

16 Socio-economic analysis

This chapter characterises the socio-economic environment of the study area, including a demographic profile, notable cultural and social aspects as well as key business and tourism features. The potential impact of the Proposal on these features is discussed along with proposed management measures. Potential socio-economic impacts have been considered in detail in the specialist Land use, planning and socio-economic assessment report (working paper 4, Appendix F). A Sikh cultural impact assessment has also been prepared (working paper 6, Appendix F).

16.1 Existing situation

16.1.1 Settlement and demographic profile

The estimated population of the Coffs Harbour local government area at June 2004 was 66,529 persons (Coffs Harbour City Council 2005a) with the majority of the population located on the coast. Major urban centres in the Coffs Harbour local government area are Coffs Harbour, Sawtell and Woolgoolga. Major industries within the local government area include retail trade, construction and property and business service sectors (Coffs Harbour City Council 2005a).

The study area comprises a number of discrete urban settlements, rural residential areas and rural / agricultural development. The settlement pattern is evident in Figure 14.1a and 14.1b in Chapter 14. Key features of the community structure within the study area are described in Table 16.1.

TABLE 16.1 COMMUNITY STRUCTURE IN THE STUDY AREA

LOCATION	COMMUNITY STRUCTURE
Woolgoolga	The largest urban settlement in the study area. In 2001, Woolgoolga had a population of 4526 people comprising 7.2 per cent of the population of the local government area (Coffs Harbour City Council 2004a). Rural residential development associated with the Woolgoolga township is located to the west of the highway, predominantly along Newmans and Woolgoolga Creek roads. Consultation with stakeholders has indicated that the rural residential communities to the west of the highway have a strong association with the Woolgoolga community.
Arrawarra, Mullaway and Safety Beach	Three discrete, but proximate coastal settlements north of Woolgoolga on the eastern side of the existing highway. In 2001, the combined population of these settlements was 2430 (Coffs Harbour City Council 2004a). Development within each of these settlements is predominantly residential.
Sandy Beach and Emerald Beach	Two discrete, but proximate, coastal settlements south of Woolgoolga. In 2001, the combined population of these settlements was 3651 people (Coffs Harbour City Council 2004a). Development within each of these settlements is predominantly residential with some limited commercial development. They rely mainly on Woolgoolga and Coffs Harbour to a lesser extent to provide services such as health, entertainment and business. A key characteristic of the structure of Sandy Beach is that the existing highway bisects the settlement, but it does not have a direct highway connection. Access is via Graham Drive and a highway overbridge at Diamond Head Drive.
Sapphire and Moonee	Two discrete, but proximate, coastal settlements between Woolgoolga and Coffs Harbour on the eastern side of the highway. In 2001, the combined population of these settlements was 3456 people (Coffs Harbour City Council 2004a). Development within these settlements is predominantly residential, but with an emerging commercial precinct at Moonee and substantial established tourist development at Sapphire. Coffs Harbour is a key hub for this locality in providing health services, major stores, educational services and business facilities.
Rural residential areas	There are several rural residential areas within the study area, the larger estates including those to the north of Gaudrons Road, Forest Glen, Heritage Park, Avocado Heights, Emerald Heights and Country Club Estate. The majority of these developments are located to the west of the existing highway.
Rural / agricultural development	There are many rural and agricultural properties in the area, mostly to the west of the existing highway (refer to Chapters 14 and 15 for further information).

The NSW North Coast is one of the fastest growing regions in NSW. Data obtained from the 2001 Census show an annual growth rate of the Coffs Harbour local government area of 1.9 per cent over a 10 year period from 1991 to 2001, higher than the Mid North Coast Statistical Division (1.4 per cent) and NSW (1.1 per cent) for the same period. In 2005, Coffs Harbour local government area accounted for 22.8 per cent of the population for the Mid North Coast statistical division and one per cent for the whole of NSW.

Within the study area, the population has been steadily increasing. Arrawarra, Mullaway and Safety Beach experienced a 16 per cent increase in population between 1991 and 2001. Woolgoolga experienced an eight per cent increase in population in that same period, while Sandy Beach / Emerald Beach and Moonee / Sapphire experienced increases of 28 per cent and 37 per cent respectively. Further details are provided in Table 16.2.

TABLE 16.2 POPULATION FIGURES

LOCALITY	1991 POPULATION	1996 POPULATION	2001 POPULATION	PER CENT ANNUAL GROWTH RATE
New South Wales	5,732,032	6,038,696	6,371,745	1.1
Mid North Coast region	240,753	262,985	275,274	1.4
Coffs Harbour local government area	51,520	58,337	61,635	1.9
Arararra, Mullaway, Safety Beach	2033	2333	2430	1.9
Woolgoolga	4165	4493	4526	0.8
Sandy Beach, Emerald Beach	2637	3373	3651	3.8
Moonee, Sapphire	2187	2910	3456	5.8

Further details regarding the demographic profile for the study area is provided in working paper 4, Appendix F.

16.1.2 Future population growth

Population growth projections for the next 30 years indicate that Coffs Harbour will continue to grow quite rapidly. Like other coastal locations on the Mid North Coast's coastal fringe, it will continue to attract "baby boomers" and people wanting a different, more relaxed lifestyle from metropolitan areas and rural inland areas. The Coffs Harbour population is expected to grow from an estimated 67,000 in 2004 to 100,000 by about 2030 (Coffs Harbour City Council 2004a).

In 2004, Coffs Harbour City Council reviewed the land capacity of the local government area, utilising both 2001 census population data and estimated population growth for local areas. The land capacity assessment considered land that is already zoned for urban development (un-subdivided land and infill development) and land identified as having future urban land capacity. Table 16.3 summaries the report's findings for those areas within the study area.

TABLE 16.3 FUTURE DEVELOPMENT POTENTIAL AT LOCATIONS WITHIN THE STUDY AREA

LOCATION	PREDICTED 2004 POPULATION	NO. OF POTENTIAL DWELLINGS ON ZONED RESIDENTIAL LAND ¹	NO. OF POTENTIAL DWELLINGS ON PROPOSED RESIDENTIAL LAND	POTENTIAL INCREASE IN POPULATION PREDICTED	2031 POPULATION
Moonee / Sapphire	3908	1694	3	5397	9305
Sandy Beach / Emerald Beach	3810	656	127	1917	5727
Woolgoolga	4646	1074	500	3550	8196
Arararra, Mullaway and Safety Beach	2487	482	157	1638	4125
Total	14851	3906	787	12,502	27,353

¹ Inclusive of zoned residential land that has not yet been subdivided, potential lots for infill development and vacant land within already developed land

Table 16.3 shows that from Sapphire to Arararra, there is the potential that the number of potential dwellings on currently zoned residential land total 3906. An additional 787 dwellings could be built on land that is proposed to be zoned residential land in future. It is anticipated that

this potential dwelling yield would accommodate an additional 12,502 people within the study area (from the projected 2004 population) by 2031.

On 5 July 2007, Council adopted the *Our Living City Settlement Strategy* (Coffs Harbour City Council 2006). The *Our Living City Settlement Strategy* predicted a population of 30,619 for the Northern Beaches area (which in addition to the four localities shown in Table 16.3, includes Red Rock / Corindi Beach / Corindi Plateau and Korora). The draft *Mid North Coast Regional Strategy* land supply calculations were used in the development of the *Our Living City Settlement Strategy*. While there are some differences with the population predictions included in the *Our Living City Settlement Strategy* (compared to the *Coffs Harbour Revised Land Capacity Assessment 2004*), the overall predicted 2031 population of 27,353 for the localities shown in the table is generally consistent to the Strategy's prediction for the Northern Beaches area.

16.1.3 The Sikh community

A Sikh cultural assessment (working paper 6, Appendix F) has been undertaken by specialist consultants and it is summarised below as part of the socio-economic assessment.

According to the 2001 Australian census, the number of people in Australia who identify themselves as Sikh is 17,401 (Australian Bureau of Statistics 2001). Woolgoolga is home to one of the most well known Sikh communities in Australia. An estimated 22 per cent (approximately 1000 people) of the Woolgoolga population is Sikh (due to the absence of specific census data, the total Sikh population numbers cannot be more accurately determined). The permanent migration of Sikhs to Woolgoolga commenced in the 1940s and they worked primarily as labourers on the banana plantations (More & Singh 2006).

The Sikh community in Woolgoolga was established through immigrants from India purchasing land and housing for families. Temples were built providing important community places of worship, meditation and congregation for the Sikh community. Woolgoolga is home to Australia's first two Gurdwaras (temples), the First Sikh Temple of Australia and the Guru Nanak Sikh Temple (Bhatti & Dusenbery 2001).

Banana farming has made a substantial contribution to the economic development of the region and the prosperity of the Sikh community (Bhatti & Dusenbery 2001). Approximately 90 per cent of Woolgoolga's banana industry is owned and operated by Australian Sikhs (Coffs Harbour City Council 2004).

For many Sikh families, farming and the relationship to the land is an important aspect of their culture, with a majority of Sikhs identifying themselves as farmers. Many Sikh farms are run as family businesses, providing a source of employment for the family and playing an important role as the focal point for the family unit. This often involves not just the immediate family but an extended family of several generations. One of the important links between culture and farming is that the farms provide the family network with the flexibility of self-employment. This flexibility affords Sikh families the freedom to carry out religious activities, including religious ceremonies that are not recognised by public holidays.

Sikh community consultation

The community involvement plan prepared prior to the beginning of the project, identified the Sikh community as an important community group and identified communication activities targeted to the community. Specific consultation with the Sikh community has included translation of information brochures, meetings with the community, as well as attendance at community focus group meetings.

Following a meeting with the Community Relations Commission in September 2005, the RTA

agreed to undertake an assessment of the potential impact of the Proposal on the cultural and heritage values of the local Sikh community as part of this report.

A Sikh Cultural Assessment (working paper 6, Appendix F) has been prepared by specialist consultants and it is summarised below.

As part of this assessment, a program of consultation was undertaken with the Sikh community to gain an understanding of the potential impacts of the Proposal and management measures which could be implemented to mitigate any potential impacts. A full summary of all consultation activities is provided within the Sikh Cultural Assessment (working paper 6, Appendix F).

Consultation activities undertaken as part of the assessment include:

- Telephone contacts with key representatives of the community and the two Sikh temples.
- Letters to the two local Sikh temples requesting access to the Sikh community and permission to conduct community consultation sessions on their premises.
- Community information flyers advertising the consultation sessions and a discussion group meeting to be held on 15 May 2006.
- Written summaries of the feedback gained from the consultation meetings. Community members were invited to review and comment on the summaries.
- Discussion group meeting held at Woolgoolga Primary School on 15 May 2006.
- Telephone contact with the community representatives following the discussion group meeting to discuss a revised consultation approach. The community's request to submit comments / feedback in writing was agreed to.
- Written correspondence and telephone contact with community representatives seeking feedback and confirmation of the revised consultation approach.
- Distribution of community flyer, via the temples, inviting the community to submit written comment.
- Verbal presentation at both temples to explain the revised consultation method.

The written submissions received are included in the Sikh Cultural Assessment (working paper 6, Appendix F).

16.1.4 Community access and mobility

Road access

Settlement patterns and road transport in Coffs Harbour are closely linked and the strong linear form of urban settlement together with the low housing density has made it difficult to develop an affordable public transport system within the local government area. Cars are the most commonly used form of transport in the study area, with 76 per cent of people using cars for travel to work (Coffs Harbour City Council 2004b).

The Pacific Highway is the dominant transport link in the Coffs Harbour area. It is the only road that provides connection between the northern beaches communities and it provides the main link south to Coffs Harbour and north to Grafton. The traffic and transport assessment (refer Chapter 10) indicates that the Pacific Highway has an annual average daily traffic volume of approximately 20,000 at the southern end of the study area, reducing to approximately 11,000 at the northern end. Approximately 90 per cent of tourists to the area travel by road and the traffic volume increases significantly in holiday periods. This generates conflict with local road users, making it difficult for crossing the highway, moving between urban areas, accessing the town / village centres and parking.

The *Coffs Harbour State of the Environment Report 2004* recognised that these accessibility issues concerning community segregation, safety, aesthetics, noise and air pollution should be at the forefront of future decisions concerning the long-term development of the Pacific Highway.

Public Transport

There are local bus companies with regular routes along the Pacific Highway providing services for the larger northern beaches communities. The local bus operators also provide daily school services (refer Chapter 10).

Coffs Harbour airport and railway station provide alternative means of transport to the Mid North Coast. The reasonably restricted public transport options to the area illustrate the areas reliance on the local and wider road network, especially the Pacific Highway.

16.1.5 Business activity

By 2004 / 2005, the gross regional product of the Coffs Harbour local government area was estimated at \$1,689.4 million, accounting for 22 per cent of the gross regional product of the Mid North Coast statistical division and 0.6 per cent of the gross state product (Coffs Harbour City Council 2005a). The largest industry sectors in terms of economic value are the property and business services sector (\$455.1 million) and retail trade (\$288.6 million). Wholesale and retail businesses are highly dependent on the seasonal tourist trade and big increases in these sectors in the past 10 years show the increasing dominance of tourism in the local economy (Coffs Harbour City Council 2004a). The largest increase in economic output in the past 10 years was in the government, administration and defence with 62 per cent growth.

Within the study area, the focus of economic activity in terms of output value and diversity is Woolgoolga, with substantial tourism business at Sapphire and emerging commercial activity at Moonee. Woolgoolga provides numerous commercial and business services for the town and surrounding beachside villages and rural areas. There is also an established industrial area of some 31.3 hectares at south Woolgoolga which includes mechanics, auto electricians, plumbers, panel beaters, painters etc. Woolgoolga therefore provides an important economic support role to the major regional / district centres of Coffs Harbour and Grafton.

In order to minimise the escape of expenditure from the local area to those larger centres, the Woolgoolga Chamber of Commerce is instituting programs to encourage patronage of local businesses. Council and the Chamber of Commerce are also investigating mechanisms to encourage relocation of businesses to Woolgoolga from surrounding areas and further afield.

Businesses within Woolgoolga mainly serve a local market, Council has defined a trade catchment served by Woolgoolga, which extends from Halfway Creek and Red Rock in the north, to Upper Corindi in the west and Emerald Beach in the south (Coffs Harbour City Council, 1996). A relatively small number of Woolgoolga businesses have a reliance on passing highway trade, including highway fronting service stations and accommodation, mainly north of Clarence Street.

16.1.6 Tourism

The main tourist attractions of the study area include the beaches, headlands, lakes, flora reserves and surrounding rural countryside. The 'coastal village' atmosphere of Woolgoolga and other northern beaches settlements, combined with a good range of budget and family accommodation available are also key attractors. Tourism on the Mid North Coast is a highly seasonal market with peaks during school and summer holidays, which result in tourist facilities being intensively used for short periods followed by prolonged periods of much reduced activity.

Stakeholder consultation has highlighted the existing and future importance of tourism to the study area and more broadly to the Coffs Harbour local government area and the region. Tourism NSW (2005) has produced data for the North Coast tourism region, identifying that in the year ending September 2005, the North Coast region had 3.1 million domestic overnight visitors and

another 145,000 international visitors. Domestic visitors spent almost 12.8 million nights in the region, a decline of 2.1 per cent from the previous year.

Regional data indicates that the majority of visitors to the north coast region are from Sydney or elsewhere in NSW and by far the dominant mode of transport for visitors to the region is private vehicle (90.7 per cent), with the Pacific Highway being the primary route. A small but growing number of visitors to the Coffs Harbour area are using air travel, however, rail and coach travel remain relatively minor. The predominant tourist travel to the study area is via private vehicle travel on the Pacific Highway.

16.2 Potential socio-economic impacts

Construction of a major new road and changes to an existing road network, as is proposed, can have both positive and negative effects on people at an individual and at a community level. This section provides what is essentially a qualitative assessment of the range of potential impacts that could arise from the construction and operation of the Proposal.

For the purposes of the assessment, a number of potential issues associated with the socio-economic environment in the study area have been identified. These issues have been identified and assessed by the project team with the benefit of experience in previous comparable highway upgrading projects, examination of specific characteristics of the community within the study area and feedback obtained from the community consultation process that has extended over a period of almost six years. The socio-economic issues that have been considered in the assessment include effects on:

- Community cohesion.
- Sikh culture and heritage.
- Amenity.
- Land use and property effects.
- Business.
- Tourism.

This assessment draws on findings from a range of other studies (presented in working papers 2 and 5 (Appendix F) and Chapters 11 (noise), 19 (landscape, visual and urban design) and 20 (air quality)) as inputs into the overall assessment of the potential socio-economic impacts of the Proposal.

Land use and property impacts, including the implications for agriculture in the study area are also recognised as important aspects in the socio-economic assessment of the Proposal. The nature and scale of those aspects is such that they have warranted a separate assessment (refer Chapters 14 and 15 respectively).

16.2.1 Community cohesion

Construction stage

Construction phase works have the potential to interrupt local community travel on local roads and along the highway, particularly if the works cause traffic delays, disruptions or additional travels circuits. The duration of any such disruption would depend on specific construction staging plans but would be expected to be less than six months in more complex or constrained locations.

However, any such potential adverse effects on community cohesion during construction would be temporary and transient as the focal point of impact would move as construction progresses along the corridor. It is not anticipated that there would be any lasting community cohesion issues arising from the construction phase.

Operation stage

The existing Pacific Highway already forms a physical barrier between some of the community precincts within the study area. Indeed, the presence of the existing highway, along with other physical and environmental factors, has fundamentally influenced the form and separation of the many urban and rural settlements along the northern beaches of Coffs Harbour.

The upgrade section of the Proposal would involve amplification of the existing highway corridor, however this would not increase the level of separation between the discrete communities as much of the new highway is located within the existing road reserve. Rather, as the Proposal incorporates a separate local access road network, community cohesion would be enhanced due to the ability of residents to travel by road between these communities without having to engage with the high volume, faster moving highway traffic. An example would include at Sapphire, where improved connectivity would be achieved by the Proposal. The Proposal incorporates an overpass at Headlands Road, which would connect properties to the west of the highway with the urban residential area of Sapphire. There would be many specific benefits associated with this improvement to local access, such as new cross highway access between residential areas and different community facilities (eg. to beaches, shops and other service). A notable example is for residents / students from Emerald Beach who would be able to access the school at Emerald Heights without utilising the new highway.

Aside from the accessibility benefits of the proposed local access roads, all of the local communities in the study area will have the opportunity for access to the high standard dual carriageway via the planned interchanges.

In the bypass section, the Proposal would form a distinct physical and visual barrier between numerous rural properties. However, overpasses or underpasses are proposed at all public roads crossed by the Proposal (including Unwins Road, Greys Road, Woolgoolga Creek Road, Newmans Road and Bark Hut Road) to enable continued road access to the west of the route.

The most notable community advantage that is anticipated with the Proposal would be the significantly enhanced cohesion between the urban residential areas of Woolgoolga (i.e. east and west of the existing highway) and between the Country Club and urban Woolgoolga. For the bypass section, the diversion of through traffic, including a substantial reduction in the volume of heavy vehicles (refer Chapter 10) onto the bypass provides for improved access and connectivity for the existing and future communities to the east of the proposed bypass.

16.2.2 Sikh cultural effects

The potential impacts on the Sikh culture as a result of the Proposal primarily relate to property impacts on agricultural land that is owned / worked by Sikh members of the community. There would be no direct impacts on the temples, which are focal points for the community.

For many Sikh families, farming and the relationship to the land is an important aspect of their culture. In order to assess the potential impact to the community as a whole, the number of impacted Sikh-owned agricultural properties has been determined as well as the level of impact (in terms of economic viability) to those properties. This data has then been considered in relation to the total number of Sikh owned properties.

Based on information provided in working paper 5 (Appendix F), of the 40 agricultural properties that are directly affected by the Proposal, 19 are assessed as experiencing severe to critical impacts on overall farm management. Of these 19 properties, ten are understood to be owned by Sikhs. Two of these property owners hold additional property not assessed to have severe to critical impact by the Proposal. There are six to seven other Sikh owned agricultural properties that would

experience moderate to minor impacts. Out of the Sikh property owners that would be affected, at least four have other potential agricultural properties that are not impacted from the Proposal.

Four residences are located on three of the severely to critically impacted agricultural properties owned by Sikhs with only two needing to be acquired by the NSW Roads and Traffic Authority (RTA). Consequently, this data suggests that only a small proportion of the overall Sikh population and Sikh owned agricultural properties would be impacted by the Proposal and that the potential impact would be confined to the small number of families who own and work on these properties and hence, a small proportion of the community.

Because of the relatively small number of Sikh owned properties (and in particular residences) that would be severely or critically affected, the Proposal would not result in a significant number of Sikhs having to leave the area. There is no evidence to suggest that compensated farmers who wish to remain in farming cannot purchase other farming properties. Options for the consolidation of impacted properties, so that an agricultural property could continue to operate through the amalgamation of land from a neighbouring property that may have been acquired may be available. Provided that Sikh families that wish to remain in farming can do so and find and purchase an alternative property, impacts could be mitigated.

If the Proposal were to result in any net job losses to the Sikh community it is possible that this would have some cultural implications and result in movement away from Woolgoolga to other urban areas, in search of employment. This outcome, however, is likely to be confined to the small number of families who own and work on farms that are classified as critically or severely impacted.

16.2.3 Amenity effects

Construction stage

Potential amenity effects during the construction stage would include noise and dust from construction sites, construction compounds and batch plants (addressed in Chapters 8 and 11). Within the upgrade section of the Proposal, these impacts would be temporary and transient, as construction moves along the corridor.

The bypass section of the Proposal passes through the low spurs of hills to the south and west of Woolgoolga, and blasting may be required in order to excavate rock in these areas. Short term noise, vibration and dust effects would be expected.

The potential locations of compound sites, batch plants and stockpile sites are identified in Chapter 8. Potential locations of ancillary work compounds have been selected to minimise:

- Environmental impacts (including noise and dust impacts) and access issues.
- Disruption to the local road network as a result of construction related traffic.

Operation stage

The upgrade section of the Proposal would result in minor visual impact on the existing landscape due to the proposed upgrade of the highway corridor. The visual impacts relating to the increase in the existing scale of the road infrastructure can be reduced through landscaping management measures. The bypass section of the Proposal would also result in substantial visual impacts, particularly as it cuts through the spurs and low hills that presently form an area of high scenic quality and diverse landscape types. A full assessment of the visual and landscape effects and the management measures proposed to ameliorate the impacts is included in Chapter 19. Details of the urban design and landscape plan that form part of the Proposal are identified in Chapter 7 with the implementation of the proposed urban and landscape design plan resulting in good visual amenity for local communities along the Proposal alignment and for motorists.

The predicted traffic noise impacts as a result of the Proposal are discussed in Chapter 11. For the upgrade section, residents affected by traffic noise from the Proposal are already impacted by traffic noise from the existing highway. Overall, the noise effects along the upgrade section would not be appreciably different. Most houses within Sapphire, Moonee, Heritage Park, Avocado Heights, Emerald Beach and Sandy Beach would experience a slight reduction in noise levels, however, some properties within each of these areas would experience either no change or a slight increase. The upgrade section incorporates a range of noise management measures such as low noise pavement and in some locations noise walls to meet the appropriate noise level criteria. The location and nature of proposed noise management measures are discussed in Chapters 7 and 11 of this report.

For the bypass section, the Proposal would introduce a new noise source to an area that currently has low background noise levels and little to no noise impacts from the existing highway or other road traffic. Noise levels would increase through this area, however the Proposal incorporates a range of features such as low noise pavement and noise walls to meet the appropriate noise level criteria.

The general amenity of the urban environment through Woolgoolga would improve as the Proposal would remove a majority of through traffic, including heavy vehicles, from the existing highway. The decrease in traffic numbers would result in a reduction in traffic noise, vibration, air emissions and traffic conflicts as the existing highway reverts to a local road function.

16.2.4 Property and land use impacts

The impacts of the Proposal on property and land use were assessed in Chapter 14 and many of those effects are directly related to social and economic activities of communities in the study area.

Property acquisition is the main land use impact and this is examined in Chapters 7 and 14 and working paper 4. Potential socio-economic impacts associated with property acquisition include implications for operation of agricultural and rural residential properties (refer Chapters 14 and 15), forestry impacts and altered access and mobility between private properties and local / regional community facilities (refer Chapter 14).

It is not expected that existing strategic land use plans nor approved development control plans in the study area would need modification as a result of land acquisition for the Proposal. Further details on other potential land use impacts as they relate to communities in the study area are discussed in Chapter 14.

16.2.5 Effects on business activity

Construction stage

In the upgrade section, construction activities could result in temporary access changes to businesses that have direct access to and from the highway and such disruption may affect patronage, particularly for those with a high reliance on passing traffic. Under the Proposal, these businesses would not have direct (at-grade) access to the new highway.

For the bypass section of the Proposal, access would be maintained to the existing local road network during construction and as such, road access to rural businesses would be maintained.

In view of the large scale of construction for the Proposal and the work force required, it is expected there may be a range of economic benefits for businesses in Woolgoolga, Coffs Harbour and the northern beaches throughout the duration of the construction. This is likely to occur through increased demand for workforce accommodation and goods / services. The construction may also generate employment opportunities in the local area. There may be additional impacts on community services (e.g. medical, social and commercial) resulting from labour relocating to

the area, however given that the construction workforce is expected to be approximately 300 persons it is anticipated that this impact would not be significant. The construction activity would be expected to generate employment opportunities in the local area, especially through subcontractor and material supply.

Operation stage

As with any highway bypass proposal, there could be adverse consequences for businesses in the area being bypassed, in this case Woolgoolga. Research into the economic impacts of bypasses similar to the Proposal (Garner and Parolin 1996) indicates that the loss of "stopper" traffic (ie typically short stops for fuel, food, rest facilities etc.) would have the main impact, with businesses such as service stations and food outlets possibly experiencing reduced turnover and employment.

The upgrade section of the Proposal could potentially alter patronage to businesses that currently have direct highway access (such as the service station north of Emerald Beach and the Moonee Beach shopping centre). Under the Proposal, access to these businesses would be via the local access road and not the highway, making accessibility of these businesses from the highway more difficult. The extent of adverse impact due to the change in access would be largely a function of the reliance on passing trade. However, these businesses may benefit from the improved connectivity with the local residences and villages- increasing local patronage.

The *Coffs Harbour City Population Profile 2004* indicates that Woolgoolga is an important hub providing a number of key services for the smaller surrounding (pre-dominantly residential) villages. Feedback from community consultation undertaken early in the development process, confirmed that there is a very small number of Woolgoolga businesses that have a strong reliance on passing traffic. Businesses that potentially rely on highway traffic through Woolgoolga include service stations and motels. These businesses could, however, still experience a decline in patronage due to the lack of exposure to through traffic on the highway. However, this lack of exposure would be partially offset by the improvement in the general amenity and accessibility to the commercial centre of Woolgoolga. The main commercial centre in Woolgoolga is located less than a kilometre from the existing highway, and is not within view of passing motorists. The *Coffs Harbour Retail Strategy 2006* indicates that the commercial centre of Woolgoolga should be consolidated and then further expanded to the period up to 2031. The Proposal would facilitate increased amenity and accessibility for local residents to access the commercial centre at Woolgoolga.

The economic importance of "stayer" highway traffic (ie travellers seeking accommodation and other services) is unlikely to be substantially affected by the Proposal. The improved amenity in Woolgoolga resulting from removal of through traffic could potentially benefit many businesses catering to short and long stay highway travellers.

Additional benefits to the local economy can also be expected through the general improvement to the road infrastructure, both within the study area and more broadly, the Pacific Highway Upgrade Program. The Proposal would provide economic growth for the area benefiting both the local and the regional areas through increased freight efficiency, travel times and level of service. These would provide flow-on benefits resulting in a reduction in transportation times and costs, providing better access for goods and services to markets as well as opening/ strengthening access to inter-regional markets.

There are opportunities to promote business activities within Woolgoolga through the introduction of signage at the interchanges proposed to the south and north of Woolgoolga. This signage would promote the town as a place to obtain fuel and general supplies as well as identifying Woolgoolga as a place for an overnight stay.

16.2.6 Potential effects on tourism

Construction stage

Impacts on tourism during the construction stage could arise due to changed access arrangements to tourist attractions, facilities and services in the study area, for similar reasons to those identified as for potential business impacts noted above. Tourist facilities and destinations could also be potentially affected by an increase in dust, construction noise, traffic conflicts and visual impacts associated with construction. However, all such construction related impacts would be transient and short term as the works progress along the corridor and there are many practical measures that would be implemented as part of the Proposal to effectively avoid or mitigate such effects. As such, while there would be nuisance effects, the impacts on individual tourism operations and the industry are likely to be minor.

Operation stage

Over ninety percent of tourists visiting the north coast utilise car travel (Tourism New South Wales September 2005). The Proposal, as part of the larger Pacific Highway Upgrade Program, would further improve highway safety and travel times and make the Coffs Harbour area (including the coastal villages and hinterland of the study area) more readily accessible.

Access to tourist destinations and businesses with current direct highway access along the upgrade section would be altered as a result of the Proposal. Access to these businesses and destinations would ultimately be from the local access road network and interchanges. Minor increases in travel time to these locations may occur as a result of the expected lower speed environment of the local access roads.

Some tourist businesses in the rural west Woolgoolga area, although not directly affected by the Proposal, are likely to be adversely affected by reduced amenity such as traffic noise and landscape / view impacts. However, management measures have been incorporated to mitigate against adverse impact (refer Chapter 7) The improved amenity in Woolgoolga resulting from removal of through traffic could potentially benefit many businesses catering to short and long stay highway travellers.

Signage would be utilised to promote tourist activities through the area by identifying villages to passing traffic as a place for "stoppers" to get fuel, supplies etc. and for "stayers" for short term accommodation and other services. Signage would also be used to identify tourist locations, facilities and services for visitors visiting the area.

16.3 Proposed management measures

Many of the potential socio-economic impacts that could arise with an upgrade of the Pacific Highway through the project area have been avoided or minimised through the route options investigations undertaken prior to the announcement of the preferred route.

The sections below do not provide the entire list of management measures that would mitigate socio-economic impacts. Measures indicated below should be read in conjunction with measures including noise wall locations, access arrangements during construction and operation phases and the urban design and landscape strategy (Chapter 7). These management measures would also assist in mitigating socio-economic impacts.

16.3.1 Construction phase management measures

The RTA recognises that successful management of the potential social and economic impacts requires continued involvement by diverse community stakeholders during the environmental assessment and construction phases of the proposed project. While some construction phase

impacts would be short term due to the transient nature of the construction along the alignment, the RTA has committed to a range of measures in the draft Statement of Commitments (Appendix A) to manage any potential impacts. Table 16.4 below summarises key management measures, the issue that it relates to as well as references to other chapters in this report for further discussion of these measures.

TABLE 16.4 CONSTRUCTION STAGE MANAGEMENT MEASURES

ISSUE	MANAGEMENT MEASURES	CHAPTER REFERENCE
Property access	Provision of traffic management procedures to manage access issues during construction.	Chapter 8
Mitigate noise / air pollution	Provision of appropriate noise management measures during the construction and operational phases. Construction batch plants to be located away from sensitive land uses.	Chapter 11 Chapter 20 Chapter 8
General amenity impacts	Appropriate environmental controls during construction in order to maintain the environmental amenity of the surrounding environment: <ul style="list-style-type: none"> ■ Water quality / detention basins. ■ Dust management measures. ■ Blasting and noise control measures. 	Chapter 11, Chapter 18 and Chapter 20
Access and movement patterns, community cohesion, impacts on businesses and tourism	The implementation of a construction environmental management plan (incorporating all commitments identified in Appendix A) during the construction stage.	Draft Statement of Commitments

16.3.2 Operation phase management measures

The impact mitigation and management measures identified in Table 16.5 for the operational phase should be interpreted in tandem with measures proposed in other chapters that assessed closely related issues (eg. land use, traffic noise / air quality, agriculture, visual / landscape). Table 16.5 provides a range of management measures, indicating the issue it would assist in managing as well as (where applicable) relevant chapters in this report where additional information on the specific issue is provided.

TABLE 16.5 OPERATION STAGE MANAGEMENT MEASURES

ISSUE	MANAGEMENT MEASURES	CHAPTER REFERENCE
Improve visual impacts	Urban design and scenic management of the upgrade to comply with the <i>RTA Pacific Highway Urban Design Framework</i> .	Chapter 19
Provide access and encourage passing traffic to stop at towns	Interchanges to be strategically located near the main northern beaches settlements to enable safe and easy access. Provision of a continuous local access road network between Sapphire and south Woolgoolga to: <ul style="list-style-type: none"> ■ Provide safer access to properties that currently have direct highway access. ■ Enable residents to travel to local schools, shops etc. without having to use the new highway. ■ Provide an alternative route between Sapphire and Woolgoolga for school buses and motorists who do not wish to use the highway. 	Chapter 7
Property access	Installation of appropriately designed overpasses / underpasses for local roads in order to allow local / property access.	Chapter 7

ISSUE	MANAGEMENT MEASURES	CHAPTER REFERENCE
Promote the town to passing traffic	Signage at the new interchanges south and north of Woolgoolga, promoting the town as a place to obtain fuel and supplies and for an overnight stay.	Chapter 16
Promote the area as a tourist location	Signage identifying Woolgoolga to passing traffic, both as a place for "stoppers" to get fuel, supplies etc and for "stayers" for short term (eg. overnight) accommodation and other services. Signage to identify access to tourist locations, facilities and services etc for visitors coming to the area as a destination (ie. promoting the area as a tourist location). Implementation of management measures such as noise walls and landscaping to minimise adverse impacts on amenity.	Chapter 16
Impacts to Sikh community (Agricultural impacts)	Implementation of the management measures proposed to manage agricultural impacts. Maintaining on-going consultation with the Sikh community in regard to management measures.	Chapter 15

16.3.3 Other opportunities

In addition to the management measures to be implemented by the RTA, it is apparent from the experience of other comparable projects that there are also strategies that could be adopted by community stakeholders to assist in mitigating certain socio-economic impacts from the Proposal. These strategies would typically seek to identify future advantages that can be realised for the local community when a bypass has been opened. They are usually centred on programs that enhance the character and amenity of community places / areas and that promote and revitalise business activities and community events.

In this context, the opportunities identified below are presented for consideration by stakeholders such as Coffs Harbour City Council, the Woolgoolga and Coffs Harbour Chambers of Commerce, individual businesses and possibly some industry groups (eg. tourism organisations). The potential measures outlined below do not form part of the draft Statement of Commitments to which the RTA has confirmed commitment, nor do they amount to an exhaustive list:

- Increase local business promotional activities for Woolgoolga (promote the town to attract local residents).
- Strategies for the development and promotion of tourism on the Mid North Coast region (such as those included in the *North Coast NSW Regional Tourism Plan 2004-2007* (North Coast NSW) and *Coffs Coast – North Coast Region – Tourism Development Plan* (Coffs Harbour City Council)) should be implemented (to promote the town as a tourist location to increase tourism and provide jobs).
- Implement general promotional activities for businesses within the Mid North Coast, such as the Manufacture Coffs Coast website to promote the area as a business opportunity area (promote investment and employment to the local area).
- Improve the amenity of Woolgoolga, implementing strategies and building on strategies like the *Street Trees Masterplan* (Coffs Harbour Council), *Woolgoolga Business Lands Masterplan* (Coffs Harbour Council) (improve amenity of Woolgoolga, increasing local and tourist patronage).
- Continual development of the Streets Ahead program and initiatives such as the Woolgoolga Curry Festival (increase tourism activity in Woolgoolga).