Centre for Aboriginal Economic Policy Research

The relative economic status of indigenous people in New South Wales, 1991 and 1996

J. Taylor

No. 173/1998

Discussion Paper

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Professor Jon Altman
Director, CAEPR
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October 1998

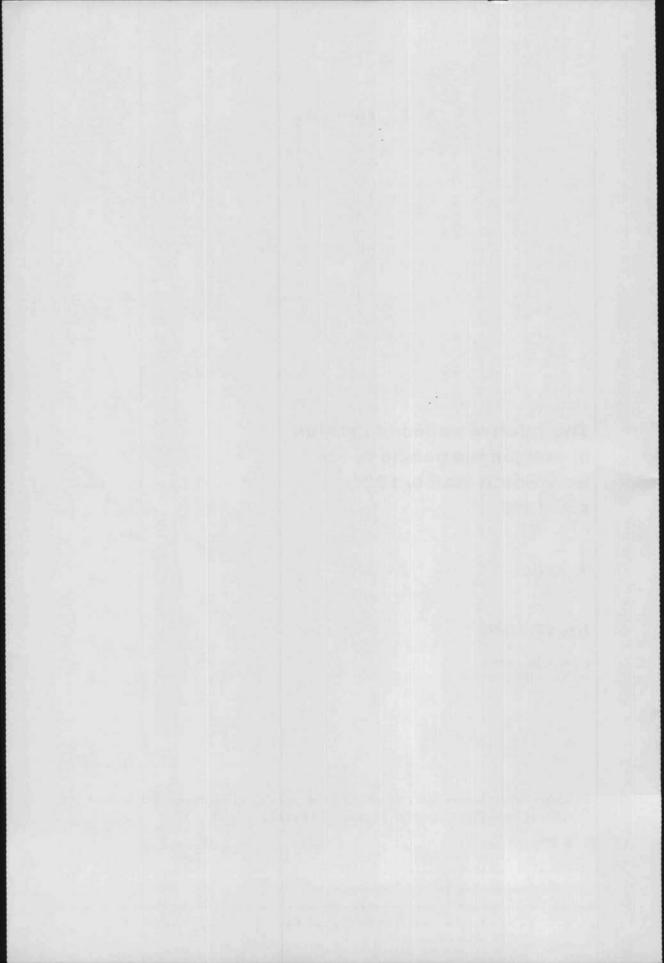
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Foreword

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 1986–91. 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. As far as possible 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 October 1998

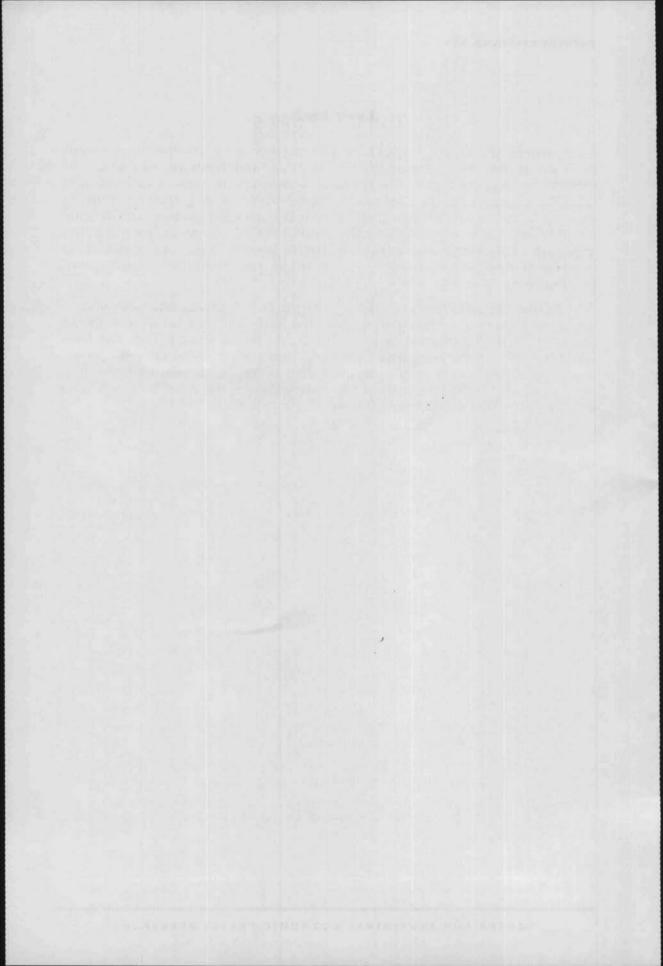


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Summary

Census data remain the primary source of information on the economic status of indigenous Australians in New South Wales, and certainly the most comprehensive. However, some care is required in their interpretation for public policy purposes. In particular, it should be noted that any change in characteristics observed between censuses does not necessarily apply to the population identified at the start of the intercensal period. In fact, because of the identification of a greater than expected indigenous population in 1996, change to the original 1991 population cannot be adequately established. What can and should be done at the aggregate State level is to estimate characteristics for the original population using Australian Bureau of Statistics experimental population estimates derived from reverse survival procedures. This has the effect of properly aligning time series data. While this problem affects any analysis of aggregate data for New South Wales, it especially relates to the population counted in Sydney.

These issues aside, a key question for policy arising from an examination of 1991 and 1996 Census data is whether there has been any improvement in the absolute and relative level of indigenous economic status in New South Wales during the 1990s. The results suggest mixed outcomes:

- The number of indigenous people recorded as employed increased, the employment rate was higher and unemployment rate lower leading to a closing of the gap in these indicators with the rest of the population.
- However, these achievements are shown to have been largely related to sustained expansion of the Community Development Employment Projects scheme, especially away from the cities. Also contributing was enhanced indigenous participation in employment-related labour market programs under the now defunct Working Nation initiatives.
- Growth in mainstream, or non-program linked employment, was insufficient
 to keep up with population growth and the true level of indigenous
 employment has been falling as a ratio of that recorded for rest of the State's
 population.
- The relatively low income status of indigenous people has remained effectively unaltered and welfare dependence remains high.

Sustained dependence over the decade to 1996 on programs for economic advancement raises further pressing issues in the context of new directions for indigenous economic policy. These are:

- the shift in CDEP to focus solely on providing employment and skills development, with non-working participants becoming clients of the social security system;
- the freeze on further CDEP scheme expansion given that this has absorbed much of the excess labour supply in the past;

- orientation towards private sector activities as the primary source of future employment growth; and
- replacement of the Commonwealth Employment Service by contracted employment provision agencies and the dismantling and restructuring of government employment assistance.

Just what effect these new arrangements will have on employment outcomes for indigenous people is unknown and in need of urgent consideration. As it stands, there are 27 Job Network member agencies registered in Inner Sydney, 22 in Western Sydney, 27 in South Western Sydney, 21 in North Sydney and the Central Coast, 21 in the Illawarra and South Eastern New South Wales, 25 in the Riverina, 23 in the Hunter and North Coast and 21 in Western New South Wales. Many of these involve the same State-wide agencies servicing multiple branches, but only one (in Redfern) is an Aboriginal organisation. This leaves the whole issue of dedicated services for indigenous job-seekers open to question.

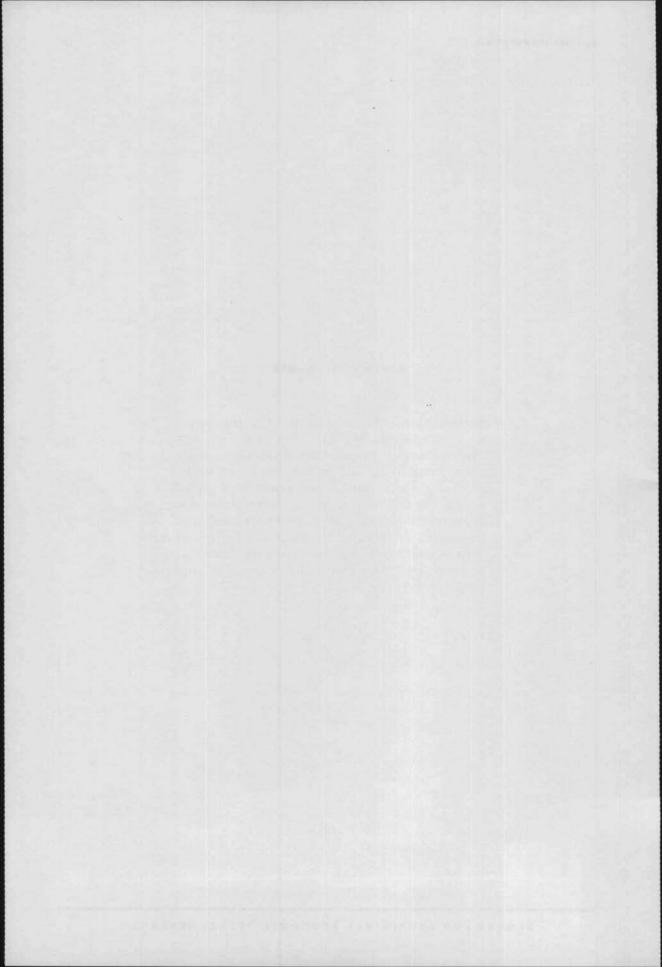
In terms of anticipating where opportunities in the private sector will be generated, an important consideration in New South Wales is the greater concentration of indigenous people in rural and often remote locations as well as in economically depressed country towns. For most of these places, the most likely avenues for stimulating jobs growth follow from an import substitution model embracing activities such as community services, construction and maintenance of housing and infrastructure, retailing, transport, media, land restoration and management.

As for residents of Sydney and other cities, despite being closer to the hub of private sector activity, they remain under-represented in many of the industries that employ large numbers of metropolitan workers. In particular, the retailing, manufacturing, hospitality, finance, construction and transport industries. This lack of penetration in leading employment sectors raises questions about the effectiveness of job programs and the prospect that a wider range of industry strategies targeted at typically metropolitan employment sectors may be required. Clearly, some focus on the special needs of city-based populations is necessary, given the much larger population presence in the cities than previously indicated.

It is important to ask how the broad strategy of raising employment levels might be targeted to suit particular regional and local circumstances. 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.

Acknowledgments

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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; Taylor and Roach 1994).

Findings for New South Wales indicated a rise in the indigenous employment rate and a slight decline in the unemployment rate, but with both of these remaining substantially below equivalent rates for the non-indigenous population (Taylor and Roach 1994). Also of note was a lack of improvement in income relativities, 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 (Australian Bureau of Statistics (ABS) 1998a; Taylor and Bell 1998). 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). As a consequence, change in census-based economic indicators cannot be taken at face value and some adjustment to the base year (1991) data is necessary to establish meaningful comparison over time. A method for such an adjustment has been devised using reverse survival techniques (ABS 1998b; Taylor and Bell 1998) and this is applied here.

Population size and distribution, 1991 and 1996

To analyse change in the economic status of indigenous people in New South Wales 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 the working-age population, while the economy itself varies in its capacity to create employment in different parts of the State.

Previous analysis has identified a variation in economic status between indigenous people resident in urban centres as opposed to rural areas (Taylor and Roach 1994; ABS 1996a). Given the policy implications of this structural dimension, and for consistency with data presented for the 1986–91 intercensal

period, the present analysis is organised according to the ABS section-of-State classification with the standard four-way taxonomy for New South Wales reduced to three components by amalgamating data for bounded localities and the rural balance to create a single 'rural' category (0–999 persons).¹ 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 101,516 indigenous people were counted in New South Wales, an increase of 31,494 or 45 per cent since 1991. A more reliable indication of the size of the State's indigenous population 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 109,925 which was 31 per cent higher than the 83,707 expected on the basis of ABS experimental projections from the 1991 Census (ABS 1996b: 16; 1998b: 10). Compared to most other jurisdictions this gap between the expected and the recorded population in 1996 was relatively high (Taylor 1997b: 4).

One of the features of the distribution of indigenous people over the past two decades has been a gradual increase in the proportion resident in urban areas, and especially in Sydney and the other major cities of Newcastle and Wollongong (Taylor and Roach 1994: 4; Burnley 1996: 108-18). Between 1971 and 1991, for example, the proportion of the State's indigenous population recorded in these major urban areas increased from 27 per cent to 38 per cent, while the proportion living in non-metropolitan areas declined from 73 per cent to 62 per cent. Even away from the cities, the main focus of population growth has been in regional and smaller urban centres with the rural share of the census-identified population declining steadily from 33 per cent of the total in 1971 to 18 per cent in 1991.

Analysis of indigenous population change by section-of-State for the most recent intercensal period between 1991 and 1996 indicates that this trend towards urbanisation has continued (Table 1). Comparison of census counts in 1991 and 1996 reveals that the rate of population increase was highest in major urban areas (53 per cent) and lowest in rural areas (27 per cent). As a consequence, the cities accounted for a growing share of the State's indigenous population (40 per cent in 1996, up from 38 per cent in 1991), with as much as one-third (34 per cent) of the State population recorded in Sydney alone. However, the majority of indigenous people counted in New South Wales (44 per cent) remain located in other urban centres scattered across the State while a declining proportion (16 per cent) are in rural, often remote, places.

Table 1. Change in indigenous population by section-of-State: New South Wales, 1991–96

NEW TOTAL	1991		19	1996		1991–96	
	No.	Per cent	No.	Per cent	Net change	Per cent change	
Major urban	26,427	37.7	40,574	40.0	14.147	53.5	
Other urban	30,994	44.3	44,898	44.2	13,904	44.9	
Rural	12,601	18.0	16,044	15.8	3,443	27.3	
Total	70,022	100.0	101,516	100.0	31,494	45.0	

As far as the relatively higher population growth in Sydney is concerned, this was not due to net migration gain from other parts of New South Wales, nor was it due to movement from interstate. Between 1991 and 1996, the indigenous population of Sydney experienced a net migration loss of 1,145, a slightly higher loss than in the previous intercensal period (Taylor and Bell 1996: 401). This fact of substantial population growth in the face of net migration loss highlights the importance in indigenous population change of factors related to the social construction of indigenous identity. As in all other major urban areas in Australia, the recent increase in Sydney's indigenous population, at over 10 per cent per annum, was considerably above expectation. At the national level, such higher than expected growth in the indigenous population has been attributed to three factors and these are also considered to be operative in New South Wales generally, but in Sydney in particular: an increased propensity on the part of individuals to declare indigenous status on the census form; the expansionary effect on population of inter-marriage which results in births of indigenous children being above the level due to indigenous mothers alone; and improved enumeration by the ABS (Gray 1997; Taylor 1997a, 1997b; ABS 1998a, 1998b).

The non-indigenous population

Far less change in distribution by section-of-State was apparent among the majority balance of the State's population (Table 2). The obvious contrast with the indigenous pattern of settlement remains the overwhelming concentration of population in the major cities, especially in Sydney which accounts for almost two-thirds of the New South Wales population. The slightly higher growth of the majority population in non-metropolitan urban centres contrasts with the situation observed for indigenous people and no doubt reflects a continuation of counterurbanisation flows out of Sydney to towns along the coast (Hugo 1996). Much starker contrast with the pattern of indigenous population change is provided by the general loss of population in rural areas. As a consequence, indigenous people continue to be over-represented in rural areas, and many are far removed from urban centres and remote from urban-type services and labour markets.

Table 2. Change in non-indigenous population by section-of-State: New South Wales, 1991–96

	1991		1996		1991-96		
	No. (million)	Per cent	No. (million)	Per cent	Net change	Per cent change	
Major urban	3.79	67.0	3.98	67.5	190,420	5.0	
Other urban	1.16	20.6	1.23	20.9	71,046	6.1	
Rural	0.69	12.4	0.68	11.6	-7,415	-1.1	
Total	5.66	100.0	5.89	100.0	254,051	4.5	

The working-age population, 1991 and 1996

The 1996 Census count of indigenous people aged 15 years and over reveals an increase of 42 per cent since 1991, from 42,172 to 59,979. This rate of increase was far greater than the 4 per cent recorded for non-indigenous adults and was substantially above expectation based on projections from the 1991 Census. However, a more realistic indication of change in the number of indigenous adults is provided by experimental population estimates produced by the ABS (1998b). These are constructed by a series of adjustments to the 1996 count. First, by excluding indigenous persons whose parents were both born overseas; second, by assuming indigenous status for a pro rata allocation of non-respondents to the census question on Aboriginal and Torres Strait Islander origins; third, by correcting for net undercount of the indigenous population; and, finally, by adjusting the number of persons aged zero on the basis of registered births (ABS 1998b).

Reconstructing the 1991 population

Inconsistency in census counts is almost a defining feature of the indigenous population. Despite erratic variation over time, the general trend in overall numbers since 1971 has nonetheless been upwards with population growth often exceeding that accounted for by biological factors. Reasons for this anomaly have been the subject of much speculation but it is generally agreed that excess population growth primarily reflects an increased willingness of individuals over time to reveal their ethnic identity in official collections combined with greater efforts made by the ABS to achieve better enumeration.

This being so, the 1996 Census-derived population may be viewed as the best estimate yet of an ultimately unknown number of individuals of Aboriginal or Torres Strait Islander descent. The point here is that those revealed in the 1996 Census are assumed to include individuals who, for whatever reason, did not appear in the 1991 Census count as indigenous. Realistically, to gain a meaningful analysis of intercensal change in employment, these individuals should be restored to the 1991 population. While the census provides no

information which can be used to achieve this directly, it is possible to derive an estimate of the 1991 working-age population using the revised 1996 population as a base. The standard demographic technique for reconstituting the initial population in this way is through reverse survival (Shyrock, Siegel and Associates 1976: 262–3, 418–21) and this is applied by the ABS to generate new estimates of the 1991 population (ABS 1998b).

Application of the reverse survival procedure in this context involves taking the population as counted in 1996, disaggregated by age and sex, and 'younging' this population by five years by making allowance for deaths that occurred over the intercensal period in order to estimate the population in each age-sex group in 1991 (Taylor and Bell 1998). Thus, the population of males aged 20–24 in 1991 is estimated by applying reverse survival ratios to the male population aged 25–29 in 1996. This is essentially the reverse of the standard procedure used in making projections of future population by the cohort-component method. The key to producing reliable estimates by this technique is selection of the correct ratios from an appropriate life table, that is, from a life table which accurately summarises the mortality experience of the relevant population over the period being considered. Application of the reverse survival procedure to reconstitute the earlier population also assumes that the population is closed to interstate migration.²

As indicated in Table 3, this procedure raises the 1991 working-age population from the 42,172 revealed in the census count to an estimate of 58,926. The 1996 estimated population is also higher at 65,174. Thus, the estimated increase in the indigenous working-age population over the intercensal period was only 6,248, or 10.6 per cent, which is more in line with the estimated growth of around 6 per cent recorded for the non-indigenous adult population.

Table 3. Estimated population aged 15 years and over: indigenous and non-indigenous people in New South Wales, 1991 and 1996

	1991	1996	1991–96		
			Net change	Per cent change	
Indigenous	58,926	65,174	6,248	10.6	
Non-indigenous	4,568,007	4,827,666	259,659	5.7	

Source: ABS 1996b: 14, 1998b: 9-10.

While reverse survival produces an indigenous population growth rate closer to that recorded for the non-indigenous population, reasons for expansion of the working-age group in the respective populations are quite different. For the indigenous population, it reflects the inevitable outcome of demographic processes set in train through high indigenous fertility in the early 1970s (Gray and Tesfaghiorghis 1993; Gray 1997). Growth in the non-indigenous population, on the other hand, is due more to sustained net overseas migration gain. From a policy perspective, the key implication to note is that the rate of indigenous

employment growth would need to be greater than for non-indigenous people, and at least equivalent to the growth in the indigenous 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 have little appreciable impact on labour force status.

Labour force status, 1991 and 1996

In examining change in the labour force status of indigenous people, census count data are utilised for two reasons. First, to maintain consistency with data from previous analysis of indigenous economic status in New South Wales (Taylor and Roach 1994). Second, to enable an examination of change by section-of-State, a geographic level for which estimated resident population data are not available. It should also be noted that labour force status is expressed as a proportion of the 15–64 year old working-age group.

Three standard social indicators are used for this purpose: the employment rate, representing the percentage of persons 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 persons in the labour force as a percentage of those of working age.

Table 4. Labour force status of indigenous and non-indigenous people: New South Wales, 1991 and 1996

	Indigenous		Non-ind	igenous
	1991 (1)	1996 (1)	1991 (2)	1996
Employment rate	38.0	41.0	64.8	66.0
Unemployment rate	35.6	27.0	11.1	8.7
Participation rate	59.0	56.1	72.3	72.2
Ratios (1/2):				
Employment rate	0.59	0.62		
Unemployment rate	3.20	3.10		
Participation rate	0.82	0.78		

Note: All figures are based on census counts and exclude those who did not state their labour force status.

The overall employment rate recorded for indigenous people by the 1991 Census (including those in the CDEP scheme and in labour market programs) was higher in 1991 (38 per cent) compared to 1986 (34 per cent) (Taylor and Roach 1994: 7). In 1996, an even higher rate (41 per cent) was recorded (Table 4).

While the employment rate for the non-indigenous population has also been higher at successive censuses, the gap between indigenous and non-indigenous rates recorded by the census has shown some tendency to narrow as indicated by the rise in the ratio of rates for the two populations from 0.59 in 1991 to 0.62 in 1996 (Table 4). Despite this, the key feature of indigenous employment status is the fact that it remains substantially below the State average and is still less than two-thirds of 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 indigenous population of working age.

Not surprisingly, given the higher employment rate, the census-derived indigenous unemployment rate was much lower in 1996, at 27 per cent, compared to 1991, at 36 per cent (Table 4). However, the non-indigenous unemployment rate was also lower in 1996 (9 per cent compared to 11 per cent). As a consequence, the unemployment level among indigenous people improved slightly but still stands more than three times the level recorded for non-indigenous adults in New South Wales.

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 State average. The 1996 Census indicates that this is still the case with the indigenous labour force participation rate actually lower in 1996 (56 per cent) compared to 1991 (59 per cent), thus falling further behind relative to the rest of the population from 0.82 in 1991 to 0.78 in 1996 (Table 4). This effectively means that around half of all indigenous people of working age are neither working nor actively seeking work. It also suggests that the increase in employment is likely to have resulted more from people shifting out of unemployment as opposed to entering the workforce for the first time.

One factor which may have dampened growth in the indigenous labour force participation rate 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 in New South Wales among indigenous persons aged 15 years and over was 45 per cent higher at the 1996 Census compared to the previous census. In 1991, a total of 6,673 adults were recorded as attending an educational institution compared to 9,676 in 1996, a difference of 3,003. This increase was sufficient to slightly raise the proportion of the census-identified adult population in attendance at educational institutions from 15.8 per cent to 16.2 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 (Taylor and Roach 1994: 8-10). While the best labour

market outcomes were observed in major urban areas, outcomes in rural areas were generally better than those in other urban areas, mostly due to the distribution of CDEP scheme employment. While this pattern of labour force status by section-of-State was still evident in 1996, the gap between non-metropolitan urban centres and rural areas was much reduced.

Table 5 shows the net change between 1991 and 1996 in the numbers of indigenous and non-indigenous people employed by section-of-State. Overall, the rate of increase in the number of indigenous employed was almost ten times greater than that recorded for the rest of the adult population. Furthermore, this relatively greater increase occurred regardless of location, although the highest rate of intercensal increase (61 per cent) was recorded in the smaller non-metropolitan urban centres. This catch-up in smaller urban centres is likely to reflect the relative expansion of new CDEP schemes in such places during the 1990s.

Table 5. Employment change among indigenous and non-indigenous Australians by section-of-State: New South Wales, 1991–96

Per cent e	mployed	Cha	nge
1991	1996	Net	Per cent
48.0	47.8	3,593	50.5
35.2	37.5	3,207	61.5
16.8	14.7	815	32.7
100.0	100.0	7,615	51.4
69.5	70.2	113,956	7.0
18.4	18.5	27,552	6.4
12.1	11.3	-3,576	-1.3
100.0	100.0	137,932	5.9
	1991 48.0 35.2 16.8 100.0 69.5 18.4 12.1	48.0 47.8 35.2 37.5 16.8 14.7 100.0 100.0 69.5 70.2 18.4 18.5 12.1 11.3	1991 1996 Net 48.0 47.8 3,593 35.2 37.5 3,207 16.8 14.7 815 100.0 100.0 7,615 69.5 70.2 113,956 18.4 18.5 27,552 12.1 11.3 -3,576

At the time of the 1991 Census, a total of 1,530 indigenous people were registered with ATSIC as participants in 31 CDEP schemes across the State. Just over half of these schemes (16) with 745 participants were in rural localities while 15 schemes with 785 participants were in urban centres. By 1996, the total number of participants had grown to 3,430 while the number of individual schemes had increased to 55. Most of this growth was accounted for by the establishment of schemes in urban centres. In 1996, 37 CDEP schemes were located in urban settings and accounted for 2,423 participants compared to only 18 in rural localities with 1,007 participants. Consequently, 86 per cent of the overall increase in scheme participation was due to the establishment of new urban schemes. The question of how many of these participants were recorded by the census as employed and what effect this had on estimated change in employment status is addressed in a later section.

The effect of variable jobs growth on changes in labour force status for indigenous and non-indigenous males and females is shown by section-of-State in Tables 6 and 7. Among indigenous adults, the greatest shift, in terms of a higher employment rate and lower unemployment rate, occurred in non-metropolitan urban areas followed by rural areas. Despite this, indigenous labour force status is still highest in the major cities, especially among females. While a similar, though less differentiated, geographic pattern of labour force status can be observed among the non-indigenous labour force (Table 7), a key difference is the relative lack of variation in outcomes across the State. As a consequence, the gap between indigenous and non-indigenous labour force status is greatest in non-metropolitan parts of the State.

As for gender differences, the employment rate for indigenous females remains substantially below that of indigenous males, although a slight improvement in the relative position of females is evident in rural areas. This underlines the very low labour force status of indigenous women in New South Wales as they also fall considerably behind their non-indigenous counterparts, with an overall employment rate at less than two-thirds that of other women in the State and an unemployment rate which is three times as high. Furthermore, just over half of indigenous women remain outside of the labour force compared to around one-third of other women and indigenous men.

Overall, the key policy point to arise from these data is that while indigenous labour force status has shifted in line with the rest of the population, and while a narrowing of the gap in labour force status is evident, labour market outcomes for indigenous people have remained substantially behind those recorded for the non-indigenous population, regardless of sex and location.

Table 6. Labour force status of indigenous Australians by section-of-State and gender: New South Wales, 1991 and 1996

	Major	urban	Other urban		Rural		Total	
	1991	1996	1991	1996	1991	1996	1991	1996
Males								
Employment rate Unemployment	53.4	53.9	38.2	43.4	43.3	44.7	45.1	47.9
rate	29.6	24.3	45.9	33.8	37.0	30.8	72.3	67.7
Participation rate	75.9	71.2	70.6	65.5	68.7	64.6	72.3	67.7
Females								
Employment rate Unemployment	39.4	41.4	25.1	29.3	26.8	31.1	31.2	34.7
rate	24.4	19.6	40.8	28.7	35.7	26.1	32.6	24.0
Participation rate	52.1	51.5	42.4	41.0	41.7	42.0	46.2	45.6

Table 7. Labour force status of non-indigenous Australians by sectionof-State and gender: New South Wales, 1991 and 1996

1 1 1 1 1 1 1 1 1 1 1 1	Major	Major urban		Other urban		Rural		Total	
District Labor	1991	1996	1991	1996	1991	1996	1991	1996	
Males									
Employment rate	74.4	74.6	71.6	70.7	73.5	72.5	73.7	73.6	
Unemployment									
rate	11.4	8.7	12.9	11.6	12.1	10.2	11.8	9.4	
Participation rate	83.9	81.7	82.1	80.0	83.6	80.7	83.6	81.2	
Females									
Employment rate	57.4	60.0	50.9	53.5	53.7	56.7	55.7	58.4	
Unemployment									
rate	9.9	7.2	11.4	9.9	9.9	8.1	10.1	7.8	
Participation rate	63.7	64.7	57.4	59.4	59.7	61.7	62.0	63.3	

Interpreting indigenous employment change, 1991 and 1996

On the face of it, results from the 1996 Census regarding indigenous employment suggest a good news story—an increase of 7,615 people in work, constituting a growth of 51 per cent since 1991 (10 per cent per annum). This apparent growth occurred at a time when overall employment in New South Wales increased by only 1.2 per cent per annum. With a rate of employment expansion at the level implied by this intercensal change, the policy goal of statistical equality in employment for indigenous people begins to look more achievable, contrary to earlier informed assessment (Sanders 1991). However, the ABS has advised a degree of caution when interpreting apparent change to indigenous census characteristics as any variation may simply be a consequence of non-demographic increase in the population (ABS 1998a).

Most research on this problem has been conducted in the United States with respect to changes in the size and composition of the American Indian population (Snipp 1986, 1997; Eschbach 1995; Sandefur, Rindfuss and Cohen 1996; Eschbach, Supple and Snipp 1998). It is noted, for example, that the amount needed to make intercensal increase in numbers balance after accounting for births, deaths and migration is usually small. However, in ethnic populations defined by self-identification, as in the case of American Indians, this 'error of closure' is often large due to shifts in the propensity of individuals to declare their ethnicity on census forms.³

What is not clear in such an event, is whether any aggregate change observed in population characteristics over time involves an alteration in the circumstances of the original population or whether it merely reflects the particular features of individuals appearing in the population for the first time. For example, it is possible that a comparison of census characteristics in 1991 and 1996 could point to an improvement in economic status while the condition

of the original (1991) population had actually worsened. The problem for analysts and policy-makers is that any such change in the condition of the original population is undetectable. All that can be noted is different aggregate status. While there is some scope for estimating the compositional impact of newcomers to the population using fixed population characteristics, such as age left school (Eschbach, Supple and Snipp 1998; Hunter 1998), for characteristics that are variable over time, such as employment status, this is simply not possible.

One correction to employment change data that can and should be made, however, is to establish a more realistic time series by estimating separate components of employment at each census date. As a first step in this process, compensation for the effect of excess population increase is achieved by using the revised ABS estimate of the 1991 working-age population to re-align the 1991 employment level with an equivalent estimation for 1996. A further step is to then estimate the contribution made to employment growth by non-market related government program interventions. This has the effect of revealing the underlying trend in mainstream employment by discounting any cosmetic change brought about by merely administrative shifts in the labour force status of individuals.

Revising employment change

Because reverse survival inevitably alters the age distribution, age-specific employment rates from the 1991 Census are applied to the new estimated five-year age distribution of the working-age group to generate an upward adjustment to the census-derived employment figure. Thus, as shown in Table 8, employment in 1991 rises from the census count figure of 14,915 to an estimated 20,714. Likewise, the 1996 employment figure from the census is adjusted to align with the 1996 ERP. This produces an estimate of employment in 1996 of 24,630. Using this adjusted estimate of 1991 employment as the new base, the intercensal rise in the number of indigenous people employed becomes 3,916 representing an increase of 19 per cent. This is a much lower (and more realistic) growth rate than the 51 per cent increase obtained from a direct comparison of the 1991 and 1996 Census. However, a proportion of this growth can be accounted for by program intervention and this contribution has also to be estimated.

Table 8. Estimated indigenous employment in New South Wales, 1991 and 1996

	1:	1996	
A Land Harding	Census count	Estimate from reverse survival	ERP
Population aged 15+	42,172	58,926	65,174
Employed	14,915	20,714	24,630

Program intervention and employment growth

An important consideration when accounting for variation in the number of indigenous people recorded as employed is the fact that administrative changes in the way the State handles entitlements for the unemployed and those not in the labour force can effect a change in their labour force status as recorded by the census. Such program influences derive primarily from participation as paid employees in the CDEP scheme and also via Department of Employment Education Training and Youth Affairs (DEETYA) labour market programs that were in operation at the time of the 1991 and 1996 Censuses.

According to the ABS, the labour force status of labour market program participants is recorded by the census using the standard question about activities in the week prior to enumeration (ABS 1995b: 8). Those in programs involving a form of wage subsidy or job placement are likely to regard themselves as having undertaken paid work, and hence employed. Those in training, but with no subsidy, are more problematic. However, if these people held a part-time job along with their training then they were also likely to be regarded as employed. According to the Indigenous Employment Initiatives Branch of DEETYA, labour market programs that were likely to have contributed to employment numbers in this way in 1996 included various elements of the Training for Aboriginals Program (TAP), Apprenticeship Wage Subsidies, Job Clubs, National Training Wage Traineeships, the New Work Opportunities Program, Jobskills Projects, and the various Jobtrain and Jobstart programs.

A question remains as to which of these programs actually generated additional employment for indigenous people. For example, some individuals in wage subsidised employment may have secured their position regardless. However, it is more likely that wage subsidies offer an important competitive edge for indigenous people in the labour market given their multiple disadvantage in securing employment (ABS/CAEPR 1996). Equally, it seems that indigenous DEETYA clients in wage subsidy programs would, in all probability, substitute for non-indigenous employees given their small share of the population. This would serve to augment indigenous employment outcomes.

One pointer to this positive interpretation of the possible impact of program intervention is provided by the fact that nationally the indigenous employment/population ratio was relatively stable between 1991 and 1994 at around 35 per cent (ABS 1995a: 41), but in the space of two years to 1996 it increased to 39 per cent. Accordingly, over the same two-year period the unemployment rate fell dramatically from 30.8 to 22.7. Such a positive shift in labour force status is unlikely to have been produced by market forces alone, especially at a time of poor outcomes generally in the labour market. Given the coincidence in timing, the suggestion here is that this improvement was associated with the introduction of Working Nation initiatives launched by the Labor Government in May 1994, as well as by the continued expansion of the CDEP scheme. A key feature of the Working Nation initiatives was the Job

Compact which gave people in receipt of unemployment allowances for more than 18 months the guarantee of a job or training opportunity. Early interventions, case management and the National Training Wage were also major features of *Working Nation* programs.

The fact that indigenous people rely heavily on government program support for employment creation is well documented (Sanders 1993; Taylor and Hunter 1996; Altman 1997; Taylor and Altman 1997). Any meaningful assessment of intercensal employment change thus has to account for changes in such programs that may influence the number of individuals who could claim on the census form that they had a full-time or part-time job of any kind in the week prior to enumeration. The contribution of these to employment growth is estimated using administrative data.

As far as employment via the CDEP scheme is concerned, this cannot be fully established for New South Wales from census data. However, it was known from the 1993 Review of the scheme that not all scheme participants were involved in employment at any time and an overall estimate of 60:40 working to non-working participants was derived from case studies (Deloitte Touche Tohmatsu 1993: 51). Given that this estimate was based largely on remote rural-schemes, this ratio can be applied to participant numbers for rural schemes to derive an estimate of CDEP employment. In urban schemes, other case studies suggest a higher ratio of 80:20 working/non-working participants (Smith 1994a, 1995,1996). Altogether, then, it is estimated that a total of 1,075 scheme participants were employed at the time of the 1991 Census (Table 9). The same calculation using 1996 participant data produces an estimate of CDEP scheme employment of 2,542 (Table 9).

By subtracting these 1991 and 1996 estimates of CDEP scheme employment from total employment in each year, an estimate of non-CDEP scheme employment is derived (Table 9). This is shown to have risen by 27 per cent from 6,399 to 8,155. Further adjustment to this employment growth is achieved by accounting for those employed via placement in a labour market program. The number of indigenous placements in programs that were likely to have produced an employment outcome at the time of the census are available from the DEETYA program database. At the time of the 1991 Census, a total of 403 indigenous people were in such programs and by 1996 this number had risen to 1,096.

Subtraction of these figures from the non-CDEP employed produces a final residual estimate of non-program dependent mainstream employment. As shown in Table 9, this reveals an estimated net intercensal increase in such employment of only 798 positions representing a rate of increase of 0.8 per cent per annum. With growth in the estimated working-age population at 2.1 per cent per annum, this lag in employment growth resulted in a decline in the mainstream employment/population ratio slightly from 32.1 to 30.3.

Table 9. Estimates of mainstream indigenous employment in New South Wales, 1991 and 1996

	1991	1996
Total employed	20,714a	24,630 b
Employed in CDEP	1.075c	2,542d
Employed in non-CDEP	19,639	22,088
Employed in labour market programs	705 e	2.356f
Employed in mainstream	18,934	19,732
Mainstream employment/population ratio	32.1	30.3
Net change in mainstream employment	798 (0.8 per cent per	r annum)

- Note: a. Estimated by applying 1991 age-specific employment rates to the 1991 ERP derived from reverse survival.
 - b. Estimated by applying 1996 age-specific employment rates to the 1996 ERP.
 - Based on a ratio of 60:40 working to non-working participants in rural schemes and 80:20 in all other schemes.
 - d. Based on a ratio of 60:40 working to non-working CDEP scheme participants in rural schemes and a ratio of 80:20 in all other schemes.
 - e. Includes placements in DEETYA programs A20, A30, A31, A42, H15, U13, W11, W12, W13, W15, W16, W20, W33.
 - f. Includes placements in DEETYA programs A20, A30, A31, F12, F13, G20, H15, H42, H43, N20, N21, N42, N43, O11, S11, U13, W40, W41, W42, W43.

Labour Market program codes: A20—Major Employment Strategies; A30—Job Skills Development (TAP Private Sector); A31—Work Experience/WIP; A42—Enterprise Employment Assistance; F12 and F13—New Enterprise Incentive Scheme Formal Training; G20—Group Employment Program; H15—Disabled Apprenticeships; H42 and H43—Apprenticeship Wage Subsidy; N20, N21, N42, N43—National Training Wage Program; O11—New Work Opportunities Program; S11—Job Skills Umbrella Projects; U13—SAP; W11, W12, W13, W15, W16, W20, W33, W40, W41, W42, W43—Jobstart.

If the mainstream employment rates shown in Table 9 are compared with equivalent non-indigenous rates, by excluding non-indigenous labour market program participants as well, then the ratio of indigenous to non-indigenous employment rates is estimated to have fallen over the intercensal period from 0.51 in 1991 to 0.48 in 1996.⁴ The policy message from this is clear. Without the prop of program intervention in the labour market, the indigenous employment rate in New South Wales would have been far below the level recorded by the 1996 Census and less than half the level recorded for the rest of the population.

Income status, 1991 and 1996

A key goal of government policy 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 the slight relative improvement in the labour force status of indigenous people in New South

Wales there may be some statistical grounds for expecting that the income gap between them and the rest of the population would 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.

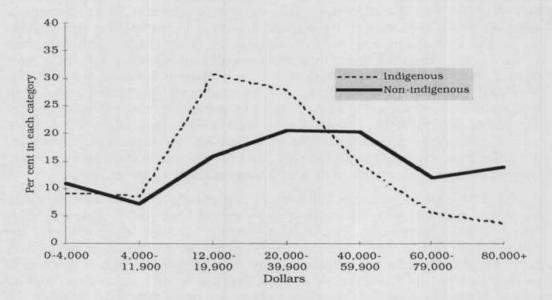
A further point to note is that census data report income as a range within an income category with the highest category left open-ended. Consequently, actual incomes have to be derived. In estimating total and mean incomes, the mid-point for each income category is used on the assumption that individuals 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 crosstabulating 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 New South Wales in 1996. Clearly, a concentration of indigenous income occurs at the lower end of the distribution with 34 per cent of individuals receiving less than \$20,000 and a sharp decline in the income distribution curve beyond the \$20,000–\$40,000 income bracket. Accordingly, a relatively small share of individuals (23 per cent) are 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 which peaks in the \$40,000-\$60,000 range with 46 per cent of individual incomes in excess of \$40,000.

Figure 1. Annual income distribution of indigenous and non-indigenous adults: New South Wales, 1996



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 \$15,100 in 1996 up from \$12,600 in 1991. This produces a ratio of mean indigenous income to that for the rest of the population of 0.65 in 1996, which is only slightly higher than the ratio calculated for 1991 (Table 10). 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 barely changed and indigenous incomes remain substantially below those of the majority population.

This lack of improvement in relative income levels may partly be explained by the fact that a large component of net employment growth for indigenous people was 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 that 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 New South Wales 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.

Table 10. Income status of indigenous and non-indigenous Australians: New South Wales, 1991 and 1996

	Individual income					
	Indige	nous	Non-indigenous			
	1991	1996	1991	1996		
Mean (\$000)	12.6	15.1	20.2	23.4		
Median (\$000) Ratio of indigenous/ non-indigenous	9.8	11.0	17.0	18.6		
Mean (\$000)	0.62	0.65				
Median (\$000)	0.58	0.59				

Income change by section-of-State

The proposition that individual income levels are influenced by labour force status and the nature of employment is supported by data on the income status of indigenous people by section-of-State (Table 11). In 1991, average income in rural areas and non-metropolitan towns was around 20 per cent below that of indigenous people in the major cities and by 1996 this gap had widened slightly. While this differential is in line with the gap in labour force status between major urban areas and the rest of the State, it also reflects the fact that much employment growth away from the cities has been due to increased CDEP scheme participation which generates part-time work with salaries tied to Newstart allowance.

Table 11. Income status of indigenous and non-indigenous Australians by section-of-State: New South Wales, 1991 and 1996

	Individual income							
	Major urban		Other urban		Rural		Total	
	1991	1996	1991	1996	1991	1996	1991	1996
Indigenous								
Mean (\$000)	14.3	17.2	11.6	13.8	11.0	13.2	12.6	15.1
Median (\$000)	11.5	13.0	9.2	10.2	8.3	9.6	9.8	10.9
Non-indigenous								
Mean (\$000)	21.5	24.9	17.5	20.1	17.3	19.9	20.2	23.4
Median (\$000)	18.3	20.2	14.6	15.8	13.7	15.0	17.0	18.6
Ratio of indigenous/ non-indigenous								
Mean (\$000)	0.67	0.69	0.66	0.69	0.64	0.66	0.62	0.65
Median (\$000)	0.63	0.64	0.63	0.64	0.60	0.64	0.58	0.59

However, it is true that the population generally in Sydney and other major cities record much higher incomes than in the rest of the State (Table 11). This no doubt reflects the much greater diversity of metropolitan economic activity and the relative concentration of higher status occupations. As a consequence, little variation in the income gap between indigenous and non-indigenous people was evident between sections-of-State in 1996 with the ratio between the two ranging from 0.66 to 0.69. In contrast, the pattern of income among the rest of the State's population continues to display very little variation according to section-of-State.

Table 12. Income status of indigenous and non-indigenous Australians by sex: New South Wales, 1991 and 1996

	Individual income						
	Males		Females		Total		
	1991	1996	1991	1996	1991	1996	
Indigenous							
Mean (\$000)	14.1	16.6	11.0	13.8	12.6	15.1	
Median (\$000)	10.9	11.0	9.3	10.9	9.8	10.9	
Non-indigenous							
Mean (\$000)	25.3	29.2	14.7	17.6	20.2	23.4	
Median (\$000)	22.1	24.3	11.6	13.6	17.0	18.6	
Ratio of indigenous/			The state of the s				
non-indigenous							
Mean (\$000)	0.56	0.57	0.75	0.78	0.62	0.65	
Median (\$000)	0.50	0.45	0.80	0.80	0.58	0.59	

Income change by sex

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As in 1991, the 1996 Census reveals an income differential between indigenous males and females in New South Wales (Table 12), though the gap in average incomes (\$16,600 for males and \$13,800 for females) is far less than among their non-indigenous counterparts (\$29,200 for males compared to \$17,600 for females). One implication is that the ratio of average income for indigenous males compared to that of non-indigenous males (0.57) is far lower than the equivalent ratio between indigenous females and other females (0.78), though both ratios showed only a marginal sign of improvement.

Employment income and welfare dependence

An important issue with regard to the economic impact of employment change concerns the contribution of employment income 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 13.

Overall, there has been some increase in the contribution of employment income to total income. In 1991, 63 per cent of income for indigenous people was derived from employment. By 1996, this proportion had risen to 65 per cent. However, compared to the equivalent figure of 89 per cent for the non-indigenous population this means that a far higher proportion of indigenous people (35 per cent compared to 11 per cent) remain dependant on non-employment sources of income.

Table 13. Total income of indigenous and non-indigenous Australians by labour force status: New South Wales, 1991 and 1996

	19	91	1996		
	Income (\$million)	Per cent	Income (\$million)	Per cent	
Indigenous					
Employed	280.4	63.0	510.5	65.1	
Unemployed	60.5	13.6	67.5	8.6	
Not in labour force	104.5	23.5	205.7	26.2	
Total	445.4	100.0	783.7	100.0	
Non-indigenous					
Employed	59,881.2	88.0	75,917.7	88.9	
Unemployed	2,313.4	3.4	1,926.1	2.3	
Not in labour force	5,854.2	8.6	7,515.1	8.8	
Total	68,048.9	100.0	85,358.9	100.0	

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 generally by Daly and Hawke (1993) for the period 1976–91. Apart from the growing share of working-age people 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 National Aboriginal and Torres Strait Islander Survey (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 an amount equivalent to the notional citizen entitlements attached to CDEP as this represents income that is properly welfare-related rather than employment-based (Smith 1994b).

Actual shifts in mean employment and non-employment incomes are shown in Table 14. 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 0.75. As for non-employment income, the mean individual income of unemployed indigenous people in 1996 was \$8,500 and \$9,400 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 14. Mean employment/non-employment income of indigenous and non-indigenous Australians: New South Wales, 1991 and 1996

Labour force status	Mean inco	me (\$000)	Change		
	1991	1996	Net	Per cent	
Indigenous					
Employed	19.81	23.35	3.5	17.9	
Unemployed	8.05	8.50	0.5	5.6	
Not in labour force	7.72	9.38	1.7	21.5	
Total	12.65	15.14	2.5	18.7	
Non-indigenous					
Employed	26.27	31.09	4.8	18.4	
Unemployed	8.75	8.42	-0.3	-3.7	
Not in labour force	7.21	7.72	0.5	7.2	
Total	20.27	23.43	3.2	15.6	
Ratio of indigenous/ non-indigenous					
Employed	0.75	0.75	0.00	-0.4	
Unemployed	0.92	1.01	0.09	9.6	
Not in labour force	1.07	1.21	0.14	13.3	
Total	0.62	0.65	0.02	3.6	

Policy implications

Although census data remain the primary source of information on the economic status of indigenous Australians, and certainly the most comprehensive, some care is required in their interpretation for public policy purposes. At a methodological level, it should be noted that any change in characteristics observed between censuses does not necessarily apply to the population identified at the start of the intercensal period. In fact, because of the identification of a greater than expected indigenous population in 1996, change to the original 1991 population cannot be adequately established. What can and should be done in this event is to estimate characteristics for the original population (where appropriate) using ABS experimental population estimates derived from reverse survival procedures as a basis. This has the effect of properly aligning time series data. This problem affects any analysis of aggregate data for New South Wales, though it especially relates to the population counted in Sydney and other large centres. Elsewhere in the State, intercensal change is affected less by this census error.

On a more conceptual level, it should be noted that as long as the census question on Aboriginal and Torres Strait Islander origins remains the sole means of comprehensively defining the indigenous population, then it is likely that the numbers identified in this way will continue to rise steadily due to improved enumeration, changes in identification and the flow-on effects of inter-marriage (Gray 1997; ABS 1998c). At a time of growing pressure for targeted service delivery that is cost-effective and based on demonstrated need, this prospect of an ever-expanding population requires careful consideration. In this context, it is worth recalling the Commonwealth's three-part definition of an indigenous Australian:

- that an individual has Aboriginal or Torres Strait Islander descent;
- · identifies as an Aboriginal or Torres Strait Islander; and
- is accepted as an Aboriginal or a Torres Strait Islander by the community in which he or she lives.

The fact is, of course, that the indigenous population revealed by the census conforms with only the first and/or second of these criteria, and even then only to the extent that a collection of individuals tick the appropriate box on a census form which asks if they are of Aboriginal or Torres Strait Islander origin. ⁶ While the third of these criteria may not always be applied when recording indigenous status in administrative statistical collections, its lack of application in the census methodology means that the census-derived indigenous population would almost certainly be of a different size to any population based on the full Commonwealth definition. This effectively raises the prospect of different indigenous populations eventuating in different statistical contexts, with that derived from the census being just one of these, though probably the most inclusive.

While recognising this complexity, the key question for policy analysts arising from an examination of census data is whether growth of the population identified by the census question on indigenous origins has resulted in an alteration to the absolute and relative level of indigenous economic status in New South Wales. Results from the above analysis suggest that it has not.

In assessing this, the first point to note is that change in social indicators for the period 1986–91 (Taylor and Roach 1994), and now for the 1991–96 period, provides a ten-year window on the economic status of indigenous people in New South Wales. This essentially covers a period of substantial efforts by the former federal Labor Government to enhance employment outcomes and income levels.

The results indicate a consistent pattern of outcomes over this period. On the one hand, the number of indigenous people recorded as employed has risen, employment rates have been consistently higher and unemployment rates have been lower leading to a closing of the gap in these indicators (albeit marginally) 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, these achievements, especially in non-metropolitan areas, are shown to be largely related to sustained expansion of the CDEP scheme. Also of

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relevance for census analysis is the fact of enhanced indigenous participation in employment-related labour market programs under the now defunct *Working Nation* initiatives. The indication is that growth in mainstream, or non-program linked employment, lagged behind population growth and that the true level of indigenous employment actually fell to less than half that recorded for the rest of the State's population.

The other consistent feature of the past decade is that the relatively low income status of indigenous people has remained effectively unaltered. In the context of apparently enhanced labour force status, this underlines the need for quality, as well as quantity, in job acquisition if the overall aim of government policy to raise economic status is 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 over the decade to 1996 on programs for economic advancement raises further pressing issues in the context of new directions for indigenous economic policy that have emerged subsequently. Of particular interest here is the 1998 Budget announcement that the objective of the CDEP scheme will be revised to focus solely on providing employment and skills development with non-working participants becoming clients of the social security system (Commonwealth of Australia 1998b: 11). Also of note is a freeze on further expansion of the CDEP scheme with a global allowance of 550 places per annum in existing schemes to accommodate natural increase. While movement off the scheme of non-working participants will create some space for working participants, the effect of such changes on indigenous employment and unemployment statistics in New South Wales is difficult to predict.

Accompanying these changes to CDEP, and more generally in the thrust of indigenous economic policy, is a re-orientation towards private sector activities as the primary source of future employment growth. This trend appears inevitable given the downsizing of public sector opportunities and the fiscal squeeze on many indigenous organisations and areas of the mainstream public sector where indigenous people have, to date, found an employment niche. A parallel development of substantial significance is the replacement of the Commonwealth Employment Service by contracted employment provision agencies and the dismantling and restructuring of government employment assistance. Under the new Job Network system, intensive assistance is available to job seekers who encounter the greatest employment placement difficulty. In this assessment Aboriginal and Torres Strait Islander status assumes considerable weighting as do many other characteristics, such as duration of unemployment and low

educational status, which will favour indigenous people (Commonwealth of Australia 1998a). However, just what effect these new arrangements will have on employment outcomes for indigenous people remains to be seen. As it stands, there are 27 Job Network member agencies registered in Inner Sydney, 22 in Western Sydney, 27 in South Western Sydney, 21 in North Sydney and the Central Coast, 21 in the Illawarra and South Eastern New South Wales, 25 in the Riverina, 23 in the Hunter and North Coast and 21 in Western New South Wales. Many of these involve the same State-wide agencies servicing multiple branches, but only one (in Redfern) is an Aboriginal organisation. This leaves the whole issue of dedicated services for indigenous job-seekers open to question.

It seems inevitable, however, that the privatisation of employment services will produce greater fluidity in the labour market circumstances of indigenous people. As far as engaging the private sector is concerned, some of the issues likely to be encountered 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).

In terms of anticipating where opportunities in the private sector might be generated, an important consideration in New South Wales is the greater concentration of indigenous people in rural and often remote locations as well as in economically depressed country towns. For most of these places, likely avenues for stimulating jobs growth follow from an import substitution model embracing activities such as community services, construction and maintenance of housing and infrastructure, retailing, transport, media, land restoration and management. While continued program funding to support such activities was announced in the 1998/99 federal Budget with an enhanced role for the Commonwealth Development Corporation (Commonwealth of Australia 1998b), there are, however, 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 such places.

As for residents of Sydney and other cities, despite being closer to the hub of private sector activity, indigenous people remain under-represented in many of the industries that employ large numbers of metropolitan workers. In particular, the retailing, manufacturing, hospitality, finance, construction and transport industries (Taylor and Liu Jin 1995, Taylor and Liu 1996). This lack of penetration in leading employment sectors raises questions about the effectiveness of job programs and the prospect that a wider range of industry strategies targeted at typically metropolitan employment sectors may be required. Clearly, some focus on the special needs of city-based populations may be necessary given the much larger population presence in the cities than previously indicated.

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. There is a role here for the government appointed Area Consultative Committees and possibly for indigenous organisations acting as employment providers within the new Job Network and engaging in the development of employment and training strategies. Also relevant are the potential economic opportunities generated by agreements between local councils and indigenous communities in the context of the Native Title Act and New South Wales Land Rights Act (Australian Local Government Association/ATSIC 1998). Examples here include the local services agreement between the Cowra Shire Council and Cowra indigenous people and the statement of commitment to redressing disadvantage between Newcastle City Council and indigenous residents of the city (Australian Local Government Association/ATSIC 1998: 10-8, 113-14).

Finally, even if sufficient new work in excess of growing 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. While improvements in labour force status to date, have kept just ahead of population growth, they 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. This places the policy focus firmly back on to skills development.

Notes

- The ABS sections-of-State within New South Wales are as follows: 'major urban' (Sydney, Newcastle and Wollongong); '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.
- A net migration loss to the total indigenous population of New South Wales of 1,548
 persons was recorded over the 1991–96 intercensal (ABS 1998b: 24).
- 3. 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 (1997).
- 4. This is based on recalculating the non-indigenous employment rates in 1991 and 1996 using data supplied by DEETYA on non-indigenous participation in job-related

- labour market programs. This indicates that 4,450 non-indigenous persons were in such programs in 1991 and 19,719 in 1996.
- 5. 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.
- 6. It is worth noting that the census question refers to 'origins' while the official Commonwealth definition refers to 'descent'. These terms may well be construed differently by respondents to official statistical collections. I am grateful to Dr Len Smith of the ANU for pointing this out.

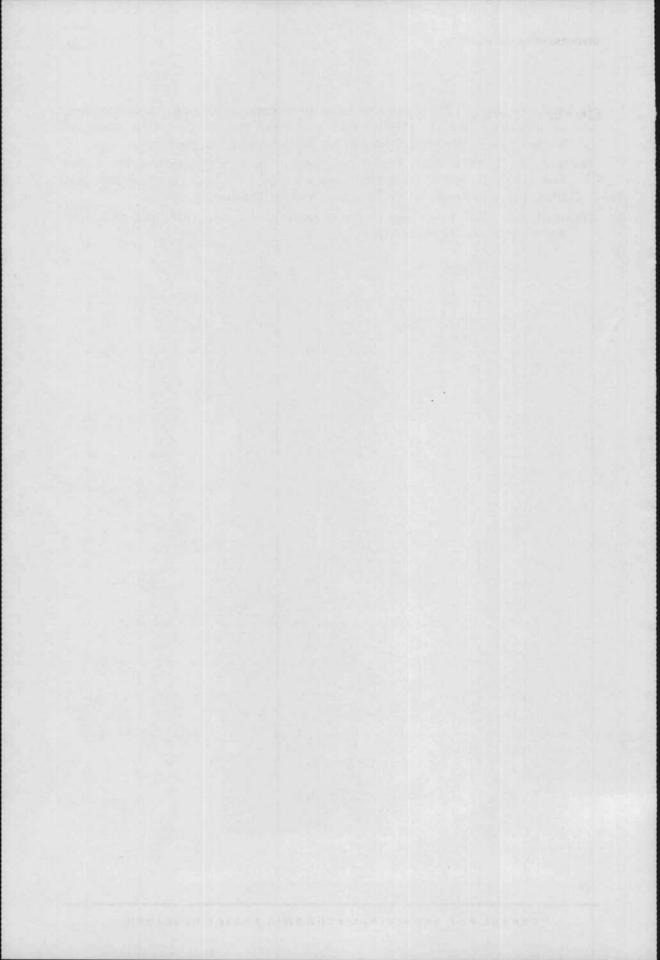
References

- Altman, J.C. 1997. 'The CDEP scheme in a new policy environment: options for change?', CAEPR Discussion Paper 148, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- 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) 1996a. 1994 National Aboriginal and Torres Strait Islander Survey: New South Wales, cat. no. 4190.1, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1996b. Experimental Projections: Aboriginal and Torres Strait Islander Population, June 1991–June 2001, cat. no. 3231.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1998a. Occasional Paper: Population Issues, Indigenous Australians, cat. no. 4708.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1998b. Experimental Estimates of the Aboriginal and Torres Strait Islander Population: 30 June 1991-30 June 1996, cat. no. 3230.0, ABS, Canberra.
- Australian Bureau of Statistics (ABS) 1998c. Experimental Projections of the Aboriginal and Torres Strait Islander Population: 1996-2006, cat. no. 2035.0, 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.
- Australian Local Government Association/Aboriginal and Torres Strait Islander Commission 1998. Working Out Agreements Between Local Government and Indigenous Australians: A Practical Guide, Australian Local Government Association, Canberra.
- Burnley, I. 1996. Atlas of the Australian People—1991 Census: New South Wales, Australian Government Publishing Service, Canberra.
- Commonwealth of Australia 1998a. *Job Network: Job Seeker Classification Instrument*, Department of Employment, Education, Training and Youth Affairs, Canberra.
- Commonwealth of Australia 1998b. Addressing Priorities in Indigenous Affairs, Ministerial Statement by Senator the Honorable John Herron, Minister for Aboriginal and Torres Strait Islander Affairs, 12 May 1998, Australian Government Publishing Service, 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.

- Deloitte Touche Tohmatsu 1993. No Reverse Gear: A National Review of the Community Development Employment Projects Scheme, Report to the Aboriginal and Torres Strait Islander Commission, Canberra.
- Eschbach, K. 1995. 'The enduring and vanishing American Indian: American Indian population growth and intermarriage in 1990', *Ethnic and Racial Studies*, 18 (1): 89–109.
- Eschbach, K., Supple, K. and Snipp, M.C. 1998. 'Changes in racial identification and the educational attainment of American Indians, 1970–1990', *Demography*, 35 (1): 35–43.
- 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. 1996. 'Counterurbanisation', in P.W. Newton and M. Bell (eds), Population Shift: Mobility and Change in Australia, Australian Government Publishing Service, Canberra.
- Hunter, B. 1998. 'Assessing the utility of 1996 Census data on indigenous Australians', CAEPR Discussion Paper 154, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Passel, J.S. 1997. '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.
- Sandefur, G.D., Rindfuss, R.R. and Cohen, B. (eds) 1996. Changing Numbers, Changing Needs: American Indian Demography and Public Health. National Academy Press, Washington D.C.
- Sanders, W. 1991. 'Destined to fail: the Hawke Government's pursuit of statistical equality in employment and income between Aborigines and other Australians by the year 2000 (or a cautionary tale involving the new managerialism and social justice strategies)', Australian Aboriginal Studies, 1991/2: 13–18.
- Sanders, W. 1993. 'The rise and rise of the CDEP scheme: an Aboriginal 'workfare' program in times of persistent unemployment', CAEPR Discussion Paper No. 54, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- 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.
- Shyrock, H.S., Siegel, J.S. and Associates 1976. The Methods and Materials of Demography (Condensed Edition), Academic Press, New York.
- Smith, D.E. 1994a. 'Working for CDEP: a case study of the Community Development Employment Projects scheme in Port Lincoln, South Australia', CAEPR Discussion Paper No. 75, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

- Smith, D.E. 1994b. 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.
- Smith, D.E. 1995. 'Redfern works: the policy and community challenges of an urban CDEP scheme', CAEPR Discussion Paper No. 99, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Smith, D.E. 1996. 'CDEP as urban enterprise: the case of Yarnteen Aboriginal and Torres Strait Islanders Corporation, Newcastle', CAEPR Discussion Paper No. 114, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Snipp, M.C. 1986. 'Who are American Indians? Some observations about the perils and pitfalls of data for race and ancestry', Population Research and Policy Review, 5: 237-52.
- Snipp, M.C. 1997. 'Some observations about racial boundaries and the experiences of American Indians', Ethnic and Racial Studies, 20 (4): 667–89.
- 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. 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. and Altman, J.C. 1997. The Job Ahead: Escalating Economic Costs of Indigenous Employment Disparity, Aboriginal and Torres Strait Islander Commission, Canberra.
- 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. 'Making sense of census data: a components analysis of employment change among indigenous Australians', *Journal of the Australian Population Association*, 15 (1): forthcoming.
- Taylor, J. and Hunter, B. 1996. 'Indigenous participation in labour market and training programs', CAEPR Discussion Paper No. 108, 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 Liu, J. 1996. 'Change in the relative occupational status of indigenous workers, 1986–91', CAEPR Discussion Paper No. 104, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

- Taylor, J. and Liu Jin 1995. 'Change in the relative distribution of indigenous employment by industry, 1986–91', *CAEPR Discussion Paper No. 96*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Taylor, J. and Roach, L. 1994. 'The relative economic status of indigenous people in New South Wales, 1986–91', CAEPR Discussion Paper No. 55, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Treadgold, M.L. 1988. 'Intercensal change in Aboriginal incomes, 1976–1986', Australian Bulletin of Labour, 14 (4): 592–609.



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