



THE AUSTRALIAN NATIONAL UNIVERSITY

Centre for
Aboriginal
Economic
Policy
Research



**The relative economic status of
indigenous people in the
Northern Territory, 1991-96**

J. Taylor and L. Roach

No. 156/1998

Discussion Paper

Series Note

The Centre for Aboriginal Economic Policy Research (CAEPR) was established in March 1990 under an agreement between The Australian National University (ANU) and the Aboriginal and Torres Strait Islander Commission (ATSIC). CAEPR operates as an independent research unit within the University's Faculty of Arts and is funded by ATSIC, the Commonwealth Department of Social Security and the ANU. CAEPR's principal objectives are to undertake research to:

- investigate the stimulation of Aboriginal and Torres Strait Islander economic development and issues relating to Aboriginal and Torres Strait Islander employment and unemployment;
- identify and analyse the factors affecting Aboriginal and Torres Strait Islander participation in the labour force; and
- assist in the development of government strategies aimed at raising the level of Aboriginal and Torres Strait Islander participation in the labour market.

The Director of the Centre is responsible to the Vice-Chancellor of the ANU and receives assistance in formulating the Centre's research priorities from an Advisory Committee consisting of five senior academics nominated by the Vice-Chancellor and four representatives nominated by ATSIC, the Department of Employment, Education, Training and Youth Affairs and the Department of Social Security.

CAEPR Discussion Papers are intended as a forum for the rapid dissemination of refereed papers on research that falls within the CAEPR ambit. These papers are produced for discussion and comment within the research community and Aboriginal affairs policy arena. Many are subsequently published in academic journals. Publications can be purchased from:

Centre for Aboriginal Economic Policy Research
2nd Floor, J.G. Crawford Building
Faculty of Arts
The Australian National University
Canberra ACT 0200
Telephone 02—6279 8211
Facsimile 02—6249 2789

Abstracts or Summaries of all CAEPR Discussion Papers can be found at the following World Wide Web address: <http://online.anu.edu/caepr>

As with all CAEPR publications, the views expressed in this Discussion Paper are those of the author(s) and do not reflect an official CAEPR position.

Professor Jon Altman
Director, CAEPR
The Australian National University
March, 1998

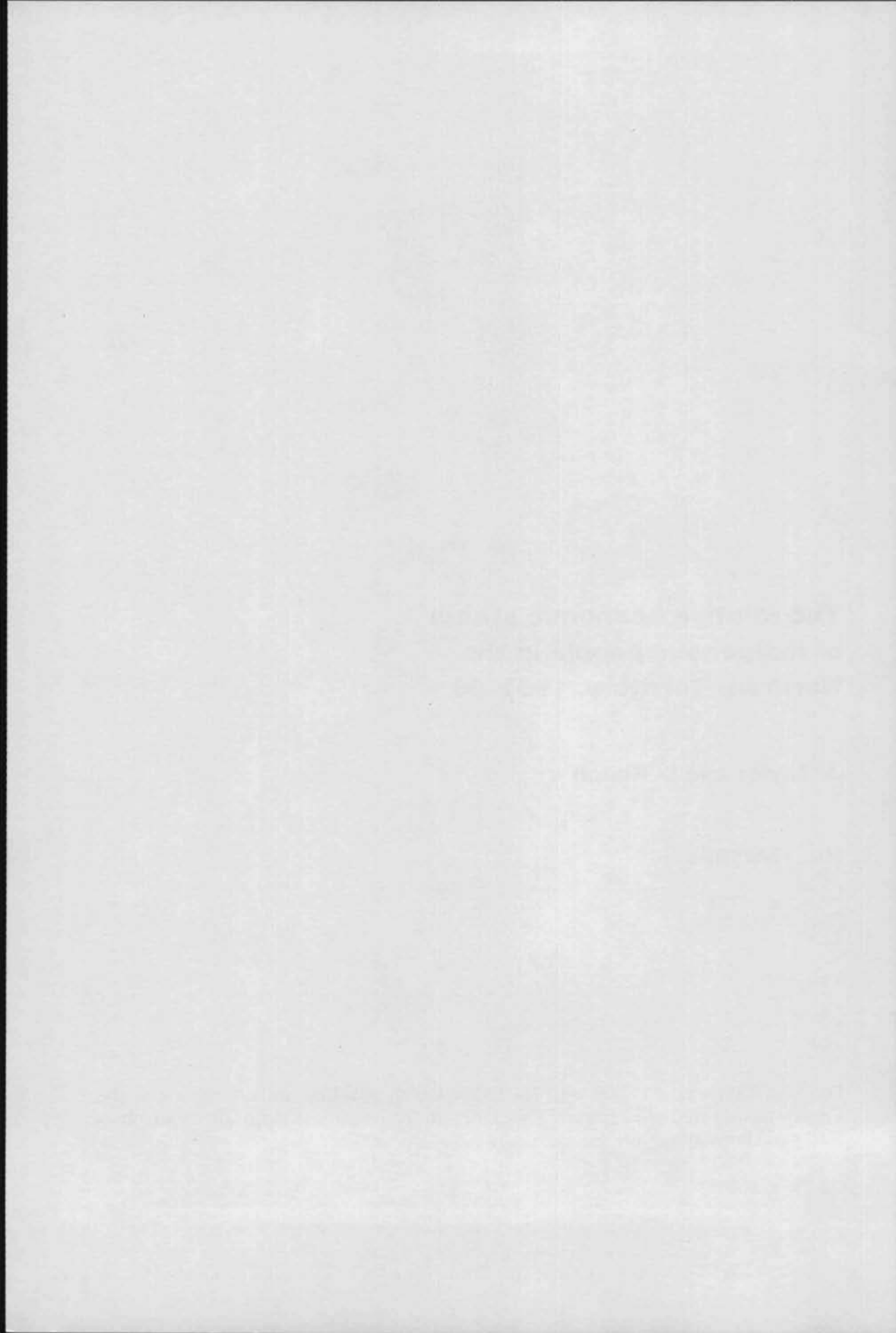
**The relative economic status
of indigenous people in the
Northern Territory, 1991-96**

J. Taylor and L. Roach

No. 156/1998

ISSN 1036-1774
ISBN 0 7315 2591 4

Dr John Taylor is a Fellow and Ms Linda Roach is a Research Assistant at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University.



Foreword

A component of CAEPR's research charter requires it to examine the economic situation of indigenous Australians at the State and Territory, as well as the national and regional levels of aggregation. Accordingly, in 1994, a series of eight CAEPR Discussion Papers (Discussion Papers 55-62) were published outlining changes in the relative economic status of indigenous Australians in each State and Territory using census data for the period 1986-1991. These analyses, together with CAEPR Research Monographs 5 and 6, formed CAEPR's commissioned contribution to the mid-term evaluation of the Aboriginal Employment Development Policy.

As part of CAEPR's continual monitoring of indigenous economic status, access to 1996 Census data now enables this series of Discussion Papers to be up-dated for the intercensal period 1991-96. The intention is to publish these papers progressively, commencing with the present issue on the Northern Territory. Care has been taken to ensure direct comparability in statistical content with the earlier series, thereby enabling longer-term analysis of change for the decade 1986-96. It is anticipated that these two series of Discussion Papers, taken together, will be of assistance to policy development at State, Territory and national levels.

Professor Jon Altman
Director, CAEPR
March 1998

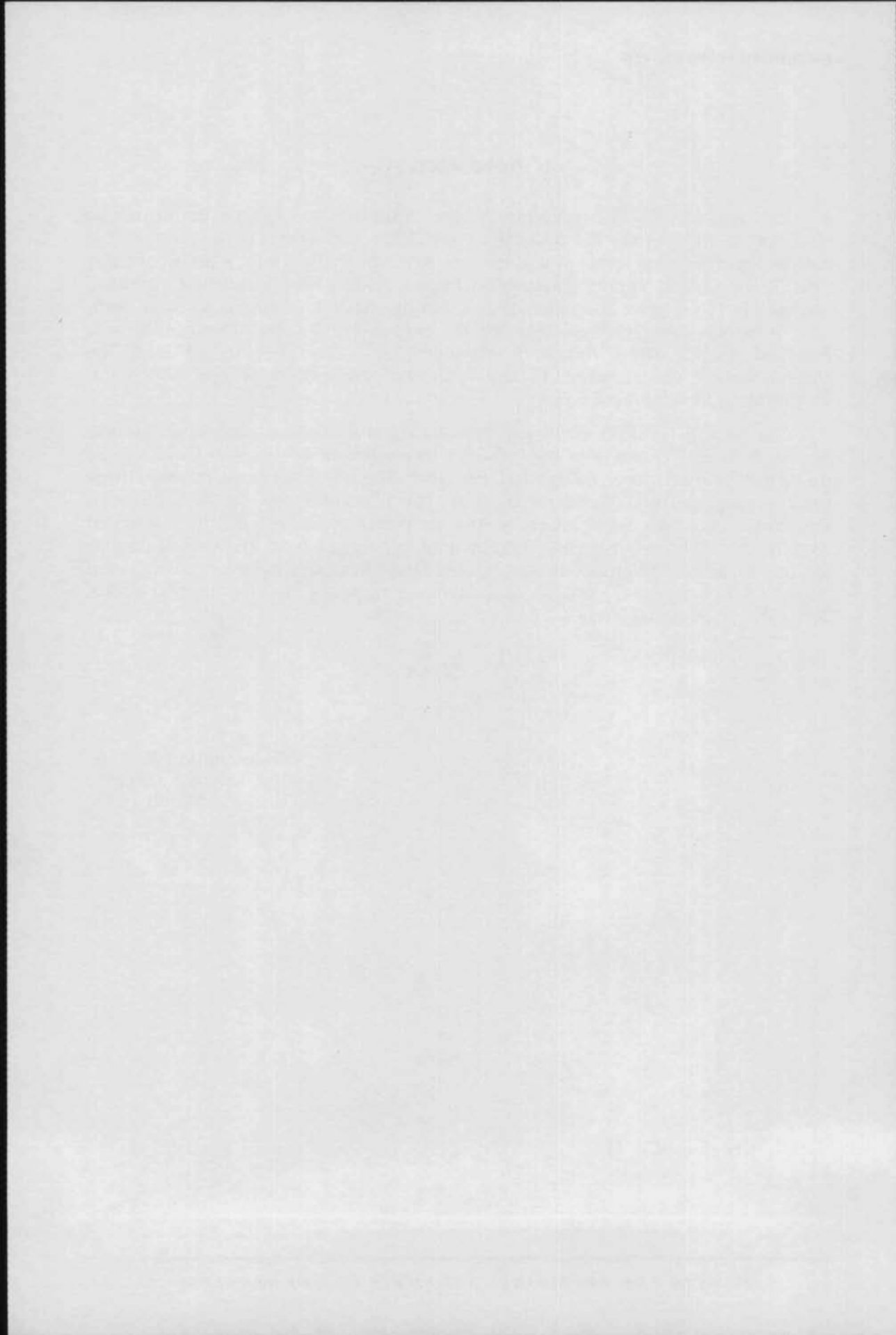


Table of Contents

Foreword	iii
Summary	vii
Acknowledgments.....	viii
Introduction	1
Population size and distribution, 1991-96	1
The indigenous population	2
The non-indigenous population.....	5
Change in the working-age population, 1991-96.....	6
Labour force status, 1991-96	6
Section-of-State and gender variations.....	8
Income status, 1991-96	13
Income change by section-of-State	16
Income change by gender.....	17
Welfare dependency	17
Policy implications	19
Notes	22
References	23

Tables

Table 1.	Change in indigenous population by section-of-State: Northern Territory, 1991-96.....	3
Table 2.	Change in non-indigenous population by section-of-State: Northern Territory, 1991-96.....	5
Table 3.	Change in indigenous and non-indigenous populations aged 15-64 years: Northern Territory, 1991-96.....	6
Table 4.	Indigenous and non-indigenous employment growth: Northern Territory, 1991-96.....	7
Table 5.	Change in indigenous and non-indigenous labour force status: Northern Territory, 1991-96.....	7
Table 6.	Change in indigenous and non-indigenous employment by section-of-State: Northern Territory, 1991-96.....	9
Table 7.	Change in labour force status by section-of-State and sex: Northern Territory, 1991-96.....	9
Table 8.	Change in non-indigenous labour force status by section-of-State and sex: Northern Territory, 1991-96.....	10
Table 9.	Participation and employment in the CDEP scheme: Northern Territory, 1986-96.....	11
Table 10.	Indigenous and non-indigenous employment growth by section-of-State: Northern Territory, 1991-96.....	12
Table 11.	Estimation of indigenous mainstream employment change: Northern Territory, 1991-96.....	13
Table 12.	Change in indigenous and non-indigenous income status: Northern Territory, 1991-96.....	15
Table 13.	Change in indigenous and non-indigenous income status by section-of-State: Northern Territory, 1991-96.....	16
Table 14.	Change in income status of indigenous and non-indigenous Australians by gender: Northern Territory, 1991-96.....	17
Table 15.	Change in indigenous and non-indigenous total income by labour force status: Northern Territory, 1991-96.....	18
Table 16.	Change in indigenous and non-indigenous mean employment/non-employment income: Northern Territory, 1991-96.....	19

Figure

Figure 1.	Annual income distribution of indigenous and non-indigenous adults: Northern Territory, 1996.....	15
-----------	--	----

Summary

The 1996 indigenous population of the Northern Territory was very close to the level projected on the basis of 1991 Census figures. This contrasted with the situation in most other States and the Australian Capital Territory where population levels in 1996 were much higher than expected. As a consequence, much interest surrounds the analysis of intercensal change in social indicators in the Northern Territory because it provides a benchmark based on consistent population levels against which the experience of other jurisdictions may be measured. This also means that intercensal change in employment and income levels can be established directly without adjusting for non-biological population increase.

Key findings are as follows:

- Between 1986 and 1991, the overall employment rate of indigenous people in the Northern Territory displayed distinct signs of improvement, rising from 28 per cent to 31 per cent (Taylor 1994: 7). By 1996, it had improved even further to 36.2 per cent.
- Nonetheless, the employment rate for indigenous people remains substantially below the Territory average and is still less than half the level recorded for non-indigenous adults.
- The indigenous unemployment rate fell from 25.9 per cent in 1991 to 17.8 per cent in 1996. However, the non-indigenous rate also fell substantially from 9.6 per cent to 5.9 per cent. As a consequence, the unemployment level among indigenous people worsened relatively and now stands at three times the level recorded for non-indigenous adults in the Northern Territory.
- Most employment growth occurred in urban centres, although some of this reflects category shift in the section-of-State classification.
- In rural areas, the CDEP scheme accounted for 93 per cent of the growth in employment. In urban areas, it accounted for 38 per cent of new jobs.

After accounting for likely jobs growth due to other labour market programs, mainstream employment is estimated to have risen by 4 per cent per annum. However, this was only just sufficient to keep up with growth in the working-age population resulting in minimal change to the mainstream employment population ratio.

Despite some success in stimulating jobs growth, little change in income relativities between indigenous and non-indigenous adults is evident since 1991 with the ratio of mean indigenous to non-indigenous income standing at 0.41 in 1996. Likewise, even though the fact that the labour force status of indigenous people in rural areas continued to improve, their incomes relative to those of indigenous people in urban areas fell further behind.

Overall, there has been notable increase in the contribution of employment income to total income. In 1991, 49.2 per cent of income for indigenous people

was derived from employment. By 1996, this proportion had risen to 55.5 per cent. However, compared to the equivalent figure of 92 per cent for the non-indigenous population this means that a far higher proportion of indigenous people (45 per cent compared to 8 per cent) remain dependent on non-employment sources of income.

To date, improvements in labour force status, while keeping just ahead of population growth, have not impacted on the gap in average incomes. For this to change, indigenous people will need to acquire employment at a much faster rate and in positions that provide an income at least commensurate with those obtained by the rest of the workforce.

Acknowledgments

Statistical information contained in this paper was prepared by Ms Jin Liu of the Commonwealth Grants Commission (CGC). We are grateful to Jin Liu for her efforts and to the CGC for facilitating this process. Helpful comments on the text were received from Jon Altman while editorial assistance was provided by Hilary Bek and Linda Roach, and layout by Jennifer Braid.

Introduction

Census-derived social indicators continue to provide the main statistical basis for assessing change in the economic status of indigenous Australians. By way of inference, they also provide a means to assess likely aggregate impacts of indigenous economic policy. Use of such data in this way formed the basis for a mid-term review of the Aboriginal Employment Development Policy (AEDP) in 1993. This involved a series of research papers aimed at establishing relative shifts in indigenous employment and income status between 1986 and 1991 (Taylor 1993a, 1993b, 1994). Findings for the Northern Territory indicated a rise in the indigenous employment rate and a decline in the unemployment rate, but with both of these remaining substantially below equivalent rates for the non-indigenous population (Taylor 1994). Also of note was a lack of improvement in income relativities with the reason being a heavy reliance on jobs in the Community Development Employment Projects (CDEP) scheme for employment growth. The release of 1996 Census data now provides for an up-date of this economic profile covering the intercensal period 1991-96.

A degree of caution has been expressed with regard to the interpretation of recent change in social indicators for the indigenous population using census data (Taylor 1997a). This is because indigenous population growth between 1991 and 1996 was augmented by a large number of individuals who had previously not appeared in census data as indigenous. Nationally, some 42 per cent of the intercensal increase in the indigenous population was due to factors other than natural causes (Gray 1997: 13). While the effect of this large census error of closure on the economic profile of the population remains to be fully established, it is safe to assume that any analytical difficulties produced as a result are largely confined to the more populous southern and eastern States where indigenous population growth far exceeded expectations based on estimates of natural increase (Taylor 1997b).¹ In contrast with most other jurisdictions, population growth in the Northern Territory was very close to the projected level estimated on the basis of 1991 Census figures (Taylor 1997b). As a consequence of this relative consistency in population levels over time, much interest surrounds the analysis of intercensal change in the Northern Territory.

Population size and distribution, 1991-96

To analyse change in the economic status of indigenous people in the Northern Territory compared to that of the rest of the population, an appreciation of respective population growth rates and spatial distributions is crucial. This is because different pressures are brought to bear on the need for new job creation by variable rates of growth in working-age population while the economy itself varies in its capacity to create employment in different parts of the Territory.

Previous analyses of the Territory's indigenous population have identified a variation in economic status between those resident in urban centres as opposed to rural areas (Tyler 1990; Taylor 1994). Given the policy implications of this structural dimension, and for consistency with data presented for the 1986-91 intercensal period (Taylor 1994), the present analysis is organised according to the Australian Bureau of Statistics (ABS) section-of-State classification with the standard three-way taxonomy for the Northern Territory reduced to two components by amalgamating data for bounded localities and the rural balance to create a single 'rural' category (0-999 persons).² Although this represents an oversimplification of the settlement hierarchy for the indigenous population by failing to distinguish outstation populations from those in larger rural localities, it is validated by the fact that residence in urban, as opposed to a rural areas, remains the crucial determinant of physical access to the mainstream labour market and other economic opportunities.

The indigenous population

At the 1996 Census, a total of 46,327 indigenous people were counted in the Northern Territory, an increase of 6,417 or 16.1 per cent since 1991. However, a better indication of the Territory's indigenous population size is provided by the estimated resident population (ERP) which adjusts the census count of usual residents according to an assessment of census error. This produced a population in 1996 of 49,566 which was slightly higher than the 48,830 expected on the basis of ABS experimental projections (ABS 1996). Compared to other jurisdictions in Australia these estimates of the 1996 indigenous population were very closely aligned (Taylor 1997b: 4) and indicate that natural increase was the primary cause of indigenous population growth in the Northern Territory.

The actual increase in the indigenous estimated usual resident population was 5,800 persons representing an annual growth rate of 2.6 per cent. This was noticeably higher than the annual growth rate of 1.7 per cent estimated for the non-indigenous usual resident population. As a consequence of this higher growth, the indigenous share of the Territory's usual resident population increased, albeit slightly, from 26.4 per cent in 1991 to 27.3 per cent in 1996.

One of the features of indigenous population distribution over the past two decades has been a gradual increase in the proportion resident in urban areas such as Darwin, Katherine and Alice Springs (ABS 1990: 9-12; Hugo 1991: 159-68, 1997: 92-100; Taylor 1994: 4). For example, between 1971 and 1991, the proportion of the Territory's indigenous population living in urban areas increased from 17 per cent to 35 per cent while the proportion living in rural areas declined from 83 per cent to 65 per cent. Analysis of indigenous population change by section-of-State for the most recent intercensal period between 1991 and 1996 suggests that this trend towards urbanisation has continued (Table 1). The rate of population increase was highest in urban areas (33 per cent) and such places accounted for a growing share of the indigenous population (40 per cent),

although the majority of indigenous people (60 per cent) remain located in rural places.

Table 1. Change in indigenous population by section-of-State: Northern Territory, 1991-96

	1991		1996		1991-96	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Urban	13,826	34.6	18,364	39.7	4,538	32.8
Rural	26,088	65.4	27,945	60.3	1,857	7.1
Total	39,914	100.0	46,309	100.0	6,395	16.0

It should be noted, however, that this relative increase in the urban population is partly illusory in the sense that some localities previously classified as rural in 1991 were designated as urban in 1996 due to change in their size and settlement status.³ For example, Maningrida which had a population of 894 in 1991 increased to 1,195 in 1996 and was thus reclassified as 'other urban'. In the same way, the former rural localities of Howard Springs, Humpty Doo-McMinns Lagoon and Virginia-Bees Creek in the Darwin hinterland were redesignated as urban centres in 1996 on account of their increase in population over the intercensal period. A total of 645 indigenous people were counted in these new urban centres. Altogether, about 40 per cent of the increase in urban population and much of the apparent slower growth in rural population can be attributed to this 'category shift'.

The other likely explanation for urban growth, though this remains to be investigated, is net migration gain from rural parts of the Territory as well as from interstate. However, analysis of census data for the previous intercensal periods suggests that Darwin actually lost indigenous population through migration exchange with the rest of the Territory and gained only slightly from interstate movement (Taylor and Bell 1996: 401). Research on the processes associated with indigenous migration to urban centres is available for most other towns in the Northern Territory (Young 1981; Loveday and Lea 1985; Lea 1989; Taylor 1988, 1990a, 1990b), although much of this is now dated. The general consensus is that increased urban residence is a response to the availability of housing, employment and social services in urban areas and has been augmented over time by a process of chain migration from rural communities in the Northern Territory and from other urban centres interstate. At the same time the distinction between urban and rural populations is somewhat blurred as much of the movement into urban areas is short-term and circular in character and urban populations retain strong links with rural hinterlands (Taylor 1988, 1998).

As for the relatively low growth in the rural indigenous population, an additional factor to consider is the fact that a very high proportion of indigenous people in the Territory, essentially those in remote areas and town camps, are

enumerated by interview and not by self-enumeration. At the 1996 Census, 70 per cent were counted in this way. Previous research has demonstrated that methodological and conceptual problems inherent in this process are likely to compromise accuracy (Martin and Taylor 1996). The effect of these leans towards under-enumeration, particularly of the young, more mobile and more socially marginal. While evidence in support of this may be localised, the relative exclusion of such cohorts emerged again in the 1996 Census (Gray 1997) and the phenomenon is well recognised by the ABS (Evans, Kahles and Bate 1993).

Also apparent in the 1996 and previous census counts are substantially divergent regional trends in population change that are difficult to explain solely by reference to demographic processes (Taylor 1993c). As in previous censuses, some rural regions of the Northern Territory displayed population growth rates between 1991 and 1996 that were much lower than expected. While the ABS can adjust census counts for census error at the regional level, this is less easy to accomplish at the small area level. More importantly, in the context of assessing change in economic status, missing characteristics can not be estimated at all. An example of this census error is provided by reference to the enumeration of indigenous people in Kakadu National Park.

The 1996 count revealed a substantial decline in both the number of indigenous people counted in the Kakadu region as their place of enumeration and in the number of those whose usual residence was in the region. The place of enumeration count fell by 30 per cent, from 443 to 310, representing a shift back towards the population levels of the early 1980s in a region where local service delivery agencies record rapid population growth due to mining and tourism developments with the resident indigenous population estimated at 533 in 1995 (Taylor 1996). Of course, one reason for a reduced place of enumeration count could be that usual residents of the region were absent and counted in another census area on census night. However, usual resident numbers also fell by around 20 per cent from 407 to 327.

In seeking to account for this population decline it may be significant that a total of 221 usual residents of Kakadu National Park did not answer the census question on Aboriginal origin (compared to only three in 1991). Since Aboriginal people comprised around half of the Park's usual residents in 1991 it seems likely that this census error may have contributed to their apparent decline in numbers. In administering the remote area census forms in 1991, the question on Aboriginal origin was pre-ticked in the affirmative. In 1996, however, this was not the case and interviewers were instructed to illicit an answer and complete the form. Whether this change in census methodology had any bearing on the increase in 'not stated's is unknown. If, for the sake of argument, however, all of those forms for usual residents which had no answer to the question on Aboriginal origin were on behalf of Aboriginal people, which in Kakadu is not an unreasonable assumption, then the Aboriginal usual resident population would have increased by 35 per cent instead of declining by 20 per cent.

In this context, it is worth noting that non-response to the census question on Aboriginal and Torres Strait Islander origin increased by 44 per cent from 6,706 in 1991 to 9,665 in 1996 with all parts of the Territory affected. As the Kakadu example illustrates, census error on this scale can make a substantial difference to recorded growth rates in places with relatively small base populations. It is suggested here that it may also have affected the relative shift in numbers by section-of-State and care should be taken when interpreting changes in urban/rural population distribution.

The non-indigenous population

A shift in proportional distribution by section-of-State was more apparent among the non-indigenous population of the Northern Territory's population (Table 2). This involved a substantial reduction in the rural population of some 22 per cent from 30,770 in 1991 to 23,923 in 1996 while the urban population increased by 13 per cent—a trend almost opposite to that observed in the previous intercensal period (Taylor 1994: 5–6). However, this recent pattern of redistribution is more illusory than real and reflects variation between censuses in the classification of localities and urban centres. Much of the expansion of urban areas in the Territory has involved spatially intermittent peri-urban growth and the associated incorporation into the urban area of formerly rural fringes (see, for example, Taylor and Lea 1988: 233–34). Thus, by 1996, the population counted in Howard Springs, Humpty Doo-McMinns Lagoon and Virginia-Bees Creek, which included some 9,500 non-indigenous people, were re-classified from rural to urban status which more than accounts for the apparent intercensal loss of rural population.

Table 2. Change in non-indigenous population by section-of-State: Northern Territory, 1991–96

	1991		1996		1991–96	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Urban	105,220	77.4	119,161	83.3	13,941	13.2
Rural	30,770	22.6	23,923	16.7	-6,847	-22.3
Total	135,990	100.0	143,084	100.0	7,094	5.2

Aside from these differences in spatial redistribution, the overwhelming contrast with the indigenous population remains the far greater concentration of the majority of the Territory's residents in Darwin, Alice Springs, Katherine and other urban centres (Taylor 1989; Hugo 1991, 1997). In contrast, the majority of indigenous people continue to be rural dwellers, far removed from urban centres and remote from many urban-type services and labour markets.

Change in the working-age population, 1991-96

As in the previous intercensal period, the rate of growth in the indigenous population of working age far outstripped that of the rest of the working-age population between 1991 and 1996. While the net increase in indigenous numbers was less than that recorded for the non-indigenous population, the rate of increase was three times higher (Table 3). This sustained relative expansion of indigenous people in the working-age group is the inevitable outcome of demographic processes set in train during the early 1970s and presently culminating in distinct shifts in the age structure of the indigenous population across Australia (Gray and Tesfaghiorghis 1993; Gray 1997). In a policy context, the key implication to note is that the rate of employment growth needs to be at least equivalent to the growth in the working-age group simply to maintain the employment/population ratio at its current low level. The retrogressive nature of this connection is indicated by the fact that employment growth could be relatively high but still without any appreciable impact on labour force status.

Table 3. Change in indigenous and non-indigenous populations aged 15-64 years: Northern Territory, 1991-96

	1991	1996	1991-96	
			Net change	Per cent change
Indigenous	23,254	27,600	4,346	18.7
Non-indigenous	98,136	104,361	6,225	6.3

Labour force status, 1991-96

As has been the case since the 1960s, employment growth in the Northern Territory between 1991 and 1996 was relatively buoyant in national terms with jobs increasing at a rate of over 2 per cent per annum. Also in line with recent experience, jobs growth recorded by the census was strongest among indigenous people. Table 4 shows the relative change in numbers employed. In 1996, a total of 9,492 indigenous people aged 15-64 were in work representing a 38 per cent increase since 1991. This compared to an increase of 8 per cent in the number of non-indigenous people employed, although the numeric increase in the latter was twice as great.

Three standard social indicators are used to highlight the extent and direction of relative change in indigenous labour force status in Table 5: the employment rate, representing the percentage of those aged 15-64 years who indicated in the census that they were in employment during the week prior to enumeration; the unemployment rate, expressing those who indicated that they were not in employment but had actively looked for work during the four weeks prior to enumeration as a percentage of those in the labour force (those employed

plus those unemployed); and the labour force participation rate, representing those in the labour force as a percentage of those of working age.

Table 4. Indigenous and non-indigenous employment growth: Northern Territory, 1991-96

	Number employed		Change	
	1991	1996	Net	Per cent
Indigenous	6,877	9,492	2,615	38.0
Non-indigenous	67,115	72,782	5,667	8.4
Total	73,992	82,274	8,282	11.2

Table 5. Change in indigenous and non-indigenous labour force status: Northern Territory, 1991-96

	Indigenous		Non-indigenous	
	1991 (1)	1996 (1)	1991 (2)	1996 (2)
Employment rate	31.5	36.2	71.4	75.0
Unemployment rate	25.9	17.8	9.6	5.9
Participation rate	42.5	44.1	79.0	79.7
Ratios (1/2):				
Employment rate	0.44	0.48		
Unemployment rate	2.70	3.01		
Participation rate	0.54	0.55		

Note: All figures exclude those who did not state their labour force status.

Between 1986 and 1991, the overall employment rate of indigenous people in the Northern Territory displayed distinct sign of improvement, rising from 28 per cent to 31 per cent (Taylor 1994: 7). By 1996, it had improved even further to 36.2 per cent. While the employment rate for the non-indigenous population also improved, the gap between indigenous and non-indigenous rates narrowed slightly as indicated by the higher ratio in Table 4. Nonetheless, the key feature is the fact that the employment rate for indigenous people remains substantially below the Territory average and is still less than half the level recorded for non-indigenous adults. At the same time, it should be noted that this relative improvement in the indigenous employment rate has been achieved against a background of sustained higher growth in the population of working age. Not surprisingly, given this boost to employment, the indigenous unemployment rate fell from 25.9 per cent in 1991 to 17.8 per cent in 1996. However, the non-indigenous rate also fell substantially from 9.6 per cent to 5.9 per cent. As a consequence, the unemployment level among indigenous people worsened relatively and now stands at three times the level recorded for non-indigenous adults in the Northern Territory.

It is important to qualify discussions of relative employment and unemployment rates with data on relative rates of labour force participation since the proportion of the indigenous population formally attached to the labour market has historically been well below the Territory average. Evidence from the 1996 Census indicates that this is still the case (Table 5). The indigenous labour force participation rate increased only slightly from 42 per cent to 44 per cent and thus remained relatively stable at barely half the level recorded for the rest of the working-age population. This effectively means that around half of all indigenous people of working-age are either not working nor actively seeking work.

Another factor, which may have dampened growth in labour force participation among indigenous people, is the effect of policies designed to encourage higher levels of attendance and retention in educational institutions (Schwab 1995). In this context, it is worth noting that attendance at educational institutions increased by 22 per cent among indigenous people of working age in the Northern Territory between 1991 and 1996. In 1991, a total of 2,370 adults were in educational institutions and this rose to 2,904 by 1996. However, this growth rate was only slightly above the rate of increase in the population of working age and so the proportion of adults in educational institutions only increased marginally from 9.8 per cent to 10.1 per cent.

Section-of-State and gender variations

One of the features of indigenous labour force status observed from the 1991 Census was a degree of difference between urban and rural populations, especially among males. Contrary to what might be expected, the best labour market outcomes were observed in rural areas, although this was mostly as a consequence of CDEP scheme employment. The relative employment fortunes of urban and rural populations now appear to have reversed.

Table 6 shows the change between 1991 and 1996 in the numbers of indigenous and non-indigenous people employed by section-of-State. Clearly, the bulk of all employment growth appears to have occurred in urban centres with non-indigenous employment in rural areas actually declining by some 23 per cent and the rate of indigenous job growth in urban areas far exceeding that in rural areas. Obviously, some of this change is likely to reflect the category shift in the section-of-State classification discussed earlier and as such the 'real' growth of urban employment is likely to be less emphatic. Nonetheless, further research is needed to investigate the composition of this apparent decline in rural employment given that the proportion of Territory jobs that are located in urban areas has risen from 74 per cent in 1991 to 80 per cent in 1996 while most indigenous people remain resident in rural areas.

The effect of this variable job growth on changes in labour force status for indigenous males and females by section-of-State is shown in Tables 7 and 8. Not surprisingly, most improvement in terms of a higher employment rate and lower unemployment rate occurred in urban areas. Consequently, indigenous employment rates in urban areas are now higher than those in rural areas, and

while the unemployment rate also remains highest in urban areas the gap in unemployment rates between urban and rural areas has narrowed considerably. A similar pattern of change is also observed among the non-indigenous labour force (Table 8). In 1991, little section-of-State variation in employment rates was evident among the non-indigenous population, but by 1996 a clear gap in favour of urban areas had emerged, especially among females, with urban employment rising and rural employment remaining relatively static. At the same time, unemployment rates in urban and rural areas fell in tandem and are now broadly comparable across the Territory.

Table 6. Change in indigenous and non-indigenous employment by section-of-State: Northern Territory, 1991-96

Indigenous	1991		1996		1991-96	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Urban	2,479	36.0	4,063	42.8	1,584	63.9
Rural	4,394	64.0	5,429	57.2	1,035	23.6
Total	6,877	100.0	9,492	100.0	2,615	38.0

Non-Indigenous	1991		1996		1991-96	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Urban	52,148	77.7	61,355	84.2	9,207	17.6
Rural	14,967	22.3	11,427	15.8	-3,540	-23.6
Total	67,115	100.0	72,782	100.0	5,667	8.4

Table 7. Change in labour force status by section-of-State and sex: Northern Territory, 1991-96

	Urban		Rural		Total	
	1991	1996	1991	1996	1991	1996
Males						
Employment rate	34.2	43.6	37.2	39.8	36.2	41.3
Unemployment rate	38.9	23.5	20.4	15.7	27.4	19.1
Participation rate	56.0	57.0	46.8	47.2	49.9	51.0
Females						
Employment rate	30.4	34.7	25.2	29.3	27.1	31.5
Unemployment rate	29.8	19.3	19.2	13.4	23.9	16.2
Participation rate	43.3	43.0	31.2	33.9	35.6	37.4

As for gender differences, the employment rate for indigenous females remains substantially below that of indigenous males, while in urban areas the gap between the two has widened. This underlines the very poor labour force status of indigenous women in the Northern Territory as they also fall way behind

non-indigenous females with an employment rate at less than half the level, unemployment almost three times as high and a rate of labour force participation which appears stuck at barely half that of other females.

The key policy point to note from these compositional data is that indigenous labour force status appears to have shifted in line with the rest of the Territory's population with a slight narrowing of the gap in labour force status, but labour market outcomes for indigenous people remain substantially behind those recorded for the non-indigenous population regardless of sex and location.

Table 8. Change in non-indigenous labour force status by section-of-State and sex: Northern Territory, 1991-96

	Urban		Rural		Total	
	1991	1996	1991	1996	1991	1996
Males						
Employment rate	77.9	81.2	76.8	77.8	77.6	80.6
Unemployment rate	10.5	6.3	9.7	5.7	10.3	6.2
Participation rate	87.0	86.6	85.0	82.5	86.5	85.9
Females						
Employment rate	65.4	70.1	60.4	61.0	64.4	68.7
Unemployment rate	8.7	5.5	7.9	6.2	8.6	5.6
Participation rate	71.6	74.1	65.6	65.0	70.4	72.8

An important question for policy is whether these shifts in indigenous labour force status reflect the creation of jobs in the mainstream labour market or whether they are more indicative of a purely administrative shift to employment status of persons who would otherwise be unemployed or not in the labour force. The likelihood that the latter is more instrumental is suggested by the fact that intercensal employment growth of 38 per cent for indigenous people was far higher than the 8 per cent growth recorded for other residents of the Northern Territory, albeit starting from a much lower base. Also, given previous analysis of indigenous participation in the Northern Territory labour market, it seems unlikely that continued improvement in labour force status resulted from market forces alone. More realistically it is likely to reflect the impact of widespread program intervention, primarily in the form of participation in the CDEP scheme but also in the Department of Employment, Education, Training and Youth Affairs (DEETYA) *Working Nation* labour market programs. One pointer to this is the fact that the indigenous employment/population ratio in the Territory was relatively stable ranging from 29 to 31 per cent between the 1986 Census and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), and then in the space of two years to 1996, it increased to 36 per cent (ABS 1995a: 41).

At the time of the 1986 Census there were four communities in the CDEP scheme in the Northern Territory with 720 participants. By 1991, 24 communities were participating in the scheme with a total of 4,146 participants and by 1996 this figure had risen to 52 communities with 6,591 participants. Of these

participants, the vast majority (5,966 or 95 per cent) were resident in rural communities (including Maningrida as rural). It should be noted, however, that CDEP scheme participant schedules include some non-working spouses. In the past, a 60:40 ratio of working to non-working participants has been used to estimate the numbers likely to have appeared in the census as employed (Taylor 1993b: 33-7). At the 1996 Census, however, a special prompt to elicit CDEP scheme employment was included on remote area census forms and responses to this are included in industry sector census output. To the extent that remote area census forms were utilised exclusively in those parts of the Territory where CDEP schemes are located (rural areas and town camps), it is assumed that data indicating the numbers employed in the scheme are reasonably accurate subject, of course, to the usual potential for census error.

In 1996, a total of 4,049 indigenous people were recorded as employed by the CDEP scheme in the Northern Territory. Of these, 3,331 (82 per cent) were located in rural areas. If those in Maningrida are included as rural then the rural total increases to 3,547 (88 per cent). This figure for CDEP scheme employment expressed as a proportion of scheme participants produces a ratio (61 per cent) which is very close to the 60:40 ratio used to identify employment from previous census data. This agreement in ratios provides a confident basis for utilising previous estimates of active workers in the CDEP scheme to compare with the census-derived 1996 figure in calculating intercensal growth in CDEP scheme employment. The results are shown in Table 9.

Table 9. Participation and employment in the CDEP scheme: Northern Territory, 1986-96

	Participants	Employed
1986	720	432
1991	4,146	2,487
1996	6,591	4,049

Note: The 1986 and 1991 figures of CDEP scheme participants who were employed at the time of the census are estimated using a ratio of 60:40 working to non-working participants as in Taylor (1993b: 33-7). The 1996 figure for CDEP scheme participants employed is directly from the 1996 Census.

Overall, an extra 1,562 individuals were working in the CDEP scheme in 1996 representing a 63 per cent increase since 1991. The majority of these new project positions were created in rural areas (964, excluding 216 at Maningrida) and CDEP scheme employment in rural areas increased by 41 per cent. The rate of increase in urban areas (including 216 at Maningrida) was, however, much greater at almost 500 per cent. The significant policy point to note is that these program-driven jobs accounted for fully 60 per cent of the growth in indigenous employment recorded by the census between 1991 and 1996. The effect was greatest in rural areas with CDEP scheme jobs accounting for as much as 93 per

cent of 1,034 additional jobs recorded, while in urban areas 38 per cent of the 1,581 new jobs can be accredited to the scheme (Table 10).

Table 10. Indigenous and non-indigenous employment growth by section-of-State: Northern Territory, 1991-96

	Per cent employed		Change	
	1991	1996	Net	Per cent
Indigenous				
Urban	36.1	42.8	1,581	63.7
Rural	63.9	57.2	1,034	23.5
Total	100.0	100.0	2,615	38.0
Non-indigenous				
Urban	77.7	84.3	9,178	17.6
Rural	22.3	15.7	-3,511	-23.5
Total	100.0	100.0	5,667	8.4

The policy message from this is clear. Without increased participation in the CDEP scheme, overall indigenous employment in the Northern Territory would have been sluggish and rural labour force status, in particular, would have been far worse than indicated by 1996 Census data. It seems also that expansion of the CDEP scheme explains part of the higher employment growth indicated for indigenous people in urban areas compared to their non-indigenous counterparts. However, even taking this into account indigenous people in urban areas still recorded higher than average employment growth. This raises the question of whether other policy initiatives may have also contributed.

In particular, it should be noted that at the time of the 1996 Census a substantial number of indigenous (and non-indigenous) people were still participating in DEETYA labour market programs devised under the previous Labor Government's *Working Nation* strategy. As many of these programs involved work experience and/or training based on wage subsidies, there is a strong possibility that many such individuals were recorded by the census as employed (ABS 1995b: 8).⁴ This presents an analytical problem similar to that concerning CDEP scheme employment prior to the 1996 Census—there is no way, other than by inference from administrative program placement data, that the numbers in DEETYA programs recorded by the census as employed can be ascertained. Even if there were, the question of whether they were employed because of program intervention, or despite it, is a moot one. However, given the multiple disadvantage experienced by indigenous people in the labour market (ABS/CAEPR 1996), it is assumed here that indigenous program placements do not substitute for other indigenous jobs in the labour market.

In order to estimate likely numbers of indigenous people employed via labour market programs, indigenous placements in the Northern Territory by program type at the time of the 1991 and 1996 Censuses were obtained from

DEETYA. In all, 1,161 individuals were registered in labour market programs in 1991 compared to 687 in 1996. Of those in 1991, only 204 (17 per cent) were in programs such as Training for Aboriginals Program wage subsidies and the various Jobstart programs that were likely to be associated with employment. This compared to 389 (57 per cent) in 1996. Combining these estimates of employment via labour market programs with figures of CDEP scheme employment, an indication of change in mainstream (non-CDEP/non-DEETYA) employment is derived. This is shown in Table 11.

Table 11. Estimation of indigenous mainstream employment change: Northern Territory, 1991-96

	1991	1996
Total employed	6,877	9,492
Employed in CDEP scheme	2,487	4,049
Non-CDEP employed	4,390	5,443
Employed in labour market programs	204	389
Mainstream employed	4,186	5,054
Mainstream employment/population ratio	17.3	17.5

Before considering the results, it should be noted that the census employment data in each year are based on place of enumeration and are unadjusted for census error. To that extent, they are only indicative of change. With this in mind, mainstream employment clearly appears to have risen with an estimated 4,186 in mainstream jobs in 1991 rising to 5,054 by 1996, a net increase of 868 or 4 per cent per annum. However, as indicated by the minimal change in the mainstream employment population ratio, this was only just sufficient to keep up with growth in the working-age population, although this is a slightly better result than recorded nationally (Taylor and Bell 1998). From a policy perspective, the key point to note is that without the prop of program intervention in the labour market, the indigenous employment rate in the Northern Territory would have been half the level recorded by the 1996 Census with no effective change evident since 1991.

Income status, 1991-96

A key goal of the AEDP is to achieve an improvement in income levels for indigenous Australians to a point where they are equal to those of the general population. In this endeavour, much depends not just on accelerating the rate of employment growth among indigenous people above that of the rest of the workforce, but also on ensuring that the types of jobs created generate incomes that are commensurate with those of the general population. Given a relative improvement in the labour force status of indigenous people in the Northern

Territory there would appear to be statistical grounds for expecting that the income gap between them and the rest of the population may have narrowed.

Accurate data on overall levels of income, as well as on income derived from employment and non-employment sources, are notoriously difficult to obtain due to a variety of conceptual problems. For one thing, the census collects and reports information on income received 'each week', whereas the flow of income for many individuals, especially indigenous people, is often intermittent. Thus, the census approach refers to income received from all sources in respect of a 'usual week' and this is then rounded up to annual income. However, what might constitute 'usual weekly' income in many households is difficult to determine. Aside from regular income flows from employment or welfare payments, there is the likelihood of intermittent employment income as well as windfall gains from investments or loans. Among some indigenous people this may extend to royalty and rental payments. On the debit side, there may be sporadic reductions of income due to loss of employment or cash transfers to others. Taken together, these flows can create a highly complex picture, even over a short space of time, and one that census methods of data gathering are likely to misrepresent.

A further point to note is that census data report income as a range within an income category with the highest category open-ended. Consequently, actual incomes have to be derived. In estimating total and mean incomes, the mid-point for each income category is used on the assumption that individuals are evenly distributed around this mid-point. The open-ended highest category is problematic, but it is arbitrarily assumed that the average income received by individuals in this category was one-and-a-half times the lower limit of the category (Treadgold 1988). Clearly, estimates of mean incomes will vary according to the upper level adopted.

Despite these caveats, the census remains the most comprehensive source of income data derived from a consistent methodology. The gross income reported is intended to include family allowances, pensions, unemployment benefits, student allowances, maintenance, superannuation, wages, salary, dividends, rents received, interest received, business or farm income and worker's compensation received. Apart from enabling comparison between population groups, individual and household income can be established. Also, by cross-tabulating census data on labour force status and income a basis for distinguishing employment income from non-employment income is provided, the latter being a proxy measure of welfare dependence.

Figure 1 describes the relative income distribution for indigenous adults in the Northern Territory in 1996. Clearly, the bulk of indigenous incomes are clustered at the lower end of the distribution with a very sharp decline beyond the \$12,000-\$20,000 range and a very small share of individuals in receipt of incomes over \$40,000. This contrasts markedly with the income distribution pattern for all other adults which displays a steadily rising curve peaking in the \$40,000-\$60,000 range.

Figure 1. Annual income distribution of indigenous and non-indigenous adults: Northern Territory, 1996

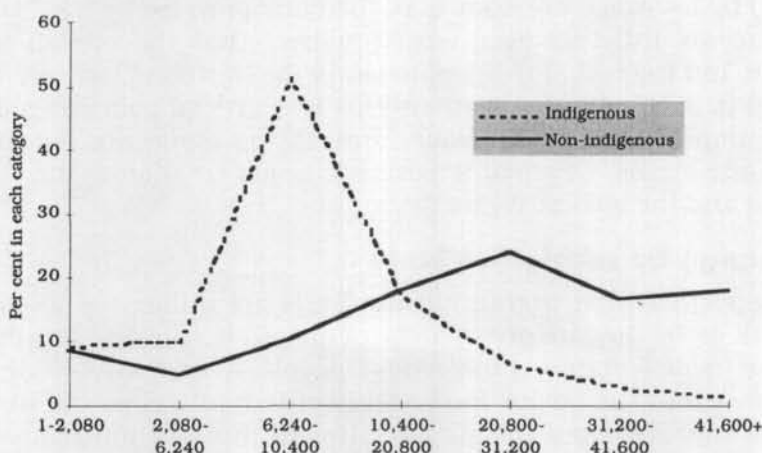


Table 12. Change in indigenous and non-indigenous income status: Northern Territory, 1991-96

	Income (\$000s)			
	Indigenous		Non-indigenous	
	1991	1996	1991	1996
Mean	9.7	11.0	23.1	27.0
Median	7.5	8.7	21.0	24.4
Ratio of indigenous/non-indigenous				
Mean		0.42	0.41	
Median		0.36	0.35	

Overall, the census indicates little change since 1991 in income relativities between indigenous and non-indigenous adults. Mean income for the indigenous adult population was \$11,000 in 1996 up from \$9,700 in 1991. This produces a ratio of mean indigenous income to that for the rest of the population of 0.41 in 1996, which is almost identical to the ratio calculated for 1991 (Table 12).⁵ Median income figures appear somewhat lower because of the different bases for calculation, although the income ratios reveal the same outcome—that income relativities have not changed and indigenous incomes remain substantially below those of the majority population.

This lack of improvement in relative incomes may partly be explained by the fact that a large component of net employment growth for indigenous people has been generated by participation in the CDEP scheme and DEETYA labour market programs as these provide for income at levels more or less equivalent to welfare

entitlements. At the same time, it may also suggest that employment outside of the scheme continues to be concentrated in relatively low-wage occupations. If expansion of employment opportunities for indigenous people continues to be characterised by low-wage work, such as currently provided by the CDEP scheme, then there seems little medium-term prospect that the overall income gap between them and the rest of the population in the Northern Territory will narrow. If anything, it is likely to widen further. This is of crucial policy significance as it signals that improvements in labour force status alone are not sufficient to enhance income status. Of equal importance to job creation is the nature of the work involved and the income it generates.

Income change by section-of-State

The proposition that overall income levels are influenced as much by the nature of work as by the rate of employment growth is supported by data showing change in the income status of indigenous people by section-of-State (Table 13). Despite the fact that the labour force status of indigenous people in rural areas continued to improve, their incomes relative to those of indigenous people in urban areas fell further behind.

Table 13. Change in indigenous and non-indigenous income status by section-of-State: Northern Territory, 1991-96

	Income (\$000s)					
	Urban		Rural		Total	
	1991	1996	1991	1996	1991	1996
Indigenous						
Mean	12.3	14.3	8.4	8.8	9.7	11.0
Non-indigenous						
Mean	23.2	27.2	23.0	26.5	23.1	27.1
Ratio indigenous/ non-indigenous						
Mean	0.53	0.50	0.37	0.30	0.42	0.40

This is indicated by a decline in the ratio of mean income for rural-based indigenous people compared to those in urban areas from 0.68 in 1991 to 0.61 in 1996. In contrast, the pattern of income among the rest of the Territory's population continues to display very little variation according to section-of-State. This widening of the urban/rural income gap among indigenous people is not surprising given the composition of much rural employment growth as part-time work with remuneration based on approximate welfare equivalents via the CDEP scheme. This is even more starkly illustrated by comparing indigenous/non-indigenous income relativities in urban and rural areas. In urban areas indigenous incomes remain around half the level of non-indigenous incomes having fallen from 0.53 of the level in 1991 to 0.50 in 1996. In rural areas, however, not only are indigenous incomes much lower as a ratio of non-indigenous incomes, they have also fallen behind to a greater extent (from 0.37 in 1991 to 0.30 in 1996). Thus, notwithstanding apparent improvement in labour

force status, it is clear that indigenous people in rural areas remain structurally disadvantaged compared to those in urban areas where a much greater proportion of available jobs are full-time and at higher levels of remuneration.

Income change by gender

As in 1991, the 1996 Census reveals no income differential between indigenous males and females in the Northern Territory with both in receipt of an average annual income of around \$11,000 (Table 14). This contrasts with the situation reported for non-indigenous adults with male incomes around 1.6 times higher than for females. One implication is that the ratio of average income for indigenous males compared to that of non-indigenous males (0.30) is far lower than the equivalent ratio between indigenous females and other females (0.50). At the same time, both indigenous males and females failed to keep up with income gains made by their counterparts, as indicated by the decline in both ratios over the intercensal period.

Table 14. Change in income status of indigenous and non-indigenous Australians by gender: Northern Territory, 1991-96

	\$ (\$000s)					
	Males		Females		Total	
	1991	1996	1991	1996	1991	1996
Indigenous						
Mean	9.8	11.0	9.6	11.1	9.7	11.0
Non-indigenous						
Mean	28.0	32.8	17.4	20.6	23.1	27.1
Ratio of indigenous/ non-indigenous						
Mean	0.35	0.30	0.55	0.50	0.42	0.40

Welfare dependency

An important issue with regard to the economic impact of employment change concerns the relative contribution of employment to total income relative to the contribution made from other sources. This provides some indication of the ability of regional populations to provide for their own welfare as opposed to depending on State support (Altman and Smith 1993). By cross-tabulating employment status against income a direct measure of the income return from employment can be derived. Likewise, the income of those who are unemployed or not in the labour force can be used as a proxy measure of welfare dependence. Average incomes calculated on this basis are shown in Table 15.

Overall, there has been notable increase in the contribution of employment income to total income. In 1991, 49.2 per cent of income for indigenous people was derived from employment. By 1996, this proportion had risen to 55.5 per cent. However, compared to the equivalent figure of 92 per cent for the non-

indigenous population this means that a far higher proportion of indigenous people (45 per cent compared to 8 per cent) remain dependant on non-employment sources of income.

This increase in the share of income from employment runs counter to a long-term trend of a decline in employment income relative to total income, noted in respect of indigenous Australians by Daly and Hawke (1993) for the period 1976-91 and evident in the Northern Territory up to the previous intercensal period. Apart from the continued overall growth in numbers employed, this may reflect an increase in the number of indigenous people in higher paid occupations combined with additional income derived from CDEP scheme employment in line with observations in the 1994 NATSIS that income from the CDEP scheme was substantially above welfare levels (ABS 1995a: 55). At the same time, it could be argued that the proportion of total income derived from employment should be lower by the amount contributed from CDEP as this represents income based on notional citizen entitlements and should arguably be classified as welfare-related rather than employment-based (Smith 1994).

Table 15. Change in indigenous and non-indigenous total income by labour force status: Northern Territory, 1991-96

	1991		1996	
	Income (\$million)	Per cent	Income (\$million)	Per cent
Indigenous				
Employed	95.0	49.2	151.8	55.5
Unemployed	17.4	9.0	16.1	5.9
Not in labour force	80.7	41.8	105.5	38.6
Total	193.1	100.0	273.4	100.0
Non-indigenous				
Employed	1,836.1	90.0	2,354.0	92.1
Unemployed	59.9	2.9	41.6	1.6
Not in labour force	143.4	7.0	160.4	6.3
Total	2,039.5	100.0	2,556.1	100.0

Actual shifts in mean employment and non-employment incomes are shown in Table 16. The most striking feature is that mean employment income for indigenous people has increased at more or less the same rate as for others in employment. This is indicated by the lack of change in the ratio of indigenous/non-indigenous employment incomes which remains at around 0.50. As for non-employment income, the mean individual income of unemployed indigenous people in 1996 was \$8,300 and \$7,740 for those not in the labour force. Compared to income from employment, these figures have remained essentially unaltered with the result that the income gap between those indigenous people in work and those more directly dependant on income transfers from the State has widened.

Table 16. Change in indigenous and non-indigenous mean employment/non-employment income: Northern Territory, 1991-96

Labour force status	Mean income (\$000s)		Change	
	1991	1996	Net	Per cent
Indigenous				
Employed	14.27	16.54	2.2	15.3
Unemployed	7.91	8.30	0.4	4.9
Not in labour force	7.39	7.74	0.4	4.8
Total	9.77	11.02	1.3	12.8
Non-indigenous				
Employed	28.19	32.82	4.6	16.4
Unemployed	9.27	9.61	0.3	3.7
Not in labour force	8.80	8.83	0.0	0.4
Total	23.20	27.10	3.9	16.8
Ratio of indigenous non-indigenous				
Employed	0.51	0.50	0.00	-0.97
Unemployed	0.85	0.90	0.01	1.17
Not in labour force	0.84	0.90	0.40	4.35
Total	0.42	0.40	-0.01	-3.43

Policy implications

The analysis of recent change in the economic status of indigenous people in the Northern Territory assumes national significance because the Northern Territory is the only major jurisdiction where data on intercensal change are available for a demographically consistent population over time. This provides for a relatively accurate assessment of improvements, or otherwise, in employment and income status. In all other jurisdictions, some degree of estimation of change would be required to account for any variation in social indicators due to the addition of individuals not previously included in the census as part of the indigenous population. This is not to suggest that the profile of change in the Northern Territory is representative of the national condition, simply that it provides the most reliable indication of likely policy impacts.

In assessing these impacts, the first point to note is that change in social indicators for the period 1986-91 (Taylor 1994), and now for the 1991-96 period, provides a ten-year window on the economic status of indigenous people in the Northern Territory. This covers a period of substantial efforts by the former federal Labor Government to enhance employment outcomes and income levels, and of sustained economic growth in the Northern Territory economy.

The results indicate a consistent pattern over this period. On the one hand, indigenous employment and unemployment rates show distinct signs of improvement leading to a closing of the gap in these indicators (albeit slowly) with the rest of the population. On the other hand, when the data are disaggregated by

section-of-State and the nature of employment growth is investigated, this achievement in rural areas is shown to be related almost entirely to sustained expansion of the CDEP scheme. In urban areas some employment growth can also be explained by CDEP scheme expansion together with an indeterminate contribution from enhanced indigenous participation in work/training-related labour market programs under the now defunct *Working Nation* policy. Thus, a key question that remains to be adequately answered, owing to data constraints, is just how much job growth occurred independently from that generated by special program assistance to individuals who would otherwise be classified in census data as unemployed. This question cannot be addressed using census data alone and requires close scrutiny of DEETYA's program placement data to examine probable links with employment outcomes in census data. The indication from such an exercise is that very little growth in mainstream/non-program linked employment has been achieved.

The other consistent feature of the past decade is a lack of relative improvement in the overall income status of indigenous people. In the context of slightly enhanced labour force status, this underlines the need for quality, as well as quantity, in job creation schemes if the overall aims of government policy to raise economic status are to be achieved. From a labour market perspective, one difficulty continues to be the substantial proportion of indigenous adults of working age who are not in the labour force. This is especially so among females and accounts, in large part, for the persistence of relatively high levels of welfare dependence. Given that much new employment growth has involved a shift into CDEP scheme employment of individuals formerly on unemployment benefit or outside the labour force, it is realistic to suggest that the level of welfare dependence is actually higher than revealed by the census. This is because income derived from such employment merely represents the transfer of social security entitlements under a different guise.

This sustained dependence on programs for economic advancement raises further pressing issues in the context of new directions for indigenous economic policy that have emerged since 1996. Of particular interest here is the recent recommendation to government that the objective of the CDEP scheme be revised to focus solely on providing employment and skills development with non-working participants becoming clients of the social security system (Spicer 1997). Also of note is a ceiling on CDEP scheme participant numbers to be pegged at 32,000 for the 1998/99 and 1999/00 financial years (Spicer 1997: 105). While movement off the scheme of non-working participants would create some space for working participants, the effects of such changes on indigenous employment statistics in the Northern Territory are difficult to predict.

Accompanying these proposed changes to CDEP, and more generally in the thrust of indigenous economic policy, is a re-orientation towards the private sector activities as the primary source of future employment growth. This trend appears inevitable given the downsizing of public sector opportunities together with the replacement of the Commonwealth Employment Service by contracted employment provision agencies and abolition of many labour market programs.

The effect of all this is likely to produce greater fluidity in the labour market circumstances of indigenous people, although as yet with unknown consequences. Some of the issues involved in engaging the private sector, including in the Northern Territory, have been canvassed elsewhere (Taylor 1995; Taylor and Hunter 1997). These include a possible lowering of average incomes and the likelihood of less job security, more casual/part-time work and fewer opportunities for women and older people (Taylor and Hunter 1997).

Also noted is the greater difficulty of creating and sustaining private sector work in remote rural settings. While it is true that some remote communities benefit from export-oriented activities such as mining, pastoral and tourism ventures, these are typically very localised, capital rather than labour intensive, highly resource and, at times, subject to market fluctuation as typified by the closure of the Mt. Todd joint venture. For most places, then, an import substitution model embracing activities such as construction and maintenance, retailing, transport, media, land restoration and management, recreation and horticulture, will continue to be most appropriate. While there is an increased program budget to support such activities under the Indigenous Business Incentive Program, there are real limits to the number of private sector jobs that could be generated in this way given the limited market size and lack of economies of scale in many of the places where indigenous people reside.

Short of any sustained migration for employment away from such localities, which has not been evident to date, this suggests a continued need for public subvention along with flexibility and realism in the drive for increased private sector involvement. In particular, it is important to ask how the broad strategy of raising employment levels might be targeted to suit particular regional and local circumstances. In this context, an initial requirement is for detailed regionally-based quantitative assessments of the supply of, and demand for, indigenous labour for different economic activities that either exist already or that may be created at the local level. Only then, can the appropriate mix of resources for enterprise development and training be appropriately channelled. Useful models for this include the employment and training strategies developed by Julalikari Council in Tennant Creek and by the Jawoyn Association, while similar planning is currently underway in the southern Gulf of Carpentaria region focused on the Pasmenco-Century project (Martin 1998).

Given the extent of dependence on program spending to generate indigenous employment growth that has been evident over the past decade, moves to diminish and restructure this link are likely to be reflected in modified labour force statistics when these are next made available following the 2001 Census. Just how this will be manifest remains unclear. However, in the face of continued high growth in the working-age population and in the general knowledge that education and training, in particular, as well as health, family size and incarceration are important determinants of successful job search (ABS/CAEPR 1996), a cautious medium-term prognosis would not suggest any likely improvement in either relative labour force status or income.

At the same time, much more work is needed to isolate the specific effect of influences on employment outcomes in the Northern Territory. For example, will increased enrolments in education translate into improved employment outcomes? What of the employment prospects for those, especially in remote area schools, who do not progress through the educational system? To what extent, and in what ways, does poor health and incarceration detract from labour force participation? What are the likely future implications of the Aboriginal Land Rights Act and Native Title Act in providing leverage for indigenous employment creation?

Finally, even if sufficient new work in excess of additional demand were to be generated, it is important to note that the enhancement of occupational status, and not just labour force status, will be necessary to meet policy goals. To date, improvements in labour force status while keeping just ahead of population growth have not impacted on the gap in average incomes. For this to change, indigenous people will need to acquire employment at a much faster rate and in positions that provide an income at least commensurate with those obtained by the rest of the workforce.

Notes

1. The term, error of closure, derives from the basic demographic balancing equation and refers to the amount needed to make intercensal change in numbers balance after accounting for births, deaths and migration. Error of closure is usually small, but in populations defined by self-identification it is often large due to shifts in the propensity to so identify. For further discussion see Passel (1996).
2. The ABS sections-of-State within the Northern Territory are as follows: 'other urban' (referred to as simply 'urban' in the text)—all urban centres with a population of 1,000 to 99,999; 'bounded locality'—all population clusters of 200 to 999 persons; 'rural balance'—the rural remainder of the State or Territory.
3. Criteria for delimiting urban centres and rural localities are applied after a census has been conducted. The criteria, based on those developed in 1965 by Dr G.J.R. Linge of the Australian National University, combine measures of population density, land use and spatial contiguity in classifying collection districts as urban or rural. For further details of this methodology see ABS (1997).
4. For further discussion of this see Taylor and Bell 1998: 7–8.
5. In estimating mean incomes, the mid-point for each income category has been taken on the assumption that individuals are evenly distributed around this mid-point. The open-ended highest category is problematic, but following Treadgold (1988) it is arbitrarily assumed that the average income received by individuals in this category was one and a half times the lower limit of the highest category. Clearly, estimates of mean incomes will vary according to the upper level adopted. In this analysis the full range of income categories has been utilised with \$70,000+ as the highest category in 1991 and \$78,000+ in 1996.

References

- Altman, J.C. and Smith, D.E. 1993. 'The welfare dependence of Aboriginal Australians: policy implications', *Social Security Journal*, March 1993: 19-43.
- Australian Bureau of Statistics (ABS) 1995a. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1995b. *Measuring Employment and Unemployment: Information Paper*, cat. no. 6279.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1990. *Aboriginal People in the Northern Territory*, cat. no. 4107.7, ABS, Darwin.
- Australian Bureau of Statistics (ABS) 1996. *Experimental Projections: Aboriginal and Torres Strait Islander Population, June 1991-June 2001*, cat. no. 3231.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1997. *Statistical Geography: Volume 3—Australian Standard Geographical Classification (ASGC) Urban Centres/Localities*, cat. no. 2909.0, ABS, Canberra.
- Australian Bureau of Statistics/Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *1994 National Aboriginal and Torres Strait Islander Survey Employment: Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.
- Daly, A.E. and Hawke, A.E. 1993. 'Work and welfare for indigenous Australians', *CAEPR Discussion Paper No. 48*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Evans, J., Kahles, D. and Bate, C. 1993. '1991 Census data quality: Aboriginal and Torres Strait Islander counts', *Demography Working Paper 93/6*, Australian Bureau of Statistics, Canberra.
- Gray, A. 1997. 'The explosion of aboriginality: components of indigenous population growth 1991-96', *CAEPR Discussion Paper No. 142*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Gray, A. and Tesfaghiorghis, H. 1993. 'Aboriginal population prospects', *Journal of the Australian Population Association*, 10 (2): 81-101.
- Hugo, G. 1991. *Atlas of the Australian People—1986 Census: Northern Territory*, Australian Government Publishing Service, Canberra.
- Hugo, G. 1997. *Atlas of the Australian People—1991 Census: Northern Territory*, Australian Government Publishing Service, Canberra.
- Lea, J.P. 1989. 'South of the Berrimah line: government and the Aboriginal community in Katherine and Tennant Creek after World War Two', in P. Loveday and A. Webb (eds) *Small Towns in Northern Australia*, North Australia Research unit, Darwin.
- Loveday, P. and Lea, J.P. 1985. *Aboriginal Housing Needs in Katherine*, North Australia Research Unit, Darwin.
- Martin, D. 1998. 'Indigenous corporate structures for doing business with industry—a case study from the Century Mine Agreement', paper presented at the AIC Conference, *Doing Business with Aboriginal Communities: New Horizons/New Opportunities*, Alice Springs, 24-27 February, 1998.

- Martin, D. and Taylor, J. 1996. 'Ethnographic perspectives on the enumeration of Aboriginal people in remote Australia', *Journal of the Australian Population Association*, 13 (1): 17-33.
- Passel, J.S. 1996. 'The growing American Indian population, 1969-1990: beyond demography', in G.D. Sandefur, R.R. Rindfuss and B. Cohen (eds) *Changing Numbers, Changing Needs: American Indian Demography and Public Health*, National Academy Press, Washington D.C.
- Schwab, R.G. 1995. 'Twenty years of policy recommendations for indigenous education: overview and research implications', *CAEPR Discussion Paper No. 92*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Smith, D.E. 1994. 'The labour force status of indigenous Australians a consideration of the cross-cultural validity of social indicators', *CAEPR Discussion Paper No. 65*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Spicer, I. 1997. *Independent Review of the Community Development Employment Projects (CDEP) Scheme*, Office of Public Affairs, Aboriginal and Torres Strait Islander Commission, Canberra.
- Taylor, J. 1988. 'Aboriginal population mobility and urban development in the Katherine region', in D. Wade-Marshall and P. Loveday (eds) *Northern Australia: Progress and Prospects, Volume 1, Contemporary issues in Development*, North Australia Research Unit, Darwin.
- Taylor J. 1989. 'Migration and population change in the northern Territory', *Australian Geographical Studies*, 27 (2): 182-98.
- Taylor, J. 1990a. 'The estimation of small town Aboriginal population change', *Journal of the Australian Population Association*, 7 (1): 40-56.
- Taylor, J. 1990b. 'Aboriginal intra-urban mobility in Katherine, Northern Territory', *Urban Policy and Research*, 8 (2): 76-80.
- Taylor, J. 1993a. *The Relative Economic Status of Indigenous Australians, 1986-91*, Research Monograph No. 5, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1993b. *Regional Change in the Economic Status of Indigenous Australians, 1986-91*, Research Monograph No. 6, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1993c. 'Aboriginal socioeconomic change in the Northern Territory, 1986-91', *CAEPR Discussion Paper No. 40*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1994. 'The relative economic status of indigenous people in the Northern Territory, 1986-91', *CAEPR Discussion Paper No. 62*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1995. 'Indigenous employment and job segregation in the Northern Territory labour market', *CAEPR Discussion Paper No. 83*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1996. *Aboriginal People in the Kakadu Region: An Analysis of Social Indicators*, Report to the Aboriginal Project Committee of the Kakadu Region Social Impact Study.

- Taylor, J. 1997a. 'Policy implications of indigenous population change, 1991-1996', *People and Place*, 5 (4): 1-10.
- Taylor, J. 1997b. 'Changing numbers, changing needs? a preliminary assessment of indigenous population growth 1991-96', *CAEPR Discussion Paper No. 143*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. 1998. 'Measuring short-term population mobility among indigenous Australians: options and implications', *Australian Geographer*, 29 (1): 125-37.
- Taylor, J. and Bell, M. 1996. 'Mobility among indigenous Australians', in P.L. Newton and M. Bell (eds) *Population Shift: Mobility and Change in Australia*, Australian Government Publishing Service, Canberra.
- Taylor J. and Bell, M. 1998. 'Estimating indigenous intercensal employment change, 1991-96', *CAEPR Discussion Paper No. 155*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. and Hunter, B. 1997. 'Promoting growth in indigenous employment in the private sector', *Australian Bulletin of Labour*, 23 (4): 295-314.
- Taylor, J. and Lea, J.P. 1988. 'City profile: Darwin', *Cities*, 5 (3): 226-34.
- Treadgold, M.L. 1988. 'Intercensal change in Aboriginal incomes, 1976-1986', *Australian Bulletin of Labour*, 14 (4): 592-609.
- Tyler, W. 1990. 'Aboriginality and socioeconomic attainment in Australia's Northern Territory', *Australian and New Zealand Journal of Sociology*, 26 (1): 68-86.
- Young, E. 1981. 'The medium-sized town in the context of mobility', in G.W. Jones and H.V. Richter (eds) *Population Mobility and Development*, Development Studies Centre, The Australian National University, Canberra.

Centre for Aboriginal Economic Policy Research

For information on earlier CAEPR Discussion Papers and Research Monographs please contact:

Publication Sales
Centre for Aboriginal Economic Policy Research
Faculty of Arts
Australian National University
Canberra ACT 0200
Telephone: 02-6279 8211
Facsimile: 02-6249 2789

Abstracts or summaries of all CAEPR Publications
can be found at the following WWW address:
<http://online.anu.edu/caepr/>

MONOGRAPH SERIES

1. *Aborigines in the Economy: A Select Annotated Bibliography of Policy-Relevant Research 1985-90*, L.M. Allen, J.C. Altman and E. Owen (with assistance from W.S. Arthur), 1991.
2. *Aboriginal Employment Equity by the Year 2000*, J.C. Altman (ed.), published for the Academy of the Social Sciences in Australia, 1991.
3. *A National Survey of Indigenous Australians: Options and Implications*, J.C. Altman (ed.), 1992.
4. *Indigenous Australians in the Economy: Abstracts of Research, 1991-92*, L.M. Roach and K.A. Probst, 1993.
5. *The Relative Economic Status of Indigenous Australians, 1986-91*, J. Taylor, 1993.
6. *Regional Change in the Economic Status of Indigenous Australians, 1986-91*, J. Taylor, 1993.
7. *Mabo and Native Title: Origins and Institutional Implications*, W. Sanders (ed.), 1994.
8. *The Housing Need of Indigenous Australians, 1991*, R. Jones, 1994.
9. *Indigenous Australians in the Economy: Abstracts of Research, 1993-94*, L.M. Roach and H.J. Bek, 1995.
10. *The Native Title Era: Emerging Issues for Research, Policy and Practice*, J. Finlayson and D.E. Smith (eds), 1995.
11. *The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects*, J.C. Altman and J. Taylor (eds), 1996.
12. *Fighting Over Country: Anthropological Perspectives*, D.E. Smith and J. Finlayson (eds), 1997.

RECENT DISCUSSION PAPER SERIES

- 120/1996 *Community involvement in education: an exploration of American Indian education policy and implications for Australia*, R.G. Schwab.
- 121/1996 *Towards greater autonomy for Torres Strait: political and economic dimensions*, J.C. Altman, W.S. Arthur and W. Sanders.
- 122/1996 *Indigenous participation in higher education: culture, choice and human capital theory*, R.G. Schwab.
- 123/1996 *Estimating the social rate of return to education for Indigenous Australians*, P.N. Junankar and J. Liu.
- 124/1996 *The right to negotiate and native title future acts: implications of the Native Title Amendment Bill 1996*, D.E. Smith.
- 125/1996 *Native title and the petroleum industry: recent developments, options, risks and strategic choices*, J.C. Altman
- 126/1996 *Aboriginal economic development and land rights in the Northern Territory: past performance, current issues and strategic options*, J.C. Altman.
- 127/1997 *Indigenous poverty since the Henderson Report*, J.C. Altman and B. Hunter.
- 128/1997 *The opportunity costs of future Indigenous labour force status*, J. Taylor.
- 129/1997 *Native Title Representative Bodies: the challenge of strategic planning*, J. Finlayson.
- 130/1997 *The potential impact of the Workplace Relations and other Legislation Amendment Act 1996 on Indigenous employees*, B. Hunter.
- 131/1997 *Post-compulsory education and training for Indigenous Australians*, R.G. Schwab.
- 132/1997 *A Torres Strait Islanders Commission? Possibilities and issues*, W. Sanders and W.S. Arthur.
- 133/1997 *Service provision and service providers in a remote Queensland Community*, J.D. Finlayson.
- 134/1997 *Indigenous sole parent families: invisible and disadvantaged*, A.E. Daly and D.E. Smith.
- 135/1997 *Utilisation of native wildlife by indigenous Australians: commercial considerations*, J.C. Altman, L.M. Roach and L.E. Liddle.
- 136/1997 *The interrelationships between arrest and employment: more evidence on the social determinants of indigenous employment*, B. Hunter and J. Borland.
- 137/1997 *A profile of indigenous workers in the private sector*, J. Taylor and B. Hunter.
- 138/1997 *Indigenous TAFE graduates: patterns and implications*, R.G. Schwab

- 139/1997** *The right to negotiate and the miner's right: a case study of native title future act processes in Queensland*, J.D. Finlayson.
- 140/1997** *The future shape of ABSTUDY: practical and policy implications of the recent proposed changes*, R.G. Schwab and S.F. Campbell.
- 141/1997** *Opportunities and problems astride the welfare/work divide: the CDEP scheme in Australian social policy*, W. Sanders.
- 142/1997** *The explosion of aboriginality: components of indigenous population growth 1991-1996*, A. Gray.
- 143/1997** *Changing numbers, changing needs? A preliminary assessment of indigenous population growth, 1991-96*, J. Taylor.
- 144/1997** *The Native Title Amendment Bill 1997: a different order of uncertainty?* J. Clarke.
- 145/1997** *Indigenous heritage protection, native title and regional agreements: the changing environment*, J.D. Finlayson.
- 146/1997** *Regional agreements and localism: a case study from Cape York Peninsula*, D.F. Martin.
- 147/1997** *Towards a comprehensive regional agreement: Torres Strait*, W.S. Arthur.
- 148/1997** *The CDEP scheme in a new policy environment: options for change?* J.C. Altman.
- 149/1997** *How does (and should) DSS treat CDEP participants? (What are these allegations of racial discrimination?)*, W. Sanders.
- 150/1997** *Growth of the Aboriginal and Torres Strait Islander population, 1991-2001 and beyond*, A. Gray.
- 151/1998** *Access to government programs and services for mainland Torres Strait Islanders*, W.S. Arthur.
- 152/1998** *Native title compensation: historic and policy perspectives for an effective and fair regime*, J.C. Altman and D. Pollack.
- 153/1998** *The continuing disadvantage of indigenous sole parents: a preliminary analysis of 1996 Census data*, A.E. Daly and D.E. Smith.
- 154/1998** *Assessing the utility of 1996 Census data on indigenous Australians*, B. Hunter.
- 155/1998** *Estimating intercensal indigenous employment change, 1991-96*, J. Taylor and M. Bell.
- 156/1998** *The relative economic status of indigenous people in the Northern Territory, 1991-96*, J. Taylor and L. Roach.

