



New England Highway bypass of Muswellbrook

Chapter 6.12 Socio-economic

Transport for NSW | October 2021

6.12 Socio-economic

This section summarises the results of the Socio-economic impact assessment (SEIA) that was completed for the proposal. The detailed assessment is provided in Appendix B.

6.12.1 Methodology

The SEIA was completed in accordance with the *Environmental Impact Assessment Practice Note – Socio-economic assessment* (EIA-N05) (Transport for NSW, 2020) (Practice Note).

The Practice Note outlines the requirements for establishing the socio-economic baseline and guides the process for assessing socio-economic impacts of Transport activities. In accordance with the Practice Note, the assessment included the following methodology:

- Definition of the study area. Two study areas comprising the LGA and Muswellbrook Statistical Area Level 2 (SA2) were used in the SEIA. Refer to Appendix B for further detail
- Desktop assessment including review of background socio-economic impact assessments
- Identification of the appropriate scope of the SEIA. The appropriate level of socio-economic assessment was identified as 'comprehensive'
- Identification and consultation with local communities and stakeholders who could be affected by the proposal
- Development of a baseline profile of the existing socio-economic environment based on information available from the Australian Bureau of Statistics (ABS), relevant local, regional and State policies and plans, as well as the outcomes of consultation carried out for the proposal
- Assessment of the potential construction, operation and cumulative impacts of the proposal on socioeconomic matters, including an assessment of the significance of these impacts
- Identification of management measures for managing and monitoring the potential socio-economic impacts of the proposal.

The SEIA is also informed by the outcomes of various other technical reports and assessments including the assessment of impacts to air quality, traffic and transport, noise and vibration, urban design, property and land use, landscape character and visual amenity.

Business surveys, stopper surveys (people stopping in Muswellbrook who do not live in the town), landowner surveys and an OD survey were carried out for the proposal. Feedback received during the survey period has been analysed, along with local community plans, to gain an understanding of the key issues, perceptions and concerns of the local and wider community with regard to the proposal's construction and operation and to provide insights into community identity, values and goals. The results of the surveys and other feedback have been compiled and are summarised in Appendix B.

The SEIA has been informed by stakeholder and community consultation carried out for the proposal. Consultation activities carried out for the proposal are detailed in Section 5 of the REF.

Issues raised applicable to the socio-economic environment have been considered in the SEIA.

The assessment of the significance of socio-economic impacts in accordance with the Practice Note includes consideration of the magnitude of the impact and the sensitivity of the receivers. The criteria for assessing each impact was established based on:

- Magnitude of impact which comprises the scale and intensity, spatial extent and duration of an impact

- Sensitivity of affected stakeholders which was defined by the susceptibility or vulnerability of people, receivers or receiving environments to adverse changes caused by the impact, or the importance placed on the matter being affected.

The assessment matrix provided in Table 6-57 has been used to determine the significance of each social impact as a function of the magnitude of the impact and the sensitivity of potentially affected stakeholders.

Table 6-57: Significance of socio-economic impacts

Sensitivity	Magnitude			
	High	Moderate	Low	Negligible
High	High impact	High-Moderate	Moderate	Negligible
Moderate	High-Moderate	Moderate	Moderate-Low	Negligible
Low	Moderate	Moderate-Low	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

A summary of the magnitude, sensitivity and significance ratings are included in this section. Detail regarding the justification for these ratings is provided in full in Appendix B.

6.12.2 Existing environment

Demographics

Muswellbrook is located in the Upper Hunter Region of New South Wales. The population of the Muswellbrook LGA in 2016 was 16,086 of which 12,075 lived in the township of Muswellbrook. The wider LGA and Muswellbrook have relatively low cultural diversity with only three per cent of Muswellbrook SA2 speaking another language at home in 2016 (consistent with 3.48 per cent in the Muswellbrook LGA). About 58.6 per cent of the population was employed full time in 2016, with an unemployment rate of 9.6 per cent, both of which are consistent with the LGA average (59.2 per cent and 8.2 per cent). Almost a quarter of the jobs within Muswellbrook SA2 (23 per cent) were concentrated in the mining sector in 2016 and about 30 per cent in retail, healthcare, public administration, accommodation and food services.

Economy

The economy of Muswellbrook and the LGA is quite diverse. The main economic drivers are mining, agriculture, power and energy generation, thoroughbred studs, retail, accommodation and food services. In the Muswellbrook LGA, the two largest generators of economic value are the mining sector and the electricity, gas, water and waste services sector. The construction, rental, hiring and real estate and administration and safety industry sectors are likely to benefit from the presence of the large mining operations in the shire.

There are over 200 businesses located within Muswellbrook, including an industrial area and shopping centres. The range of businesses indicates that Muswellbrook, serves a variety of industries for residents of Muswellbrook and the wider region.

Social infrastructure

Social infrastructure comprises social services or facilities that are used for the physical, social, cultural or intellectual development or welfare of the community. Social infrastructure includes educational facilities, childcare centres, hospital and medical facilities, aged care, sporting and recreational facilities, community halls, clubs, libraries as well as services, activities and programs that operate within these facilities. Open spaces, parks and sporting fields used for sport, recreational and leisure are also identified as social infrastructure.

Social infrastructure located within 400 metres of the construction footprint includes:

- Shelley's Family Day Care Centre – which occupies two buildings, with one building located at about six metres west and the second building located about 18 metres south of the construction footprint
- The Kingdom Hall of Jehovah's Witness - which is located about 300 metres north east of the construction footprint.

The location of key infrastructure in proximity to the proposal is shown in Figure 6-33 to Figure 6-36.

Muswellbrook is home to a number of health care, emergency services and aged care facilities to meet the needs of local and regional communities. It has about 17 medical facilities and one district hospital none of which are located within 400 metres of the proposal. No community services facilities or sporting or recreational facilities are located within 400 metres of the proposed road corridor or construction footprint.

Access and connectivity

The New England Highway forms the spine of the local traffic network, providing direct access to the Muswellbrook town centre as well as connectivity to Aberdeen and Scone to the north and Singleton to the south-east.

Key public transport facilities, as described in Section 6.5 of the REF, include rail and bus services. Transport and Countrylink offer rail services to Muswellbrook, which is located on the Hunter rail line. The bus network within Muswellbrook provides connections between Muswellbrook, Denman, Aberdeen and Scone, and provides a town service around the Muswellbrook town centre stopping at places such as the hospital. Muswellbrook is also serviced by a local taxi service.

Pedestrian footpaths provide access along the New England Highway to the town centre and surrounding areas. On and off road cycle routes facilitate access to the town centre, residential areas and recreational facilities.

Community identity, values

A review of community strategic planning documents relevant to Muswellbrook LGA was carried out to identify values and aspirations specific to the local and regional community.

Key community values and aspirations identified in the Muswellbrook Shire Council Community Strategic Plan 2017-2027 include:

- *We want community wellbeing to be at the heart of everything we do and every consideration we make*
- *We want to be inclusive. We want everyone to enjoy full participation in our community*
- *We want to be culturally rich and diverse with our Shire's communities having strong identities and a shared 'sense of place'*
- *We want a local economy with full employment in a diverse range of high value industries.*
- *We want to be leaders in environmental sustainability.*

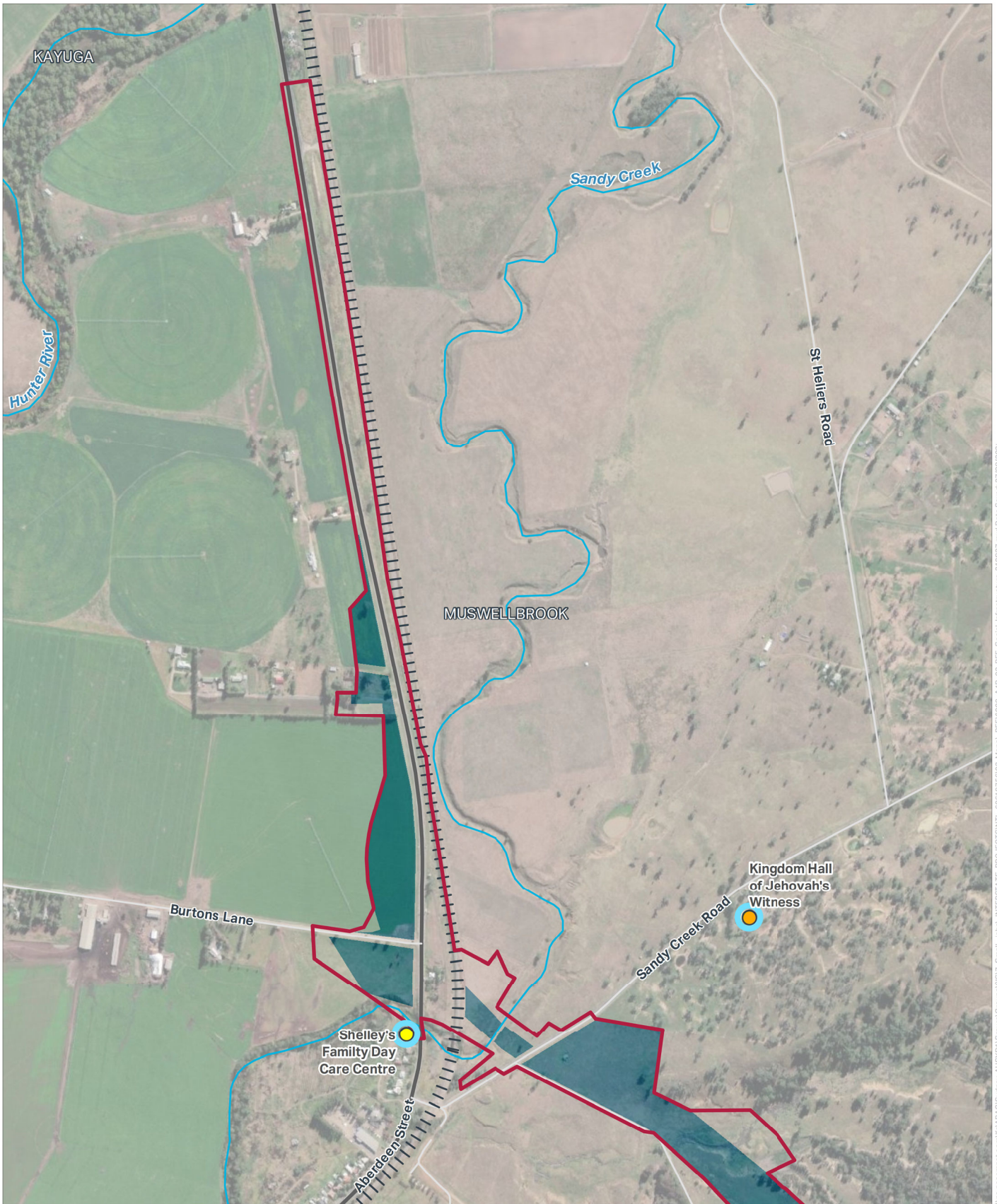
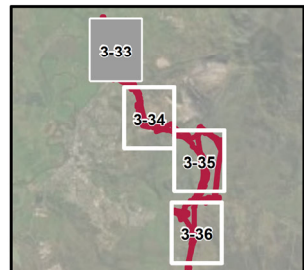


FIGURE 6-33: SOCIAL INFRASTRUCTURE SURROUNDING THE PROPOSED ROAD CORRIDOR (1 OF 4)

- Legend**
- | | |
|------------------------|------------------------------|
| Construction footprint | Social Infrastructure |
| Proposed road corridor | Educational facilities |
| State Road | Places of worship |
| Local Road | Within 400m of the proposal |
| Railway | |
| Watercourse | |



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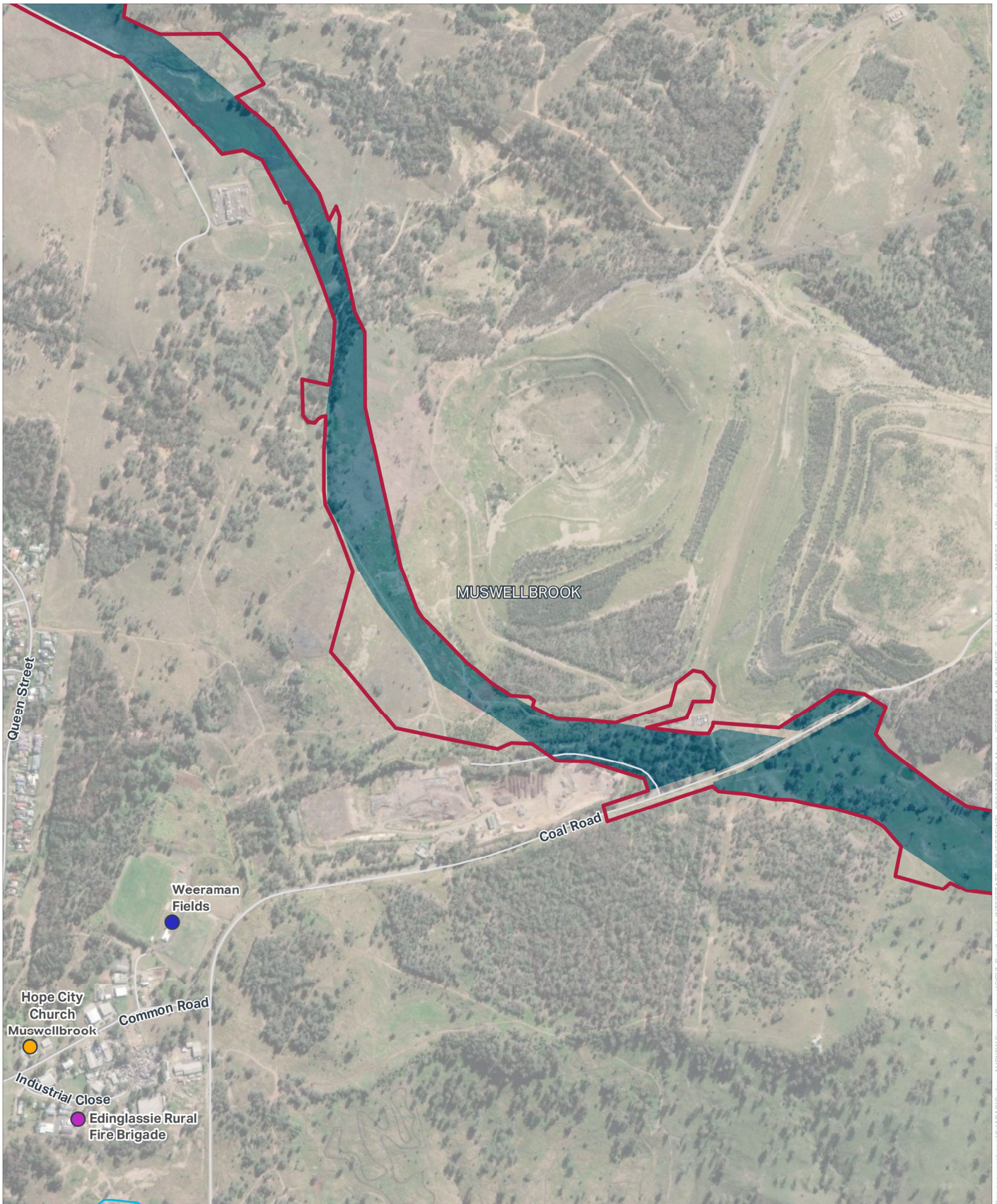


FIGURE 6-34: SOCIAL INFRASTRUCTURE SURROUNDING THE PROPOSED ROAD CORRIDOR (2 OF 4)

Legend

- | | |
|------------------------|--------------------------------------|
| Construction footprint | Social Infrastructure |
| Proposed road corridor | Places of worship |
| Local Road | Sporting and recreational facilities |
| Railway | Emergency Services |
| Watercourse | |



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FIGURE 6-35: SOCIAL INFRASTRUCTURE SURROUNDING THE PROPOSED ROAD CORRIDOR (3 OF 4)

Legend

- Construction footprint
- Proposed road corridor
- Local Road
- Railway
- Watercourse



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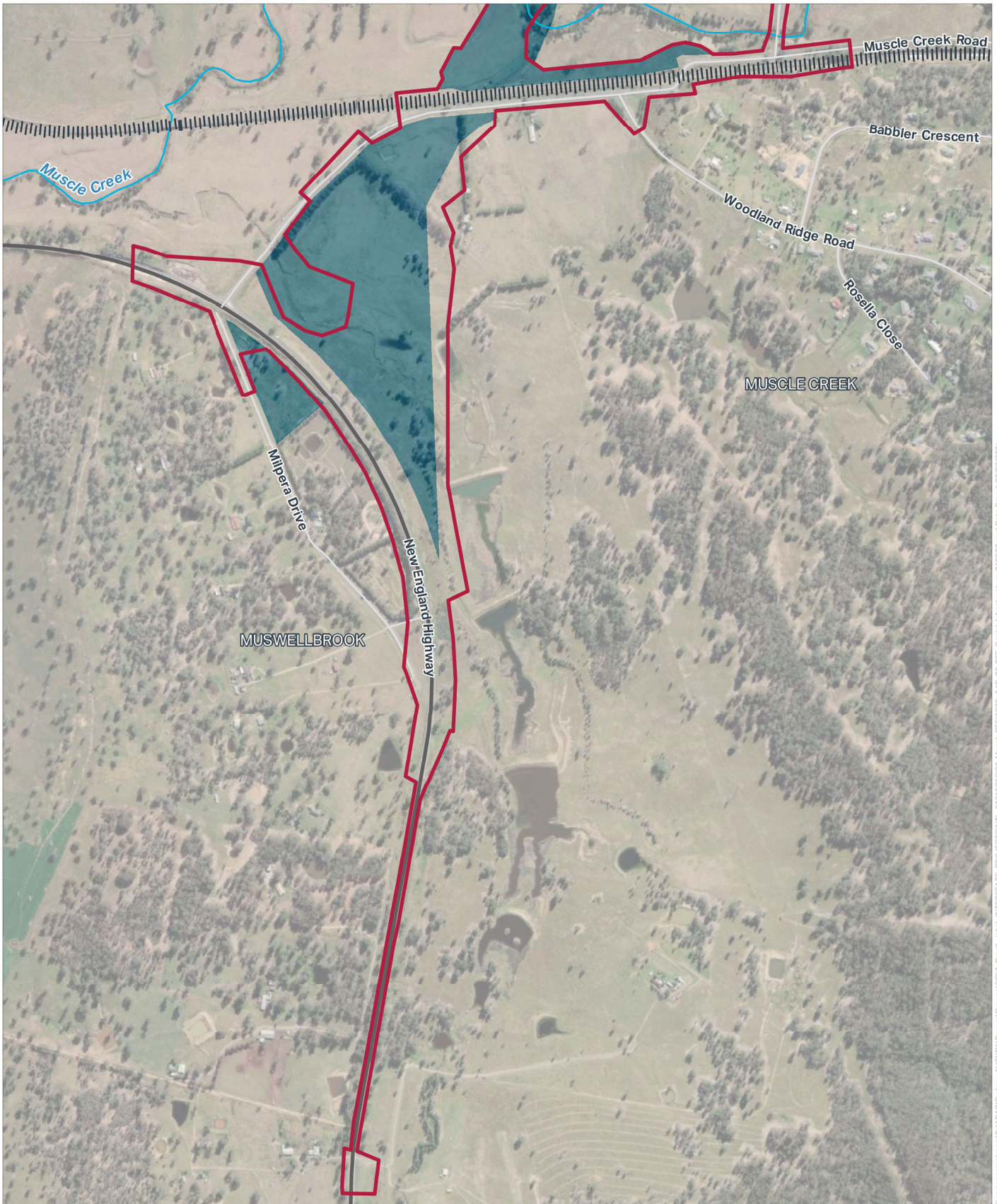
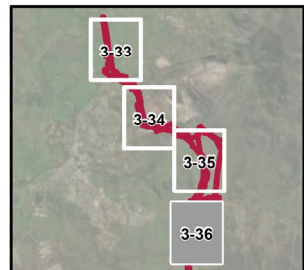


FIGURE 6-36: SOCIAL INFRASTRUCTURE SURROUNDING THE PROPOSED ROAD CORRIDOR (4 OF 4)

Legend

- Construction footprint
- Proposed road corridor
- State Road
- Local Road
- Railway
- Watercourse



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6.12.3 Potential impacts

Construction

Property

Property impacts, including details of property acquisitions and temporary occupation of land for ancillary facilities are discussed in Section 6.11. This section assesses the socio-economic implications of property impacts.

The proposal would fragment one agricultural property, owned by MCC, to be partially acquired. A farm access culvert would be provided under the proposed bypass to enable continuity of farm operations on this property.

The proposal would require the partial acquisition of 19 lots. One lot (about 1000m²) used for agricultural purposes (producing pasture and fodder to supply its dairy farm) would be subject to full acquisition. Five properties are owned by Transport. Tenants on one of these properties would be required to relocate. Transport would provide sufficient notice of the requirement to vacate.

The magnitude of properties acquired is moderate. The sensitivity of affected individuals and households is considered to be low. As a result, the significance of partial acquisition of residential properties on the socio-economic environment is considered to be moderate-low.

Amenity

Amenity refers to the quality of a place, its appearance, feel and sound, and the way its community experiences the place. Potential impacts have been addressed in this REF as follows:

- Noise and vibration (refer to Section 6.6) - Impacts are expected to be greatest during earthworks and pavement works. Up to six receivers are predicted to be highly noise affected. One non-residential receiver is expected to exceed the NML during earthworks
- Air quality (refer to Section 6.9) - Impacts include:
 - Annoyance due to dust deposition on surfaces and visible dust plumes
 - Elevated particulate (PM₁₀) concentrations due to dust-generating activities
 - Exhaust emissions from diesel-powered plant and equipment
- Landscape character and visual amenity (Section 6.10) - Construction activities would only be visible to those with views of the proposal which is primarily limited to motorists and some residents located along the New England Highway, Muscle Creek Road, Coal Road, Sandy Creek Road and Aberdeen Street.

The significance assessment for these impacts is summarised in Table 6-58 and is discussed in detail in section 6.2 of Appendix B.

Table 6-58: Summary of significance assessment for amenity impacts during construction

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Noise and vibration	Moderate	Moderate	Moderate
Air quality	Moderate	Moderate	Moderate
Visual amenity	Moderate	Moderate	Moderate

Access and connectivity

The proposal could potentially give rise to increased travel time due to reduced speed limits and temporary lane closures on the New England Highway, Muscle Creek Road, Sandy Creek Road, Koolbury Flats Row and Burtons Lane (refer to Section 6.5).

Some existing accesses to residential properties on Muscle Creek Road and Milpera Drive for the southern interchange works and Burtons Lane and Koolbury Flats Row for the northern interchange works may be temporarily impacted during the construction period with residents inconvenienced through changes in pedestrian and vehicle access to their properties. Most of these impacts would be limited to short term restrictions and/or closures with alternate access arrangements provided.

The management of property access would be considered during detailed design and as part of the staging plan.

Commercial and private property access roads would be reinstated and/or relocated as required. Private accesses include a residential access south off Muscle Creek Road and a farm access culvert under the proposed bypass. Commercial access includes a relocated access to the MCC substation off Coal Road. Ausgrid access tracks would be relocated to maintain access to assets and for fire safety.

The sensitivity of receptors to property access changes is considered to be moderate. Given that the magnitude of change is considered to be low, the socio-economic significance of this impact would be moderate-low.

Public and active transport connectivity

The proposal is not expected to change any public transport services or routes. All existing bus services would be maintained during construction, with potential for minor delays to bus services due to construction speed limits and an increase in heavy vehicle movements using the nominated haulage routes.

Construction activities within or adjacent to the Main North railway line corridor would be undertaken during rail possessions, thereby limiting impact to train services. Given the low number of public transport services which could potentially be impacted by the proposal, the socio-economic impact is considered to be negligible.

There are no formal pedestrian or cycle paths along the bypass route. Existing paths would be maintained during the construction period. Therefore, impacts to active transport connectivity are considered negligible.

Table 6-59: Summary of significance assessment for access and connectivity during construction

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Access to properties	Low	Moderate	Moderate-low
Public and active transport connectivity	Negligible	Negligible	Negligible

Impacts to community values

A summary of the assessment of impacts to community values during the construction of the proposal is provided in Table 6-60.

Table 6-60: Assessment of impacts to community values

Value	Assessment
Economic Prosperity	<p>The bypass is expected to support business opportunities during the construction period. Existing businesses along the New England Highway would be able to continue to operate</p> <p>Local benefits are expected to flow from construction worker expenditure to businesses in Muswellbrook town centre and neighbouring areas. Potential delays during construction are not expected to impact turnover as existing traffic arrangements would continue during construction</p>
Social Equity and Inclusion	<p>The proposal is generally located outside of the township of Muswellbrook and so is unlikely to directly impact the ability of the community to be creative, vibrant, inclusive, safe and healthy. The main amenity impacts are expected to arise from noise and visual effects</p> <p>Access to existing community infrastructure such as educational facilities, health services and places of worship, which are fundamental to creating and maintaining a sense of community cohesion and wellbeing, would be maintained during construction</p>
Environmental Sustainability	<p>Sustainability initiatives have been embedded in project planning and design and would be further considered in detailed design and procurement. Sustainability initiatives would address waste and materials, biodiversity conservation, carbon and energy management, climate change resilience, water efficiency, pollution control, supply chain amongst a range of other initiatives</p> <p>Sustainability and climate change are addressed in Section 6.13 of the REF</p>
Cultural Vitality	<p>Non-Aboriginal Heritage</p> <p>As discussed in Section 6.8, the proposal is not expected to have any direct impact on heritage items</p> <p>Aboriginal Heritage</p> <p>As discussed in Section 6.7, the cultural values and heritage assessments identified 12 Aboriginal archaeological sites</p> <p>Two sites would be subject to salvage with all sites subject to surface collection of artefacts. Two cultural sites at Sandy Creek would be directly impacted. Mitigation measures are outlined in Section 6.7</p>
Community Infrastructure	<p>Potential impacts would be limited to indirect amenity impacts</p>
Community Leadership	<p>Transport engaged in early consultation with the community throughout the preferred option selection process and continues to keep the community and stakeholders informed and proactively consulted throughout the development of the proposal. The REF would also be on public display and invitations would be sent to the community to comment on the Muswellbrook Bypass</p>

Overall, the magnitude of impact upon community values and aspirations is deemed to be low, given that potential impacts that would conflict with the values above would be temporary and mitigation measures would be implemented to manage these impacts. The sensitivity of the community to these matters is considered to be moderate due to the potential changes to amenity, traffic and access, heritage impacts and economic impacts. The overall socio-economic significance is moderate-low.

Business impacts

The proposal has the potential to impact local businesses as a result of temporary increases in travel times and impacts to local amenity.

Construction worker expenditure during the three-year construction period would benefit local services such as cafes and takeaways, service stations, trades and services suppliers and potentially some accommodation providers.

Construction staging would minimise impacts on the road network. Temporary changes to speed limits would be limited to outside of the town centre.

Property access would be maintained as far as practicable throughout construction including access to MCC, Muswellbrook Waste Management facility and for maintenance and other purposes along the Main North railway line. Heavy vehicles would only access construction sites from approved heavy vehicle routes.

Given the majority of the construction works would be carried out offline and that existing traffic arrangements would be for the most part maintained, the magnitude and sensitivity of impacts to travel time for deliveries and employees travelling to work is considered to be negligible. Similarly as maintenance of property access would be a key focus of construction management, there would be negligible socio economic impacts to property owners. The overall socio-economic significance is therefore considered to be negligible.

Many businesses such as accommodation providers, restaurants, cafes, and health and beauty businesses rely to an extent upon high levels of local amenity. As most businesses in the local area are located in the town of Muswellbrook and at some distance from construction works, there would be a minimal impact on the business environment.

The magnitude of construction activity on amenity for business is considered to be low given the temporary nature of impacts, the proximity of construction works to only two businesses and as these businesses are located near a heavy rail line where rail movements contribute to the existing noise environment. The sensitivity of affected businesses is considered to be moderate, as these businesses would rely on a certain level of amenity to provide a particular customer experience. As a result, the socio-economic significance of construction activity on the amenity for businesses is considered to be moderate - low. The significance assessment for these impacts is summarised in Table 6-61 and is discussed in detail in section 6.5 of Appendix B.

Table 6-61: Summary of significance assessment for business impacts during construction

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Access and travel time	Negligible	Negligible	Negligible
Business amenity	Low	Moderate	Moderate-low

Agricultural sector impacts

Where the proposal requires acquisition of agricultural land, it has the potential to affect agricultural businesses. The productivity of agricultural businesses could be affected by the following:

- Directed loss of productive land
- Internal access changes between parts of a property
- Changes to the sizes and shape of paddocks.

Under the Muswellbrook LEP, land use for agricultural activities is zoned RU1 Primary Production. Table 6-62 shows the extent of RU1 land to be acquired, the total area of that rural zone within the Muswellbrook LGA and the percentage of rural land in the LGA to be acquired by the proposal.

Table 6-62: Agricultural land to be acquired by the proposal

Land Zone	Area within the proposed road corridor (hectares)	Area within Muswellbrook LGA (hectares)	Percentage acquired by the proposal
RU1 Primary Production	31.2	134669.0	0.02 %

The magnitude of impacts to the agricultural sector within Muswellbrook would be low. One property used for agricultural purposes would be fragmented.

One property, an agricultural business, at the northern interchange would be affected by both total and partial acquisition. However, this is not expected to impact the viability of the operation to a great extent as the area to be acquired (whole and partial) represents in the order of seven per cent of the agricultural operation.

The land to be acquired is at the margin of a much larger dairy farm and as a consequence the impact to farming practices is considered to be moderate.

Overall, the magnitude of impact to agricultural operations is considered to be low. The sensitivity to change is also low given the ability to adapt farm practices to change following partial acquisition, the restoration of land leased for construction compounds and laydown areas following construction and well managed mitigation during construction. On this basis, the socio-economic significance of the Muswellbrook bypass on the regions agricultural sector is considered to be low.

Economic impacts

The economic benefit of construction is multi-dimensional, including:

- Increased expenditure at local and regional businesses by construction workers
- Direct employment of around 120 workers in peak periods through on-site construction activities
- Direct expenditure associated with on-site construction activities
- Indirect employment and expenditure through the provision of goods and services required for construction.

Operation

Property

Land leased for construction compounds and laydown areas would be restored following the construction period and would be available for future agricultural or other use. As a result, the socio-economic significance of impact on land use is considered to be low.

The full or partial acquisition of land may result in changes to the lives of those affected giving rise to a sense of anxiety or uncertainty, a loss of amenity and financial costs. Acquisition has the potential to affect people with a deep connection to their property, which may have been in the family for generations. In some instances, it may be difficult to find another property with equivalent facilities and amenity to that being acquired. Given that only one property would be acquired and the low number of partial acquisitions, the overall magnitude of the socio-economic impact of property acquisition is considered to be low. The overall sensitivity of affected property owners to full and partial acquisition is considered to be moderate given the emotional stress property acquisition may cause to some individuals. On this basis the overall

socio-economic significance of property acquisition on community wellbeing associated with the proposal would be moderate-low.

The significance assessment for these impacts is summarised in Table 6-63 and is discussed in detail in section 7.1 of Appendix B.

Table 6-63: Summary of significance assessment for property acquisition impacts

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Land use	Low	Low	Low
Community wellbeing	Low	Moderate	Moderate-low

Amenity

Operation of the proposal may impact the local amenity of the area. This would primarily relate to amenity impacts from road traffic noise, changed traffic patterns, change in air quality and visual impacts where views of the pastoral and wider landscape may be obstructed by the road infrastructure. These potential impacts have been addressed in this REF as follows:

- Noise and vibration (refer to Section 6.6) - there would be increases in road traffic noise at residential receivers and one childcare centre located in proximity to the bypass, on Muscle Creek Road, Woodland Ridge Road, Coal Road, Lonhro Place, Aberdeen Street, Burtons Lane and New England Highway. A decrease in heavy traffic volumes through town would provide a corresponding reduction in traffic noise levels with amenity benefits.
- Air quality (refer to Section 6.9) - once operational the proposal is unlikely to impact on air quality
- Landscape character and visual amenity (refer to Section 6.10) - impacts to visual amenity are generally considered to be high-moderate particularly at its northern extremity given the proposal would result in a long-term visual impact that would impact a number of residential receivers and road users.

Amenity impacts would be appropriately managed with the relevant safeguards provided in each section above. The significance assessment for these impacts is summarised in Table 6-64 and is discussed in detail in section 7.2 of Appendix B.

Table 6-64: Summary of significance assessment for amenity impacts

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Noise and vibration	Low	Moderate	Moderate-low
Air quality	Low	Low	Low
Visual amenity	High (at northern connection and Muscle Creek Road otherwise moderate /low)	Moderate or low (High at Muscle Creek Road)	High (at Muscle Creek Road) and high to moderate (at the northern connection) otherwise the rating is moderate/low)

Access and connectivity

All properties affected by changed access arrangements as a result of the proposal would be provided with restored or new permanent access arrangements.

The proposal is forecast to improve travel times, reduce congestion, reduce travel costs and reduce traffic-related mental and physical health impacts for both motorists and residents living near major arterial roads in the area such as Maitland Street and New England Highway/Bridge Street. The reduction in traffic volumes on key roads with the proposal is expected to improve the reliability of bus services and access to public transport (i.e. train station). Similarly, the proposal would cut journey times, improve driver safety and boost freight productivity by providing free flow conditions on the bypass.

Impacts to parking availability, public transport and active transport connectivity are considered negligible. The reduction of traffic along the New England Highway/Bridge Street through Muswellbrook could improve traffic conditions for cyclists, allowing this section of the New England Highway/Bridge Street to form part of the on-road cycle route. It would also reduce the potential for pedestrian /vehicular conflict providing a safer and more pleasant walking environment along this main thoroughfare through Muswellbrook town centre.

The significance assessment for these impacts is summarised in Table 6-65 and is discussed in detail in section 7.2 of Appendix B.

Table 6-65: Summary of significance assessment for access and connectivity

Impact	Magnitude of impact	Sensitivity of receivers	Significance
Access to properties	Negligible	Negligible	Negligible
Traffic and transport	Negligible	Negligible	Negligible
Public and active transport connectivity	Negligible	Negligible	Negligible

Social infrastructure

Shelley's Family Day Care Centre and The Kingdom Hall of Jehovah's Witness are located within 400 metres of the proposed road corridor.

The operational impacts at these locations include noise exceedances and visual impacts from the bypass. The significance assessment for these impacts is summarised in Table 6-66:.

Table 6-66: Summary of significance assessment for social infrastructure

Social infrastructure	Magnitude of impact	Sensitivity of receivers	Significance
Shelley's Family Day Care Centre	Moderate	High	High-moderate
The Kingdom Hall of Jehovah's Witness	Low	Moderate	Moderate-low

Shelley's Family Day Care Centre is one of 24 properties at which operational noise exceeds the cumulative noise limit (refer Section 6.6). It is therefore eligible for at-receiver mitigation measures including architectural treatments. Without acoustic treatment, the socio-economic significance of noise impacts would be high-moderate. Should acoustic treatment proceed at this property, the magnitude and sensitivity of the operational impact on Shelley's Family Day Care Centre is reduced to low and the socio-economic impact is low.

Business impacts

Studies of other highway bypass impacts in NSW identify that the most affected businesses are those directly serving the needs of the motorists. These include service stations, food and beverage outlets, and accommodation establishments (to a lesser extent).

Half of respondents surveyed during the stopper surveys indicated they would be visiting food/beverage businesses during their stop in Muswellbrook. Nineteen per cent said they would buy fuel at a service

station during the stop and thirty-seven per cent of stoppers said they would not visit any businesses or services in Muswellbrook.

During the business impact surveys conducted for the proposal, 47 per cent of businesses said they were highly dependent on passing trade (visibility to passing traffic or pedestrians), while 28 per cent said their business was moderately dependent on passing trade. These businesses mostly consisted of food/beverage places, hotels/motels and service stations.

Business owners may experience a level of uncertainty about the impact the proposal would have on through traffic and trade. While some businesses would experience a decrease in turnover and reduced employment, at least in the short term, evidence from bypassed towns indicates that some highway dependent businesses have been able to reposition themselves and become sustainable in the longer term. Respondents to the stopper survey were asked if they would stop in Muswellbrook once the bypass was operational. Over 60 per cent advised they would continue to stop, with nine per cent unsure or it would depend on the journey. Two thirds of stoppers noted this rate was not different from the rate at which they currently stop.

The magnitude of impacts on passing trade are considered to be moderate on the balance of potential short-term turnover impacts, the need to make business adjustments and potential benefits associated with improvements to amenity. The sensitivity of businesses to impacts to passing trade is considered to be moderate as nearly half of businesses surveyed said they are highly dependent on passing trade. On this basis the socio-economic significance of this impact would be moderate.

In recognition of the long running discussion with regard to impacts to bypassed towns, Transport has launched a 'Bypass Town signage initiative' in partnership with Destination NSW, which aims to encourage travellers to stop and visit bypassed towns in rural and regional NSW. The signs are a first for NSW and feature colour images depicting the features of bypassed towns. The Bypassed Town signs would form part of the NSW wayfinding signage and would be included as part of the directional signage strategy for future bypass proposals, including Muswellbrook.

Improved local amenity in the Muswellbrook township is likely to result in positive business impacts through the support of new business development opportunities which may encourage motorists to continue to stop in Muswellbrook. The reduction of heavy vehicles from the town centre could enable businesses to vary how they function and attract customers, for example by providing outdoor dining. In addition, removal of heavy vehicles from the streetscape would afford an opportunity for Muswellbrook Shire Council to pursue initiatives for a revitalised town centre outlined in Muswellbrook Town Centre Strategy.

Economic impacts

As outlined in Section 6.5, the New England Highway through the Muswellbrook town centre is a major transport artery for freight travelling between the Port of Newcastle and the Hunter Valley and has supported the significant growth in transportation for coal and agricultural industries and employment in NSW.

One objective of the proposal, in alignment with strategic planning at a national and state level, is to reduce the impediments caused by heavy vehicle traffic along the inland Sydney to Brisbane corridor of the National Land Transport Network (New England Highway).

On year of opening, with the removal of up to 4800 vehicles per day (including about 1900 heavy vehicles) through the Muswellbrook town centre, the bypass would have significant benefits to freight movement and traffic movements in and through Muswellbrook. Improvements in the efficiency and reliability of these transport networks would likely result in increased productivity, reduced costs and broader economic benefits for the freight industry.

The NSW Government is committed to delivering an efficient and effective transport system which reduces the time it takes to travel across NSW. The proposal would also improve transport connections and lower vehicle operating costs between employment and tourist destinations. It would enable increased average

speeds for freight and passenger movements on the New England Highway, with the proposed bypass predicted to save between 5.3 and 7.1 minutes during peak travel times by 2044.

6.12.4 Safeguards and management measures

Impact	Environmental safeguards	Responsibility	Timing	Reference
Community information	<p>A Communication Plan (CP) will be prepared and implemented as part of the CEMP to ensure provision of timely and accurate information to the community during construction. The CP will include (as a minimum):</p> <ul style="list-style-type: none"> • Mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions • Contact name and number for complaints • How the proposal webpage will be maintained for the duration of the proposal. • Minimum consultation activities to be carried out • A complaints handling procedure 	Construction contractor	Pre-construction and construction	Additional safeguard
Business impacts	<p>Transport will develop a signage strategy for the entrances to Muswellbrook, in consultation with Muswellbrook Shire Council to encourage motorists to visit Muswellbrook. This will include signage showing:</p> <ul style="list-style-type: none"> • The travel distances and estimated times for travelling routes via the bypass compared to travelling via the Muswellbrook town centre • Services and facilities available within the Muswellbrook township • Any visitor attractions within the Muswellbrook township 	Transport	Detailed design and operation	Additional safeguard
Business impacts	<p>Transport will engage with Muswellbrook Shire Council and local businesses regarding the progress of the proposal to allow businesses time to prepare for</p>	Transport	Detailed design and construction	Additional safeguard

Impact	Environmental safeguards	Responsibility	Timing	Reference
	changed traffic conditions through the town			
Employment	Construction workers will be sourced from the local area where feasible	Contractor	Construction	Additional safeguard
Business impacts	Access to businesses will be maintained throughout the proposal	Contractor	Construction	Additional safeguard