



THE AUSTRALIAN NATIONAL UNIVERSITY

**Centre for  
Aboriginal  
Economic  
Policy  
Research**



**The relative economic status of  
indigenous people in Victoria,  
1991 and 1996**

**J. Taylor**

**No. 174/1998**

**Discussion Paper**

## Series Note

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- 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.

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October 1998

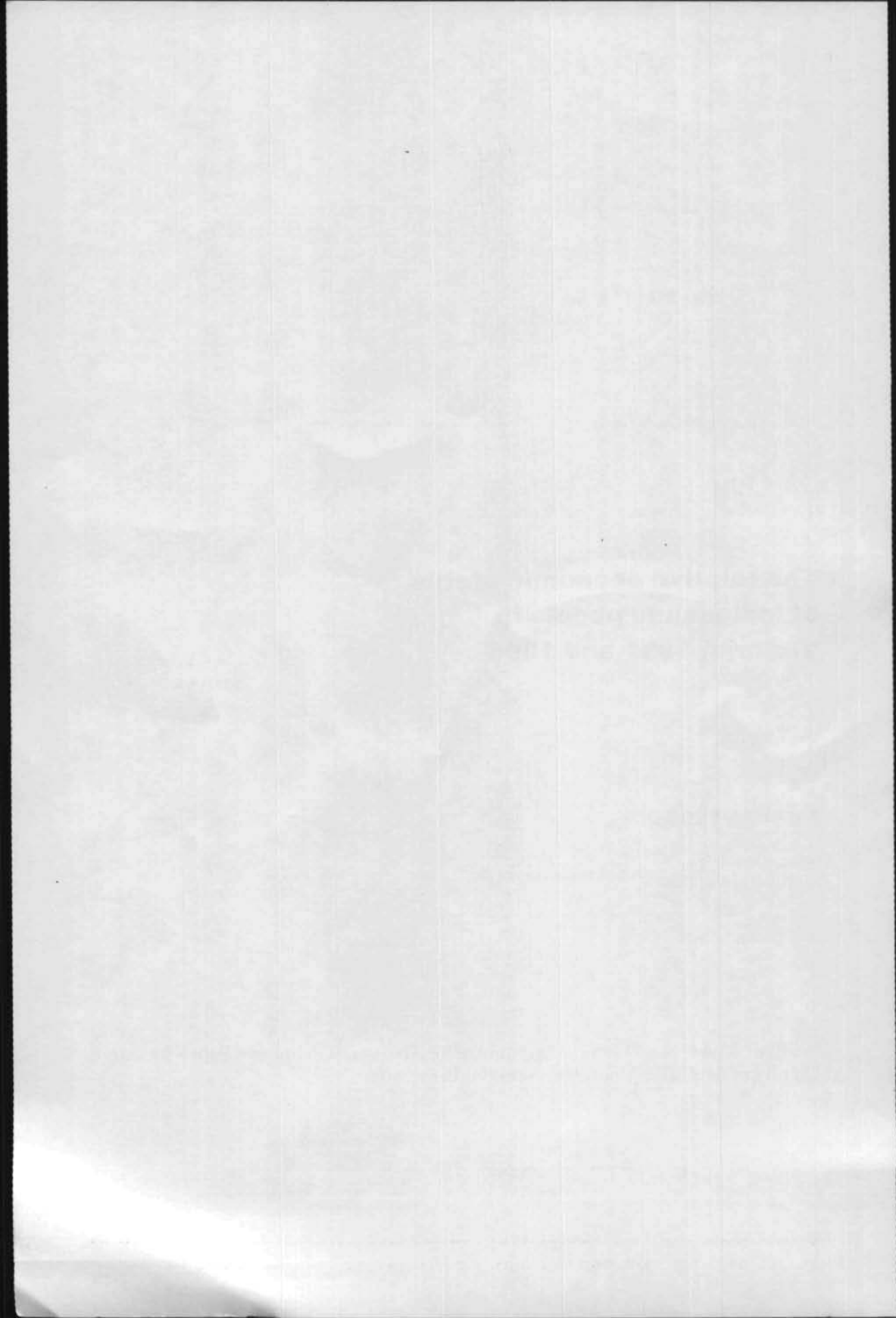
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ISSN 1036-1774  
ISBN 0 7315 2609 0

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Faculty of Arts, The Australian National University.

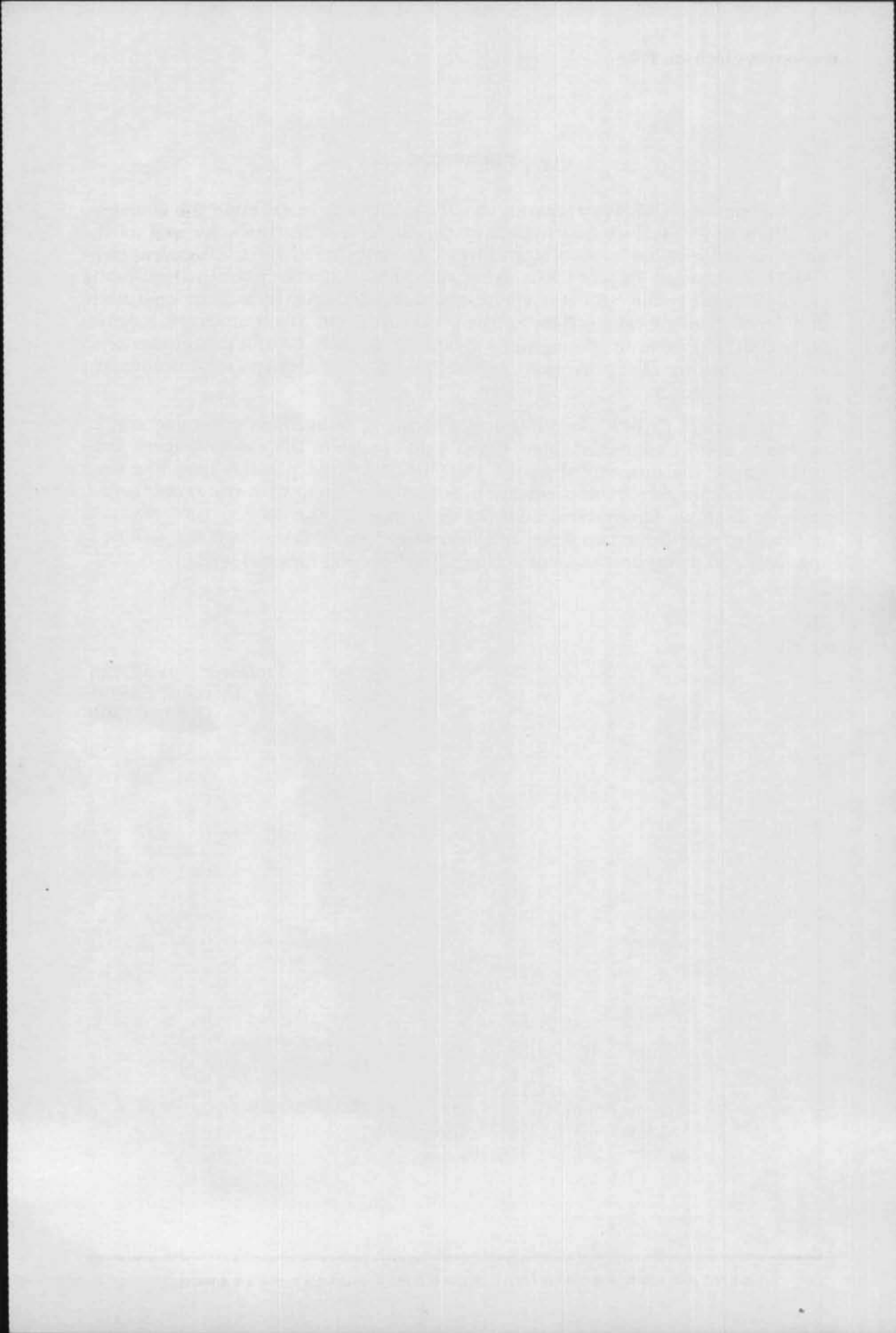


## Foreword

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 1986-91. 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 Victoria, 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.

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

- The number of indigenous people recorded as employed increased, the employment rate was higher and the unemployment rate was lower but the gap in these indicators with the rest of the population remained the same.
- Employment growth, especially in non-metropolitan areas, was largely related to an expansion of participation in the Community Employment Development Projects (CDEP) scheme. 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 36 Job Network member agencies registered in West and Inner Melbourne, 35 in East Melbourne, 19 in Geelong, 18 in the Central Highlands, and 13 in Gippsland. Many of these involve the same agencies servicing multiple branches, but only one (in Mildura and also servicing Swan Hill and Robinvale) 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 might be generated, an important consideration in Victoria is the greater concentration of indigenous people in rural and often remote locations as well as in economically depressed country towns. As for those in Melbourne, 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. For example, the retailing, manufacturing, hospitality, finance, construction and transport industries.

This lack of penetration in leading urban employment sectors raises questions about the effectiveness of job programs and the prospect that a wider range of industry strategies targeted at typically metropolitan jobs may be required. Clearly, some focus on the special needs of the city-based population is necessary given the much larger population presence in Melbourne 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**

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 Linda Roach greatly assisted with the initial analysis of intercensal changes in census characteristics. Editorial assistance was provided by Hilary Bek and Linda Roach, and layout by Jennifer Braid.

## ORIGINAL ARTICLES

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION  
PUBLISHED WEEKLY  
CHICAGO, ILL., MAY 1, 1919  
Vol. 27, No. 19  
CONTENTS  
ORIGINAL ARTICLES  
The Journal of the American Medical Association  
Published Weekly  
Chicago, Ill., May 1, 1919  
Vol. 27, No. 19  
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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 Victoria indicated no change in the indigenous employment rate and a rise in the unemployment rate with both of these remaining substantially below equivalent rates for the non-indigenous population (Taylor and Roach 1994: 7). Also of note was a lack of improvement in income relativities with the proportion of the adult population dependant on non-employment sources of income rising from 26 per cent to 29 per cent. 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 Victoria 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 Victoria reduced to three components by amalgamating data for bounded localities and the rural balance to create a single 'rural' category (0-999 persons).<sup>1</sup> Although this represents an oversimplification of the settlement hierarchy, it is validated by the fact that residence in urban, as opposed to 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 21,515 indigenous people were counted in Victoria, an increase of 4,778 or 29 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 22,574 which was 11 per cent higher than the 20,434 expected on the basis of ABS medium series experimental projections from the 1991 Census (ABS 1996b: 16; 1998b: 10). Compared to most other jurisdictions, especially the adjoining States of New South Wales and Tasmania, this gap between the expected and the recorded population in 1996 was relatively small (Taylor 1997b: 4).

One of the features of the distribution of Victoria's enumerated indigenous population over the two decades to 1991 was a gradual increase in the proportion counted in Melbourne and a requisite decrease in the share counted in country urban centres and rural areas. (Taylor and Roach 1994: 4; Maher and Caldwell 1997: 110-11). For example, over 70 per cent of the indigenous population was located in non-metropolitan Victoria in the early 1960s, but by 1991 this proportion had fallen to 55 per cent with 45 per cent in Melbourne. 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 continued (Table 1). Comparison of census counts in 1991 and 1996 reveals that the rate of population increase was highest in major urban areas (35 per cent). As a consequence, Melbourne and Geelong accounted for a growing share of the State's indigenous population (47 per cent in 1996, up from 45 per cent in 1991). Nonetheless, this means that the majority of indigenous people counted in Victoria still remain located in other urban centres scattered across the State (40 per cent) while 14 per cent are in small rural localities.

As far as the relatively higher population growth in Melbourne is concerned, this was not due to net migration gain from other parts of Victoria or from interstate. Between 1991 and 1996, the indigenous population of Melbourne experienced a net migration loss of 300 persons, with 60 per cent of this loss going to other States. This net movement out of Melbourne was more than double that recorded for the previous intercensal period (Taylor and Bell 1996: 401). The fact that population growth in the city was still relatively high, despite increased



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 Melbourne's indigenous population, at 7 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. These are considered to be operative in Victoria generally, but in Melbourne in particular: an increased propensity on the part of individuals to declare indigenous status on the census form; the population expansionary effects 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).

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

	1991		1996		1991-96	
	No.	Per cent	No.	Per cent	Net change	Per cent change
Major urban	7,471	44.6	10,095	46.9	2,624	35.1
Other urban	6,852	40.9	8,481	39.4	1,629	23.8
Rural	2,414	14.5	2,939	13.7	525	21.7
Total	16,737	100.0	21,515	100.0	4,778	28.5

### 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 Melbourne which accounts for more than two-thirds of the Victorian population.

**Table 2. Change in non-indigenous population by section-of-State: Victoria, 1991-96**

	1991		1996		1991-96	
	No. (million)	Per cent	No. (million)	Per cent	Net change	Per cent change
Major urban	2.88	68.1	2.96	68.4	84,918	2.9
Other urban	0.79	18.7	0.83	19.2	41,640	5.3
Rural	0.55	13.2	0.54	12.4	-13,883	-2.5
Total	4.22	100.0	4.33	100.0	112,675	2.7

The fact that the highest growth of the majority population occurred in non-metropolitan urban centres contrasts with the situation observed for indigenous people and reflects to some extent counterurbanisation flows out of Melbourne as well as the expansion of population on the metropolitan fringe (Hugo 1996; Maher and Caldow 1997: 12–28). Much starker contrast with the pattern of indigenous population change is provided by the general loss of population in rural areas. As a consequence, the over-representation of indigenous people in rural areas has been strengthened.

## **The working-age population, 1991 and 1996**

The 1996 Census count of indigenous people aged 15 years and over revealed an increase of 28 per cent since 1991, from 10,288 to 13,136. This rate of increase was far greater than the 2 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, 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.<sup>2</sup>

As indicated in Table 3, this procedure raises the 1991 working-age population from the 10,288 revealed in the census count to an estimate of 12,696. The 1996 estimated population is also higher at 13,863. Thus, the estimated increase in the indigenous working-age population over the intercensal period was only 1,167 or 9.2 per cent, though this is still substantially above the estimated growth of around 4 per cent recorded for the non-indigenous adult population. The key policy implication of this differential 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.

**Table 3. Estimated population aged 15 years and over: indigenous and non-indigenous people in Victoria, 1991 and 1996**

	1991	1996	1991-96	
			Net change	Per cent change
Indigenous	12,696	13,863	1,167	9.2
Non-indigenous	3,466,070	3,598,934	132,864	3.8

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

## 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 Victoria (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: Victoria, 1991 and 1996**

	Indigenous		Non-indigenous	
	1991 (1)	1996 (1)	1991 (2)	1996 (2)
Employment rate	46.2	48.0	64.6	65.7
Unemployment rate	27.4	21.2	12.0	9.5
Participation rate	63.6	60.9	73.4	72.6
Ratios (1/2):				
Employment rate	0.72	0.73		
Unemployment rate	2.28	2.24		
Participation rate	0.87	0.84		

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) remained unaltered between 1986 and 1991 at 46 per cent (Taylor and Roach 1994: 7). In 1996, the rate had risen slightly to 48 per cent (Table 4). Because the employment rate for the non-indigenous population was also higher in 1996, the gap between indigenous and non-indigenous rates recorded by the census remained essentially the same as indicated by the ratio of rates for the two populations at 0.72 in 1991 and 0.73 in 1996 (Table 4). Thus, the key feature of indigenous employment status is the fact that it remains substantially below the State average at less than three-quarters of the level recorded for non-indigenous adults. At the same time, this lack of relative change should be viewed against the



background of sustained higher growth in the indigenous population of working age.

Not surprisingly, given a rise in the employment rate, the census-derived indigenous unemployment rate was lower in 1996, at 21 per cent, compared to 1991, at 27 per cent (Table 4). However, once again, this was in line with the trend generally in the State and the non-indigenous unemployment rate was also lower in 1996 (9 per cent compared to 12 per cent). As a consequence, the unemployment level among indigenous people relative to that of the rest of the population remained 2.2 times higher.

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 (61 per cent) compared to 1991 (64 per cent) and thus fell further behind relative to the rest of the population from 0.87 in 1991 to 0.84 in 1996 (Table 4). This effectively means that more than one-third of all indigenous adults are neither working nor actively seeking work compared to only one-quarter of all other adults. It also suggests that any employment gains are 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 among indigenous persons aged 15 years and over was 53 per cent higher at the 1996 Census compared to the previous census. In 1991, a total of 1,655 adults were recorded as attending an educational institution compared to 2,531 in 1996. This increase was sufficient to slightly raise the proportion of the census-identified adult population in attendance at educational institutions from 16.1 per cent to 19.3 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, partly because rural employment figures were inflated by the inclusion of participants in the Lake Tyers Community Development Employment Projects (CDEP) scheme. This pattern of labour force status by section-of-State was still evident in 1996.

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 eight 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 was recorded in urban centres. Also of note is the fact that indigenous employment growth was positive in rural areas even though non-indigenous rural residents experienced a net decline in employment. This variation no doubt reflects the expansion of the CDEP scheme in rural communities.

**Table 5. Employment change among indigenous and non-indigenous Australians by section-of-State: Victoria, 1991-96**

	Per cent employed		Change	
	1991	1996	Net	Per cent
Indigenous				
Major urban	53.5	54.5	777	33.3
Other urban	31.3	31.3	420	30.7
Rural	15.2	14.2	146	22.0
Total	100.0	100.0	1,343	30.7
Non-indigenous				
Major urban	69.8	70.2	57,576	4.6
Other urban	17.0	17.3	18,722	6.2
Rural	13.2	12.4	-5,832	-2.5
Total	100.0	100.0	70,466	4.0

At the time of the 1991 Census, a total of 109 indigenous people were registered with the Aboriginal and Torres Strait Islander Commission as participants in the State's sole CDEP scheme at Lake Tyers. By 1996, the total number of participants had grown to 355 while the number of individual schemes had increased to 11. Most of the growth in participant numbers was accounted for by the establishment of schemes in urban centres. In 1996, five CDEP schemes were located in urban settings in Melbourne, Bairnsdale, Shepparton, Swan Hill and Warrnambool and these accounted for 226 participants (63 per cent of the State total). The question of how many of these participants were recorded by the census as employed and what impact 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 by section-of-State is shown in Tables 6 and 7. Among indigenous adults, the greatest shift, in terms of a higher employment rate and lower unemployment rate, occurred in urban areas, especially away from Melbourne. Despite this, the poorest indigenous labour force status is still recorded in non-metropolitan urban centres, a pattern which is repeated among the non-indigenous labour force (Table 7).



**Table 6. Labour force status of indigenous Australians by section-of-State and gender: Victoria, 1991 and 1996**

	Major urban		Other urban		Rural		Total	
	1991	1996	1991	1996	1991	1996	1991	1996
Males								
Employment rate	58.7	59.4	45.3	48.8	59.7	57.5	54.0	55.4
Unemployment rate	24.5	19.5	39.3	30.4	24.3	19.4	29.7	23.2
Participation rate	77.8	73.8	74.7	70.0	79.0	71.4	76.9	72.1
Females								
Employment rate	44.7	46.2	31.2	34.0	40.6	42.1	38.8	41.1
Unemployment rate	20.4	17.0	31.5	21.1	18.5	18.8	24.1	18.5
Participation rate	56.1	55.6	45.5	43.1	49.8	51.8	51.1	50.4

As for gender differences, the employment rate for indigenous females remains substantially below that of indigenous males, especially outside Melbourne, 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 Victoria as they also fall considerably behind their non-indigenous counterparts with an overall employment rate at less than three-quarters that of other women in the State and an unemployment rate which is more than twice as high. Furthermore, half of all indigenous women remain outside of the labour force compared to around one-third of other women and one-quarter of indigenous men.

**Table 7. Labour force status of non-indigenous Australians by section-of-State and gender: Victoria, 1991 and 1996**

	Major urban		Other urban		Rural		Total	
	1991	1996	1991	1996	1991	1996	1991	1996
Males								
Employment rate	72.7	73.5	72.7	72.6	75.1	75.0	73.0	73.5
Unemployment rate	13.0	9.9	13.1	11.3	11.0	8.7	12.8	10.0
Participation rate	83.6	81.5	83.7	81.9	84.4	82.2	83.7	81.7
Females								
Employment rate	56.9	58.9	52.3	54.2	56.9	58.7	56.1	58.0
Unemployment rate	11.3	8.8	11.4	9.9	8.9	7.2	11.0	8.8
Participation rate	64.2	64.5	59.1	60.2	62.5	63.3	63.1	63.6

Overall, the key policy point to arise from these data is that the shift in indigenous labour force status has been more or less in line with the rest of the

population. Consequently the economic differentials remain largely unchanged with outcomes for indigenous people still substantially behind those recorded for the non-indigenous population regardless of sex and location.

## **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 1,348 people in work, constituting a growth of 30 per cent since 1991 (6 per cent per annum). This apparent growth occurred at a time when overall employment in Victoria increased by only 0.8 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.<sup>3</sup>

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 4,422 to an estimated 5,426. 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 6,089. Using this adjusted estimate of 1991 employment as the new base, the intercensal rise in the number of indigenous people employed becomes only 663 representing a increase of 12 per cent. This is a much lower (and more realistic) growth rate than the 30 per cent increase obtained from a direct comparison of 1991 and 1996 Census count data. 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 Victoria, 1991 and 1996**

	1991		1996
	Census count	Estimate from reverse survival	ERP
Population aged 15+	10,288	12,696	13,863
Employed	4,422	5,426	6,089

### 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 the *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 established for Victoria 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 one 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 drawn largely from rural-based schemes, the same ratio can be applied to participant numbers for the Lake Tyers scheme to derive an estimate of 65 CDEP employees in 1991. In urban schemes, other case studies suggest a higher ratio of 80:20 working/non-working participants (Smith 1994a, 1995, 1996). If this ratio is applied to those urban-based schemes operating at the time of the 1996 Census then, altogether in 1996, an estimate of 258 CDEP scheme employees is derived (Table 9). Subtraction of these 1991 and 1996 estimates of CDEP scheme employment from total employment in each year produces estimates of non-CDEP scheme employment (Table 9). This is shown to have risen by 9 per cent from 5,361 to 5,831.

**Table 9. Estimates of mainstream indigenous employment Victoria, 1991 and 1996**

	1991	1996
Total employed	5,426 <sup>a</sup>	6,089 <sup>b</sup>
Employed in CDEP	65 <sup>c</sup>	258 <sup>d</sup>
Employed in non-CDEP	5,361	5,831
Employed in labour market programs	123 <sup>e</sup>	810 <sup>f</sup>
Employed in mainstream	5,238	5,021
Mainstream employment/population ratio	41.2	36.2
Net change in mainstream employment	-217 (-0.8 per cent per 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.

c. Based on a ratio of 60:40 working to non-working participants.

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.

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. 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 fall in mainstream employment of 217 positions representing a rate of decline of 0.8 per cent per annum. With growth in the estimated working-age population at 1.8 per cent per annum, this lag in employment growth resulted in a substantial drop in the mainstream employment/population ratio from 41.2 to 36.2.

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 0.65 in 1991 to 0.57 in 1996.<sup>4</sup> The policy message from this is clear. Without the prop of program intervention in the labour market, the indigenous employment rate in Victoria would have been far below the level recorded by the 1996 Census and just over half that 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 equivalent 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 at least commensurate with those of the general population.

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).<sup>5</sup> 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. Annual income distribution of indigenous and non-indigenous adults: Victoria, 1996**

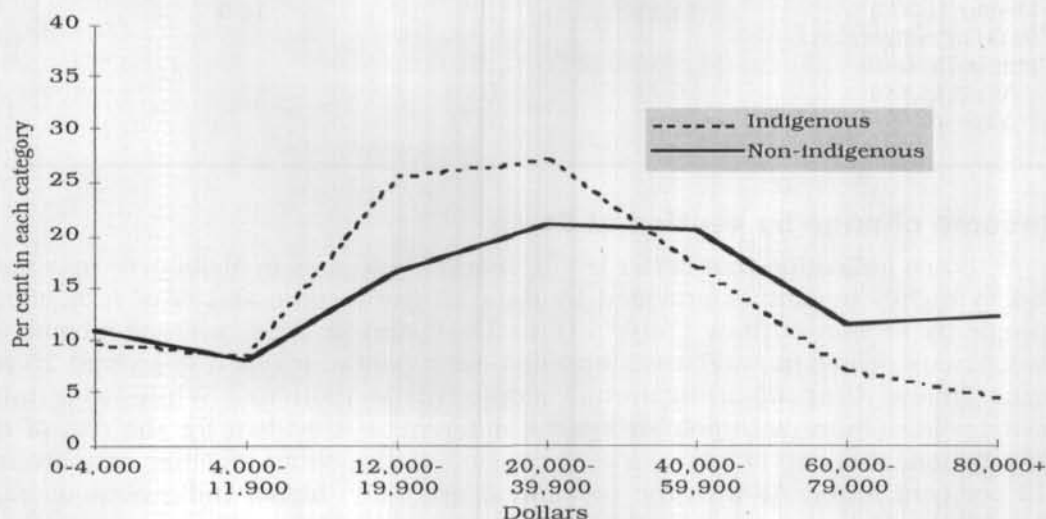


Figure 1 describes the relative income distribution for indigenous adults in Victoria in 1996. Clearly, the bulk of indigenous incomes are clustered at the lower end of the distribution with as much as 44 per cent of individuals in receipt of incomes of less than \$20,000 and a relatively small share (28 per cent) with incomes over \$40,000. This contrasts markedly with the income distribution

pattern for all other adults with only 35 per cent receiving incomes below \$20,000 and 44 per cent over \$40,000.

Surprisingly, given the lack of improvement in labour force status, the census indicates some narrowing of the income gap between indigenous and non-indigenous adults. Mean income for the indigenous adult population in 1996 was \$16,600, up from \$13,900 in 1991. This produces a ratio of mean indigenous income to that for the rest of the population of 0.75 in 1996, which is higher than the ratio of 0.72 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 trend. Notwithstanding this positive shift, indigenous incomes remain, on average, at only three-quarters of the level reported generally in Victoria.

**Table 10. Income status of indigenous and non-indigenous Australians: Victoria, 1991 and 1996**

	Individual income			
	Indigenous		Non-indigenous	
	1991	1996	1991	1996
Mean (\$000)	13.9	16.6	19.2	22.1
Median (\$000)	11.1	12.5	16.5	17.7
Ratio of indigenous/ non-indigenous				
Mean (\$000)	0.72	0.75		
Median (\$000)	0.67	0.71		

### Income change by section-of-State

Some indication that better labour market outcomes in Melbourne may have led to higher income is provided by data on the income status of indigenous people by section-of-State (Table 11). In 1991, and in 1996, average income for indigenous people in rural areas and non-metropolitan towns was around 20 per cent below that of indigenous people in Melbourne. While a similar metropolitan/non-metropolitan income differential is evident for the rest of the population, this gap is less marked with non-metropolitan incomes only around 12 per cent lower. As with the population generally, higher indigenous average income in Melbourne no doubt reflects the greater diversity of metropolitan economic activity and the relative concentration of higher status occupations, although for indigenous people it may also reflect the fact that much employment growth away from Melbourne has been due to increased CDEP scheme participation which generates only part-time work with salaries tied to Newstart allowance.

**Table 11. Income status of indigenous and non-indigenous Australians by section-of-State: Victoria, 1991 and 1996**

	Individual income							
	Major urban		Other urban		Rural		Total	
	1991	1996	1991	1996	1991	1996	1991	1996
Indigenous								
Mean (\$000)	15.5	18.4	12.3	14.7	12.7	15.5	13.9	16.6
Median (\$000)	12.7	14.3	10.0	11.5	10.0	10.7	11.1	12.6
Non-indigenous								
Mean (\$000)	20.0	23.1	17.2	19.5	17.4	20.2	19.2	22.1
Median (\$000)	17.3	18.7	15.1	15.9	14.1	15.7	16.5	17.7
Ratio of indigenous/ non-indigenous								
Mean (\$000)	0.78	0.79	0.72	0.75	0.73	0.77	0.72	0.75
Median (\$000)	0.73	0.77	0.66	0.72	0.71	0.68	0.67	0.71

**Table 12. Income status of indigenous and non-indigenous Australians by sex: Victoria, 1991 and 1996**

	Individual income					
	Males		Females		Total	
	1991	1996	1991	1996	1991	1996
Indigenous						
Mean (\$000)	16.0	18.9	11.8	14.5	13.9	16.6
Median (\$000)	13.8	14.1	9.6	11.7	11.1	12.6
Non-indigenous						
Mean (\$000)	23.9	27.7	14.2	16.6	19.2	22.1
Median (\$000)	21.2	23.4	11.4	12.8	16.5	17.7
Ratio of indigenous/ non-indigenous						
Mean (\$000)	0.67	0.68	0.83	0.88	0.72	0.75
Median (\$000)	0.65	0.60	0.84	0.91	0.67	0.71

**Income change by sex**

As in 1991, the 1996 Census reveals a substantial income differential between indigenous males and females in Victoria (Table 12), though the gap in average incomes (\$18,900 for males and \$14,500 for females) is far less than among their non-indigenous counterparts (\$27,700 for males compared to \$16,600 for females). One implication is that the ratio of average income for indigenous males compared to that of non-indigenous males (0.68) is far lower than the equivalent ratio between indigenous females and other females (0.88), while the gap between female incomes also narrowed considerably.

**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 little change in the contribution of employment income to total income. In 1991, 71.5 per cent of income for indigenous people was derived from employment. By 1996, this proportion had barely risen to 72 per cent. Compared to the equivalent figure of 88 per cent for the non-indigenous population this means that a far higher proportion of indigenous people (28 per cent compared to 12 per cent) remain dependant on non-employment sources of income.

**Table 13. Total income of indigenous and non-indigenous Australians by labour force status: Victoria, 1991 and 1996**

	1991		1996	
	Income (\$million)	Per cent	Income (\$million)	Per cent
Indigenous				
Employed	84.3	71.5	135.1	72.0
Unemployed	12.0	10.2	12.3	6.6
Not in labour force	21.6	18.3	40.1	21.4
Total	117.9	100.0	187.5	100.0
Non-indigenous				
Employed	42,758.9	88.0	53,230.7	88.7
Unemployed	1,782.4	3.7	1,496.1	2.5
Not in labour force	4,066.1	8.4	5,266.7	8.8
Total	48,607.4	100.0	59,993.5	100.0

While this levelling off in the share of income from employment halts a long-term trend of a decline in employment income relative to total income noted for indigenous Australians (Daly and Hawke 1993), it also signals that increased employment alone is not sufficient to enhance income status. Of equal importance to job creation is the nature of the work involved and the income it generates. It could be argued, for example, that the proportion of total income derived from employment should be lower by an amount equivalent to the notional citizen entitlements attached to CDEP participation 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 0.83. As for non-employment income, the mean individual income of unemployed indigenous people in 1996 was \$8,420 and \$9,490 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 considerably.

**Table 14. Mean employment/non-employment income of indigenous and non-indigenous Australians: Victoria, 1991 and 1996**

Labour force status	Mean income (\$000)		Change	
	1991	1996	Net	Per cent
Indigenous				
Employed	20.37	24.36	4.0	19.6
Unemployed	8.15	8.42	0.3	3.3
Not in labour force	7.69	9.49	1.8	23.5
Total	13.98	16.69	2.7	19.4
Non-indigenous				
Employed	24.91	29.42	4.5	18.1
Unemployed	8.22	8.06	-0.2	-1.9
Not in labour force	6.87	7.40	0.5	7.7
Total	19.24	22.17	2.9	15.2
Ratio of indigenous/ non-indigenous				
Employed	0.82	0.83	0.01	1.2
Unemployed	0.99	1.04	0.05	5.3
Not in labour force	1.12	1.28	0.16	14.6
Total	0.73	0.75	0.03	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.

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.<sup>6</sup> 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 Victoria. 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 the State. 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, the employment rate is higher and unemployment rate lower but there has been no closing of the gap in these indicators with the rest of the population. 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 an expansion of the CDEP scheme. Overall, other government labour market programs under the now defunct *Working Nation*



initiatives also contributed. The indication is that growth in mainstream, or non-program linked employment, lagged behind population growth and that the true level of indigenous employment fell to almost 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.

A growing reliance on labour market programs to keep up with employment demand from population growth 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 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 non-metropolitan Victoria 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 36 Job Network member agencies registered in West and Inner Melbourne, 35 in East Melbourne, 19 in Geelong, 18 in the Central Highlands, and 13 in Gippsland. Many of these involve the same State-wide agencies servicing multiple branches, but only one (in Mildura and also servicing Swan Hill

and Robinvale) 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 Victoria is the greater concentration of indigenous people in non-metropolitan parts of the State, especially in economically depressed country towns. As for those resident in Melbourne, 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. For example, the retailing, manufacturing, hospitality, finance, construction and transport industries (Taylor and Liu Jin 1995; Taylor and Liu 1996). This lack of penetration in leading urban employment sectors raises questions about the effectiveness of job programs and the prospect that a wider range of industry strategies targeted at typically metropolitan jobs may be required. Clearly, some focus on the special needs of the city-based population is necessary given the much larger population presence in Melbourne than previously indicated.

For all regions, though, it is important to ask how the broad strategy of raising employment levels might be targeted to suit particular 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.

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. 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. This places the policy focus firmly back on to skills development.

## Notes

1. The ABS sections-of-State within Victoria are as follows: 'major urban' (Melbourne and Geelong); '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.
2. A net migration loss to the total indigenous population of Victoria of 516 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 2,294 non-indigenous persons were in such programs in 1991 and 20,486 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.

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