

# Ellerton Drive Extension

**Social Impact Assessment** 

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# Executive summary

This report provides a Social Impact Assessment (SIA) of the proposed Ellerton Drive Extension (EDE).

The proposal first appeared as a potential route on the Queanbeyan Structure Plan of 1974. It was marked on the Queanbeyan LEP map in 1991, from which time Queanbeyan City Council (QCC) commenced acquisition of property for the road. In 2009, the EDE was endorsed by QCC as part of a package of transport infrastructure improvements to service forecast population growth in the local government area, and from 2011 concept and preliminary design of the EDE was progressed. In June 2014 grant funding for the construction of the Ellerton Drive Extension from both the Australian Commonwealth and NSW State Governments was announced.

The proposal aims to reduce heavy vehicle movements and traffic congestion in the Queanbeyan city centre and provide relief to Cooma Street, Monaro Street, Queens Bridge and various CBD roads from increases in traffic arising from population growth in the south of the LGA.

The EDE would provide a two-lane single carriageway with climbing lanes. It would also provide a crossing of the Queanbeyan River which would provide access and connectivity for Queanbeyan in excess of the 1 in 100 year flood. Other elements of the design include cycle and pedestrian pathways throughout the length of the EDE, additional access for Fairlane Estate residents and emergency egress for Greenleigh residents, as well as fauna underpasses and noise remediation measures.

The SIA has been guided by NSW Roads and Maritime *Environmental Impact Assessment Practice Note – Socio-economic impact assessment* (EIA-N05)(Roads and Maritime Services, 2013). The report has taken into account findings of investigations into the existing environment, outcomes of other studies relevant to the project, differing views of community members and key stakeholders, and experience from other transport projects. The SIA recommends mitigation measures that might enhance the proposal's positive benefits and avoid, manage or mitigate its negative social impacts.

Community and stakeholder consultation has been an integral part of the project planning since 2009 and is ongoing. As part of preparing this SIA, a qualitative consultation was carried out where a range of voices within the community representing individual residents as well as stakeholder groups both for and opposed to the EDE, were interviewed. A further two groups provided written feedback on the SIA. Their views, as well as feedback expressed in previous consultation undertaken for the EDE, have been taken into account in this report.

Potential benefits during construction include job creation and anticipated flow-on effects to local businesses in the supply of materials, goods and services for the EDE and to the contractors building the road. Businesses in the CBD, industrial areas and local shopping districts in close proximity to either end of the EDE are expected to benefit from increased patronage during the construction period.

Construction of the EDE is expected to have negative impacts on the amenity of residents living in close proximity to the road footprint as a result of increased noise and vibration, dust, temporary changes in access arrangements, and interruption to visual amenity. Mitigation measures are recommended to reduce these impacts.

Operation of the EDE is expected to generate significant benefits for Cooma Street, the Queanbeyan CBD and adjoining streets as heavy vehicle movements are diverted away from these areas. The expected improvement in amenity of the CBD, in particular, is expected to provide the platform needed to revitalise the town centre by creating the preconditions for new business to establish. The benefits to Queanbeyan business, as well as to the wider community that would be attracted to the CBD, would be significant. Benefits would also be expected to flow to community uses, such as schools, in improved safety and amenity.

The EDE would have negative impacts on the amenity of residents living in close proximity to the road, mainly through increased noise and impacts on views. The proposed bridge over the Queanbeyan River would introduce a major new element into the landscape and the roadway would be visible to some residents in Fairlane Estate and Greenleigh. Mitigation measures are recommended to reduce these impacts, where possible.

On balance, the assessment has found that the proposed development would result in a range of social and economic benefits that would outweigh negative impacts that could not be mitigated.

#### 1 INTRODUCTION

Queanbeyan City Council (QCC), in partnership with the Australian and New South Wales Governments, proposes to construct a two-lane single-carriageway sealed road as an extension to Ellerton Drive at East Queanbeyan, to Old Cooma Road and Edwin Land Parkway at Karabar, in Queanbeyan.

# 1.1 Project history

The Ellerton Drive Extension (EDE) was first shown as a potential route on the Queanbeyan Structure Plan of 1974. From 1991, it was included on the Queanbeyan LEP map and again marked on the Queanbeyan Structure Plan of 1994. In the 1990s, QCC commenced acquisition of properties in the road corridor; Council currently owns 75% of the road corridor and is currently finalising negotiations to take full ownership of the road corridor.

In 2009, the EDE was endorsed by QCC as part of a package of transport infrastructure improvements to service forecasted growth in Queanbeyan Local Government Area (LGA), in particular that associated with the future Googong and Tralee urban areas.

In September 2011, the NSW Government announced the first instalment of a \$4 million package to allow design and environmental studies on the EDE, further stages of Old Cooma Road, various intersection improvements, as well as seed funding for the Dunns Creek Road corridor identification and related studies. In 2014, a further \$50 million in funding was announced by the Australian Commonwealth and NSW State Governments towards the construction of the EDE.

Since 2011, QCC had progressed the preferred 'traffic solution' options through concept and preliminary design, with input from relevant specialist studies relating to the EDE. Since 2011, there have been a number of occasions on which community comment and input into the design and form of the EDE could be made.

# 1.2 Project overview

The 4.6 km EDE provides an alternative route, capable of accommodating B-Double movements, around the Queanbeyan Central Business District (CBD) and connects east and west Queanbeyan to new population growth areas in the south.

The objective of the EDE is to reduce heavy vehicle movements and traffic congestion in the Queanbeyan city centre by providing an alternative route for traffic travelling on the north/south route through Queanbeyan. It would retain a minimum Level of Service (LOS) D¹ and provide relief to Cooma Street, Monaro Street, Queens Bridge and various CBD roads from the increase in traffic passing through the entire Queanbeyan area due to the growth in development throughout Queanbeyan. The EDE is intended to cater for future growth mainly arising from increased

LOS (D): approaching unstable flow. Speeds slightly decrease as traffic volume slightly increase. Freedom to manoeuvre within the traffic stream is much more limited and driver comfort levels decrease. Vehicles are spaced about 50m or 8 car lengths. Minor incidents are expected to create delays. Examples are a busy shopping corridor in the middle of a weekday, or a functional urban highway during commuting hours. It is a common goal for urban streets during peak hours. Technically it involves between 585 and 1105 vehicles per hour, average delay of 25 seconds at a priority intersection, and average 35 seconds delay at a signal/rotary intersection.

residential development within Queanbeyan and would improve travel times, travel experience and the liveability of the city.<sup>2</sup>

The EDE would involve the construction of climbing lanes in areas with steep grades, a bridge over the Queanbeyan River and supporting infrastructure including shared paths, on-road cycle provision, lighting, stormwater drains and fauna under-passes. There would be 3.9 km of new road construction with 700 metres of the existing Ellerton Drive to be upgraded. The width of the road formation is up to 80 metres. Key features of the Proposal include<sup>3</sup>:

- Two-lane single carriageway design with climbing lanes
- Bridge crossing over Queanbeyan River and Barracks Flat Drive: this would provide in excess
  of 1:100 year flood access and connectivity for Queanbeyan. The new bridge would be
  concrete and approximately 184 m long and 22 m above the river
- Shared cyclist and pedestrian pathway
- Provision for on-road cyclists
- Additional access points for Fairlane Estate
- Emergency egress for Greenleigh Estate at Lonergan Drive and the East Queanbeyan reservoir
- Stormwater drainage system, including pavement surface drainage and culverts
- Two fauna under-passes
- Potential for pedestrian under-passes at Jumping Creek Estate
- Noise mitigation measures
- Edwin Land Parkway Intersection upgrade.

Figure 1 shows the location of the Proposal.

Roads and Maritime Services, 2014b, quoted in SMEC *Ellerton Drive Extension Review of Environmental Factors* November 2015, page 1.

A detailed description of the project's components is at Section 3.1 of the REF.



Figure 1: Location of the Proposal (SMEC 2015)

The footprint of proposed works is shown at Figures 2 and 3.

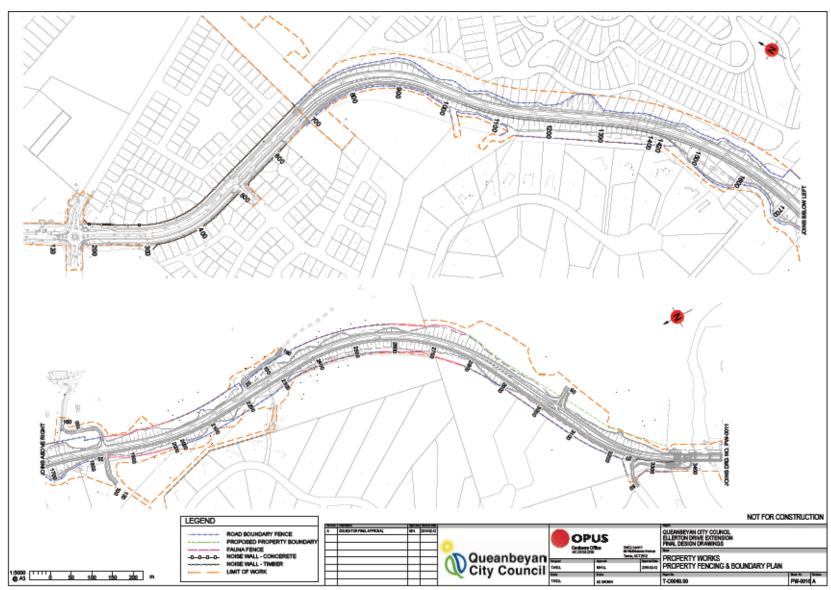


Figure 2: Footprint of proposed works, Northern Section (Opus 2015)

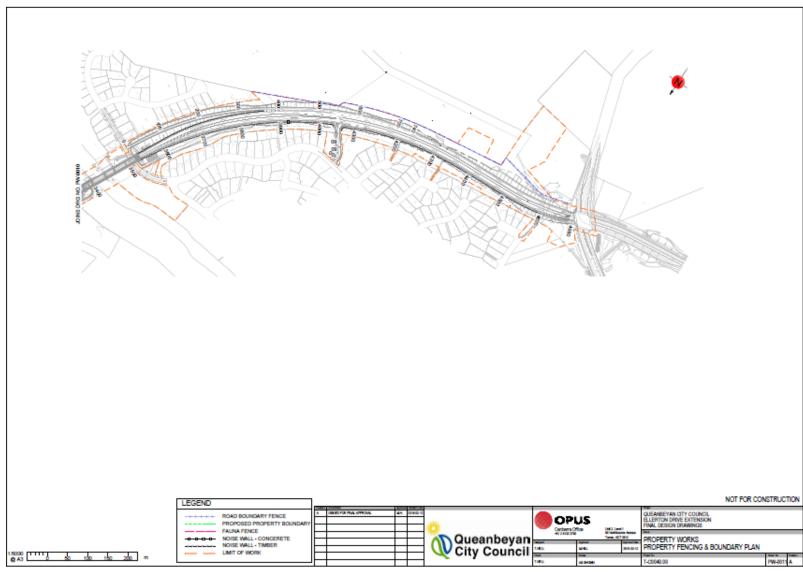


Figure 3: Footprint of proposed works, Southern Section (Opus 2015)

# 1.3 Report purpose

The purpose of this report is to provide a social impact assessment (SIA) of the proposal.

Socio-economic impacts have the potential to alter the way businesses, communities and individuals work, live and play on a daily basis. They can relate to access, community values, community cohesion, amenity, health and wellbeing, property, income, employment and environment.

Socio-economic impact assessment involves identifying and evaluating changes to or impacts on communities, business and industry that are likely to occur as a result of a proposed development, in order to mitigate or manage impacts and maximise benefits.<sup>4</sup> Impacts may be:

- Positive or negative
- · Direct or indirect
- Temporary or permanent
- Occurring during the construction or operational phase of the project
- Spatially concentrated or dispersed
- Cumulative.

# 1.4 Assessment methodology

The SIA is guided by Roads and Maritime's *Environment Impact Assessment Practice Note – Socio Economic Assessment* (EIA-NO5). The report aims to provide a balanced assessment of the project's benefits and impacts, taking into account:

- Findings from investigations into the existing environment e.g. regional and local context, socio-economic characteristics
- Outcomes of other studies relevant to the project e.g. traffic and transport, heritage, noise, air quality, visual assessment
- Differing views of community members and key stakeholders, including those expressed as part of broader consultation carried out for the EDE to date
- Experience from other transport projects.

#### The report describes:

- An overview of social policy relevant to the EDE
- The existing socio-economic environment
- Findings from consultation, including that carried out prior to the commissioning of the SIA
- Impact assessment and mitigation measures.

# 1.5 Description of the study area

Direct impacts are likely to be experienced in areas closest to the project footprint. However, given the nature and scale of the project, indirect impacts are likely to be felt in a wider area including surrounding suburbs, newly developing areas and the Queanbeyan CBD.

<sup>4</sup> RMS Practice Note Socio-economic Assessment EIA-N05

#### 2 OVERVIEW OF SOCIAL POLICY

The relevant policy framework is discussed below.

#### Environmental Planning and Assessment Act 1979 2.1

As an activity, the EDE is being dealt with under Part 5 of the EP & A Act. There is no formal planning requirement to prepare a SIA for this project.

Clause 228 of the EP&A Regulation lists the factors to be taken into account when considering the likely impact of an activity on the environment. Subclause (2)(a) refers to 'any environmental impact on a community.' In this context, 'environment' is taken to include 'all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.'

A Review of Environmental Factors (REF) has been developed for the proposal to address the requirements of Clause 228 of the EP&A Regulation including social impact.

#### NSW Long Term Transport Master Plan 2012 (Transport for 2.2 NSW)

The Master Plan notes that transport plays a vital social function in regional NSW, connecting communities with services, education opportunities, jobs and recreational activities. It provides people with good access to each other, their communities and key services – especially given the dispersed nature of townships across regional NSW and the development of peninsula communities along the coast. To achieve the objective of supporting regional development, communities need good transport services within regional towns and cities, between those towns and cities and between regional areas and Sydney.<sup>5</sup>

The Master Plan also notes that good access to transport can help to address social exclusion amongst people with disability, those on low incomes and both younger and older people who are more likely to have some limits on their mobility.<sup>6</sup>

#### Queanbeyan Tomorrow Community Vision 2021 (QCC 2012) 2.3

The Community Vision contains a number of key priority areas for the City of Queanbeyan:

- Image and influence
- Business and industry
- Culture and leisure
- Infrastructure, access and transport
- The community
- The environment.

For each of these areas, the Community Vision has a number of key strategies. For infrastructure, access and transport, the goal is that

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Queanbeyan continues to grow in a managed and sustainable way with well developed, maintained and affordable infrastructure. The CBD is pedestrian friendly with reduced, slowing traffic that creates less conflict between vehicles and pedestrians. A Bypass (which includes the Ellerton Drive Extension) takes heavy vehicles out of the CBD, with traffic flowing easily between suburbs and the CBD, and will assist traffic flow through Queanbeyan from the ACT to the coast. A range of affordable public transport services meets peak and off-peak demand, with innovative new options supporting the traditional services.<sup>7</sup>

The Community Vision acknowledges the reality of dependence on personal cars for transport, and consequent heavy use during peak times, as well as concerns about adequacy, timing and current use of public transport systems. It recognises, however, that there is strong community support to divert heavy traffic out of the CBD, reclaiming that space for pedestrian and light vehicle access and providing an opportunity to reinvigorate the city centre. It also accepts the need to consider transport in the wider sense i.e. giving more emphasis to walking and cycling for local trips.

Targeted social outcomes for infrastructure, access and transport include:

- Ready access to a wide range of transport options to access a range of goods and services available in the local area
- Greater sense of community through redesigned and more dynamic CBD with less traffic
- Public Transport Strategy
- All members of the community to have access to facilities, services and attractions via safe, well designed and integrated public transport, motor vehicle, cycling and pedestrian infrastructure.

The targeted economic outcome for infrastructure, access and transport is that people stopping in the CBD will increase and result in economic benefits.

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#### 3 EXISTING SOCIO-ECONOMIC ENVIRONMENT

The socio-economic baseline content has been informed by ABS Census data characteristics, local community structure and patterns, relevant business and economic data, specialist studies and background data relevant to the project, and outcomes of consultation with key stakeholders and interest groups.

# 3.1 Regional and local context

Queanbeyan LGA is located in New South Wales, about 12 km from the Canberra CBD and 250 km south-west of the Sydney CBD. It is bounded by the Australian Capital Territory in the north and west, and the Palerang Council area in the east and south – see Figure 4.

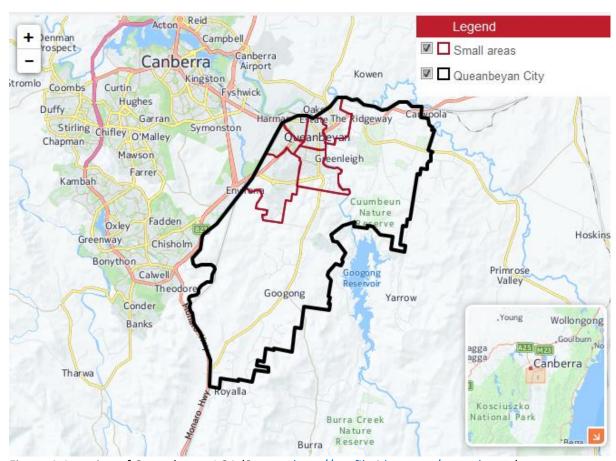


Figure 4: Location of Queanbeyan LGA (Source: <a href="http://profile.id.com.au/queanbeyan">http://profile.id.com.au/queanbeyan</a>)

The origins of the City of Queanbeyan can be traced back to 1820 when three explorers stumbled upon the confluence of the Molonglo and Queanbeyan Rivers, deeming it a suitable stop for travellers crossing into the Monaro. Four years later, stock farmers started to settle in the area and by 1835 a post office and police station had been built. In 1838, Queanbeyan was proclaimed a township with a population of about 50 people.

Over the next five decades, Queanbeyan prospered as the centre of a primary-producing area. It was proclaimed a municipality in 1885 with an area of 5,700 acres and over 200 rateable properties under its jurisdiction. The town's resident population was supported by a range of civic, commercial and industrial uses, including schools, banks, churches, hospital, flourmills and several public houses, which also serviced the needs of the surrounding farming community.

Proximity to the Australian Capital Territory and the city of Canberra, in particular, was destined to have significant ramifications for Queanbeyan particularly after the Second World War when Canberra's population growth started to accelerate. The latter quickly outpaced Queanbeyan's growth; when Queanbeyan achieved City status in 1972, its population was in the order of 15,000, one tenth that of Canberra's population at the time.

In 2004, an additional 122 square kilometres were added to Queanbeyan Council's borders, bringing its jurisdiction to a total of 173 square kilometres. These largely rural lands, to the south and east of Queanbeyan City, were part of the former Yarrowlumla Shire.

By 2011, Canberra's population had reached 358,000 compared to Queanbeyan's 40,000. Due to its size and function as the nation's capital, Canberra's industries and activities serve both the city and a wider area that encompasses Queanbeyan and south-eastern New South Wales. The interdependence between Canberra and Queanbeyan is facilitated by a number of road links:

- The Yass Road/Piallago Avenue connection to the airport and newly developing business parks in east Canberra
- The Monaro Highway and Canberra Avenue connect to the established industrial and commercial areas of southern and central Canberra.

A further consequence of this proximity is that part of Canberra's workforce is drawn from across the border. SGS Economics estimates that at least one in every ten Canberra workers lives outside the ACT and that more than two-thirds of Queanbeyan residents travel to the ACT for work.<sup>8</sup>

The route of the EDE extends from the end of the existing Ellerton Drive in the eastern part of Queanbeyan and travels south past Greenleigh and Fairlane/Karabar, with a crossing over the Queanbeyan River, to join Old Cooma Road where it intersects with Edwin Land Parkway. The terrain ranges from gently sloping land subject to extensive clearance, through to relatively untouched bush extending up steep hillsides. The route passes through the existing built-up area of Queanbeyan East from where it travels south, skirting the rural residential suburb of Greenleigh to the west through undulating to steep sections. To the east is a combination of bush, including the Cuumbuen Nature Reserve, and open rural grassland. The route then crosses the Queanbeyan River west of the intersection between Barracks Flat and River Drives past existing residential development to continue, through sparsely populated bushland, towards its endpoint at the intersection of Old Cooma Road and Edwin Land Parkway.

#### 3.2 Socio-economic characteristics

The study area has been profiled by examining data for Level 1 Statistical Areas (SA1) that border or intersect the route alignment: 1101002, 1101003, 1101004, 1101005, 1101009, 1100812, 1100813 and 1100814 - see Figure 5. The data is for the 2011 Census, unless otherwise stated, by place of enumeration. The geographical areas of comparison are the study area, Queanbeyan LGA, Australian Capital Territory (ACT) and NSW.

http://www.sgsep.com.au/insights/insights-bulletin/canberra-insights-bulletin-2015/capital-region-growth-canberra-leaking-over-the-border/ viewed on 11 January 2016.

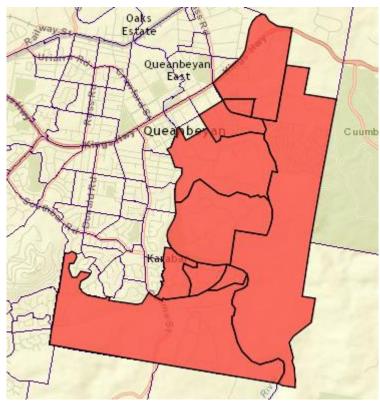


Figure 5: Relevant Level 1 Statistical Areas (Source: ABS, 2011)

It is standard practice under the Practice Note to provide information on a number of descriptors such as the study area demography, future development, travel behaviour, business and industry, community values, social infrastructure, local amenity, etc. These are discussed in the following sections.

#### 3.2.1 Population

In 2011, the population of the study area was 3,193 compared with 38,200 in Queanbeyan LGA, 360,549 in the ACT and 6,958,812 in NSW.

The estimated residential population of Queanbeyan LGA at 30 June, 2014, was 40,858 persons. <sup>9</sup> The LGA's population is projected to increase by 1.9% annually to 58,500 persons in 2031. <sup>10</sup> For discussion on where this growth is likely to occur, refer to Section 3.2.4 below.

The proportion of population aged 14 and under in the study area (19.33%) was comparable with that of NSW (19.21%), higher than that of the ACT (17.17.37%) and slightly lower than that of Queanbeyan LGA (20.27%). The proportion of population aged 65 and over in the study area (8.49%) was slightly lower than the figure for Queanbeyan LGA (9.55%) and the ACT (10.3%), but considerably lower than that of NSW (14.63%).

The proportion of Indigenous population in the study area (2.38%) was lower than both that of Queanbeyan LGA (3%) and NSW (2.48%), but higher than that of the ACT (1.45%). The study area had a lower incidence of persons born overseas (16.69%) compared with Queanbeyan LGA (18.83%),

<sup>9</sup> ABS, Regional Population Growth, Australia 3218.0, 31 March 2015.

NSW Planning and Environment, State and Local Government Area Population Projections, 2014.

and considerably lower than that of NSW (25.51%) and the ACT (23.93%). The study area also had a lower incidence (10.71%) of persons who spoke a language other than English at home compared with Queanbeyan LGA (14.41%), the ACT (17.96%) and, in particular, NSW (22.31%).

The study area had a considerably lower proportion of people needing assistance due to a disability (1.91%) compared with Queanbeyan LGA (3.6%), the ACT (3.3%) and NSW (4.85%).

#### 3.2.2 Families and housing

In 2011, the study area had 1,298 dwellings, compared with 16,091 in Queanbeyan LGA, 145,231 in the ACT and 2,864,531 in NSW. Of these:

- The study area had a significantly higher proportion (71.96%) of separate houses compared with Queanbeyan LGA (61.06%), the ACT (66.63%) and NSW (61.91%)
- The study area's proportion of medium density housing<sup>11</sup> (15.1%) was also higher than that in Queanbeyan LGA (14.08%), the ACT (13.54%) and considerably higher than that in NSW (9.69%)
- By contrast, the study area had a considerably lower proportion of high density housing<sup>12</sup>
  (4.93%) compared with Queanbeyan LGA (16.62%), the ACT (12.5%) and NSW (17.88%).

Average household size in the study area (2.46) was higher compared with that in Queanbeyan LGA (2.33), the ACT (2.36) and NSW (2.35).

Housing tenure was distributed as follows:

- The study area had a higher proportion of dwellings owned outright (27.68%) compared with Queanbeyan LGA (24.4%), but lower compared with NSW (31.94%) and comparable to that in the ACT (27.44%)
- There was a higher incidence of dwellings owned with a mortgage in the study area (45.3%) compared with the ACT (37.51%), Queanbeyan LGA (37.78%) and NSW (31.86%)
- The study area had a lower proportion of rented housing (21.78%) compared with Queanbeyan LGA (31.25%), the ACT (30.05%) and NSW (29.12%)
- Similarly, the study area's share of public housing (one percent) was lower than both that in Queanbeyan LGA (4.65%) and NSW (4.22%).

# 3.2.3 Socio-Economic Indexes for Areas (SEIFA)

Socio-Economic Indexes for Areas (SEIFA) is a product developed by the Australian Bureau of Statistics (ABS) that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Census.

Queanbeyan LGA had a score of 1051 for the index of Advantage/disadvantage, and was amongst the higher ranking areas in NSW. The study area contained a range of scores between 1033 and 1185 for this index, with most of these well above the LGA score, indicating a higher level of advantage in the study area.

#### 3.2.4 Current and future land releases

Semi-detached, row or terrace house, townhouse etc.

<sup>&</sup>lt;sup>12</sup> Flat, unit, apartment etc.

Queanbeyan Residential and Economic Strategy 2031 (the Strategy) was released in December 2008 following an inquiry into future residential land releases in the Queanbeyan LGA. QCC provided additional residential and employment land in recognition that the latter needed the residential land development to support it financially. The Strategy identified the need to accommodate 10,000 new dwellings and an additional 130 hectares of employment lands in Queanbeyan over the next 25 years.

Following the enquiry, the State Government required QCC to demonstrate that the traffic needs of the development areas and the rest of QCC LGA were adequately catered for in the Strategy. In 2009, QCC undertook the *Googong and Tralee Traffic Study (2031)* which demonstrated the need for the EDE.

In 2014, a review of this Strategy, which culminated in the *Combined Residential and Economic Strategy 2015-2031*, assessed the extent to which key changes and actions that had occurred in the interim had impacted on the supply of residential and employment lands in the LGA. This report also considers the potential for future land releases.

Since 2008, the following land releases have been rezoned:

- Some 6,200 dwelling at Googong, which straddles Old Cooma Road south of Karabar. Approximately 1000 lots have now been sold and approximately 500 homes constructed
- South Tralee: located on the south-western edge of Queanbeyan, this area will
  accommodate some 1,350 new homes, a village centre, and land for community, sporting
  and education facilities. The development of this land is likely to begin in the next 12
  months (subject to final approvals etc.) and continue to roll out to approx. 2031. No
  definitive timeframe at this stage although expected to begin within 5 years
- The Poplars: situated between Jerrabomberra and the Monaro Highway, this 160 ha site will accommodate retail and commercial activities, a business park, private recreation and environmental conservation. The employment potential of the site is in the order of 1,000 jobs. No definitive timeframe at this stage although expected to begin within 5 years
- Parts of Jumping Creek have been rezoned for residential development, with potential for approximately 250 lots. Other parts of this estate have been deferred and will be subject to a future investigation.

Future land releases in the pipeline include:

- About 25 ha of land at North Tralee, south of The Poplars, proposed to be rezoned for commercial and/or light industrial purposes. This is likely to be rezoned within the next six months and developed within the next five years
- Additional land at South Jerrabomberra which has capacity for 1,000 residential lots and other uses. This is likely to be rezoned within three to four months and development commencing within five years, continuing to 2031
- Land at Environa/Robin and Tralee which has potential for an additional 2000 dwellings. This land is within the Australian Noise Exposure Forecast (ANEF) 20 contour and is not identified to be developed under the recently endorsed *Residential and Economic Strategy* 2031.

As all these lands are located in the southern part of the LGA, transport access is a key consideration.

#### 3.2.5 Travel behaviour

Queanbeyan is a major regional centre that provides employment, education and health services to the Southern region of NSW. Proximity to Canberra and ongoing land release in the southern part of

Queanbeyan, will continue to influence travel patterns that radiate from and flow through Queanbeyan.

#### Demography

In 2011, there was a far lower proportion of households in the study area that had no vehicle (3.27%) compared with Queanbeyan LGA (6.3%), the ACT (6.43%) and NSW (10.16%). In respect of households with one vehicle, the study area had 25.63% of such households, followed by 33.74% in Queanbeyan LGA, 36.51% in NSW and 37.63% in the ACT. The proportion of households with two or more vehicles in the study area (65.91%) outstripped that in the ACT (55.94%), Queanbeyan LGA (53.41%) and NSW (46.49%). The relatively high vehicle ownership in the study area reflects its relative distance from retail, commercial, civic and community services, as well as its higher income status.

A higher proportion of the study area's population (93.72%) travelled to work by car as driver or passenger, compared with Queanbeyan LGA (91.96%), the ACT (82.66%) and NSW (78.13%). The incidence of travel to work by public transport<sup>13</sup> was similar in the study area (1.45%) and Queanbeyan LGA (1.55%), but significantly lower than that in the ACT (6.81%) and in NSW (12.62%). The incidence of population in the study area who walked or cycled to work (1.81%) was lower than that in Queanbeyan LGA (3.23%) and considerably lower than that in NSW (6%) and the ACT (7.83%).

Due to Queanbeyan's close proximity to Canberra there is a low containment rate of jobs and a high degree of cross-border commuting. In 2011, 62.3% of the workforce travelled to work outside Queanbeyan, while 23.8% worked in Queanbeyan.<sup>14</sup>

#### **Road Usage Patterns**

The main users of the road network are business, freight and private travel. Travel behaviour is dictated by the location of key activity centres in relation to where people live currently and is also influenced by the location of newly developing areas to the south of the city. A survey of 306 resident drivers living in the southern part of the LGA found that the Monaro Highway and Cooma Street (north of Southbar Road) were the most frequently used thoroughfares both throughout the day and during peak periods and that:

- Googong/Fernleigh Park residents relied more on Edwin Land Parkway and Lanyon Drive than other residents
- Burra/Little Burra residents relied more on Old Cooma Road, Cooma Street, Canberra Avenue, Southbar Road and Yass Road than other residents
- Mt Campbell/Royalla residents were above average users of the Monaro Highway and below average on most others. <sup>15</sup>

#### **Key Activity Centres and Links**

Key activity centres that generate regular trips include the Queanbeyan CBD, Queanbeyan industrial area centred on Yass Road, Canberra CBD, Fyshwick industrial area, and the business parks adjoining Canberra airport. The airport precinct, an eight-minute drive from the Queanbeyan CBD, functions as a hub for air travel and provides a diverse range of shopping opportunities (Costco, Ikea, Big W, etc.) and employment for about 7,000 workers. Schools also generate regular trips across Queanbeyan e.g. St Gregory's Primary School at Lowe Street, Karabar High School at Donald Road, Queanbeyan Public at Isabella Street, Queanbeyan South at Cameron Road, and Queanbeyan East at

Bus and train.

http://profile.id.com.au/queanbeyan/residents viewed on 25 February 2016.

<sup>&</sup>lt;sup>15</sup> Queanbeyan City Council *Traffic Survey* Micromex Research September 2015.

http://www.canberraairport.com.au/corporate/about/about/viewed on 13 January 2016.

Yass Road. As Jerrabomberra Public School can only take enrolments from within that suburb, traffic movements associated with the school are more localised.

Major road networks link these activity centres:

- The Monaro Highway and Canberra Avenue provide access from Queanbeyan to Fyshwick, Canberra CBD and the airport precinct
- Canberra Avenue/Monaro Street/Yass Road provide access from the ACT into the Queanbeyan CBD
- Bungendore Road/Yass Road/Piallago Avenue provide access from Queanbeyan to the Queanbeyan East industrial area and Canberra airport precinct
- Cooma Street is the main route that collects traffic from areas to the south of the Queanbeyan CBD with several schools and residential development taking access from or close to Cooma Street
- Edwin Land Parkway/Tompsitt Drive/Lanyon Drive provides alternate access from Queanbeyan's south and Jerrabomberra to Canberra Avenue and the Monaro Highway.

#### **CBD Traffic Issues**

There are two road crossings of the Queanbeyan River: the Morisset Street bridge and the Queens Bridge at Monaro Street. There is also a pedestrian footbridge near Isabella Street in East Queanbeyan. Personal, business and freight travel that uses Cooma Street to access the Queanbeyan industrial area and Canberra airport precinct must therefore pass through the CBD. This has the following implications:

- Increased travel times for those travelling to or through the CBD
- Increased traffic congestion and reduced amenity for businesses and residents in and around the CBD and along key collector roads such as Cooma Street
- Increased traffic congestion and road safety risks adjacent to schools close to the CBD
- Risk to the wider community and to property through flooding. During a 1:20 flood event, much of the CBD will be underwater and the town cut in two.

The above issues were flagged as problems by stakeholders who live close to the CBD, St Gregory's School – whose two campuses are located on the edge of the CBD – and the Queanbeyan Business Chamber.

#### **Neighbourhood Access**

A number of residents along or within close proximity of the EDE route currently rely on a single road access:

- Access to Greenleigh is currently via a single road: Severne Street
- Barracks Flat Drive is the sole access for residents in Fairlane Estate.

#### **Public transport routes**

Public transport routes operate at either end of the EDE footprint. Route 832 services the area between the Queanbeyan CBD and East Queanbeyan via Ellerton Drive while route 850 links Queanbeyan to Bungendore along the Kings Highway. Route 839, the Queanbeyan Loop service, operates between the CBD and Karabar, and includes a circuit along River and Barracks Flat Drives.<sup>17</sup>

#### Walking and cycling usage

Parts of the EDE are currently used for walking. Informal tracks intersect the southern section of the route in the vicinity of Woodman Place, Lonergan Drive and between Doeberl Place and Cooma

The routes can be viewed at <a href="http://qcitytransit.com.au/pdf/bus-maps-2015/Qcity">http://qcitytransit.com.au/pdf/bus-maps-2015/Qcity</a> network map.pdf

Street; these tracks are on privately owned land. The *Queanbeyan Pedestrian and Mobility Plan*<sup>18</sup> identified existing pedestrian and on-road cycle paths in Queanbeyan, including those at either end of the EDE that have the capacity to be part of a wider network that link various parts of the city, although the route was not among those nominated as priorities for funding, at the time the Plan was published.

There are currently limited opportunities for off-road cycling in Queanbeyan and none in close proximity to the study area. A range of unofficial but popular mountain-bike specific trails exist in Jerrabomberra and surrounding areas, including on both sides of the Edwin Land Parkway. However, sealed shared paths and similar bike paths are limited in extent across Queanbeyan. The *Queanbeyan City Council Bicycle Plan*<sup>19</sup> identified an off-road bicycle path that could be constructed along the full length of the EDE to create a safe facility for all cyclists of all levels of cycling proficiency. The off-road shared path proposed for the EDE would link to the recently constructed shared path facility adjoining Edwin Land Parkway.

#### 3.2.6 Labour force, income and employment

In 2011, the study area had a median weekly household income range of \$1,602 to \$2,902 compared with \$1,654 for Queanbeyan LGA, \$1,916 for the ACT and \$1,233 for NSW.

In 2011, the unemployment rate in the study area (2.19%) was lower compared with Queanbeyan LGA (2.9%), the ACT (3.6%) and NSW (5.9%). At December 2015, the unemployment rate for Queanbeyan LGA was 2.1% compared with 4.7% in the ACT and 5.8% in NSW.<sup>20</sup>

In 2011, the study area's and Queanbeyan LGA's workforces were characterised by significant employment in public administration and safety (27.91% and 26.92% respectively) when compared with NSW (6.15%), but less than that of the ACT (32.32%). Other significant employment sectors in the study area included construction (9.67%), health care and social assistance (8.47%) and professional, scientific and technical services (7.85%). These trends were mirrored in Queanbeyan LGA with construction (10.2%), healthcare and social assistance (8.68%) and professional, scientific and technical services (6.48%) following suit. By contrast, in NSW healthcare and social assistance dominated (11.61%) followed by retail trade (10.36%), manufacturing (8.45%), and education and training (7.94%).

#### 3.2.7 Business and industry

In 2014, the Construction industry had the largest number of total registered businesses in Queanbeyan LGA, comprising 26.4% of all total registered businesses, compared to 14.9% in New South Wales.<sup>21</sup> In 2013/14, Public Administration and Safety was the most significant industry category, generating \$167 million in that year.<sup>22</sup>

<sup>19</sup> QCC, May 2010.

<sup>&</sup>lt;sup>18</sup> QCC, May 2010.

Department of Employment, Small Area Labour Markets September Quarter 2015.

http://economy.id.com.au/queanbeyan/number-of-businesses-by-industry?es=11 viewed on 13 January 2016.

http://economy.id.com.au/queanbeyan/value-add-by-industry?LoQo=1&WebID=15 viewed on 13 January 2016.

In 2013/14, the total tourism and hospitality sales in Queanbeyan City were \$115.4 m, the total value added was \$57.1 m. In 2011, there were 531 people working in tourism and hospitality in Queanbeyan, of whom 48% worked full-time and 46.1% worked part-time.

For the year ending June 2014, there were 12 accommodation establishments offering 414 rooms<sup>23</sup> in Queanbeyan LGA. Occupancy was 47.9% and the takings were \$9,200,000. During 2014/15, there were 286,033 domestic visitor nights spent in Queanbeyan. For the five years up to 2014/15, the main reasons overnight visitors cited for visiting Queanbeyan were visiting friends and relatives (46.6%), holiday (26.9%) and business (21.2%).<sup>24</sup>

Business activity is concentrated mainly in Queanbeyan West and Queanbeyan East industrial areas, and the Queanbeyan CBD. Suburban centres at Karabar, Queanbeyan East and Jerrabomberra provide local shopping opportunities rather than destinations in themselves.

A key outcome of the Community Vision exercise was the community's desire to see a revitalisation of the Queanbeyan CBD. A Master Plan for the CBD was commissioned in 2009 to provide a strategic framework within which future land use decisions could be made, detailed design guidelines for any future CBD redevelopments, and a staged plan for public domain improvements. As part of implementing the Master Plan, the Crawford Lifestyle Precinct – which turned an unattractive area of the CBD into a pedestrian friendly area with al fresco dining – was created. In late 2015, QCC announced that it would be proceeding with another phase of the Master Plan to upgrade Monaro Street between Lowe Street and the riverfront.

Despite these urban design initiatives, CBD vacancy rates remain at an all-time high with 15 to 20 offices and shops in the Monaro Street/Crawford Street zone empty, including the former CBA building on Monaro Street which has been unable to find a tenant in eight years. According to the Queanbeyan Business Chamber, a significant inhibitor to reversing this trend is the heavy vehicle traffic that passes through the CBD and the effect that it has on the amenity of the area.<sup>25</sup>

#### 3.2.8 Community values

In both 2006 and 2011, key themes raised by the community as part of consultation for the *Queanbeyan Tomorrow Community Vision 2021*, concerned:

- The CBD: traffic, parking, appearance, image, activities, the river and social issues, youth activities
- Transport: public transport, bikes/walkways, major roadways, CBD traffic flow
- Services: recreation, social, health, aged care, schools
- Culture: arts, facilities, cinema, social activities, history and heritage
- Image: developing Queanbeyan's own identity, relationship with the ACT, town feel with city amenity
- Infrastructure: sewerage treatment, green energy, planning and location of new infrastructure, planning for and managing future growth.<sup>26</sup>

Community values were centred on:

Hotels, motels and serviced apartments with 15 or more rooms. http://www.destinationnsw.com.au/wp-content/uploads/2015/01/Queanbeyan-LGA-accommodation-profile.pdf viewed on 12 January 2016.

http://economy.id.com.au/queanbeyan/tourism-value viewed on 12 January 2016.

Personal communication, 29 January 2016.

<sup>&</sup>lt;sup>26</sup> Page 10.

- An active, involved community that connects people with each other and the place in which
  they live, which creates a sense of belonging, a sense of safety and a country atmosphere,
  while embracing the diversity of the community, including the various cultures and
  neighbourhoods
- Preserving Queanbeyan's attractive complex landscape, its parks, river, escarpment, grassland and forested hills and associated flora and fauna for future generations
- Queanbeyan being one of Australia's oldest inland settlements whose history not only shapes its community, but is captured in its historical buildings and community spaces
- Queanbeyan being a 'country town with city benefits', from diverse housing choices to a wide range of services and community groups including sports, arts and culture with easy access to transport links.

#### 3.2.9 Social infrastructure

Social infrastructure that abuts the footprint of or is close to the EDE includes the following:

- Sporting facilities: Steve Mauger Sportsground, Queanbeyan Golf Course, Taylor Park
   Sporting Complex, Wright Park
- Open space: Doeberl Reserve, Barracks Flat Park, Queanbeyan River reserve, Margaret Donoghoe Park, Cuumbuen Nature Reserve, Wright Park, Don K Campbell Park
- Churches: St Matthews, 191 Cooma Street, Karabar, Canberra Gospel Church, 91 Ellerton Drive, Queanbeyan East
- Shopping: Karabar shopping centre at the corner of Cooma Street and Southbar Road, and the shopping precinct at the intersection of Ellerton Drive, Yass Road and Bungendore Road
- Education: TAFE Illawarra Queanbeyan campus between Buttle Street and Ellerton Drive,
   East Queanbeyan Public School on Yass Road, and St Gregory's Primary School in MacQuoid
   Street
- Emergency Services: Lake George Fire Control and Administrative Centre at 10 Ellerton Drive
- Council property: QCC Depot and Queanbeyan pound at 10 Ellerton Drive.

According to the *Noise Impact Assessment* there are no sensitive receivers amongst these services and facilities, and many are remote from the EDE.

The Queanbeyan River is important for amenity and provides significant recreational opportunities within the region, including swimming, canoeing and kayaking, and fishing. An annual River Festival was commenced in 2015 and includes a 'regatta' down the river. Doeberl Reserve is a natural area that provides publicly accessible walking trails along the river in the vicinity of the EDE footprint. There are also publicly accessible walking trails on the northern side of the river that terminate in the vicinity of the dwelling at 27 Lonergan Drive.

#### 3.2.10 Local amenity

Amenity refers to the quality of a place, its appearance, feel and sound, and the way its community experiences the place. Aesthetic qualities are an important part of amenity, but the broader concept of amenity is determined also by the physical design of a place and the human activity that takes place within it. A place that has 'amenity' is regarded as pleasant and attractive, as well as convenient and comfortable.<sup>27</sup> (Handy, 2002, page 2).

Handy, S. Amenity and Severance 2002, page 2.

Where the existing Ellerton Drive forms part of the EDE, it is flanked by housing. None of these dwellings have frontage to the EDE. Existing background noise levels for dwellings on or in close proximity to Ellerton Drive are dominated by distant traffic from Bungendore Street/Kings Highway. These levels diminish with increasing distance from Ellerton Drive.

Where the proposed EDE skirts the suburb of Greenleigh, from the end of Taylor Place to the Queanbeyan River, ambient noise is variously influenced by noise from distant traffic, aircraft, neighbouring properties, wind in trees, birdlife and domestic animals.

From the Queanbeyan River to Cooma Street, ambient noise is affected by traffic from Cooma Street which escalates with increasing proximity to that road.

The EDE passes through areas of intact and disturbed native vegetation. The Cuumbuen Nature Reserve and associated ridgeline forms an appealing backdrop to the urban areas of Queanbeyan and the area where the EDE passes over the Queanbeyan River supports a riparian vegetation and unique natural environment set in an urban context. This combination of natural elements contributes to the visual amenity that residents in the vicinity of the road corridor – particularly in Greenleigh and Fairlane Estate – currently enjoy.

Residents at various locations along or in close proximity to the EDE interviewed for this SIA commented that their amenity was influenced by peace and quiet, privacy, views, semi-rural living, neighbourliness, access to services, landscape and fauna, the river, bushland, clean air and a safe environment. Residents living close to the CBD, including on Cooma Street, valued the proximity this gave them to the downtown area, but noted that traffic volume and noise, poor access and lack of safety impacted on their amenity.

#### 3.2.11 Heritage

There are no identified non-Aboriginal heritage sites within the EDE alignment.

Eight Aboriginal heritage sites were identified within 100 metres of the route and a further 60 within the broader area. The *Aboriginal Cultural Heritage Archaeological Report*, <sup>28</sup> prepared in association with the proposal, assessed that the overall impacts of the proposal on Aboriginal heritage within the 80 metre corridor of the proposed road would be low within a local context and very low within a regional context, with the exception of the Jumping Creek area outside of the road corridor. Impacts and recommended mitigation measures are discussed further at Section 5.2.5.

## 3.2.12 Summary of key findings

Key socio-economic characteristics of the study area can be summarised as follows:

The study area is strongly defined by social, economic and physical characteristics

- The study area population is comparatively affluent, homogeneous and independent
- Travel behaviour is affected by the growth of urban development in the south of the LGA and Queanbeyan's relationship to the ACT, with approximately two-thirds of Queanbeyan's workforce commuting to jobs across the border

Aboriginal Cultural Heritage Archaeological Report – Ellerton Drive Extension, Queanbeyan Cultural Heritage Management Australia December 2014.

- Private vehicles are the predominant mode of transport throughout the study area, with higher than average levels of vehicle ownership. There is limited public transport availability, cycling and pedestrian movement in the study area. Having easy access to transport links is something the community values
- Heavy vehicle traffic, particularly trucks, is working against opportunities to reinvigorate the Queanbeyan CBD
- The physical qualities of the EDE environment, concentrated particularly where the route alignment skirts Greenleigh and crosses the Queanbeyan River, derive from its bushland setting, escarpment and scenic qualities. The community places high value on these qualities.

#### 4 COMMUNITY CONSULTATION

## 4.1 Prior consultation on the EDE

#### 4.1.1 Background

Consultation leading up to the design development of the EDE includes the following:

- Rezoning of land for future residential development at Googong and Tralee (2009)
- Traffic plan to determine preferred solutions for Queanbeyan's traffic needs (2009)
- Public transport forum to shape policy on public transport and pedestrian facilities (2011).<sup>29</sup>

Consultation on the EDE design took place with key stakeholder groups and residents in the vicinity of the route between 20 May and 21 June 2013. Changes to the design arising from community input included:

- The addition of emergency egress from Greenleigh Estate at Lonergan Drive and at the water tower off Severne Street
- Additional access points for Fairlane Estate
- The addition of off-road shared pathways to provide missing links between neighbourhoods and loops for recreational purposes
- Inclusion of on-road cycle ways to provide more commuter routes
- The addition of fauna underpasses.<sup>30</sup>

Consultation with local Aboriginal communities was undertaken in 2012 and 2014 as part of preparing the EDE Queanbeyan Aboriginal Cultural Heritage Report (ACHAR).<sup>31</sup>

The eleven groups that submitted expressions of interest for the initial 2012 consultation were invited to participate, with five groups attending the field investigation and three groups providing post fieldwork feedback.

A second stage of consultation specific to the Aboriginal Heritage Impact Permit (AHIP) application was initiated in September 2014 in accordance with Department of Environment Climate Change and Water (DECCW) requirements. This time expressions of interest were received from eight groups, who were all invited to respond to the proposed salvage methodology.

From 12 December 2014 to 9 February 2015 the REF was placed on public exhibition. The REF and associated documents were exhibited online and hard copy was made available at Council's Customer Service Centre and Library. As part of this process:

- Those registered on the EDE mailing list and directly affected residents were contacted
- A5 postcards advising of the REF exhibition were posted to 21,000 Queanbeyan properties
- Key government agencies were invited to comment<sup>32</sup>

CHMA, December 2014.

The history of community consultation on the proposal is documented in detail in the Ellerton Drive Submissions Report (Queanbeyan City Council, September 2015) and referred to in the Ellerton Drive Extension Review of Environmental Factors (SMEC, November 2015).

<sup>&</sup>lt;sup>30</sup> REF, page 64.

NSW Office of Water, NSW Office of Environment and Heritage (OEH), NSW Department of Primary Industries, NSW Department of Planning and Environment, NSW Public Works, Roads and Maritime Services, NSW Rural Fire Services, Transport for NSW, Queanbeyan Police Department,

• QCC hosted two information sessions which were attended by 120 people. Together with RMS, QCC undertook more than 20 pop-up sessions at Riverside Plaza, Karabar Shopping Centre and Jerrabomberra Shopping Centre during various periods on selected days, where it is estimated that approximately 1,000 people were spoken to over this period.

An independently facilitated community forum was held on 28 April 2015 to provide an opportunity for further feedback on the proposal. The forum was attended by approximately 350 people of whom at least 59 had previously made one or more submissions on the EDE.

Since 2010, QCC has provided an opportunity for the community to ask questions to Council, through a 'Questions on Notice' process. Questions and answers submitted through this process that are specifically related to the proposal are also posted on QCC's EDE website. This process is ongoing.

At the time this SIA was prepared, consultation was also being carried out with the NSW EPA regarding environmental performance and licensing matters, and with OEH in regard to fauna crossings, offset implementation and measures to minimise impacts on wildlife. Also, QCC was preparing to exhibit the SIS addendum.

#### 4.1.2 Issues raised in REF consultation

A total of 357 submissions were received by 3 April 2015 in response to the exhibition of the REF. While the submission period officially closed on 9 February 2015, all questions and issues submitted after the official submission period were accepted for consideration, including those questions and issues submitted before, at and after the Community Forum of 28 April 2015.

A total of 188 (53%) submissions supported the EDE and 140 (39%) objected to it or to specific elements of the proposal. The remainder of submissions neither supported nor opposed the EDE, or made comments outside its scope.

The table below summarises issues for and against the EDE relevant to social impact.

Support for EDE, including benefits	Against EDE
<ul> <li>The road will be used and save travel time</li> </ul>	Reduced amenity
<ul> <li>Easier route to the airport from the south</li> </ul>	<ul> <li>Inadequate public transport and cyclist facilities</li> </ul>
<ul> <li>Reduced heavy vehicle traffic through the CBD</li> </ul>	<ul> <li>Noise impacts, particularly in rural setting amplified by</li> </ul>
<ul> <li>CBD will become more business and user friendly</li> </ul>	topography
through improved amenity	<ul> <li>Altered sleep patterns and health issues</li> </ul>
<ul> <li>Improved safety in school zones through reduced</li> </ul>	Vibration impacts
traffic	Health impacts
<ul> <li>Reduced noise and traffic along Cooma Street, and</li> </ul>	<ul><li>Loss of business</li></ul>
easier entry from side roads and driveways	• Land use impacts
<ul><li>Inclusion of foot and bike paths</li></ul>	<ul> <li>Reduced general safety</li> </ul>
<ul> <li>EDE will provide alternative emergency exits along</li> </ul>	<ul> <li>Loss of Aboriginal identity</li> </ul>
the route	<ul><li>Loss of access to the bush</li></ul>
<ul><li>Improved flood access</li></ul>	<ul> <li>Construction noise, dust and vibration</li> </ul>
<ul> <li>Additional access provides better safety for</li> </ul>	Traffic noise and pollution
Greenleigh and Fairlane Estate residents	Impacts of coastal bound traffic from south Canberra

Commonwealth Department of the Environment, Australian Platypus Conservancy.

Impacts from traffic changes attracted the most concern (70 submissions), followed by noise from increased traffic (49 submissions), impacts on the visual environment (31 submissions), health related impacts (26 submissions), reduced safety (26 submissions), water quality and flooding (23 submissions), and bushfire safety access requirements (22 submissions). These and other issues, together with QCC's responses to each are discussed in detail at Section 4.4 of the *Ellerton Drive Submissions Report*.

As a result of the REF consultation, the following changes were made to the design of the EDE:

- Different options for noise remediation measures were investigated and included in the design (wall, road surfacing, in-house treatments)
- The road alignment was adjusted to minimise footprint (environmental impact) and visual impact
- Travel lanes were reduced to minimise footprint (environmental impact) and reduce costs, responding to concerns about the overall project costs
- Additional fauna underpasses were included.

# 4.2 Survey of Queanbeyan LGA residents regarding the proposed Ellerton Drive Extension

In April 2015, RMS commissioned Jetty Research to conduct a random and representative survey of 800 adult residents in the Queanbeyan Local Government Area (LGA). The survey aimed to establish community opinion on the proposed road and to measure the reach of community engagement activities.

The survey was conducted between May 20 and June 25, 2015. Respondents were not told the topic of the survey prior to starting. A total of 805 interviews were conducted.

The survey found as follows:

- The majority of residents (92%) knew about the EDE
- Overall, 62% of residents supported the EDE with 16% opposed and 21% neutral
- Those living less than 1 km from the EDE were more likely to be opposed to the project than those who lived more than 5 kilometres away. However, the majority of those living within a 1 km radius of the EDE still supported the project with 54% in favour versus 28% opposed
- Three in five residents (61%) had no specific concerns about the EDE. Of those who did have concerns, the main issue was more traffic through Jerrabomberra (18%), followed by congestion in other parts of the city (14%), the environment (8%), noise (8%), cost (5%) and safety when crossing the road (4%).

When prompted, more than two-thirds of respondents agreed that the EDE would reduce congestion in the Queanbeyan CBD (73%), take heavy vehicles out of the CBD (66%), make travelling around Queanbeyan quicker (72%), and set Queanbeyan up for future growth (66%).

However, 52% also agreed that the EDE would create noise for residents adjoining the route and 48% agreed that it would have visual impacts on residents nearby. Thirty-seven per cent felt that it would increase traffic noise in the region and 29% agreed that it would have negative impacts on the environment.

# 4.3 Consultation undertaken as part of the SIA

#### 4.3.1 Background

The *Socio-Economic Assessment Practice Note* includes guidance on community consultation for road-related proposals. It notes that:

- Consultation and communication can occur at various stages of a project's life, from project development to operation
- The amount, timing of consultation and communication varies depending on the specific issues, community interest or project complexity, and potential level of impact.<sup>33</sup>

The *Practice Note* provides an indicative list of stakeholders to be consulted, which can include some or all of the following:

- Local council officers and elected representatives
- State government officers (i.e. education, health, police and emergency services) and elected representatives
- Community facility providers (i.e. schools, child care, aged care, support services)
- Affected property or business owners
- Community/resident groups
- Environmental groups (including local heritage groups)
- Business or industry associations.<sup>34</sup>

This list is in addition to wider communication with property owners, the general public, transport users and key stakeholders in general.

It is accepted practice that the preparer of a road-related SIA draws on consultation findings that have occurred through the initiatives of other parties, including those acting on behalf of the proponent. This has been the experience of this author in recent SIAs with which she has been involved, three of them guided by the *Practice Note*. The author is also aware of this approach having been used in SIAs prepared by other parties for recent road proposals.

#### 4.3.2 Approach

It was the decision of QCC that additional consultation be carried out for this SIA. The aim of this consultation was to reach a range of stakeholders within the local community, with equal representation drawn from those in favour of and opposed to the EDE. The purpose of this qualitative exercise was to gain a representative view of key issues facing affected stakeholders. Many of those approached to participate had previously made one or more submissions on the EDE.

The author of this SIA was available for face-to-face interviews with stakeholders during 27 – 29 January 2016. QCC supplied a list of stakeholders from those who had previously made submissions, which included residents and groups representing the interests of residents, business, education and the environment. 18 individuals or groups were approached in December 2015 and January 2016. Meetings were held with:

- Ten residents drawn variously from Queanbeyan East, Greenleigh, Fairlane Estate, Karabar and Jerrabomberra, some of whose properties abut the EDE alignment
- The principals of St Gregory's Primary School and Jerrabomberra Public School

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<sup>&</sup>lt;sup>33</sup> Page 8.

• The Chair of the Queanbeyan Business Chamber.

Social impacts identified in consultation with these stakeholders are discussed in Section 4.3.2.

Of the remainder approached:

- Four individuals or groups did not respond to the invitation to meet
- One group confirmed a meeting time with insufficient notice
- Another did not confirm a tentative meeting time
- No agreement could be reached with a third group about representation at the meeting.

A further offer was extended on Friday 5 February to three of these groups, all of which had made previous submissions on the EDE, to provide written comment by close of business on Wednesday 10 February, with a questionnaire sent to each:

- Greenleigh Residents Group (GRG)
- Queanbeyan Conservation Alliance (Alliance)
- Jerrabomberra Residents Association (JRA).

GRG and the Alliance provided written comments and social impacts identified in their responses are discussed in Section 4.3.3.

JRA did not comment. The views of this group have been presented in previous submissions and relate to:

- The impact of increased traffic volumes passing through Jerrabomberra
- Pressure that this will cause on existing roads and access within the suburb
- Cost of building the road
- Community consultation on the proposal and
- The need to consider alternatives.

Questionnaires provided to all stakeholder groups, either as part of the face-to-face meetings or follow up invitations to the three stakeholders groups above, are at Attachment 1.

A total of 20 unsolicited emails were received in relation to the SIA. Of these:

- Eleven persons had previously made a submission on or were logged as having made contact in regard to the EDE
- Two identical emails were signed by two individuals residing at the same address
- Four identical emails were received from a single Greenleigh family.

Issues of relevance to social impact arising from these emails are discussed in Section 4.4 below.

#### 4.3.2 Social impacts identified in interviews with stakeholders: 27 – 29 January 2016

#### 4.3.2.1 Residents

Residents' perceptions of the positive impacts of the EDE included:

- Improved access/egress from property, particularly on Cooma Street
- Reduced travel times/improved access to work, shopping, medical services, community and recreation facilities, open space, friends and family
- Removal of heavy traffic from Queanbeyan CBD which, in turn, would improve the amenity
  of the area
- Improved access during a flood

• Proposed egress at Greenleigh would provide additional bushfire safety.

Residents whose properties abut the EDE footprint identified a range of negative impacts – see table below.

Impact	Mitigation/Response
Loss of amenity due to increased traffic noise.	Impacts would be mitigated in accordance with the Road Noise Policy "reasonable and feasible" guidelines. Each property that requires additional remediation over and above the Road Noise Policy criteria would be individually assessed for mitigation measures. Impacts would be mitigated in consultation with affected residents, taking particular circumstances into account. Post-construction, noise levels would be monitored in set locations along the route.
Loss of amenity due to increased air pollution, loss of sunlight access, sleep disturbance, ability to enjoy private open space.	It is acknowledged that once operational, the EDE could cause increased air pollution from vehicles using the road as, over time, traffic is expected to increase along the road. For some properties, particularly those that adjoin or are close to the EDE, these impacts may not be able to be mitigated adequately or at all.
Loss of access to open space/bushland.	The open space/bushland referred to here (the Escarpment) is privately owned or Crown Land subject to an Aboriginal Land Claim.
Potential for health impacts through stress, air pollution effects.	The potential for stress is acknowledged. The level of pollutants generated is expected to be too low to cause any health, amenity or environmental problems. A Community Liaison Strategy as part of the CEMP would keep the local authorities, residents and community in the vicinity of the Works and road users informed. Progress updates would be posted on QCC's website.
Cost of EDE, including costs to run air- conditioning and potential for rate rises.	The project would be delivered by QCC with the assistance of NSW Roads and Maritime Services. Council rates would not be affected. Once the design is finalised, the detail of mitigation measures would be discussed with affected residents.
Need for certainty on mitigation measures, in particular noise wall heights, setbacks, materials and colour.	See comment above.
Timetable for building EDE.	Construction is planned to occur over a 2 to 2.5 year period subject to the project being approved by QCC and NSW Treasury.

In addition, some residents felt that the EDE:

- Would not result in a reduction of CBD traffic:
  - in response, traffic modelling carried out for the proposal shows that by 2031, with the EDE in place, even with the overall population increase and resultant overall increase in traffic over time, traffic movements into the CBD would be less than 2014 levels (without the EDE)
- Would cause traffic to back up at the roundabout at Yass Road and Ellerton Drive, causing problems for people travelling along Piallago Avenue:
  - The Yass Road/Bungendore Road roundabout is under consideration by RMS for an upgrade to a signalised intersection, designed to accommodate the expected future traffic flows

- Would have negative impacts on CBD businesses:
  - It is noted that the Queanbeyan Business Chamber, which represents some 220 businesses, holds the opposite view – see discussion below.

Residents living in close proximity to the route alignment:

- Saw no wider community benefits from the EDE
- Had concerns about impacts on the wider community related to cost of the proposal
- Had concerns about environmental impacts and
- Had concerns about congestion at the Yass Road roundabout.
  - In response: Council would recover its portion of the total project costs from developer contributions with no impact on ratepayers. Environmental impacts are the subject of a separate technical investigation; in respect of the Yass Road roundabout, RMS is currently investigating options for improving traffic flow through that intersection.

Some residents living in close proximity to the EDE felt that there were selective benefits for the wider community such as emergency egress from Greenleigh and easier access to the CBD from Fairlane Estate.

Residents living further away from the EDE saw benefits of the proposal for the wider community in providing better connectivity, diverting heavy traffic from the CBD, improved traffic flow on Cooma Street and access for Fairlane Estate residents onto that road, and provision of additional flood access.

In respect of mitigation measures, residents sought clarity on noise wall height and setbacks, and potential for design changes to minimise impacts on private property. These suggestions will be considered by the project team and changes made to the design where feasible.

#### 4.3.2.2 Schools

The EDE is expected to have positive impacts for St Gregory's Primary School which has two campuses on the edge of the Queanbeyan CBD: one at Lowe Street and another at MacQuoid Street. Likely benefits include:

- Improved safety for children walking between the two campuses, and to sport and recreation facilities in the CBD
- Easier and safer traffic conditions for parents picking up and dropping off children, particularly in the vicinity of the roundabout at the Lowe Street campus
- Removal of heavy traffic going past the Lowe Street site would reduce noise impacts on the kindergarten classroom and playground as well as improve safety.

The principal of the Jerrabomberra Public School raised various concerns of the EDE for Jerrabomberra – see table below.

Negative impacts for Jerrabomberra	Mitigation/Response	
The effect of the EDE, combined with the Edwin Land Parkway (ELP), would cut Jerrabomberra in half.	The ELP corridor was shown in the planning strategies before Jerrabomberra was developed.  Traffic modelling shows that most of the increase in traffic passing through Jerrabomberra would come from Googong, Jerrabomberra itself and the new South Jerrabomberra developments; this traffic would go through Jerrabomberra regardless of whether the EDE were in place or not.  The EDE would not contribute a significant proportion of that increase and therefore little through traffic is expected to originate from the EDE.	
EDE will bring more traffic into and through Jerrabomberra and down to Googong.  Much of the severance of Jerrabomberra is caused by traffic emanating from the Googong development.	See comments above.  This is partly correct. See comments above.	
The increase in traffic now that Googong has started has been phenomenal on ELP, and ELP meets up with EDE.	This would continue to happen irrespective of the EDE being in place.	
Increased traffic on the ELP, significantly since the opening of Googong, has resulted in parents not wanting their children to walk across that road (ELP).	A significant number of Jerrabomberra residents have used the ELP since it opened. Pedestrian safety issues in the area are currently being investigated, with the full participation of key stakeholder groups.	
Canberra traffic going to the coast will come up Lanyon Drive, into Tompsitt Drive, the ELP and then up the EDE. It will stop going through the main street of Queanbeyan, but it means that all this traffic is going to come through the centre of Jerrabomberra.	This is likely to happen to a limited degree. It is likely that South Canberra residents will go through Jerrabomberra to travel to and from the coast via the EDE.	
The increase in traffic will make it dangerous for kids who walk home. The speed of traffic has increased, channelling more traffic through an established residential area.	While this situation is unrelated to the EDE, it is acknowledged that traffic volumes have increased since Googong started to develop. Traffic speed has remained virtually the same as before. All Jerrabomberra traffic issues are currently being considered separately.	
Conversion of the large roundabout to a signalised intersection, provision of underpass under ELP would alleviate concerns.	Designs to convert the roundabout to a signalised intersection were exhibited in November 2015, but not supported by the school. Mitigation of pedestrian impacts will be revisited with the full participation of key stakeholders.	
Noise from ELP will echo up the hill.	This would continue to happen irrespective of the EDE being in place. Consideration of noise mitigation options for ELP between the roundabout and Stringybark Drive will be considered in the 2016/17 delivery plan. Where possible, Road Noise Policy criteria would be met.	

In summary, if the EDE were not to proceed, traffic issues for Jerrabomberra would largely remain the same. Googong traffic would still go through Jerrabomberra, Queanbeyan traffic would still go through Jerrabomberra, Jerrabomberra residents would still use their own roads, and developments at South Jerrabomberra would still add a substantial amount of traffic onto Tompsitt Drive.

The EDE would increase the traffic in Jerrabomberra slightly, but it would not be the main component of this traffic increase.<sup>35</sup>

#### 4.3.2.3 Queanbeyan Business Chamber

The Queanbeyan Business Chamber, which represents approximately 220 Queanbeyan businesses, sees the following positive impacts of the EDE for business:

- Removal of heavy traffic from the CBD would create the opportunity to revitalise the downtown area
- Improved amenity would be conducive to stimulating new businesses in the CBD, in particular in hospitality and retail offerings
- Plans for the Morisset Street cinemas would be an ideal project to leverage off fewer truck movements
- The EDE would give better access to industrial parks
- The Karabar shopping precinct would be a prime location for more businesses to establish because of its position at the junction of the EDE and the Edwin Land Parkway
- Jerrabomberra and Karabar shopping centres may find that their trade, at least in peak times, increases where people stop into those shops on the way home
- The EDE would be an enormous stimulus for the hospitality, construction and industrial sectors
- Loss of trade in the CBD due to fewer traffic movements would not be significant.

#### 4.3.3 Social impact issues raised in written feedback

#### 4.3.3.1 Queanbeyan Conservation Alliance

The Alliance was formed in 2013 and has the objective of campaigning for the protection of Queanbeyan's ecologically important areas, including the Escarpment and Queanbeyan River and its tributaries. Other than the EDE, the main focus of the Alliance is to advocate for a sustainable, integrated transport plan before any decisions are made about building new roads in Queanbeyan.

The Alliance sees no benefit in building the EDE. A number of negative social impacts of the proposal were identified – see table below.

These matters are discussed in greater detail in the *South Jerrabomberra and Queanbeyan Traffic Analysis*, December 2014.

Impact	Mitigation/Response
The EDE would change Queanbeyan forever	QCC has worked on a number of transport solutions for
without providing a real solution to the	Queanbeyan including:
community's transport needs.	<ul> <li>Regular discussions on how to increase public transport patronage</li> </ul>
	Promotion of public transport usage
	<ul> <li>Investigation into possibilities offered by existing rail lines</li> </ul>
	<ul> <li>Adoption of a Bicycle Plan that prioritises the provision of cycling infrastructure in</li> </ul>
	Queanbeyan and links it to the ACT
	Improvement of pedestrian facilities throughout
	Queanbeyan and including links with the ACT
	A new bus interchange in the Queanbeyan CBD.
Council's own study shows that the EDE will	Modelling work undertaken indicates that the EDE would
add to, not lessen, congestion in many areas.	largely redirect traffic.
	QCC, in conjunction with RMS, is working on all the
	components of the overall package of road and
	intersection upgrades that were recommended in the
	Traffic Study and approved by Council.
It would funnel thousands of cars close to	It is acknowledged that the EDE would bring traffic closer
homes, causing unacceptable noise impacts.	to areas where none currently exists such as Fairlane
	Estate and Greenleigh. However, it would redirect traffic
	away from currently congested areas, some of which are
	also close to homes i.e. Cooma Street, Queen Street
	Bridge, CBD. Negative effects of the EDE would be
	mainly on adjacent and nearby dwellings, whilst the
	positive impact on Cooma Street would affect not only
	residents along this road but also all the Karabar and
	Queanbeyan residents who use the feeder streets that
It would destroy bushland habitat for native	come off Cooma Street and Monaro Street.  Destroyed bushland habitat would be mitigated by
animals and disturb Queanbeyan River	Council's purchase of appropriate offsetting habitat.
corridor.	It is acknowledged that the proposed bridge would
corndor.	change the river aesthetics and interrupt views of
	properties in proximity to the alignment.
	However this loss of visual amenity to the nearby
	residents along the river corridor should be viewed in the
	context of the overall benefit to the Queanbeyan
	community in providing alternative flood access around
	the city.
It would pose a financial risk to the community,	The EDE would be funded through a combination of
through Council considering borrowing \$40	public and private contributions. Council's contribution
million or more to fill a funding gap.	would be covered by developer contributions. Council
	rates would not be affected.

The Alliance noted that the only way to mitigate negative impacts of the EDE was not to proceed with the proposal and to consider an integrated transport plan instead. In regard to the latter point, QCC has worked on a number of transport solutions for Queanbeyan – see response to the first point in the table above.

The 'do nothing' option would have the following limitations:

Approved and future land use changes would increase travel demand and traffic volumes,
 with additional traffic travelling along Bungendore Road through the main street of the

- Queanbeyan CBD. This would lead to increased congestion, increased crash risks and reduced amenity
- The 'do nothing' option would not provide the necessary transport infrastructure to accommodate the future transport demands of Queanbeyan and the region. Pressures on existing roads would continue to increase, eventually exceeding the current road network capacity. This would cause substantial further traffic congestion and delays in the regional transport corridor and ultimately restrict the growth potential of the Queanbeyan area
- It would take away the only planned east west connection in Queanbeyan during a greater than 1 in 20 year flood event.

Reduced congestion in the Queanbeyan CBD, along with more efficient, free-flowing traffic along the EDE, is expected to reduce overall greenhouse gas emissions for the Queanbeyan region over and above a 'do nothing' option.

The Practice Note explains what management and mitigation measures generally seek to do:

- Avoid, where possible, the negative impacts of the project on quality of life or socioeconomic conditions within the study area through changes to the project (footprint, construction or operation) so that the impact is eliminated
- Minimise the impacts of the project on quality of life or socio-economic conditions within the study area, by modifying the project to reduce the severity of the impact
- Mitigate the impacts of the project on quality of life or socio-economic conditions within the study area, by implementing measures that alleviate or offset an impact
- Enhance the quality of life or socio-economic conditions within the study area, implementing measures that ensure the project fits more harmoniously into the community.<sup>36</sup>

The Alliance's suggested mitigation measures do not address the above measures for reducing impacts.

#### 4.3.3.2 Greenleigh Residents Group (GRG)

No information was provided on the formation of GRG, its catchment, the number of households it represents, the frequency with which it meets and what the key issues for the group were other than the EDE. The following negative impacts of the EDE were identified for the local area – see table below.

<sup>36</sup> 

Issue relevant to local social impacts	Mitigation/Response
Loss of direct access to high value bushland and the Eastern Escarpment.	The land in question is privately owned.
Loss of peace, tranquillity, fresh air, privacy.	This is acknowledged, but mitigation can reduce the scale of these impacts.
Traffic noise will be introduced into the area.	This is acknowledged, but mitigation can reduce the scale of these impacts. While a large proportion of Greenleigh residents would be affected by an increase in noise levels, this impact would decrease substantially with distance from the EDE and would for the most part be below the thresholds in the RNP.
(the EDE will introduce) an unreasonably high increase in traffic noise and pollution for all suburbs built in the last 30 years.	Mitigation measures would reduce the scale of the impact. For many residents, including those living in some suburbs built in the last 30 years, the EDE would create little to no noise impact at all. It would reduce traffic and noise in Karabar along Cooma Street and Queanbeyan through the CBD and across the Queens Bridge.
Scenic views will be interrupted.	It is acknowledged that views from nearby residents along the river corridor would be affected by the river crossing. It is further acknowledged that these impacts cannot be mitigated.
Loss of ability to bushwalk close to place of residence.	The EDE would not block access to public bushwalking opportunities, noting that bushwalking on private land is not permissible. A pedestrian underpass at Jumping Creek is proposed, and a shared path along the extent of the project. There are still likely to be tracks under the bridge.
Loss of a safe environment for children, the elderly, etc. as there are no major traffic issues in the area.	Access to the EDE from Greenleigh would be gated. The road corridor would be fenced and no properties in Fairlane Estate or Greenleigh would have direct access to the roadway other than the driveway to 40A Severne Street.
Having multiple homes sealed to reduce noise (will mean) loss of amenity, loss of escape routes in case of house fires, loss of outdoor entertainment and general living.	It is acknowledged that there may be impacts on the enjoyment of outdoor areas for properties where RNP criteria cannot be met.  Each property that requires additional remediation over and above the RNP criteria would be individually assessed for mitigation measures. Impacts would be mitigated in consultation with affected residents, taking particular circumstances into account.
Increased risk of bushfire with 1000s of motor vehicles travelling past our woodland suburb and the heavily wooded Eastern Escarpment – motorists flicking cigarettes out of their vehicle windows, vehicle fires and/or crashes posing an unacceptable fire risk to an already high risk suburb.	The EDE would act as a firebreak for Greenleigh from the adjacent woodlands.  It would provide improved access for emergency services in the event of a bushfire.  Additional emergency egress for Greenleigh would improve bushfire safety for local residents.

GRG stated that the EDE would have only negative effects on access to work, shopping, business and services, community facilities, sport and recreational facilities, open space, friends and family. This was not elaborated upon.

GRG also commented that 'nobody in GRG has suggested any positive benefits'. However, at least two Greenleigh residents expressed support for the EDE during the REF consultation process and one with whom the author of this SIA met as part of the consultation process remarked that providing additional egress for Greenleigh would be beneficial from a bushfire safety point of view.

GRG stated that the EDE would have no benefits for the wider Queanbeyan community. This was not elaborated upon. Negative social impacts of the EDE for the wider Queanbeyan community are noted in the table below.

Negative issues relevant to social impact on	Mitigation/Response
the wider Queanbeyan community	
More traffic will come into Queanbeyan.	Ellerton Drive acting as a source of additional traffic
	into Queanbeyan is not supported by traffic data
	and studies carried out for the EDE.
There will be an increased risk to school children	There are no schools that would experience
etc. as the EDE would run a heavy vehicle road	significantly increased traffic as a direct result from
directly past schools in East Queanbeyan and	the EDE.
Jerrabomberra.	It would remove traffic from the Cooma Street
	corridor, and reduce risk to school children along
	that route in particular. Schools likely to benefit
	include St Gregory's Primary School, Queanbeyan
	Public School, Queanbeyan South Public School and
	Karabar High School.
	Traffic passing in the vicinity of Jerrabomberra
	Public School and Queanbeyan East Public School
	would not directly be significantly influenced by the
	EDE.
	The principal of St Gregory's Primary School
	confirmed that improved safety would be an
	important benefit of the EDE for this school.

GRG's response to measures to mitigate the impacts of the EDE on Greenleigh was not to build it at all or to consider other options.

The 'do nothing' option has limitations:

- Approved and future land use changes would increase travel demand and traffic volumes, with additional traffic travelling along Bungendore Road through the main street of the Queanbeyan CBD. This would lead to increased congestion, increased crash risks and reduced amenity
- This would not provide the necessary transport infrastructure to accommodate the future transport demands of Queanbeyan and the region. Pressures on existing roads would continue to increase, eventually exceeding the current road network capacity. This would cause substantial further traffic congestion and delays in the regional transport corridor and ultimately restrict the growth potential of the Queanbeyan area
- It would take away the only planned east west connection in Queanbeyan during a greater than 1 in 20 year flood event.

These measures do not address the *Practice Note's* measures on reducing impacts.

# 4.4 Social impact issues raised in unsolicited comments

Key issues for social impact are in the table below.

Mitigation/Response
The SIA relies in large part on consultations carried out as
part of the pre-REF and REF process. This process has been
extensive and is ongoing. Consultation for the SIA was in
addition to that process and designed to be qualitative,
seeking a balance of views from those who favour or oppose
the EDE, and from various individual and group stakeholders.
QCC's portions of the project costs are fully recoverable from
Developer Contributions.
NSW Roads and Maritime Services would be assisting QCC in
the delivery of the project.
It would not affect Council rates.
It is acknowledged that some residents would experience an
increase in noise from the EDE.
Mitigation measures would reduce the scale of this impact.
The traffic analysis does not support this view.
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Pedestrian safety issues will be investigated with the full
participation of stakeholder groups.
Emergency exits were added to the project as an outcome of
consultation with the Greenleigh community. They decided
in favour of a gated access to limit additional traffic through
the neighbourhood.
Noise wall barriers would be designed at the appropriate
height to mitigate the noise in accordance with the NSW
Road Noise Policy, or where this is not feasible at the
maximum reasonable structurally achievable height - with
on-property treatment offered to residents where the
mitigation measures cannot achieve the RNP guidelines.
This bushland, including the escarpment, is privately owned.
The EDE would not affect access to publicly owned bushland
along the river corridor.
The SIA does this.
The traffic analysis shows a reduction in traffic through the
CBD as a result of the EDE. In particular, the removal of
heavy traffic from the CBD would be a benefit of the
proposal.
Yass Road/Ellerton Drive intersection is being considered by
the RMS design team. QCC will pursue with the ACT
government the idea of duplicating Piallago Avenue.
Construction is planned to occur over a 2 to 2.5 year period
subject to the project being approved by Council and NSW
Treasury. As this project has not formally been approved
yet, a definitive timeline cannot be provided.
The details of proposed noise walls and other mitigating
measures would be provided to residents. Council is
currently preparing presentation sessions for affected
homeowners Subject to Council and NSW Treasury
homeowners. Subject to Council and NSW Treasury
approval of the EDE, where the noise remediation measures
approval of the EDE, where the noise remediation measures do not result in noise levels within the prescribed RNP
approval of the EDE, where the noise remediation measures do not result in noise levels within the prescribed RNP criteria, there would be another round of one-on-one
approval of the EDE, where the noise remediation measures do not result in noise levels within the prescribed RNP

Issue raised	Mitigation/Response
Jerrabomberra impacts: - The EDE will increase traffic congestion and make access to local shopping centre more difficult.	- The Googong and Tralee Traffic Study (2031) and the 2014 Traffic Study update prepared for the project does not support this view. Increased traffic attributed to the EDE would be a small proportion of the whole.
- EDE Information Flyer states that QCC does not propose any change to the roundabout at Tompsitt Drive and Lanyon Drive or for the Jerrabomberra Circle.	- RMS and QCC are considering changes to these intersections as part of a separate process to the EDE.
- Also notes that QCC says there will be a 15% reduction in traffic in the CBD but does not indicate how much of an increase in traffic there will be in Jerrabomberra area.	- The EDE would contribute approximately 3% additional traffic to Jerrabomberra through to 2031 - see section 5.3.8.
- Increase traffic noise, congestion and pollution (in Jerrabomberra).	<ul> <li>This is likely to occur as a result of organic growth, but the proportion of traffic increase attributed to the EDE is minimal.</li> </ul>
- Cause increased construction noise and vibration.	- Construction of the EDE would have no impact on Jerrabomberra.
- Cause loss of access to the bush.	- The EDE would not result in loss of access to bush in Jerrabomberra.
- Reduction in air quality and health concerns to residents	The EDE would not contribute directly to air quality problems in Jerrabomberra.
Concerns about proximity to and mitigation of on-ramps in Fairlane Estate	The Fairlane community requested an on-ramp in the early 2013 consultation process. The southbound on-ramp would be relatively low, so the specific impact resulting from the ramp itself should be relatively low when compared to the overall impact of the roadway. The ramp would be at a lower level than many of the adjacent homes, improving the acoustic impact, and also results in the actual road carriageway being located further from these homes than would otherwise have been the case.  The traffic volumes on the on-ramps are not expected to be significant, consisting predominantly of local private vehicle traffic.  The on-ramps have been included in the noise model and there are noise mitigation measures proposed for this area.

# 4.5 Summary

Consultation carried out for the project to date fulfils requirements to consider community views under the *Practice Note*.

Many of the issues raised by stakeholders in the SIA consultations have been submitted before during earlier consultations. The SIA consultation provided an opportunity for a range of views to be heard.

## 5 IMPACT ASSESSMENT

# 5.1 Policy context

The requirement of Clause 228 of the EP& A Regulation to consider the likely impact of the EDE on the environment, including how it may affect individuals and/or social groupings, has been complied with under the REF.

The EDE also meets the requirement of:

- The NSW Long Term Transport Master Plan 2012 for transport to provide people with good access to each other, their community and key services
- The Queanbeyan Tomorrow Community Vision 2021 infrastructure, access and transport goal to take heavy vehicles out of the CBD, with traffic flowing easily between suburbs and the CBD, and to assist traffic flow through Queanbeyan from the ACT to the coast. The Vision recognised that there is strong community support to divert heavy traffic out of the CBD, reclaiming that space for pedestrian and light vehicle access and providing an opportunity to revitalise the city centre, bringing with it economic benefits for the area. The EDE meets this objective.

# 5.2 Construction phase impacts

Proposed construction works would involve the potential for early works where feasible, establishment of construction compounds and facilities, preparation for and construction of various elements of the EDE, installation of street lighting and landscaping, and site clean-up and decommissioning of compounds and facilities on completion of the project.

## 5.2.1 Property

Since the 1990s, QCC has been acquiring land within the EDE footprint. Acquisition of land through the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW), through mutual agreement and identification and acquisition of offset sites, is ongoing. Twenty-five per cent of the corridor remains to be acquired.

Three privately owned properties that are directly affected by land acquisition include:

- A dwelling at 40A Severne Street, whose access would be severed by the EDE. The design
  includes access for this property from the EDE. Land required for the road corridor was
  acquired in the 1990s
- Land to the north of 40A Severne Street, which currently has access from the end of the
  existing Ellerton Drive. The design of the EDE would provide new access near this location,
  with an additional gate near the common boundary with 40A Severne Street; this would
  improve access for rural fire services in the event of bushfires. The land required for the
  road corridor was recently acquired
- Jumping Creek Estate: the road corridor passes through this estate. Land is yet to be acquired for the corridor and consideration is still being given to the way in which the estate will have access from the EDE.

Site compounds and stockpile areas would be required for the duration of construction, a period of about 24 to 30 months. They would be used for site offices, eating and ablution facilities, car parking, temporary stockpiling of construction materials, fill material, plant and equipment.

Potential site compound sites are proposed as follows:

- Two site compounds on either side of Ellerton Drive where it currently terminates. The major portion on the northern side is disturbed land which backs onto the rear of housing in Thomas Royal Gardens and to the site pf a dwelling in Ellerton Drive. The southern site sits on operation land owned by QCC which backs onto the side of a church
- Site compound along the southbound lanes of existing Ellerton Drive
- Two stockpile sites on previously cleared land within Jumping Creek Estate, with the closest dwellings being about 250m away in Lonergan Drive and Woodman Place
- A site compound area on cleared land south of the Queanbeyan River, where River Drive
  joins Barracks Flat Drive. This site is close to up to 10 dwellings
- A combined site compound/stockpile area on disturbed land east of the Old Cooma Road/Edwin Land Parkway. The site largely sits on operation land owned by QCC and backs onto Crown Land under Land Claim. The closest residences to this site are in Alfred Place.

In the event that other sites were to be required to facilitate the EDE, all appropriate approvals would be obtained.

The location of site compounds and stockpile area would have the following local amenity impacts:

- Changes to local access: the compound area along Ellerton Drive would require redirecting
  of traffic to Tennyson Drive onto the opposite side lanes (this would be restriped to suit)
- Noise: this is possible along Ellerton Drive. The construction contract would require the early installation of noise walls in that area
- Visual amenity: an office compound and equipment parked in the area shown on the south embankment of the Queanbeyan River would be visible to nearby properties. The Ellerton Drive compound is along the back fences of the adjacent properties. Other compound sites and stockpile areas are not prominently located.

# 5.2.2 Changes to population and demography

The EDE would create an influx of workers during construction, some of whom are likely to reside outside the Queanbeyan LGA. This is unlikely to alter the prevailing demographic profile of the LGA.

# 5.2.3 Economy and business

Construction of the EDE would have a positive impact on the Queanbeyan economy and local businesses. It is anticipated that 45 direct and 140 indirect jobs per year would be created during the period required to construct the road. Materials would be sourced from local suppliers where practicable. There would be indirect positive impacts in the provision of goods and services to the contractors such as materials, specialist expertise, accommodation and food, with many local supplier and construction-related businesses benefitting from a project of this magnitude. Businesses in the CBD, industrial area and local shopping districts in close proximity to either end of the route are expected to benefit from increased patronage during the construction period.

There may be temporary negative impacts for some businesses which may experience less patronage due to a perceived or actual reduction in access and convenience, or through traffic delays; however, as the EDE passes through largely open terrain, this effect is likely to be minimal. It would be likely to be more than offset by expected increased patronage of local businesses during the construction phase of the project.

## 5.2.4 Social infrastructure

Services such as schools may be adversely impacted on the occasions that temporary traffic management is required during peak times; however, such negative impacts are expected to be short-term. Construction noise and dust is not likely to adversely impact schools, all of which are remote from the EDE footprint.

Other than traffic delays that may occur during construction, most community facilities in close proximity to the study area are not expected to be affected by construction activity.

Emergency services potentially affected by road construction works and traffic delays include:

- Ambulance station at 7 Erin Street
- Bushfire services at 41 Campbell Street.

Access to these services, which are located on the edge of the Queanbeyan CBD, would be maintained at all times.

Other social infrastructure in the vicinity of the EDE includes the following:

- Sporting facilities: Steve Mauger Sportsground, Queanbeyan Golf Course, Taylor Park
   Sporting Complex, Wright Park
- Open space: Doeberl Reserve, Barracks Flat Park, Queanbeyan River reserve, Margaret Donoghoe Park, Cuumbuen Nature Reserve, Wright Park, Don K Campbell Park
- Churches: St Matthews, 191 Cooma Street, Karabar, and Canberra Gospel Church, 91 Ellerton Drive
- Shopping: Queanbeyan CBD, Karabar shopping centre at the corner of Cooma Street and Southbar Road, and the shopping precinct at the intersection of Ellerton Drive, Yass Road and Bungendore Road
- Education: TAFE Illawarra Queanbeyan campus, Buttle Street and Ellerton Drive, East Queanbeyan Public School
- Council property: Queanbeyan pound at 10 Ellerton Drive.

Access to the Canberra Gospel Church at 91 Ellerton Drive would be modified to be right-in, left-out. During operation of the EDE, it would be right-in, left-in and left-out.

During construction there would be no public access into the construction area. This restriction would be lifted on completion of the EDE.

During construction of the bridge across the Queanbeyan River, the contractor would limit access to the area on the water under the bridge. On completion of construction, there would be no restriction on this access.

Both the northern and southern embankment areas, including the area of the compound would be restricted during construction. On completion, all these temporary facilities and restrictions would be removed.

# 5.2.5 Local amenity

Amenity impacts include any factors that affect the ability of a resident, visitor or business owner to enjoy their home and daily activities involving, for example, noise, vibration, views, air quality, and local access.

## 5.2.5.1 Environment Protection Licence (EPL)

The project will so be subject to an Environment Protection Licence during construction, overseen by the EPA. This would seek to manage issues such as noise, working hours, dust, and soil and water management and pollution.

#### 5.2.5.2 Construction noise

In addition to noise from machinery, trucks, reversing alarms, excavation and other plant, it is possible that a crushing and screening plant could be required on site to process and use suitable onsite materials for roadbase, thus minimising the amount of imported material required. The location would be determined by the Contractor, most likely at one of the designated stockpile sites. It is also possible that the crusher plant could be mobile and relocated across the site as the work progresses.

Standard construction working hours would be: Monday to Friday: 7:00 am to 6:00 pm Saturday: 8:00 am to 1:00 pm

In general, the project does not propose to undertake consistent works outside of standard working hours.

All of the identified potentially impacted sensitive receivers were grouped into eight Noise Catchment Areas. These are shown in Figure 1 of the Noise Report.

Construction work outside of standard hours would not be undertaken without prior agreement with the contract Principal and with strong justification. Works outside of standard working hours would be undertaken in accordance with the *RMS Environmental Noise Management Manual Practice Note vii* (Roads and Traffic Authority, 2001) and *RMS Noise Management and Night Works Fact Sheet 02* (Roads and Maritime Services, 2011), or in accordance with any Environment Protection Licence.

Evening and night time works would be based on prevailing circumstances on a case by case basis and may include deliveries, late running works where continuity is required for safety or engineering reasons, or similar activities. Any extension to working hours would be subject to consultation with directly affected residents.

Noise walls would be installed in select locations where feasible to help mitigate construction noise e.g. along Ellerton Drive. A noise mitigation sub-plan would be an important component of the Construction Environmental Management Plan (CEMP) and would be adhered to by the contractor.

#### 5.2.5.3 Vibration

Noise and vibration levels would vary due to the movement of plant and equipment about the worksites and concurrent operation of plant. Noise and vibration would be managed as part of a sub plan of the contractor's CEMP which would include the preparation of a Construction Noise & Vibration Management Plan (CNNVMP) to minimise construction noise and vibration emissions in accordance with the Interim Construction Noise Guideline.

Where a vibration-intensive construction activity is identified, and assessment indicates the potential for excessive vibration, mitigation actions would be undertaken to minimise the likelihood of human discomfort and/or building structural damage.

Where blasting is required, blasting emissions would be required to comply with the ANZEC (1990) 'Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration'. A detailed blasting management plan would be undertaken once the need for blasting is confirmed and specific details are available.

Prior to construction commencing, the Contractor would be required to ensure that dilapidation surveys are undertaken of all buildings potentially subject to construction vibration effects. The purpose of such studies would be to assess the pre-existing condition of each building prior to any works occurring. Photos of pre-existing conditions would usually accompany such studies and copies provided to the landowner.

## 5.2.5.4 Visual amenity

The Proposal would have a temporary adverse impact on visual amenity during construction. Plant, machinery, materials and construction activities would cause minor, temporary adverse visual impacts. It is acknowledged that there is little that can be done to reduce adverse visual impacts during construction.

Construction of the EDE would be visible to residences that are adjacent to the route, namely those along the existing Ellerton Drive, and properties in Greenleigh and Fairlane Estate that abut or are in close proximity to the alignment.

Excavated bedrock would require crushing and screening to meet the nominated engineered fill criteria. The crusher would have temporary adverse visual as well as noise impacts.

The proposal would result in the loss of vegetation to enable construction to take place. Earthworks and vegetation clearing would also expose subsoil in some areas which would be visible in the landscape. It is acknowledged that the bushland and escarpment is valued by the local community for its visual and environmental qualities. The road layout has been designed to minimise removal of existing vegetation, however the nature of this project necessitates some clearing. It is proposed that where possible, the cleared native vegetation would be mulched and recycled, and used within the landscape works. Existing topsoil would also be collected and stockpiled for use within the landscape works wherever practicable.

On completion of construction, new planting would aim to maintain a similar character in order to reduce visual impact, by retaining as many significant trees as possible beyond the zone of construction.

The contractor would be required under the CEMP to keep the work site tidy and in good order.

## 5.2.5.5 Air Quality

Construction-related air quality impacts would primarily be associated with dust generation and mobilisation. The main activities that may cause dust generation include earthworks associated with construction of the EDE and the total amount of dust would depend on the silt and moisture content in the soil and the types of activities being carried out. Dust could also be generated by crushing and milling of excavated material, clearing of vegetation, and mobilisation of exposed soil. Vehicle access to the construction compound site may also cause airborne dust.

Dust mobilisation has the potential reduce visual amenity when settling on properties and may cause general discomfort for the surrounding community.

Construction of the Proposal would also cause exhaust emissions from construction vehicles, plant and machinery.

A construction air quality management plan would be prepared for the proposal, in accordance with OEH, EPA guidelines and the Environmental Protection Licence, to manage and mitigate potential air quality impacts of the proposal during construction. The management plan would include notification requirements for the neighbouring community.

## 5.2.6 Heritage

While it is not expected that the EDE would have any direct or indirect impacts on listed European heritage items, there is a duty of care under the Heritage Act 1977 in relation to the protection of relics. The Jumping Creek area was formerly used for mining, quarrying and agriculture, and there is potential for unknown historical sites to occur within this section of the EDE alignment. In the event that European archaeological heritage material is uncovered during construction, the contractor would be expected to follow an *Unexpected Archaeological Finds Procedure*.

The proposed EDE would cause direct harm to the Aboriginal sites located within the road corridor. Proposed safeguards for Aboriginal heritage sites are as follows:

- Where identified Aboriginal heritage sites are to be disturbed, the proponent (QCC) must obtain a S90 Aboriginal Heritage Impact Permit (AHIP) from the OEH. The AHIP should be obtained over the entire impact area to address the requirements of the NP&W Act. This must be done prior to construction commencing. Conditions of the AHIP would need to be adhered to
- The Contractor's site induction is to include a cultural awareness element and reference to its responsibilities under the NP&W Act
- Should Aboriginal material be unexpectedly uncovered during construction, the *Unexpected Archaeological Finds Procedure* would need to be followed.

# 5.2.7 Access and connectivity

There may be disruptions to local traffic flows during construction. This has the potential to affect traffic movements, pedestrian and cycle networks, and public transport services.

Because the proposed road is almost entirely new, disruptions to existing traffic would not be widespread. Given that most of the development is closed off from the main traffic routes, management of temporary traffic issues at adjoining intersections when required would not be expected to be significantly complex or inconvenient.

Construction access and material haul routes to the southern section of the project would be restricted from the Edwin Land Parkway/Old Cooma Road intersection entrance and in limited cases from Barracks Flat Drive. Construction access and material haul routes to the northern section of the project would be restricted from the Ellerton Drive entrance. In exceptional circumstances, where temporary access was required through alternate routes to the project, potentially affected members of the community would receive reasonable prior notification.

Earthwork volumes for each section north and south of Queanbeyan River are considered as isolated earthwork packages, and the achievement of a cut/fill balance in each section in the design would be

attempted. Where possible, site-won material from onsite excavation, residual soil and, extremely to-highly weathered bedrock, would be reused as engineered fill. Any excess material would be hauled to approved stockpile areas.

Hauling material between the north and south sections would require transport through the Queanbeyan CBD and should be minimised as much as possible. This may add to the CBD's current amenity problems and could have a negative flow-on effect for some businesses.

Temporary haul roads across the Queanbeyan River are not proposed. Materials from local suppliers for both sections of the project would be hauled along the existing public haul routes, and would be subject to Council and State regulations.

The Contractor would be required to prepare a detailed Traffic Management Plan in accordance with the relevant Australian Standards and the RMS Traffic Control at Worksites Manual.

The Contractor would also prepare traffic management plans where work is to interact with local traffic. This would include a temporary traffic management plan for each of the construction stages for RMS to review and QCC to approve. All local and RMS temporary traffic management guidelines would be adhered to. Affected residents would be provided with notification of any traffic interruptions in accordance with the TMP.

Construction of the EDE may have impacts on public transport services through delays caused by changes in routes and timetabling. These matters would be confirmed in consultation with QCity Transport, and addressed in the TMP.

Similarly, construction may have temporary, but minor impacts on the use of cycling and walking routes in Queanbeyan e.g. along the existing section of Ellerton Drive and in the vicinity of the bridge construction along Barracks Flat Drive.

The contractor would be required to provide temporary 24-hour, seven-day-a-week access to the resident of 40A Severne Street; a permanent access to the EDE would also be provided to this resident. Temporary and permanent access would be available to landowners at Jumping Creek and Curtis Estate.

## 5.2.8 Impacts of construction on Jerrabomberra

Construction of the EDE is not expected to have significant noise and vibration impacts on Jerrabomberra, and no visual amenity impacts on this suburb.

# 5.2.9 Mitigation measures for construction

The table below provides a summary of mitigation measures proposed for construction.

## **Property**

- Land acquisition would be undertaken in accordance with the Land Acquisition (Just Terms Compensation) Act 1991 and QCC policies.
- Consultation with potentially affected property owners would be undertaken as early as possible.

#### **Social Infrastructure**

- The construction traffic management plan (CTMP) would include measures for ensuring access to social infrastructure is maintained at all times.
- The CTMP would include requirements for ongoing consultation and notification with emergency services providers to ensure that access is maintained at all times.
- During construction of the bridge across the Queanbeyan River, the contractor would limit
  access to the area on the water under the bridge. Both the northern and southern
  embankment areas, including the area of the compound, would be restricted during
  construction.

#### Local amenity

- The contractor would be required to develop and implement a Community Liaison Strategy as part of the CEMP to keep the local authorities, residents and community in the vicinity of the Works and road users informed.
- A 24 hour hotline and complaints management process would be established.

#### Standard work hours:

- Monday to Friday: 7 am to 6 pm
- Saturday: 8 am to 1 pm
- Extension to work hours would be undertaken in accordance with RMS Environmental Noise
   Management Manual Practice Note and RMS Noise Management and Night Works Fact Sheet,
   Potentially affected members of the community would receive prior notification and be notified
   before the start of any works outside of standard hours.

#### Noise and vibration:

- A construction noise mitigation sub-plan would be developed as part of the CEMP and adhered to by the contractor.
- A Construction Noise & Vibration Management Plan (CNVMP) would be developed as a sub-plan
  of the CEMP. The CEMP and CNVMP would address construction noise issues (location of loud
  operations such as crusher plants, limiting reverse alarms, hours of work, etc.)
- Dilapidation surveys are to be undertaken of potentially affected buildings prior to construction commencing.

#### Air quality:

• Implementation of a construction air quality management plan in accordance with the EPL, OEH and EPA guidelines.

#### Visual:

- Visual impact of construction operations will be minimised by retaining significant trees beyond the zone of construction by controlling clearing using barricade fencing. Tree protection measures would be detailed in the landscaping specification and implemented prior to clearing.
- Where possible, cleared vegetation would be mulched and recycled and used in landscaping works
- Existing topsoil would be used within landscaping works where possible.
- The contractor would be required under the CEMP to keep the work site tidy and in good order.
- Progressive revegetation and landscaping of cleared areas as works are completed would be undertaken where possible.
- New planting and landscape treatment would be predominantly low maintenance grassing in accordance with QCC requirements.

#### Heritage

Requirements to manage impacts on European and Aboriginal Heritage under the Heritage Act 1977 and the NP&W Act as well as any additional approvals such as the AHIP process are to be adhered to.

#### Access and connectivity

A CTMP would include measures to:

- Manage traffic staging during construction.
- Ensure continuous, safe and efficient movement of traffic for both the public and construction workers.

- Provide continuous access to the property at 40A Severne Street, Curtis Estate and Jumping Creek during construction operations.
- Maintain the capacity of local roads.
- Implement temporary speed restrictions around work zones.
- Maintain access to local roads and properties.
- Manage temporary changes to public transport services and routes.
- Minimise road user delays and frustrations where possible, such as additional signage and information.

Should temporary or alternative property access be required, this would be provided in consultation with the affected landowner(s). Work would not be carried out on public holidays or over the Christmas and New Year holiday period. Traffic Control Plans would address peak tourist/holiday traffic such as Friday and Sunday afternoons and days immediately prior to and following public holidays.

#### Communication

Community and stakeholder consultation would continue during the detailed design and construction phases of the proposal to aid understanding of the project details and processes. The Community Liaison Strategy would include requirements to provide timely, regular and transparent information and updates to residents and property owners such as:

- Letter box drops, media releases, and/or community updates.
- An internet site established and maintained for the duration of the project.
- Variable message signs.
- A 24 hour telephone hotline and complaints management process would be maintained throughout the construction of the project.

Activities which would require updates to the community would include:

- Changes to access and traffic conditions.
- General construction progress.

# 5.3 Operational phase impacts

## 5.3.1 Property impacts

Alternate access to the dwelling at 40A Severne Street would be provided from the EDE. Access would be maintained for landowners in Curtis Estate and Jumping Creek.

# 5.3.2 Changes to population and demography

No resident is expected to have to relocate as a result of the EDE. However, it is possible that some may choose to do so in time. To the extent that this might happen, it is considered unlikely that it would result in significant changes to population and demography in the area close to the EDE. By contrast, improvements in amenity in other parts of Queanbeyan e.g. near the CBD, could open up opportunities for urban renewal that might change the demographics in those areas.

# 5.3.3 Economy and business

Significant urban design improvements have already been made to Monaro Street over the past few years as part of the Queanbeyan CBD masterplan (2009). Together with these ongoing enhancements, the improved amenity that would arise from diverting heavy vehicles and other traffic from the CBD to the EDE is expected to enhance the attraction of the CBD, improving the environment for existing businesses as well as bringing in new businesses to the CBD.

The potential for changed patronage of businesses and community services was tested in the formal community consultation on the EDE. It was overwhelmingly apparent that traffic removal, particularly trucks, from the main street was seen as a positive for business by making the centre of the city more accessible and enjoyable for local and interstate visitors. With vacancy rates languishing at all-time highs, such a move would be timely and beneficial for CBD business. Significantly, only two submissions on the EDE felt that 'bypassing' the CBD would result in a loss of business.

Improved traffic flow in the CBD would provide an opportunity for an open discussion with the Queanbeyan business and broader community about the future of Monaro Street and implementing and/or altering the current masterplan.

In terms of regional economic effects, improved connectivity and reduced travel times for workers, suppliers and customers would also enhance business opportunities in the wider area.

The EDE has been endorsed by the Queanbeyan Business Chamber as necessary to revitalising the downtown area. In particular, the EDE would provide better access to industry, enhance the hospitality and retail offering in the Queanbeyan CBD, benefit smaller shopping centres such as at Karabar, and be an enormous stimulus for the hospitality, construction and industrial sectors. QBC does not view the EDE as resulting in any significant loss of trade in the CBD.

### 5.3.4 Social infrastructure

There would be no negative impacts on community services, facilities and networks due to property acquisition or a need for services, facilities and networks to relocate. Most services and facilities are also sufficiently removed from the alignment of the EDE not to be exposed to noise, air quality or visual impacts.

The EDE would have significant benefits for community uses located in or close to Cooma Street and the CBD, through reduced truck movements and improvements to general traffic flow in these areas. The following schools are expected to benefit from the EDE in this way:

- St Gregory's Primary School (Lowe and MacQuoid Street campuses)
- Karabar High School, Donald Road
- Queanbeyan South Public School, Cameron Road
- Queanbeyan Public School, Isabella Street.

As the EDE is not expected to increase traffic movements along Yass Road, there would be no impacts on Queanbeyan East Public School.

Insofar as impacts on Jerrabomberra Public School are concerned, it is noted that only a marginal increase in traffic passing along Edwin Land Parkway is likely to be attributed to the EDE. It is noted that QCC is considering traffic issues along Edwin Land Parkway as a separate project to the EDE.

Post-construction, existing walking tracks on the southern bank of the Queanbeyan River would be reinstated. QCC is currently working on a separate project to provide a connection to the CBD along the river via a concrete pathway along the southern river bank to link up with the Doeberl Reserve. The shared path being built as part of the EDE would link to this river path. Over the longer term, Council would also like to link River Reserve to the CBD along the northern bank via a similar path.

There are otherwise no significant amenity impacts anticipated for social infrastructure during operation of the proposal.

# 5.3.5 Local amenity

Changes to noise, visual amenity, access and air quality are likely to affect local amenity. Negative impacts are likely to be felt most by residents in close proximity to the EDE.

## 5.3.5.1 Noise and vibration impacts

## **Vibration**

Provided that the road is well maintained, vibration associated with heavy trucks passing by is generally unlikely to be perceptible.

#### Noise

While it is difficult to predict the exact nature of individual responses to road noise, it is acknowledged that the EDE would result in road noise impacts for some adjacent neighbourhoods.

To assess the noise impacts of the Proposal and recommend appropriate mitigation measures Council engaged SLR Consulting Australia Pty Ltd (SLR) who is a leading international environmental consultancy with specialist expertise in industrial acoustics and vibration.

The computer noise modelling and all associated assessments were performed in accordance with the NSW Road Noise Policy (RNP) and RMS Environment Noise Management Manual (ENMM), and in accordance with Australian standards and design codes and international best practice.

For traffic operating on public roads, the RNP is appropriate for assessing potential road traffic noise impacts. The RNP noise criteria aim to protect amenity inside and immediately around permanent residences, schools, hospitals and other sensitive land uses.

Most of the existing residences along the proposed EDE route are currently not affected by significant traffic noise. The areas most likely to be adversely affected by noise from the EDE are properties located in East Queanbeyan near the existing Ellerton Drive; Greenleigh communities along Taylor Place, Woodman Place and sections of Severne Street and Lonergan Drive; and Fairlane Estate along a section of Barracks Flat Drive, Doeberl Place and River Drive.

For a large proportion of these residents there would be an increase in traffic noise levels. However, this would decrease substantially with distance from the EDE, and mitigation measures are recommended to reduce these impacts.

The RNP bases mitigation guidelines on "feasible and reasonable" measures. Whilst QCC has made the undertaking to apply the RNP guidelines, it is acknowledged that there would be an overall increase in noise level in the vicinity of the new roadway and that not all residents would be satisfied with the mitigation measures that would be implemented.

In relation to the steps undertaken to identify feasible and reasonable mitigation measures, mitigation measures are generally considered in the following order of priority:

- 1. Road design and traffic management
- 2. Quieter pavement surfaces
- 3. In-corridor noise barriers/mounds (close to the source i.e. roadway)
- 4. Localised barriers/mounds (close to the receiver i.e. property)
- 5. At-property treatments.

Suitable noise mitigation strategies have been considered where both technically and economically appropriate.

At properties where noise mitigation strategies cannot achieve compliance with the RNP noise criteria, discussions with relevant individual homeowners would be undertaken on a case-by-case basis to resolve specific on-property noise mitigation measures. QCC would work closely with affected residents to resolve noise-related issues.

Council has undertaken to continue to work with residents along the alignment to ensure mitigation measures minimise impacts from noise.

Post-construction noise monitoring will be carried out following the opening of the project to monitor and review the effectiveness of the "as built" designs and assess the need for modifications. This noise monitoring will be conducted once traffic flows have stabilised, usually two to 12 months after opening. The results of this monitoring and review will be made available to the community.

In contrast to the areas experiencing an increase in noise levels, there would also be significantly reduced traffic with the resultant reduced noise along Cooma Street, Monaro Street and within the CBD. The reduced traffic along Cooma Street would also provide easier entry from side roads and driveways.

## 5.3.5.2 Visual impacts

The EDE would introduce new cuttings, embankments, noise walls, culverts and a new bridge, and would involve the removal of sections of vegetation.

Locations likely to be subject to medium-high to high visual impact include:

- Taylor Place: the proposed road alignment is situated on the opposite side of the valley creating the potential for high adverse visual impact to dwellings in this street. Proposed cut and fill batters would be within range of most viewpoints and combined with required clearance of vegetation would likely impact on visual amenity in this location. Introduction of timber noise walls to blend in with the woodland surroundings would help screen local residences from the EDE and potential noise. The walls themselves would have significant short to medium term adverse visual impacts on existing woodland views; in time, revegetation between the dwellings and noise walls may help reduce the impact of the latter.
- Severne Street: clearing of vegetation for cut and fill batters is likely to reduce visual
  amenity, at least in the short term, at selected points in this street. Existing topography and
  dense native vegetation would assist in screening the EDE, and visual impacts can be
  mitigated through a combination of landscaping and design measures. Timber noise walls
  up to 2.4 m high are proposed along the rear property boundary of four residences on
  Severne Street. This would help screen local residences from the EDE and potential noise.
  The noise walls themselves would have significant adverse visual impacts on existing
  woodland views from affected properties.
- Lonergan Drive, Woodman Place and Pike Place: the EDE is situated in undulating terrain, creating the potential for moderate to high adverse impact on residences at selected points in these streets. The proposed bridge abutment to the south-east of Lonergan Drive would have a high level of adverse impact, particularly to the dwelling at 35 Lonergan Drive for which mitigation measures are unlikely to be feasible. The introduction of timber noise walls up to 2.4 m high as the EDE passes south of Lonergan Drive would help screen local residences from the road and reduce potential noise impacts. A woodland buffer would remain between the noise wall and properties. The noise walls themselves would have moderate visual impacts on existing woodland views. Existing and new vegetation along the EDE between the noise walls and residences may, in time, help screen the noise wall and reduce its visual impact.
- 40A Severne Street: the EDE alignment is within close proximity of this property. Extensive
  clearance of vegetation would be required to construct the EDE, reducing visual amenity for
  this dwelling. Landscape and design measures may reduce visual impacts. Due to the native
  woodland character in this locality, amelioration works specific to this property are unlikely
  to be feasible.
- Doeberl Place: the reserved land currently offers little visual amenity or remnant native vegetation, and is restricted from use by the public. The proposed bridge abutment and road extending to the northern side of the river is likely to have a medium to high visual impact, particularly at night when car headlights are used. Location of the noise wall adjacent to the road should mitigate this. Due to the elevated location of most dwellings, fill batters to the lower slopes would likely have low adverse visual impact. Proposed noise walls up to 4.2 m high would likely impact significantly on existing views. Further potential impacts on visual amenity may arise from future earthworks and bridge abutment construction.
- Barracks Flat Drive and southern connecting streets: existing visual amenity in this area is not significant. The proposed bridge abutment and road extending to the northern side of the river is likely to be less visible to residences on Barracks Flat Drive due to its lower elevation compared to Doeberl Place. Where the EDE connects with Edwin Land Parkway, road works are likely to create a moderate to high adverse visual impact for bushwalkers, noting that this area is privately owned and continued bushwalking access would not be encouraged. There would be a moderate visual impact on dwellings within the southern connecting streets, adjacent to areas proposed to be cleared of native vegetation. Concrete

noise walls up to 4.2 m high are proposed along the outside of the shared pathway along the EDE. These would help screen dwellings from the EDE and potential noise and would have little effect on the general aesthetics of the area. A limited woodland buffer would remain between the properties and noise wall.

• The proposed bridge abutment and road extending to the northern side of the river, is likely to create a medium level of adverse impact upon the existing condition. The visual significance is likely to be low to medium, when considering the aspect and arrangement (i.e. the low opportunity for viewpoints) of properties within view, and therefore receivers are unlikely to receive significant visual impact. The lower elevation in comparison to Location A7 also aids to reduce the visual impact.

## 5.3.5.3 Access impacts

The EDE would improve safety for Greenleigh residents by providing emergency egress at Lonergan Drive and near the water tower off Severne Street. It would also provide additional access in and out of Fairlane Estate which currently relies solely on Barracks Flat Drive for access. This would reduce wait times for traffic joining Cooma Street.

The Yass Road roundabout is being redesigned by RMS as a signalised intersection. This project is separate from EDE.

Access to the dwelling at 40A Severne Street would be permanently severed by the EDE. Alternate access is proposed to be provided through a left in and out, right in and out turn to the eastern side of the EDE, about 120m from this property. It is acknowledged that severance of this property may cause the owner stress and anxiety, as well as loss of access to existing social and other networks. The proximity of the EDE to this property would also have local amenity impacts such as noise and visual.

Other than this property, the EDE would not be expected to have negative impacts on local access to other properties.

# 5.3.5.4 Air quality impacts

The majority of the EDE alignment is on undeveloped or previously cleared bushland, and air quality in residential areas that abut this bushland is high.

Ellerton Drive, Edwin Land Parkway and River Drive may already be subject to air pollution, however, the level of pollutants generated along these roadways is expected to be too low to cause any health, amenity or environmental problems.

Once operational, the proposal could cause some localised increased air pollution from vehicles using the road and, over time, traffic is expected to increase along the road.

However, the EDE would cause operational efficiencies through reduced congestion and improved traffic flow across the Queanbeyan area. This would reduce vehicle emissions from reduced start/stop motoring, particularly in the Queanbeyan CBD which currently experiences congestion.

# 5.3.5.5 Summary of local amenity impacts

It is acknowledged that local amenity would likely be affected by the EDE and that where impacts could not be adequately mitigated, this may cause stress and anxiety for residents.

By contrast, the Queanbeyan CBD and properties on or in close proximity to Cooma Street would likely enjoy significant improvements in amenity as a result of the EDE. A significant number of dwellings, as well as businesses, community services and open space would benefit from the reduction in noise, vibration, air pollution and improved access to households, as a result of traffic, in particular heavy vehicle traffic, being diverted to the EDE.

# 5.3.6 Access and connectivity

The EDE would have the following benefits for access and connectivity:

- Improved movement of traffic around Queanbeyan's CBD
- Increased road safety for the Queanbeyan community
- Potential increased capacity for public transport services
- Provision of specific infrastructure for cyclists and pedestrians
- Provision of additional routes for connecting the Queanbeyan community
- Increasing the capacity of the freight network.

There would be a 2.5 m off-road shared path for pedestrians and cyclists for the entire length of this major project. The shared path would be connected to adjoining neighbourhoods, improving connections for these residential areas of Queanbeyan. It would also connect to a river path on the southern side of Queanbeyan River that would continue to the CBD when this path is built. In addition, on-road cycling provision in the road shoulder for the entire length of the project. Both shared paths and on-road cycling provision would link with the existing facilities on the recently completed Edwin Land Parkway. These initiatives respond directly to QCC's objectives of providing improved pedestrian and cycling access, as described in Council's *Pedestrian and Mobility Plan* and *Bicycle Plan*.

The upgrade of two additional roundabouts to traffic signals would likely be required to ensure areas such as Jerrabomberra and Queanbeyan East are not adversely affected by population growth:

- Lanyon Drive and Tompsitt Avenue, Jerrabomberra
- Yass Road/Bungendore Road/Ellerton Drive, Queanbeyan.

These intersections are currently under consideration for separate improvement by RMS. QCC would promote any RMS community consultation on these intersections. While these upgrades would be required irrespective of the EDE proceeding or not they, together with the EDE, would ensure that the Traffic Study's objective of maintaining a LOS D or better in Queanbeyan's road network is met.

When the road is in operation, most local and regional residents would benefit from its many positive impacts. The most significant positive impacts are likely to result from the removal of heavy traffic from the CBD and the resultant improvement in the amenity of this precinct and access improvements to Canberra and the new development estate. Travel time, fuel consumption, accidents and inconvenience to users would decrease. Access to jobs, schools, shops, recreation and other community services and amenities would improve. Access to the neighbourhoods of Greenleigh and Karabar, and access to and from new development areas would improve.

The proposed bridge across the Queanbeyan River would provide alternate flood-free access to the Queanbeyan community.

# 5.3.7 Impact on community values

Judged against community values articulated in the *Queanbeyan Tomorrow Community Vision 2021*, the EDE is expected to have the following implications.

Value	Comment
An active, involved community that connects people with each other and the place in which they live, which creates a sense of belonging, a sense of safety and a country atmosphere, while embracing the diversity of the community, including the various cultures and neighbourhoods.	The EDE would not change this.
Preserving Queanbeyan's attractive complex landscape, its parks, river, escarpment, grassland and forested hills and associated flora and fauna for future generations	It is acknowledged that the EDE would have local amenity impacts. However, the positive amenity impacts for the wider community that would result, in particular from removing heavy traffic from the CBD and along Cooma Street, would be significant.
Queanbeyan being one of Australia's oldest inland settlements whose history not only shapes its community, but is captured in its historical buildings and community spaces.	The EDE would not impact on this.
Queanbeyan being a country town with city benefits, from diverse housing choices to a wide range of services and community groups including sports, arts and culture with easy access to transport links.	The EDE would not change this.

While the EDE has generated opposing views within the community, this division of opinion cannot be said to have changed the local character and identity of Queanbeyan, nor the cohesiveness of the wider community. It is acknowledged that the EDE would affect areas that have natural value to some sectors of the local community, mostly those who live in close proximity to the proposed road.

## 5.3.8 Impacts on Jerrabomberra

Common themes raised in submissions on the EDE and in response to this SIA relate to the impact of increased traffic volumes passing through Jerrabomberra and pressure that this would cause on the suburb's roads and access.

It is acknowledged that Jerrabomberra would be impacted in the future due to overall increased population and general traffic density associated with Queanbeyan's population growth. However, this will occur regardless of whether the EDE Proposal proceeds or not.

The EDE would have little direct impact on the traffic along Edwin Land Parkway, as it provides an alternative route around the Queanbeyan Central Business District (CBD) for traffic.

Traffic modelling of all intersection upgrades carried out by QCC shows daily traffic movements current at 2014 and forecast to 2031 for various scenarios. Figures for the Edwin Land Parkway and Tompsitt Drive are shown in the table below<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> http://www.qcc.nsw.gov.au/ArticleDocuments/1338/TrafficCurrent2014vs%20Modelling%202031.PDF.aspx viewed on 17 February 2016.

Location	2014	2031 (no EDE)	2031 (with EDE)
Edwin Land Parkway, between roundabout at Tompsitt Drive and intersection with Stringybark Drive.	4,775	9,060	9,555
Tompsitt Drive, between the roundabout and Lanyon Drive.	14,789	29,425	29,215

While traffic movements along these routes is forecast to double in both cases, the proportion of the increase attributable to the EDE is negligible. Any increase in traffic through Jerrabomberra is expected to come largely from future development to the south of Queanbeyan, in particularly with South Jerrabomberra traffic adding a considerable volume onto Tompsitt Drive. This trend is already being seen in the way in the preferences of Googong/Fernleigh residents to use Edwin Land Parkway and Lanyon Drive – see Section 3.2.5.

The *Traffic Study* shows that regardless of whether the EDE is included in the road network or not, other roads and intersections will also require improvements as they act independently of the EDE. In particular the Yass Road/Bungendore Road and Lanyon Drive/Tompsitt Road intersections are currently under consideration for improvement by RMS.

QCC is working on a range of other intersection and road upgrades including traffic efficiency improvements to the Jerrabomberra Circle. Whilst the latest modelling indicates that this roundabout does not need upgrading for traffic capacity reasons before 2031, QCC is reviewing the need to upgrade the intersection in the short to mid-term for reasons of safety, pedestrian movement, cycle movement or interaction with adjoining intersections.

Council would seek separate developer funding, external grants and other funding mechanisms for the development and implementation of these intersections and improvements, the majority of which would be required regardless of the construction of the EDE Proposal.

## 5.3.9 Mitigation measures for operational phase

The table below provides a summary of mitigation measures for the EDE's operational phase.

## **Local amenity**

- Noise attenuation measures to be installed, to minimise impacts on affected properties.
- Noise wall location, height, material and design to be confirmed with affected residents.
- On-site building mitigation would be delivered to affected properties that qualify for treatment.
- Landscaping to replace cleared vegetation and improve aesthetics of the proposed road.
- Lighting would be restricted to major intersections and feature directional lighting to minimise light spill to surrounding areas.
- There would be no lighting on the Queanbeyan River Bridge.
- Maintenance of 60 km speed limits along existing Ellerton Drive from Yass Road roundabout to approximately Ch 1200 and 80 km elsewhere.
- Post-construction monitoring would be carried out to review the effectiveness of the 'as built' designs
  to assess the need for modifications. The results of monitoring and review would be made public
  Noise monitoring would be conducted once traffic flows had stabilised, usually two to twelve months
  after opening of the road.
- QCC would consider further noise assessment of affected locations as a separate project as part of Council's integrated planning process, along with other proposed projects.

# Access and connectivity

- Implement road striping and directional signage strategy to explain new traffic and access arrangements.
- The EDE, once built, would be managed in accordance with QCC operation plans and policies.

# 6 CONCLUSION

This report provides an assessment of the potential social and economic impact of the proposed EDE. The assessment has had regard to the existing context of the proposal, the contribution of other specialist studies, outcomes from community consultation, and the adoption of appropriate mitigation measures.

The EDE would improve movement of traffic around Queanbeyan's CBD and increase road safety for the Queanbeyan community, increase the capacity for public transport services, provide infrastructure for cyclists and pedestrians, additional routes for connecting the Queanbeyan community and increase the capacity of the freight network.

Provision of flood-free access across the Queanbeyan River would be a key benefit of the EDE. Currently, the town is severed during a 1 in 20 year flood. The proposed bridge across the Queanbeyan River would enable access between west and east Queanbeyan to be maintained during a flood event in excess of a 1:100 year event.

The diversion of heavy vehicle traffic from Cooma Street, Queens Bridge and the Queanbeyan CBD, would improve the amenity of thousands of residents living on or close to these locations as create the preconditions for revitalising the CBD. Apart from the boost to the local economy that would result from building the EDE, the proposal would assist in addressing a fundamental barrier to reinvigorating the CBD: removal of trucks from the centre of town.

The EDE would benefit community uses in and around the CBD, in particular schools, through reduced truck movements and increased safety.

Additional connections to Greenleigh would provide substantial safety improvement during fire or emergency events. Additional access to Fairlane Estate would provide relief for traffic entering Cooma Street and in emergency events.

It is acknowledged that the EDE would be likely to have impacts on sections of the community that live in close proximity to the road footprint. The proposal would introduce elements that are either absent or currently not an issue for these residents. Noise can be mitigated in accordance with RNP criteria, pollution is not expected to be significant and visual impacts would be localised. The proposed bridge across the Queanbeyan River would be a visual element that cannot be mitigated, but which does not affect a significant number of properties. Where possible, mitigation measures would be implemented to reduce local amenity impacts during construction and operation of the proposal – see Section 5 of this report.

Operation of the EDE is expected to have some impacts on Jerrabomberra, but these are forecast to be minor relative to the overall impacts of growth and population increase.

Uncertainty is an impact that would be felt mostly before and during the construction stage, but can be eased by providing updates and continuing consultation. In particular, early and ongoing consultation with affected property owners, businesses and communities as well as community participation in the ongoing planning, environmental management and monitoring would be important in avoiding and minimising potential socio-economic impact of the project's construction and operation.

Overall, the assessment has found that the proposed development would result in a range of social and economic benefits. For the most part, negative impacts are expected to be felt by a relatively small segment of the community and most would be able to be mitigated to reduce their scale.

# 7 REFERENCES

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Roads and Maritime Services *Environment Impact Assessment Practice Note – Socio Economic Assessment* (EIA N05) 22 July, 2013

Roads and Maritime Services *Survey of Queanbeyan LGA residents regarding the proposed Ellerton Drive Extension* July 2015

SMEC Ellerton Drive Extension Review of Environmental Factors November 2015

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Transport for NSW NSW Long Term Transport Master Plan 2012

# Survey questionnaires

## **Resident survey**

# Ellerton Drive Extension (EDE) Social Impact Assessment: interview questions

- 1. How long have you lived at this address?
- 2. What is it that you like about living here?
- 3. Is there anything about living here that you don't like or that is a problem for you?
- 4. Would the EDE make any difference to the way you have access to the following:

Activity	Yes	No	N/A
Work			
Shopping			
Businesses and services			
Community facilities			
Sport and recreational facilities			
Open space			
Friends and family			

If you have answered 'yes' to any of the above, please discuss

- 5. Are there any benefits of the EDE for yourself? If so, please discuss.
- 6. Are there any benefits of the EDE for the wider Queanbeyan community? If so, please discuss.
- 7. Are there any negative impacts of the EDE for yourself? If so, please discuss.
- 8. Are there any negative impacts of the EDE for the wider Queanbeyan community? If so, please discuss
  - 9. What would reduce the impacts of the EDE in your particular circumstances?

# Greenleigh survey (same as residents survey plus)

# About the Greenleigh Residents Group

- 1. When did the group form?
- 2. What is its catchment?
- 3. Approximately how many participating households are there in the Group?
- 4. How often does the Group meet?
- 5. What are the key issues for the group, other than the EDE?

## Queanbeyan Conservation Alliance survey

# Ellerton Drive Extension (EDE) Social Impact Assessment: Queanbeyan Conservation Alliance

- A. About the Queanbeyan Conservation Alliance (QCA)
- 1. When did the QCA form?
- 2. What are the QCA's aims and objectives?
- 3. What are the key issues for the QCA, other than the EDE?
- B. About the proposed EDE
- 1. Would the proposed EDE have an effect on access of Queanbeyan residents to any of the following:

Activity	Yes	No
Work		
Shopping		
Businesses and services		
Community facilities		
Sport and recreational facilities		
Open space		

If you have answered 'yes' to any of these questions, please discuss how.

- 2. Are there any benefits of the proposed EDE for the city of Queanbeyan? If so, please discuss.
- 3. Are there any negative impacts of the proposed EDE on the city of Queanbeyan? If so, please discuss.
  - 4. What would reduce impacts of the proposed EDE on the city of Queanbeyan?
  - 5. Do you have any other comments you wish to make on behalf of QCA?

## **Schools survey**

# Ellerton Drive Extension (EDE) Social Impact Assessment: interview questions

- 1. How long has the school been operating at this address?
- 2. What is the school's geographic catchment?
- 3. What are the school's operating hours?
- 4. How many students are enrolled?
- 5. How many staff are on site on a regular basis?
- 6. How do staff and children get to school and back?

Travel mode	Students (approx. %)	Staff (approx. %)
On foot		
Bus		
Bicycle		
Car as		
passenger		
Car as driver		
Other		

- 7. What are the key traffic, transport and access issues for children, parents and staff at this school?
- 8. Are there other key issues of concern for your school? If so, please discuss.
- 9. Do you think that the EDE would have benefits for your school? If so, please discuss.
- 10. Do you think that the EDE would have negative impacts on your school? If so, please discuss.
  - 11. If you have identified negative impacts of the EDE for your school, what do you think could be done to reduce these?
  - 12. Do you have any other comments?

## **Queanbeyan Business Chamber Survey**

## Ellerton Drive Extension (EDE) Social Impact Assessment: interview questions

- 1. How long has the Chamber been in existence?
- 2. How many businesses or members does the Chamber represent?
- 3. What type of businesses are represented?
- 4. Where are they mostly concentrated?
- 5. What are the key traffic, transport and access issues facing Queanbeyan businesses?
- 6. If there are other key issues for businesses, please discuss.
- 7. Are there any benefits that the EDE would have for Queanbeyan businesses? If so, what are they?
- 8. Are there any negative impacts that the EDE would have on Queanbeyan businesses? If so, what are they?
  - 9. If applicable, what would reduce negative impacts of the EDE on Queanbeyan businesses?
  - 10. What benefits would the EDE have for the Queanbeyan CBD, industrial areas and other commercial/shopping precincts in the local government area?
  - 11. What negative impacts would the EDE have on these areas?
- 12. Are there business sectors which might benefit from the EDE? If so, which ones and how?
- 13. Would the EDE likely result in potential loss of trade for any business sectors? If so, which ones and how?
  - 14. Do you wish to make any other comments?