

Mid North Coast NSW: Review of Infrastructure Reports

Prepared for the:

Mid North Coast Regional Development Board

Prepared by:

Dr Karen McFadyen



Office of Regional Engagement
Coffs Harbour campus

31 August 2006.

***This report provides a review of the infrastructure challenges pertaining to the
Mid North Coast, as identified by the following reports:***

Local Government Inquiry (2006)
Are councils sustainable?
Final Report: Findings and recommendations.

National Sea Change Taskforce (2006)
Meeting the sea change challenge:
Best practice models of local and regional planning for sea change communities.

National Economics, 2005
State of the Regions Report

Legislative Assembly Standing Committee on Public Works (2005)
Inquiry into infrastructure provision in coastal growth area.

Northern Rivers Development Board (2005)
Regional industry and economic plan for the Northern Rivers.

NRMA (2005)
Mid North Coast Better Roads Study – Fact sheet and news release.

Hunter Valley Research Foundation (2005) *Growing Jobs on the Mid North Coast, A Green Paper
providing: A blueprint for future employment growth in this region.*

Department of Transport and Regional Services (2004)
Auslink White Paper: Building our national transport future.

Hunter Valley Research Foundation (2003)
Mid North Coast Regional Profile,
A socio-economic profile of the Mid North Coast Region,

'On the NSW Mid North Coast the proportion of the population aged over 55 is already 32 per cent. Given the rapid aging of this population they are expected to continue to lead the way in Australia in understanding the impact of aging communities' (State of the Regions 2005-06, p.158).

'Put simply, for every year the over 70's share of total population increases by one percentage point, when that rise is accompanied by a proportionately similar rise in 55 year olds, the unemployment rate could be expected to be 3.49 percentage points higher' (State of the Regions 2005-06, pp.151-152).

Executive Summary

Purpose of the report:

This report was designed to establish if there are arguments and/or observations contained in the reports listed in Table E.1 that can be used to:

- a. Identify the major infrastructure needs (current and projected) for the Mid North Coast region, particularly infrastructure required to facilitate the region's growth;
- b. Determine regional infrastructure priorities.

No	Title	Short title	Date
1	Local Government Inquiry (2006) <i>Are councils sustainable? final report: findings and recommendations</i> , Independent inquiry into the financial sustainability of NSW Local Government, Sydney	LGI	May 2006
2	National Sea Change Taskforce (2006) <i>Meeting the sea change challenge: Best practice models of local and regional planning for sea change communities</i> , Sydney	NSCT	Jan 2006
3	Legislative Assembly Standing Committee on Public Works (LASCPW) (2005) <i>Inquiry into infrastructure provision in coastal growth areas</i> , Sydney	LASCPW	Nov 2005
4	National Economics, (2005), <i>State of the Regions Report</i> , Canberra.	SOR	Nov 2005
5	Northern Rivers Development Board (2005) <i>Regional industry and economic plan for the Northern Rivers, A community road map to developing our future, Final Report incorporating feedback from stakeholder consultation</i>	NRDB	Nov 2005
6	NRMA (2005) <i>Mid North Coast better roads study</i> , Fact sheet and News release	NRMA	Nov 2005
7	Hunter Valley Research Foundation (2005) <i>Growing Jobs on the Mid North Coast, A Green Paper providing: A blueprint for future employment growth in this region</i> , Sydney	HVRF	Jan 2005
8	Department of Transport and Regional Services (2004) <i>Auslink White Paper: Building our national transport future</i> , Sydney	DoTaRS	June 2004
9	Hunter Valley Research Foundation (HVRF) (2003) <i>Mid North Coast Regional Profile, A socio-economic profile of the Mid North Coast Region</i> , Sydney	HVRF	July 2003

Table E.1 List of reviewed reports

Report findings:

1 Inadequate reporting makes prioritising infrastructure needs impossible

There is consensus that a NSW infrastructure audit (at State and Local Government level), identifying current infrastructure: its condition, life expectancy, annual maintenance costs, and depreciation; is an overarching issue that needs to be addressed. A lack of awareness regarding the status of current infrastructure has resulted in an inability of NSW regions to document and prioritise key physical infrastructure needs

throughout the state. Nonetheless, it is claimed that current NSW coastal infrastructure is inadequate for existing residents, a result of many years of infrastructure under-provision.

2 Identification of population characteristics that drive infrastructure needs

As the reviewed reports do not identify specific MNC infrastructure needs, the reports were examined for observations regarding characteristics (current and projected) of the MNC population which influence infrastructure needs, and the infrastructure needs they create. This section presents a list of the major characteristics of the MNC population, whilst the next section outlines the infrastructure requirements of such a population.

The main themes extracted from the reviewed reports are that the MNC population:

- a) Is increasing at a rapid rate and has a large visitor population;
- b) Is older than much of Australia's population and aging at a faster rate. This trend is exacerbated by in-migration of the sea changers, an out-migration of 20 to 39 year olds, and the resultant low fertility rate (as measured by the proportion of the population under 1 year old);
- c) Has particular socioeconomic characteristics: The MNC has a disproportionately high number of non-working population compared to working-age population (aged 15-55); resulting in the MNC being a region at risk in the future, in terms of being able to grow both its population and its economic base. Furthermore, the region has a high unemployment rate, low workforce participation rate, low education levels, low per capita wages and expenditure and includes a higher proportion than the NSW average of Aboriginal and Torres Strait Islanders.
- d) The MNC population is projected to continue to increase and to age.

3 Possible infrastructure needs arising from the identified characteristics

Following are the main infrastructure types identified in the reviewed reports as requirements for the aforementioned MNC population characteristics:

** Infrastructure demands of an increasing population:*

The rapid coastal population growth has led to increased residential and commercial development along the coast. The increased population puts pressure on existing infrastructure, along with demanding new infrastructure, including:

- Basic infrastructure: transportation, water, waste, and energy infrastructure;

Executive Summary – Review of Infrastructure Reports

- Social/community services: aged care, education, health and community facilities, communications, social and policing services, tourism facilities;
- Economic and Environmental: creation of local jobs and sustainable communities.

** Infrastructure requirements, and economic impacts, of an aging population:*

The increasing proportion of people in the over 55 years age group have infrastructure expectations which are highly focused on health services, aged care, public transport (private or community buses and rail services) and footpaths [for more detail see Table E.2, p. iv]. This group also has a strong economic influence on a region (lowering expenditure, increasing unemployment, and decreasing local government rate revenue). The next section deals with infrastructure aimed at combating the effects of the region's socioeconomic characteristics and the negative impacts of an aging population on the regions economy.

** Infrastructure demands created by the MNC's socioeconomic characteristics:*

The major requirement created by the MNC's socioeconomic characteristics is for infrastructure which promotes economic growth. The two types of infrastructure identified in the reviewed reports which facilitate business growth in regional Australia, are communications and transport infrastructure. In fact, according to SOR (2005-06, preface)

'as a result of the rest of Australia not having the same quality transport, communication and other links to the rest of the world as Global Sydney, the cost to the nation in terms of household income was \$37 billion.'

These types of infrastructure are now described [for more detail see Table E.2, pp. iv-v].

a) Communications infrastructure (high quality broadband)

The State of the Regions (2005-06) report powerfully argues that regional Australia's economic performance can be improved with the immediate provision of high quality broadband. SOR (2005-06) provides a clear and concise summary of the technology and infrastructure needed to provide high quality broadband to all, as well as the economic benefits of additional coverage. The economic benefits accrue mainly from increased innovation, exporting and productivity (facilitated by broadband); and, over time, far outweigh the costs of the infrastructure provision.

b) Transport infrastructure (road, rail and air)

Transport infrastructure makes social networks more efficient, minimises production costs, increases the scale and efficiency of labour markets and promotes sustainable growth. Thus, improving road, rail and airfreight transport is critical to international competitiveness. While there have been some increases in rail usage, freight carriage is still primarily supported by road infrastructure and this continues to contribute increases in traffic to the MNC. Given the logistically strategic position of the MNC as a trade

route between Brisbane and Sydney, investment in both rail and road infrastructure can improve access to key national (and international) passenger and freight gateways that serve the region: while improving road safety; travel times for freight; and journey to work throughout the region. New and expanded rail freight options can also serve the region's industrial, agricultural and commercial producers.

4 Further information regarding infrastructure needs

Some of the reviewed reports may be of great use to the MNCRDB, with regards to planning for and facilitating the development of infrastructure:

- DoTaRS (2004) gives guidelines on how/when to apply for funding for regional road infrastructure, and on the type of applications most likely to be successful.
- LASCPW (2005) provides examples of a wide range of infrastructure problems and solutions arising from population growth and aging populations.
- NRDB (2005) provides an example of a listing of infrastructure projects within defined economic, social and environmental goals and objectives.
- SOR (2005-06) contains a good section on the benefits of broadband to businesses and regions. It also describes the economic impacts of an aging population.
- NSCT (2006) provides information regarding best practice principles and strategic responses for infrastructure provision, in the face of increasing and aging populations. It also suggests solutions to a wide range of infrastructure problems.

In addition, there are associated projects (*Comprehensive Coastal Assessments*; and *Coastal Management Plans*) relating to coastal planning and development being undertaken by the Department of Planning which may be of use to the MNCRDB.

5 Conclusion

The lack of identified specific infrastructure needs and priorities for the MNC in the reviewed reports was disappointing. However, it appears that all regions in NSW are in the same position, having insufficient information regarding current infrastructure, to record and prioritise immediate and future requirements.

Nevertheless, the strong themes (increasing, aging, and poor socioeconomic characteristics) documented concerning the MNCs population suggests a variety of infrastructure needs. Hence, an overall plan for nurturing and developing the regions economy (to facilitate an increase in the MNC's gross regional product) through the provision of broadband and vital transport infrastructure; together with the provision of public transport, aged care and health infrastructure; should address the most pressing infrastructure (and many socioeconomic) needs for the MNC.

Infrastructure	Driver	Addressing the following needs
Aged care		
Residential care/ nursing homes	Increasing aged population	To address an existing shortfall in nursing home beds and to avoid having elderly people waiting in hospitals for available nursing home positions (LASCPW 2005, p.38)
Hospitals (including community care)	Increasing aged population Increasing ATSI population Low socio-economic areas High tourist population	Older people use NSW hospitals four times more often than younger ones (LASCPW 2005) Public hospitals tend to provide the more complex and costly treatments for chronic aging conditions such as diabetes, dementia, dialysis and rehabilitation (LASCPW 2005, p.29/31) Growth in non-patient care and community support for the aged (LASCPW 2005, p.29/31) Increased spending on equipment for a growing number of people with disabilities to prevent avoidable admissions to (expensive) acute care services (LASCPW 2005, p.29 and p.31) In 1996 the proportion of Indigenous hospital inpatient episodes on the MNC (3.7%) was higher than the Indigenous representation in the population (2.6%), and the proportion of episodes for Kempsey and Nambucca LGA's are markedly higher (HVRF 2003, p.21) Increased burden on hospitals & emergency departments, rather than GP's (LASCPW 2005)
Doctors	Increasing population and aging population	Incoming residents in some areas are having difficulty in finding a local doctor, as the doctors are not accepting new patients (LASCPW 2005, p.36)
Respite care	Aged/disabled population	There is an unmet demand for respite care (at home/in institutions) (LASCPW 2005, p.39)
Home care	Increasing aged population	NSW Health is moving towards a preventative model of aged care, a focus on staying well and having self-care and home care (LASCPW 2005, pp.38-40)
Transition care	Increasing aged population	A six-week package between acute and community care, to reduce those in nursing home accommodation (LASCPW 2005, pp.38-41)
Communication¹		
High Quality Broadband	Reduced gross regional product High unemployment Increasing population driving to work Low levels of education Aging population	Increased business innovation, exporting and productivity (SOR 2005-06; HVRF 2005) Increase business efficiency by facilitating integrated supply chain management, and sharing of resources with customers and suppliers (SOR 2005-06) Increase telecommuting opportunities and decrease road traffic (HVRF 2005; NSCT 2006) Increase access to education, social interaction, entertainment (SOR 2005-06; NSCT 2006) The Telehealth network will become an important means of providing specialized metropolitan services to local patients, eliminating the need to travel (LASCPW 2005)

¹ Bellingen Council is participating in the Southern Phone Company, funded by the Commonwealth Governments Networking the Nation program. It is a public company in which only local councils can be shareholders. ClearTowns is an example of a company in Australia providing communities in regional and remote Australia with HiBIS subsidised broadband Internet access - MNC participating towns include Coffs Harbour, Lowanna and Ulong

Infrastructure	Driver	Addressing the following needs
Transport		
Roads	<p>Reduced gross regional product</p> <p>Increasing population</p> <p>Large no of people driving to work</p>	<p>Increase business efficiency and access to markets, enable and support the export of goods (HVRF 2003; 2005; SOR 2005-06)</p> <p>Highway infrastructure that supports freight carriage and caters for continually increasing traffic is vital to the MNC, given its logistically strategic position as a trade route between major centres such as Brisbane and Sydney (HVRF 2005)</p> <p>Investment in road infrastructure can improve access to key national and international passenger and freight gateways that serve the region, and improve road safety and travel times for road freight and journey to work times to key employment areas throughout the region (NRRDB 2005, p.21).</p> <p>New & expanded rail freight options can serve the region's industrial, agricultural and commercial producers (NRRDB 2005, p.21).</p> <p>Improving road transport is critical to international competitiveness (DoTRS 2004).</p>
Footpaths	High proportion of aged population	Safety for pedestrians - Councils may be liable if elderly residents are injured on deteriorated footpaths (LASCPW 2005, p.21). Has positive community & tourism benefits (NSCT 2006)
Rail	<p>Reduced gross regional product</p> <p>Increasing population</p> <p>High proportion of aged population</p>	<p>Increase business efficiency and access to markets (DoTRS 2004)</p> <p>Safety for driving population by reducing road traffic (LASCPW 2005)</p> <p>Reduce road maintenance costs (LASCPW 2005)</p> <p>Provides an alternative to driving, for those no longer able to drive long distances is environmentally friendly, and may attract tourists (LASCPW 2005, p.27)</p>
Cycleways	Increasing population	<p>Increase safety by reducing road traffic (LASCPW 2005; NSCT 2006)</p> <p>Currently a lack of alternatives to road transport (LASCPW 2005, pp.26-27)</p> <p>Health benefits through increased exercise (LASCPW 2005, p.27)</p> <p>Enhanced lifestyle and tourism appeal (LASCPW 2005, pp.26-27; NSCT 2006)</p>
Public transport	Increasing and aging population	<p>A lack of adequate public/community transport forces people to rely on car transport, thus perpetuating poor patronage for existing public transport (LASCPW 2005, p.23).</p> <p>Increase safety and lower road maintenance costs by reducing road traffic (LASCPW 2005)</p> <p>Alternative to driving, for those no longer able to drive long distances - limited transport options can lead to isolation of older persons and a consequent deterioration in both physical and mental health (LASCPW 2005, pp.24-25)</p> <p>Environmentally friendly (LASCPW 2005, NSCT 2006)</p>
Air	Low gross regional product	Improving air freight transport is critical to international competitiveness (DoTRS 2004).

Table E.2: Infrastructure priorities for the MNC

Table of contents	Page no
Executive summary	i
1 Project summary	2
1.1 Project brief	2
1.2 The reviewed reports	2
1.3 The Mid North Coast region defined	3
1.4 Types of infrastructure	3
2 Infrastructure - its importance, current condition and funded projects	3
2.1 The importance of infrastructure	3
2.2 Inadequate reporting makes prioritising infrastructure needs impossible	3
2.3 Specific funds earmarked for the MNC	5
3 Identifying current and future population characteristics and trends that influence (drive) infrastructure needs for the MNC	6
3.1 Increasing population	6
3.2 Aging population	6
3.3 Socioeconomic characteristics	7
3.4 Population projections	7
4 Infrastructure needs arising from the MNC's population characteristics	8
4.1 Infrastructure demands of an increasing population	8
4.2 Infrastructure requirements of an aging population	8
4.2.1 Health services	8
4.2.2 Aged care	9
4.2.3 Public transport and footpaths	9
4.3 Infrastructure needs created by MNC's socioeconomic characteristics	10
4.3.1 Communications infrastructure (high quality broadband)	10
4.3.2 Transport infrastructure	11
5 Further information regarding infrastructure needs	13
6 Conclusion	14
Tables	
Table 1.1 List of the reviewed reports	2
Table 1.2 Time blowouts – Recent & current Pacific Highway project delays	5
Table 1.3 Stages in commitment to a networked economy	11

1 Project summary

1.1 Project brief

This project arose from the MNCRDB's desire to synthesise content relating to Mid North Coast (MNC) infrastructure from a number of reports. Hence, this report was designed to establish if there are arguments and/or observations contained in the reviewed reports (listed in Table 1.1 below), which can be used to:

- a. Identify the major infrastructure needs (current and projected) for the MNC region, particularly infrastructure required to facilitate the region's growth;
- b. Determine regional infrastructure priorities.

1.2 The reviewed reports

No	Title	Short title	Date
1	Local Government Inquiry (2006) <i>Are councils sustainable? final report: findings and recommendations</i> , Independent inquiry into the financial sustainability of NSW Local Government, Sydney	LGI	May 2006
2	National Sea Change Taskforce (2006) <i>Meeting the sea change challenge: Best practice models of local and regional planning for sea change communities</i> , Sydney	NSCT	Jan 2006
3	Legislative Assembly Standing Committee on Public Works (LASCPW) (2005) <i>Inquiry into infrastructure provision in coastal growth areas</i> , Sydney	LASCPW	Nov 2005
4	National Economics, (2005), <i>State of the Regions Report</i> , Canberra.	SOR	Nov 2005
5	Northern Rivers Development Board (2005) Regional industry and economic plan for the Northern Rivers, A community road map to developing our future, <i>Final Report incorporating feedback from stakeholder consultation</i>	NRDB	Nov 2005
6	NRMA (2005) <i>Mid North Coast better roads study</i> , Fact sheet and News release	NRMA	Nov 2005
7	Hunter Valley Research Foundation (2005) <i>Growing Jobs on the Mid North Coast, A Green Paper providing: A blueprint for future employment growth in this region</i> , Sydney	HVRF	Jan 2005
8	Department of Transport and Regional Services (2004) <i>Auslink White Paper: Building our national transport future</i> , Sydney	DoTaRS	June 2004
9	Hunter Valley Research Foundation (HVRF) (2003) <i>Mid North Coast Regional Profile, A socio-economic profile of the Mid North Coast Region</i> , Sydney	HVRF	July 2003

Table 1.1 *List of the reviewed reports*

An overview of each of the reports (listed in Table 1.1) is provided in Appendix A. The overviews are designed to inform the MNCRDB of the infrastructure related content of each of the reports for future reference.

To this end, each overview contains:

- a) A short summary of the report;
- b) A brief description of content related to MNC infrastructure; and
- c) An outline of the infrastructure related content.

1.3 The Mid North Coast Region defined

The Mid North Coast Region, as defined by the Department of Planning, consists of the Local Government Areas of: Greater Taree, Port Macquarie-Hastings, Kempsey, Nambucca, Bellingen and Coffs Harbour.

1.4 Types of infrastructure

'Hard' or 'physical' infrastructure broadly includes roads, rail, airports, energy, water and sewerage, and communications while 'soft' infrastructure broadly includes education, health, community services, environment and leisure facilities and services.

2 Infrastructure - its importance, current condition and funded projects

2.1 The importance of infrastructure

The development and growth of any community is dependent on the ability of infrastructure to meet demand (HVRF 2005). Infrastructure influences the level of business development, community involvement and social interaction within a region (HVRF 2005). In fact, the provision of adequate infrastructure has been linked, within Australia and overseas, with regional productivity growth and economic prosperity (LASCPW 2005; SOR 2005-06). Thus, it should be recognised that improving infrastructure is not only desirable in terms of meeting community demands, but can be a catalyst for future economic growth (LASCPW 2005; SOR 2005-06).

2.2 Inadequate reporting makes prioritising infrastructure needs impossible

Current infrastructure accounting and reporting by NSW State² and Local Governments is inconsistent and deficient (LASCPW 2005; LGI 2006). Thus neither level of Government can currently list the value of the coastal infrastructure (including the MNC), its condition, or life expectancy (LASCPW 2005; LGI 2006; NSCT 2006).

According to the LGI (2006), the structure and detail of information in NSW council infrastructure asset registers is not uniform, and depreciation rates used to estimate the annual consumption of their assets are inconsistent. Furthermore, the majority of councils are reporting assets at their original or historical values (described as 'at cost'), with only 13% of NSW councils measuring and reporting the 'fair value' (the present market value or replacement cost). This has the effect of 85% of councils

² On the topic of a State audit, LASCPW (2005, p.117) concludes: 'While the NSW Government says that there is an ongoing infrastructure audit process for coastal councils being undertaken, comments made in submissions indicate that there is confusion about this process. It would appear that continuity of the audit project has been disrupted by various structural changes in the Department of Planning. Communication between the Department of Planning, Councils and the general public on this audit initiative is poor.'

underestimating their infrastructure values and understating the extent of depreciation expenditure in their financial reports.

This lack of infrastructure knowledge and its ramifications was identified by LASCPW (2005), who assert:

'...the Committee has not attempted to nominate particular infrastructure types or particular coastal areas that need attention. This is because the fundamental problem of inadequate auditing of coastal infrastructure is yet to be resolved p.xi)... infrastructure auditing is critical. Without this first step, coordinated decision making at local, state and federal levels will continue to be stymied due to debates about measurement of infrastructure problems and hence priorities for infrastructure provision. A common audit of coastal infrastructure will enable a clear hierarchy of priorities to be established that can form the basis of projects to be put into the coastal Regional Strategies.' (p.xiii).

The LGI (2006, p.128) agrees:

'If councils are not consistently recording and valuing their infrastructure than any aggregation of regional infrastructure needs are distorted. Consequently, it is difficult for the State and Commonwealth Government to allocate funds and to coordinate complementary infrastructure effectively.'

In fact it cannot even be assumed that the current infrastructure is sufficient for the existing residents of coastal areas, as the surge of new “sea change” residents has not created a new problem, rather has exacerbated the pre-existing problem of infrastructure under-provision which has been building up gradually over many years (LASCPW 2005; LGI 2006). Furthermore, higher costs of maintaining infrastructure have been experienced due to changes in public liability exposures and today’s higher environmental performance standards (LASCPW 2005; LGI 2006). The LGI (2006, pp.115-116) outlines the current position of NSW councils in relation to infrastructure:

'NSW Local Government therefore finds itself responsible for a legacy of major infrastructure that is expected to reach the end of its usable life in the next few decades. It has been argued that the current revenue mechanisms available to Local Government were not designed to meet the financial burden of 'second generation' infrastructure renewal. Councils are also facing competing expenditure pressures due to cost shifting and to increased service demands on councils. A common response by councils has been to strip expenditure on asset maintenance and not match asset depreciation with spending on asset renewals. This has induced an infrastructure backlog and an ongoing, annual infrastructure renewal gap.... The backlog refers to costs to bring infrastructure to a satisfactory condition today. It does not take account of new infrastructure needs generated by a growing and shifting population, changing profile, likely changes to building and construction standards or rising community expectations and demands.'

Subsequently, under current funding arrangements, councils have limited capacity to maintain, upgrade and add new infrastructure (LASCPW 2005; LGI 2006; NSCT 2006). Hence there has been a call for *consistent auditing of infrastructure* and *increased*

avenues for infrastructure funding for councils to allow for an assessment of the infrastructure needs and their priorities to assist in planning in coastal areas (LASCPW 2005; LGI 2006; NSCT 2006). For example, LASCPW (2005, p.xv) recommend:

'...the NSW Govt fast track and resource the completion of coastal infrastructure audits to a common, nationally agreed methodology. The results of the audits should be integrated into the formation of the Department of Planning's Regional Strategies and be used to assist the ranking of priority infrastructure projects.'

Thus, it is clear that MNC infrastructure does not meet current and/or future community requirements; and the lack of knowledge regarding existing infrastructure, its condition, life expectancy, and annual maintenance costs, negates any efforts to identify and or prioritise infrastructure needs for this region.

2.3 Specific funds earmarked for MNC

The DoTaRS (2004) and NRMA (2005) reports are the only two reviewed reports that document specific MNC infrastructure earmarked for improvement and for current or future funds. The DoTaRS (2004) states that the Australian Government funding contribution to major projects on the National Network includes:

- * \$645m for the Pacific Highway in NSW - duplication and upgrade (p.72)
- * \$573 million for the North Coast rail line between Sydney and Brisbane (p.xiii)

However, the NRMA (2005, p.3) assert that, the Federal Government has not provided as much money as it should have under the National Network program on the Pacific Highway between the Great Lakes and Coffs Harbour (350 km from Karuah to Corindi). For this section, only one third of the projects scheduled for completion by 2005 have actually been completed; and the majority of projects have had large delays (see Table 1.2) and overspends.

Time blowouts – recent and current Pacific Highway project delays

<i>Project</i>	<i>Overdue</i>	<i>Completion due</i>
<i>Bundacree Creek to Possum Brush</i>	<i>5 years +</i>	<i>Due in 2006</i>
<i>Bonville Bypass</i>	<i>2 years +</i>	<i>No longer reported</i>
<i>Cooperook Deviation</i>	<i>3 years +</i>	<i>Due 2006</i>
<i>Cooperook to Moorland</i>	<i>4 years +</i>	<i>No longer reported</i>
<i>Taree to Cooperook</i>	<i>4 years</i>	<i>Completed 2005</i>

Table 1.2 *Time blowouts - Recent and current Pacific Highway project delays*
Source: *NRMA (2005, p.3)*

3 Identification of current and future population characteristics and trends that influence (drive) infrastructure needs for the MNC

As none of the reports identify specific infrastructure needs for the MNC, the reports were examined for observations regarding characteristics (current and projected) of the MNC population, which drive or create infrastructure needs. The following issues and trends are the main themes identified from the reviewed reports, as being important drivers of infrastructure needs in the MNC. Detailed facts and figures regarding these issues are contained in Appendix B.

3.1 Increasing population

The *rapid coastal population growth*, due in part to the sea change phenomenon, is widely recognised (DoTaRS 2004; LGI 2006; NSCT 2006) and detailed statistics, tables and pictorial representations of figures can be found in a number of the reports (for example: HVERF 2003; LASCPW 2005; SOR 2005-06). The coastal and tourist destinations of the MNC also have a *high influx of visitors* at peak tourist times, a phenomenon that creates its own pressures (LASCPW 2005; NSTC 2006).

3.2 Aging population

Essentially, the current population has a *high proportion* (almost one third) *of the over 55 group* (SOR 2005-06). The *aging* of the population is exacerbated by *in-migration of the sea changers* (over 55's) (LASCPW 2005; NSCT 2006), the *out-migration of 20 to 39 year olds* (HVERF 2003; SOR 2005-06), and the resultant *low fertility rate* (SOR 2005-06). Between 1996 and 2001, the MNC's population in groups such as 0 to 9 and 20 to 39 decreased (HVERF 2003) and the MNC currently has less than one per cent of effective fertility³ (as measured by the proportion of the population under 1 year old) (SOR 2005-06). These trends suggest that the region is at risk in the future in terms of being able to sustain its population (SOR 2005-06).

An aging population combined with out-migration of working age groups also has a strong economic influence, as succinctly summarized by SOR (2005-06, preface):

'By itself a too high a concentration of population 55 and over will reduce regional productivity⁴ and increase unemployment while a high share of the working age range of 25 to 54 will increase regional productivity and will reduce unemployment. Migration inflows in the younger age ranges tend to reduce unemployment. Migration inflows in the older age ranges tend to increase unemployment.'

Thus an aging population impacts on the ability of the region's population to sustain its economic base (HVERF 2003; SOR 2005-06). Furthermore, an aging population on fixed or limited incomes presents challenges to Local Government, with an increase in Pensioner Concessions limiting their revenue base (primarily rates) (LASCPW 2005, LGI

³ Figures are for 2004, there is only one other region in Australia with less than 1% fertility

⁴ Appendix B, sect B.3.1 examines the complex relationship between over 55 yr olds and the unemployment rate, and over 70 yr olds and the unemployment rate and business activity, in further detail

2006). Moreover, the impact of the aging population on the MNC is projected to continue and increase, as SOR (2005-06, p.158) maintain:

'On the NSW MNC the proportion of the population aged over 55 is already 32 per cent. Given the rapid aging of this population they are expected to continue to lead the way in Australia in understanding the impact of aging communities.'

3.3 Socioeconomic characteristics

The MNC has *lower education level, lower proportion of labour force and higher unemployment than the NSW average*, trends which have economic (low income/expenditure) and social (increased drinking, crime rates, etc) ramifications (HVRF 2003; SOR 2005-06). Consequently, the MNC has *low real wages per capita, and low expenditure* compared to NSW (HVRF 2003; SOR 2005-06) and less capacity to spend money on goods and services, results in decreasing business activity. The MNC also has *greater proportion of smaller businesses* than the NSW average *and a shift from secondary sector to greater tertiary sector employment*, which impacts on economic growth, unemployment and education needs (HVRF 2005). The MNC also has a higher than NSW average, and *increasing, Aboriginal and Torres Strait Islander (ATSI) population* (HVRF 2003) who have a higher than average unemployment rate (HVRF 2003). The prevalence of a *disability* is also higher in the MNC area (23%) than in the state (19%) (HVRF, p.59) and it is increasing (SOR 2005-06), thereby reducing the areas participation in the labour force.

The aging population's economic impacts were mentioned in the previous section (3.2). Essentially, the MNC has a disproportionately high number of non-working population compared to working-age population (aged 15 to 55), resulting in the MNC being a region at risk in the future, in terms of being able to grow both their population and their economic base.

3.4 Population projections

The MNC population is projected to continue to increase and to age (HVRF 2003:2005; LASCPW 2005; SOR 2005-06).

4 Infrastructure needs arising from the MNC's population characteristics

For purposes of planning, service and infrastructure provision and environmental sustainability, and to maximise business development and address challenges, it is important to understand the potential needs of the MNC population. Thus, the infrastructure needs of the population trends outlined in Section 3 are now examined.

4.1 Infrastructure demands of an increasing population

The rapid coastal population growth, has lead to increased residential and commercial development along the coast which has placed significant demands on coastal communities existing infrastructure, along with demanding new infrastructure, including:

- Basic infrastructure: transportation (roads, public transport, pedestrian paths, cycle-ways, parking), water (sewage systems, water supply and storm water management), waste treatment and management, and energy/power infrastructure;
- Social/community services: aged care, education and training facilities, health (hospitals, doctors, dental services, and respite care), community facilities (open space, recreational areas, libraries and community centres), emergency and crisis services (crisis accommodation, support services and youth services), communications, social and policing services, tourism facilities (signage, public toilets, visitor information centres);
- Economic: creation of local jobs through increased economic development;
- Environmental: prevention of coastal erosion and pollution, and creation of sustainable coastal communities (LASCPW 2005; NSCT 2006).

Thus essentially, the increasing population drives demand for all types of infrastructure, as no particular type bears the burden of population growth. Consequently, in an attempt to focus on infrastructure most needed by the MNC, this report concentrates on the infrastructure requirements of the other population characteristics specific to the MNC.

4.2 Infrastructure requirements of an aging population

Infrastructure expectations for an aging population group are highly focused on health services, aged care, and public transport and footpaths (LASCPW 2005; LGI 2006; NSCT 2006; SOR 2005-06). These types of infrastructure/services are now considered briefly and are described in greater detail in Table E.2, in the Executive summary.

4.2.1 Health services

The aging MNC population has major requirements for health services: older people use hospitals four times more often than younger people, need more complex and costly

treatments for chronic aging conditions, and require home and community care (LASCPW 2005). Nonetheless, increased demand for health services on the MNC is a combination of these age related factors and other factors including: the relatively large proportion of indigenous people in the MNC; the increasing population combined with a high influx of tourists at certain periods and the poor socioeconomic characteristics of the region. Each of these factors place high demands on hospitals: both in- and out-patient services (LASCPW 2005).

4.2.2 Aged care

The aging population has critical needs for residential care, nursing homes, doctors, respite care, home care, community and transition care (LASCPW 2005, pp.38-40). Many of these needs are highlighted in this excerpt from a submission and transcript by Coffs Harbour City Council to LASCPW (2005):

'Mr FERGUSON (Coffs Harbour City Council): We have an ageing community and the over 65 and over 85 year olds will double in the next 20 years. There are only 55 general practitioners within our local area, and that is a significant problem for those new people who come to the city because many of the general practitioners have closed their books. In doing that, those people do not have access to medical services unless they go on longer waiting routines or use the public hospital system' (LASCPW 2005, p.36).

Furthermore, there is already a shortfall in aged facilities, as noted by Coffs Harbour Council:
'Nursing home beds (high band): At the current planning ratio of 40 beds per 1000 population over 70, Coffs Harbour should have 277 high band beds. It has 235 and not all of these are operational. Accommodation standards vary from barely adequate to overly generous. Hostel beds low band (Low band): The ratio here is 50:100. This yields a desirable number of 346. The actual number is 272. The standard is more uniform. Respite care: There is huge, largely unmet, demand for respite care both in the patients own home and institutions' (LASCPW 2005, p.39).

4.2.3 Public transport and footpaths

Coastal areas lack adequate public and community transport (LASCPW 2005; NSCT 2006). The significance of public transport is highlighted by LASCPW (2005, pp.24-25):

'To retirees, the alternative forms of transport become more critical as they become too infirm to drive. It is recognised that accessible transport options are vital to the social well being of aging populations. Limited transport options can lead to isolation of older persons and a consequent deterioration in both physical and mental health.'

Without effective public transport, populations are forced to rely on car transport; more people utilising private vehicles perpetuates poor patronage for public transport, which in turn reduces the viability of existing services (LASCPW 2005, pp.23-24). LASCPW (2005) and NSCT (2006) also stress the importance of footpaths to the elderly.

4.3 Infrastructure needs created by the MNC's socioeconomic characteristics

To combat the MNC's socioeconomic factors, infrastructure which promotes economic growth is required. The two types of infrastructure identified in the reviewed reports which will facilitate business growth are communications infrastructure (infrastructure which supports high quality broadband) and transport infrastructure. In fact, according to the SOR (2005-06, preface)

'as a result of the rest of Australia not having the same quality transport, communication and other links to the rest of the world as Global Sydney, the cost to the nation in terms of household income was \$37 billion.'

Both of these types of infrastructure are now briefly described.

4.3.1 Communications infrastructure (high quality broadband)

Communications infrastructure is a vital element for the future economic and social well being of coastal areas (HVRF 2005; LASCPW 2005; SOR 2005-06). It can assist in telecommuting, education and improved health services, and it enhances communication capabilities for all ages (including social and entertainment) (HVRF 2005; LASCPW 2005; SOR 2005-06). Importantly, communications infrastructure can assist businesses to develop potential, operate competitively, access markets and export; whereas a lack of this infrastructure can impede business (HVRF 2005; SOR 2005-06).

The most avid and eloquent supporter of communications infrastructure, specifically high speed broadband access is SOR (2005-06). It provides a compelling argument for the provision, as quickly as possible, of broadband internet access to the whole of Australia SOR (2005-06, pp. 1-12). SOR (2005-06) concisely explains the means of effectively providing broadband to even remote areas of Australia; provides evidence of robust demand in regional Australia; and gives examples of demand aggregation and how local communities can take action to improve the quality and coverage of their internet services. Utilising prior research, statistical methods and projections, SOR (2005-06, pp. 105-114) demonstrates that the costs for providing broadband could be recuperated through increased economic activity, including increased employment and exports.

There are clear stages in the use of the communications infrastructure that represent an increasing degree of involvement in the modern networked economy (SOR, 2005-06). As Table 1.3 (see over) indicates, six e-stages can be identified⁵.

⁵ SOR (2005-06), Section 3.3 (pp. 62-64) describes the e-journey, and clearly shows the stages - invaluable pages for understanding the movement of businesses through these stages, and the importance of broadband

Stage	Technology use	Stage description	Use
0	Phone - No use of computer	None	Make and receive calls from customers and suppliers
1	Computer	Processing stage	Word processing, image and data processing
2	Internet	Communication stage	Research, e-mail, order product or services
3	Web site	Information stage	Online brochure, promotion, e-newsletter, simple Web metrics, receive orders etc
4	Intranet or Interactive site	Transaction stage	Sell products/services, online bookings, share resources within business etc
5	Extranet or integrated process	Integration stage	Supply chain management, share resources with customers or suppliers etc
6	Best practice involvement in networked economy	Transformation stage	Technology enabled customer and content focus to all business relationships

Table 1.3 Stages in commitment to a networked economy (Source: SOR, 2005-06, p.2)

According to SOR (2005-06, p.2), a firm generally needs to have the objective of reaching Stage 5 or 6 to be competitive in the modern networked economy. However, if internet access is not available, or it is of poor quality, this objective can not be achieved. Access to, and the quality of, internet communications infrastructure and services has, therefore, become a strategic issue for economic development. In fact, Australia's exporting enterprises cannot continue to be efficient or competitive, particularly as part of international supply chains, without high standard internet service (SOR 2005-06).

SOR (2005-06, p.11) asks 'Does the causal relationship run from export success to the level of e-staging, or does it run from e-staging to export success?' Empirical evidence indicates that communications infrastructure is a particularly important facilitator of successful innovation, as it allows a high level of e-staging which, in turn, enables a higher rate of innovation. Sustained export success requires sustained innovation and regional Australia is under-performing in terms of its e-staging potential, with negative implications for its exports. Those regions where internet access and/or quality is likely to be the lowest, have the highest relative potential to benefit from infrastructure improvements (SOR 2005-06, p.12). The economic benefits for increasing broadband coverage in regional Australia are significant in terms of gross regional product and employment, and there are social and entertainment benefits too (SOR 2005-06).

4.3.2 Transport infrastructure

Infrastructure makes social networks more efficient, minimises production costs, increases the scale and efficiency of labour markets and promotes sustainable growth (SOR 2005-06, preface). Improving road, rail and air freight transport is critical to international competitiveness (DoTaRS 2004). Road infrastructure that supports freight carriage and caters for continually increasing traffic is vital to the MNC, given its logistically strategic position as a trade route between Brisbane and Sydney (HVRF 2005). Investment in road infrastructure can improve access to key national and international passenger and freight gateways that serve the region, and improve road

safety and travel times for road freight and journey to work travel to employment areas throughout the region (NRDB 2005, p.21). New and expanded rail freight options can serve the region's industrial, agricultural and commercial producers (NRDB 2005, p.21).

The majority of new sea changers to coastal communities use private car transport so road usage and traffic congestion⁶ is increasing in coastal areas (LASCPW 2005; HVRF 2003, p.ii). Local roads are also subject to high usage in tourist periods, a factor which must be considered during any planning process (LASCPW 2005; NSCT 2006). The NRMA (2005) highlights traffic growth on the MNC section of the Pacific Highway:

- Average annual traffic growth during 2001-04 was a “staggering” 6.5% on the MNC section of the Pacific Hwy compared with the State average of 1-2%;
- The top growth rate was 14% at Laurieton (junction with MR600) and Coffs Harbour (junction with High Street);
- There are some 40,000 vehicles a day at Coffs Harbour – a high number that compares with traffic levels on Sydney’s busiest roads;
- Heavy vehicle traffic has grown with the Pacific Highway improvements and now approaches some 20% of all traffic on the route (p.3).

Additional traffic puts pressure on existing local roads, car parks, footpaths, road lighting, signage, bridges, drainage works, etc; and there is increased demand for ancillary services, such as street sweeping and cleaning (LASCPW 2005, p.21).

In recognition of the importance of transport infrastructure, DoTaRS (2004) has provided funding for the transport needs of regional Australia (see DoTaRS 2004, pp.77-88), by 'encouraging the development of strategic regional infrastructure to: support the growth of established and emerging industries, respond to structural changes, and strengthen regional economic and social opportunities' (DoTaRS 2004, p.79). However the amount and timeliness of this funding has been questioned (NRMA 2005). In fact the NRMA (2005) provide empirical evidence of a 'substantial gap between what has been promised for the Pacific Highway and what has been delivered' (p.2), asserting that 'the Federal Government has under-spent on the National Highway by some \$358 million in the six years from 1998 to 2003' (p.2).

⁶ LASCPW (2005) and NSCT (2006) also stress the value of cycle-ways to sea change communities, to alleviate traffic congestion, provide an alternative to driving, reduce road maintenance, provide health and lifestyle benefits and tourism benefits.

5 Further information regarding infrastructure needs

Some of the reviewed reports may be of great use to the MNCRDB, with regards to planning for and facilitating the development of infrastructure.

- NSCT (2006) gives a wealth of information regarding best practice principles and strategic responses for infrastructure provision, in the face of increasing and aging populations. This report provides solutions to a wide range of infrastructure problems, from 'big picture' regional infrastructure planning and facilitation to local solutions to individual infrastructure problems.
- SOR (2005-06) contains a section on the benefits of broadband to businesses and regions. It also describes the economic impacts of an aging population, particularly the complex relationship between the share of people over 70 and the ratio of over 70's to over 55's.
- LASCPW (2005) provides helpful information regarding concerns arising from population growth and insufficient infrastructure provision on all types of infrastructure (physical, human services, community, and environmental). For each type of infrastructure, examples of problems and solutions are given.
- NRDB (2005) provides an example of a listing of infrastructure projects within defined economic, social and environmental goals and objectives.
- NRMA (2005) gives specific details of delays and overspends on MNC roads
- DoTaRS (2004) gives guidelines on how/when to apply for funding for regional road infrastructure, and on the type of applications most likely to be successful.

There are associated projects and guidelines relating to coastal planning and development being undertaken by the Department of Planning which may be of use to the MNCRDB:

- *Comprehensive Coastal Assessment (CCA)*: To assist in setting a better strategic base for coastal planning, CCA's are being conducted - the first detailed assessment of the NSW Coast northward from Port Stephens and south of Shellharbour. Due for completion in 2006 (LASCPW 2005, p.86).
- *Coastal Management Plan (CMP)*: CMP's, designed to look after the health of the catchment area and coastline, will be prepared for all coastal Crown land reserved or dedicated for a public purpose (LASCPW 2005, p.86-87).

6 Conclusion

The lack of identified specific infrastructure needs and priorities for the MNC in the reviewed reports was disappointing. However, it appears that all regions in NSW are in the same position, having insufficient information regarding current infrastructure, to record and prioritise immediate and future requirements.

Nevertheless, the strong themes (increasing, aging, and poor socioeconomic characteristics) documented concerning the MNCs population suggest a variety of infrastructure needs. Hence, an overall plan for nurturing and developing the regions economy (to facilitate an increase in the MNC's gross regional product) through the provision of broadband and vital transport infrastructure; together with the provision of public transport, aged care and health infrastructure; should address the most pressing infrastructure (and many socioeconomic) needs for the MNC.

Finally, a quote from SOR (2005-06, preface) on improving the economic performance of a region:

Those **regional centres** which have **successfully helped improve the economic performance of the region** have been ones with high employment growth relative to population growth which, in turn, has occurred in provincial cities that:

- * maintain a population growth rate in excess of 0.3 per cent per annum;
- * develop diversified lifestyle and cultural choices for residents;
- * develop scale in a small number of non-mining/non-agricultural industries; and
- * develop inter-regional export capacity in business and/or education services

Appendix A - Summary of reports and their infrastructure related content

Appendix A	Report summaries:	
	Including general and MNC infrastructure content	2
A.1	LGI (2006) <i>Are councils sustainable</i>	2
A.2	NSCT (2006) <i>Meeting the sea change challenge: Best practice models of local & regional planning for sea change communities</i>	2
A.3	National Economics (2005-2006) <i>State of the Regions</i>	3
A.4	LASCPW (2005) <i>Inquiry into infrastructure provision in coastal growth areas</i>	4
A.5	NRDB (2005) <i>Regional industry and economic plan for the Northern Rivers</i>	4
A.6	HVRF (2005) <i>Growing jobs on the Mid North Coast, a green paper providing: a blueprint for future employment growth in this region</i>	5
A.7	NRMA (2005) <i>Mid North Coast better roads study, Fact sheet and News release</i>	5
A.8	DoTaRS (2004) <i>Auslink White Paper: Building our national transport future</i>	5
A.9	HVRF (2003) <i>Mid North Coast Regional Profile: A socio-economic profile of the MNC Region</i>	6
Appendix B	Details of population and socioeconomic characteristics:	7
B.1	Increasing population	7
B.2	Population projections	7
B.3	An aging population	
	B.3.1 Relationship between aging population & unemployment	11
	B.3.2 The impact of Pensioner concessions	14
B.4	Younger age groups/fertility rates	14
B.5	Increasing Aboriginal and Torres Strait Islander population	15
B.6	High unemployment/low participation rate	16
B.7	Low education levels	16
B.8	Low income and expenditure	18

Appendix A:

Summary of the reports, including their infrastructure related content

This section provides an overview of each of the reports containing three sections. The first section provides a short summary of the report, with the next section describing MNC infrastructure related content and the third section briefly outlines the infrastructure related content of each report.

A.1 LGI (2006) *Are councils sustainable?*

Short summary: Examines the sustainability of NSW local councils as presently constituted and funded. Highlights a number of issues requiring urgent attention: an infrastructure crisis requiring over \$6 billion dollars to bring current infrastructure to an acceptable standard; councils role and relationship with higher tiers of government, including the problem of cost shifting; managing rising community expectations; maintaining existing service commitments in the face of a huge infrastructure bill and constraints on rate income; strengthening governance arrangements including restoring public faith in the development control process; overcoming skills shortages, perhaps through greater resource sharing and using tools such as performance benchmarking to upgrade management practices.

MNC Infrastructure related content: This report does not refer specifically to MNC infrastructure rather, it refers in general terms to NSW council infrastructure.

Infrastructure related content: Reveals that the structure and detail of information in NSW council asset (infrastructure) registers is not uniform, and thus impossible to aggregate or quantify. Less than one-fifth of NSW councils have asset management policies in operation and few, if any are strategically planning and setting aside funds for the maintenance and replacement of existing infrastructure, resulting in the current infrastructure crisis (see the short summary above). The LGI's recommendations relating to infrastructure include: that all councils adopt a total asset management (TAM) system and consistent accounting practices within two years; that there is increased monitoring and development of council infrastructure management by the NSW State and the Commonwealth Governments; and that councils financial situation be improved through a combination of increased annual Commonwealth and State grants, council expenditure savings, and higher rates, fees and charges.

A.2 NSCT (2006) *Meeting the sea change challenge: Best practice models of local and regional planning for sea change communities*

Short summary: This report documents the range of governance, environmental, community, economic, and infrastructure challenges affecting “sea change” councils in Australia and internationally, and identifies best practice in addressing these issues. An extensive literature review and analysis, was informed by discussions with practitioners

Appendix A - Summary of reports and their infrastructure related content

working in sea change communities of Australia, in order to identify examples of innovative or best practice suitable for implementation within communities in Australia.

MNC Infrastructure related content: This report uses examples from many coastal growth areas, including some from within the MNC. When a MNC area has been referred to, the content of the reference appears in an appropriate Appendix in this report.

Infrastructure related content: Identifies best practice principles for infrastructure provision (guidelines on needs determination, investment decisions, collaboration and charges) in sea change communities and, in line with these principles, outlines strategies for managing infrastructure provision and for delivering particular types of infrastructure suitable for coastal and high amenity communities affected by rapid growth.

A.3 National Economics SOR (2005-2006) *State of the Regions (2005-06)*

Short summary: This report divides Australia into 64 regions and highlights various population characteristics across these regions: baby bounce and fertility over the last decade; population sustainability; and net migration, population and ageing trends for the period from 1998 to 2008. Unemployment statistics (their origins and current measurement) and social change, labour market, employment and unemployment are also examined. The results of an infrastructure survey of Local Government personnel are described, the role of Local Government in regional development explored, and sources of revenue for government assessed. This report also includes an illuminating preface, which outlines the accumulated insights of the State of the Regions reports. Telecommunications are thoroughly investigated, and are described in detail in the section below entitled 'Infrastructure related content'.

MNC Infrastructure related content: This report uses examples from all over the country, including some from within the MNC. When an area of the MNC has been referred to, a copy of the content of the reference appears in this report, in an appropriate Appendix, table, or within the main report.

Infrastructure related content: This report provides detailed investigations of telecommunications infrastructure, including: an expose of the role of telecommunications infrastructure in the development of economic growth; a section on understanding the demand for telecommunications and its impact on businesses (both business practices and business profits); a section outlining opportunities for telecommunications infrastructure expansion; a section outlining current ADSL broadband coverage and the economic benefits of extending the coverage; and a section on market conduct, regulation and broadband access in regional Australia. As far as telecommunications are concerned, this report is a one-stop-shop, with all the information on the how, when, where, who and why of broadband infrastructure. Telecommunications are examined in relation to metropolitan, regional and rural Australia and solutions are suggested for many demand and/or supply problems.

Appendix A - Summary of reports and their infrastructure related content

Other infrastructure topics are also examined, including: Local Government responses to an infrastructure survey, and the economic and social benefits of infrastructure (in general) to regional Australia (see Stylised Facts - Ten, Eleven and Twelve).

A.4 LASCPW (2005) *Inquiry into infrastructure provision in coastal growth areas*

Short summary: This report examines coastal population growth; infrastructure issues relating to the environment, funding, and the infrastructure backlog; physical infrastructure (road, public transport, cycle-ways, railway and airports, water and sewerage, waste management, energy and communications); human services infrastructure (health, police, education); community infrastructure (affordable housing, public housing, residential parks, community facilities, community transport); and green infrastructure (coastline values and vision, sustainability, urban development impacts). The funding responsibilities of the three tiers of Governments and their funding sources are also examined, with particular emphasis given to the revenue raising constraints of councils and their increasing responsibilities. Further, current infrastructure planning and processes are detailed, best practice approaches suggested and recommendations made.

MNC Infrastructure related content: This report uses examples from many coastal growth areas, including some from within the MNC. When a MNC area has been referred to, a copy of the content of the reference appears in the appropriate Appendix.

Infrastructure related content: This report provides a summation of the concerns about coastal infrastructure, highlighting the ramifications of infrastructure deficiencies combined with growing populations, and the tensions created between providing adequate infrastructure for development and retaining the natural environment and amenity of coastal regions. The particular problems with the provision of physical, services, community and green infrastructure are examined and the consequences of continued inadequate provision are highlighted.

A.5 NRDB (2005) *Regional industry and economic plan for the Northern Rivers*

Short summary: Provides a framework for regional economic development geared to facilitating sustainable business and employment growth in the Northern Rivers (NR) region, for all organisations and individuals involved in economic development. The report gives a comprehensive outline of current and projected population and the labour force of the NR Region. Economic development objectives and targets are developed and strategic actions to foster economic and employment growth are outlined, with ongoing implementation and next steps suggested.

Infrastructure related content: The report has a section related to infrastructure – see Section 4.1 Strategic Activity Area 1: Facilitation of continued investment in economic capacity building infrastructure. This section lists specific roads, rail, and water and sewerage infrastructure requiring attention; and strategies are included regarding communication technologies, industrial land, energy and lifestyle infrastructure.

Appendix A - Summary of reports and their infrastructure related content

A.6 HVRF (2005) *Growing jobs on the Mid North Coast, a green paper providing: a blueprint for future employment growth in this region*

Short summary: This report identifies labour market, industry and population/demographic trends within the MNC and provides a list of opportunities and policy directions to positively influence employment growth in light of these trends.

MNC Infrastructure related content: This report contains general comments regarding infrastructure, postulating that: an increasing population requires infrastructure to meet their demands, and the provision of this infrastructure in turn impacts on population growth, business development, employment, community involvement and social interaction. According the HVRF (2003), the MNC needs to be aware of retaining its natural amenity in the face of competing land issues, issues which will also underpin economic and community development. Current internet usage and provision is examined, and it is recognized that communications infrastructure is a critical tool for business expansion and enables teleworking, thus the provision and take-up of broadband internet connection is encouraged. It is further suggested that the strategic position of the MNC between major centres of Sydney and Brisbane emphasises the importance of transport infrastructure to support increasing freight transport and traffic generally, and to support local businesses access to external markets.

A.7 NRMA (2005) *Mid North Coast better roads study, Fact sheet and News release*

Short summary: Reviews commitments by the Government to improve: The Pacific Highway between the Great Lakes and Coffs Harbour areas (350 km from Karuah to Corindi); The Oxley Highway (233 km from Port Macquarie to the New England Highway at Walcha); Waterfall Way (Main Road 76 – 164 km from the Pacific Highway to Armidale). Outlines the mismanagement of Pacific Highway road projects, the majority of which suffer from time delays and overspends. Reveals that the Federal Government has underspent on the Pacific Highway.

MNC Infrastructure related content: Gives specific details of MNC road projects.

A.8 DoTaRS (2004) *Auslink White Paper: Building our national transport future*

Short summary: Auslink is the Government's framework for a national land transport plan to be shared between all levels of govt, with the following core components:

- A National Network of important road/rail infrastructure, links to ports and airports, and other rail/road inter-modal connections
- The National Land Transport Plan which outlines the Government's approach to improving and integrating the National Network, and the investments it will make

Appendix A - Summary of reports and their infrastructure related content

- A single funding regime, the AusLink programme, for the National Network
- Separately earmarked funding for local and regional transport improvements
- New legislative, intergovernmental and institutional mechanisms.

MNC Infrastructure related content: This report lists national funding priorities, including some funds earmarked for the MNC.

Infrastructure related content: The report provides a summary of transport infrastructure investments to be funded under the first five-year plan. The Australian Government will improve the capacity of local government to address local transport infrastructure backlogs and to fund projects of strategic regional importance. Under AusLink, starting in 2005–06, the Government will introduce two funding streams directed to local and regional priorities. Following the successful Roads to Recovery approach, \$800 million over four years will be allocated on a formula basis directly to all local councils. This will help all councils to sustain levels of service across their local road systems. A further \$400 million over four years will be available for land transport projects of regional economic and social significance. This funding will be available to local councils and will be competitively allocated. It will contribute to priority regional transport projects which local councils would otherwise find difficult to fund.

A.8 HVRF (2003) *Mid North Coast Regional Profile: A socio-economic profile of the MNC Region*

Short summary: A profile of the Mid North Coast (MNC) is provided, with particulars of current population and demographics, and projections for the next 20 years. The main areas detailed are the increasing and aging population, Aboriginal and Torres Strait Islander population details, and characteristics of the labour force, income and expenditure, education, crime, health, housing, household and family structure, journey to work and the environment.

MNC Infrastructure related content: This report links population demographics to infrastructure in a very general manner: postulates that the increasing population will result in higher and increasing needs for infrastructure such as health services, schools, day care centres, recreation facilities, water, sewerage and electricity, new dwellings and pressure to develop existing vacant land; the increasingly aging population will require aged care facilities and services; the higher ATSI population may need increased health services; the regions lower levels of education and income, combined with the high incidence of drinking may result in increased crime and need for police; the high use of cars to get to work may require higher levels of road infrastructure and maintenance and/or increased public transport.

Appendix B:

Details of population and socioeconomic characteristics

B.1 Increasing population

- The Mid North Coast population is increasing: between 1996 and 2001 the fastest population growth was in the predominantly coastal areas of Hastings and Coffs Harbour. Over the same period, the population declined in the LGA of Bellingen (HVRF 2003, p.4)
- NSW has seven of the sixteen fastest growing LGAs in Australia: Lake Macquarie, Hastings, Tweed, Port Stephens, Shoalhaven, Shellharbour and Coffs Harbour (LASCPW 2005, p.7).
- HVRF (2003) has a variety of tables and figures regarding the MNC increasing population and demographic characteristics, which may be useful for creating or augmenting arguments regarding MNC needs compared to NSW and to Sydney
- SOR (2005-06) has a variety of tables and figures relating to aspects of the MNC increasing population
- The Mid North Coast represents approximately 4 per cent of the State's population and according to the 2001 Census, the population of the Mid North Coast totalled 225,921 persons. Within this Region, the Local Government Areas (LGAs) of Hastings, Coffs Harbour and Taree were the largest in terms of enumerated people (HVRF 2003B, p.i).

B.2 Population projections

- The MNC population is projected to continue to increase and to age (HVRF 2003, p.3; SOR 2005-06)
- The population of the MNC is projected to grow and as settlement is more concentrated in coastal areas, the MNC's coastal LGAs are expected to record the largest rates of urban expansion. These include Coffs Harbour, Port Macquarie and Forster. Based on historical in-migration, 19.4 % of MNC residents in 2001 lived elsewhere in Australia five years earlier (1996). This suggests that in-migration settlement patterns, particularly to coastal areas, will be an important driver of MNC's population growth/urban expansion (HVRF 2005, p.3).
- Continued growth in population along the Mid North Coast's coastal fringe is projected. As people retire or reduce their involvement in the workforce, lifestyle becomes an even more significant factor in their choice of residential location. Coastal locations will continue to attract the ageing "baby boomers" both from

Appendix B - Details of MNC population characteristics

large metropolitan areas such as Sydney, Melbourne and Brisbane and other rural areas of the State. As the population of the Mid North Coast continues to age, reflecting national trends, household size will continue to decline, so that even as new dwellings are built the population will not increase proportionally to new dwellings as it has in the past (HVERF 2003, p.i).

- In 2001, the MNC had a population of approximately 260,000. This is projected to increase to 380,000 by 2026, with the areas of Great Lakes, Hastings and Coffs Harbour expected to experience the greatest increase in population. The proportion of older people (aged 60 years and over) was around 25% of the total population in 2001 and is projected to increase to 35% of the population by 2026. Conversely, the proportion of younger people (0 to 29 years) is projected to fall from 35% to 30% over the same period. (HVERF 2005, p.3)
- See LASCPW (2005) Appendix 3, Table 1, for total projected populations, by Statistical Local Areas (SLA) in non-metropolitan coastal regions of NSW, 2001 - 2031; and Appendix 3, Table 4, which describes population of NSW regions in 2031 and population change from 2001-2031.
- HVERF (2003, p.13-16) gives population projections under high, medium and low growth scenarios.
- SOR (2005-06) gives population projections for various demographics and net migration flows

Exerpts re population projections from the SOR (2005-06, pp 180 to 199).

9.4 SOR major regional grouping: net migration flows: 1996 - 2008 (p.177)

- For the lifestyle regions [including the MNC] the level of migrant inflows over the next four years is projected to be a little below the level of recent trends. This is the result of a projected small trend away from lifestyle regions by lifestyle changers and return towards attractive provincial areas.

There are many factors driving this outcome, including:

- Potential sea changes (that is, those in the 25 to 54 age group) turning inland for higher levels of community based living and/or because suitable coastal sites have become unaffordable, especially sites in the lifestyle regions; and
- Retirees following the same track and for the same reasons as the potential sea changers in the working age population.

9.5 SOR major regional group: population growth rates (p.179)

- Lifestyle regions [including MNC], which were above the national average over the 1996 to 2004 period, experience a decline in growth rates over the projection period (2004 to 2008). However, the lifestyle group still maintains a healthy margin in growth outcomes over the projection period compared to the other

Appendix B - Details of MNC population characteristics

regional groups. The projected population growth rate for the lifestyle major group is 1.8 per cent per annum over the projection period, compared to 2.2 per cent from 1996 to 2004.

9.7 Conclusion (p.179)

- The overall impression is one of convergence occurring between major regions, at least in terms of population growth. This is to be expected. One regional grouping cannot expect to maintain a relative superiority in population growth for a long period of time.
- Continued high population growth will:
 - Place upward pressure on relative land and accommodation costs;
 - Reduce quality of life by placing excessive pressure on infrastructure; and
 - Crowd out trade exposed employment (manufacturing, etc.); and
 - Create opportunities for previously lagging regions to capture increasing shares of migration flows and to accelerate their population growth rates.

B.3 Aging population

- Relative to NSW, the MNC population is older and has been ageing at a faster rate (HVRF 2003, pp.i, 6, 7).
- There were large increases between 1996 and 2001 for the 45 to 60 age bracket and these increases were larger than those for the State (HVRF 2003, p.5).
- Between 1996 and 2001 the percentage increases in the MNC population were most pronounced in the older age groups, particularly for those aged 75 or more. The percentage change in the MNC for older age groups was higher than the State average (HVRF 2003, p.5).
- Nambucca, Bellingen and Hastings are expected to have the highest proportions of elderly people by 2026. Based on the expected numbers by 2026, Hastings, Coffs Harbour and Taree will have the most aged people (HVRF 2003, p.2).
- The coastal LGAs with the highest percentage of people over 65 are: Bega Valley (17.8 per cent), Ballina (19.1 per cent), Shoalhaven (19.6 per cent), Nambucca (21.3 per cent), Tweed (21.7 per cent), Eurobodalla (22.2 per cent), Hastings (22.2 per cent) and the Great Lakes (25.6 per cent). These current figures do not reflect the large number of retirees that are also expected to move to those communities in the next decade (LASCPW 2005, p.9).

Appendix B - Details of MNC population characteristics

- Within the Mid North Coast, the 65+ age group accounts for large proportions of the population in Hastings (22.3 per cent) and Nambucca (21.1 per cent). Every MNC LGA had a higher proportion of this age group than either Sydney (11.9 per cent) or NSW (13.1 per cent) (HVRF 2003, p.9).
- The Mid North Coast Region is the region with the largest proportion, 30 percent, of its population over 55 years. By 2021, it is projected to have the oldest population in Australia with 47% of residents over 55 years (HVRF 2005, p.13).
- For people aged 65 years and more, the Mid North Coast proportion was 19 per cent while the comparable proportions in other areas were: NSW, 13 per cent and Sydney, 12 per cent (HVRF 2003, p.6).
- The infrastructure expectations for the aging population group are highly focused on nursing and other aged services (HVRF 2003, p.2), health services and public transport (HVRF 2005, p.22; LASCPW 2005, p.16). Those reliant on the Aged Pension may require low income housing (HVRF 2003).
- A final point is the link between “soft” services provision and “hard” infrastructure demand for certain population groups. As noted by the COTA National Seniors Partnership in the context of ageing populations requirements: Inadequate provision of services that promote healthy aging and the capacity for seniors to remain in their own homes can contribute to increased pressure on infrastructure such as hospitals and nursing homes. Inadequate provision of public transport can impact upon the reliance on private transport and in turn on the need for roads and the location of service infrastructure (LASCPW 2005, p.16).

Case Study 1: Coffs Harbour – A coastal getaway

Between 2004 and 2022 the population of Coffs Harbour is projected to increase in size, from its current 65,097 to around 76,155 (17 per cent). It is typical of many coastal growth areas as its youth population is projected to decline, while its working age population will grow slightly (mainly at the older ages) and the elderly population will grow substantially. The proportion of the population aged over 65 years is currently 16.2 per cent of the population and it is expected it will grow to 25.4 percent of the population by 2022. In common with other coastal growth areas, as its population ages it will have more people leaving the workforce than entering it. This will lead to a decline in economic activity as greater demands are being made on the Council for increased human services infrastructure and services. As with other coastal growth LGAs, Coffs Harbour will have difficulty in overcoming the backlog in the development of new infrastructure and in maintaining the existing infrastructure at acceptable standards. This difficulty will be greatly compounded by the fall in revenue resulting from the increase in pensioner rebates claimed by the ageing population (LASCPW 2005, p.10)

9.6 SOR major regions: age structure of population: 1996-2008 (p.179)

- See Tables 9.7 to 9.9 show the changes in the age structure of the population.

Appendix B - Details of MNC population characteristics

- The lifestyle region [inc the MNC] is projected to increase its share of population of those aged 55 and over by 6 percentage points between 1996 and 2006.
- This region, for each of the benchmark years between 1996 and 2008, has had the highest share of population aged 55 and over. The share is increasing by 0.5 percentage points per year. By 2008 this will reach 28.5 per cent, compared to 22.5 per cent in 1996.
- From Table 9.8, the core metro region has the highest share of population in the working age range. This is 46 per cent in 2004, rising to 46.7 per cent in 2008. The lifestyle and rural regions have the lowest share of population in the working age range of 25 to 54. Both regions have shares under 40 per cent. The data for average ages by region in Table 9.5 reflects these trends. By 2008 the average age for the lifestyle region will be greater than 40 years.
- NSCT (2006, p. A.47) gives the following project by the Coffs Coast as an example of a best practice for an ageing population.

Area: *COFFS HARBOUR (NEW SOUTH WALES)*

Description of the area: Coastal Lifestyle Destination

Population: 64,051

Location: 540km north of Sydney

Planning Theme: *Infrastructure –Ageing Population*

Resource / Planning Document *Future of Ageing: Coffs Coast*

Description The project brings together key stakeholders in the Aged and Retirement sector (including government departments, private and not-for-profit service providers and consumers). The project has been developed as a model of aged care service integration, community participation and strong relationships with funding sources to develop local aged care and retirement facilities.

Website: http://dynamic.dotars.gov.au/nolg/nalg/entry_detail.aspx?entry=2141

Relevance to NSCT Member Councils: Accommodating an ageing population within a medium sized coastal community.

B.3.1 The relationship between an aging population and unemployment (excerpts from SOR 2005-06, pp.150-151)

- Regions are more likely to have stress put upon them by having a disproportionately high number of non-working population compared to working-age population (aged 15 to 55) as well as taking into account the out-migration from the region. These regions are clearly at the most risk in the future in terms of being able to grow both their population and their economic base.
- The results of the unemployment analysis at the regional level can be directly related to the net migration patterns of the various age groups at the same level.

Appendix B - Details of MNC population characteristics

- The lifestyle motivation prompts people to move to regions with considerably higher levels of unemployment, an example of this move is from the dispersed metropolitan regions to the lifestyle regions on the coast of Australia.
- The regression results clearly point towards a relationship between migration patterns differentiated by age and regional unemployment patterns. For every 1 percentage point of net internal migration of 25-54 year olds, a region is likely to have 1.10 percentage points lower unemployment. Of course, this does not suggest a causal relationship between receiving higher levels of migration to an area and a falling level of unemployment; in fact it is highly likely that the opposite applies and that due to employment opportunities 25-54 year olds move to the area. Regardless, this is a very strong trend which should be heeded by all in local government and economic development, that is, unless you can attract people aged 25-54 you are likely to be building an economy with less employment.
- For every one percentage point of net internal migration of over 55 year olds one can expect a 0.88 percentage points higher unemployment. This is a very severe result and highlights the enormous structural problems created on our lifestyle coastlines.
- The complex relationship between the share of people over 70 and the ratio of over 70's to over 55's needs elaboration. Put simply, for every year the over 70's share of total population increases by one percentage point, when that rise is accompanied by a proportionately similar rise in over 55's, the unemployment rate could be expected to be 3.49 percentage points higher. This sounds like an enormous impact considering that the over 70's are not part of the labour force, are not competing for jobs, and cannot be measured as unemployed. Without noting the economic consequences the assumption would be that the unemployment rate would stay the same or fall. It does not, however, because the level of over 70's has a material impact on the average level of consumption, average level of demand and average level of investment in the community, each of which falls when the proportion of over 70's rises.
- These trends, therefore, result in a smaller economy which is less able to create employment opportunities. The most important impact of the relationships identified is that they will continue to increase the gap between unemployment levels in the creative metropolitan areas and other regions, especially the lifestyle regions. Rather than current migration and ageing patterns not contributing to any hoped reduction in regional differences, current patterns (let alone any accelerating of these patterns) will enhance the regional differences further.
- The 2005-06 *State of the Regions* report finds that the general ageing of the population as reflected by the increase in the share of the population over 54, between 1996 and 2001, across Australian regions reduced industry productivity and reduced total household income by \$847 million. Most of this income loss

Appendix B - Details of MNC population characteristics

occurred in the lifestyle regions, along the New South Wales and Queensland coastlines, with a total household income loss of \$717 million. The inference of this is that a balance in the net migration impacts across all age groups is desirable to maximise regional productivity.

- Regions that have a high proportion of their population aged below 55 typically have better economic outcomes, as witnessed in the range of reports since 1998. Most of the advantage lay in the strength of the labour force and its concurrent impacts on income and service provision. These regions have both a greater ability to grow their population and a higher proportion of workforce participation, meaning that economic activity can be driven from within and is less reliant on outside influences.
- The regions with the lowest proportion of their population aged below 55 are the 'retirement regions' on the east coast. The regions along the New South Wales coast and north of Brisbane have the highest proportions of over 55's. The New South Wales Mid North Coast and Queensland's Sunshine Coast had over 30 per cent of their population aged over 55 in 2001. The ageing population trend has exacerbated since 2001.
- The MNC is the region with the second lowest level of employment of over 55 year olds in 2001, 17.1% (the lowest is the NSW Central Coast, at 17%).
- *Aged employment: Share of over 55's employed, 2001 Census.* The regions that have had the highest proportion of over 55's in their population, and the regions that have had the highest in-migration of this age cohort, have the lowest proportion within that age group that are employed. This is predominantly due to the fact that these regions are considered as attractive 'retirement' regions and the majority within this age bracket no longer wish to participate in the work force. This is the enormous dilemma of lifestyle regions:-
 1. will they be able to provide viable employment opportunities; and
 2. will the general population be large enough to provide a labour force which can service the requirements of a population with significant service needs?

Region	Score	Rank
WA Peel-South West	72.7	55
VIC Gippsland	72.6	56
NSW Illawarra	72.5	57
NSW South-East	71.8	58
Adelaide Central	71.4	59
QLD Wide Bay-Burnett	70.6	60
NSW Central Coast	70.2	61
NSW Richmond-Tweed	70.1	62
QLD Sunshine Coast	68.4	63
NSW Mid North Coast	68.0	64

B.3.2 The impact of Pensioner Concessions

- Pensioner rebates are a constraint on local government incomes. Other state Governments refund 100 per cent of pensioner rebates to councils, whereas the NSW Government only refunds 50 per cent to councils. (LASCPW 2005, p.72)
- Pensioners are allowed a maximum flat rebate of \$250 on general council rates and \$87.50 each for water and sewer charges. Fifty percent of the rebate is recoverable by councils from the State Government. (LASCPW 2005, p.72)
- Councils argue that the limited recovery of the pensioner rebate from the State Government reduces Local Government revenues. This in turn exacerbates the difficulty in meeting the infrastructure and service needs of coastal growth communities. (LASCPW 2005, p.72).
- A practical example of the impact of pensioner rebates was provided by Eurobodalla Council in its submission to the LASCPW (2005, p.73):

'The number of properties subject to pension rebates at Eurobodalla Shire Council is 24%, and growing at a rate of 5% per year. Each year \$1.78 million is written off as pensioner rebates, reducing the annual purchasing power of rates by 8%. Only 50% of that is recovered through State Government subsidy. The Committee was advised that this shortfall will be compounded in the future as the number of retirees increases in coastal growth areas and the proportion of the population eligible for rebates increases.'

B.4 Younger age groups/fertility rates

- Population decline in certain age groupings has been recorded. The declines between 1996 and 2001 were primarily in the younger age groups, such as 0 to 9 and 20 to 39 which is a likely reflection of these people leaving the Region for further education and better employment opportunities (HVRF 2003, p.i and p.5).
- Bellingen, Taree and Kempsey have a high proportion of youth (0-14). This, too, has implications for the location of facilities for people in the early stage of the life cycle and their parents in their early 40s (HVRF 2003, p.93).
- The number of people aged 25-34 is declining in most of the smaller, more remote communities such as Nambucca, Hastings and Greater Taree. Lack of employment and educational opportunities appear to be factors motivating the exodus of young people from these communities (LASCPW 2005, p.14).
- However, not all of the LGAs in the MNC are expected to have high proportions of older people: some are forecast to have high proportions of youth (0-14). This too has implications for the provision and location of facilities for young families (schools, recreation facilities, day care centres etc.). (HVRF 2005, p.22).

Appendix B - Details of MNC population characteristics

- The most current figures (2004) show that the NSW MNC region has the lowest effective fertility rate in Australia, as measured by the number of one year olds or younger as % of population (see Table 8.9 from SOR 2005-06). As a retirement region, the total number of older people reduces the effective fertility rate.

Region	Score	Rank
VIC Gippsland	1.14	55
Adelaide Outer	1.12	56
Melbourne East	1.12	57
QLD Wide Bay-Burnett	1.12	58
NSW South-East	1.12	59
QLD Sunshine Coast	1.09	60
Melbourne Inner	1.08	61
NSW Richmond-Tweed	1.03	62
Adelaide Central	0.98	63
NSW Mid North Coast	0.96	64

Table B.1: Regions in Australia with the lowest proportion of population aged <1 year old

B.5 Increasing Aboriginal and Torres Strait Islander Population

- Compared with NSW, the MNC has a higher proportion of Indigenous people (HVRF 2003, p.i)
- The Aboriginal and Torres Strait Islander (Indigenous) population of the MNC Region currently comprises 3.7 per cent of the population of the entire Region. This proportion has been growing with recent Censuses because of a higher birthrate than the population as a whole and also because of an increase in willingness to identify as an Aboriginal or Torres Strait Islander. This latter trend has been evident in measures of the total Indigenous population of Australia. At the 1991 Census the declared proportion of Indigenous persons in the MNC Region was 2.1 per cent, in 1996 it was 3.0 per cent, in 2001, it was 3.7 per cent: increases of 53 per cent and 29 per cent between successive Censuses, while the whole MNC population increased by 9.8 per cent and 5.1 per cent respectively (HVRF 2003, p.i).
- There is a growing indigenous population on the MNC, with 3.5 per cent of the total population in 2001 identifying as Aboriginal or Torres Strait Islander, compared with the NSW average of 1.9 per cent. Each of the individual LGAs has a proportionally greater indigenous population compared with NSW, with Kempsey having the largest representation at 8.5 per cent of the total population. (HVRF 2005, p.3)

Appendix B - Details of MNC population characteristics

- The rising proportion of Aboriginal and Torres Strait Islanders suggests that community services will need to be adjusted to meet the specific needs of this community. Investment to improve indigenous health and education and reduce undesirable outcomes (e.g. unemployment and social inequity) will have the potential to produce large benefits in reduced financial and resource expenditure and enhanced quality of life for the larger regional community. The heterogeneity of this community's location suggests that policies need to be appropriately spatially targeted. (HVRF 2005, p.22)
- One striking measure of Indigenous difference is the high proportion of Indigenous prisoners in Australian gaols. Nationally, in 2001, the Indigenous rate of imprisonment was over 15 times that of the non-Indigenous population; for NSW it was 13.2 times. In the Mid North Coast Region the apparent rate of Indigenous imprisonment in 1996 (for Richmond Tweed and Mid-Northern) is 10 times that of the non-Indigenous population of the Region (HVRF 2003, p.23).
- This group has particular needs for health, education and police (HVRF 2003)

B.6 High unemployment/low participation rate

- High unemployment is a characteristic of the MNC: in 2001 it was 13 per cent, higher than either Sydney (6 per cent) or NSW (7 per cent) (HVRF 2003, p.26).
- Unemployment is particularly high in the 20-24 yrs age group (HVRF 2003, p.27) and the Indigenous unemployment rate is considerably higher than the highest total population unemployment rate (HVRF 2003, p.22).
- The MNC has a higher unemployment rate than NSW and a lower proportion of people who are in the labour force: that is, people who are either in work or looking for work (HVRF 2003, p.ii).
- Approximately, 54 per cent of the MNC is in the working age population (15 to 59). By comparison, the State had a relatively larger working age population (61 per cent) (HVRF 2003, p.6).
- The participation rate in the MNC as at the 2001 Census was lower than NSW and Sydney. (Participation rate reflects the proportion of the working age population engaged in the labour force; ie, the sum of people working and looking for work as a proportion of the working age population) (HVRF 2003, p.27).

B.7 Low education levels

- National evidence suggests a strong relationship between education and lower unemployment: that is, unemployment rates tend to be lower for those with more education and training (HVRF 2003, p.ii).

Appendix B - Details of MNC population characteristics

- While the unemployment problem is multifaceted, there is a strong correlation between low educational attainment and high unemployment. This, together with the generally less well educated population in the MNC, provides compelling evidence to suggest that persistently higher rates of unemployment in the MNC in general, and among young people in particular, are related to its relatively less skilled workforce. That is, part of the unemployment problem in the MNC lies with the supply of labour not just the demand for it. If youth and the unemployed are not encouraged to undertake training to gain the skills required to be attractive to employers in the tertiary sector, the pool of unemployed will continue to grow. Therefore, those without post school education and training will be at increased risk of unemployment, particularly long-term unemployment (HVRF 2003, p.35) (Also see HRVF 2005, p.ii).
- A key characteristic of the MNC is its high proportion of early school leavers as defined by people who left school at Year 10 *or earlier* (60 per cent) compared with either Sydney (37 per cent) or NSW (44 per cent) (HVRF 2003, p.i, p.47).
- The MNC has a lower proportion of residents completing Year 12 in the Region than in the State (24 per cent compared with 38 per cent respectively), a lower proportion in the Region holding degree or diploma qualifications, and a higher proportion with no qualifications (HVRF 2003, p.ii, p.40)
- The lower level of educational attainment in the MNC compared with Sydney has significant *implications* for employment and other economic opportunities in the Region. In terms of unemployment, there is a clear (inverse) relationship between educational attainment and unemployment: people with higher (post-school) qualifications consistently experience lower rates of unemployment than those without post-school qualifications. In addition, labour force participation tends to be substantially higher among those with higher qualifications. The comparatively lower educational level of the MNC makes it more vulnerable to unemployment than areas such as Sydney (HVRF 2003, p.47).
- *The MNC may not have a suitably qualified workforce* - there has been a structural shift in the Region's economy away from employment in primary industry to proportionally more people being employed in the tertiary sector. This structural shift means that the lower level of educational attainment in the MNC compared with the State may have significant employment implications. Those with lower qualification attainment are more likely to experience difficulty finding employment in growth industries as newer industries require people with skills in problem solving, customer service etc (HVRF 2003, p.2).
- There are a high proportion of residents with health related qualifications (above the State average) - a marker of existing expertise (HVRF 2005).
- The attractiveness of the MNC to skilled, entrepreneurial people will depend on the perceived liveability of its communities and the diversity of lifestyles. While

this point appears to reflect the ability to 'import' skilled, entrepreneurial and creative people, it also refers to the MNC's ability to retain those with these abilities already living in the region. (HVRF 2005, p.17)

B.8 Low income and expenditure

- Incomes for MNC individuals are generally lower than the State overall and concentrated in the lower and middle income ranges, evidenced by 2001 Census data comparing the MNC with NSW. There are proportionally fewer MNC people in the higher income brackets compared with NSW (HVRF 2003, p.ii, 37).
- Consequently, MNC residents are more restricted in their ability to spend money on goods and services, save, and access financial resources (HVRF 2003, p.ii).
- Weekly household expenditure is lower in the MNC than in the State (HVRF 2003, p.ii). If MNC residents continue to have lower income levels they will have less capacity to spend money on goods and services. This could lead to lower business growth in the Region than in other areas (HVRF 2003, p.41).

Reasons for lower incomes in the Region as a whole include:

- A lower proportion of working age people (between 15 and 59 years) in the MNC (54 % in 2001) than in the State (61%), and a higher proportion of older, mostly retired, people in the Region (19%) than in the State (13%) (HVRF 2003, p.39).
- A higher proportion of the regional population with a disability (23%) compared with the State (19%) (HVRF 2003, p.39).
- The number of professionals in the MNC is substantially lower than Sydney and NSW (HVRF 2003, p.39).
- Lower educational attainment in the MNC, with a lower proportion of residents completing Year 12 in the Region (24%) than in the State (38%), a lower proportion in the Region holding degree or diploma qualifications, and a higher proportion with no qualifications (HVRF 2003, p.40)