

**Public Expenditure on Services for
Indigenous People**
Education, Employment, Health and Housing

Max Neutze

Will Sanders

Giff Jones

Number 24
September 1999

THE AUSTRALIA INSTITUTE

**Public Expenditure on Services for
Indigenous People**
Education, Employment, Health and Housing

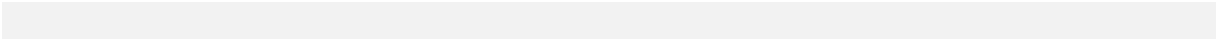
Max Neutze

Will Sanders

Giff Jones

Discussion Paper Number 24
September 1999

ISSN 1322-5421





Contents

Tables	v
Acknowledgements	vii
Abbreviations	ix
Executive Summary	xi
1. Introduction	1
1.1 Why the study has been undertaken	1
1.2 Indigenous disadvantage and government services	3
2. Education	5
2.1 Introduction	5
2.2 Indigenous disadvantage	5
2.3 Method	6
2.4 Results	10
2.5 Discussion	16
2.6 Assumptions and data sources	17
2.7 Sources of data	19
3. Employment	21
3.1 Gross levels of expenditure	21
3.2 Expenditure per unemployed person	24
3.3 Need and disadvantage	26
3.4 Discussion	28
4. Health	31
4.1 Introduction	31
4.2 Data issues	31
4.3 Publicly funded health services: a brief overview	32
4.4 Indigenous demand for, and usage of, health services	32
4.5 Discussion	38
5. Housing	39
5.1 Introduction	39
5.2 Indigenous disadvantage	40
5.3 Method	42
5.4 Public housing	43

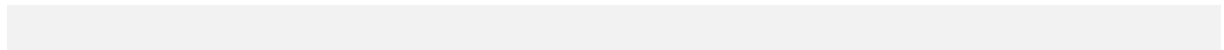
5.5 Community housing	46
5.6 Rent Assistance	49
5.7 Owner occupation	51
5.8 Discussion	55

Appendices

Appendix A Issues relating to Methods and Measurement	57
--	-----------

Appendix B Other Programs	65
----------------------------------	-----------

References



Tables

1.1 Commonwealth Expenditure on Indigenous-Specific Programs, 1995-96	4
2.1 Estimated Public Expenditure per Student from General Funds, 1995-96	11
2.2 Expenditure per Person on ABSTUDY and AUSTUDY, 1995-96	11
2.3 Estimated Public Expenditure per Student, 1995-96 (including ABSTUDY, AUSTUDY and AIC; excluding special Indigenous programs)	12
2.4 Estimated Public Expenditure per Student (including ABSTUDY, AUSTUDY, AIC and specific Indigenous programs)	13
2.5 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (excluding ABSTUDY, AUSTUDY, AIC and special Indigenous programs)	13
2.6 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (including ABSTUDY, AUSTUDY and AIC; excluding specific Indigenous programs)	15
2.7 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (including ABSTUDY, AUSTUDY, AIC and specific Indigenous programs)	15
3.1 Employment Program Expenditure 1995-96	22
3.2 Commencements And Expenditures in DEETYA/CES General Programs 1995-96	23
3.3 Estimated Employment Program Expenditure per Unemployed 1995-96	26
3.4 Labour Force Status and Employment Need/Disadvantage Indicators of Persons Aged 15+	27
3.5 Duration of Unemployment Payments (June 1997)	28
4.1 Gross Expenditures per Person, Indigenous and non-Indigenous People, Through Publicly Subsidised Health Programs, 1995-96	33
4.2 Net Public Expenditures per Person by Type of Health Service, 1995-96	34
4.3 Gross Expenditure per Person, Indigenous and non-Indigenous People, Through Publicly Subsidised Health Programs, 1995-96	36
5.1 Estimated Rebates to Indigenous and non-Indigenous Public Housing Tenants at Different Levels of Household Income, 1996	44
5.2 Tenure Distribution of Indigenous and non-Indigenous Households at Different Levels of Household Income, 1996	45
5.3 Estimated Rebates to Indigenous and non-Indigenous Community Housing Tenants at Different Levels of Household Income, 1996	48

5.4 Rental Assistance per Indigenous and non-Indigenous Household	50
5.5 Financial Assistance to Renters per Indigenous and non-Indigenous Household (\$ per annum per total household)	51
5.6 Benefits to Indigenous and non-Indigenous Households from Housing-Related Public Expenditure Including Tax Expenditure	54

Acknowledgements

We are grateful to a number of people and organisations that provided assistance in the preparation of this paper. The Commonwealth Department of Family and Community Services provided data on the recipients of rent assistance, including those who identified as Indigenous. The Department of Employment, Workplace Relations and Small Business provided data about participation in labour market programs and the number who identified as Indigenous, while the Department of Education, Training and Youth Affairs responded to a number of queries about education programs. Mark Witham, a PhD student at James Cook University, provided unpublished data on his estimate of the implicit funding model used in funding school education in South Australia and also provided valuable comments on a draft of the education chapter. Michael Long of the Australian Council for Educational Research made available data on the age distribution of Indigenous students enumerated in the 1996 Census. Roger Jones provided data on estimates of the rent rebates for Indigenous and non-Indigenous households.

The work of John Deeble and his colleagues on expenditure on Indigenous and non-Indigenous health provided a model for our work and almost all the data we needed for the health chapter. John also provided comments on that chapter. Professors Jon Altman and Glenn Withers, both of the Australian National University, refereed the paper and provided valuable comments. Finally we are indebted to many people in State departments of education and of Indigenous affairs for responding to our questions about their policies. Neither the Australia Institute nor any of the above people are responsible for any of the views put forward. These are solely the responsibility of the authors.



Abbreviations

ABS	Australian Bureau of Statistics
ABSTUDY	Aboriginal Study Assistance Scheme
ABTA	Aboriginal Benefits Trust Account
AHS	Aboriginal Health Service
AIC	Assistance to Isolated Children
AIHW	Australian Institute of Health and Welfare
ATSIC	Aboriginal and Torres Strait Islander Commission
AUSTUDY	Australian Study Assistance Scheme
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Projects
CES	Commonwealth Employment Service
CGC	Commonwealth Grants Commission
CHO	Community Housing Organisation
DEETYA	Department of Employment, Education, Training and Youth Affairs
DFACS	Department of Family and Community Services
DSS	Department of Social Services
ERP	Estimated Resident Population
NATSIS	National Aboriginal and Torres Strait Islander Survey
ILC	Indigenous Land Corporation
NSWCCG	NSW Council on the Cost of Government
PBS	Pharmaceutical Benefits Scheme
RA	Rent Assistance
SIF	Special Indigenous Form



Executive summary

One of the more controversial public debates of recent years has been about the amount of public funds being expended for the benefit of Aboriginal and Torres Strait Islander people. Some have asserted that too much is being spent on Indigenous people in comparison with other needy sectors of the Australian community, while others have pointed to the very substantial disadvantages which Aboriginal and Torres Strait Islander people continue to face and the need for a special effort to help them overcome those disadvantages.

Unfortunately, reliable and comprehensive data on which to base an informed debate on this important issue has been seriously lacking. This study goes some way towards addressing that deficiency. It concentrates on education, health, housing and employment, which are the traditional “big four” priority areas for the Commonwealth Government’s programs specifically for Indigenous people. It seeks to encompass general programs as well as those specifically for Indigenous people, including, where possible, State and Territory programs in addition to those funded by the Commonwealth.

The study is concerned primarily with establishing, to the extent possible with the information available, the proportion of public funding in the areas under study that is spent for the benefit of Aboriginal and Torres Strait Islander people. It also seeks to put the results in the broad context of Indigenous need, which for the purpose of this paper is taken essentially to signify the additional effort (if any) required to bring outcomes for Indigenous people to comparable overall levels with the Australian population as a whole. This is, of course, a considerable simplification of what is a very complex subject in itself; a fuller treatment of the concept of need would have to take account of many other factors than spending levels, including the diversity of the circumstances and aspirations of Indigenous people. Such an analysis lies beyond the scope of this paper.

The authors ask that such conclusions as they have drawn about the relationship between spending levels and levels of need be read against this background.

A further note of caution. For a number of reasons, including differences and limitations in data availability, different methods have had to be used to analyse each of the four sectors covered. This needs to be borne in mind when comparing the results of each part of the study.

Principal findings

Education

1. Public expenditure on education for Indigenous persons in the most relevant age groups (3-24) is 18 per cent higher per capita than for non-Indigenous persons.
2. This is a more appropriate measure of benefits than the ratio of expenditure per student (where the margin is 43 per cent), because of the significantly lower retention rates of Indigenous students in the schooling system, and their lower participation in higher education which reduce the benefits received by Indigenous people.
3. A number of significant factors are contributing to a higher than average outlay on education for Indigenous people, including location (per capita costs of delivering

education services are higher in rural and remote locations) and lower than average incomes, leading to greater average needs for assistance to students.

4. Equity considerations require that there be additional expenditure on the education of those who are most disadvantaged educationally.
5. The authors conclude that, against the background of significant disadvantage and pressing need, an additional 18 per cent expenditure per head on the education of Indigenous people can be seen as a very modest contribution to reducing the disadvantage.

Employment

1. Public expenditures on employment programs – or, more accurately, programs for the unemployed – are of the order of 48 per cent higher per unemployed Indigenous person than per unemployed non-Indigenous person.
2. At least part of this difference would seem to be attributable to such factors as high levels of long term unemployment, and higher average costs of the general employment programs in which Indigenous people participate. Census figures show that Indigenous people are around four and a half times more likely to be unemployed than non-Indigenous people.
3. A significant proportion of public expenditure in this category on Indigenous people is for the Community Development Employment Projects (CDEP) scheme, which is essentially a work-for-the-dole program. Its objectives include community development as well as employment and support for the unemployed.
4. The authors conclude that, given the acute differences in employment need and disadvantage between Indigenous and non-Indigenous Australians, the size of the task ahead to provide employment opportunities for a rapidly expanding Indigenous population of working age, and the multiple objectives of CDEP, the margin is not excessive.

Health

1. A major study undertaken for Commonwealth, State and Territory health authorities and relevant major Indigenous organisations found that, in 1995-96, per capita expenditures on publicly funded health services were 52-55 per cent higher for Aboriginal and Torres Strait Islander people than for non-Indigenous people.
2. Poverty alone is sufficient to explain the higher public expenditure per person on health services for Indigenous as compared with non-Indigenous Australians. The level of such expenditure for Indigenous people is about the same as the level for non-indigenous people with comparable incomes.
3. Much of the difference is due to the higher privately funded health expenditures by non-Indigenous people. Total health expenditure per head – privately as well as publicly funded – is only about 8 per cent higher for Indigenous people.
4. The authors conclude that, considering their much shorter life expectancy and much higher incidence of many diseases, allocation of public expenditure according to need would almost certainly put more resources into health services for Indigenous people.

Housing

1. Public assistance for housing comes through funding for public and community housing, through Rent Assistance paid to eligible tenants through the Commonwealth Department of Family and Community Services, and through the favourable tax treatment of owner-occupied housing.
2. The first category is particularly significant for Indigenous people, as a much higher proportion of Indigenous than non-Indigenous households live in public and community housing. On the other hand, non-Indigenous households benefit most from the taxation advantages of owner-occupation, and get slightly more from Rent Assistance.
3. The study estimates that, overall, the average Indigenous household gets between 8.5 and 25 per cent more in benefits from public expenditures on housing. But Indigenous households are, of course, larger on average than non-Indigenous. Expressed as benefits *per head*, the margin shifts to favour the non-Indigenous by between 9 and 21 per cent.
4. The authors conclude that, considering the much greater housing needs of Indigenous people, existing housing policies, far from being favourable to them have been, on balance, inequitable and inadequate. This would justify increased resources being put into programs directed specifically towards addressing their housing needs.

Summing up

One of the key conclusions to emerge from this study is that a focus on special programs for Indigenous people alone will provide a very misleading picture of the distribution of public expenditure between Indigenous and non-Indigenous people. A full picture must include both special programs and general programs. While Indigenous people benefit substantially more than other Australians from specific programs, they benefit substantially less from many, much bigger, general programs.

This study's detailed examination of public expenditure on education, employment, health and housing shows that on a per capita basis Indigenous Australians receive slightly more than non-Indigenous Australians in the areas of health and education, somewhat more in the area of employment, but significantly less in the area of housing. However, the advantages enjoyed by Indigenous people from public expenditure are small when compared to the disadvantages they suffer from in each of these areas.

1. Introduction

Is too much or too little being spent on public services for Indigenous Australians relative to other Australians? While that question has aroused a deal of debate in recent years, much of the argument has been based on personal perception rather than on analysis of relevant data. The inevitable result has been the generation of more heat than light on an important issue of public policy.

It has not helped matters that there has been comparatively little information available that might help sustain objective discussion. This study seeks to address that deficiency. Its aim has been to identify the extent to which Aboriginal and Torres Strait Islander people benefit from government programs, in comparison with the level of benefits received by non-Indigenous Australians, and to assess the results against differing levels of need of the two groups.

The main focus of the study is on Commonwealth and State/Territory outlays on education, health, housing and employment programs. These are the traditional “big four” among government activities directed specifically towards addressing the disadvantages suffered by Indigenous Australians, and have been identified on a number of occasions by the present Federal Government as its priority areas in Indigenous affairs. Each of the four has a chapter devoted to it, while other significant areas of public expenditure are discussed in Appendix 2. General programs as well as those specifically for Indigenous people are encompassed in the study.

It is important to understand how the concept of need has been dealt with in this paper. The assumption which underlies the analysis is essentially that Indigenous need can be represented by the additional effort (if any) required to bring outcomes for Indigenous people to comparable overall levels with the Australian population as a whole. That is clearly a simplification as other factors, not least those relating to the diversity of the circumstances and aspirations of Indigenous people, are also relevant to need. This leads, however, towards a complexity of conceptual issues and measurement problems that lie well beyond the capacity of a paper of this nature, and the reader should bear this limitation in mind when considering the analysis and the authors’ conclusions.

1.1 Why the study has been undertaken

In the public debate about the levels of public expenditure on Indigenous people in Australia, the main focus of comment has usually been on the amounts spent on programs funded by the Commonwealth specifically for Indigenous Australians. Information on such programs has been compiled and published over a number of years.¹

The figures have been used by some in the community, such as the One Nation Party, as apparent evidence of excessively favourable treatment for Indigenous people as against other

¹ The papers in which this information has appeared have had a number of titles, including *Social Justice for Indigenous Australians* and *Commonwealth Programs for Aboriginal and Torres Strait Islander Peoples*, produced by the Aboriginal and Torres Strait Islander Commission (ATSIC) for the years up to 1995-96, and statements with the titles *Addressing Priorities in Indigenous Affairs* and *A Better Future for Indigenous Australians*, presented at the time of the 1998-99 and 1999-2000 Federal budgets respectively by the Minister for Aboriginal and Torres Strait Islander Affairs, Senator the Honourable John Herron.

Australians in need. It has also been argued that some people have sought to identify as being of Aboriginal or Torres Strait Islander origin in order to qualify for additional benefits.

The real situation is, however, considerably more complex. To begin with, many of these programs have provided services that are available, in some form or other and in varying degree, to other Australians through general programs. Indigenous people may access many of these general programs, but by and large there has been only limited information available on the extent to which they have actually done so.

Further complexities arise from the shared nature of responsibilities between the various spheres of government in Australia for the provision of services to Aboriginal and Torres Strait Islander people. As for other Australians, it is to their State or Territory government, or local government where relevant, that Indigenous people must turn for a large proportion of public services – schools, hospitals, roads, utilities, emergency services, and so on. This shared responsibility has been formally recognised in the endorsement, by the Council of Australian Governments in 1992, of the *National Commitment to Improved Outcomes in the Delivery of Programs and Services for Aboriginal Peoples and Torres Strait Islanders*. As is the case with the Commonwealth's general programs, however, little hard data has been available about the extent to which Aboriginal and Torres Strait Islander people have in fact been benefiting from State and Territory programs.

It is not particularly surprising that this should be so. Until comparatively recent times, not much has been done to try and identify Aboriginal and Torres Strait Islander people in administrative data bases such as, for example, registrations of births and deaths and admissions to public hospitals. In part this has been because racial origin is, ultimately, an irrelevance in Australia as a test for eligibility for such services. Accordingly, there has been a natural reluctance to venture into sensitive ground when it was not necessary to do so. But it also reflects the fact that Indigenous people have had good cause, arising from the history of their maltreatment following European occupation, to be suspicious, and even fearful, of the motives of those with power over them who might want to put their racial origin “on the record”. Accordingly, researchers and administrators seeking to find out how Indigenous people are faring have been largely restricted to using Census data as the statistical base for their studies. This has presented a number of significant limitations.

Readiness to identify an Indigenous background is increasing, as is evidenced by the significant growth in the numbers of Australians registering as of Aboriginal and Torres Strait Islander origin in successive Censuses, and administrative data bases are also gradually improving their coverage. Nonetheless, until Deeble et al undertook their study of health expenditures on Indigenous people, published in 1998, data deficiencies had deterred most systematic analysis of actual usage of publicly funded services by Aboriginal and Torres Strait Islander people. This study seeks to build and extend on that pioneering work.

Because of the importance of Census information about the Indigenous and non-Indigenous populations, our study, to the extent data limitations have allowed, is based on analysis of expenditures around the time of the 1996 Census. Data and method issues are discussed further in individual chapters, and in Appendix 1. For example Appendix 1 points out that most of our data calculates crude average expenditures on Indigenous and non-Indigenous people without taking account of factors other than indigeneity that affect those average expenditures.

1.2 Indigenous disadvantage and government services

Government services are provided to Aboriginal and Torres Strait Islander people for essentially two broad reasons; to provide them with services to which all Australians who meet relevant eligibility criteria such as income or age are entitled, and to help them overcome their particular disadvantage.

That Indigenous people are, collectively, substantially worse off than the average Australian is well documented, showing up in such indicators as much lower life expectancies and poorer health, very high unemployment and underemployment, lower incomes, lower education levels, poorer standards of accommodation, and greater involvement with the criminal justice system. Relevant statistical data are contained in individual chapters.

The unsuitability, or inaccessibility to Indigenous people, of general programs has underlain the development of many specific programs for addressing areas of Indigenous disadvantage. Many general services are not readily accessible, or not available at all, in remote areas where many Aboriginal and Torres Strait Islander people live. But what have been broadly described as cultural reasons are also highly important. Many Indigenous people find the methods of service provision of the dominant culture alienating and intimidating, and prefer services which are provided through organisations that are under Indigenous control and which will take account of their cultural preferences. Thus much of the funding provided by the Aboriginal and Torres Strait Islander Commission (ATSIC) is channelled through community-run organisations which are the actual providers of services.

While Indigenous-specific programs provide only a proportion of the total services of government which benefit Aboriginal and Torres Strait Islander people, they provide a useful guide to the areas of disadvantage that governments have been seeking to address. In 1995-96² the breakdown by function of the Commonwealth's expenditures on such programs was in the broad proportions shown in Table 1.1.

The four categories of education, health, housing and labour and employment, which form the core areas of our study, accounted for some 63 per cent of the Commonwealth's outlays in 1995-96 on Indigenous-specific programs (though in fact our coverage is somewhat lower, as some minor programs have been excluded). It is worth noting here that these four categories cover many of the most substantial areas of government spending in Australia, including public hospitals and Medicare; pre-school, school and post-secondary education; unemployment benefits and labour market programs; and various forms of assistance for housing, including through tax expenditures.

Table 1.1 Commonwealth Expenditure on Indigenous-Specific Programs, 1995-96

² The Census was held in August 1996. The 1996-97 financial year was the first full year of the Coalition Government elected in March 1996, and was in many respects a transitional year. No publication has been produced providing comparable information for the 1996-97 financial year, comparable to that on which the table in the text is based. According to the statement *A Better Future for Indigenous Australians* made at the time of the 1999-2000 Federal Budget by the Minister for Aboriginal and Torres Strait Islander Affairs, Senator the Hon John Herron (Herron 1999), expenditures on Commonwealth programs for Indigenous people are expected to exceed \$2.2 billion during this financial year. Changes in coverage and definitions mean that this figure is not comparable with figures for earlier years. Education, health, housing and employment programs constitute some two-thirds of the total projected outlays covered in the Minister's statement.

	\$m	Per cent
Labour and employment	397	24
Housing	271	16
Education	259	15
Land, culture and recreation	177	11
Infrastructure	132	8
Health	119	7
Social security and welfare	45	3
Industry assistance and development	36	2
Law and order	35	2
General and other*	201	12
TOTAL	**1670	100

* Includes ATSIC running costs

** Subject to rounding errors

Source: Derived from *Commonwealth Programs for Aboriginal and Torres Strait Islander Peoples 1995-1996*; Handbook summary, p.22. ATSIC, Canberra 1998

The findings of the study are presented in each chapter, and are summarised in the Executive Summary.

2. Education

2.1 Introduction

The objective of this part of the study is to compare public expenditures on education, at levels from pre-school to tertiary education, on Indigenous and non-Indigenous Australians. We have sought to identify the differences in expenditure per head from general programs and the additional effect of programs that are specifically aimed at providing services to Indigenous people. In the case of Indigenous-specific programs we have also sought to distinguish, though not always to measure, the following components (which are not mutually exclusive) and to analyse their significance:

- the extent to which these programs provide services and benefits that would otherwise be provided by general programs³;
- the extent to which these programs compensate for lower expenditure per head from general programs on Indigenous people than on non-Indigenous people⁴; and
- the special needs of Indigenous people arising from such factors as lower incomes, remote location, language and other cultural differences and general social disadvantage.

Total public expenditure on education in 1995-96, including grants to private schools but excluding grants to individuals and specific programs for Indigenous students, was about \$23 billion, which included \$1.3 billion of capital expenditure. Of the \$23 billion, \$1.1 billion was on pre-schools, \$7.7 billion each on primary and secondary schools, \$2.4 billion on Technical and Further Education (TAFE) and \$4.1 billion on universities. In addition \$1.6 billion was spent on AUSTUDY and \$0.1 billion on ABSTUDY to assist secondary and tertiary students. Specific assistance for Indigenous education received \$0.16 billion. Grants to private schools totalled \$3 billion.

How do we assess whether expenditure on Indigenous education is too high, too low or about right?

Although the identified expenditure on Indigenous education was small, and much of the funds spent through ABSTUDY would, in its absence, have been spent through AUSTUDY, identified expenditure was significant per Indigenous student. A more difficult task for this chapter is to make estimates of how much of the non-identified general expenditure on education was on or for Indigenous students. The adequacy of that expenditure must be assessed in relation to the educational disadvantages which Indigenous people experience.

2.2 Indigenous disadvantage

Indigenous people are less likely to attend school and do not stay at school as long, and fewer of them go on to post-secondary education. A slightly smaller proportion of Indigenous than of non-Indigenous three and four year olds attend pre-school but attendance at primary school is almost universal among Indigenous children of the appropriate ages. Even within the ages

³ This question is discussed in more detail in Appendix 1.

⁴ This could have a number of causes, but the most obvious would be because, for cultural reasons, it is more appropriate and effective to deliver services to Indigenous people through programs that are specific to them.

where school attendance is compulsory, Indigenous children begin to drop out and beyond those ages retention rates are significantly lower.

In 1993 only 33 per cent of Indigenous children enrolling in year 7 stayed through to year 12 compared with 76 per cent of non-Indigenous (National Review of Education for Aboriginal and Torres Strait Islander People, 1994, p. 27)⁵. And of the 33 per cent who stayed to year 12, only 22 per cent went on to University compared with 31 per cent of the 76 per cent of non-Indigenous, ie. 6.6 per cent of the year 7 Indigenous children went on to University compared with 23.6 per cent of non-Indigenous (p. 36). Even in NSW where Indigenous people have been more exposed to a non-Indigenous society than in most parts of Australia, retention rates from year 7 to year 10 in 1996 were 77 per cent for Indigenous and 94 per cent for non-Indigenous children. The corresponding rates for year 7 to 11 were 47 and 75 per cent and from year 7 to 12, 30 and 63 per cent (New South Wales Council on the Cost of Government, p. 8).

Some of the shortcomings resulting from low retention in secondary schools are made up in the TAFE system, where more Indigenous students are enrolled in less costly basic or preparatory courses – 43 per cent compared with 16 per cent of non-Indigenous enrolments in 1992 (National Review, 1994, p. 31) – rather than the more costly vocational courses. As a result, though, their participation rates in TAFE, which are quite high, lead to less post-secondary qualification than for non-Indigenous.

The 1996 Census reported that 2 per cent of the Indigenous population had bachelors degrees or above and 13.6 per cent some post-school qualification. The comparable proportions of the total population were 10.4 and 34.4 per cent respectively.

Another measure of how well the education system is serving Indigenous people is the levels of literacy and numeracy achieved. The National Review of Education for Aboriginal and Torres Strait Islander People (1994, pp. 22-4) reported that 45 per cent of Indigenous primary school students had literacy and numeracy levels within the range of the lowest 16 per cent of other Australian students. Similarly the NSWCCG (1998, p. 46-50) found mean Indigenous numeracy and literacy rates at years 3 and 5 consistently around or just below 90 per cent of the mean for all students between 1990 and 1996. The relatively few Indigenous students who sat for the state-wide examinations at secondary level also performed well below the state average. For example Indigenous student scores in the Higher School Certificate for English, Maths and Science were about 60 per cent of the state average. Poorer education levels in turn affect employment and income levels (Janunkar and Liu, 1996). There is also a common belief that there are adverse effects on health, crime, imprisonment, unwanted teenage pregnancies, and result in less contribution to society in tax payments.

2.3 Method

How much of the \$23 billion of general expenditure on education is spent on the education of Indigenous students? Is more spent on average on the education of an Indigenous than a non-Indigenous student? This is inherently a difficult question to answer. Because the great majority of Indigenous children attend mixed schools and mixed classes within schools, most of the costs of pre-schools, schools, colleges and universities cannot be allocated to types of students without a detailed study of the allocation of the time of staff among students. We are

⁵ Data for individual States suggest that there has been little change in this situation since 1993.

not aware of any such study, and therefore it has not been possible for us to estimate directly expenditures on different classes of students such as Indigenous and non-Indigenous.

The Commonwealth Grants Commission was convinced that it costs more to educate Indigenous students and in its *Report on General Grant Relativities, 1994*, it gave a weight of 1.8 to Indigenous pre-school, primary and secondary students in calculating the relative costs of providing education at these levels in the States and Territories. Similarly it gave a weight of 1.5 to Indigenous people aged 15 and over in calculating funds necessary for TAFE (Searle, 1998). At least some of these factors are calculated from a statistical estimation of actual expenditure per school. But those estimates are likely to be affected by the fact that more Indigenous people attend small schools in isolated areas which cost more per student. As reported below in Appendix 1 (Issues Relating to Methods and Measurement), the Commission's 1999 Report assesses Indigenous disability factors as varying with location so it is no longer possible to provide national figures. Nor does its Report publish factors for particular classes of location.

States also fund their schools using funding formulae which frequently include additional funding for Indigenous students but very little information is available publicly about the factors they use. In the absence of such information we describe below the results of an interesting academic study. Witham⁶ used statistical regression methods to estimate the implicit disability factors used in South Australia to distribute funds between schools in the primary and secondary sectors for 1997-98. The model included two main components.

First, there is a per-school component to cover overheads which were estimated to differ between different kinds of school. Total per-school funding amounted to \$180 million of which \$2.7 million is for Aboriginal Schools. Excluding the Aboriginal Schools loading, the average per school is some \$270,000 and the 15 Aboriginal Schools get an extra \$96,000 per school or an additional 36 per cent. Second, there is a larger per-student component which differs according to grade level, whether secondary students are in a "small area school", and whether students have special needs, one of which is Aboriginality. The total allocation to this component is \$748 million. Excluding the loading for Aboriginal students this component is \$722 million or \$4170 per student. For each Aboriginal student an additional loading of \$4932 is paid to the school, or nearly 120 per cent of the average per-student funding.

There are two useful aspects of Witham's estimates. First, by the nature of the multiple regression technique used, they are estimates of the *additional* funding provided to Aboriginal schools and students when all other factors such as size of school and disadvantages such as "special students" and students requiring English as a second language have been taken into account. As a result they show fairly conclusively that, other factors being equal, schools get more funding per Aboriginal than per non-Aboriginal student. The second is that, since the estimated regression equation accounted statistically for over 98 per cent of the variation in funding between schools, it is reflecting quite closely the rules being used to fund schools. Like the Grants Commission loadings, these do not demonstrate in themselves that more is spent on educating each Indigenous student, and certainly not that each Indigenous student gets more than twice as much benefit as a non-Indigenous student from public expenditure on

⁶ Mark Witham, a PhD student at James Cook University, provided the following data which were derived from his research for his doctoral thesis.

school education. They may aim to encourage schools to keep their Indigenous students at school. But they do seem to reflect also a belief that it costs more to educate the average Indigenous students.

The higher costs found in cost studies and used in allocation of funds could result from many factors. Indigenous students may speak a language other than English at home, are unlikely to get as much help from their parents or to have books and facilities at home that make it easy for them to do homework.⁷ Simply because their numeracy and literacy skills are lower they will need more attention to help them keep up with their class.

Higher costs do not necessarily result in higher expenditures. Indeed there are at least two reasons why public expenditure per Indigenous student may actually be lower. The first is that, in secondary and tertiary education, Indigenous students are concentrated in classes and courses where costs are lower than the average. In secondary school their lower retention rate means that a higher proportion of Indigenous students are concentrated in the earlier grades where class sizes are larger.⁸ In TAFE colleges it results from the higher proportion enrolled in less costly preparatory and basic courses rather than the more costly vocational courses. At universities also more Indigenous students are enrolled in less expensive courses such as arts and education. In addition more of them are enrolled in undergraduate diploma courses and fewer in more costly postgraduate courses (National Review, 1994, pp 31-7).

The second is that enrolments may not be a very good indicator of attendance among Indigenous school students (Stanley and Hansen, 1998, 44-5; Vardon, 1998, 109). There are widespread reports of low Indigenous attendance rates at primary and secondary school because of illness, parent sanctioned absences and truancy. Some components of expenditures are proportional to enrolments: teachers have to be available to teach all enrolled students. But allocation of teacher time, the most important item of expenditure, is related to attendance. Accordingly, expenditure allocation based on enrolment alone will exaggerate expenditure on education of Indigenous students.

Finally we need to look again at location and size of school as determinants of expenditure. Vardon (1998, 109) quoted an average direct school cost of education of “\$4782 in rural areas and about \$4000 in urban schools.” To the extent that more is spent on education of Indigenous pre-school and school students because they attend small schools in isolated locations, the higher expenditure need not imply a proportionately better education. The higher expenditure on small schools is incurred in an attempt to provide students at those schools with the same level of education as those in the larger schools. Since we are interested in expenditure mainly as a measure of benefits to different children, the effects of school size and location on expenditure should, if possible be taken out of our estimates.

From currently available data, we cannot judge whether on balance public expenditure per student is likely to give greater or smaller benefits to the average Indigenous than the average non-Indigenous student. In part it depends on the priorities of the school. If the school gives a high priority to bringing all students up to some level of achievement, it is likely to use more resources on under-achievers who will include many Indigenous students. But if it

⁷ The Tutorial Assistance Scheme is designed to help overcome some of these problems.

⁸ In South Australia fund allocations for each year 11-12 enrolment was \$1462 or 39 per cent higher than for each year 8-10 enrolment.

attempts to use its resources where it expects to get the most achievement per dollar spent, Indigenous students may receive less staff time and attention than others.

We were unable to find evidence that would support overall a higher or lower per student (benefit from)⁹ expenditure for Indigenous students. Therefore we have assumed that public expenditure per student from general-purpose funds is the same for all students, including Indigenous and non-Indigenous students

- within each State and Territory;
- at each given level of education – pre-school, primary, secondary, TAFE, and university; and
- in each sector – government and private (which applies only at primary and secondary levels).

As a result, the estimates of public expenditure per student take account of differences in expenditure between States, between levels and between private and public schools. They do not take account of differences within States which may arise because of size of school, its location or the composition of its student body. While this assumption may result in some under or some over-estimation of the relative expenditure on Indigenous people, we believe that it is impossible to justify any other.

For several services, including education, there are two ways of measuring public expenditure per head. The first is expenditure per person using the service: expenditure per student. The second is expenditure per person eligible to use the service: expenditure per person within the relevant age group. The difference between the two measures results from differences in the participation rates between Indigenous and non-Indigenous people at each level of education. The first measure shows differences in expenditure per student attending schools, colleges and universities. The second shows the extent to which more or less is spent per Indigenous than per non-Indigenous person in the relevant age group for each level of education, whether or not they attend.

Although our first set of tables (Tables 2.1 to 2.4) contain estimates of public expenditure per student, we are strongly of the view that our second set of tables (Tables 2.5 to 2.7) showing expenditure per person in the relevant age group are more relevant for comparing public expenditure on education of Indigenous and non-Indigenous people. The poor levels of educational attainment of Indigenous people occur because of low participation and retention levels as well as the limited achievement of those who participate. Both those who drop out and those who stay in the education system should be considered its clients when comparing levels of expenditure per head.

In addition to general funding for education, funds are allocated to individuals rather than to educational institutions. The most important of these are, or were in 1996, ABSTUDY and AUSTUDY grants that were primarily for secondary and tertiary students and were effectively available to Indigenous and non-Indigenous students respectively.

⁹ We do not repeat in “benefit from” as qualifying “expenditure” in the remainder of this paper in the interests of brevity.

Finally, there are a number of programs of assistance for education of Indigenous students. Some of these are provided to Indigenous students or their families and some to schools with Indigenous students for specific programs to assist their education. While expenditure on the Commonwealth programs in this class have been included, programs of the States are more difficult to identify and have not been included.¹⁰

Some further assumptions and their effects are described at the end of this chapter, along with sources of data used in making estimates.

2.4 Results

The results will be discussed in two parts. The first deals with expenditure per enrolled student and the second with expenditure per person in the relevant age group. In both parts the first section provides estimates of expenditures under the arrangements for general funding of educational institutions. Funds provided to individuals through ABSTUDY and AUSTUDY, together with other public expenditures on programs that are for the specific benefit of Indigenous Australians, are included in the second section.

Expenditure per student

General Funding Table 2.1 shows the estimated public expenditure per student at pre-school, primary and secondary, and tertiary levels in Australia in 1995-96. Because of the data available the table is limited to Australia as a whole. In calculating the allocation of the great majority of the funds, however, each State and Territory was treated separately. The differences arise because of different distribution of Indigenous and non-Indigenous students between low cost systems such as Victoria and high cost systems such as the Northern Territory (NT). In addition, different proportions of Indigenous and non-Indigenous students in primary and secondary schools attend private and government schools, and there is less public expenditure per student on private than on public school students. Public expenditure per student on primary and secondary education of Indigenous children was about 12 per cent, and per student in total 8 per cent, higher than for non-Indigenous.

General Plus Individual Specific Funding In 1996 two major specific programs provided funding for individual students. First, grant funding was provided to Indigenous secondary and tertiary students through ABSTUDY and to non-Indigenous students through AUSTUDY.¹¹ Expenditure in 1995/96 per person on the two schemes is summarised in Table 2.2.

In addition some of the allowances that are available to secondary students under ABSTUDY are available to non-Indigenous students under the Assistance for Isolated Children (AIC) program. These are included in Table 2.3. The data for pre-schools and primary schools included in Table 2.3 are the same as in Table 2.1. The gap between per student expenditure on Indigenous and non-Indigenous students is magnified by including these special programs.

¹⁰ Data in the NSWCCG (1998) report shows that NSW provided \$17.1 million in 1996/97, though it is not certain that none of those funds came from Commonwealth sources. In the same year Queensland allocated \$2 million of its own funds.

¹¹ ABSTUDY will be provided under the Youth Allowance from 2000, but the Commonwealth has claimed that nearly all of the conditions will remain the same.

Table 2.1 Estimated Public Expenditure per Student from General Funds, 1995-96

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	4740	4265	111
Primary and secondary	5716	5103	112
Tertiary	5691	5730	99
TOTAL	5639	5216	108

Source: Calculated from information in ABS, 1996 Census (Cat Nos 2034.0-2034.8), ABS, Schools (Cat No. 4221.0) and ABS Expenditure on Education (Cat No 5510)

Table 2.2 Expenditure per Person on ABSTUDY and AUSTUDY, 1995-96

	ABSTUDY	AUSTUDY
\$ per secondary student	1922	457
\$ per 12 - 17 year old	1118	368
\$ per tertiary student	4652	919
\$ per 18-24 year old	1442	550

The much higher ABSTUDY payments per student presumably occurred for three reasons: first, because a higher proportion of Indigenous people were eligible; second, because they were eligible for higher benefits on average, primarily because they and their parents have lower incomes; and third, because the benefits or the means tests for ABSTUDY were more generous. The Commonwealth Department of Education, Training and Youth Affairs was unable to provide an estimate of the relative significance of these factors. A study undertaken in 1994 by ATSIC in conjunction with the Department of Finance of the extent to which specific Indigenous programs substituted for general programs in 1992-93, however, quoted an estimate that 68 per cent of ABSTUDY payments would have occurred under AUSTUDY criteria. Assuming that the same percentage applies to secondary and tertiary students, that estimate implies that under AUSTUDY criteria expenditure per Indigenous secondary student in 1995-96 would have been \$1307 and per tertiary student \$3163. The difference between these figures and those included in Table 2.2 – \$620 per secondary and \$1489 per tertiary student – reflects higher payments to Indigenous people with any given level of need as defined in the student assistance legislation. These differences are much smaller than the crude differences shown in the table: \$1465 and \$3733 respectively.

Table 2.3, which uses the data in Table 2.2, includes expenditure on assistance to individual students.

Table 2.3 Estimated Public Expenditure per Student, 1995-96 (including ABSTUDY, AUSTUDY and AIC; excluding specific Indigenous programs)

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	4740	4265	111
Primary and secondary	6294	5293	119
Tertiary	10343	6649	156
TOTAL	6703	5584	120

Inclusion of these programs that make payments to individuals, increases the difference in estimated expenditure per student from 12 to 19 per cent for primary and secondary students and from – 1 to 55 per cent for tertiary students. Combining all levels of education, the difference increases from 8 to 20 per cent.

The final step is to include expenditure on specific programs to improve the participation in and effectiveness of education of Indigenous young people. The specific programs included:

- a Direct Assistance Program, encompassing a Tutorial Assistance Scheme for primary, secondary and tertiary students (\$32 million), Vocational and Educational Guidance (\$2.3 million) and a Student Support and Parental Awareness Program (\$16.5 million). The latter supported school-based committees that helped schools respond better to the needs of Indigenous students; and
- a Strategic Initiatives Program (\$84 million) aimed at bringing about equity in education by the end of the century by funding providers of education through programs to improve literacy and language education, Indigenous education workers and pre-school places.

In addition a separate \$21 million program provided funds to universities to improve their facilities and programs for Indigenous students. The margin between Indigenous and non-Indigenous expenditure per student at each level above pre-school is, of course, further magnified by the inclusion of these specific programs.

With them, public expenditure is 43 per cent higher for all students, and in the tertiary sector is twice as high, mostly because of higher payments for ABSTUDY (the majority of which would appear to be a result of the lower incomes of Indigenous students and their parents) and specific programs.

Table 2.4 Estimated Public Expenditure per Student (including ABSTUDY, AUSTUDY, AIC and specific Indigenous programs)

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	5511	4265	129
Primary and secondary	7268	5293	137
Tertiary	13579	6649	204
TOTAL	7962	5584	143

Expenditure per Person in the Relevant Age Group

It has been argued above that it is more appropriate to make comparisons of public expenditure on education by comparing expenditures per person in the relevant age group than per student. When that is done, the margin of expenditure on Indigenous students that appears in Tables 2.1 to 2.4 is considerably reduced.

General programs Table 2.5, which includes only expenditure on general programs, shows that, except for primary and secondary schools, expenditure on Indigenous people is less per person in the relevant age group than on non-Indigenous. On the assumptions made in this study, public expenditure through general programs per 3-24 year old Indigenous person was 11 per cent *less* than per non-Indigenous person. These results occur because of the low retention rates for Indigenous students.

Table 2.5 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (excluding ABSTUDY, AUSTUDY, AIC and specific Indigenous programs)

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	1990	2181	91
Primary and secondary	4603	4561	101
Tertiary	1774	3432	52
TOTAL	3557	3977	89

A comparison of Tables 2.1 and 2.5 shows the effects of differences in participation rates. Whereas there was generally more public expenditure per Indigenous student, there was less per Indigenous person in the relevant age group. At all levels Indigenous people fare worse if

the comparison is based on numbers in the age group. This is least important at the primary level where Indigenous participation rates are nearly as high as non-Indigenous and most important at University level where they are much lower.

Further light can be shed on the comparisons in Table 2.5 by making use of State and Territory estimates used in deriving the data included in this chapter.

Two important factors taken together increase relative national expenditures on Indigenous people.

- 28.5 per cent of the Northern Territory's population is Indigenous compared with a national average of 2.1 per cent; no other State or Territory has more than 3.3 per cent. It has 13.4 per cent of the Indigenous and only 0.7 per cent of the non-Indigenous population.
- *per student* expenditure on education in the Territory is above the national average at every level, and at primary and secondary level is the highest in the country – around 50 per cent above the average.

The most likely explanation for most of that expenditure difference is that 27 per cent of Territorians live outside urban areas compared with 14 per cent of all Australians. In addition only Darwin, Alice Springs and Katherine had populations of over 5,000 in 1996 so that 38 per cent of the Territory's population lived in rural areas or settlements with less than 5,000 inhabitants compared with 20 per cent for the whole of Australia.

Because of great differences in participation rates, public expenditure on university education per 18 - 24 year old non-Indigenous is almost three times as much as per Indigenous person. Because of differences in the courses in which Indigenous students were enrolled, our methods of estimation under-estimate that difference. The difference in participation is much smaller in the case of technical and further education (TAFE) since many Indigenous people attend TAFE colleges to make up for deficiencies in their secondary education¹².

For various reasons Indigenous people make less use of all parts of the public education system except primary schools. Lower attendance rates in pre-schools, lower retention rates in secondary schools and lower progression to and within post secondary education are the main reasons. Together these factors more than offset, in terms of public costs, the higher proportion of Indigenous students who enrol in government schools. When estimated over the 3 to 24 year age group, expenditure per head is \$420 lower for Indigenous people. Expenditure per Indigenous person is just under 89 per cent of expenditure per non-Indigenous person.

General plus Individual and Specific Programs Differences in payment per person in the relevant age groups for ABSTUDY and AUSTUDY shown in Table 2.2 are proportionately smaller than differences expressed per student because Indigenous participation rates are lower in both secondary and tertiary education. They are combined with expenditure on general programs and expressed as per person in the age group in Table 2.6.

¹² It is notable that in 1996, when the peak rates of attendance of Indigenous people at TAFE were around 9 to 10 per cent of the age groups between 15 and 29, more than 6 per cent of each 5-year age group up to age 64 attended TAFE or other non-university post-secondary educational institutions (Gray *et al* 1998).

Table 2.6 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (including ABSTUDY, AUSTUDY and AIC; excluding specific Indigenous programs)

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	1990	2181	91
Primary and secondary	5069	4730	107
Tertiary	3216	3982	81
TOTAL	4228	4257	99

Inclusion of these three programs increases modestly the differences between public expenditure on education of the Indigenous and non-Indigenous per person in the relevant age groups for primary and secondary education, and eliminates it for all education. Roughly speaking the greater expenditure per Indigenous person in primary education is offset by the lower expenditure on tertiary education.

Finally, including the specific Indigenous education programs results in estimated public expenditure per person in the relevant age groups being higher in each level of education (Table 2.7).

Table 2.7 Estimated Public Expenditure per Person in the Relevant Age Group, 1995-96 (including ABSTUDY, AUSTUDY, AIC and specific Indigenous programs)

	Indigenous	Non-Indigenous	Indigenous as % of Non-Indigenous
	\$	\$	%
Pre-school	2314	2181	106
Primary and secondary	5854	4730	124
Tertiary	4233	3982	106
TOTAL	5022	4257	118

In total, public expenditure on Indigenous people is \$765 or 18 per cent higher per 3-24 year old person than on the non-Indigenous.

2.5 Discussion

On the basis of numbers in the relevant age groups (3-24), public expenditure on education for Indigenous persons is 18 per cent higher per capita than for non-Indigenous persons. This ratio is considered to be a more appropriate indicator of relative benefits than a ratio of expenditure per student, because of the significantly lower retention rates of Indigenous students in the schooling system, and their lower participation in higher education.

Is a margin of 18 per cent in favour of Indigenous people too high, about right, or even too low? There can be no simple response to such a question, since it takes us beyond the field of quantitative analysis techniques into areas of judgment.

From an equity point of view there should be additional expenditure on the education of those who are most disadvantaged educationally. This argument is particularly strong for groups such as recent migrants and Indigenous people who may have difficulty in achieving because of cultural differences. Even from the point of view of efficient use of resources, special education programs can be justified if they will help disadvantaged young people contribute more to society and result in fewer of them being dependent on social welfare payments.

This study has identified a number of significant factors which are contributing to a higher than average outlay on education for Indigenous people. For example, they are much more likely to be living in rural and remote locations, where per capita costs of delivering education services are higher. They have significantly lower incomes, leading to greater average needs for assistance to students. Lower incomes also result in greater reliance on the public education sector, and there is a lower than average proportion of Indigenous children in private schools. This is broadly consistent with the lower proportions of children from low income households in general who are enrolled in private schools, evidence for which comes from the ABS 1993-94 Household Expenditure Survey.¹³

A number of programs provide additional services to Indigenous students. The main components are the \$156 million spent in 1995-96 on specific programs for improving the education of Indigenous people and, as noted above, a substantial part of the \$131 million spent on ABSTUDY that provides more generous benefits than those under AUSTUDY. These programs aim to assist Indigenous children to become better prepared at pre-school,¹⁴ to learn more at primary school, to encourage them to stay at secondary school and to progress to tertiary education, thereby helping to bring them closer to the levels of educational attainment of other Australians. This expenditure aims to overcome the effects of many decades of educational neglect during which Indigenous people were not given the same educational opportunities as others. It also helps to offset the particular disadvantages for some of having to learn in a foreign language, and of having parents who frequently themselves have very little formal education of the kind that is necessary for survival in the dominant culture of Australia.

¹³ The most appropriate income group for comparison, the lowest three income quintiles (see Appendix 1) paid only \$1.35, \$1.22, and \$3.68 respectively per week in private school fees compared with \$5.45 and \$11.86 for the two highest quintiles and an overall average of \$4.72.

¹⁴ For example in South Australia Indigenous children can enrol in pre-school at 3 but non-Indigenous only at 4 years of age.

Against this background of significant disadvantage and pressing need, an additional 18 per cent expenditure per head on the education of Indigenous people can be seen as a very modest contribution.

How might events since 1996 have affected this outcome? Commonwealth spending on education programs specifically for Indigenous people has increased (see Herron 1999, p.14)¹⁵, but the effect of this on total education outlays would not be enough in itself to make a substantial change. Whether there has been much change in the share of other forms of education funding that goes to the benefit of Indigenous people is not known. What can be said from the data available, however, is that there appears to have been little real change in the gap between Indigenous and non-Indigenous educational attainment, including retention rates. Overall, therefore, we would consider that our findings have continuing relevance.

2.6 Assumptions and data sources

A much lower set of estimates of public expenditure on Indigenous students would result if we were to assume that nearly all pre-schools and schools and all TAFE colleges and universities would exist even if there were no Indigenous students, and that only the additional cost of having Indigenous students should be estimated. But such estimates could be criticised as arbitrarily assuming that the Indigenous students were the marginal students at any institution.

Capital costs have been added to current costs. Under accrual accounting the only capital costs that should be charged to an individual year's costs are the interest earnings foregone on the current value of the capital assets being used plus the depreciation of those assets during the year. But the data needed to estimate those values are not available. Under the cash flow basis used by Australian governments for services such as education that do not earn income, capital costs are treated in the same manner as current costs. It seems better to adopt that approach than to ignore capital costs altogether. Adding capital to current costs does, however, create problems: as a result of the lumpiness of capital investment and its dependence in any particular year on macroeconomic conditions and government policy, the results are less comparable between States than the results that exclude them.

Data from the 1996 Census counts are the only enrolment data for Indigenous and non-Indigenous children that can be compared with other demographic data. Indigenous enrolments from this source compare reasonably well with State and Territory data on Indigenous enrolments as reported in *ABS Schools*. Respondents to the Census self-identify in confidence whether or not they are Indigenous. There is some evidence from the post-enumeration survey that this may exaggerate the number of Indigenous people. Nevertheless it seems better to use Census data than data from *Schools* which is based on identification to school staff as to whether or not a student is Indigenous. It is interesting that the two sources provide very similar total enrolments of Indigenous students in primary and secondary schools for the whole of Australia, but in individual States the differences are significant: *Schools* records 31 per cent fewer Indigenous primary enrolments than the Census in Victoria and 24 per cent less in Tasmania but 18 per cent more in both Western Australia and the Northern Territory.

¹⁵ As noted in a footnote in the Introduction, changes in coverage in such publications mean that caution should be exercised in making comparisons of expenditure levels over time.

Census data on education are taken directly from the counts made at the place of enumeration and take no account of under-enumeration or people who were away from home on Census night. The ABS produces another set of data of Estimated Resident Population (ERP) by State and by age which take account of these factors. The differences, especially for the Indigenous population, are significant. For example the Indigenous ERP in the NT is 12 per cent higher than the actual count. Much of this difference seems likely to be a result of under-counting at the Census. It could be assumed that those who were not counted at the Census would be unlikely to be attending an educational institution, in which case they would be ignored in estimating student numbers. Alternatively it could be assumed that they have the same likelihood of attendance as those who were counted and the enrolment figures adjusted up accordingly. We have used the second assumption which will tend to provide a higher estimate of public expenditure on Indigenous education. The data on the age distribution of Indigenous students from the Census count were made available by Michael Long of the Australian Council on Educational Research.

Census data do not distinguish private and public school enrolments. The Census enrolments of Indigenous and non-Indigenous students in primary and secondary schools have been broken down between public and private in proportion to the enrolment data in *Schools*.

In the second part of the comparisons, expenditure on education has been compared between groups on the basis of the number of persons in the relevant age groups. For this purpose we have used the following age groups.

Pre-school	3 to 4
Primary school	5 to 11
Secondary school	12 to 17
University and TAFE	18 to 24

There are two main problems with this categorisation. The first is that children attend the different kinds of educational establishment at different ages in different States. This would be a more serious problem if the main focus of the study was on particular levels of education. But since the main focus is on the overall level, which is calculated per person aged 3 to 24, it is less serious. The second is that participation in tertiary education is far from being confined to people less than 25 years of age, and this is particularly true of Indigenous students, many of whom enrol as mature age students, and more true of TAFE than of university education. Considered alone, expenditure on tertiary education should be calculated as the percentage of adults over the age of 15 or 16. But considered as a part of education as a whole it is reasonable to express expenditures as per person aged 18 to 24.

There is a further problem that there will be some overestimation of the per capita cost of both secondary and tertiary education because the cost of educating overseas students are not included, but the numbers are relatively small and their omission should not distort relative costs to any great extent.

Although data are available by State on the “current grants to non-profit institutions” from governments for educational purposes (ie. government grants to private schools), there are no data on how much of the grant funds go separately to primary and secondary schools. These

funds have been allocated to primary and secondary private schools in proportion to the full time equivalent staff in each type of school in each State and Territory. Tax expenditure on private schools (the loss to the government of tax revenue from the tax deductibility of gifts to building funds of private schools) has not been included because the data are not available.

Data on public expenditure on pre-schools in each State have been allocated between Indigenous and non-Indigenous children in proportion to total enrolments as shown in the Census adjusted for estimated under counting of 3 and 4 year olds. That takes no account of the children enrolled in private pre-schools. There are no data on their numbers and they are assumed to be small.

The estimates in this chapter include some of the effects of location on expenditure which, as discussed above, are not incurred to provide greater benefits to the recipients. They include the inter-state/territory but not the intra-state/territory effects of location. In particular they include the marked difference between the Northern Territory and the other parts of Australia but not the large differences between education costs in the State capitals on the one hand and rural and remote areas of each State on the other.

2.7 Sources of data

Because we relied on the Census of Population for data about the number of persons attending educational institutions and the number in the age groups that would be expected to be eligible to attend, most of the data relate to 1996 as it is the date of the most recent Census. This commonly meant using either 1995/96 or 1996/97 expenditure data.

Expenditure data are taken from the ABS publication *Expenditure on Education* (ABS cat. no. 5510.0) which includes public expenditure on pre-schools, public schools, universities and TAFE colleges and grants by governments to private schools for each State and Territory. Annual reports of the relevant Commonwealth department (DEETYA in 1996) provide data on expenditure on particular programs including primarily ABSTUDY, AUSTUDY, the Indigenous Education Strategic Initiatives Program and the Aboriginal Education Direct Assistance Program.

Capital and recurrent costs have been added, in line with the cash accounting approach used by governments in the provision of services that are not income-producing. No estimates of the capital value of the land buildings and equipment are available to which an annual cost of capital could be applied. Expenditure on capital is only a small part of the total expenditure on education.

Data on Indigenous and non-Indigenous school enrolments have been taken from the 1996 census which is based on self identification, rather than from statistics relying on identification of Indigenous status at school. The census data have been adjusted for estimated under-enumeration of Indigenous and non-Indigenous people in the Census.

Because the census does not distinguish between enrolment in public and private schools, this has been estimated using data from the ABS publication *Schools* (ABS cat. no. 4221.0) which is derived from school enrolments.



3. Employment

Public expenditure on employment services is primarily directed to unemployed people. By far the largest element of such expenditure is income support payments to the unemployed. Beyond this, there is expenditure on more 'active' programs, which provide either training for employment or employment subsidy. The first section of this chapter summarises gross levels of expenditure in the employment area, while the second converts this to expenditure per unemployed person for the relevant population group. As most figures in both sections are estimates, derived from a variety of sources, much of the discussion of this chapter is about how these estimates have been calculated. A later section of the chapter examines issues of employment need and disadvantage.

3.1 Gross levels of expenditure

Income support for unemployed people is primarily paid under the Social Security Act. The social security legislation does not distinguish between Indigenous and non-Indigenous people. All are entitled to precisely the same range of payments. Social security administration has, however, for about a decade now, included a facility for Indigenous people to identify when applying for payments. The Department of Social Security, now Family and Community Services, has been reluctant to use this Indigenous identification data for either policy or research purposes, arguing that there is a high likelihood of the data being incomplete and hence under-enumerating Indigenous payment recipients. Some data from the social security administrative record has, however, been released, albeit in a restricted way.

Late in 1995, the Department of Social Security released a data set which contained 24,121 Indigenous identifiers among all unemployment payment recipients as at August 1995 (Altman and Hunter 1996). The average total number of unemployment payment recipients for 1995-96 was 806,500; 800,700 at the beginning of the year and 812,300 at the end (DSS 1996). Expenditure for the year on income support for the unemployed was \$6,636.9 million (DSS 1996:164). If we assume that 24,121 Indigenous-identifying clients received unemployment payments at the same \$ rate as other clients, then Indigenous identifiers would have received \$198.5 million in unemployment payments during 1995-96. However, there is some evidence to suggest that Indigenous identifiers may have received a little more.

In 1997, the DSS undertook another exercise in which it distinguished Indigenous identifiers within its unemployment payments database at May that year. This exercise found that the average payment among Indigenous identifiers (25,920 at the time) was \$153.94 per week, compared to \$150.68 among all unemployment payment recipients. This may be due to disproportionate numbers of Indigenous identifiers living in remote areas and receiving a remote area loading in their payment, but also to Indigenous identifiers having less other income and therefore a higher payment entitlement. Applying the factor $153.94/150.68$ to the figure of \$198.5 million raises the amount that Indigenous identifiers are likely to have received as unemployment payments in 1995-96 to \$202.8 million. This is the figure given in the first line of Table 3.1 and the 'other clients' figure is derived by subtraction of this figure from the total program expenditure.

Table 3.1 Employment Program Expenditure 1995-96

	Total	Indigenous identifiers	Others
	\$m	\$m	\$m
General programs			
Income support for unemployed under Social Security Act	6636.9	202.8	6434.1
DEETYA/CES programs	1890.9	105.8	1785.1
TOTAL	8527.8	308.6	8219.2
Specific programs			
DEETYA/CES Training for Aboriginals		53.0	
ATSIC programs			
CDEP		314.6	
Community training		21.8	
Movement to award wages		1.2	
TOTAL		699.2	8219.2

Beyond income support, more 'active' public expenditure on employment services in 1995-96 was primarily administered by the Commonwealth Employment Service(CES) within the Department of Employment, Education, Training and Youth Affairs. DEETYA in 1995-96 had both general employment and training programs in which Indigenous people could participate and some programs directed specifically to Indigenous people. Within general programs there was an administrative facility to identify Indigenous participants, much as in social security administration. The range of general programs offered by DEETYA through the CES in 1995-96 was considerable. Table 3.2 lists fourteen such programs and their numbers of Indigenous 'commencements' as a percentage of the total. These percentages of program commencements for Indigenous people are multiplied by total program budgets in order, in the final column of the table, to derive an estimate of program expenditure flowing to Indigenous people. These program expenditure estimates sum to \$105.8 million, which is the Indigenous expenditure figure appearing in line two of Table 3.1.¹⁶ Again the 'other clients' figure is derived simply by subtraction of the Indigenous figure from the total program budget.

¹⁶ Note that \$105.8 million represents 5.6% of the total expenditure of \$1,890.9 million, even though Indigenous program participants only represented 4.5% of commencements. This reflects higher Indigenous participation rates in some of the more expensive programs per participant.

Table 3.2 Commencements and Expenditures on DEETYA/CES General Programs, 1995-96

Program	Commencements			Expenditure (\$m)	
	Total	Indigenous	%	Total	Estimated Indigenous
Jobtrain	92,803	3,208	3.5	168.4	5.82
Job Clubs	45,790	1,146	2.5	30.1	0.75
Special Intervention	90,031	2,701	3.0	193.7	5.81
Other Employment Participation	4,338	80	1.8	9.4	0.17
Jobstart	100,523	2,422	2.4	236.4	5.70
Accredited Training for Youth	1,657	84	5.1	9.2	0.47
Skillshare	164,840	7,798	4.7	133.9	6.34
Jobskill	27,406	1,244	4.5	273.1	12.40
Landcare and Environment Action	13,488	1,033	7.7	88.8	6.80
New Work Opportunities	49,402	5,230	10.6	498.3	52.75
National Training Wage	33,464	3,594	10.7	62.5	6.71
Mobility Assistance	48,800	2,288	4.7	29.9	1.40
Labour Adjustment Assistance	4,536	5	0.1	53.1	0.06
New Enterprise Incentive Scheme	10,216	61	0.6	103.9	0.62
TOTAL	687,155	30,894	4.5	1890.9	105.80

These estimates of DEETYA/ CES expenditure through general programs on Indigenous people may, if anything, be high. It is known in the Department that 'completion' of courses and work placements is seldom as high among Indigenous people as others and that lack of completion leads to some expenditure savings.

Together social security income support and CES administered general employment and training programs are estimated to have accounted in 1995-96 for public expenditure of \$308.6 million on Indigenous identifiers and \$8,219.2 million on other employment program clients. These totals are given at the bottom of the first panel of Table 3.1.

The second panel of Table 3.1 adds expenditure through Commonwealth employment programs intended specifically for Indigenous people. The first of these was the DEETYA/ CES Training for Aboriginals Program. The second is the Community Development

Employment Projects (CDEP) Scheme administered by the Aboriginal and Torres Strait Islander Commission (ATSIC). CDEP pays the equivalent of unemployment payments, plus a 40% loading, to enable Indigenous community organisations to employ unemployed community members. CDEP is, as such, an Indigenous-specific work-for-the-dole scheme. However, having started in 1977, 20 years before the general work-for-the-dole scheme, the CDEP scheme is not administered within the social security system, but rather by ATSIC. Also it has community development objectives which are considerably broader than just employment.¹⁷

The final two items in the Indigenous specific panel of expenditure of Table 3.1 are ATSIC programs, the Community Training Program and the Movement to Award Wages Program. The former funded training delivered through Indigenous community organisations, while the latter assisted these organisations in moving their employment practices towards industrial award conditions and coverage.

Our analysis does not include some other small Indigenous specific programs in 1995-96 of relevance to employment, such as the Community Economic Initiative Scheme operating within ATSIC's Business Funding Scheme, Affirmative Action for Aboriginal and Torres Strait Islander Women operated by the Affirmative Action Agency and the Contract Employment Program for Aboriginals in Natural and Cultural Resource Management operated by Environment Australia (see ATSIC 1998). The first two of these programs did not, however, have separately identifiable budgets from the larger programs within which they were embedded. Were the natural and cultural resource employment program to be included, with expenditure of \$3.8 million, it is arguable, given our methods, that general programs for employment in natural and cultural resource management should also be taken into account and divided between Indigenous and non-Indigenous participants. However, such participant information was not available, and general and specific programs in these areas were, we judged, best left aside.

Similar reasoning to the above was applied to small amounts of State/ Territory government expenditure on Indigenous-specific and general employment programs. Only limited information was available on expenditure through such Indigenous-specific programs,¹⁸ and there was no information available on the extent to which Indigenous people had participated in the general programs. Without this information we could not apply our method of comparison and the expenditure was better left out. We are convinced, however, that this is not a great omission and that the Commonwealth programs listed in Tables 3.1 and 3.2 accounted for the vast majority of public expenditure on employment programs in 1995-96.

3.2 Expenditure per unemployed person

The most obvious way to convert gross levels of employment expenditure to expenditure per unemployed person in the relevant population group would be to divide by the numbers of Indigenous and other unemployed persons identified in the 1996 Census; ie. 24,233 and 747,737 respectively. Given the existence of the CDEP scheme as an extensive Indigenous

¹⁷ A further consideration is that some elements of CDEP scheme expenditure are clearly additional to outlays on unemployment payments. For example, the wages of CDEP project co-ordinators substitute for general unemployment payment administrators' wages, which we have not counted in general unemployment payment expenditure.

¹⁸ See Appendix 1 for a discussion of expenditure by State and Territory governments.

work-for-the-dole and community development program, however, some adjustment to the numbers of Indigenous ‘unemployed’ needs to be made for participants in that scheme during 1995-96.¹⁹

ATSIC administrative data indicates that at the time of the 1996 Census there were around 28,000 participants in the CDEP scheme. The Census identified 12,259 of these participants among the Indigenous employed. However, the labour force status in the Census of the other almost 15,800 CDEP participants is less clear. To clarify their labour force status requires some understanding of Census administration.

The Australian Bureau of Statistics has for some time recognised the inadequacy of complex self-administered Census forms in remote Indigenous communities where residents have low levels of English literacy. As a result, over recent years it has devised interviewer-administered Census techniques for these communities utilising a Special Indigenous Form (SIF). Knowing that the distinction between CDEP and other employment was an issue in these communities, the 1996 SIF provided an interviewer prompt to specify CDEP or other employment at the point of naming the employer. This procedure identified 11,050 CDEP participants among the Indigenous employed in the areas where the SIF was used in rural and remote parts of Queensland, Western Australia, South Australia and the Northern Territory. Outside the areas where the SIF was used, another 1,200 Indigenous respondents provided enough information, unprompted, to allow their employment also to be identified as CDEP; giving the Census figure of 12,259 CDEP employees.

This Census figure does not identify all CDEP participants among the Indigenous employed, since it does not systematically pick up those outside the SIF areas. Taylor and Hunter have estimated the total number of CDEP participants among the Indigenous employed at the 1996 Census at 18,656 (Taylor and Hunter 1998: 16). Given the nature of the CDEP scheme, these Indigenous ‘employees’ should also arguably be regarded as among the ‘unemployed’ persons who are beneficiaries of public expenditure on an unemployment program. This increases the number of Indigenous unemployed at the time of the 1996 Census to 42,889; ie the 24, 233 identified in the Census as unemployed plus 18,656 CDEP ‘employees’. The Indigenous ‘employed’ would similarly be reduced by 18,656.

A case could be made for increasing the numbers of Indigenous ‘unemployed’ somewhat further, to be more in line with ATSIC’s CDEP administrative data. However, this would run the risk of counting twice CDEP participants who had already identified as ‘unemployed’ in the Census. The 42,889 figure would seem a reasonable, though probably conservative, estimate of the Indigenous unemployed in 1995-96 adjusting for CDEP.

Table 3.3 utilises this adjusted number of Indigenous unemployed in calculating expenditure per unemployed person. It shows that about 35 per cent less expenditure per unemployed person flows to Indigenous people from general programs than to others: \$7,200 per Indigenous unemployed compared to \$11,000 per other unemployed person. This is not surprising, given the size of the CDEP scheme and the way in which it transfers large numbers of Indigenous people away from general income support for the unemployed. The

¹⁹ As the general work-for-the-dole scheme had not started at this time, no similar adjustment is needed for other unemployed people.

figures suggest that broadly speaking about as many Indigenous people participate in CDEP as access general unemployment payments.

When specific Indigenous employment programs are added to general programs, the comparison of expenditure shifts to a 48 per cent margin in favour on Indigenous people; \$16,300 per Indigenous unemployed compared to the \$11,000 per other unemployed. How is this margin to be judged, given the greater need and disadvantage of Indigenous people in relation to employment?

Table 3.3 Estimated Employment Program Expenditure per Unemployed Person 1995-96

	Indigenous identifiers	Others
General program expenditure	\$308.6m/42,889 = \$7,195	\$8219.2m/747,733 = \$10,992
General + specific program expenditure	\$699.2/42,889 \$16,303	=

3.3 Need and Disadvantage

Need is a concept which is used less frequently in relation to employment than in relation to other social concerns, such as housing and health. However, there are social indicators relating to labour force status which can be legitimately thought of as indicators of employment need or disadvantage. Table 3.4 calculates several of these social indicators for both Indigenous and other Australians, utilising 1996 Census data, both adjusted and unadjusted for the CDEP scheme in the way discussed in the previous section.

The unemployment rate calculates the unemployed as a proportion of the employed plus the unemployed. Using unadjusted census figures, at the top of Table 3.4, the Indigenous unemployment rate is calculated to be approximately two-and-a-half times the non-Indigenous rate (22.7 per cent compared to 9.0 per cent). Using CDEP adjusted figures, further down Table 3.4, the Indigenous unemployment rate is calculated to be approximately four-and-a-half times the non-Indigenous rate (40.2 per cent compared to 9.0 per cent). This adjusted unemployment rate is perhaps the most striking indicator of greater employment need and disadvantage among Indigenous Australians. The difference between the Indigenous and non-Indigenous figures could hardly be starker.

Another measure of employment need and disadvantage is the employment population ratio. This calculates numbers of employed as a proportion of the total population aged 15 years and over (ie the employed plus the unemployed plus those not currently in the labour force). Using 1996 Census figures unadjusted for CDEP, the employment population ratio for Indigenous Australians was 5 percentage points lower than for the non-Indigenous (40.7 per cent compared to 56.6 per cent). Adjusting the Indigenous employment and unemployment figures in the light of CDEP increases this gap to 14 percentage points (31.5 per cent compared to 45.5 per cent). Again, this is a very significant degree of greater employment need or disadvantage.

A third measure of employment need and disadvantage is the workforce participation rate. This divides the employed plus the unemployed by the total population aged 15 years and over. The Indigenous labour force participation rate, using 1996 census figures, was 52.7 per cent, whereas the non-Indigenous was 62.0 per cent. As the CDEP adjustment process only moves Indigenous people between employed and unemployed, this makes no difference to the Indigenous labour force participation rate.

Table 3.4 Labour Force Status and Employment Need/Disadvantage Indicators of Persons Aged 15+

	Total	Indigenous identifiers	Others
Census 1996			
Employed	7,636,319	82,347	7,553,972
Unemployed	771,970	24,233	747,737
Not in labour force	5,174,181	95,509	5,078,672
Unemployment rate		22.7%	9.0%
Employment/ population ratio		40.7%	56.6%
Labour force participation rate		52.7%	62.0%
CDEP adjusted			
Employed		63,691	
Unemployed		42,889	
Not in Labour Force		95,509	
Unemployment rate		40.2%	
Employment/population ratio		31.5%	

Table 3.5 gives another measure of employment need and disadvantage among Indigenous Australians. These figures are drawn from a June 1997 Department of Social Security data set which analysed the duration on unemployment payments of all those in receipt of such payments at some time over the previous six months.²⁰ The proportion of Indigenous identifiers who had been on unemployment payments for over 24 months was 5 percentage points higher than among the other clients (25.5 per cent compared to 20.3 per cent), while the offsetting proportions of recipients of lesser duration were all in the “up to 9 months” and most in the “up to 6 months” duration categories. Indigenous identifiers were clearly far more likely to be long term unemployment payment recipients. These figures do not include CDEP participants, most of whom are also likely to have been ‘unemployed’ for long periods.

²⁰ Note the higher numbers of Indigenous and non-Indigenous unemployed generated by this method which is not at a single point in time, but rather a six month retrospective compilation.

Table 3.5 Duration of Unemployment Payments (June 1997)

Duration	Indigenous identifiers (%)	Others (%)
Up to 3 months	14.4	15.9
4-6 months	15.8	19.3
7-9 months	12.0	12.2
10-12 months	9.5	9.5
13-18 months	14.1	14.4
19-24 months	8.7	8.3
over 24 months	25.5	20.3
	100.0	100.0
Number	38,699	1,243,992

One final indicator of employment need, which may be seen as emerging rather than extant, is the projected growth in the population aged 15 years and over in the near future, the potential future labour force. Because of its younger age structure, the Indigenous population aged 15 years and over is projected to grow at 2 per cent per annum over the decade from 1996, compared to 1 per cent for the rest of the population. This growth will add about 65,000 Indigenous people to the working age population between 1996 and 2006 (Taylor and Hunter 1998: 12).

All these measures suggest that employment need and disadvantage are far greater among Indigenous Australians than others. It would seem reasonable then to suggest that specific measures to encourage Indigenous people into employment are well justified, alongside general measures.

3.4 Discussion

The major findings of this chapter are that general employment programs contribute 35 per cent lower levels of expenditure on Indigenous unemployed people than others, and that, when Indigenous specific programs are added, the level of expenditure on Indigenous unemployed rises to 48 percent above that for other unemployed. The CDEP scheme is a major element contributing to this pattern, as it both lowers general program expenditure and raises specific program expenditure on Indigenous unemployed. Although CDEP is essentially an Indigenous work-for-the-dole scheme, it does also have broader community development objectives. These broader objectives may partly explain the margin in employment expenditure that CDEP creates towards Indigenous people.

Indicators of employment need and disadvantage point to major differences between Indigenous and other Australians. In the light of this, the margin in expenditure towards Indigenous unemployed, once specific programs including CDEP have been taken into account, may well be judged not to be excessive. Indeed, given that the growth of the Indigenous population of workforce age over the next decade is projected to be twice that for

the rest of the population, expenditure on Indigenous unemployed may be judged to be quite low relative to need.

In contrast to the other areas studied in this paper, Indigenous specific employment programs contributed significantly to overall public expenditure on Indigenous people, rather than being a comparatively small addition to general program expenditures. This is largely due to the CDEP scheme, which has frequently been linked to an entitlement to general unemployment payments. CDEP is not as clearly and unequivocally an 'Indigenous specific' program as some others. Indeed it can in some ways be thought of as 'appropriate' adaptation of general unemployment payments to the different economic and labour market circumstances of Indigenous Australians (Sanders 1998).

Finally, it should be noted that organisation and program structures have changed quite significantly in the employment area since 1995-96. The CES no longer exists and many of its funding programs were abolished under the program of expenditure reductions embarked upon by the Coalition Government after it came to office in March 1996. It is doubtful, however, that overall employment program expenditure patterns on Indigenous and other Australians will have changed all that much. The two largest elements of employment expenditure remain essentially unaltered and firmly in place. These are income support payments to the unemployed under the Social Security Act and, for Indigenous people, ATSIC's CDEP scheme. A new Indigenous Employment Policy announced by the Coalition Government in June 1999 will involve some increases in expenditures on Indigenous-specific programs compared with recent years. The findings of this chapter would seem, therefore, to be of ongoing relevance.



4. Health services

4.1 Introduction

This chapter deals with public expenditures on health services. It draws in large measure on a major recent study, *Expenditure on Health Services for Aboriginal and Torres Strait Islander People*, undertaken by John Deeble and colleagues from the National Centre for Epidemiology and Population Health and the Australian Institute of Health and Welfare (Deeble *et al* 1998). This study was commissioned by the Commonwealth Department of Health and Family Services (as it then was), with the support and co-operation of all State and Territory health authorities and of relevant major Indigenous organisations. It uses 1995-96 as the base for its analysis.

The poor health status of Aboriginal and Torres Strait Islander people is a matter of high concern in Australia, and with good reason, as the following summary from Deeble *et al* (1998, p. vii) shows:

The health of Aboriginal and Torres Strait Islander people is much worse than any other demographic group in Australia. On average, Aboriginal and Torres Strait Islander people die at three times the rate of other Australians. For some age groups the rate is as much as seven times that of the rest of the population [and] for some conditions, such as diabetes, it is 12-17 times higher. Life expectancy for Aboriginal and Torres Strait Islander men is about 17 years less than for other Australian males and the difference is slightly more for women. Although infant mortality has improved, there are few signs that the gap in life expectancies is diminishing.

Australia's record is worse than that of comparable countries. The all-causes mortality rate for Australia's Indigenous population is twice the Maori rate and 2.3 times that of the Indigenous population of the United States. In the two decades to 1994, the Maori death rate declined by 44 per cent, while the rate for the United States Indigenous population declined by 30 per cent. In Australia, however, there was no significant reduction in the Indigenous death rate in the decade to 1995 (Australian National Audit Office, 1998, p. 39)²¹.

4.2 Data issues

Analysing public expenditures on health services for Indigenous people, and comparing them with expenditures for non-Indigenous people, presents a number of challenges. Significant under-identification, or lack of identification, of Indigenous people in the records of health services is a source of many of these. And, unlike other areas such as education, housing and employment, the Census provides no separate basis for analysis and cross-check because data on use of health services is not collected in Censuses.

The study undertaken by Deeble *et al* found that identification was best for inpatients at major hospitals and less complete or absent for outpatients, GP and specialist services and Medicare and Pharmaceutical Benefits (PBS). Considerable effort was made in that study, using data from different sources, to correct for the under-estimation. Special sample surveys were taken

²¹ The source of the ANAO's information was the AMA, Public Health Association of Australia Inc., submission to the House of Representatives Standing Committee on Family and Community Affairs Inquiry into Indigenous Health, Canberra, 1997.

of doctors and of pharmacies to assess the use of Medicare and PBS services by Indigenous people.

Differences in demand on and usage of publicly funded health services by Indigenous and non-Indigenous people will reflect a wide range of factors such as income, incidence and type of illness suffered, location, and cultural influences. Thus, because Indigenous people are heavily represented at the lower end of the income scale, it would be expected that they would on average make higher proportionate demands on the public health system, and less on the private system, than the national average. People who live in remote locations, as do many Indigenous people, may tend when requiring hospital treatment to be admitted more as inpatients, and to stay longer in hospital, because they lack alternative living arrangements nearby. And cultural factors are important in leading Indigenous persons towards medical services that have been established specifically for them, and away from the private sector.

The cost of health services, particularly those provided to hospital inpatients that accounted for about 50 per cent of all Indigenous patient costs, varies considerably depending on the kind of health services provided. Since Indigenous people suffer from some diseases such as diabetes to a much greater extent than other Australians, it was important to take account of these cost differences. Casemix costing has been developed in many countries including Australia and used in the funding of hospitals. The Australian Institute of Health and Welfare (AIHW) has developed a variant of casemix costing as a Disease Costing Model. “Because it appeared to explain most of the cost variation between Indigenous and non-Indigenous patients in the same casemix category, no additional allowance for Aboriginality was made.” (Deeble *et al*, 1998, 33)

4.3 Publicly funded health services: a brief overview

In 1995-96, net public expenditures on health services exceeded \$26 billion (Deeble *et al* 1998, Table 2.5, p. 14). The main components were:

	\$ billion	Per cent
Hospitals	11.2	43
Medicare and other medical	6.6	25
Pharmaceutical drugs and appliances	2.4	9
Nursing homes	2.1	8
Community health	1.6	6
Public health	0.5	2

4.4 Indigenous demand for, and usage of, health services

This section summarises the main findings of Deeble *et al* (1998) that are relevant to this paper.

In 1995-96, recurrent expenditures—both public and private—for and by Aboriginal and Torres Strait Islander people were estimated at \$853 million. This was 2.19 per cent of all such expenditures during the year. On a per person basis, it was about 8 per cent higher than

that for or by other Australians—a very small difference, particularly bearing in mind their much worse state of health.

Behind the overall figure lies a very different pattern of health services use. Indigenous people relied much more on publicly-funded hospital and community health services, and much less on private doctors, private hospital care, dentistry, medicines and ancillary services, than other Australians. On the basis of the estimates made in the study, some 19 dollars in every 20 spent on health services for Indigenous people was for services funded by governments (a net \$810 million out of \$853 million).

The high proportion of the Indigenous health services provided by State and Territory governments is underlined by the fact that nearly 80 per cent of gross expenditures on health services for Aboriginal and Torres Strait Islander people through publicly subsidised programs (including services funded through the Medicare Agreements) were managed by the States and Territories. For non-Indigenous persons, this proportion was just over one-half.

Direct Commonwealth funding is comparatively minor in importance. Aboriginal health organisations funded by the Commonwealth provided only 11 per cent (\$90 million) of the total public outlays on health services for Aboriginal and Torres Strait Islander people in 1995-96, and less than 6 per cent of the publicly funded cost of health services for Indigenous people was paid for through Medicare and the Pharmaceutical Benefits Scheme (PBS). For non-Indigenous people, the proportion of publicly funded health services paid for through Medicare and the PBS exceeded one-third.

On a per capita basis, gross spending on Indigenous people through publicly subsidised programs delivered through State and local government services outranked such spending on non-Indigenous people by a ratio of 2.2:1. The comparable ratio for services provided through Medicare and the PBS, however, was 0.24:1.

Table 4.1 Gross Expenditures per Person, Indigenous and non-Indigenous People, Through Publicly Subsidised Health Programs, 1995-96

	Indigenous	Non-Indigenous	Ratio Indigenous/Other
Delivery	\$	\$	
Through State and local government	1,763	806	2.20:1
Through Medicare/PBS	128	535	0.24:1
Through Aboriginal health organisations & Other Commonwealth programs	344	213	1.62:1
TOTAL	2,235	1,554	1.44:1

Source: Deeble *et al* (1998) Table 2.2, p 11

Estimated payments for Aboriginal and Torres Strait Islander people represented only 0.55 per cent of all Medicare benefits for medical services, and an even lower proportion of PBS benefits, in 1995-96 (Deeble *et al*, Table 2.5, p. 14).

Overall, per capita expenditures on publicly funded health services was about 55 per cent higher for Aboriginal and Torres Strait Islander people than for non-Indigenous people (Deeble *et al*, Table 2.6, p. 14). The different patterns of service usage are shown in Table 4.2.

Table 4.2 Net Public Expenditures per Person by Type of Health Service, 1995-96

	Indigenous		Non-Indigenous		Ratio Indigenous/Other
	\$	%	\$	%	
Hospitals	1,218	55.3	604	42.6	2.02:1
Nursing Homes	43	2.0	116	8.2	0.38:1
Community Health	543	24.6	81	5.7	6.71:1
Patient transport	95	4.4	17	1.2	5.82:1
Public Health	71	3.2	27	1.9	2.57:1
Medicare & other medical	91	4.1	366	25.8	0.24:1
PBS drugs & appliances	27	1.1	133	9.5	0.20:1
Other	115	5.2	73	5.1	1.58:1
TOTAL	2,201	100.0	1,417	100.0	1.55:1

Source: Deeble *et al* (1998) Table 2.6, p 14.

As the table shows, Indigenous people made much greater use of hospitals and of community health services (including through Aboriginal Health Services). They made much greater use of patient transport services, though these were only a small proportion (1.3 per cent) of total public expenditures on health services. The table also shows that, in addition to making much less use of Medicare and the PBS, Indigenous people made comparatively little call on public funds for nursing homes (less than 40 per cent of the per capita level for non-Indigenous persons).

The factors influencing these patterns are now examined.

Income. To what extent might the higher public expenditure per head on Indigenous people be attributable to the fact that their incomes are low? To examine this, Deeble and his colleagues estimated the distribution of income among Indigenous and non-Indigenous families, adjusting for the number of adults and dependent children in the family. On this basis 72 per cent of Indigenous families in the 1994 National Aboriginal and Torres Strait Islander Survey had adjusted family incomes within the range of the lowest two quintiles - that is, the poorest 40 per cent - of all families in the 1990 National Health Survey.

Estimates were then made of the average government expenditure per head on health services in 1993-94 for non-Indigenous people in each income band. For the lowest two quintiles, these gave figures of \$2,079 and \$1,971 respectively (Deeble *et al*, Table 4.1, p.57). (Reflecting the sharp fall in use of publicly funded services as incomes rise, the average was

\$1,301.) These figures are comparable with the \$1,908 estimate of net government expenditures per Indigenous person in the same year (Figure 4.7, p.57)²².

On the evidence available, therefore, the overall use of publicly funded health services by Indigenous people appears to be consistent with the use made of such services by non-Indigenous people with comparable incomes.

It is likely that it is mainly because of their lower incomes that Indigenous people make much greater use of publicly funded health services relative to services for which the user pays or at least has to contribute. This difference is shown in Table 4.3. Indigenous people spend much less on the services of (non-hospital) GPs and specialists for which significant private contribution is required. And they spend almost nothing on private hospitals, dental and other professional services or non-prescription medicines for which there is little government contribution.

Incidence and type of illness. The overall poor state of health of Indigenous people is demonstrated by their much lower life expectancy, which has already been referred to. Higher incidences of specific diseases are also shown in mortality statistics, as for example in an analysis undertaken by C.D. Mathers²³ of mortality in Statistical Local Areas in North Australia where more than 50 per cent of the population identified as Aboriginal or Torres Strait Islander in the 1991 Census. He found that, compared with the total Australian population, people living in remote Aboriginal areas had substantially higher age-standardised death rates overall (3 and 4 times higher for males and females respectively) and dramatically higher rates for a wide range of specific causes, including:

- infectious and parasitic diseases (18 and 22 times higher for males and females respectively);
- cancer of the cervix (11 times);
- diabetes (18 and 22 times);
- respiratory diseases (8 and 12 times);
- diseases of the genito-urinary system (9 and 17 times); and
- homicide (15 and 8 times).

²² Actual figure supplied by authors.

²³ Reported in Deeble *et al* (1998) p. 45

Table 4.3 Gross Expenditure per Person, Indigenous and non-Indigenous People, Through Publicly Subsidised Health Programs, 1995-96

Source	Indigenous				Non-Indigenous				Ratio
	Govt \$m	Priv. \$m	Total \$m	Per person \$m	Govt. \$m	Priv. \$m	Total \$m	Per person \$m	Indig./ Other
<i>Subsidised services</i>									
Public hospitals									
- inpatients	340	4	344	939	8,222	948	9,170	515	1.82
- outpatients	98	-	98	267	2,129	-	2,129	120	2.23
Mental institutions	10	-	10	27	399	-	399	22	1.23
Nursing homes	16	4	20	49	2,065	672	2,737	154	0.35
Community health	199	-	199	543	1,438	5	1,443	81	6.70
Patient transport	35	1	36	98	295	264	559	31	3.16
Public health	26	-	26	71	489	-	489	27	2.63
Medicare & other medical	32	2	34	93	6,532	1,374	7,870	442	0.22
PBS drugs & appliances	10	3	13	35	2,366	483	2,879	162	0.20
Administration & research	43	1	44	120	1,295	620	1,915	107	1.12
<i>Other services</i>									
Private hospitals	-	5	5	13	258	2,858	3,116	175	0.07
Dental & other professional	1	11	12	32	296	3,108	3,404	191	0.17
Non-prescribed medicines	-	12	12	33	-	2,440	2,440	137	0.24
TOTAL	810	43	853	2,320	25,775	12,775	38,550	2,163	1.08

While such statistics are not of themselves proof of higher Indigenous demand for publicly funded health services – one can, after all, die at home or under a tree from diabetes related causes, as well in a public or private hospital or nursing home – they are of such a magnitude that it is inconceivable that they would not be reflected in increased demand for those services.

A casemix study of hospital inpatients in a number of non-metropolitan areas (Fisher *et al*, 1998) provides some interesting insight into Indigenous usage of acute hospital services. The study was undertaken with the co-operation of 10 hospitals of more than 30 beds, located in Cairns, Mount Isa, Cunnamulla, St George and Innisfail (Queensland), Kalgoorlie (Western Australia), Port Augusta (South Australia), and Darwin, Katherine and Alice Springs (Northern Territory).

The study found that Aboriginal and Torres Strait Islander people comprised 34 per cent of hospital separations. This almost certainly represents a significantly higher proportion than the proportion of Indigenous people in the catchment areas for the hospitals. They comprised two-thirds of those admitted for renal dialysis. In most other significantly occurring casemix classifications, they had considerably longer average lengths of stay than non-Indigenous patients and significant variation in relative frequency of admissions.

The average cost of an inpatient episode for an Aboriginal and Torres Strait Islander patient was 5.3 per cent higher than for a non-Indigenous person. If the cost is adjusted for the difference in case-mix, however, the difference jumps to 19 per cent. This reflects primarily the fact that average costs for renal dialysis vary little between Indigenous and non-Indigenous patients, and the high demand for such treatment in the Indigenous population. Those results imply that Deeble's estimates of hospital expenditures on Indigenous patients may be somewhat low.

Location. The 1996 Census reported that 27 per cent of Aboriginal and Torres Strait Islander people lived outside urban areas, ie in bounded localities and rural areas, compared with 14 per cent of the total population. The proportions in major urban areas were 30 and 62 per cent respectively.

It is widely considered that there is a general tendency for people from rural and remote areas to be more likely to be admitted as inpatients when requiring hospital treatment, and to stay longer in hospital, partly because they are sicker when admitted and partly because they have nowhere else to stay where they can be properly cared for and have access to health service. In a Northern Territory study of causes of variation of length of stay within Diagnosis Related Groups, Beaver *et al* (1998) show that this effect is a more important determinant than Aboriginality and continues to be significant even when Aboriginality is also taken into account. The casemix study referred to in the previous section noted that the average length of stay of Indigenous inpatients in all but one of the top twenty diagnosis-related groups was significantly higher than for non-Indigenous patients. The NT study implies that a substantial part of that difference may be because more Indigenous people live in rural areas. Similarly, it is not possible to say how much locational factors might have affected decisions to admit Indigenous persons for inpatient treatment, rather than treatment as outpatients.

It might be noted, however, that other data relating to length of stay (Deeble *et al* 1998, p. 79) tends to suggest that, in a number of States, the average length of stay of Aboriginal and

Torres Strait Islander inpatients, even excluding dialysis patients, is somewhat less than that of non-Indigenous inpatients.

Cultural factors. Indigenous cultural preferences have underlain the development of a system of community controlled medical services specifically for Aboriginal and Torres Strait Islander people. Expenditure on these services through the Commonwealth's Office of Aboriginal and Torres Strait Islander Health Services totalled \$90 million in 1995-96.

Has the existence of this system added to the public costs of health services for Indigenous people? It might be argued that it would be more efficient – presumably also meaning cheaper – to provide all medical services to Indigenous people through general services rather than to have a separate system running along side them. But the matter is complex. For one thing, some Aboriginal health services (AHSs) operate in areas where mainstream services are poor or non-existent. Also, in the absence of a service which is attuned to their particular needs and that they can afford, some Indigenous people might decide not to seek medical attention at all, resulting in worse health and, eventually in some cases, more costly treatment in acute care public hospitals. What the net effect of this separate system might be on the public costs of health services for Indigenous people thus becomes very difficult to assess.

4.5 Discussion

The higher levels of public expenditure on Indigenous Australians arises primarily from the greater use they make of services provided by State and local governments for all Australians rather than from expenditure on Commonwealth services that are directed particularly at improving Indigenous health.

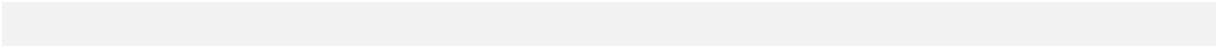
Poverty alone is sufficient to explain the higher public expenditure per person (a little over 50 per cent) on health services for Indigenous as compared with non-Indigenous Australians. The level of such expenditure for Indigenous people is about the same as the level for non-Indigenous people with comparable incomes.

Looked at another way, most of the difference is due to the higher personal health expenditures by non-Indigenous people. Total health expenditure – privately as well as publicly funded – per head is only about 8 per cent higher for Indigenous people. Different patterns of use of health services between Indigenous and non-Indigenous people reflect differences in disease incidence, income, location and preference for services delivered in a culturally sensitive manner.

Considering their much shorter life expectancy and much higher incidence of many diseases, allocation of public expenditure according to need would almost certainly put more resources into health services for Indigenous people.

In the period since 1995-96, the Commonwealth government has increased spending on Indigenous health programs. Herron 1999 (p.16) indicates that estimated expenditure in 1999-2000 “on services in Aboriginal and Torres Strait Islander communities” is \$153.5 million, while outlays on other programs in the Health and Aged Care portfolio are projected to amount to \$69 million. While direct comparisons with earlier years are not possible because of coverage changes, the increases are significant, though any assessment of their overall impact on the comparative benefits from public health outlays for Indigenous and non-

Indigenous persons would need to take account of the fact, noted earlier in this chapter, that direct Commonwealth funding has been relatively minor in importance.



5. Housing

5.1 Introduction

Directly or indirectly, public funds are spent on all kinds of housing in Australia. There are three distinct programs of direct expenditure that Indigenous people participate in to varying degrees. In addition public funds are spent indirectly through exempting from taxation of particular forms of income from housing. For some kinds of expenditures such as rent assistance the amount spent is a good measure of the benefit to the recipient. For others such as public housing and home ownership it is more appropriate to measure the benefits by means other than in relation to the annual level of expenditure.

The first housing program is the provision of public housing under the Commonwealth State Housing Agreement. Under this program the Commonwealth has traditionally lent money to the States and Territories which also contribute some of their own funds and manage the stock of housing. Tenants are charged either market rent, or a (rebated) rent equal to a specified percentage of household income, usually 20-30 per cent, whichever is lower. The great majority of tenants are charged rebated rents. Eligibility for entry into public housing is generally means tested but, in most States and Territories, once a household becomes a public tenant it is not evicted if its income subsequently exceeds the maximum for entry. The rebate falls as income rises, and above some income level the tenant will pay full market rent. Rent rebates are not received in cash but eligible families pay less than market rent. The Agreement includes specific Commonwealth funds for housing Indigenous people under the Aboriginal Rental Housing Program (\$91 million in 1995-96), but Indigenous people are housed also under the general program. Only through the censuses is it possible to assess accurately the number of Indigenous people in public housing.

The second is the Rent Assistance (RA) Program of the Department of Family and Community Services (DFACS) under which income units (families or individuals with separate incomes) that receive a DFACS or Veterans' Affairs pension, benefit or allowance and are renting privately are eligible to receive rent assistance as an income supplement if their rent payment exceeds a specified level. There are no Indigenous-specific provisions within the Rent Assistance Program, though some aspects of it have differential impacts on the amount of assistance Indigenous people receive.

The third program is community housing, which has a large element specifically for Indigenous people. The Aboriginal and Torres Strait Islander Commission (ATSIC) provided \$106.8 million for such housing in 1995-96 under its Community Housing and Infrastructure Program (CHIP). In addition, some of the ARHP funds are passed on to local Indigenous Community Housing Organisations (CHOs) for community housing. Indigenous community housing is similar in many respects to public housing but there are significant differences: it is funded by capital grants rather than loans and managed by CHOs and it is located predominantly in discrete Indigenous communities, mostly in rural areas or in or near small urban centres. Rents are almost invariably rebated to a percentage of household income in a manner similar to public housing.

The fourth way in which the Commonwealth effectively spends funds on home owners is through tax exemptions (often known as tax expenditures) and privileged treatment of an owner-occupied home in the asset part of the means test for social security benefits.

In this study we are interested in the benefits that are provided, through public expenditure, to Indigenous people compared with those provided to the non-Indigenous. Public expenditure on rent assistance goes directly to the beneficiaries in the form of an income supplement to help private tenants pay their rent, and therefore is a good measure of the benefits to recipients. But public expenditure on public (traditionally loan funds) and community housing (mostly grant funds) is used, along with income from rent and from sale of existing housing, for capital expenditure on new housing and for maintenance and management of existing housing. As the accounts of public housing authorities and community housing organisations are kept on a cash rather than an accruals basis, the level of expenditure on public housing in any one year is a poor indicator of either the true cost or the value of the rent rebates received by tenants in that year. Other factors affecting the level of expenditure in any one year are the size and age of the public housing stock in a particular State or Territory, the rate at which it is being expanded or reduced, the rate of interest being paid and the debt on the stock as a proportion of its market value.

Indigenous households are eligible for public housing on the same terms as non-Indigenous. Because their incomes are lower, it would be expected that a higher proportion of them would be public tenants. The records of the housing authorities contain incomplete information about the number of Indigenous families housed in their general public housing as there are no advantages and may be disadvantages for Indigenous people in identifying. Census data for 1996 are the best source of information about the number of Indigenous people housed by public housing authorities and how much they have benefited from rent rebates.

There are two other sources of funds for Indigenous housing which are not included in the estimates in this chapter.

- The Aboriginal Home Ownership program lends modest funds at subsidised interest rates to low-income Indigenous home buyers and requires only small deposits. Although gross outlays were \$36.4 million in 1995-96, net outlays were less than \$5 million since \$13.4 million was received in interest payments and \$18.4 million from repayments of existing loans. In 1995-96, 408 loans were made averaging \$96,000 and 4000 families had loans at the end of that year.
- Aboriginal Hostels Ltd provides subsidised accommodation, usually in urban areas, for Indigenous people temporarily living away from their home base. Although providing a kind of housing, these hostels supply accommodation that has more in common with student hostels and hostels for the aged than with family housing. This chapter will limit itself to housing rather than covering all accommodation.

5.2 Indigenous disadvantage

The housing disadvantages suffered by Indigenous people have been extensively studied in recent years. Using 1996 Census data, Roger Jones (1999, Chap. 9) used two measures of housing need. The first measure is one of housing adequacy and the second measure is an estimate of housing affordability. It is a measure of inadequate income relative to the cost of housing.

Jones found that 17.8 per cent of Indigenous family and group households were overcrowded by accepted Australian standards, compared with 3.8 per cent of non-Indigenous. In addition to estimating the number of overcrowded dwellings, Jones also estimated the depth of

housing inadequacy. He calculated that the average additional bedroom need of overcrowded Indigenous households is 1.92 compared with 1.16 for overcrowded non-Indigenous households. Thus not only are more Indigenous households overcrowded, those that are overcrowded are more seriously overcrowded.

Inadequacy defined mainly as insufficient living space ignores other facets of the quality of housing of Indigenous people, including its state of repair and whether or not services are available and functioning. Using 1996 Census results and data from other sources, Jones (1998) has estimated the capital cost of making all housing of Indigenous people adequate in these respects as \$1,981 million or nearly \$21,000 per household. No comparable estimates for non-Indigenous housing have been made

Jones' (1999) second measure of housing disadvantage was an estimate of those who could not afford to pay their current housing cost and still have enough left over to buy the other necessities of life. How much is needed to be 'left over' depends on the size and composition of the household and is commonly known as the 'after-housing poverty line'. Some people, however, pay high housing costs because they choose to live in large or high quality housing. Taking into account those who were paying more than the rent in the area where they lived for housing that was "adequate" for them, given the size of their household, Jones found that, by this measure, 13 per cent of Indigenous people could not afford to pay anything for their housing and another 14 per cent could not afford to pay the market rent for adequate housing. The comparable proportions for the non-Indigenous were 4.5 and 6 per cent respectively.

Jones (1998) estimates also the depth of this problem in the Indigenous community: the total annual cost in 1996 of meeting the affordability deficits of Indigenous households who rented their housing, including the estimated \$65 million foregone by public housing authorities and Community Housing Organisations in the form of rent rebates. His estimate does not include the \$19 million (our 1997 estimate) that was received from Rent Assistance. These two figures can be seen as affordability deficits that were being met by governments through current programs. The affordability deficits that are not being met (\$69 million) were estimates of the additional income that would be required to make it possible for Indigenous households to pay the cost of their current housing up to a level that would allow them to rent private rental housing that is adequate for their household in terms of size. Finally, an additional annual rental cost of \$13 million would allow private renters currently living in poor quality dwellings to move to dwellings of an acceptable standard. Again no comparable estimates for the non-Indigenous population are available. The \$1981 million capital cost of meeting unmet need for adequate housing can be amortised to an annual cost of \$144 million and added to the \$82 million annual cost of making adequate housing affordable to give a total annual cost of \$226 million as a measure of unmet need.

In 1996 only 31 per cent of Indigenous households fully owned or were purchasing their homes compared with 70 per cent of other households. Home owners in Australia are advantaged by the tax and social security systems because, as 'landlords' to themselves, the rental value of their housing is not subject to income tax, increases in the value of owner-occupied housing are not subject to capital gains tax and, unlike other assets, the value of an owner occupied home is not taken into account in determining eligibility for, or the level of entitlement to, social security payments.

5.3 Method

The approach taken in measuring the benefits received from public expenditure on housing to private, public and community tenants is to estimate the extent to which the rents payable are lower as a result of the Rent Assistance (RA), public and community housing programs. In the case of RA, data about the level of expenditure on the program provide direct information about its value to recipients²⁴. The disadvantage suffered by Indigenous Australians because so few of them are able to benefit from the tax advantages of home ownership (tax forgone as a result of privileged treatment of home ownership) is difficult to measure but some simplified estimates have been made.

It is assumed in the following estimates that Indigenous people pay the same as non-Indigenous when they rent in the private market and when they purchase a house. This assumption may not always reflect reality; there are many accounts of individual acts of discrimination against Indigenous people, especially in the rental market. To the extent that they pay more for housing of a given quantity and quality, the following estimates of the benefits they receive as a result of public expenditure will be too high. This is most obvious in the private rental market where a rent which will buy a non-Indigenous tenant household adequate housing may not buy the same housing for a comparable Indigenous tenant household.

For public and community housing it was necessary to use indirect estimates, initially developed by the Australian Institute of Health and Welfare (AIHW) (1995, 1997) and modified by Jones *et al* (1998). Using 1996 Census data, the market rent for each public or community house or flat was estimated from the level of rent paid for privately rented housing of the same size (number of bedrooms) in the same general location. Since public and community housing is provided primarily for those at the lower end of the income distribution, it was decided to select a point in the distribution of private rents lower than the median. More or less arbitrarily, AIHW selected the thirtieth percentile²⁵, and we have used the same. The rent rebate is therefore the difference between rent actually paid and the estimated market rental value of each house and flat.

Only low income households can get access to public housing and those with other disadvantages as well get priority allocation. If their incomes rise above the maximum for allocation, tenants in most areas can continue to live in public housing but lose their rebate and pay the full market rent. Less than 20 per cent of public housing tenants pay full market rents. Means testing is less formal, if it exists at all, in the community sector.

Since the census data from which estimated rent rebates are calculated include the income of the household, the distribution of rebates between income levels can be estimated.

Since RA is payable only to recipients of social security or veterans beneficiaries it can be assumed that all are in the lower parts of the income distribution. But because RA is paid to

²⁴ It is arguable that private rents for low-cost accommodation are higher than they would be in the absence of RA because RA increases the demand and supply is not perfectly elastic. If that were true, gross RA would exaggerate the benefits received by eligible private tenants. To the extent that the supply of low-rent private housing is relatively elastic, the exaggeration will be smaller.

²⁵ If, for example, rents paid for 3 bedroom dwellings in some location are listed from the lowest to the highest, the 30th percentile is the point on that distribution where 30 per cent of the dwellings pay a lower and 70 per cent a higher rent.

individuals and means tested on the income of their income unit while the unit for public housing is the household, the two sets of data cannot readily be combined. For example RA can be paid to a person or a couple renting a room or sharing a house or flat, but only households (generally comprising a single family) can occupy houses and flats in the public sector. Indigenous households are more likely than non-Indigenous to include more than one family or a family and other adults.

The ideal units for assessment of standards of living are groups that share their income: income units, most of which are families or single persons living alone. Their incomes should be adjusted for the number of adults and children in each unit. Data on the size and composition of income units and households were not readily available for any of the data sets used for this study. What we know from census and other data is that the median Indigenous household is 54 per cent larger than the median non-Indigenous household and the average 37 per cent larger. Similarly, if single persons living alone are added to families to approximate income units, the average Indigenous income unit is 29 per cent larger. As a result of these differences the *income per person* in any given *household income* range is generally lower in Indigenous than in non-Indigenous households. This needs to be kept in mind when comparing the value of rent rebates between Indigenous and non-Indigenous households in any income range.

5.4 Public housing

Using the methods described above, the estimated gross value of all rent rebates in public housing in 1996 was about \$1100 million, of which about 7 per cent was received by Indigenous households. This is well above the proportion of Indigenous to total households – about 1.6 per cent. The proportion in public housing would be expected to be higher partly because Indigenous households are poorer and, because their parents were also poorer, less wealth has been passed down to current households. Therefore Indigenous households at any income level are less likely to be home owners. The data shown in Table 5.1 make it possible to explore some of the reasons for these greater benefits to Indigenous households.

The table contains two summary measures. The first row of bold figures contains data for household with incomes below \$26000, which is close to the 30th percentile in the income distribution for all Australian households, and the last row for all income levels. The last two columns in the table provide the best overall summary of the assessment. On average all Indigenous households, no matter what their tenure, get five times the benefit from public housing rent rebates received by non-Indigenous households. Those with incomes less than \$26000 get just over three times the benefit of comparable non-Indigenous households.

Very little of those large differences is a result of differences in the average level of rebates paid to Indigenous and non-Indigenous public housing tenants. This can be seen by comparing columns 4 and 5: the average rebate received by an Indigenous public tenant is only 7 per cent more than for non-Indigenous tenants, and the difference is much the same for lower income tenants. This difference might occur because the larger Indigenous households are allocated larger and more costly dwellings. Thus almost all of the difference in average rebate per household is because a higher proportion of Indigenous households live in public housing: 23 compared with 5 per cent.

Table 5.1 Estimated Rebates to Indigenous and non-Indigenous Public Housing Tenants at Different Levels of Household Income, 1996

Household Income	% of h'holds public tenants		Av. rebate per public tenant \$		Av. rebate per household \$	
	Indig	Non-Indig	Indig	Non-Indig	Indig	Non-Indig
<\$8319	37.34	13.96	4020	3791	1501	529
\$8320-10399	40.62	14.70	4160	3628	1690	533
\$10400-15599	34.56	10.36	4205	3780	1453	391
\$15600-20799	31.64	10.50	3913	3851	1238	404
\$20800-25999	27.09	7.41	3716	3717	1007	275
Total <\$26000	32.96	10.68	4000	3755	1318	401
\$26000-31199	23.47	7.01	3449	3573	809	251
\$31200-36399	20.60	4.56	3310	3271	682	149
\$36400-41599	18.17	4.35	3461	3074	629	134
\$41600-51999	14.22	3.46	3392	2823	482	98
\$51600-77999	10.02	1.42	3228	2537	323	36
>\$78,000	6.85	0.42	3370	2720	231	11
Total	23.16	4.95	3764	3500	872	173

Source: calculated from unit record files from the 1996 Census.

The table includes data for households according to income level. It has been pointed out above that, at any given level of household income, individual members of Indigenous households are likely to be poorer because their households are larger. It would be expected, then, that at any given level of household income a higher proportion of Indigenous households would qualify as public tenants. One way of trying to understand the marked differences between columns 2 and 3 that drive the differences between columns 6 and 7 is to examine the tenures in which Indigenous households are under-represented. This is shown in Table 5.2.

Table 5.2 Tenure Distribution of Indigenous and non-Indigenous Households at Different Levels of Household Income, 1996

Household Income	Owner		Buyer		Private rental		Community rental	
	Indig	Non-Indig	Indig	Non-Indig	Indig	Non-Indig	Indig	Non-Indig
	%	%	%	%	%	%	%	%
<\$8319	14.82	70.96	7.79	3.73	21.43	3.64	8.92	0.58
\$8320-10399	14.34	71.77	4.60	3.67	23.40	3.66	9.64	0.80
\$10400-15599	15.99	45.74	6.59	8.52	26.36	23.84	9.86	1.20
\$15600-20799	10.24	57.53	8.49	8.00	31.88	18.38	11.48	0.69
\$20800-25999	10.85	53.42	12.22	11.72	31.64	22.43	11.32	0.49
Total <\$26000	12.79	57.77	8.36	7.97	28.33	16.73	10.55	0.74
\$26000-31199	12.71	38.53	15.70	17.75	29.27	31.13	11.73	0.40
\$31200-36399	10.33	47.91	18.63	19.26	30.69	23.82	11.90	0.27
\$36400-41599	12.42	37.06	21.32	26.62	28.52	26.98	11.56	0.26
\$41600-51999	12.60	31.90	27.26	34.66	26.79	25.26	10.95	0.26
\$51600-77999	13.69	35.97	34.30	39.79	23.64	18.97	10.45	0.14
>\$78,000	18.14	36.99	38.82	46.01	20.21	13.45	7.32	0.13
Total	12.92	43.26	18.04	26.89	27.14	19.73	10.64	0.36

Source: calculated from unit record files from the 1996 Census.

Note: The percentages in the rows do not add to 100 because public tenants (shown in Table 5.1) and households in 'other and not stated' tenures are not included.

There is significant under-representation of Indigenous households among both outright owners and home buyers. The differences are greatest for outright ownership which is more than three times as common overall among the non-Indigenous, and up to five times as common among lower-income households. Among buyers there are only small differences at each level of income. But the much higher average level of incomes among non-Indigenous buying households helps produce a 49 per cent higher proportion among the non-Indigenous in total (27 compared with 18 per cent). Community rental is quite rare among the non-Indigenous at all income levels. It is mostly a geographically separate tenure among the Indigenous, used by households at all levels of income in discrete Indigenous communities. Private renting also is more common among the Indigenous, especially at the lowest income levels.

Some of these differences can best be explained by looking at tenure choice from a life-course point of view. The 70+ per cent of outright owners at the two lowest levels of income among non-Indigenous households reflect the fact that a large proportion of these people would be retired single persons or couples whose tenure choices were made at an earlier stage in their life course when their incomes were much higher. Buying a home was for them a major part of their saving for retirement – more important in many cases than superannuation. Fewer older Indigenous people had the opportunity or the resources to buy their homes when they were younger because few had secure jobs or sufficient income to save a deposit and service a mortgage. In addition many Indigenous people give lower priority to the accumulation of physical capital such as housing relative to the “social capital” they can accumulate by responding to demands that they share their income and assets with their kin (Neutze, 1998; Martin, 1995). Building up social capital in this way makes it more difficult to accumulate physical capital. Finally, individual ownership of houses is not legally possible for those living on Aboriginal communal land. The lack of individual land title, which precludes mortgage financing, also makes it very difficult to borrow to build on such land.

It has long been recognised in the housing literature that housing decisions can be understood only by examining the level and distribution of income and wealth over the life course. Indeed there is good reason to be suspicious of the figures reported 10 to 15 per cent of outright owners among Indigenous households with low to middle incomes. Some of these may in reality live in houses on crown land or Aboriginal land for which no rent is paid but where the occupant, although having no formal title to the property, feels like an owner.²⁶ In any event it is clear from Tables 5.1 and 5.2 that classifying people solely according to household income at a point of time can provide only a partial picture of the relative standards of living of different households.

No matter what the explanation of the high level of occupancy of public housing by Indigenous people, there is no doubt that they have been comparatively well served by the suppliers of public housing. In part this is because of the funds earmarked for Indigenous housing under the Aboriginal Rental Housing Program over the years²⁷ (Sanders, 1993, 1996) and in part because they have been unable to access home ownership because of their low incomes and wealth. In June 1996 there were some 11,500 dwellings that had been built or bought using ARHP funds in public ownership and presumably occupied by Indigenous people (Department of Social Security, 1996, p. 385). That would account for about half of the public housing occupied by Indigenous people at the time of the 1996 Census.

5.5 Community housing

The Community Housing program, funded primarily by the Commonwealth, began in the early 1970s in response to criticisms that State and Territory housing authorities were not sufficiently sensitive to the preferences and special needs of Indigenous Australians in the design, layout and management of public housing. In addition, some of those authorities were reluctant to provide public housing in discrete Indigenous communities, often in remote locations, where the only demand came from Indigenous people. Community Housing Organisations were established, some providing only housing but others providing also a

²⁶ This view is strengthened by the fact that the highest proportions of outright owners among Indigenous households are found in the “Rural Balance” defined as places with fewer than 200 people (ABS, 1998), which is where people are more likely to live on Aboriginal or crown land.

²⁷ About \$90 million per year in recent years.

range of other support services to their communities. In addition to funds earmarked for community housing under the Community Housing and Infrastructure Program (CHIP), CHOs have, in recent years, begun to receive allocations from some State and Territory ARHP funds and funds from State and Territory government sources.

Non-Indigenous community housing is a mixture of publicly funded but community managed housing much like Indigenous community housing, and cooperative housing for middle income people. The average rebate per dwelling was only 75 per cent of that in Indigenous community housing. Because of its relatively small role, the average rebate per non-Indigenous household was only \$10 per year.

Most of the funds allocated to Indigenous community housing are grants and therefore carry no obligation to pay interest or to repay the funds, but the CHOs are expected to charge rent calculated in much the same way as public housing rents, ie. at a proportion (20-30 per cent) of household income up to the market rent for the property. Both of these criteria are difficult to implement in discrete Indigenous communities where household composition, and therefore household income, changes frequently and where there is no private rental market from which market rents can be estimated. CHOs are, however, expected to cover management and maintenance costs from rent revenue and, in the interests of prudent management, should also set aside a depreciation reserve so that in due course the housing can be replaced.

The very features that make CHOs responsive to the preferences of their clients also make them responsive to the difficulties that clients, who frequently are in the same kinship group as the Organisations' administrators, have in paying even modest rents. One result is that some CHOs have large rent arrears. Another is that rents for Indigenous community housing are much lower than public housing rents (Sanders, 1996) despite the fact that much of it is in remote locations where building costs are high, though of course land costs and market rents, to the extent that they can be assessed, are low. Indigenous people can also see community housing, paid for from grants, as belonging to them and may see no good reason to pay rents.

Notwithstanding its special features, the benefits of community housing to tenants and the Indigenous community can be assessed in the same way as the benefits from public housing. The lack of a local private rental market in discrete communities, however, creates problems for estimating rent rebates from census data. This has required that the private rental data for the region be used to estimate market rents for community housing. Since most of that rental housing is located in urban centres where rents are usually higher, rent rebates may be over-estimated. Table 5.3 shows the estimated rent rebates for community housing comparable to the estimates for public housing in Table 5.1.

The average rebate per Indigenous community tenant is about the same as for Indigenous tenants of public housing, despite the fact that rents charged for community housing are a good deal lower than those charged for public housing.²⁸ Community housing is spread more evenly than public housing across different household income groups. It does not appear to be means tested in the same way as public housing, presumably because it is available to all

²⁸ Sanders (1996) using data from the NATSIS showed that in 1994 55 per cent of Indigenous community tenants paid less than \$48 per week and 84 per cent less than \$108 compared with only 27 and 70 per cent respectively of Indigenous public housing tenants. He also shows that much of the difference is due to most public housing being in urban areas and most community housing in rural and remote areas.

members of most of the communities where CHOs operate. Furthermore the average rebate per household in community housing increases rather than decreases with household income. This could be mainly because higher household incomes result more from larger households with multiple incomes than from higher individual incomes. That would be likely to occur in rural areas where households are larger and many adults receive social security benefits or CDEP payments.

Table 5.3 Estimated Rebates to Indigenous and non-Indigenous Community Housing Tenants at Different Levels of Household Income, 1996

Household Income	% of households community tenants		Av rebate: \$ per community tenant		Av rebate: \$ per household	
	Indigenous	Non-Indig	Indigenous	Non-Indig	Indigenous	Non-Indig
<\$8319	8.92	0.58	3290	2974	293	17
\$8320-10399	9.64	0.80	3384	2629	326	21
\$10400-15599	9.86	1.20	3303	2460	326	29
\$15600-20799	11.48	0.69	3432	2722	394	19
\$20800-25999	11.32	0.49	3408	2949	386	15
Total <\$26000	10.55	0.74	3377	2680	356	20
\$26000-31199	11.73	0.40	3521	2829	413	11
\$31200-36399	11.90	0.27	3618	2752	431	7
\$36400-41599	11.56	0.26	3697	2656	428	7
\$41600-51999	10.95	0.26	3841	2724	421	7
\$51600-77999	10.45	0.14	4073	3049	426	4
>\$78,000	7.32	0.13	4839	4107	354	5
Total	10.64	0.36	3644	2720	390	10

Source: calculated from unit record files from the 1996 Census.

The benefits per household in each income group shown in the last columns of Tables 5.1 and 5.3 can be added. Over all Indigenous households, the benefits of rent rebates to those occupying public and community housing averaged \$1262 per year and for non-Indigenous households \$183. Among households earning <\$26,000, the average benefits were \$1674 and \$421 respectively. The vast majority of both of those differences resulted from the much higher proportion of Indigenous households who live in public and community housing: 34 compared with 5 per cent of all households and 44 compared with 11 per cent of those with incomes less than \$26,000.

The average rebate per Indigenous public and community tenant was \$3726, 8 per cent more than the \$3446 per comparable non-Indigenous tenant.

5.6 Rent Assistance

During the 1980s the Commonwealth introduced rent assistance for private tenants who are recipients of social security or veterans benefits except for single people under 25 without dependents living with parents or guardians. Rent assistance is paid in the form of a supplement to the main benefit received and it is paid to individuals rather than to households. All of these benefits are means tested on the incomes of the income unit of which the individual is a part. As a result Rent Assistance (RA) can be paid to single individuals who are boarding, renting a room or sharing a house or flat as well as to families who are sharing dwellings. Where couples are both receiving benefits only one of them would be eligible for rent assistance. It follows that the data about rent assistance are not strictly comparable to those for rent rebates in the earlier part of this chapter.

Whereas the guiding principle for calculation of rent rebates is that a household should not pay more than a given percentage of their income for housing, rent assistance is based on the belief that any benefit recipient can afford to pay up to a minimum rent. Above the minimum rent for payment of RA, assistance is paid at 75 cents per dollar of additional rent paid up to the maximum payment. The rent at which the maximum allowance is paid is, in principle at least, a rent at which it is believed adequate housing can be obtained in the market. In fact, of course, funds available for rent assistance are limited so many recipients of RA still have difficulty making ends meet. The minimum rent for RA and the maximum RA payable vary with the size and composition of the income unit and with housing arrangements. For example the maximum RA for single sharers is two-thirds of the maximum for single persons living independently. In 1995-96, \$1,552 million was distributed in RA and in 1996-97 \$1,614 million. In June 1997, 986,470 income units were receiving RA implying an average payment of a little over \$1600 per recipient. This is less than half the rent rebate per public housing tenant, though it must be remembered that the latter are households, which are larger than income units.

One of the features of RA is that the minimum rent at which beneficiaries become eligible and the rent at which the maximum RA is payable do not vary between locations even though market rents may vary markedly. As a result, many Indigenous people living in rural and remote locations do not pay a high enough rent to be eligible, while Indigenous and non-Indigenous people living in capital cities frequently have to pay more than the rent at which the maximum RA is payable and the majority get the full allowance. Nevertheless, data supplied by the Department of Family and Community Services showed that, in May 1997, average RA per fortnight per non-Indigenous recipient varied only from \$60 in capital cities to \$57 in rural areas, and for Indigenous recipients from \$56 to \$51. In remote areas the respective averages were \$54 and \$43, and a much higher proportion of Indigenous recipients lived in those areas. As a result the average RA payment per fortnight to each Indigenous recipient was \$8.50 lower than for each non-Indigenous recipient (\$51.90 and \$59.40).

How can RA received by Indigenous and non-Indigenous people be usefully compared? Table 5.4 shows three possible bases. All are based on the amount received per household per year and have the disadvantage that they rely on May 1997 data on RA and August 1996 census data on numbers of households in each income group. But since this was a period of

very slow movement in private rents and slow changes in the number of recipients of RA, the very broad conclusions should hold up despite the time difference.

Table 5.4 Rental Assistance per Indigenous and non-Indigenous Household

	Total households	RA p.a. per household \$	Private renters	RA \$ pa per private tenant	Private renters Income <\$36400	RA \$ pa per priv. Tenant Income <\$36400
Non-Indigenous	5920883	258	1177535	1298	516365	2960
Indigenous	94932	201	26119	729	16367	1164
TOTAL	6015815	257	1203654	1286	532732	2905

Sources: Census of Population 1996; Data on Rent Assistance supplied by the Department of Family and Community Services relating to May 1997.

Since only private and (very few) community tenants are eligible for rent assistance,²⁹ it is interesting to compare RA per privately renting household. The margin is now a good deal greater as shown in the fourth column of figures in Table 5.4: non-Indigenous private tenants get 78 per cent more RA on average than Indigenous. Presumably most of the difference is because the non-Indigenous pay higher rents. But there is a means test on all the allowances and benefits whose receipt is a condition for getting RA. Most of these means tests are around \$36,000 to \$37,000 for a couple with two children. In the final two columns of figures in Table 5.4 we look at the RA received per privately renting household in 1996 with an income less than \$36,400. The final column suggests that lower-income non-Indigenous private tenant households get about two-and-a-half times as much from RA as similar Indigenous households. Much of that difference is presumably because lower income Indigenous people pay lower rents and therefore are less likely to be eligible. Because it ignores the fact that many recipients of RA are individuals rather than households, the average RA per household on the last comparison is much higher than the average of \$1600 per recipient of RA. Nevertheless it is a legitimate comparison of the extent to which low income Indigenous and non-Indigenous households have been able to get access to Rent Assistance.

To check whether these comparisons using census household counts as the denominators accord with data from DFACS, households that are ineligible for rent assistance (home owners, public tenants and residents in government funded aged care accommodation) have been excluded from the client base. Of the others, 55 per cent of the non-Indigenous but only 27 per cent of the Indigenous clients received RA. The total annual RA per eligible (based on tenure alone) client was \$854 per non-Indigenous and \$359 per Indigenous client – a ratio of about 2.4:1. The averages are smaller because of the inclusion of non-household recipients in the second calculation, but the very limited RA received by Indigenous clients who are eligible in terms of tenure is confirmed.

The second column of figures is comparable with and can be added to the final columns of Tables 5.1 and 5.3. All show the benefits received per household, irrespective of tenure. As

²⁹ Community tenants are not included because it is believed that their rents are so low that few qualify for RA. If they were included the ratios of non-Indigenous:Indigenous become even greater: \$1274:\$524 per private and community tenant and \$2873:\$844 for those tenants with incomes less than \$36,400.

Table 5.5 shows, the \$57 more received by non-Indigenous than by Indigenous households makes a very small dent in the much larger margin (\$1262 to \$183) by which the benefits from public and community housing for Indigenous people exceed those for the non-Indigenous.

Table 5.5 Financial Assistance to Renters per Indigenous and non-Indigenous Household (\$ per annum per total household)

	Indigenous	Non-Indigenous
Public housing rebates	872	173
Community housing rebates	390	10
Private rent assistance	201	258
Total	1463	441

5.7 Owner occupation

The two major government policies which benefit owner occupants are the exemptions from income tax of (1) imputed rent and (2) real capital gains on proceeds from sale of a home. Although they do not involve the expenditure of government funds they do result in the government receiving less revenue, which has the same effect. Because they involve expenditure through tax measures they are called “tax expenditures”. The value of these expenditures is very difficult to calculate since they vary with the marginal tax rate of each home owner, the general rate of interest, the ratio by which the rate of house price inflation exceeds the general rate of inflation, the purchase price and the terms of any mortgage loan (Bourassa *et al* 1995). A third benefit to some home owners is the exclusion of the value of an owner occupied home in calculating the value of assets used in applying the means test to recipients of social security benefits. The value of this benefit has not been included in this chapter because of the lack of the data needed to estimate its distribution.

The capital gains tax exemption is conceptually simple. If any other major asset is sold for more than its purchase price (indexed according to changes in the Consumer Price Index), the real capital gains are taxed at the same rate as income, but for owner occupied dwellings no such tax is payable. Using varying assumptions, Bourassa *et al* calculate the effect of exemptions from capital gains tax on the value at the time of purchase of a house bought for \$100,000. For example, assume a general inflation rate of 3 per cent, a 20 year mortgage for 75 per cent of the purchase price, a nominal interest rate of 6 per cent, a marginal tax rate of 38 per cent and that the house is sold after 20 years. Then if the house gains in value by 4.5 per cent per year (1.5 per cent in real terms), the tax exemption of capital gains is worth \$11,100 at the time of purchase. If house prices increase by only 3.5 per cent (0.5 per cent real) the exemption is worth \$3,400 at the time of purchase.

The tax exemption of imputed rent is conceptually more complex and can best be explained with an example. Consider two otherwise identical neighbouring houses, one of which is rented and the other owner occupied. For simplicity we assume each costs \$100,000 and that

each has a 20 year mortgage for 75 per cent of its market value. Both the landlord and the owner occupant pay the same mortgage costs, the same rates, insurance and maintenance, both can expect the same capital gain if they sell in the future and both have the same opportunity cost because of the interest they could have earned if they had invested their \$25,000 deposit and their loan repayments during the course of the loan in some interest-earning asset. Assume that the investor receives a net rent for her house of \$6,000 per year after paying agent's fees, rates, insurance and maintenance – so that is also the net rental value of the owner occupant's accommodation. There is one difference (in addition to the capital gains tax difference discussed above) in the annual cost of providing housing in these two ways. The investor will pay income tax on the net rent received after deduction of mortgage interest (\$4500 in the first year) but the same net rental value of the housing the owner occupant provides for herself is tax exempt. At a 38 per cent marginal tax rate the difference in cost will be \$570 per year ($0.38(\$6000 - \$4500)$) in the first year. But by the time the mortgage has been fully repaid the difference rises to \$2280 per year. This is the value of the non-taxation of imputed rent to an owner occupant.

What effect will this have? The investor will be willing to buy a house such as this for renting only if she can get an acceptable rate of return on that investment. Since investors must compete with owner occupants in the market for houses she must pay the same price. The only way that she can afford to make such an investment is to charge rents that are higher than they would be if owner occupants, like landlords, were taxed on the rental value (net of mortgage interest) of the houses they own.³⁰ Such taxes have been in effect at various times in Australia as well as other countries. The final result is that rents are higher relative to house prices than they would be without this particular tax exemption. These are the benefits to owner occupants included in Table 5.6.

Bourassa *et al* use a slightly different way of calculating the advantage. The assumptions listed above plus a few more, such as that each owner makes early mortgage repayments of 1 per cent of the value of the house each year, can be used to calculate the present value to owner occupants of this tax exemption. With house prices increasing at 4.5 per cent per year the value, at the time of purchase, of exempting its rental value from tax is \$21,700 and at 3.5 per cent per year, \$18,400.

Perhaps a better way to show the combined effect of these two exemptions is the one used by Bourassa and Hendershott (1994) where they estimated that the annual cost of providing rental housing in Australia in 1993 at about 9.2 per cent of the capital cost compared with 6.3 per cent for owner occupied housing. It is therefore scarcely surprising that owner occupation is popular among Indigenous as well as non-Indigenous people. Since 1993 there has been some reduction in the rate of general inflation and of house price inflation and a 2 per cent margin could be used to provide a conservative estimate of the cost advantage enjoyed by owner occupants. On a house valued at \$150,000 this would mean an annual cost advantage of about \$3,000 per household.

The concepts developed above were used also by Flood (1993) in estimating the levels of assistance separately to home owners, home purchasers, private renters and public renters, using 1990-91 data. As reported by the Industry Commission (1994, p. 21) in their Report on

³⁰ The higher user cost of home ownership to investors will cause a fall in the price of housing—larger in those sectors of the market where a higher proportion is owned by investors. But it will have no effect on the relative price which is our interest here.

Public Housing, the highest average level of assistance per household was provided to public tenants (\$2890)³¹ followed by home owners (\$1890) with private renters (\$970) and purchasers (\$890) at lower levels. The reason for tax exemptions being of much lower value to purchasers is that mortgage interest payments would be an allowable deduction against taxable income from imputed rents just as they are against rent for landlords. Using Flood's figures without any adjustments for increased prices between 1990-91 and 1996 implies that the value of tax exemptions to outright owners in 1996 would be \$4.96 billion and to purchasers, \$1.46 billion. Together these two figures are much larger than the value of assistance to public (\$1.11 billion) community (\$0.10 billion) and private renters (\$1.55 billion) combined. As the Industry Commission points out, the largest government expenditure on housing is on owner occupants.

All Housing Assistance Applying the same figures to Indigenous and non-Indigenous households allows us to complete the picture of the benefits received as a result of public expenditure including tax expenditure on housing assistance as shown in Table 5.6, which includes also the results obtained earlier in this chapter. Since the sections of the table are constructed slightly differently it is useful to look at each component. The final result is that Indigenous households on average receive greater benefits from the total of government housing expenditures. But if account is taken of the larger numbers of people in Indigenous households, the benefit per person living in those households is about 10 per cent lower than for the non-Indigenous.

The series of rows in the table showing "benefit per total household" are calculated simply by dividing total benefits flowing to recipients by the total number of Indigenous or non-Indigenous households irrespective of tenure. They can be added vertically to get the figures in the second last line. The first row under each sub-heading shows the benefits from a particular kind of expenditure per household whose tenure makes them eligible to receive those benefits. For example in the first row it is the average rebate per public tenant even though some public tenants receive zero rebate. The fact that only some households in the relevant tenure receive benefits has a marked effect in the case of Rent Assistance which is shown as benefit per private tenant even though many private tenants receive no assistance.

On a per person basis, the total benefit per household in the final two lines are determined not only by the level of the particular benefits but also the distribution of households among tenures. A much higher proportion of non-Indigenous households are outright owners, and therefore receive very substantial benefits from exemption of imputed rent and capital gains from taxation. As a result, the benefits per Indigenous household are only 25 per cent higher than per non-Indigenous household, despite the much greater benefits Indigenous households get from public and community housing programs.

³¹ The difference between this estimate of \$2890 and our estimate of \$3500 is likely to be due to two factors. First, between 1990-91 and 1996 the proportion of public tenants receiving rebates and the average size of rebates increased as public housing became increasingly transformed into welfare housing available only to the very poor. Second, Flood's (1993) estimates were based on Housing Authorities' comparisons of rebated rents with market rents for their properties. It is notable that the Department of Social Security (1997, p. 7) estimated the average value of public housing rebates in 1996-97 as \$4000 per household. Our estimates are about midway between the other two and have the advantage that they are based on objective data rather than the (varying) methods of assessing market values in each State and Territory.

Table 5.6 Benefits to Indigenous and non-Indigenous Households from Housing-Related Public Expenditure Including Tax Expenditure

	Indigenous \$	Non-Indigenous \$
Public Housing		
Benefit per public tenant	3764	3500
Benefit per total household	872	173
Community Housing		
Benefit per community tenant	3644	2720
Benefit per total household	390	10
Private rental		
Benefit per private tenant	729	1298
Benefit per total household	201	258
Outright owners		
Benefit per owner*	1890	1890
Benefit per total household	244	818
Buyers		
Benefit per buyer*	890	890
Benefit per total household	161	239
Total		
Benefit per total household	1868	1498
Benefit per person	505	555

* These figures are the same for Indigenous and non-Indigenous households as a result of assumptions made rather than estimates of their value.

In one important respect these calculations might be expected to over-estimate the benefits to Indigenous owners relative to the non-Indigenous. The average benefit to Indigenous and non-Indigenous owners (and, at a different level, buyers) are assumed to be the same because no data were available to permit them to be separately estimated. But any benefits from exemption of income from taxation are worth more to those whose marginal tax rates are higher, that is those on higher incomes.³² They are worth more also to those whose houses are of greater value. We know that Indigenous incomes are lower and we would expect that the values of the houses they own or are buying would be lower also. These factors together determine the value of exemptions received by owners. Also, together with the ratio of mortgage debt to home value, they determine the value of the exemptions received by buyers. It seems likely, then, that the estimated Indigenous benefits shown in Table 5.6 for owners

³² Flood's (1993) estimates of the distribution of benefits between income quintiles, reported by the Industry Commission (1994), reflect this to some degree: the highest benefit per household among home owners is for those in the top quintile (\$3180), but the next highest benefit was in the lowest income quintile (\$1570). Unfortunately the method he used assumed first an equal distribution of equity as a per cent of dwelling value across income quintiles, and second a uniform marginal tax rate for all income quintiles!

and buyers are significantly exaggerated. Were the average tax advantages of Indigenous owner occupants half those for the non-Indigenous, the total benefits from public expenditure per Indigenous household from public expenditure (including tax expenditure) on housing would fall from \$1868 (25 per cent) to \$1626 (8.5 per cent) *higher*. Expressed on a per person basis, the Indigenous benefit falls from \$505 (9 per cent) to \$439 (21 per cent) *lower*. The best estimates probably lie between these figures.

5.8 Discussion

Indigenous people on average receive much larger benefits than the non-Indigenous from the provision of public and community housing in Australia. Most of the public funds for community housing go to Indigenous people and a much higher proportion of Indigenous than non-Indigenous households live in public housing. The benefits (which take the form of rent rebates) are, however, about the same on average for Indigenous and non-Indigenous tenants. Public housing is gradually being reduced in significance relative to other forms of housing assistance.

Rent Assistance is of somewhat less value on average to Indigenous than to non-Indigenous private tenants, partly because Indigenous rents are lower since they tend to occupy poorer housing and are more likely to live outside the high-rent capital cities. The difference is not very large.


The largest public subsidies (though not the largest per household) go to owners and buyers and take the form of exemption from income tax of imputed rent and capital gains on owner occupied housing. Since there are a much smaller proportion of owners and a somewhat smaller proportion of buyers among Indigenous households, they benefit less from these subsidies. The value of these subsidies increases with the value of the housing occupied and the marginal tax rate of the owner. Since we have been unable to take these factors into account, our estimates are likely to exaggerate the benefits received by Indigenous owners and buyers from these tax exemptions.

Altogether our estimates are that the benefits from public expenditures (including tax forgone) amounted to between \$1630 and \$1870 per Indigenous household and \$1500 per non-Indigenous household in the year 1995-96. The average Indigenous household gets 8.5 to 25 per cent more. But Indigenous households are, of course, larger on average than non-Indigenous. Expressed as benefits *per head*, the margin shifts to favour the non-Indigenous at about \$550 compared with \$440 to \$505 per Indigenous person: 9 to 21 per cent less.

Considering the much greater housing needs of Indigenous than of non-Indigenous people, this result strongly suggests that existing housing policies, far from being favourable to Indigenous people have been, on balance, inequitable and inadequate. These findings would justify increased resources being put into programs directed specifically towards meeting the housing needs of Indigenous people.

The years since those on which we have based our analysis have seen Commonwealth, State and Territory governments looking to develop more co-ordinated approaches to the provision of housing for Indigenous people, consistent with the intent of the National Commitment to Improved Outcomes in the Delivery of Programs and Services to Aboriginal Peoples and Torres Strait Islanders. We have not had sufficient information, however, to enable us to assess how such developments may have impacted on the relative benefits to Indigenous and

non-Indigenous people of public expenditures on housing. In relation to specific Commonwealth programs, Herron (1999) shows that ATSIC's funding for community housing is estimated at \$124.5 million for 1999-2000, which compares with \$106.8 million in 1995-96. ARHP funding, however, has not changed, even in nominal terms, for a number of years. As to Rent Assistance and the effect of income tax exemptions, it would seem reasonable to assume that any changes in relative benefits to Indigenous and non-Indigenous persons would be gradual, since changes to the existing pattern of housing would take place over an extended period. In any event, it could not be presupposed that any trend would be in favour of Indigenous persons.



Appendix A Issues relating to methods and measurement

A.1 Methods

The main question about methods was how to make valid and relevant comparisons between the level of public expenditure on services for Indigenous and non-Indigenous Australians. The total expenditure had to be divided by the population of each group but should it be the total population or the population entitled to use a particular service? In the case of health services, Deeble *et al* (1998) had divided by the total population, though they also made some comparisons on the basis of expenditure per head among Indigenous people and non-Indigenous people living in (comparable) lower income families. His method for hospitals is based on estimates of the cost of providing health services per patient with particular diagnoses using a Disease Costing Model developed by the Australian Institute of Health and Welfare. Further details of the methods used by Deeble and his colleagues are contained in their publication.

Public expenditure on education can benefit people at any age, but it is concentrated on younger people. Had we been concerned mainly with post-secondary education, the relevant comparator might well have been per person aged 15 and over. Since we wanted to look at education as a whole we used expenditure per person aged 3 to 24 as the basis for comparison, since the great majority of public funding of education, from pre-school to higher education, was received by people in that age group. Comparisons of funding per person in narrower age ranges are used for particular levels in the education system.

We use also comparisons per enrolled student, but primarily to show whether differences in expenditure per person in the relevant age group arise mostly because of differences in expenditure per student or differences in participation rates. Since public expenditure on education aims to provide for all young people, the performance of an education system should be judged in part on how well it is holding its clients.

Housing statistics are commonly compared per household, the unit that occupies an individual dwelling, and this has provided the main basis for our comparisons of public expenditure on Indigenous and non-Indigenous housing. But since Indigenous households are significantly larger than non-Indigenous, equal levels of public expenditure per household will result in lower per capita expenditures per head on Indigenous households. Hence we provide also an estimate of expenditure per head. Equal expenditure per head probably would make the larger Indigenous households better off since it does not cost twice as much to provide adequate housing for a household with twice as many people: there are economies of scale.

Public expenditure on employment programs and unemployment are directed at those who are out of work; either sustaining them while they are receiving no income from employment or assisting them through training or experience programs to get employment. It follows that comparisons should be per unemployed person. Among the unemployed, those in most need are the long term unemployed.

When comparing public expenditures on services for Indigenous and non-Indigenous Australians, it would be desirable to distinguish those differences that are due to indigeneity from those that are due to other factors such as income, location and age distribution. Frequently in this paper we mention confounding factors and sometimes we provide tables that indicate how influential they are. We have not been able to carry out rigorous

quantitative analyses of the kind needed to measure the influence of all the significant factors. One reason is that data on expenditure on services for Indigenous and non-Indigenous people in different income groups living at different locations are rarely available. This is partly because detailed data on Indigenous and non-Indigenous use of services that distinguishes users according to the other factors are rarely available. Some studies of limited groups of users are reported in the health and education chapters, and more studies of this kind are needed.

Our work therefore concentrates on the broad average levels of expenditure – all that was possible using the national and state data that was available to us. Our conclusions therefore need to be cautious and to be treated with caution by readers.

A.2 Funding formulas and disability factors

There is a widespread belief that it costs more to provide some services to Indigenous than to non-Indigenous people. But whether costs are higher because they are Indigenous or because Indigenous people suffer from other disadvantages is unclear. Certainly there is debate on that matter in relation to the cost of hospital services. Most if not all States and Territories use a funding formula for allocating funds to individual schools, and commonly those formulas allocate additional resources according to the number of Indigenous students. Some data from the implicit funding formula used in South Australia are included in the Education chapter.

Aside from funding for individual students (mainly ABSTUDY and AUSTUDY) almost all public funding of education goes to institutions providing it. Conceptually it is possible to estimate the costs of education in a manner similar to the hospital disease cost model, using the students enrolled in different courses as the main explanatory variables. This was beyond our resources and it is less useful at lower levels of education where all students pursue much the same courses. Also it does not show whether Indigenous students in a course cost more than non-Indigenous. Since it is not possible, without detailed studies of the amount of time teachers spend on individual students, to estimate the expenditure within a school, college or university on different students, we made the neutral assumption that expenditure per head is the same for Indigenous and non-Indigenous students at any given level of education in each State and Territory. The effects of this assumption are discussed in more detail in the Education chapter.

The Commonwealth Grants Commission has included the number of Indigenous students, people or other relevant group among the disability factors in its estimates of the expenditure needs of each State and Territory. In its 1993 Review of General Grant Relativities, which was used in 1996, aboriginality was treated as a separate disability factor. Such disability factors suggest that it was generally agreed that the *costs* of providing services to Indigenous people are higher. It does not follow that *expenditure* per head is higher on Indigenous people. For some services, including hospital services and police and law and order, it is clear from the evidence available about service use that expenditure is higher, though in the latter case the expenditure may be more for the benefit of the non-Indigenous than the Indigenous population (see Appendix 2).

The Grants Commission does not generally provide the sources of its cost estimates. It frequently justifies its decisions by reporting arguments presented by States and Territories and its own studies. Its disability factors sometimes vary substantially over time. For

example its 1999 Review reports that “the weight applied to Indigenous people in the Police assessment is now 3.5 compared with 9 set in the 1993 Review” (CGC, 1999, Vol II p. 58). The 1999 Review (Vol. I, p. 26) introduced a different way of calculating Indigenous disability factors: in future they differ according to the remoteness of the area where the Indigenous people live. This is justified by the greater disabilities experienced by those living in remote locations and the greater cost of providing services to them. In the context of the 1999 Budget it was announced that the Commission “is to develop measures of relative disadvantage [within the Indigenous community] to target resources more effectively to the areas of greatest need” (Herron, 1999, p. 8)

For reasons given above, and because the Grants Commission does not publish detailed disability factors, they have not been used in our analysis.

A.3 Indigenous identification

Identification of the Indigenous users of services provided for the whole population proved to be a major problem for Deeble and his colleagues in their research on health and they carried out special surveys to estimate the numbers of users. Much of the raw data they used had to be adjusted for under-identification. For the most part we have based our comparisons in the other chapters on the number of people who identified as Indigenous at the 1996 Census. Although post-enumeration surveys showed that there was not complete consistency in Indigenous self identification, the census figures are the best available source.

Some of our estimates are based on identification in administrative data series. The most important is the estimates of the extent to which Indigenous people identify as Indigenous when claiming social security benefits. This is used in our estimates of the unemployment benefits and Rent Assistance received by Indigenous people. The number of Indigenous people identifying as recipients of unemployment beneficiaries in social security records appear to be broadly consistent with census data. Limited use was made of Indigenous identification data originating in schools in the education estimates – primarily in estimating Indigenous enrolment in private schools – but most of the estimates relied on census data on school attendance and on numbers in the relevant age groups.

A.4 Expenditure or benefits from expenditure?

In a study such as this which is primarily concerned with equity between different recipients of services, the ideal would be to measure not the cost of, or expenditure on, the service but the benefits received from the service. In cases such as student assistance, rent assistance, and unemployment benefits where the benefit flows in cash from the government to the recipient, the distinction usually is irrelevant since benefits equal expenditure. Benefits received are very close to expenditures also for medical and hospital benefits paid through Medicare and the Pharmaceutical Benefits Scheme and the savings in tax that accrue to owner occupants from the non-taxability of imputed rent and capital gains.

Ideally one would measure the benefits from health services in terms of improved health, but this is very difficult and we have to make do with Deeble *et al*'s data on expenditure. Similarly in the case of education the ideal would be to measure benefits as educational achievement, but again the difficulties are too great and we must make do with estimates of expenditure. In both cases expenditure (other than capital expenditure) in a particular year is

expected to produce results in the same year, though they should also produce continuing benefits over many years.

Most of the public expenditure on public and community housing is of a capital nature and the benefits that flow to its occupants in the shape of rebated rents are not closely related to expenditure in any one year. Fortunately we had access to direct estimates of the value of rent rebates, defined as the difference between the market rent and the actual rent paid, for all public and community rental housing.³³ This is the measure used by the Industry Commission (1994) in its Report on Public Housing in comparing the distributional effects of government housing policy among income groups and those living in housing under different tenure arrangements.

A.5 Expenditure by State and Territory governments

In the provision of publicly funded services for Indigenous people, including the four areas which are the primary focus of this study, the Commonwealth government shares financial responsibility with State and Territory governments under varying arrangements. Programs specifically for Indigenous people may be funded and delivered by the Commonwealth; funded by the Commonwealth and delivered through the States and Territories; or partially or wholly funded and delivered by the States and Territories. Similar situations apply with general programs.

This complexity of arrangements is reflected in variations in the availability of data on which to base our analysis, particularly in relation to State and Territory programs. By and large, that has not led to significant problems for this study. In the case of education, the ABS publishes figures that encompass all public expenditures, while for health, Deeble and his colleagues included the relevant health programs of State and Territory governments. Given the approach adopted, the housing estimates of rent rebates include the effects of all financial assistance to public and community housing. Employment programs are predominantly Commonwealth-funded, and some information is collected relating to Indigenous participation in those programs.

We sought nonetheless to obtain information about State and Territory programs that would help meet our data needs, including more precise identification of amounts actually being spent for the benefit of Indigenous people. Our efforts were only partially successful. New South Wales and Queensland provided published reports which included information on the amounts of State funding of programs specifically for Indigenous people, while some unpublished material was received from South Australia on a restricted use basis. In other jurisdictions, information was not readily available, and while some indicated a willingness to collect and forward some data, only limited amounts had been received by the time this paper went to publication.

Thus it has not been possible, in the absence of comparable information for all States and Territories, to build a national picture of the extent of the funding they provide from their own resources which benefits Indigenous people. On the basis of the information that was received, however, it is apparent that State and Territory funding of Indigenous-specific programs is small relative to the Commonwealth's. Thus in NSW in 1996-97, spending on the State's Aboriginal programs, net of Commonwealth specific purpose funding, but

³³ We are indebted to Dr Roger Jones of QED Pty Ltd for supplying these data.

including areas of activity other than education, employment, health and housing, amounted to some \$137 million³⁴. In Queensland in 1995-96, the State's spending on its Indigenous-specific programs totalled \$111 million³⁵. These two States between them accounted for 56 per cent of the Indigenous population at the 1996 Census.

The South Australian Department of Education, Training and Employment advised that the State's expenditure on Aboriginal education in 1995-96 amounted to over \$16 million, which it regards as a conservative figure. It also noted that data were not available on a comparable basis across States and Territories on costs of Indigenous education and training. In relation to the other material received from South Australia which was referred to above, it was decided, in view of the limitations placed on its use and the absence of comparable information from a number of other jurisdictions, that it should not be used in this study.

Some information on education outlays in relation to Indigenous students was received for Western Australia, and this has been drawn on in the Education chapter.

Further possible sources of information were the 1998 and 1999 Reports on Government Services of the Steering Committee for the Review of Commonwealth/State Service Provision, which has been requested by the Prime Minister, with the support of the Premiers and Chief Ministers, to give particular attention to the performance of general programs in relation to Indigenous Australians. It was found, however, that the information published in these reports, while a useful addition to the overall knowledge base, was too limited to be of assistance for the specific needs of this study.

While such data deficiencies may be regrettable, for the reasons given above they should not have had much impact on the overall outcomes of this study. In the case of education, the available evidence indicates that State and Territory Indigenous specific programs are a small proportion of the total and that taking them into account would have little impact on the overall results of the analysis. With employment programs, the impact of State and Territory funded programs would, on the information available, be negligible. The housing chapter estimates directly the benefits in any one year to Indigenous tenants in public and community housing, whether those benefits were provided by the expenditure of Commonwealth or of State or Territory funds. It follows that there is no need to try to estimate separately the expenditure by State and Territory governments. The situation with health was noted above.

A.6 Substitution in the provision of specific Indigenous services

A simplistic way to estimate the extent to which Indigenous Australians are advantaged as a result of public expenditures is to add up the cost of government programs that are provided specifically for their benefit. But if we are concerned with the benefits they receive from public expenditure on a service, over and above what they would receive if there were only general programs for the whole population, we need to adjust those figures. The main reason is that some of the funds provided to Indigenous people under specific programs would be available to them under general programs if the specific programs did not exist. Such specific programs may exist because it is more effective to deliver services to Indigenous people in a

³⁴ . Derived from NSWCCG (1998) pp 12-13. Of this \$137 million, around \$25 million was spent on housing and infrastructure, \$22 million on health, \$17 million on education, and \$10 million on employment, training and business development.

³⁵ Queensland Government (1996). The total included \$22 million for housing, \$18 million for health, \$8 million for employment and training and \$2 million for education.

culturally appropriate manner, or because the objectives of the programs can be achieved more readily through specific programs.

In 1994 ATSIC, in cooperation with the Department of Finance, made estimates of the extent of substitution in order to assess the extent of Commonwealth spending in 1992-93 on programs that provide services to Indigenous people for which they would not be eligible under general programs. Other expenditure is a substitute for expenditure on general programs. Substitution was defined as follows.

Substitution in this paper refers to those situations where a Commonwealth program specifically for Aboriginal and Torres Strait Islander people provides a service which, in the absence of that specific program, would fall within the sphere of a mainstream program, or of the responsibilities of a State, Territory or local government, to provide (ATSIC, 1995, 39-41).

The estimates of the extent of substitution were for both ATSIC programs and the Indigenous specific-programs of other Commonwealth departments. It was found that of a total of \$1,253 million spent on specific Indigenous programs in 1992-93 (omitting those that spent less than \$2 million) about \$310 million or a quarter was spent on services that were substitutes for general programs of the Commonwealth. The main substitute programs were in the areas of employment (CDEP), housing and ABSTUDY. Other programs costing \$30 to \$90 million were less clearly substitutes with the difference between the two mainly depending on whether community housing was seen as a substitute for Commonwealth State Housing Agreement expenditure. With even less precision the study also estimated that another 10 per cent of Commonwealth spending was on programs that substituted for general programs of State, Territory and local government. The greater part of this was expenditure on infrastructure and essential services under ATSIC's Community Housing and Infrastructure Program (CHIP).

While the concept of substitution is a valuable one, estimating how much public expenditure on specific programs is a substitute for general programs is very difficult. Are there any services provided under specific programs that would not be supplied at all if the programs were discontinued?

This study also takes into account the concept of substitution, though it approaches it in a different way. Within the areas that it covers, it attempts to estimate Commonwealth spending on Indigenous people from both general and Indigenous-specific programs. In a world in which the distribution of needs was the same among Indigenous and non-Indigenous people, spending per person or per client from general plus specific programs would be the same for both where the Indigenous programs were fully substitutes. Where needs are different and spending is to some extent needs based, as it is for example in public housing, the question is whether any higher public expenditure on Indigenous people is because their needs are greater or because the terms under which the specific funds are distributed are more generous. Frequently it is difficult to answer that question quantitatively and the authorities responsible for the programs have not made such estimates.

Of the programs covered in this study, means testing is important in relation to public housing, rent assistance, unemployment benefits and student assistance. Since, as discussed below, Indigenous people have lower incomes per person, per family or income unit and per

household, it would be expected that a higher proportion of them would qualify for such benefits and that they would receive a greater benefit per head.

The previous paragraph implied a definition of need that relates to the ability of people to satisfy their needs in the private market. But there are other dimensions, including relative disadvantage. Assuming that we place some value on equity or at least want to limit the number of people wholly dependent on long term public assistance, more should be spent on those whose health, educational attainment, employment level or housing are worse.

Wherever possible in this study we have sought to identify how much of the differences in public spending per head arise because of different entitlements such as means tests defined for the various programs, how much because of factors such as location that are more or less beyond the control of individuals, and how much because of special assistance provided to Indigenous people as such. This last margin then needs to be considered in relation to the particular disadvantages from which Indigenous people suffer.

A.7 Means tests and income distribution

One of the important reasons for different levels of public expenditure on Indigenous Australians from others is that on average the Indigenous have lower incomes. As a result their children are less likely, for example, to go to private schools and to universities, but when they do go to universities or to secondary schools, they are more likely to qualify for financial assistance than are non-Indigenous students. Ideally we should compare public expenditure on Indigenous people with that on non-Indigenous people in the same income groups. Similar differences occur in relation to health services and housing.

One source of information about the consumption patterns of different income groups is the Household Expenditure Survey, which provides detailed data on households in different income quintiles. Unfortunately household income is not a good criterion for comparing the well being of people living in Indigenous and non-Indigenous households because Indigenous households are so much larger. The 1996 Census shows that the median size of Indigenous households was 2.84 persons and the average size 3.7. For other households the comparable figures are 1.85 and 2.7 respectively (ABS, 1998, cat no. 2134.0).

It is important to recognise that household size and level of well being or income are related to one another in complex ways. By living in large households people with lower incomes are able to spread across more individuals some of the living costs that individuals and families with higher incomes can afford to pay themselves: there are economies of scale in household costs. High occupancy rates are a way of economising on housing costs. There is much evidence that Indigenous households live in more crowded conditions (Jones 1994), showing that they share bedroom space, but in addition they share living space, facilities for meal preparation and consumption, bathroom, toilet and laundry facilities.

Given this difference in household size, it is less surprising that the median household income of Indigenous households is as high as 85.4 per cent of that of non-Indigenous. But if we divide the median incomes of each group by the median number of persons per household, Indigenous households' median income (expressed per head) is only 55.7 per cent of the non-Indigenous. This calculation, which is an approximation to income per head, may overstate differences in well being because it assumes that living costs are the same for children as for adults and ignores economies of scale. An alternative is to look at the individual incomes of

adults (those aged 15 and over) only. According to the 1996 Census the median individual income of Indigenous adults was 73.6 per cent of the median for non-Indigenous adults. The trouble with this measure is that it assumes that the living costs of children are zero. Since children under 15 comprise 40 per cent of the Indigenous population compared with 21 per cent of the non-Indigenous, the comparison of adult incomes seriously overstates the relative well being of the Indigenous population.

Comparing the distributions of individual adult incomes gives some idea about where Indigenous people fit into the general income distribution. Sixty per cent of non-Indigenous, but 78.4 per cent of Indigenous adults in 1996 had weekly incomes of less than \$392. Taking into account that each Indigenous adult had to provide for almost twice as many children, a suitable comparison of public expenditure for the Indigenous population is with the lowest three income quintiles of the total or the non-Indigenous population.

A similar conclusion is reached by Deeble *et al* (1998, p. 53) and reported in more detail in the Health chapter of this report. Using equivalent (adjusted for the number of children and adults) real family incomes from the 1990 National Health Survey and the 1994 NATSIS survey, they showed that 72 per cent of Indigenous people were in families with equivalent family incomes in the range covered by the lowest-income 40 per cent (the bottom two quintiles) of the non-Indigenous population. About 87 per cent were within the income range covered by the lowest-income 60 per cent.


A.8 A choice about where to live

For traditionally oriented Indigenous people living on or close enough to visit “their land” is very important. Frequently living close to their land requires that they live far from urban areas where most jobs and services are provided. The right to make this choice is respected by most of those responsible for allocation of funds for services for Indigenous people, even though the cost of doing so may be high. The choice is respected in the sense that they will be provided with health and education services, possibly housing and general support when they are unemployed, even if they choose to live in places where these services are costly to provide and where unemployment is more likely because there are few jobs available. That respect has limits, of course. Secondary and tertiary education, more specialised health and hospital services and frequently public housing are provided only in the larger settlements. Those who choose to live in very small settlements in Indigenous homelands are likely to have only very limited access to services.

To date there appears to have been no consistent pressure to get unemployed Indigenous people to move to larger settlements where more jobs are available. Indeed the willingness of the Commonwealth to pay social security benefits to Indigenous Australians, especially those paid to the unemployed, irrespective of location is one of the reasons that many Indigenous people can afford to choose to live close to their land. This willingness appears to derive in part from a recognition that contacts with traditional land are culturally important. In part it may also reflect reluctance among non-Indigenous people living in towns and cities to having Indigenous people, especially if they are unemployed, living among them.

While it is possible that the costs of providing services to Indigenous Australians could be reduced by requiring that they live in larger centres, historical experience with doing just that in church and government missions, as well as respect for their cultural ties to land and their

freedom to live where they wish, suggest that the disadvantages of such a policy would outweigh any cost savings.



Appendix B Other programs

It was noted in the introductory chapter that the four areas selected for detailed examination in this study – education, employment, health and housing – accounted for some 63 per cent of the Commonwealth's programs specifically for Aboriginal and Torres Strait Islander people in 1995-96, the year selected as the prime basis for study.

This attachment looks at three of the more significant areas of funding that fall outside those four areas – infrastructure; law, order and public safety; and land. What then remains is a heterogeneous range of activities covering such areas as the preservation and fostering of Indigenous culture, art and heritage, various community and social service activities, sport and recreation, and business development. Each is undoubtedly intrinsically important, but we have not had the resources to include everything in our study and, in any event, because they are areas of lesser expenditure their exclusion would probably not materially affect the broad pattern of our findings.

B.1 Infrastructure services

These services fit the first of the above criteria but not the second. They have been excluded very largely because of lack of information about the level of use and about expenditure on, or benefits from, their use among Indigenous and non-Indigenous Australians. In 1995-96 Commonwealth expenditure on community infrastructure through ATSIC's CHIP program amounted to \$131.7 million.

In considering public funding of infrastructure two distinct groups of Indigenous people need to be considered. The first is those living in predominantly non-Indigenous urban areas. They can be expected to get the same infrastructure services as their neighbours and, through rates, taxes, user charges and developer charges, to pay about the same for those services. Those conclusions need to be qualified because Indigenous people will tend to live in lower income parts of cities and receive somewhat less valuable services and pay somewhat lower charges. But in this respect they are like their low-income non-Indigenous neighbours. Probably close to two thirds of Indigenous people lived in such locations in 1996.³⁶

The second is those living in discrete Indigenous communities either in remote locations or on the outskirts of predominantly non-Indigenous settlements. For a number of reasons they are treated differently, though it must be noted that even in some of these communities many of the roads and air services, for example, serve Indigenous and non-Indigenous people alike. Our attention is directed more at services such as water supply, sewerage, electricity and access roads that are provided within discrete communities and services that link those communities with the general transport networks.

Infrastructure services are the responsibility of State, Territory and local governments in Australia and those governments have a responsibility to provide services on an equitable basis to all their residents. To this end, State and Territory governments have a long standing responsibility for funding assistance where the costs of providing services for which local

³⁶ The Australian Bureau of Statistics (1999, cat no. 4708.0) reports that 66 per cent of the Indigenous population in 1996 lived in areas of early European settlement, nearly all in the south-east and south-west of the country. This includes some country towns with Indigenous fringe settlements but excludes Indigenous people living in urban areas elsewhere in the country.

governments are responsible are high relative to the revenue raising potential of the responsible local council. Where there are no local governments (Northern Territory outside the few large urban centres, northern SA and western NSW) responsibility rests directly on the State or Territory. The WA, SA and NT governments have direct responsibility for water and sewerage throughout their jurisdictions and most State and Territory governments take responsibility for electricity supply, either directly or by regulation of private or corporatised suppliers.

There are cost reasons for not providing infrastructure services, or providing only limited services, to some Indigenous communities. The first is that some are very small and, because of economies of scale, the cost of services per person or per household is correspondingly very high. Some, but not all, of those costs can be avoided if technology more appropriate for such settlements is used. The second is that some small settlements are occupied only temporarily, either on a seasonal basis or for a limited period. Capital costs that cannot be amortised over a number of years make such services very costly. Non-Indigenous people in similar situations generally would not be willing to live in very small communities such as cattle stations or at small mines unless their employer provided basic infrastructure services, but small Indigenous communities can rarely afford to provide these services for themselves.

Small size and remote location do not seem to be the sole reason, however. The key findings of a joint ATSI and WA Department of Aboriginal Affairs study of comparably located Indigenous and non-Indigenous communities of a similar size in Western Australia (Deloitte Touche Tohmatsu, 1996 p. I)³⁷ were:

- the great disparities in the provision of power, water, housing, roads and Shire services found in the three Aboriginal communities as compared with the mainstream town sites;
- the inadequate provision of these critical and essential services has direct implications for community health and there is a need therefore to establish equitable standards and levels of services to ensure that the health status of the Aboriginal communities is not jeopardised;

In some parts of the Northern Territory, Queensland and Western Australia, local authorities with very few non-Indigenous residents have been established. Because of the low incomes of their Indigenous residents and the fact that many of them live on crown or Aboriginal land that is not rateable, those local governments commonly have very limited revenue raising capacity and are heavily dependent on Territory and State funds. Even in local authorities which house non-Indigenous as well as discrete Indigenous communities, the small revenue yield from rates on property occupied by the Indigenous is sometimes used as a reason for not supplying them with services, or providing only limited services.

While such decisions are understandable they conveniently ignore the responsibilities of councils to provide services to all their residents in an equitable manner. They also ignore funding realities. Local government grants commissions in each State and Territory distribute Commonwealth funds received under the *Local Government (Financial Assistance) Act 1995* to local councils in order to make their financial resources more equal. The formulas used by most States and Territories include a loading for the number or proportion of Indigenous

³⁷ The other findings concerned the cost of bridging the gaps in service provision by improving the services in the Aboriginal communities and the difficulties of estimating that cost.

residents. In 1995 the Local Government Ministers' Conference resolved to improve services to Indigenous communities (National Office of Local Government, 1997, Chapter 6). A similar response can be made in relation to State and Territory governments which claim that the poor services they provide to Indigenous communities is because they get little tax revenue from them. But they receive additional funds from the Commonwealth Grants Commission because it factors Indigenous disabilities into its assessments of the cost of providing a range of services.

State, Territory and local governments feel relieved of their responsibilities also because there are other sources of funding. In 1996-97 the Commonwealth provided \$12 million under the *Local Government (Financial Assistance) Act 1995* to 94 Indigenous communities that were identified as performing local government functions (National Office of Local Government 1997, p.48). And, although ATSIC asserts that its infrastructure funds provided through CHIP are supplementary to those provided by State and local governments that have primary responsibility, there is inevitably some substitution of ATSIC for local funds. In addition, funds received from mining royalties by Indigenous royalty associations may be used for infrastructure. Finally, some part of CDEP funds are used in the provision and maintenance of infrastructure services in discrete Indigenous communities. The ATSIC/Department of Finance report on the substitution factor concluded as follows.

While the Review did not estimate the proportion of CDEP funding which is utilised in the provision of services that would elsewhere be regarded as the responsibility of local, State or Territory governments, an estimate of one-half (say \$115 million in 1992-93) may be reasonable to conservative (ATSIC, 1994).

This figure includes "municipal and basic services such as garbage collection, road maintenance, maintenance of water and electricity supplies and public housing (excluding the capital input) ...". It is therefore broader than infrastructure services narrowly defined. In 1995-96 the same proportion would have amounted to \$157 million.

It might be expected that with such a range of funding sources there would be adequate provision of infrastructure in discrete Indigenous communities. Partly for reasons given above, and partly because of discrimination on the part of some State and Territory governments or their authorities and some local councils against these communities, this is far from true. State reports on services to Aboriginal and Torres Strait Islander communities required under the *Local Government (Financial Assistance) Act 1995* (National Office of Local Government, 1997, Appendix I) give examples of progress being made in improving those services in some communities. By implication, much progress needs to be made in other communities. The National Aboriginal and Torres Strait Islander Survey of 1994 (ABS, 1996) provided data on the number of Indigenous dwellings that lack: running water connected to the dwelling (2.4%), internal flushing or external toilets (2.8%), bath or shower (3.9%) and electricity or gas (2.0%). Proportions were much higher in rural areas: lacking running water 7.4%, toilet 9.0%, bath or shower 10.5% and electricity or gas 7.2%.

Financial arrangements for the provision of infrastructure in discrete Indigenous communities are complex and varied both within and between States and Territories. Not only do they include State and Territory grants, Commonwealth grants, local council funds, CDEP funds and royalties, those funds are combined in ways that depend on particular local circumstances. Royalties can be considered public funding but may also be considered the property of the Indigenous communities that receive them. It is impossible to make estimates of the extent to

which these specific funds from State and Territory governments are simply providing for Indigenous communities the same public assistance as is, or has been, provided to non-Indigenous communities through general assistance programs. While case studies may illustrate ways in which the various sources of funds are combined in particular communities, a large number of such studies would be needed to be confident that the result had any representative value. In the circumstances, the only alternative was to omit these services from our analysis.

B.2 Land

Government outlays relating to land for Indigenous people cover such things as native title, land rights and land grants under both Commonwealth and State legislation, and land acquisition and management.

A higher proportion of expenditure on land is of a capital nature.

An examination of *Commonwealth Programs for Aboriginal and Torres Strait Islander Peoples 1995-96* shows that the Commonwealth's outlays on land-related programs specifically for Indigenous people in that year amounted to \$132 million. This figure includes some \$15 million for the costs of the National Native Title Tribunal, \$24 million for the Indigenous Land Corporation (ILC), and \$27 million for the Aboriginals Benefit Trust Account (ABTA) established under the *Aboriginal Land Rights (Northern Territory) Act 1976*³⁸.

A comprehensive figure for State outlays has not been obtained. In New South Wales, \$39 million was allocated in 1996-97 under the terms of the its Aboriginal Land Rights Act, divided equally between meeting the administrative and land acquisition costs of the Land Councils and the Land Council Investment Fund, while in Queensland \$5 million of State funds was spent in 1995-96 on land matters.

How should such expenditures be regarded? That they are for the benefit of Indigenous people is unquestionable and, taking a very short term view (as most critics have done) it could be argued that they are largely unmatched by programs for non-Indigenous people. But it is essential to look at the matter in a historical perspective, not merely on the basis of the outlays of one financial year. The economic value of land is not measurable as a service like education or health.

Through the original seizure of lands, non-Indigenous Australia has received benefits of incalculable dimension. Not only was compensation not paid to the Indigenous people, but much of the land was given away as grants to settlers or as leases at nominal rents – often not collected (Roberts 1924). Over the years, many public policies have resulted in enormous subsidies of one kind or another to the non-Indigenous users of land, such as water and transport at far below real cost. Even if such subsidisation is now a less significant element of the Australian economy, and land costs arguably reflect today's market realities more than how the land was originally obtained, the facts remain that the present Australian economy has been founded on the dispossession of the original people.

³⁸ The amount for the ILC was an allocation from the Aboriginal and Torres Strait Islander Land Fund established following the decision of the High Court in *Mabo*. The resources received by the ABTA are largely, but not totally, used for land related matters, principally for the budgets of the Land Councils.

Compared with such enduring benefits, what is now being spent on land for Indigenous people is insignificant. It is limited and belated redress that it is reasonable and appropriate to charge to the total Australian community.

B.3 Law order and public safety

This is principally a State and Territory function, and in terms of Commonwealth programs specifically for Aboriginal and Torres Strait Islander people is a comparatively small activity, accounting for outlays of \$35 million in 1995-96. This was predominantly for community managed Indigenous legal services, funded through ATSI³⁹.

Indigenous law and justice issues are a major area of public concern, brought sharply into focus through the work of the Royal Commission into Aboriginal Deaths in Custody. Actions taken by governments since the Royal Commission reported appear to have failed, however, to have any material bearing on the levels of Aboriginal and Torres Strait Islander involvement in the criminal justice system. In 1997-98, the imprisonment rate per 100,000 Aboriginal and Torres Strait Islander adults was between 3 times (in the Northern Territory) and 15 times (in South Australia) the rate for the total population⁴⁰. Over-representation in police custody is even higher. The 1994 National Aboriginal and Torres Strait Islander Survey (ABS, 1996) reported that 32 per cent of Indigenous males aged over 13 reported having been arrested by the police in the previous 5 years (9 per cent of females), while almost 10 per cent of those surveyed stated that they had been hassled by the police in the year prior to the survey.

Any attempt to calculate the proportion of government outlays in the law and justice sector that is attributable to the involvement of Aboriginal and Torres Strait Islander people in that sector would need to encompass expenditures on custodial and police services, the courts, and general legal aid services (ie other than those funded through ATSI). Overall, information on Indigenous use of these services is limited. Information on programs specifically for Indigenous people in the law and justice area is not available on a national basis, though it is known that Queensland spent \$4.6 million on such programs in 1995-96, and New South Wales a similar amount in 1996-97⁴¹.

But, whatever the level of outlays might be, could it really be said that Indigenous people benefit from them? Although much of the expenditure under this heading is to protect members of the Indigenous population and their property from threats from other Indigenous people, probably more is directed at protecting the non-Indigenous population from threats to their property or amenity arising from Indigenous activities.

In total, the expenditure is scarcely for the benefit of Indigenous people. And, at the individual level, persons who have been arrested or incarcerated are generally unlikely to regard the experience as beneficial and positive.

³⁹ The allocation for 1999-2000 within ATSI's budget for legal and preventative services is \$60 million.

⁴⁰ Steering Committee for the Review of Commonwealth/State Service Provision (1999) p. 532

⁴¹ Queensland Government Program Statement for Aboriginal and Torres Strait Islander Peoples (1996) and NSW Council on the Cost of Government (1998)

Accordingly, benefits for Aboriginal and Torres Strait Islander people in the area of law and justice will, overall, vary inversely with expenditure levels⁴² rather than directly as in other areas of public outlays such as education. The Indigenous population as a whole would be better off in circumstances where present expenditure levels could be reduced.

In no small measure, expenditure on the criminal justice system has to be seen as part of the cost that the Australian people have to bear as a result of the forced displacement of a traditional, self-administered set of laws and sanctions by an alien set which have only limited legitimacy within the Indigenous community. For them, the whole natural and social system within which they lived has been pushed roughly aside, and for most of them traditional laws and culture have lost much or even all of their relevance. In a situation of such profound social and cultural trauma, conflict with the dominant society is inevitable.

Legal aid and human rights expenditures more clearly benefit the Indigenous community. Indigenous legal aid services provide a service broadly similar to that provided through general legal aid to the general community (including some Indigenous people who choose to use general legal aid services or are unable, for resource or other reasons, to obtain assistance from the Indigenous services). In this sense it is clearly a substitute service. And human rights expenditure – negligible, in any event, in relation to total outlays – which are aimed at ensuring that the rights of Indigenous people are protected from external threat, should be seen as part of the costs of a civil society more than as services for the benefit of Indigenous people.

⁴² Obviously this would not be universally true; for example, expenditures by prison authorities on improving cell design and prisoner supervision, and so reducing the possibility of suicides.

References

- Aboriginal and Torres Strait Islander Commission (1994) *The Substitution Factor in Aboriginal and Torres Strait Islander Programs*, mimeo.
- Aboriginal and Torres Strait Islander Commission (1995) *Social Justice for Indigenous Australians*, Canberra.
- Aboriginal and Torres Strait Islander Commission (1998) *Commonwealth Programs for Aboriginal and Torres Strait Islander Peoples 1995-1996*, Canberra.
- Aboriginal and Torres Strait Islander Commission (1998) *As a Matter of Fact: Answering the Myths and Misconceptions about Indigenous Australians*, Canberra.
- Altman, J.C. and B. Hunter, 1996. 'The geographic distribution of unemployment-related benefits and CDEP scheme employment', CAEPR Discussion Paper No. 112, Centre For Aboriginal Economic Policy Research, Australian National University, Canberra.
- Australian Bureau of Statistics (1996) *National Aboriginal and Torres Strait Islander Survey*, Canberra.
- Australian Bureau of Statistics (1998) *Census of Population and Housing: Aboriginal and Torres Strait Islander People: Australia*, (Cat. No. 2034.0), Canberra.
- Australian Bureau of Statistics (1999) *Population Issues, Indigenous Australians*, Occasional Paper, Catalogue No. 4708.0.
- Australian Bureau of Statistics (annual) *Expenditure on Education*, Catalogue No. 5510.0
- Australian Bureau of Statistics (annual) *Schools, Australia*, Catalogue No. 4221.0
- Australian Institute of Health and Welfare (AIHW), 1995, *Australia's Welfare and Services Assistance*, AGPS, Canberra.
- Australian Institute of Health and Welfare (AIHW), 1997, *Australia's Welfare and Services Assistance*, AGPS, Canberra.
- Australian National Audit Office (1998) *Performance Audit: The Aboriginal and Torres Strait Islander Health Program*, Canberra.
- Beaver, Carol, Yuejen Zhao, Stewart McDermid and Don Hindle (1998) Casemix-based funding of Northern Territory public hospitals: Adjusting for severity and socio-economic variations, *Health Economics*, Vol. 7, pp. 53-61.
- Bourassa, S.C. and P.H.Hendershott (1994) On the equity effects of taxing imputed rent: Evidence from Australia, *Housing Policy Debate*, Vol 5, pp. 73-95.
- Bourassa, Steven C., Alistair W. Greig and Patrick N. Troy (1995) The limits to housing policy: Home ownership in Australia, *Housing Studies*, Vol. 10, pp. 83-104.

- Commonwealth Grants Commission (1994) *Report on General Revenue Grant Relativities 1994*, Commonwealth of Australia, Canberra.
- Commonwealth Grants Commission (1999) *Report on General Revenue Grant Relativities 1999*, Commonwealth of Australia, Canberra.
- Deeble, J., C. Mathers, L. Smith, J. Goss, R. Webb and V. Smith (1998) *Expenditures on Health Services for Aboriginal and Torres Strait Islander People*, Department of Health and Community Services, Canberra.
- Deloitte Touche Tohmatsu (1996) *Comparative Study of the Essential Services Delivered to Selected Aboriginal Communities and Remote Townships: Final Report*, Aboriginal Affairs Department, WA and ATSIC.
- Department of Social Security (1996) *Annual Report, 1995-96*, Canberra.
- Department of Social Security (1997) *Submission to the Senate Community Affairs Reference Committee, Inquiry into Housing Assistance*, Canberra, May.
- Fisher, Dale A., Jo M. Murray, Michael I. Cleary and Rita E. Brewerton (1998) *The Aboriginal and Torres Strait Islander Case Mix Study, Medical Journal of Australia*, Vol. 169, Supplement, S11-S16.
- Flood, Joe (1993) *Housing Subsidies 1990-91, Consultant Report for the Industry Commission and the Department of Health, Housing, Local Government and Community Services*, mimeo.
- Gray, M, B. Hunter and R. G. Schwab (1998) *A critical survey of indigenous education outcomes, 1986-96*, Centre for Aboriginal Economic Research, ANU Discussion Paper No. 170, Canberra.
- Herron, Senator the Hon John (1999) *A Better Future for Indigenous Australians*, Commonwealth of Australia, Canberra.
- Industry Commission (1994) *Public Housing*, Report No. 34, AGPS, Canberra.
- Janunkar, P. N. and J.Liu. (1996) *Estimating the Social Rate of Return to Education for Indigenous Australians*, Centre for Aboriginal Economic Policy Research, Discussion Paper No. 123, Canberra.
- Jones, Roger (1994) *The Housing Needs of Indigenous Australians, 1991*, Centre for Aboriginal Economic Research, ANU Research Monograph No. 8, Canberra.
- Jones, Roger, Max Neutze and Will Sanders (1998) *Measures of Indigenous housing need and resource allocation in the ARHP and CHIP*, Report prepared for the Indigenous Policy Unit, Department of Social Security, Canberra.
- Jones. Roger (1998) *Experimental Estimates of Indigenous Housing Need*, Report prepared for the Indigenous Policy Unit, Department of Social Security, Canberra.

- Martin, D.F. (1995) *Money business and culture: issues for Aboriginal economic policy*, Centre for Aboriginal Economic Policy Research, ANU, Discussion Paper No. 101, Canberra.
- Minister for Aboriginal and Torres Strait Islander Affairs (1997) *Rebutting the Myths: Some facts about Aboriginal and Torres Strait Islander affairs*, Canberra.
- National Office of Local Government (1997) *Local Government National Report*, Canberra.
- National Review of Education for Aboriginal and Torres Strait Islander People (1994) *A Discussion Paper*, AGPS, Canberra.
- Neutze, Max (1998) *Housing and Infrastructure for Indigenous Australians*, Urban Research Program, ANU, Working Paper No 65, Canberra.
- New South Wales Council on the Cost of Government (1998) *NSW Government Programs for Aboriginal People: Service Efforts and Accomplishments 1998*, Sydney.
- Parliamentary Library, Information Research Service (1998) *Identifiable Commonwealth expenditure on Aboriginal and Torres Strait Islander Affairs*, Current Issues Brief No 18, 1997-98.
- Queensland Government (1996) *Program Statement 1996-97 for Aboriginal and Torres Strait Islander Peoples*, Brisbane.
- Roberts, Stephen H, (1924) *History of Australian Land Settlement 1788-1920*, Macmillan, Melbourne.
- Ross, K.1999. *Population Issues, Indigenous Australians 1996*, Occasional Paper, Australian Bureau of Statistics, Catalogue No. 4708.0.
- Sanders, Will (1993) *Aboriginal Housing*, in Chris Paris, *Housing Australia*, Macmillan, Melbourne.
- Sanders, Will (1996) *Housing data from the NATSIS: can it assist with program evaluation?* in J.C. Altman and J. Taylor (eds) *The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects*, Centre for Aboriginal Economic Policy Research, ANU, Research Monograph No. 11, Canberra.
- Searle, R.J. (1998) *Changes in the Indigenous population and the distribution of financial assistance grants*, North Australia Research Unit, ANU, Discussion Paper 10/98, Darwin.
- Stanley, Owen and Geoff Hansen (1998) *ABSTUDY: An Investment for Tomorrow's Employment*, A review of ABSTUDY for the Aboriginal and Torres Strait Islander Commission, Canberra.
- Steering Committee for the Review of Commonwealth/State Service Provision (1999) *Report on Government Services 1999*, Ausinfo, Canberra.

Taylor, J. and B. Hunter 1998. *The Job Still Ahead: Economic costs of continuing Indigenous employment disparity*, Aboriginal and Torres Strait Islander Commission, Woden ACT.

Vardon, Cheryl (1998) Comments, in *Towards a benchmarking framework for service delivery to Indigenous Australians*, Proceedings of the Benchmarking Workshop, Centre for Aboriginal Economic Policy, ANU, and Council for Aboriginal Reconciliation, Canberra.