected to improve connectivity for the community across the rail corridor, such as the provision of DDA-compliant ramps on new pedestrians in Wagga Wagga and Albury; however, given the characteristics of each township, local road users would experience changes to mobility differently. ▸ In the Albury precinct: ▸▸ increased frequency of level crossing closures and longer journey times have the potential to increase stress for road users; however, as the line is an existing operational rail corridor, road users would likely be cognisant of potential delays and the increase in train movements would have a minimal impact on people's way of life. Improved pedestrian connectivity in central Albury may improve active transport uptake and enhance connectivity between east and west Albury. Consequently, it is likely that minimal changes to mobility would be experienced by local residents, resulting in a low impact rating. ▸ In the Greater Hume–Lockhart Precinct: ▸▸ the removal of the pedestrian bridge at Culcairn would not significantly impact pedestrian connectivity as the overpass is already closed (since 2010) and the pedestrian crossing facility at the level crossing adjacent to the overpass would remain open ▸▸ increased level crossing closures and longer journey times have the potential to increase stress for road users; however, as the line is an

Impact theme	Impact	Impact summary
		existing operational rail corridor, road users would likely be familiar with potential delays and the increase in train movements would have a minimal impact on people's way of life. Consequently, it is likely that minimal changes to mobility would be experienced by local residents, resulting in a low impact rating. ▸ In the Wagga Wagga precinct: ▸▸ Edmondson Street bridge replacement includes modifications that would result in minor changes at nearby intersections; however, no significant changes to operation of the road network are anticipated ▸▸ more frequent level crossing closures would be caused by additional trains passing, and bus services may also experience a small increase in delays (refer to Chapter 9: Transport and traffic) ▸▸ potential changes to the transport network may be more acutely felt due to the city's growing population and its role as a regional service hub. Increased closures at the Fernleigh Road level crossing may result in longer journey times and increased stress for residents; however, as it is an existing operational level crossing, residents would likely have developed a level of resilience to potential delays. The area is also well connected to alternative arterial road and highway connections for residents to use should potential level crossing delays be seen as a deterrent. As a result, it is possible that a moderate change to mobility would be experienced by local residents, resulting in a low SIS impact rating. ▸ In the Junee precinct: ▸▸ Kemp Street bridge includes modifications that would result in minor changes at the nearby intersection; however, no significant changes to the operation of the road network is anticipated. Junee Station pedestrian bridge provides a connection to a closed platform and would not change access within the station ▸▸ increased level crossing closures associated with increased train movements through the area may result in a slightly longer journey for road and public transport users in the Junee; however, the increase in frequency to a train every hour would likely affect a small proportion of road users and, as such, would have a minimal impact on mobility, resulting in a low impact rating.
Community	Character	The proposal would not result in influx of people to the region due to increased job opportunities for its operation. However, it is anticipated that the increased freight network opportunities would foster business development and economic growth, providing job opportunities for people. Consequently, it is possibly that the proposal would have minimal effect on the social locality during operation, resulting in a low impact rating.
	Community cohesion – social severance	Community severance comprises the effects of transport infrastructure or motorised traffic as a physical or psychological barrier separating one built-up area from another area or space, affecting mobility and accessibility. Uncertainty about waiting times was reported as a key issue for community members regarding accessing facilities, services and affecting motivation to get out and around. The highest average daily increases in frequency of trains at level crossings is from one freight train every 1.5 hours in 2020, to two freight trains every hour in 2040, would result in more frequent level crossing closures. The proposal would also increase the likelihood of a vehicle experiencing the maximum delay associated with a level crossing closure for a 1,800 m freight train; however, the maximum delay to motorists would be the same with or without the proposal. The exception would be where a level crossing would be upgraded to an active crossing (with a marginal increase in delay of 15 seconds). ▸ In the Albury precinct: ▸▸ Albury is physically divided by both the rail corridor and Hume Highway into east and west. There is an even distribution of commerce services and recreational parks at both the east and west sides of town, yet a large concentration of educational and health services, as well as Albury City Council, are located to the east of the rail corridor. The airport is located at the west of the rail corridor ▸▸ health and educational users located at the western side of the rail corridor may experience severance. Due to the limited increase of increased frequency of level crossing closure, it could be anticipated that it is likely that a minimal effect on social severance would be experienced by local residents, resulting in a low impact rating. ▸ In the Greater Hume–Lockhart precinct:

Impact theme	Impact	Impact summary
		▸ Culcairn, Yerong Creek and Henty are physically divided by both the rail corridor and Olympic Highway in east and west. In Culcairn, health and education services are located to the west of the rail corridor, while in Henty they are located to the east of the rail corridor. ▸ during consultation, concerns about exacerbation of social severance was raised in Culcairn. Therefore, it could be argued that, despite the limited increase in frequency of queuing, it is possible it would be experienced as a mild deterioration in community severance, in particular by those to the east of Culcairn and those in the west of Henty, resulting in a medium impact rating. ▸ In the Wagga Wagga precinct: ▸ Wagga Wagga is physically divided in north and south by both the train line and Sturt Highway. There is an even distribution of services and infrastructure both north and south of Wagga Wagga, noting the north has a large concentration of waterways and public services. Worst-case queues of up to 44 vehicles in 2024 and 66 vehicles in 2040 were identified in Fernleigh Road, Wagga Wagga. However, the number of vehicles stopping for level crossing closure in a peak hour would be the same with and without the proposal ▸ social indicators in Wagga Wagga portrayed a high level of advantage and median age of 35 with a representation of 5.4 per cent of Indigenous people. During consultation, concerns about exacerbation of social severance was raised in Wagga Wagga and opportunity to engineer intersections to mitigate the severance, disruptions and affected access is possible. Despite the potential resilience and adaptability of the Wagga Wagga residents to the increased frequency of queuing, it is possible that severance would be experienced as a moderate effect in the community, resulting in a medium impact rating. ▸ In the Junee Precinct: ▸ Junee is physically divided by both the rail corridor and Olympic Highway. There is an even distribution of services (education, health, commerce) at both east and west sides of the town; noting that the June Shire Council and public schools are located to the west and public hospital to the east of town ▸ social indicators portray greater socio-economic disadvantage, with a median age of 40, and high proportion of older workers, empty nesters and retirees, and seniors. During consultation, it was perceived that the freight trains within the yard can close the level crossing for 10–15 minutes currently. The continued use of the station for crew changes and the increase frequency of queuing due to train movement, would possibly result in social severance being experienced as a noticeable change for local residents, resulting in a medium impact rating.
Accessibility	Access to community services	During SIA consultation, concern was raised regarding potential delays of emergency services during operation of the proposal due to the increased number and length of trains (noting that the proposal does not propose to increase the length in freight trains). Mobility impact for all road users has been assessed in the mobility section of this table. Operation of the proposal would result in a Medium impact rating in Wagga Wagga and a Low impact rating in Albury, Greater Hume–Lockhart and Junee.
Culture	Aboriginal cultural heritage	Technical Paper 2: Aboriginal cultural heritage assessment report did not anticipate any direct or indirect impacts that would occur during operation on tangible Aboriginal heritage. No additional impacts to Aboriginal cultural values are expected during the operational phase of the proposal.
	Non-Aboriginal heritage	Ongoing operational impacts are largely restricted to lasting impacts caused by the vibration of passing trains. These are anticipated to be negligible, as items located in close proximity to the railway corridor are already subject to continuous vibration as a result of the railway track. Impacts to heritage viewsheds and vistas would occur where there are existing views to bridges and footbridges that would be demolished and replaced by taller structures. Consequently, it is unlikely that there would be a deterioration to cultural identity and values, resulting in a low impact rating. Further detail on non-Aboriginal heritage is provided in Chapter 11: Non-Aboriginal heritage and Technical Paper 3: Non-Aboriginal heritage.

Impact theme	Impact	Impact summary
Health and wellbeing	Amenity	The operation of the proposal would potentially result in changes to amenity, such as noise and air quality, due to the increase of daily movement of trains, which may impact the health and wellbeing of sensitive receivers. The proposal would result in a marginal increase in emissions from more train movements but air quality criteria is predicted to be met as described in Chapter 22: Air quality. The track adjustment and increase train frequency would increase noise levels along the proposal site. Exceedance of airborne noise triggers from the proposal are predicted at 15 receivers (7 residential and 6 educational facilities, a place of worship and a museum). These receivers, identified in Chapter 15: Noise and vibration and Technical Paper 6: Noise and vibration (non-rail), would possibly experience minor to moderate disruption, resulting in medium impact rating.
	Safety and hazards—road network performance	During SIA consultation, community members showed clear interest in seeing safety improvements involving existing train level crossings, showing high value on safety on local roads, and increased perception of safety risks in road–rail interfaces at level crossings. Technical Paper 1: Transport and traffic indicated that more frequent queuing would occur at level crossing as a result of the proposal. The number of impacted vehicles in a peak hour during a level crossing closure would be the same with and without the proposal. Detailed design of road infrastructure including the two road bridge in Wagga Wagga and Junee would comply with all relevant standards, such as Austroads guidelines. Consequently, the likelihood of increased risks to safety due to road performance in the local area is unlikely and the magnitude of the impact would be minor. As such, the impact of safety risk due to road performance for local residents has been assessed as a low impact rating.
Health and wellbeing	Safety and hazards—active transport	During SIA consultation, expectation about improvements in safety for pedestrians at pedestrian bridges were raised; in particular, improved Disability Discrimination Act 1992 (Cth) (DDA) accessibility for people with a disability. As discussed in Chapter 7: Proposal features and operation: ▸ ramps on either end of the Albury Station pedestrian bridge would enhance connectivity for the community across the rail corridor and Hume Highway, as it would replace the current stair arrangements and would meet DDA requirements ▸ the Cassidy Parade pedestrian bridge and Wagga Wagga Station pedestrian bridge would meet DDA requirements ▸ shared paths provided on both sides of the road at Edmondson Street bridge and on one side of the road at Kemp Street bridge. Due to road gradient, the shared path design on Edmondson Street bridge and Kemp Street bridge would not be DDA compliant for disabled access; however, ARTC is committed to revising the existing design to achieve DDA compliance. To achieve this, it is expected that a footbridge independent of the road bridge may be required as a substitute for the footpath on one side of the road bridge. Consequently, improved pedestrian safety due to enhanced bridge infrastructure in the local area would be experienced differently at each precinct. As such, the pre-enhanced impact of improved pedestrian safety risk has been assessed as a high impact rating in Albury and medium impact rating in Greater Hume–Lockhart, Wagga Wagga and Junee.
	Safety and hazards—flooding	Social impacts of flooding relate to intangible impacts such as the stress, anxiety and ill health that can be associated with the effects of flood inundation. During operation, flooding impacts are expected to be minor to negligible. Drainage works have been designed to mimic or improve the existing drainage and flooding conditions where possible. As such, it is expected that the proposal would not result in any significant flood-related socio-economic impacts.
	Private residences	Residents adjacent to Cassidy Parade pedestrian bridge enhancement site in Wagga Wagga raised concern regarding safety and privacy, as people could access to the rear of the properties through the walkway. This has resulted in changes to their daily way of living to avoid people looking into the property. Residents adjacent to Cassidy Parade pedestrian bridge enhancement site are likely to experience moderate disturbance permanently as result of bridge design, which will result in a high impact rating.
Surroundings	Amenity and aesthetic values	During SIA consultation, enhancing visual landscaping and aesthetic through design and maintenance along the railway line and rail yards was raised across various stakeholders. This was particularly important for Indigenous people and residents adjacent to the rail corridor.

Impact theme	Impact	Impact summary
		▸ The main features of the proposal with the potential to impact the aesthetic values and amenity in the local study area and its quiet lifestyle include: ▸ replacement road and pedestrian bridges ▸ removal of pedestrian bridges ▸ modification to existing rail bridges ▸ track lowering and retaining walls beneath road bridges ▸ more frequent freight trains passing by with increased height. ▸ The proposal would result in minor and moderate impacts within the local study area, affecting local and neighbouring sensitive receivers during operation due to changes in infrastructure at each precinct, as well as permanent minor night-time light impacts (refer to Chapter 17: Landscape and visual amenity). ▸ It is anticipated that visual and noise and air quality impacts would have a different effect on those sensitive receivers that reside in the proximities of the proposal, than to those who transit or visit the area for work, study or access to services. ▸ In the Albury precinct: ▸ operation of the proposal would have moderate impacts at Albury Station and negligible visual impacts at night-time (refer to Chapter 17: Landscape and visual amenity) ▸ Albury has a high proportion of Indigenous people, as well as retirees and seniors. Indigenous people, seniors, retirees and families are more vulnerable to changes in the environment and also more likely to have a deeper appreciation for tranquillity and visual landscape. During Albury LALC consultation, it was noted that a number of Indigenous people live in the vicinity of the existing rail corridor. It is possible that vulnerable groups would be affected by amenity changes in surroundings, and this would be experienced as a minor deterioration, resulting in a medium impact. ▸ In the Greater Hume–Lockhart precinct: ▸ operation of the proposal would result in a moderate to minor visual impact in local sensitive receivers at Culcairn, Henty and Yerong Creek rural town. Moderate visual impacts at night-time were identified for Henty Yard clearances and Yerong Creek clearances (refer to Chapter 17: Landscape and visual amenity) ▸ the potential for air quality impacts due to this proposal would be greater where sensitive receivers are located adjacent to the rail corridor, such as Henty ▸ Greater Hume comprises families with children and older residents who are transitioning or already in retirement, who have a deeper appreciation for tranquillity and visual landscape. Consequently, it is possible that changes in the surroundings would have a moderate effect on vulnerable groups of people, resulting in a medium impact rating. ▸ In the Wagga Wagga precinct: ▸ operation of the proposal would result in a moderate visual impact at Uranquinty rural town centre and Wagga Wagga Station. Minor impacts were identified at Cassidy Parade and Edmondson Street. Regarding night-time visual impacts, moderate visual impacts are predicted for Uranquinty Yard clearances site and the residences to the north of the rail corridor on Brookong Avenue and on Cassidy Parade, as well as residences on Donnelly Avenue, Little Best Street, Erin Street and Railway Street to the south of the Wagga Wagga station and the former station master residence ▸ the noise modelling of traffic over the proposed Edmondson Street Bridge indicated that noise levels are predicted to reduce at most locations. The potential noise reduction is primarily due to improved acoustic screening that is provided by the bridge decks at these locations ▸ the potential for air quality impacts due to this proposal would be greater where sensitive receivers are located adjacent to the rail corridor, such as Wagga Wagga ▸ the temporal extension of changes in the Wagga Wagga precinct would be likely perceived by residents. As the median age of residents is 36, a percentage of the population would likely to adapt to change. Consequently, it is possible that a minor deterioration may be experienced in the local township, resulting in a medium impact. ▸ In the Junee precinct: ▸ operation of the proposal would result in a moderate visual impact in Kemp Street and south Junee. Minor visual impacts at Junee Station and town

Impact theme	Impact	Impact summary
		centre, and Olympic Highway and north Junee. Moderate night-time visual impacts were identified at Harefield Yard clearances, Kemp Street Bridge and Junee to Illabo clearances ▸ the noise modelling of traffic over the proposed Kemp Street Bridge indicated that noise levels are predicted to reduce at most locations. The potential noise reduction is primarily due to improved acoustic screening that is provided by the bridge decks at these locations ▸ Junee has a high proportion of Indigenous residents (9.4 per cent). This group places a high value on landscape and tranquillity. During EIS consultation, residents indicated concern about visual amenity and steepness for Kemp Street and Edmondson Street bridges, how high they would be and whether they would cause shading. Therefore, it can be anticipated that it is possible that changes in the environment would have a moderate effect on residents, in particular residents at Kemp Street bridge, resulting in a medium impact.
Livelihood	General operational land use	Direct operational impacts on land use would relate to the required property acquisition described in Chapter 2: Strategic context and need. The impacts due to changes of land use associated with the acquisition of land as part of the proposal are generally considered to be minimal due to the small area of land impacted. The frequency and size of trains would increase as part of the Inland Rail program. Impacts to adjacent and surroundings land uses would be due to amenity impacts associated with noise, air quality, and visual impacts. The amenity impacts are considered in Chapter 15: Noise and vibration, Chapter 17: Landscape and visual amenity and Chapter 22: Air quality. ARTC's standard maintenance procedures would continue to be used along the rail corridor. ARTC would continue to manage the land in accordance with the General Biosecurity Duty under the *Biosecurity Act 2015* (NSW). It is expected that the proposal would not result in any land use social impacts during operation.
	Local business	Operation of the proposal has the potential for amenity changes at properties along the rail corridor resulting from the change in train operations. The significance of impacts would depend on the location of the impacted property. Potential operational noise and visual impacts are considered in chapters 15 and 17 and mitigation measures are provided in those chapters to minimise the potential impacts, as far as reasonably practicable. Decisions would be made by individual landowners about existing and future developments based on their own assessment of the potential impacts of the proposal. Such individual assessments may affect decisions around land development beyond the outcomes of the assessment and statutory approval process for the proposal. Minimal impacts for the agricultural and tourism sector in the social locality are expected, including: ▸ additional travel and time costs to move livestock and machinery between parcels of land due to changes in transport access near travelling stock reserves ▸ potential for reduced scenic amenity due to the proposal location within the rural and regional landscape. It is likely that some visitors will see the proposal as diminishing rural character while others will find interest in the proposal structure. Consequently, it is expected that the proposal would not result in any significant socio-economic impacts to local businesses during operation. An impact rating of low has been identified.
Decision making	Decision-making systems	The support of those most affected by the proposal operation, local residents, landowners and vulnerable groups, will be best achieved by seeking their local knowledge, and requesting their review and input into management and contractor requirements to maintain wellbeing, community cohesion and values. As uncertainty about time schedules and waiting times at level crossing persist, stakeholders would be included in providing input to Inland Rail procedures to align with local practices, beyond complaints and enquiries procedures. The successful implementation of the Communications Management Plan would ensure ARTC, the principal contractor and the community are engaged in open dialogue on matters relating to operation of the proposal. As such, the impacts to people's capacity to influence change is medium.

13.6 Mitigation and management

13.6.1 Approach to mitigation and management

Comprehensive and appropriate communication and consultation with the community and other key stakeholders will play a key role in managing the potential for socio-economic impacts during construction and operation. Effective communication and engagement are fundamental to reducing risk and minimising potential impacts. Identifying, engaging and effectively communicating with stakeholders is critical to the successful delivery of the proposal. The approach to consultation is described in Chapter 5: Engagement.

ARTC would continue to engage with stakeholders and the community in the lead up to, and during, construction. A communication management plan would be developed for the construction phase to ensure that:

- landowners/landholders and community members with the potential to be affected by construction activities are notified in a timely manner about the timing of activities and potential for impacts
- enquiries and complaints are managed and a timely response is provided for concerns raised
- accurate and accessible information is made available
- feedback from the community is encouraged
- opportunities for input are provided, where appropriate.

In relation to the potential for socio-economic impacts, the plan would include:

- communication with potentially affected residents, the general community and other key stakeholders to provide information about the proposal, and the likely nature, extent and duration of amenity and access changes during construction
- protocols to identify and engage with vulnerable persons and/or vulnerable groups that might be affected by construction
- procedures to respond to issues and complaints during construction.

Other key mitigation measures include a proposal-specific:

- industry participation plan. This plan would be developed and implemented to manage the potential employment and regional economic benefits of the proposal
- workforce management plan. This plan would be developed and implemented during construction to manage the potential impacts of the non-resident workforce, local business and employment opportunities and workforce health and wellbeing requirements
- Social Impact Management Plan (SIMP). This would plan would outline proposed monitoring to track and enable reporting on the delivery of measures to mitigate social impacts and enhance community benefits.

13.6.2 Mitigation measures

Measures that will be implemented to address potential social impacts are listed in Table 13-16.

TABLE 13-16 SOCIAL IMPACT MITIGATION MEASURES

Stage	Ref	Impact/issue	Mitigation measure
Pre-construction /construction	SI1	Workforce management	A workforce management plan will be implemented to manage local and Indigenous employment opportunities and to manage the interaction between the non-resident workforce with the community. The workforce management plan will include: ▸ identify local skills gaps and potential workforce skills and training requirements and establish how the contractor will use the Inland Rail Skills Academy to achieve its training objectives ▸ employment targets for local and regional residents, Indigenous people, women, under 25-year-old participation and trade-related positions ▸ strategies for maximising local training and employment opportunities for residents ▸ a localised communication and engagement strategy raise awareness of opportunities to gain employment and training. ▸ manage health and wellbeing services needs of the temporary construction workforce, including medical, allied health and wellbeing services ▸ consultation with councils, local health and emergency services to establish processes for managing potential increased demand due to non-resident workforce, if required ▸ a code of conduct and strategies to promote workforce wellbeing ▸ liaison with ARTC to identify potential opportunities to provide, where possible, the continuation of employment to maximise worker retention from subsequent Inland Rail projects ▸ monitor regional infrastructure projects to pre-emptively identify potential constraints in labour markets.
Construction	SI2	Workforce management	Volunteering program will be implanted to encourage community cohesion between the local community and non-resident workforce through active facilitated by ARTC.
Pre-construction/ construction	SI3	Local business and industry content	A local and Indigenous industry participation plan will be implemented, which: ▸ identifies the capacity of local and Indigenous businesses suitable to supply the proposal ▸ sets out procurement targets and identifies methods for preparing suppliers to be ready for potential demand ▸ liaise with business development and industry support groups and the Wagga Wagga and Albury LALCs to understand the capacity of local and Indigenous business to engage in business with the proposal ▸ promotes the Inland Rail website and supplier portal to businesses in the region ▸ delivers business capacity workshops to address contract requirements and meet-the-contractor events for local and/or Indigenous businesses.
Pre-construction/ construction	SI4	Local business and industry content	Business and service providers whose access and/or properties will be impacted during construction will be engaged to: ▸ agree on feasible and reasonable property-specific measures ▸ maintain active communication with landowners and residents adjacent to enhancement sites to inform any changes on construction schedule and receive feedback about the effectiveness of measures in place.
Operation	SI5	Local business and industry content	ARTC will promote the use of Inland Rail for local businesses to reach markets elsewhere in Australia, through social investment program that foster innovation and business growth.

Stage	Ref	Impact/issue	Mitigation measure
Pre-construction/ construction	SI6	Housing and accommodation	A workforce accommodation plan will be implemented to address the potential shortages of accommodation for temporary workforce. The plan will: ▸ prioritise the use of temporary local accommodation ▸ avoid the use of private rental housing accommodation during workforce peak periods (possession) ▸ consider combined strategies to mitigate shortages of accommodation ▸ outline transport arrangement of workers to and from works site daily ▸ include a monitoring and management mechanism to identify the capacity of local short-term accommodation and rental housing. If accommodation supply constraints become apparent, amendments will be done to the workforce housing and accommodation plan appropriately.
Pre-construction/ construction	SI7	Health and community wellbeing	A community health and wellbeing plan will be implemented to identify strategies to promote community wellbeing, local support mechanisms and communications and engagement activities to directly support health and wellbeing. The plan will: ▸ identify those residents within one kilometre to enhancement sites who are more prone to experience stress and wellbeing issues due to construction activities ▸ partner with local support mechanisms/services to provide information and support to residents who report wellbeing issues, and establish approaches to adaptively manage support measures on a case-by-case basis ▸ liaise with local Indigenous services and community service providers to identify potential increases in health service demand that may be as a result of the proposal's amenity changes ▸ outline measures to address changes in access for vulnerable community members across the rail corridor at Junee and Wagga Wagga as a result of bridge replacement works ▸ promote road and rail safety during the construction and operation, including school-based education programs for schools in the local study area and culturally appropriate approaches to rail safety education and awareness campaigns for Indigenous communities ▸ address privacy and safety concerns of residents adjacent to Cassidy Parade pedestrian bridge enhancement site, Wagga Wagga Station pedestrian bridge and Kemp Street Bridge ▸ ARTC will work with the Wagga Wagga and Albury LALCs and the local Aboriginal community to investigate opportunities to incorporate Aboriginal aspirations and connection to Country design principles into the proposal.
Operation	SI8	Cultural values and community identity	ARTC will explore with the local community, including relevant Indigenous groups, ways to enhance aesthetic value, cultural heritage and community identity and cohesion across the social locality through a Community Investment Program.
Detailed design/pre-construction	SI9	Way of life	Prior to closure of Kemp Street bridge, ARTC will investigate opportunities to reduce duration of level crossing closure on Olympic Highway, Junee.
Pre-construction/ construction	SI10	Community and stakeholder engagement	ARTC will oversee the preparation and implementation of a proposal-specific communication management plan, which would include: ▸ the appointment of a dedicated community and landowner liaison ▸ communications action plans tailored to each stage of the construction program that focuses on awareness and preparedness for upcoming impacts, with special attention to most vulnerable groups at each precinct ▸ targeted engagement for residents that may experience cumulative impacts. ▸ engagement with the LALCs to incorporate local Indigenous community knowledge into engagement practices.

Stage	Ref	Impact/issue	Mitigation measure
Pre-construction/ construction	SI11	Social impact	A comprehensive social impact management plan (SIMP) will be finalised through consultation with key stakeholders to manage and monitor the implementation of the proposed social and economic mitigation measures. The SIMP would review and refine the proposed monitoring and reporting framework presented in this report on an ongoing basis.
Operation	SI12	Community and stakeholder engagement	ARTC will develop an operations communication and engagement plan that builds community awareness of the rail corridor's operational characteristics, including information on level crossing operations, likely daily train movements and ARTC's ongoing role after construction. ARTC will continue to monitor and inform the community about ways for people to be informed about the time of day in which trains may be passing through a level crossing to facilitate access and movement around the town.

13.6.3 Interactions between mitigation measures

Mitigation measures to minimise the potential social impacts will also be implemented as part of those identified for Chapter 9: Transport and traffic, Chapter 10: Aboriginal heritage, Chapter 11: Non-Aboriginal heritage, Chapter 14: Economic, Chapter 15: Noise and vibration and Chapter 17: Landscape and visual amenity.

13.6.4 Residual risk

Residual impacts are impacts of the proposal that may remain after implementation of the mitigation measures detailed in Table 13-16 and elsewhere in this EIS. These are summarised in Table 13-17. This table is presented according to the requirements of *Social Impact Assessment Guideline for State Significant Projects* (DPIE, 2021a).

Further information on the approach to the environmental risk assessment, including descriptions of criteria and risk ratings, is in section 13.2.3.

TABLE 13-17 RESIDUAL IMPACT MANAGEMENT—SOCIAL IMPACT

Area of social impact	Potential impact	Pre-mitigated impact rating	Mitigation measures	Residual impact rating
Construction				
Way of life	Increased job opportunities in the social locality during construction	Low (positive)	Workforce management plan, monitoring and adaptative management Industry participation plan and monitoring ARTC Inland Rail Skills Academy	High (positive)
Way of life	Increased local procurement opportunities during construction	Medium (positive)	Workforce management plan Industry participation plan ARTC Inland Rail Skills Academy	High (positive)
Way of life	Reduction of temporary accommodation alternatives due to increased demand on accommodation from incoming temporary construction workforce	High–very high (negative)	Temporary workforce accommodation plan, monitoring and adaptative management Workforce management plan	Low (negative)
Way of life	Reduction of private rental alternatives due to increased demand on accommodation from incoming temporary construction workforce.	Low (negative)	Temporary workforce accommodation plan, monitoring and adaptative management Workforce management plan	Low (negative)
Way of life	Mobility impacts for residents, including experiencing increase delays and accessibility constraints, due to changes in traffic conditions during construction	Medium–very high (negative)	Mitigation and management measures outlined in Chapter 9: Transport and traffic Workforce Traffic management plan Temporary workforce accommodation plan Community and stakeholder engagement plan	Medium– low (negative)
Community	Potential change to cohesion and character due to presence of temporary workforce in local towns	Medium–very high (negative)	Workforce management plan (Code of Conduct) Community and stakeholder engagement plan (grievance mechanism)	Low (negative)
Community	Potential loss of sense of place due to disruption to people's mobility and access to places.	Low–very high (negative)	Mitigation and management measures outlined in Chapter 17: Landscape and visual amenity Mitigation and management measures outlined in Chapter 9: Transport and traffic Community and stakeholder engagement plan (grievance mechanism)	Low (negative)
Accessibility	Impacts to offsite parking due to construction activities and/or parking of construction vehicles	Low (negative)	Mitigation and management measures outlined in Chapter 9: Transport and traffic Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)

Area of social impact	Potential impact	Pre-mitigated impact rating	Mitigation measures	Residual impact rating
Accessibility	Access to educational services by local residents may be constrain due changes into traffic conditions and access, including changes to school bus routes and accessibility to pedestrians	Low–very high (negative)	Mitigation and management measures outlined in Chapter 9: Transport and traffic Community and stakeholder engagement plan (early communication and grievance mechanism) Provision of additional bus service to pedestrians and school users affected in Wagga Wagga and Junee, if required.	Low (negative)
Accessibility	Access to health services by local residents may be constrain due to influx of non-permanent workforce and changes into traffic conditions and access	Low–medium (negative)	Workforce management plan, monitoring and adaptative management Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Accessibility	Perceived impacts related to delays at level crossings that have potential to affect access for emergency services during construction phase	Low–medium (negative)	Mitigation and management measures outlined in Chapter 9: Transport and traffic Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Culture	Impacts on Indigenous cultural values due to lack of consultation with Indigenous people and lack of incorporation of connection to Country design principles into the proposal	High (negative)	Mitigation and management measures outlined in Chapter 10: Aboriginal heritage ARTC would work with the Wagga Wagga and Albury LALCs and the local Indigenous community to investigate opportunities to incorporate Indigenous aspirations and connection to Country design principles Community and stakeholder engagement plan.	Medium (positive)
Culture	Deterioration of cultural identity due to direct and indirect impacts to non-Aboriginal heritage sites including those of increasing rarity or that are a one-of-a-kind structure	Very high (negative)	Mitigation and management measures outlined in Chapter 11: Non-Aboriginal heritage ARTC Community Investment Program	Low (negative)
Health and wellbeing	Noise, vibration and changes to air quality as a result of the construction of the proposal may cause stress, anxiety and/or sleep disruption, affecting wellbeing of sensitive receivers	High (negative)	Community health and wellbeing plan, monitoring and adaptative management Community and stakeholder engagement plan (early communication and grievance mechanism) Management measures outlined in Chapter 15: Noise and vibration and Chapter 22: Air quality	Low (negative)

Area of social impact	Potential impact	Pre-mitigated impact rating	Mitigation measures	Residual impact rating
Health and wellbeing	Safety risks to pedestrians during construction, particularly for school aged children and families accessing nearby schools, due to changes in traffic and road network conditions	Low–high (negative)	Mitigation and management measures outlined in Chapter 9: Transport and traffic Rail safety awareness program Community and stakeholder engagement plan (early communication and grievance mechanism) Provision of additional bus service to pedestrians and school users affected in Wagga Wagga and Junee	Low (negative)
Surroundings	Construction related activities may impact the aesthetic values and amenity in the local study area and its quiet lifestyle, due to the changes to visual landscape, level of noise and air quality	Medium–high (negative)	Community health and wellbeing plan Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Livelihood	Impacts to private properties due to temporal property requirements for the proposal, including disruption to property access from public roads and amenity impacts from construction activities.	Low–high (negative)	Community and stakeholder engagement plan (early communication and grievance mechanism) ARTC would identify those areas in which it has been reported throughout consultation safety risks to people accessing to rail corridor and potentially accessing adjacent properties to improve security and agree on mechanism to improve safety	Low (negative)
Livelihood	Impacts to businesses due to temporal property requirements for the proposal, including disruption to property access from public roads and amenity impacts from construction activities	Low–medium (negative)	Land access agreements Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Decision-making systems	Impacts on procedural fairness and people's capacity to decide over changes that may affect their lives pre-construction and during construction	High (negative)	Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Decision making systems	Unequal distribution of impacts on vulnerable groups and sensitive receivers	High–very high (negative)	Community health and wellbeing plan Community and stakeholder engagement plan (early communication and grievance mechanism)	Low (negative)
Operation				
Way of life	Positive economic effects derived from direct and indirect employment of the proposal's operation and procurement opportunities with Indigenous people	Medium (positive)	ARTC Community Investment Program	Medium (positive)
Way of life	Improved freight efficiency reducing business cost	High (positive)	ARTC Community Investment Program	High (positive)
Way of life	Accessibility impact for local residents due to an increase of trains during operation and likelihood of experiencing the maximum delay associated with 1.8 km freight trains	Low (negative)	Community and stakeholder engagement plan	Low (negative)

Area of social impact	Potential impact	Pre-mitigated impact rating	Mitigation measures	Residual impact rating
Community	Potential change to cohesion and character due to increased freight network opportunities and business development	Low (negative)	Community and stakeholder engagement plan ARTC Community Investment Program	Low (negative)
Community	Exacerbation of social severance due increase frequency of trains and/or increased likelihood of experiencing delays associated with 1,800 m freight trains	Medium–high (negative)	Community and stakeholder engagement plan Prior to closure of Kemp Street bridge, ARTC will investigate opportunities to reduce duration of level crossing closure on Olympic Highway, Junee ARTC Community Investment Program	Medium to Low (negative)
Culture	Changes to community identity due to impacts to cultural heritage as a result of the proposal's operation	Low (negative)	Mitigation and management measures outlined in Chapter 11: Non-Aboriginal heritage Community and stakeholder engagement plan ARTC Community Investment Program	Low (negative)
Health and wellbeing	Noise, vibration and changes to air quality as a result of increased number of trains may cause stress, anxiety and/or sleep disruption, affecting wellbeing of sensitive receivers	Medium (negative)	Community and stakeholder engagement plan ARTC Community Investment Program	Low (negative)
Health and wellbeing	Increased risks to road safety in the local area	Low (negative)	Rail safety awareness program Community and stakeholder engagement plan (Early communication and grievance mechanism)	Low (negative)
Health and wellbeing	Improved pedestrian safety due enhanced bridge infrastructure, including improved accessibility for people with disability	Medium–high (positive)	Rail safety awareness program Community and stakeholder engagement plan (early communication and grievance mechanism)	High (positive)
Surroundings	Reduced aesthetic values due to rail freight movements and views of new infrastructure may impact nearby sensitive receivers	Medium–high (negative)	ARTC Community Investment Program Mitigation and management measures outlined in Chapter 11: Non-Aboriginal heritage and Chapter 17: Landscape and visual amenity	Medium (negative)
Livelihoods	Detrimental impacts to businesses as a result of permanent amenity changes and changes to the freight network	Low (negative)	ARTC Community Investment Program Community and stakeholder engagement plan (Early communication and grievance mechanism)	Low (negative)
Decision making systems	Limited access to grievance mechanism during operation may limit people's capacity to have access to access complaint and remedy mechanisms	Medium (negative)	ARTC community and stakeholder engagement plan	Low (negative)