

19.1 Existing conditions

The Tiwi Islands are located approximately 60 km north of Darwin or 20 km north of the Australian mainland at the closest point across the Clarence Strait. The main islands within the group are Bathurst and Melville, with several much smaller islands located close to the coastline.

There are three main communities on the Tiwi Islands:

- Nguiu (Bathurst Island);
- Pirlangimpi (Melville Island); and
- Milikapiti (Melville Island).

There is also Wurankuwu (Bathurst Island, 60 km from Nguiu) a small outstation established in 1994. The other official outstations on the Islands are also small and have no services apart from water bores and generators. They are Paru (7 houses), Taracumbi (2 houses), Yimpinari (1 house) and Takamprimili (1 house). All are located on Melville Island (TLC 2004). The ABS census collection districts are illustrated in Figure 19.1 and the three main communities are highlighted in blue.



Figure 19.1: ABS Census Collection Districts

Source: ABS, 2005

19.1.1 Population

Table 19.1 presents the population of the Tiwi Islands by community and Indigenous status. The 2001 Census counted 2,236 people on the Tiwi Islands of which the majority live in Nguiu (59%) and are Tiwi Islanders (91%). The population of the Tiwi Islands accounts for approximately 1% of the total Northern Territory population and 4% of the Territory's Indigenous population (ABS 2001b).

The population rose by approximately 10% between the census in August 2001 and June 2003 when the estimated residential population was 2,454. Sixty nine per cent of the population are in the 15 years and over age category and only 3% aged 65 years and over (ABS 2005).

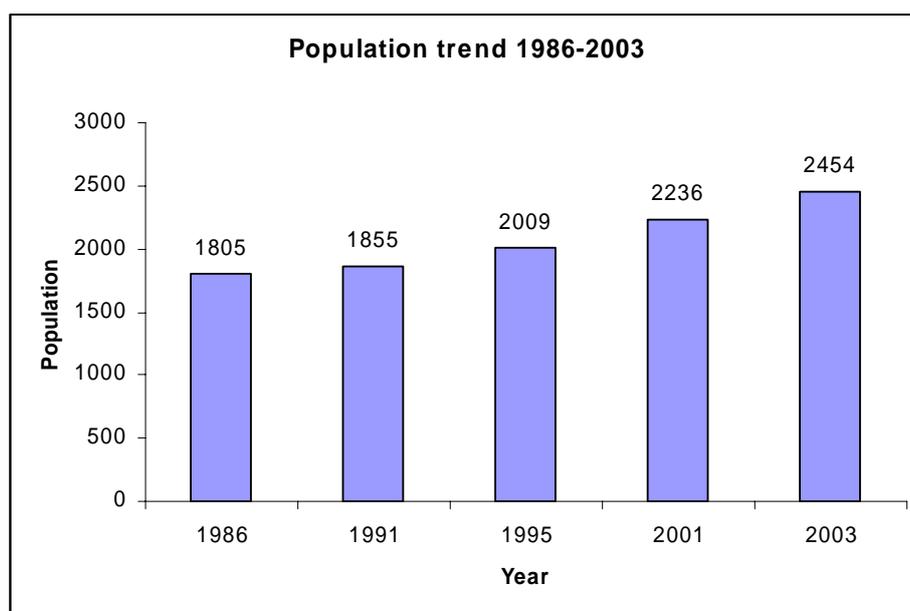
Table 19.1: Population by Tiwi Island Communities, 2001

	Kilimiraka	Nguiu	Milikapiti	Pirlangimpi	Pickertaramoor	Total
Indigenous	99	1,209	387	324	8	2,027
Non-Indigenous	0	101	63	45	0	209
Total persons	99	1,310	450	369	8	2,236
Aged 15 years and over	68	929	287	244	8	1,536
Aged 65 years and over	3	36	10	9	0	58

Source: ABS 2001b

Note: Kilimiraka was a small camp on the south-western part of Bathurst, but it is no longer in operation. It was included in the 2001 census and is also referred to later in this section.

Figure 19.2: Population Trend, 1986 to 2003



Source: TLC, 2004

The population trend for the Tiwi Islands from 1986 to 2003 is illustrated in Figure 19.2. The population increase between 1986 and 1991 was minimal (2.8%), however between 1995 and 2003 the population increased by some 18.1%. The large population increase is not due to the Sylvatech forestry operations as their workforce is located in Darwin. It is possible that a component of the 18.1% increase is attributable to improved census collection methods.

Percentage age distribution by Indigenous status is presented in Table 19.2. The Indigenous population is relatively young (54% less than 25 years old) which is not uncommon for Indigenous communities in Australia. The non-Indigenous population has a very low proportion of people in the 15-24 years age category when compared to the Indigenous population and the Northern Territory as a whole. This is most likely attributed to non-Indigenous families leaving the Tiwi Islands so their children can pursue educational opportunities in Darwin or other major cities.

Table 19.2: Percentage Age Distribution by Indigenous Status in the Tiwi Islands, 2001

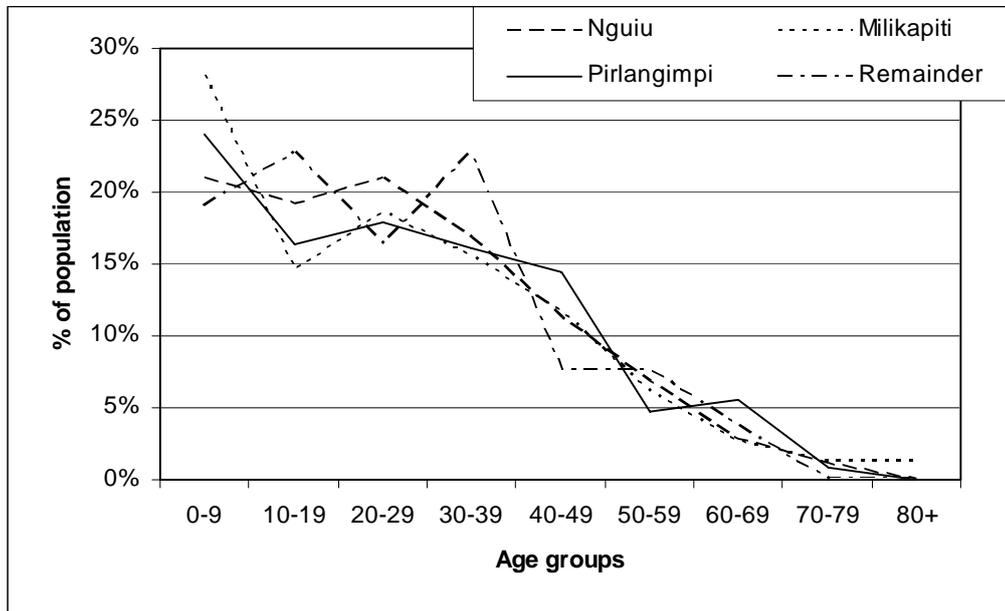
Age category	Indigenous			Non-Indigenous			Total			NT
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Persons
0-4 years	11.0	13.2	12.1	7.8	4.1	6.3	10.7	12.5	11.6	8.1
5-14 years	21.6	19.7	20.7	9.8	10.8	10.2	20.5	19.1	19.8	16.2
15-24 years	22.7	19.8	21.2	3.9	4.1	4.0	21.0	18.8	19.9	14.8
25-44 years	30.9	31.0	31.0	34.3	47.3	39.8	31.2	32.1	31.7	34.2
45-64 years	12.6	13.0	12.8	38.2	29.7	34.7	14.9	14.1	14.5	21.5
65 years +	1.3	3.3	2.3	5.9	4.1	5.1	1.7	3.4	2.5	5.2
Total	100	100	100	100	100	100	100	100	100	100

Source: ABS, 2001a

NB: These statistics do not include those people who did not declare their Indigenous status.

The age distribution across the Tiwi Islands communities is illustrated in Figure 19.3. Milikapiti has the highest proportion of children in the 0-9 age category, however it conversely has the lowest number of people in the 10-19 age category. There is significant variance in the proportion of the population across each age category in the 'remainder' region and this is due to the small population size (79 persons). The over 50s population is spread evenly across each of the four regions with 11% in each.

Figure 19.3: Age Distribution Across Selected Regions, 2001



Source: ABS, 2001b

NB: Due to the small numbers, the populations of Pickertaramoor and Kilimiraka have been combined and represented as ‘Remainder’.

19.1.2 Employment and income

Employment levels

Unemployment statistics for the Tiwi Islands are presented in Table 19.3 for the March 2004 to March 2005 quarters. The unemployment rate on the Tiwi Islands is some three times the Northern Territory average and has risen from 15% (119 persons) to 19% (150 persons) over the year. Although this equates to an additional 31 persons unemployed (or 26% increase) over the year, the quarterly fluctuations range only from -8 to +11 (Department of Employment and Workplace Relations (DEWR) 2005).

Investigations failed to determine why the unemployment rate has risen by four percentage points over the year, it may be that the people who have migrated to the Tiwi Islands have not found employment or collection methods are more accurate.

Table 19.3: Unemployment Statistics for the Tiwi Islands, March 2004 to March 2005 Quarters

	Unemployment					Unemployment rate (%)					LF
	Mar 04	Jun 04	Sep 04	Dec 04	Mar 05	Mar 04	Jun 04	Sep 04	Dec 04	Mar 05	Mar 05
Tiwi Islands	119	111	128	139	150	14.9	14.0	16.1	17.5	18.9	793
Northern Territory	5,700	5,300	5,800	6,100	6,500	5.6	5.2	5.7	6.0	6.4	101,400
Australia	599,300	586,000	579,100	566,900	554,400	5.9	5.8	5.7	5.5	5.4	10,312,100

Source: DEWR, 2005

Labour force status by Indigenous status is presented in Table 19.4 and highlights the high proportion of Indigenous persons employed in the national Community Development Employment Program (CDEP). CDEP 'employs' 68% of employed Indigenous persons and 18% of employed non-Indigenous persons on the Tiwi Islands. The original intent of CDEP was to provide training and skills to facilitate a smooth transition to full-time employment, however it has become a long-term employment option for many with few real incentives (ABS 2001).

The majority of the labour force on the Tiwi Islands are Tiwi (82%) and are male (58%). The unemployment rate is much higher for males (16.1%) than for females (8.9%). Anecdotal evidence suggests that this may be due to the higher proportion of females employed in Government administration roles.

Table 19.4: Labour Force Status by Indigenous Status, 2001

	Indigenous			Non-Indigenous			Total		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
In the labour force:									
Employed: CDEP (a)	195	136	331	16	6	22	211	142	353
Employed: Other	70	74	144	50	42	92	120	116	236
Employed: not stated (b)	9	6	15	3	3	6	12	9	21
Unemployed	62	26	88	4	0	4	66	26	92
<i>Total labour force</i>	<i>336</i>	<i>242</i>	<i>578</i>	<i>73</i>	<i>51</i>	<i>124</i>	<i>409</i>	<i>293</i>	<i>702</i>
Not in the labour force	339	434	773	10	10	20	349	444	793
Unemployment rate	18.5%	10.7%	15.2%	5.5%	0.0%	3.2%	16.1%	8.9%	13.1%

(a) Community Development Employment Program

(b) Includes employed persons who did not state their Industry sector.

Source: ABS, 2001a

Employment type

Employment by industry across the Tiwi Islands communities is presented in Table 19.5. Of the 606 people who completed the Census survey, the large majority work in the 'government administration and

defence' sector (36%). This is double the proportion of people in the Northern Territory as a whole that work in this sector (18%). The next highest employer of people on the Tiwi Islands is the 'health and community services' (14%) and 'education' (13%) sectors. Two thirds of the people employed in the 'agricultural, forestry and fishing' sector live in Pirlangimpi.

Table 19.5: Employment by Industry, 2001

Industry	Nguiu	Milikapiti	Pirlangimpi	Remainder	Total
Agriculture, Forestry and Fishing	6	3	18	0	27
Mining	0	0	0	0	0
Manufacturing	6	0	6	0	12
Electricity, Gas and Water Supply	0	0	0	0	0
Construction	13	0	6	0	19
Wholesale Trade	3	0	0	0	3
Retail Trade	23	9	12	0	44
Accommodation, Cafes and Restaurants	9	0	3	0	12
Transport and Storage	12	3	0	0	15
Communication Services	3	0	0	0	3
Finance and Insurance	0	0	0	0	0
Property and Business Services	6	0	0	0	6
Government Administration and Defence	84	88	41	6	219
Education	56	15	9	0	80
Health and Community Services	67	6	11	3	87
Cultural and Recreational Services	6	6	11	0	23
Personal and Other Services	29	0	6	0	35
Non-classifiable economic units	0	0	0	0	0
Not stated	9	6	3	3	21
Total	332	136	126	12	606

Source: ABS, 2001b

NB Due to the small numbers, the populations of Pickertaramoor and Kilimiraka have been combined and represented as 'Remainder'

19.1.3 Education and training

Presented in Table 19.6 is the number of people attending different types of educational institutions. There are two Catholic schools in Nguiu, offering education from pre-school to junior secondary. There is a Catholic primary school at Wurankuwu, and Milikapiti and Pirlangimpi have NT government schools

offering primary education only. Anecdotal evidence suggests that retention rates in the Catholic schools are better than in the government schools.

The debate on the Tiwi Islands at the moment is the development of a 'land owners' private school'. It has been suggested that the school be a boarding school built at Pickertaramoor. Boarding from Monday to Friday was a suggested means to improving retention rates and thus educational outcomes. Debate as to whether this is an effective strategy continues, with those opposed to the boarding school stating that improving educational outcomes needs commitments from excellent educators willing to live on the Tiwi Islands as well as parents who are committed to a clearly articulated set of values and curriculum, not more buildings (Cleary 2005).

Table 19.6: Type of Educational Institution Attending, 2001

	Nguiu	Milikapiti	Pirlangimpi	Remainder	Total
Pre-school	17	11	7	0	35
Infants/Primary:	187	87	54	16	344
Secondary:	67	12	27	0	106
TAFE - Full-time	0	0	3	0	3
TAFE - Part-time	6	0	0	0	6
University / other tertiary - Full-time	0	0	3	0	3
University / other tertiary - Part-time	9	3	3	0	15
Other - Full-time	4	0	0	0	4
Other - Part-time	0	0	3	0	3
Total	290	113	100	16	519

Source: ABS, 2001b

NB: Due to the small numbers, the populations of Pickertaramoor and Kilimiraka have been combined and represented as 'Remainder'

The highest level of schooling completed for adults on the Tiwi Islands is presented in Table 19.7. The majority (70%) of the population have not completed schooling past Year 10 (not including those who did not state their response to this census question). The low educational achievement affects the ability of Indigenous people to gain employment across a range of occupations. According to Cleary (2005), education is perhaps the most important issue that needs to be addressed on the Tiwi Islands. He goes on to say that there are several 'lost' generations who are unable to perform the most basic functions of literacy and numeracy.

Table 19.7: Highest Level of Schooling Completed – Adults in the Region, 2001

	Nguiu	Milikapiti	Pirlangimpi	Remainder	Total
Year 8 or below	173	67	34	25	299
Year 9 or equivalent	148	59	39	27	273
Year 10 or equivalent	281	74	63	18	436
Year 11 or equivalent	71	36	39	0	146
Year 12 or equivalent	120	23	46	0	189
Still at school	63	0	7	0	70
Did not go to school	12	9	3	3	27
Not stated	59	17	12	9	97
Total	927	285	243	82	1,537

Source: ABS, 2001b

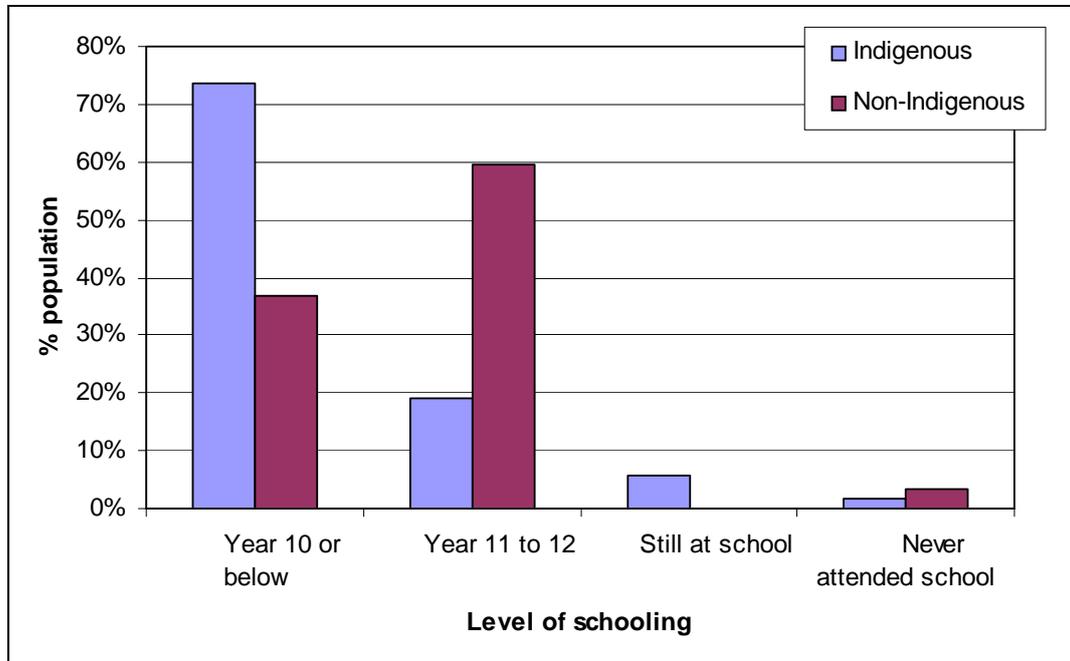
NB: Due to the small numbers, the populations of Pickertaramoor and Kilimiraka have been combined and represented as 'Remainder'

Figure 19.4 illustrates the highest level of schooling completed by Indigenous status and highlights the disparity between the Indigenous and non-Indigenous population. More than three times as many non-Indigenous persons completed schooling to year 11 to 12 compared to Indigenous people. As previously discussed, this works against the Indigenous population when seeking employment across a range of occupations.

The Tiwi Islands Training and Employment Board coordinates all vocational education and training activities on the Tiwi Islands and was established in 1999. In April 2003 the Board had agreements with seven Registered Training Organisations who provide training on the Islands, and 142 apprentices employed through the Group Apprenticeship Scheme. The first training centre was built in 2003 and was the first of a proposed cluster of centres to be built on the Islands.

Apprenticeships are offered across a large range of disciplines. The Board also provides other accredited training that enhances skills and creates pathways to apprenticeships or direct employment, e.g., child care, health work, small boat handling, first aid etc.

Figure 19.4: Highest Level of School Completed by Indigenous Status, 2001



Source: ABS, 2001a

19.1.4 Sport and recreation

The most popular sport on the Tiwi Islands is without a doubt Australian Rules football. It is believed that Catholic missionaries introduced Australian Rules football to the Tiwi Islands in the 1930s. There are seven teams on the Islands who strive for a place in the grand final which is typically viewed by more than 1,500 spectators, who come from all around Australia and even overseas. Sport and recreation on the Tiwi Islands is also used as a vehicle for anti-drug campaigning, with those people involved in smoking marijuana being banned from playing football for a period of time.

The sport and recreation facilities available in each of the three main communities on the Tiwi Islands are presented in Table 19.8. Each community is well serviced and this highlights the popularity of sport amongst the residents.

Table 19.8: Sport and Recreation Facilities at Nguiu, Pirlangimpi and Milikapiti

	Nguiu	Pirlangimpi	Milikapiti
Recreation club	1	1	1
Swimming pool	1	1	Nil
Sport and recreation hall	1	1	1
Football oval	2	1	1
Golf course	1	1	Nil
Tourism fishing resort	Nil	1	1

Source: TLC (2004)

19.1.5 Housing

The majority of the housing on the Tiwi Islands is sourced through the Indigenous Housing Authority (IHA) of the Northern Territory. The IHA is a partnership between the Commonwealth and NT Governments that allocates funds to areas based on needs analyses. There is a shortage of suitable housing on the Tiwi Islands and severe overcrowding has been identified as a priority issue. Some existing dwellings are of poor standard and waiting lists are common. Each of the three major communities has housing associations that manage the construction and maintenance of housing stocks.

Presented in Table 19.9 are the number of households and number of persons per household for various household structures by Indigenous status. The mean household size is nearly twice that for non-Indigenous people and it also shows that for Indigenous people a high proportion of households (18%) house more than one family.

Table 19.9: Household Structure by Indigenous Status, 2001

	Indigenous		Non-Indigenous	
	No. of households	Persons in household	No. of households	Persons in household
One family	315	1,390	32	98
Multi family	78	631	0	0
Lone person	23	24	30	38
Total	416	2,045	62	136
Mean household size	4.8		2.7	

Source: ABS 2001a

19.1.6 Health

The health status on the Tiwi Islands is poor and in the 1990s the Tiwi Islands had the worst overall health statistics for any population group in Australia. During this period the major health issues included renal disease, diabetes, heart disease, ear disease and mental health. Drug and alcohol abuse, suicide and domestic violence were also major health and social concerns.

Since the 1990s considerable progress has been made toward improving the level of health status on the Tiwi Islands. This was facilitated by the establishment of the Tiwi Health Board in 1995. The aim of the board was to empower Tiwi people to improve health by taking over service delivery. During this time the Commonwealth Government funded an Indigenous health care trial. The health care trial was aimed at achieving a more coordinated approach to the delivery of health care services and to improve the quality of care. The services provided by the Tiwi Health Board are now provided by Tiwi Health, a dedicated branch within the Remote Health section of the NT department of Health and Community Services.

Significant achievements over this period include:

- 80% reduction in loss of kidney function amongst renal patients;
- Four years of sustained reduction in death and renal failure;
- 11.5% reduction in hospital admissions;
- Reduction in suicides;
- Mental health, youth and chronic disease programmes fully operational; and
- Operation of the first Indigenous-owned pharmacy.

Tiwi Health continues to improve the health status of the Tiwi Islands and the social well being of the community as a whole.

19.1.7 Justice issues

There are police based at both Pirlangimpi and Nguuu, although Nguuu is now the main station of the region with the officer-in-charge (OIC) based there. The OIC of Pirlangimpi holds the rank of Brevet Sergeant. Members are usually rostered Monday to Friday, with weekends off duty. Magistrates Court and Juvenile Court hearings are held each month. There is an Aboriginal Community Police Officer (ACPO) stationed at Milikapiti.

ACPOs were first introduced in 1979, as the Northern Territory Police Aide Scheme, following a surge of refugees and illegal fishing boats in Australian waters. ACPOs now essentially perform two roles:

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- Acting as law enforcement officers helping Aboriginal communities understand their obligations under Territory Law; and
 - As intermediaries or liaison officers between police and Aboriginal communities.

The ACPO scheme is a partnership arrangement between the NT Police and Aboriginal Communities and there are 53 ACPOs in the Northern Territory. All ACPOs are members of the NT Police Force and the NT Police Association.

Pirlangimpi members are responsible for the day-to-day policing of the Tiwi Islands, with general patrols to the various communities comprising the main duties. Patrols are conducted on a weekly basis or as required in response to incidents. Most police work involves crime by Aboriginal people (not surprisingly given their proportion of the population) although there has been a disturbing trend for some non-Aboriginal people to traffic cannabis with young men on the islands.

The crime rate on the islands is not high in comparison with other settlements on the mainland. Most crime is committed while the offenders are under the influence of alcohol and is generally against the person or property. Offenders typically are male, Aboriginal, 18 to 25, and unemployed. The bulk of crimes are crimes against the person or property offences. There is little stigma attached to having been imprisoned. The most prevalent offences include aggravated assault, unlawful entry, stealing and criminal damage. Most crimes are cyclical, occurring near the issue of Social Security cheques.

Police and community interaction has been strong, with a number of community-based initiatives in place to moderate the excessive consumption of alcohol. A CDEP-funded wardens patrol was established recently in Nguuu, for example, and is proving to be of great help to Nguuu ACPOs and the community. A women's patrol has also been established within Nguuu, which has decreased the number of incidents of domestic violence.

It is not possible to obtain justice statistics for the Tiwi Islands as the NT Department of Justice does not report down to this level in the public domain.

19.1.8 Selected statistics

The selected characteristics presented in Table 19.10 further highlight the disparity between the Indigenous and non-Indigenous populations on the Tiwi Islands. The non-Indigenous population come to the Tiwi Island for employment purposes and are generally paid a premium for working in a remote location, hence the median incomes for non-Indigenous people are higher than for Indigenous persons. The median age of Indigenous persons is much lower than for non-Indigenous persons as the non-Indigenous population is predominantly made up of mature employees.

Table 19.10: Selected Characteristics by Indigenous Status, 2001

	Indigenous	Non-Indigenous	Overall
Median age	23	40	24
Median weekly rent	\$1 - \$49	\$50 - \$99	\$1 - \$49
Median weekly individual income	\$160 - \$199	\$600 - \$699	\$160 - \$199
Median weekly family income	\$400 - \$499	\$1,500 - \$1,999	\$400 - \$499
Median weekly household income	\$500 - \$599	\$1,000 - \$1,199	\$500 - \$599

Source. ABS 2001a

Selected characteristics by region are presented in Table 19.11. There is approximately one extra person per household in Nguiu (4.9) than in Milikapiti (4.0). There is considerable variance in the median income levels between the communities across the selected categories, however it is difficult to establish a trend as the numbers are so small in some of the communities.

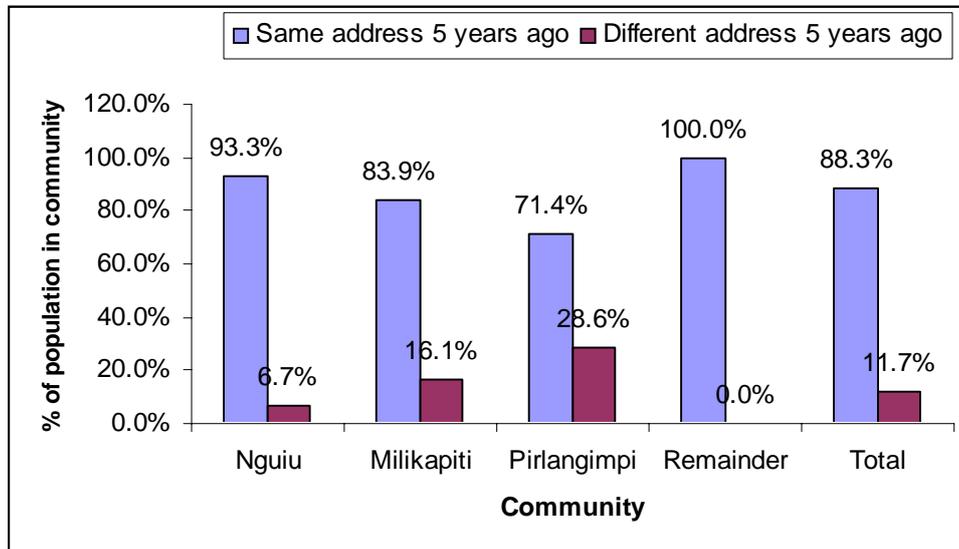
Table 19.11: Selected Characteristics by Region, 2001

	Kilimiraka	Nguiu	Milikapiti	Pirlangimpi	Pickertaramoor
Median age	21	24	24	24	54
Median weekly rent	\$0-\$49	\$0-\$49	\$0-\$49	\$0-\$49	\$0-\$49
Median weekly individual income	\$120-\$159	\$160-\$199	\$160-\$199	\$160-\$199	n.a.
Median weekly family income	\$300-\$399	\$400-\$499	\$400-\$499	\$300-\$399	\$300-\$399
Median weekly household income	\$600-\$699	\$600-\$699	\$500-\$599	\$400-\$499	\$300-\$399
Mean household size	4.5	4.9	4.0	3.6	3.0

Source. ABS 2001b

Figure 19.5 illustrates the stable nature of the population on the Tiwi Islands. Across all communities, nearly 90% of the population held the same address as they did five years ago. This varied from 71% in Pirlangimpi to 100% across the remaining small communities. This indicates a very stable population.

Figure 19.5: Population, 2001



Source: ABS 2001b

NB Due to the small numbers, the populations of Pickertaramoor and Kilimiraka have been combined and represented as ‘Remainder’

19.1.9 Regional economy

Business enterprises on the Tiwi Islands include aquaculture, forestry, tourism, barge operations, and arts and crafts. In recent years there have been additional forestry projects proposed and initial mineral exploration was carried out at the Lethbridge Bay sites in the 1900s, and more recently by Matilda Minerals.

In 1999, the TLC assessed the Tiwi economy at \$25 million/year. This was made up of \$11.5 m commercial fishing generated by non-Tiwi interests, \$9.5m ‘welfare economy’ generated by Tiwi, and \$4 m enterprise and non-welfare payments accruing to the Island’s organisations and business sector (TLC 2004).

The Tiwi Islands Community Trust was set up in 1986 to improve the local economy and reduce the dependence on welfare. The Trust set up partnerships in forestry, tourism, cultured pearls and coastal barging, however the risk and marginal profits resulted in all partnerships being ended apart from Tiwi Barge Pty Ltd. The tourism joint ventures (Tiwi Tours and Barra Base Lodge) were purchased outright by the trust and these continue to do well. Tiwi Pearls was sold and Melville Forest Products was terminated in 1997 (TLC 2004).

A business operating adjacent to the Project study area is ‘Top End Sportfishing Safaris’ which is run by Les and Annette Woodbridge out of Milikapiti. Top End Sportfishing Safaris offer accommodation at Milikapiti for up to 12 people and also have a campsite at Johnston River which caters for a maximum of

six. They conduct guided fishing and hunting tours and have been operating in the Northern Territory since 1986.

19.1.10 Other infrastructure

Power generation on the Islands is by means of diesel power stations. Payment operates through a card system, where consumers pre-purchase cards for insertion into individual meters. Production bores supply domestic water to Nguiu, Milikapiti and Wurankuwu and it is of good quality and quantity. The water for Pirlangimpi is sourced from a permanent spring that is pumped into a one million litre holding tank. All communities have water borne sewerage systems pumped into sewerage ponds.

There are approximately 250 km of road on Bathurst Island, slightly less than Melville Island which has 280 km of road. These values do not include the numerous cultural, hunting and recreational tracks. Sealed roads are confined to 14 km within Nguiu community and the Pirlangimpi and Milikapiti internal roads. The three main communities have community-owned and licensed aerodromes with sealed airstrips. In addition, landing areas are also located at Port Hurd (Bathurst Island), Pickertaramoor, Rolla Plain and Maxwell Creek (Melville Island).

Public transport is regular on the Islands, with Nguiu serviced three times a day and Pirlangimpi and Milikapiti twice daily. The majority of freight transport to the Tiwi Islands is by shipping and each community has a government-owned barge landing and material offload facility. A regular barge service is provided to each main community and the Port Hurd Marine Harvest Aquaculture Facility by Tiwi Barge Services Pty Ltd, a joint venture with the TLC.

Communications on the Islands are good with the television services ABC, Imparja and 7 Central available. ABC Radio National is transmitted to the area and local news and information is provided through Broadcasting for Remote Area Communities Services in Nguiu, Pirlangimpi and Milikapiti. There is a monthly newspaper called the 'Tiwi Times' and this is prepared by the Tiwi Islands Training and Employment Board. Newspapers from the mainland are available regularly but arrive a day late.

A CDMA tower erected in 2003 at Nguiu provides mobile telephone services to the area. A CDMA tower has been erected at Milikapiti and is now operational. Land-line phones are available to all houses in the main communities, however anecdotal evidence suggest that only approximately 15% of households have a phone connected.

19.2 Objectives and standards

The objective for the Project in relation to socio-economic aspects is to ensure that adverse impacts are minimised and mitigated, and the short- and long-term social enhancement opportunities are maximised.

The applicable management objectives and relevant legislation, standards and guidelines are listed below in Table 19.12. The potential issues and investigations required are also listed. All investigations have been completed.

Table 19.12: Socio-economic Management Objectives and Standards

Management objectives	Relevant Legislation, Standards or Guidelines	Potential issues	Investigations to address issues
<p>Ensure that the project impacts do not adversely affect the Tiwi Islands communities.</p> <p>Ensure that the proposal complies with the <i>EPBC Act 1999</i>.</p> <p>Ensure the short- and long-term social impacts and opportunities are maximised to the benefit of the Tiwi Islanders.</p>	<p><i>Environment Protection and Biodiversity Conservation Act 1999</i></p>	<p>Potential changes to lifestyle, sources of income and opportunities for development.</p> <p>Impacts on the economic and social development locally and of the region.</p>	<p>Complete desktop baseline socio-economic study. Conduct stakeholder consultation to identify further data sources and ground truth desktop analysis.</p> <p><u>Specific study:</u></p> <ul style="list-style-type: none"> • Baseline socio-economic study • Stakeholder consultation <p>Proposal is considered a controlled action under the EPBC Act 1990 and will therefore be assessed by the Commonwealth Department of Environment and Heritage.</p>

19.3 Definition of issues and impacts

The Project area is located in a relatively isolated part of Melville Island, with the closest community being Milikapiti. Milikapiti is approximately 25 km by line of sight or 105 km by road from Andranangoo, and 40 km by line of sight or 120 km by road from Lethbridge. When the mineral sands mine is fully operational it will be staffed by 8 to 15 employees, operating on a two weeks on / one week off roster. Although the Project is in an isolated location and small in size, there are numerous potential impacts, and these will need to be managed to ensure positive outcomes. Preservation of the natural environment, continued access to recreational areas and opportunities to improve the local economy have been cited during the consultations as areas of priority to the Tiwi people. Matilda began consultations with the TLC and Traditional Owners prior to embarking on the exploration programme and has maintained regular consultations.

The Northern Territory economy will benefit from royalties paid by Matilda which are based on 18% of net profit which will equate to approximately \$1,000,000 per year at current commodity prices and exchange rates. Five per cent of gross revenue will be paid to the TLC who distribute it to the landowners. This equates to approximately \$900,000 per year at current commodity prices and exchange rates.

Relevant government policy in relation to employment and local industry participation is administered through the NT Department of the Chief Minister, Office of Indigenous Policy Coordination. Two particularly relevant strategy documents are:

- Building our Population (2004); and

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- Building a Better Territory, The Economic Development Strategy for the Northern Territory June (2002).

These documents outline the Northern Territory Government's commitment to creating an environment for growth that provides education, training and employment opportunities for all Territorians, particularly the young Indigenous population. The partnership between the government, the Land Councils and Native Title holders aims to improve economic returns from exploration and mining. One way of doing this is to identify and promote local industry capacity and promote this capability for the supply and service of resource projects including the development.

Matilda is currently employing two Indigenous people in its field operations and hopes to be able to utilise further local employment during the construction, commissioning and operational phases of the Project. The company has commenced dialogue with the Tiwi Island Training and Employment Board (TITEB) and any training requirements Matilda needs will be met through TITEB.

A 15-person camp will be built on site. Employees will operate on a working roster of two weeks on followed by one week off. This sort of roster is not conducive to a settled family life for many people and the Tiwi people may prefer to engage in contract work opportunities. Two areas of opportunity that exist for contract work are in mine site rehabilitation and civil works (road maintenance). The civil works crew is run by the TILG and has completed work for Matilda during the exploration phase of the Project. Matilda will also investigate alternative rosters that might be more satisfactory for employing Tiwi's.

The TLC and community have expressed demand for accommodation infrastructure to remain after the mining project has ceased operations. This infrastructure could then be used for tourism, research or camping facilities. Matilda's current plans are to remove all plant and equipment post mining, and to leave the accommodation units at the last site they mine on Melville Island (currently Lethbridge). The mining area and other cleared areas will be rehabilitated. The community has indicated that they would like the roads to remain. Agreements with the Traditional Owners and TLC in relation to rehabilitation and closure will need to be formalised prior to the commencement of mining, as required by the NT Government Guidelines for the Project.

Unless the Matilda employees are locally recruited or have previous experience working on the Tiwi Islands they will have limited knowledge of the physical and social environment in which they will be operating. Site inductions and ongoing training will be essential to ensure the Matilda employees understand and respect the local environment.

Matilda proposes to transport the mineral sands to Port Melville at a rate of 32,000 t/annum for the first three years and 35,000 tonnes in the last year of operation. Average haulage will be four truck loads per day, seven days a week, depending on rain. There will be no haulage when it rains and extra trucking may be required following rainfall events. Matilda will need to ensure that all roads are maintained and that traffic activities do not adversely impact on the social surroundings. The potential transport-related issues for the Project are as follows:

- Disturbance of amenity in relation to noise and vibration;

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- Creation of dust;
 - Increased traffic between the Project site and Port Melville;
 - Potential for spillage of mineral sands; and
 - Potential for an accident resulting in injury or fatality.

19.4 Management

Matilda has undertaken extensive consultations with the TLC and Traditional Owners and these interactions have formed the foundations for a healthy working relationship (see Section 22). A consultation strategy will be developed by Matilda in collaboration with the TLC and Traditional Owners to ensure the delivery of current project information occurs in a timely manner and in a way which is appropriate for the stakeholders. Included in the consultation strategy will be a mechanism for gathering grievances, bringing them to Matilda's attention and resolving them.

Some of the operational aspects of the Project have changed since the NOI and consultation period (e.g. mining method, life of mine and infrastructure to remain post mining). Matilda will continue to consult the TLC, Traditional Owners and community to ensure all stakeholders are fully informed prior to the Draft EIS being released for public comment.

An employment strategy will need to be developed by Matilda outlining the potential for long-term and contract employment opportunities arising from the project. Matilda will continue to work with the TLC and the community to assess demand for employment and desired working conditions. Matilda have commenced discussions with the Tiwi Islands Employment and Training Board, who are in a position to provide training needs as required.

Draft plans for rehabilitation and closure are presented in Section 21 of this EIS. These agreements between Matilda and the TLC and Traditional Owners will need to be formalised prior to the commencement of mining and will need to be periodically reviewed during the life of the mine, in case conditions or attitudes should change. This is particularly important with respect to accommodation infrastructure as the community members have expressed their desire for these buildings to remain at each site.

Cultural awareness programs and behavioural guidelines will be implemented for Project employees. Site inductions and weekly toolbox meetings can be used to roll-out the programs and guidelines on a regular basis. Matilda is developing an EMS to assist them in managing their environmental responsibilities and to allow for continuous improvement of their environmental management programs.

A road transport strategy will need to be developed by Matilda in collaboration with the TLC to reduce the level of disturbance and ensure safety is the number one priority.

It is important to recognise that many important social impacts are not direct, that is they occur well after any action is taken, and often in areas not adjacent to the Project. Matilda will need to undertake ongoing monitoring and evaluation and report to government and other stakeholders on the social impacts of this Project. Management actions are summarised in Table 19.13 below.

Table 19.13: Socio-economic Management Actions

Management action	Details
Develop consultation strategy	Develop strategy in collaboration with the TLC and Traditional Owners, including a mechanism for gathering grievances, bringing them to Matilda's attention and resolving them.
Develop employment strategy	Outlining the potential for long-term and contract employment opportunities arising from the project.
Formalise agreements for rehabilitation and closure	Crystallised prior to the commencement of mining, with review undertaken during the life of the mine.
Implement cultural awareness programs	Implement cultural awareness programs and behavioural guidelines for Project employees.
Develop road transport strategy	Developed in collaboration with the TLC with the aim of reducing the level of disturbance and ensure safety is the number one priority.
Develop monitoring and evaluation program	Develop monitoring and evaluation program for reporting to government and non-government stakeholders on the social impacts of this Project

19.5 Commitments

Matilda commits to ensuring that adverse impacts are minimised and mitigated, and the short and long-term social enhancement opportunities on the island are maximised through the development of a consultation strategy (Section 19.4)

Matilda commits to working with the TLC and the community to assess demand for employment and desired working conditions for future employment of locals through the development of an employment strategy (Section 19.4).

Matilda commits to developing a road transport strategy reduce the level of disturbance and ensure safety is the number one priority (Section 19.4).

Matilda commits to implementing cultural awareness programs for employees and sub-contractors (Section 19.4).

Matilda commits to consultations with the TLC and the local community to establish agreed end land use of areas and infrastructure requirements (Section 19.5).

Matilda commits to developing a monitoring and evaluation program for reporting to government and non-government stakeholders on the social impacts of this Project (Section 19.4).