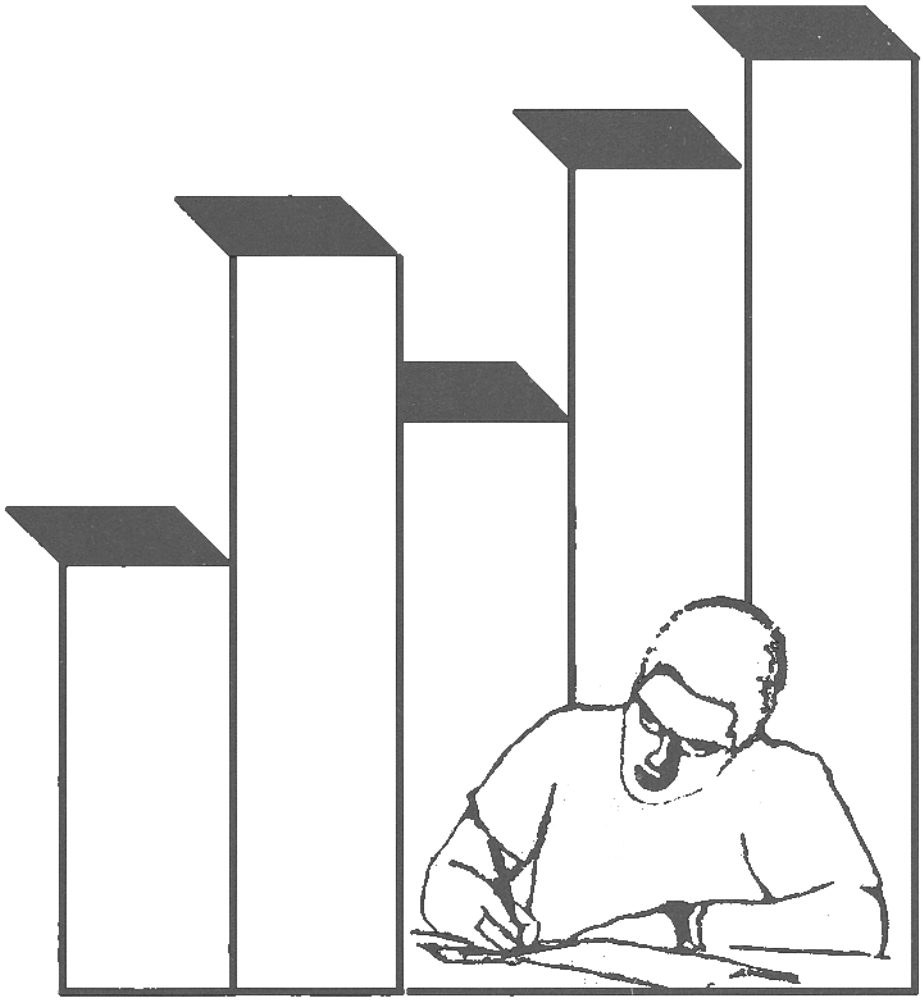
The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects

Edited by J.C. Altman and J. Taylor



Research Monograph No. 11

The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects

Edited by
J.C. Altman and J. Taylor

Centre for Aboriginal Economic Policy Research
The Australian National University, Canberra

Research Monograph No. 11
1996

First published in Australia 1996.

Printed by Instant Colour Press, Canberra, Australia.

© Centre for Aboriginal Economic Policy Research, The Australian National University.

This book is copyright. Apart from any fair dealings for the purpose of private study, research, criticism or review as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission. Inquiries should be directed to the publisher, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra ACT 0200, Australia.

National Library of Australia.
Cataloguing-in-publication entry.

The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects.

Includes Index.
ISBN 0 7315 2662 7

1. Demographic surveys - Australia - Congresses.
2. Aborigines, Australian - Population Congresses.
3. Aborigines, Australian - Census - Congresses.
4. Torres Strait Islanders - Population - Congresses.
5. Torres Strait Islanders - Census - Congresses.
6. Australia - Population - Congresses.
I. Altman, Jon C., 1954- . II. Taylor, John, 1953- .
III. Australian National University. Centre for Aboriginal Economic Policy Research.
(Series: Research monograph (The Australian National University. Centre for Aboriginal Economic Policy Research); no. 11).

304.60899915

Front cover designed by Julia Topliss, ABCD Roms, Canberra.

Preface

The workshop 'Statistical needs for effective Indigenous policy: findings from the 1994 National Aboriginal and Torres Strait Islander Survey', on which this monograph is based, was convened by the Centre for Aboriginal Economic Policy Research (CAEPR), The Australian National University (ANU), for a variety of reasons. It has been over four years since in April 1992 an earlier workshop 'A National Survey of Aboriginal and Torres Strait Islander Populations: Problems and Prospects' had been co-convened by CAEPR and the Academy of the Social Sciences in Australia. That earlier workshop had raised a wide range of issues that workshop participants had felt needed to be considered when developing the National Aboriginal and Torres Strait Islander Survey (NATSIS). Subsequently, the NATSIS was undertaken in 1994, and in 1995 and 1996 a considerable amount of material from the Survey was published by the Australian Bureau of Statistics (ABS). While CAEPR was aware of, and had participated in, an ABS-sponsored evaluation of the Survey (published in August 1996 as *National Aboriginal and Torres Strait Islander Survey: An Evaluation of the Survey*, ABS cat. no. 4184.0), it appeared timely to us to reconvene a gathering of ABS staff, academics and bureaucrats involved in Indigenous affairs to assess Survey outputs from more academic and policy perspectives and to raise issues for consideration during the likely development of a future NATSIS.

The planning for the workshop was initiated after the change in Federal Government, but had not anticipated the fairly significant changes in policy direction that resulted from the Budget just a week before the workshop was convened. With a clearly articulated focus by the Howard Government on achieving improvements and outcomes for Indigenous Australians, the workshop provided a timely opportunity for a well-informed gathering of social science academics and policy practitioners to ask how any changes in the socioeconomic status of Indigenous Australians could be measured. This is a particularly pertinent point because, besides the five-yearly census, the 1994 NATSIS is the sole official source of comprehensive information about Indigenous Australians. Questions about the efficacy of this particular survey vehicle to generate information that informs policy formulation and measures the impacts of policies and programs across a range of important areas are vital.

The fundamental difference between the 1992 and 1996 workshops is that potential NATSIS outputs were only hypothetical at the earlier deliberations, whereas at the 1996 workshop we intentionally set out to assess the usefulness and validity of actual NATSIS output on a wide range

of key policy issues that covered all the major components of the 1994 NATSIS. Such analysis was greatly facilitated by the availability in June 1996 of a Confidentialised Unit Record File (CURF) that was jointly purchased by a consortium at the ANU and heavily utilised in preparing a number of papers for the workshop. The workshop format replicated the approach taken at previous CAEPR-convened events: most papers were circulated beforehand, synoptic presentations were made in 15-20 minutes, discussion was maximised, and paper authors had a short period of a month to revise papers for publication.

The workshop's content was largely driven by the range of topics covered in the NATSIS: correlating fairly closely with NATSIS categories are chapters 3 and 12 which focus on different aspects of the family (demography and household and family composition); chapters 5 and 6 on formal and informal employment; chapter 7 on income; chapter 8 on education; chapter 9 on training; chapter 10 on housing; chapter 11 on health; chapter 13 on culture; and chapter 14 on law and justice. Other issues raised in the workshop (and now this monograph) include the policy and political development of the NATSIS (chapter 1); the range of NATSIS outputs in the context of all ABS statistics about Indigenous issues (chapter 2); the issue of mobility that was poorly addressed by the NATSIS (chapter 4); Torres Strait Islanders (chapter 15); uses of outputs at the regional level (chapter 16); the NATSIS evaluation (chapter 17); and a concluding summation of workshop issues (chapter 18).

In the politically-fraught arena of Indigenous affairs policy-making, it is probably useful to explain the make-up of the workshop's participants. At the 1996 workshop, a similar proportion of papers were authored by CAEPR staff as in 1992 (58 per cent versus 57 per cent), although a higher proportion were by university or research institute-based academics (89 per cent in 1996 versus 71 per cent in 1992). This was partly because this workshop was predicated on the availability of the NATSIS CURF in June 1996 and was largely focused on the social scientific value of NATSIS output. The group that gathered was relatively small, but all key Canberra-based Commonwealth agencies were invited to attend; for a variety of reasons some interests invited could not participate.

As is often the case at such interactive gatherings, owing to size constraints and financial considerations, there was a general absence of State and Territory and Indigenous regional interests, although some Indigenous organisational interests were represented. It is primarily for this reason that, as in 1992, CAEPR gave a commitment to the workshop that papers presented would be edited and published as quickly as possible in a CAEPR research monograph. This reflects CAEPR's commitment to full transparency and also provides the opportunity for peer review to ensure appropriate objectivity and scholarship. This monograph presents all the papers presented at the workshop, 16 of which were circulated beforehand.

While discussions held at the workshop are not reproduced verbatim, the writing of the final chapter after its completion by the conveners was intended to accurately reflect the major issues raised in discussion.

*****

As conveners of the workshop it is our pleasure to thank a number of organisations and individuals who ensured that the event itself was a success and that this monograph has been completed for publication quickly. First and foremost, we would like to thank contributing authors (listed below) for the effort made to provide quality papers for circulation some two weeks before the workshop. Similarly, authors demonstrated commitment and professionalism in completing papers for publication as monograph chapters just a month after the conclusion of the workshop. Interestingly, perhaps, eight authors provided papers for both this and the 1992 monograph.

Many thanks also to John Paice (ABS), Ron Morony (Aboriginal and Torres Strait Islander Commission), Jim Castro (Department of Employment, Education, Training and Youth Affairs), Peter Woodley (Department of Health and Family Services), Sandra Ellims (Office of Indigenous Affairs, Department of Prime Minister and Cabinet), Colin Plowman (Aboriginal and Torres Strait Islander Commission), and Peter Vaughan (Office of Indigenous Affairs, Department of Prime Minister and Cabinet) for acting as chairs, rigorous timekeepers and commentators for individual sessions.

It is all too easy to overlook the enormous effort that is involved in transforming a disparate collection of workshop papers, even if prepared to a proforma template, into a monograph. We would like to thank most sincerely the CAEPR production team of Krystyna Szokalski, Linda Roach Hilary Bek and Anne Forsythe for sub-editing all chapters and ensuring volume-wide style consistency. Without their collective and coordinated effort and commitment, publication of the monograph would not have been possible only three months after the completion of the workshop. Special thanks are also due to Jin Liu, research officer at CAEPR, who assisted a number of authors to gain access to the CURF. Last, but by no means least, we thank Bill Arthur and Olga Howell for preparing the index which is an innovation in CAEPR monographs (other than annotated bibliographies).

We would also like to thank the Department of Prime Minister and Cabinet, the Department of Finance and the Australian Institute of Health and Welfare for providing some financial assistance to help offset the costs of holding the workshop at University House on 28 and 29 August 1996.

*****

The National Aboriginal and Torres Strait Islander Survey: 1994 Findings and Future Prospects provides an extremely timely opportunity to place on the public record what is known, from official statistics, about the contemporary situation of Indigenous Australians. In that sense, chapters in this monograph are descriptive as well as analytical. As noted in both the introduction (chapter 1) and conclusion (chapter 18), there are important political and policy imperatives for ensuring that information about the wellbeing of Indigenous Australians is readily available; otherwise, it will be impossible to monitor if Howard Government initiatives are making a difference.

CAEPR sponsored this workshop because, as a social sciences research unit at the ANU, we are big users, and purchasers, of ABS data on Indigenous Australians and increasingly we are collaborating with the ABS in joint publications. We are very much a vested interest because we are highly dependent on secondary data to undertake our core research functions, but CAEPR is also concerned that information collected must accurately reflect the lived reality and diversity of circumstances experienced by Indigenous Australians. While CAEPR researchers gather some primary data, we are first and foremost data analysts. From our perspective it is essential that this analysis accurately informs policy formulation and provides some means to assess longer-term trends in the socioeconomic status of Indigenous Australians.

CAEPR's objective in sponsoring this workshop is clearly not to undermine the ABS if its objective is to repeat the NATSIS in 1999. As such, this workshop is not an evaluation. Rather, from rigorous statistical and scholarly perspectives we aim to highlight any conceptual flaws in the 1994 survey and any methodological problems and shortcomings and also to identify key information needs, much as was done in 1992. In a very real sense we hope that the chapters in this monograph value-add to the next NATSIS. But we also believe that the five-yearly census and now the NATSIS cannot be the sole vehicle for collecting information about Indigenous Australians. In Indigenous affairs policy, in general, there is an ongoing problem with substitution as distinct from supplementation. It is important that the NATSIS itself does not become a statistical substitution mechanism that results in other Australia-wide surveys generating inadequate information about Indigenous Australians.

Jon Altman
John Taylor

Canberra
December 1996

Contents

Preface iii-vi

List of tables and figures ix-xi

Abbreviations and acronyms xii-xiii

Contributing authors xiv-xv

1. The 1994 NATSIS: from conception to completion and beyond
   J.C. Altman 1

2. Recent developments in the collection of Indigenous statistics
   A. Barnes 13

3. Indigenous demographic data needs: inadequacies and prospects
   H. Tesfaghiorghis 28

4. Surveying mobile populations: lost opportunity and future needs
   J. Taylor 40

5. Indigenous Australians in the labour market: the NATSIS and beyond
   B. Hunter 53

6. Indigenous voluntary work: NATSIS empirical evidence, policy relevance and future data issues
   D.E. Smith and L.M. Roach 65

7. Sources and distribution of Indigenous incomes: evidence from the NATSIS
   R.T. Ross 77

8. Indigenous participation in schooling: a preliminary assessment of the NATSIS findings
   R.G. Schwab 84

9. Post-secondary qualifications and training for Indigenous Australians
   A.E. Daly 96

10. Housing data from the NATSIS: can it assist with program evaluation?
W. Sanders 106

11. The NATSIS and policy and planning in Aboriginal health
I. Anderson and B. Sibthorpe 118

12. Indigenous families and households
R.G. Jones 135

13. Cultural issues
N. Peterson 149

14. Law, justice, Indigenous Australians and the NATSIS: policy relevance and statistical needs
C.A. Carcach and S.K. Mukherjee 156

15. Torres Strait Islanders
W.S. Arthur 165

16. The NATSIS as a regional planning and policy tool
D.F. Martin 173

17. Findings from the NATSIS evaluation
G. Sarossy 183

18. Statistical needs in Indigenous affairs: future options and implications
J.C. Altman and J. Taylor 193

Index 203

List of tables and figures

Tables

2.1. National Statistical Collections activities since 1992 relevant to Indigenous people. 18

2.2. Output products produced by ABS from the 1994 NATSIS. 22

4.1. Mobility status of the adult population aged 15 years and over reporting Canadian Aboriginal identity by number of moves in the past 12 months, 1991. 45

4.2. Adult population aged 15 years and over reporting Canadian Aboriginal identity by number of weeks spent on the land away from home in past 12 months, 1991. 47

4.3. Age and sex specific mover rates for health-related reasons. 48

5.1. Comparison of NATSIS and MLFS methodology: length of time not working and looking for work, 1994. 57

5.2. Comparison of NATSIS and MLFS methodology: number of unemployed persons in households, 1994. 58

5.3. Proportion of Indigenous people engaged in hunting, fishing and gathering bush foods, by labour force status and part-of-State,1994. 60

5.4. Proportion of employed Indigenous people also engaged in hunting, fishing and gathering by part-of-State, 1994. 61

6.1. Type of voluntary work undertaken by sex and cases nominated by Indigenous adult persons aged 15 years and over, 1994. 67

6.2. Type of Indigenous voluntary work undertaken by sex, nominated cases and section-of-State, 1994. 69

7.1. Employment status and main source of income at time of the NATSIS, 1994. 79

7.2. Average weekly income by main source of income at time of the NATSIS, 1994. 81

7.3. Average weekly income by ATSIC regions and Torres Strait area. 82

8.1. Aboriginal and Torres Strait Islander (ATSI) student characteristics, schools and curriculum, and attitudes and perceptions: Ceduna ATSIC region, Adelaide ATSIC region, and Australia, 1994. 89

9.1. Highest qualification held by Indigenous Australians aged 15 years and over, 1991-94. 97

9.2. Level of highest qualification by median income, males and females. 98

9.3. Type of training by whether completed or not, Indigenous males and females, 1994. 100

9.4. Length of training course by training provider, males and females, 1994. 101

9.5. Type of training for males and females in CDEP and non-CDEP employment, 1994. 102

9.6. Length of unemployment spell by number of training courses attended, male and female, 1994. 103

10.1. Census estimates of private dwellings occupied by Indigenous households, by tenure/nature of occupancy, 1971-91. 108

10.2. NATSIS estimates of private dwellings occupied Indigenous households, by tenure/nature of occupancy and part-of-State, 1994. 109

10.3. Rented private dwellings occupied by Indigenous households: weekly rent by type of landlord, 1994. 112

10.4. Rented private dwellings occupied by Indigenous households: weekly rent by type of landlord by part of State, 1994. 113

10.5. Indigenous households in private dwellings by tenure: whether dwelling meets needs of household and problems identified if not, 1994. 114

10.6. Indigenous households in private dwellings by tenure: whether toilet did not work in last four weeks, 1994. 115

10.7. Dwelling did not meet needs, by tenure by part-of-State, 1994. 116

11.1 Comparison of selected health questions in the NHS 1994 and the NATSIS 1994. 121

11.2. Chronic disease and self reported health status: 18 years and older, 1994. 125

11.3. Questions on health care seeking behaviour in the NATSIS 1994 and the NHS 1994. 128

11.4. Results of question on problems with local health services in the NATSIS, 1994. 130

12.1. Indigenous family households and household size by region, 1994. 137

12.2. Housing tenure of Indigenous family households by region, 1994. 138

12.3. Household income, household income after housing costs and housing costs of Indigenous family households by region, 1994. 139

12.4. Per cent of family type by region, 1994. 141

12.5. Relationship of secondary families to primary family, 1991 Census and 1994 NATSIS. 141

12.6. Family income and family size by family type and region, 1994. 142

12.7. Use of formal child care services: Indigenous families with Indigenous children aged 0-12 years, 1994. 144

12.8. Wanted formal child care services in last four weeks: Indigenous families with Indigenous children aged 0-12 years not using services in 1994. 145

15.1. Characteristics of Torres Strait Islander population in the Strait and rest of Queensland, 1994. 168

15.2. Characteristics of Torres Strait Islander population in the Strait and rest of Queensland, 1994. 169

16.1. Usefulness and appropriateness of NATSIS data in regional planning. 178

Figures

3.1. Trends in estimated Indigenous total fertility rates, 1956-94. 32

4.1. Regional rates of Indigenous population movement, 1986-91. 42

6.1. Hunting, gathering and fishing by ATSIC region, persons aged 15 years or more, 1994. 72

Abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACOSS	Australian Council of Social Services
ACS	Australian Construction Services
ADC	Aboriginal Development Corporation
AEDP	Aboriginal Employment Development Policy
AEP	Aboriginal Education Policy
AHL	Aboriginal Hostels Limited
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
ANU	Australian National University
APS	Aboriginal Peoples Survey
ASSPA	Aboriginal Student Support and Parent Awareness Program
ATSIC	Aboriginal and Torres Strait Islander Commission
BMI	Body Mass Index
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Projects (scheme)
CD	Collection District
CES	Commonwealth Employment Service
CTP	Community Training Program
CURF	Confidentialised Unit Record File
DAA	Department of Aboriginal Affairs
DEET	Department of Employment, Education and Training
DEETYA	Department of Employment, Education, Training and Youth Affairs
DHFS	Department of Health and Family Services
DHSH	Department of Human Services and Health
DOPIE	Department of Primary Industry and Energy
DSS	Department of Social Security
HCINS	Housing and Community Infrastructure Needs Survey
ISA	Indices of Socioeconomic Advantage
LFS	Labour Force Survey
MCEETYA	Ministerial Council on Employment, Education, Training and Youth Affairs

MLFS	Monthly Labour Force Survey
NATSIS	National Aboriginal and Torres Strait Islander Survey
NAHS	National Aboriginal Health Strategy
NCEPH	National Centre for Epidemiology and Population Health
NHS	National Health Survey
NTEHP	National Trachoma and Eye Health Program
OEA	Office of Evaluation and Audit
OTSIA	Office of Torres Strait Islander Affairs
RCIADIC	Royal Commission into Aboriginal Deaths in Custody
SAC	Survey Advisory Committee
SSDA	Social Science Data Archives
SLA	Statistical Local Area
TAFE	Technical and Further Education
TAP	Training for Aboriginals Program
TFR	Total Fertility Rate
TRG	Technical Reference Groups
TSRA	Torres Strait Regional Authority
VWS	Voluntary Work Survey

Contributing authors

Jon Altman is the Director, Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Ian Anderson was formerly Chief Executive Officer of the Victorian Aboriginal Health Service. From May to August 1996 he was a Visiting Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Bill Arthur is Research Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Tony Barnes is National Director, National Centre for Aboriginal and Torres Strait Islander Statistics, Australia Bureau of Statistics, Darwin.

Carlos Carcach is a Senior Research Officer in the Data Management Program at the Australian Institute of Criminology, Canberra.

Anne Daly is a lecturer in the Faculty of Management at the University of Canberra and a Visiting Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Boyd Hunter is a Post-Doctoral Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Roger Jones is Head of the Social Science Data Archives, Research School of Social Sciences, Faculty of Arts, The Australian National University, Canberra.

David Martin is Research Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Satyanshu Mukherjee is a Principle Criminologist at Australian Institute of Criminology, Canberra.

Nic Peterson is a Reader in the Department of Archaeology and Anthropology, and was a Centre Visitor at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Russell Ross is a Senior Lecturer in the Department of Economics, University of Sydney.

Will Sanders is a Research Fellow at CAEPR, Faculty of Arts, The Australian National University (ANU), Canberra and is also coordinator of the Institutions of Aboriginal Australia Strand of the ANU's Reshaping Australian Institutions Project.

George Sarossy is First Assistant Statistician, in the Social and Labour Division, Australian Bureau of Statistics, Canberra.

Beverly Sibthorpe is a Research Fellow at the National Centre for Epidemiology and Population Health, The Australian National University, Canberra.

R.G. (Jerry) Schwab is a Research Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Diane Smith is a Research Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

John Taylor is a Fellow at the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

Habtemariam Tesfaghiorghis is Research Fellow, Graduate Studies in Demography, National Centre for Development Studies, and an Associate of the Centre for Aboriginal Economic Policy Research, Faculty of Arts, The Australian National University, Canberra.

1. The 1994 NATSIS: from conception to completion and beyond[1]

J.C. Altman

In April 1992, I convened a workshop 'A National Survey of Aboriginal and Torres Strait Islander Populations: Problems and Prospects'. That workshop was planned when it became apparent that the Commonwealth Government might implement recommendation 49 in the National Report of the Royal Commission into Aboriginal Deaths in Custody (Commonwealth of Australia 1991: 62) that called for a national survey to improve an understanding of the socioeconomic situation of Australia's Indigenous populations. The 1992 workshop was driven by two fundamental concerns. First, an earlier workshop in 1991 'Aboriginal Employment Equity by the Year 2000' (Altman 1991) had raised serious concerns about the availability of statistical information to assess the effectiveness of Commonwealth Indigenous affairs policy. The 1992 workshop afforded an opportunity to specifically highlight, from a social sciences perspective, where the statistical shortfalls were most evident. Second, the 1992 workshop provided a timely opportunity for both academics and policy practitioners to openly attempt to inform and influence the Australian Bureau of Statistics (ABS) both about the content of 'a' national survey and methodological issues that would need to be addressed in its development.

It is important to note at the outset that from both social sciences and policy-making perspectives the major thrust of the Royal Commission, that it was the low overall socioeconomic status of Indigenous Australians that contributed most significantly to high Indigenous incarceration rates (and subsequent deaths in custody), was very adequately demonstrated with available census-based statistics (see, for example, Gray and Tesfaghiorghis 1991). What was now needed was a statistical database that would allow a more refined analysis of the causes of Indigenous socioeconomic marginalisation. In 1992, the Royal Commission recommendations had momentum and overwhelming support at both Federal and State levels. The workshop in 1992 aimed to influence and assist statistical policy formulation: if a national survey was to be conducted, then its outputs needed to be of use to policy-making and program evaluation.

The outcomes of the 1992 workshop were slightly refocused in the subsequent monograph *A National Survey of Indigenous Australians: Options and Implications* (Altman 1992a). This shift to focus specifically on the national survey, rather than data requirements more generally, was

driven, in large measure, by a commitment made a week before the workshop by the previous Government to provide $4.4 million to the ABS to conduct a national survey.

Nevertheless, it must be noted that, as the earlier monograph now records, workshop support for 'a' national survey was far from unanimous. At best, a national survey was regarded by participants at the 1992 workshop as one prong in what needed to be a concerted ABS effort to improve the availability of statistics about Indigenous Australians. The earlier workshop, however, was fair and balanced: it was recognised and accepted that data collection was not the sole responsibility of the ABS; many agencies, at Commonwealth and State levels, needed to improve their data collections and, in particular, the use of Indigenous identifiers in administrative data sets (Altman 1992b: 153-6).

The 1992 workshop was, somewhat accidentally, timely because it was conducted only one week after the Government's commitment to fund a national survey. The present workshop recorded in this monograph may, in future, also be judged to have been timely for three very different reasons.

First, the workshop this time was conducted just after the ABS released the findings of an evaluation of the National Aboriginal and Torres Strait Islander Survey (NATSIS) (ABS 1996a). Many of the findings of this evaluation were summarised at the workshop by Sarossy (see chapter 17). The evaluation was not readily available to workshop participants when preparing their papers. However, the workshop did afford an opportunity to subject the NATSIS to additional robust scrutiny by a range of academic specialists and policy practitioners who have actually analysed and used survey outputs. Such additional scrutiny is both timely and appropriate because, as Sarossy notes, 'a significant proportion of the intended output from the survey was not available to the user community at the time of the evaluation' [early 1996]. As the papers prepared for this workshop and presented in this monograph indicate, a great deal more is available now.

Second, as the 1994 NATSIS indicated, there is a long lead time and much consultation required by the ABS to prepare for a special survey of this nature. If the 1994 NATSIS is to be repeated in 1999 (that is, five-yearly) then the time is fast approaching to plan for this eventuality. Again, this specialist workshop was timely as one mechanism to assist the ABS decide, firstly, if the NATSIS should be repeated according to external evaluation of its merits and, secondly, what form a new NATSIS might take. A particularly pertinent issue that the workshop addressed was whether other data collection strategies have been implemented (in areas such as health, housing and employment) that could result in sections of the NATSIS either being deleted or substantially modified.

Third, this workshop was conducted immediately after the 1996-97 Federal Budget that signalled for the first time the Howard Government's new direction in Indigenous affairs (see Hunter and Taylor 1996). From an

Indigenous perspective there has been considerable criticism of the Budget for its implementation of cutbacks to financial resources earmarked for special Indigenous programs, especially those administered by the Aboriginal and Torres Strait Islander Commission (ATSIC). But from a public policy perspective, these cuts signal changes in overarching political and policy frameworks that will be pertinent at least for the next three to six years. Changes in policy focus could alter the need for statistics about Indigenous Australians and the workshop provided a timely opportunity to consider this possibility.

This introductory chapter canvasses four overarching issues, some of which will be examined more microcosmically and in more detail in subsequent chapters that focus on particular subject areas. These issues were raised right at the start to encourage the robust discussion and debate that occurred at the workshop but is difficult to capture in the monograph format; hopefully, these discussions assisted authors in revising their papers for publication. I begin by outlining some options for deciding what might be included in, and what might be excluded from, a repeat NATSIS and associated ramifications. I then very briefly review what other data collection strategies have been implemented in the nearly five years (1992-96) since the last workshop. Next, the 'new' policy environment is discussed and an attempt is made, at this early phase of a new Federal Government, to outline what difference this might make to data requirements. Following on from this, a brief discussion of the political economy of statistics is provided; this is a theme that is returned to in the monograph's concluding chapter that attempts to summarise workshop findings and discussions.

A repeat NATSIS: what should be in and what should be out?

The workshop reported in this monograph was titled 'Statistical Needs for Effective Indigenous Policy: Findings From the 1994 National Aboriginal and Torres Strait Islander Survey'. As this title suggests, the workshop sought open, constructive and rigorous scrutiny of the 1994 Survey. Such scrutiny is not always easy because major surveys, like the NATSIS, evolve into statistical institutions and, in assessing their usefulness, there is always the temptation not to admit mistakes, to defend corporate image and methodological integrity, and ultimately to seek to maintain access to the significant fiscal support that sponsored such a survey. These are all inherent characteristics of bureaucratic politics and the ABS culture is not immune from the temptation to defend the NATSIS. On the other hand, the participation of the ABS in this (and the earlier) workshop and the evaluation undertaken of the NATSIS (ABS 1996a) suggests that there is a recognition that the initial 1994 Survey was, at least in part, experimental and there is room for modification and improvement. This is certainly the case if the results of future surveys are to value-add to policy-making.

In seeking workshop input into assessing the usefulness of a repeat NATSIS, I proposed that a framework be considered that scrutinised different parts of the Survey and asked the following:

i What unique questions that are not standard ABS questions have been asked by the 1994 NATSIS? These include broad categories such as cultural issues (examined by Peterson, chapter 13), health (Anderson and Sibthorpe, chapter 11), household and family (Jones, chapter 12) and law and justice (Carcach and Mukherjee, chapter 14). Are there sound grounds for including these questions in a future NATSIS or has experience to date suggested that they be deleted?

ii What questions should be in for historical comparative purposes; that is, because they allow policy makers to track changes in socioeconomic status, service delivery improvements and perceived improvements between the 1994 NATSIS and the next NATSIS?

iii What questions should be excluded because they either do not value-add to policy-making or because they are not statistically robust? How can the statistical robustness of outputs, even where problems are apparent,[2] be rigorously assessed? If rigorous assessment shows lack of robustness, then this is an admission of failure in the 1994 NATSIS, but given the Survey's experimental nature surely some failures could be put down to learning experience.

iv What questions should be recast because, while worthwhile in themselves, they have generated inaccurate or ambiguous outputs? As above, this also represents an admission of statistical failure, but at least the area concerned is deemed to be sufficiently important for the question to be repeated in a different guise. The problem with such question 'fine-tuning' is that it will make inter-survey (longer-term) analysis either inappropriate or statistically unsustainable.

v And, finally, what questions should be refined and re-defined so that they correlate more closely with regular ABS household surveys? For example, the definition of the unemployed in the monthly Labour Force Survey (LFS) and the 1994 NATSIS are not strictly comparable (see ABS/CAEPR 1996). This, in turn, means that opportunities for strict comparison with the total population are limited.

Other data collection strategies, 1992-96

As noted above, it has never been intended that the NATSIS becomes an omnibus survey of Indigenous Australians that somehow obviates the obligations of both the ABS and other agencies to collect accurate statistics using Indigenous identifiers (see also Dunn 1992). Indeed, it would arguably be a very negative outcome if the NATSIS somehow operated as a statistical substitution regime. Yet there are indications that plans to

enhance the Indigenous sample in regular ABS population/household surveys have not been pursued vigorously. In the NATSIS evaluation it was noted that the ABS has reservations about using enhanced sampling in regular surveys on the grounds that the validity of Indigenous data could be compromised. It is suggested that the grounds for potential inaccuracy could derive from the cross-cultural use of common collection instruments and methods (ABS 1996a: 34-5).

This is a valid issue, but it is of some concern that, while enhanced samples have been used in the monthly LFS once a year since 1994 and in the 1995 National Health Survey (see Anderson and Sibthorpe, chapter 11), results from these surveys are not yet readily available, although some evaluation has taken place (ABS 1995).

There is a need for open and critical assessment of attempts to gather data about Indigenous Australians beyond the five-yearly census and now NATSIS. For example, in 1992, Australian Construction Services (ACS) conducted a major housing and infrastructure survey for ATSIC (ACS 1992). Subsequent analysis of data derived from both the 1986 and 1991 Censuses indicated some overestimation of housing need (see Jones 1994), but nevertheless an attempt to collect data using different survey methods had been made. ATSIC sponsored the 1992 Housing and Community Infrastructure Needs Survey and it is to be commended for facilitating a rigorous and transparent assessment of its validity.

It remains unclear whether the administrative data collected by key Commonwealth agencies like the Department of Employment, Education, Training and Youth Affairs (DEETYA) and the Department of Social Security (DSS) are accurately identifying Indigenous clients. While it is true that both agencies are collecting information for program administration rather than policy evaluation purposes, it does appear that the use of identifiers has not progressed in recent years.[3] The situation for other important areas such as demography and health is discussed in detail by Tesfaghiorghis (chapter 3) and Anderson and Sibthorpe (chapter 11).

There are two reasons for this brief foray to revisit an old issue. First, there is a danger that excessive attention on a five-yearly NATSIS will divert attention from the potential to utilise other data collections to provide more regular (annual) data on Indigenous Australians that are crucial for policy-making purposes linked to political rather than five-yearly cycles. Second, the very real issue of why comparative information about Indigenous Australians is still only available from the five-yearly census requires continuing appraisal.

Changed political circumstances

In 1992 it was noted that the Commonwealth Government's language of managerialism was not matched by rigorous performance evaluation in Indigenous affairs (Altman 1992c: 3). At the time this was dismissed as a governmental inconsistency. At the same workshop it was predicted that a

change in government could see a decline in trends to increased resourcing of Indigenous affairs policy in real terms (Altman 1992c: 7). This prediction was based on then Coalition Opposition policy outlined in *Fightback!* that talked about better-targeted support and needs-based service delivery, but linked this to greater efficiency and effectiveness and associated fiscal pruning (see Altman and Sanders 1992).

To some extent, the ramifications of lack of rigorous performance evaluation are being experienced by agencies, like ATSIC, that are now bearing the brunt of cutbacks vis-à-vis other agencies. While this mainstreaming is driven more by ideology than empirical evidence, this policy shift may not have occurred or been justifiable if ATSIC had information about highly efficient programs or had demonstrated that it was internally allocating resources to those programs that were clearly most effective.

Howard Government policy appears to be moving, broadly-speaking, in two directions. Firstly, on face value, Indigenous Australians are being asked to contribute to the Government's overall deficit-reduction plan, a short-term requirement over the next three to four years that is argued, very politically, to be driven by the size of the inherited underlying deficit. While such a requirement has popular appeal, when directed at Indigenous Australians it tends to overlook that special programs are in place to ameliorate a historical legacy: the long-standing Indigenous deficit in housing, health, education, infrastructure and overall economic wellbeing. Accurate statistics are needed more than ever to rigorously demonstrate the socioeconomic differences between Indigenous and other Australians, so that persuasive arguments for contributing to deficit reductions can be offset by equally persuasive arguments about the opportunity costs associated with not addressing urgent shortfalls.

Secondly, more subtly and perhaps more substantively, ATSIC is being targeted to make contributions to the Government's deficit-reduction plan rather than the Indigenous programs administered by other mainline agencies such as the Department of Health and Family Services (DHFS) and DEETYA. This apparent inconsistency is partly due to historical factors: for example, the funding of Aboriginal medical services has recently been shifted from ATSIC to the Office of Aboriginal and Torres Strait Islander Health Services in DHFS (see Anderson and Sanders 1996) and it is too early to cut back on this initiative. On the other hand, there is little statistical evidence that DEETYA Indigenous education programs, which have expanded, have been more, or less, effective than ATSIC's programs. Given the new Government's stated policy focus on outcomes in Indigenous affairs, a redistribution of resources to areas where outcomes are most apparent would be justified. However, there is no evidence to date that such redistribution has been driven by empirical evidence and some suggestion that it is driven by an ideology of mainstreaming.

The Howard Government has already demonstrated that Indigenous lobbying for special treatment because of historical legacy that has proved

persuasive in the past can be double-edged. If governments provide special funding allocations due to special need, as has occurred over the past decade or two, then agencies need to demonstrate improvements in outcomes, not an intractable socioeconomic gap nor static infrastructural shortfalls. ATSIC, in particular, has somewhat unfairly been lumbered with two fundamental problems. On the one hand, since its establishment in 1989, there has been a shift to directly service a growing and more diverse Indigenous client base. In earlier years, Department of Aboriginal Affairs funding had been more focused on rural and remote regions. The establishment of the ATSIC representative structure Australia-wide and the devolution of many funding decision-making powers to the broadly-representative Board of Commissioners meant that apparently enhanced resources have had to be allocated far more widely, especially to clients living in urban and metropolitan areas.

On the other hand, where program dollars have been effectively utilised, in the broad absence of official statistics, ATSIC like other agencies has had difficulty in demonstrating the extent of improvements. This was clearly demonstrated, for example, with the attempted evaluation of the Aboriginal Employment Development Policy (AEDP) in 1993-94 which was highly dependent on 1986 and 1991 Census data. The absence of short-term cyclical data made it difficult to differentiate the positive effects of the AEDP from recessionary macroeconomic factors that were affecting the Australian labour market more generally (see ATSIC 1994). If improvements are occurring, and they are in some situations, then they need to be clearly demonstrated. Otherwise, governments may unfairly conclude that policies and programs are at best ineffectual, at worst part of the problem rather than part of the solution. This suggests that there is now a more urgent need for accurate official statistics, but unfortunately there are no new sources in the immediate future.

In this new policy and fiscal environment, ATSIC in particular faces new challenges. In the next three to four years it will have far fewer discretionary dollars to be allocated by the Board of Commissioners and regional councils. This suggests, perhaps, that ATSIC will need fewer regional data because ATSIC regional councils will have fewer discretionary resources to allocate. Or, alternatively, there may be a need for greater regional statistical scrutiny to ensure that mainline Commonwealth departments and State and Territory agencies are financing the citizenship entitlements of Indigenous people. It is certainly the case that, with fewer dollars to go around, rigorous performance evaluation, benchmarking with mainstream programs and a high degree of accountability will all be needed to ensure that available financial resources are used as efficiently as possible. Official statistics will be of crucial importance because, while ATSIC is empowered to more rigorously evaluate its own performance, it has few means to assess the relative performance of other agencies and other levels of government.

Just as the Howard Opposition (and now Government) was able to use the 'crisis' rhetoric of Indigenous affairs to draw conclusions, ideological or empirical, about efficacy of the broad Hawke/Keating approach in Indigenous affairs, so the Labor Opposition and ATSIC Commissioners will need data and data analysis to rigorously assess the efficacy of the Howard Government's 'new' approach. A very obvious problem, that will be highlighted in the monograph's conclusion (chapter 18), is the unanticipated poor correlation between political and statistical cycles. Data from the 1996 Census, when available, will be primarily assessing the outcomes of Labor Government policies; it will be 2002, at the earliest, before data from the 2001 Census are available to assess the new approach in Indigenous affairs. Under these circumstances, the need for an intercensal NATSIS, and for other official comparative statistics about Indigenous Australians, is greatly enhanced.

The political economy of statistics

The above discussion indicates that, in both current and future policy environments, the political economy of statistics about Indigenous Australians will be extremely important. This, of course, is neither new nor surprising: as already noted, since the 1980s the rhetoric and reality of disadvantage have been powerful mechanisms to attract enhanced support for Indigenous programs, at least from the Commonwealth Government (see Sanders 1991; Altman 1992c: 9-10).

The political economy of statistics embraces two broad issues that need to inform deliberations about a future NATSIS: first, how are decisions to be made about what is included in the NATSIS and, second, who will control data outputs and undertake data analysis.

The rhetoric of the NATSIS was couched in terms of strong language that survey results will help Indigenous Australians make better decisions (ABS 1995). This language was important as a means to ensure full Indigenous participation in the Survey; it was a part of what is termed, in chapter 18, 'the politics of participation'. This rhetoric, however, suggests that either Indigenous people control decision-making processes, which recent budgetary decisions indicate they clearly do not; or that decisions are made both by Indigenous and other Australians on the basis of official statistics, rather than on the basis of social, cultural and political imperatives. In reality, statistics can influence decision-making. Assuming that the NATSIS data do facilitate Indigenous (or bureaucratic or political) decision-making, it is not surprising that a diversity of interests are consulted about information requirements. Under these circumstances, careful consideration must be paid to determining Survey content and matching this to policy priorities. In this process, the ABS needs to tread a complex, and at times unenviable, path between widespread consultation with the Indigenous community to ensure participation, on the one hand, and focused expert input to ensure policy relevance, on the other.

With appropriate analysis, the NATSIS results might facilitate rational decision-making. But, if information is empowering in some ways, then the control of its dissemination is an important and very real issue (see Jonas 1992). This raises important questions about who undertakes data analysis, who pays for access to data and who controls the nature of outputs.[4]

Much of the analysis undertaken in this monograph is based on purchased access to a publicly-available Confidentialised Unit Record File (CURF).[5] The production of the CURF is welcomed by academic policy analysts, such as those represented at the workshop, but its existence raises questions (not addressed in the evaluation of the Survey owing to timing of the CURF release in mid-1996) such as how many Indigenous organisations have purchased the CURF and how comprehensible is this file to such potential users. Equally important are questions that the NATSIS evaluation started to address, and which Martin explores in chapter 16, asking what rigorous evaluation is being undertaken of NATSIS users; whether there is evidence that NATSIS statistical outputs are being used to facilitate effective regional planning; and finally whether there is evidence that users are 'applying the data to respond to their needs' (ABS 1996b: 5).

Conclusion

At the outset of the 1992 workshop, I noted a statistical inconsistency: while the rhetoric of government was managerialist and economically rational, statistics about Indigenous Australians appeared in decline (Altman 1992b: 2-4). By 1996, as the presentation by Barnes (chapter 2) and other papers in this volume indicate, this decline was arrested and has probably been reversed, in no small part owing to the existence of the 1994 NATSIS.

In 1996 it is possible to discern the emergence of a somewhat different development. There is an embryonic possibility in the new Indigenous affairs policy of the Howard Government that a distinction in policy between remote and non-remote Indigenous populations, evident in the pre-ATSIC era, may re-emerge. Such a distinction could result from a relative growth in programs administered by mainstream service providers to Indigenous clients in more densely settled regions and the allocation of static special program dollars to Indigenous people in rural and remote regions. This distinction could be an unintentional consequence of the current quarantining of some ATSIC programs, such as the Community Development Employment Projects (CDEP) scheme and the Community Housing and Infrastructure Program (primarily delivered to discrete Indigenous communities) and a decline in resources available for other programs and other regions.

If the establishment of ATSIC and its operations from 1990 to 1996 raised the profile, and obvious relative need, of urban Indigenous

Australians, then there is now a distinct possibility that this new focus will abate. It is of some concern that this trend may be exacerbated by the way statistics are collected, even in the five-yearly census, with some distinction being evident between the remote area enumeration strategy (by interview) and the usual self-completion of census questionnaires by the rest of the Indigenous population (Martin and Taylor 1996). This difference has real implications: for example, CDEP scheme participants are identified in the former but not the latter. Under such changed circumstances, the NATSIS will prove a very important vehicle to ask consistent questions about the entire Indigenous population.

Inevitably, in developing the next NATSIS there will be a spectrum of issues, with associated trade-offs. At one extreme, the NATSIS could aim to remain an omnibus survey providing a high quantity of data that is responsive to widespread Indigenous and agency demands. At the other extreme, it could be a fine-tuned, high-quality survey which is focused and responsive to immediate policy demands. Part of the task that this workshop has set out to address, from a variety of perspectives, is where along this spectrum the NATSIS should sit.

The ABS faces a dilemma: it could try and service all real and imagined data users and end up pleasing none, or it could make some proactive and informed decisions about how a mean, lean and somewhat sharpened NATSIS might look and generate data that will directly influence policy development. I make no secret, at the outset, that my preference is for the latter strategic approach that generates some key intercensal data that provides both a snapshot about how the socioeconomic status of Indigenous Australians is faring in the 'new' Indigenous affairs policy environment and some comparison with the 1994 NATSIS. But in articulating this preference, I do so with a belief that the NATSIS has developed something of a momentum that would be counter-productive to stall. It remains important that pressure to develop enhanced Indigenous samples in regular ABS household surveys is maintained to ensure that, alongside five-yearly data about the Indigenous population (from the NATSIS and the census), more regular comparative data, at least on an annual basis, is generated.

Notes

1. This chapter is a revised and retitled version of opening remarks to the workshop previously titled 'Review of the pre-survey [1992] workshop and subsequent policy developments'. Parts of the earlier version are now in the preface.

2. An example of such a potential problem area has arisen in attempts to assess income levels of participants in the CDEP scheme versus income received by others, often unemployed. Altman and Hunter (1996a) have found a high degree of similarity using 1991 Census data for a number of Northern Territory communities, whereas Ross (chapter 7) and Arthur (chapter 15) using 1994 NATSIS data show a marked difference.

3. Some research by Taylor and Hunter (1996) on DEETYA data sets and by Altman and Hunter (1996b) about DSS data sets indicate that both have shortcomings for use in research.

4. The complexities of this issue can be demonstrated with a concrete example. A recent publication using 1994 NATSIS output *Employment Outcomes for Indigenous Australians* (ABS/CAEPR 1996) was principally written (as acknowledged in the fine print) by CAEPR staff member Dr John Taylor, as a consultant to the ABS funded by ATSIC's Royal Commission Monitoring Unit. But the final editing and publication of the monograph was undertaken by the ABS with attenuated control over the nature, tone and emphases of analyses resting with the Australian Statistician.

5. The adequacy of the CURF for rigorous statistical analysis is questioned to some degree by statistician Roger Jones in chapter 12.

References

Aboriginal and Torres Strait Islander Commission (ATSIC) 1994. *Review of the AEDP*, ATSIC, Canberra.

Altman, J.C. (Editor) 1991. *Aboriginal Employment Equity by the Year 2000*, Research Monograph No. 2, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. (Editor) 1992a. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. 1992b. 'Statistics about indigenous Australians and the role of a national survey: where to now?', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. 1992c. 'Statistics about indigenous Australians: needs, problems, options and implications', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. and Hunter, B. 1996a. 'The comparative economic status of CDEP and non-CDEP community residents in the Northern Territory in 1991', *CAEPR Discussion Paper 107*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. and Hunter, B. 1996b. 'The geographic distribution of unemployment-related benefits and CDEP scheme employment', *CAEPR Discussion Paper 112*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. and Sanders, W. 1992. 'Aboriginal and Torres Strait Islander affairs', in P. Vintila, J. Phillimore and P. Newman (eds) *Markets, Morals and Manifestos: Fightback! and the Politics of Economic Rationalism in the 1990s*, Institute for Science and Technology Policy, Murdoch University, Perth.

Anderson, I. and Sanders, W. 1996. 'Aboriginal health and institutional reform within Australian federalism', *CAEPR Discussion Paper 117*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) 1995. *Getting Results: National Aboriginal and Torres Strait Islander Survey 1994, Australian Summary*, cat. no. 4191.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *National Aboriginal and Torres Strait Islander Survey: An Evaluation of the Survey*, cat. no. 4184.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *Labour Force Characteristics of Indigenous Australians: Statistics, Methodology and Comparisons*, cat. no. 6287.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *1994 National Aboriginal and Torres Strait Islander Survey: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.

Australian Construction Services 1992. *1992 Housing and Community Infrastructure Needs Survey*, Aboriginal and Torres Strait Islander Commission, Canberra.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 2 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Dunn, A. 1992. 'Can existing surveys be modified to include an Aboriginal identifier?', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Gray, A. and Tesfaghiorghis, H. 1991. 'Social indicators of the Aboriginal population of Australia', *CAEPR Discussion Paper 18*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Hunter, B. and Taylor, J. 1996. 'Indigenous labour force status to the year 2000: estimated impacts of recent Budget cuts', *CAEPR Discussion Paper 119*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Jonas, W. 1992. Aboriginal community and agency perceptions about the collection of social statistics', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Jones, R. 1994. *The Housing Needs of Indigenous Australians*, Research Monograph No. 8, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Martin, D.F. and Taylor, J. 1996. 'Ethnographic perspectives on the enumeration of Aboriginal people in remote Australia', *Journal of the Australian Population Association*, 13 (1): 17-31.

Sanders, W. 1991. 'Destined to fail: the Hawke government's pursuit of statistical equality in employment and income status between Aborigines and other Australians by the year 2000 (or, a cautionary tale involving the new managerialism and social justice strategies)', *Australian Aboriginal Studies*, 1991/2: 13-18.

Taylor, J. and Hunter, B. 1996. 'Indigenous participation in labour market and training programs', *CAEPR Discussion Paper 108*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

2. Recent developments in the collection of Indigenous statistics

A. Barnes

Prospects for another National Aboriginal and Torres Strait Islander Survey (NATSIS) are currently being considered. This paper sets out some advances that have been made in our understanding of statistical collection issues as a consequence of the 1994 NATSIS, as well as other advances in Indigenous statistics since 1992.[1] The focus is on issues which continue to present challenges rather than those that are well understood.

While the paper takes a broad perspective, some experiences of the NATSIS will be reviewed in more detail. The ways in which Aboriginal and Torres Strait Islander people are identified in collections will also be considered. The paper concludes by considering future priorities for collection of Indigenous statistics.

Major initiatives from outside the Australian Bureau of Statistics (ABS)

Since the 1992 CAEPR workshop there has been increased government interest and collection activities associated with Indigenous statistics. This is illustrated by recent developments in Aboriginal health and education information, following major reviews of the National Aboriginal Health Strategy (NAHS) and the Aboriginal Education Program (AEP). Both reviews concluded that available statistics were inadequate to meet government needs and, as a consequence, increased resources were allocated to statistical issues in these two areas.

Health and education statistics

In the case of the NAHS, the review found it difficult to draw informed conclusions even about health service processes, let alone health outcomes or the effectiveness of the NAHS over the preceding five years. Since the review, the Office of Aboriginal and Torres Strait Islander Health Services within the Commonwealth's Department of Health and Family Services (DHFS) has focused on data acquisition in an attempt to address these deficiencies. This has been apparent in the details of the framework agreements for Aboriginal health funding which are being negotiated with each State and Territory. Further, developments following the NAHS review were also responsible for funding being tripled for Aboriginal and Torres Strait Islander health and welfare information at the national level. These funds were instrumental in the development of the Aboriginal and

Torres Strait Islander Health and Welfare Information Unit (a joint program of the Australian Institute of Health and Welfare/ABS).

The AEP review recommended the development of a detailed suite of statistical and information collections and reporting systems far beyond what currently exists (Commonwealth of Australia 1995). As a consequence, the ABS is currently conducting a review of Aboriginal education statistics collections on behalf of Department of Employment, Education, Training and Youth Affairs (DEETYA). As part of this exercise a Directory of Indigenous Education and Training Statistics is being prepared within ABS.

ABS initiatives in Aboriginal and Torres Strait Islander statistics

A number of initiatives have come from within ABS, the most significant being the conduct and reporting of the NATSIS. A second major development was the preparation of Experimental Population Estimates (ABS 1995) and subsequently Population Projections (ABS 1996a) for the Aboriginal and Torres Strait Islander population. These have formed a major component of ABS's work in demography over the past three years. Two other initiatives to be considered here are concerned with enhancement of procedures for the Census of Population and Housing, and the creation and promulgation of a 'standard' for capturing and recording Indigenous information. These are discussed briefly below.

Census 1996

Before the conduct of the 1996 Census, ABS developed and implemented an Indigenous Enumeration Strategy. This strategy was designed to improve the quality of the enumeration of Indigenous people by enhancing procedures used in previous censuses. One of the strategy's features was the employment of a senior Census management team member (State Indigenous Manager) in each State and the Northern Territory in the months leading up to and during the enumeration in August. The role of these officers was to focus on overcoming Indigenous enumeration difficulties. The adoption of these initiatives, which were not applied to any other population group, indicates ABS's commitment to achieving Indigenous statistics of the highest quality.

For the 1996 Census, increased resources have also been devoted to quality control of Indigenous statistics. Additional validation checks will be made during the processing of the special Indigenous Census forms used in remote areas and there will be capacity to conduct further investigations on problems which cannot be resolved during processing. The 1996 Census will also have more resources than previously to conduct a coordinated output program for Indigenous statistics during 1997-99. An important component of the preparations for Census output is the development of an Indigenous geographic classification system - national/State and Northern Territory/Aboriginal and Torres Strait Islander

Commission (ATSIC) Regions with subcategories down to the lowest output level of communities of 80 people or more. This will greatly improve the quality of local area statistics produced from the Census.

Standardising Indigenous identification
It is widely, but not universally, accepted that the definition of an Indigenous Australian is that which emerged from the 1983 High Court judgment in the case of Commonwealth v Tasmania (46ALR625). This judgment states that an Aboriginal or Torres Strait Islander person is one who:

i has Aboriginal or Torres Strait Islander descent;

ii identifies as an Aboriginal or Torres Strait Islander person; and

iii is accepted as an Aboriginal or a Torres Strait Islander by the community in which he or she lives.

In Australia, many collections record people as Aboriginal or Torres Strait Islander based on a question designed to capture information about the first of these three criteria. Despite the fact that no endorsed standard method existed before 1996, this is broadly the approach ABS has adopted in the previous three censuses. This question, based on biological descent, was:

Are you of Aboriginal or Torres Strait Islander origin?
(For persons of mixed origin, indicate the one to which they consider themselves to belong)
No..... ❑
Yes, Aboriginal..... ❑
Yes, Torres Strait Islander..... ❑

In the NATSIS the same question was used but with important differences in the coding of responses. Persons of both Aboriginal and Torres Strait Islander origin were recorded as 'both Aboriginal and Torres Strait Islander' by interview or marking both 'yes' boxes.

Are you of Aboriginal or Torres Strait Islander origin?
Yes, Aboriginal..... ❑
Yes, Torres Strait Islander..... ❑
No..... ❑

Early in 1996, ABS adopted a formal 'standard' for capturing and recording people's Indigenous status (referred to as the ABS Standard for Indigenous Status). The ABS standard uses the Census question with the addition of an instruction for identifying people of both Aboriginal and Torres Strait origin. This standard question was the approach used in the 1996 Census. As a consequence, all population estimates for Indigenous people from the

ABS up to the year 2001 will be based on this approach to recording Indigenous status.

Are you of Aboriginal or Torres Strait Islander origin?
(For persons of both Aboriginal and Torres Strait Islander origin, mark both 'yes' boxes)

No	❑
Yes, Aboriginal	❑
Yes, Torres Strait Islander	❑

The adoption of a standard which does little more than endorse current practice does not appear a major issue. However, viewed strategically, and recognising that improvements in the capture of people's Indigenous status is the single most important issue for better Indigenous statistics, the creation of a standard is a considerable advance and has important consequences.

The precise form of the question(s) used to classify people as Indigenous or not, and further sub-classify them in collections, is of considerable interest to Indigenous people and to those involved with government policy. The form of the question(s) is also an important statistical issue. There is a need for consistency over time for valid time series and, even more importantly, from one collection to another at the same point in time, in order to produce valid ratio and rate statistics. This variability has the potential to be an important source of bias but one which we have no direct information about for Aboriginal and Torres Strait Islander people. The New Zealand experience with Maori identification in their census indicates the potential magnitude of this problem (Gould 1992).

Possible additional question(s) which more closely reflect the High Court decision should be explored in detail, possibly as part of the planning for a future national survey. The attitude of Indigenous people and other key stakeholders would also need to be explored in detail.

Families and households

Classification standards for Indigenous families and households must also be considered in greater detail in the future. The primary consideration for the definition of Indigenous households is whether the Indigenous status of the resident family or families reference person(s) or spouse should be the defining criteria (the approach used in ABS census results) or whether the presence of any Indigenous household resident should determine an Indigenous household (the approach adopted in the NATSIS). Statistics are very sensitive to this issue, particularly when comparisons between States and Territories are made.

Even more problematic are the definitions of Indigenous families and income units, which not only have the same difficulties as household definitions, but also have the issue of traditional structures to consider. No

formally endorsed definitions of Indigenous families or households exist at present but the current preferred ABS working definition, which will be used in the analysis of the 1996 Census results, is based on the status of the reference person or spouse of any family with a household or lone person.

Major collections, 1992-96

Some of the major national statistical collection activities since the last workshop are summarised in Table 2.1. Next to the census and the NATSIS, perhaps the most important collection has been the ATSIC-sponsored 1992 *Housing and Community Infrastructure Needs Survey* (HCINS) (Australian Construction Services 1992). This survey of Indigenous communities (mainly those outside urban areas) is being reviewed by ATSIC with a repeat collection activity possibly being considered for 1997. Collection procedures used in the HCINS varied from State to State and consequently there is doubt about some intra-state comparisons. Despite this, the data fill an important information gap and still remain useful.

Another prominent collection is the recent DHFS 1994 National Drug Strategy: Urban Aboriginal and Torres Strait Islander Survey, using mainly non-Indigenous interviewers, 3,000 adult urban and metropolitan Indigenous people were interviewed about drug and alcohol issues, including personal alcohol consumption.

The use of Indigenous identifiers in ABS social surveys

Indigenous identifiers have been used in a number of ABS social surveys over the past four years. Indigenous statistics resulting from these surveys have not been reported, as some have been assessed as insufficiently reliable for reporting, while others are under consideration. For example, an analysis of the quality of the Indigenous data from the 1995 National Health Survey (NHS) is currently being undertaken.

The experience ABS has gained through the use of Indigenous identifiers in recent ABS social surveys has led ABS to the view that careful consideration must be given before including an Indigenous identifier question in future surveys. Further, the size of the Indigenous sample in many sample surveys and the way in which the sample is selected can also lead to poor quality, and possibly misleading Indigenous statistics which require caution in their formal release as ABS-endorsed statistics. Sample sizes of Indigenous populations can be enhanced to increase the precision of statistics, as occurred in the 1995 NHS. This is, however, an expensive exercise if done with statistical rigour, as was the case in the NHS. It is ABS's view that sample enhancement should not be considered unless the resulting statistics can fully justify the additional expense and analytical complexity which the enhancement produces.

Table 2.1. National Statistical Collections activities since 1992 relevant to Indigenous people.

Collection (sponsoring agency)	Year	Status	Sample unit	Approx. intended Sampling fraction	Sampling method	Coverage
Census (ABS)	1991	Results reported	All people	100 per cent	Census	All Indigenous and non-Indigenous people
	1996	Field work completed First results July 1997	All people	100 per cent	"	"
NATSIS (ABS)	1994	Most results reported	All people	5 per cent	Multistage random cluster sample	All Indigenous people
	1999?	Proposal being considered	All people	Approximately 5 per cent	"	Not yet decided
Housing needs and Infrastructure (ATSIC)	1992	Results reported	Communities	100 per cent of communities	Census	All remote and rural communities. Variable in major urban centres
	1997	Undecided	Undecided	Undecided	Undecided	Undecided
National Drug Strategy Urban Aboriginal and Torres Strait Islander Peoples Supplement (DHFS)	1994	Results reported	People >14 years	6 per cent	Approx multi-stage cluster sample	People>14years in urban and metropolitan areas
Disability Aging and Carers (ABS)	1993	Indigenous results insufficiently reliable for reporting	All people	0.2 per cent	Multi-stage random cluster sample	All Indigenous and non-Indigenous people except remote area

Table 2.1. Continued.

Collection (sponsoring agency)	Year	Status	Sample unit	*Approx. intended* sampling fraction	Sampling method	Coverage
Survey of Education and Training (ABS)	1993	Some Indigenous results reported	People >14 yrs	0.2 per cent	Multi-stage random cluster sample	All Indigenous and non-Indigenous people except remote areas >14 years
	1997	Undecided	"	"		"
Labour Force Survey (ABS)	1994	Results analysed draft report being revised	People >14yrs	0.4 per cent	Multistage random cluster sample	All Indigenous and non-Indigenous people >14 years
	1995	Not yet analysed	"	0.4 per cent	"	"
	1996	Not yet analysed	"	0.4 per cent	"	"
National Health Survey (ABS)	1989	Uncertainty about reliability of Indigenous results	All people	0.2 per cent	"	All Indigenous and non-Indigenous people
	1995	Reports on data quality and survey results planned	All people	0.7 per cent	"	All Indigenous and non-Indigenous people
National Health Survey	1993	Results not reported and reliability not assessed	Dwellings	0.6 per cent	"	All dwellings of Indigenous and non-Indigenous people, except remote areas
Mental Health	1996	Information collection exercise being planned for Indigenous mental health	Undecided	Undecided	Undecided	Undecided

Administrative data collection activities

The key to high quality Indigenous statistics from administrative collections is complete records of people's Indigenous status obtained through accurate completion of a 'standard' approach to identifying Indigenous people. This is not easy to achieve and, despite some promising advances in the first half of 1996, there have been few improvements in reporting high quality Indigenous statistics derived from administrative collections since 1992.

Births and deaths

In 1992, birth and death statistics were one of the few sets of Indigenous social statistics derived from an administrative collection which were considered to be sufficiently reliable to be reported by ABS. Even these were of adequate quality for only three States: Western Australia, South Australia and the Northern Territory. By 1996, of the remaining States and Territories, only the Australian Capital Territory has sufficiently improved the quality of Indigenous identification in its death records to be added to the list of States with Indigenous statistics of sufficiently high quality for reporting. The situation is no different for birth statistics, although more States are closer to achieving reportable quality birth statistics.

Despite this apparently static situation, there have been some significant advances in 1995 and 1996. Most importantly, all States' and Territories' Registrars of Births, Deaths and Marriages have adopted the ABS 'standard' Indigenous identifier in their birth and death collections. Of particular note are the achievements in Queensland where a coordinated effort has been mounted to adopt the use of identifiers for the first time from January 1996. After just a few months of using an identifier, early results suggest a high standard of recording of Indigenous status may have already been achieved, particularly for births. There is a possibility that Queensland Indigenous birth statistics could be published from 1997, well before other States which have had Indigenous identifiers for many years.

Other administrative records

Health records have shown improvement in the quality of Indigenous identification since 1992, notably in perinatal statistics collections. There may be improvement in the quality of the Indigenous identification in other health administrative collections (for example, hospital separations, cancer registrations, injury and dental collections). However, these have not yet been systematically investigated.

An important advance has been the endorsement of the ABS 'standard' by the National Health Information Management Group. This identifier will also be included in the 1997 edition of the National Health Data Dictionary as the national standard for government health data collections. This provides a platform from which to launch a national campaign to standardise and monitor Indigenous identification in future administrative health collections (mainly State and Territory).

Presently, attention is being paid to Indigenous education statistics but this has not yet resulted in a systematic review of the quality of Indigenous identification in administrative education collections. Until such a review is conducted, the quality of some Indigenous schools statistics remains uncertain. A similar situation exists for prison statistics where, despite prison censuses in 1992 and planned for 1996 which have included an identifier, the approach to identifying Indigenous people in these collections has not been systematically investigated. The completeness with which Indigenous identifying information is sought or recorded is also unassessed. Some preliminary investigations of the quality of Indigenous identification will be undertaken as part of the 1996 prison census. In other law and justice collections the situation is, if anything, even more uncertain.

Survey methodology issues concerning data for Indigenous people

The NATSIS

Although it is not the purpose of this paper to present or discuss statistical results, a list of all the output products from the 1994 NATSIS is displayed in Table 2.2 to illustrate the quantum and scope of existing publication. By the standards of major national surveys, especially a first time survey, the NATSIS was a successful operation. By and large, it produced the survey statistics which were determined by the various Technical Reference Groups as being required. It ran to budget and to time, and there were no major problems with client groups or users. Amongst the special design and operational features of the NATSIS, the following must be considered amongst its successes:

- the two-stage search and selection process for Indigenous households;
- the 'good relations which were established with the Indigenous community;
- the extensive consultation processes with the Indigenous community;
- development of the benchmarking population estimates;
- the employment and training of up to 100 Indigenous interviewers;
- approximately 90 per cent response rate across all sections of the community; and
- some aspects of the feedback of results.

Table 2.2. Output products produced by ABS from the 1994 NATSIS.

ABS Catalogue No.	Title	Pages	Release Date (or Expected)	Comments
4190.0	NATSIS: Detailed Findings	108	Feb 1995	Main findings of survey
4191.0	NATSIS: Getting Results - Australian Summary	8	Feb 1995	Summary for mass distribution
4192.0	NATSIS: Regional Overviews	2	Feb 1995	36 ATSIC regional wall charts
4197.0	NATSIS: Australia's Indigenous Youth	50	Feb 1996	Standard ABS publication
4196.0.001-36	NATSIS: ATSIC Regional Statistics Books	108	Feb 1996	36 ATSIC regional publications: with ATSIC
4155.0	NATSIS: A Social Atlas	60	Oct 1996	60 ATSICs regional maps of social conditions
4199.0	NATSIS: Employment Outcomes of Indigenous Australians	98	May 1996	Analysis of employment data: with CAEPR
4395.0	NATSIS: Health of Indigenous Australians	50	Sept 1996	Descriptive health statistics
4187.0	NATSIS: Housing Characteristics and Conditions	60	Sept 1996	Descriptive housing statistics
4195.1-7	Aboriginal and Torres Strait Islander People at a Glance (One for Each State and NT)	4	Sept 1996	Summary statistics and population estimates
4190.1-7	NATSIS: State publication (One for each State and NT)	80	Sept 1996	State version of 4190.0
4189.0	NATSIS: Law and Justice	60	Oct 1996	Analysis of law and justice data: with AIC
4179.3	NATSIS: Torres Strait Islanders of Queensland	30	Oct 1996	Descriptive Torres Strait Islander statistics for Queensland: with CAEPR
--	Occasional Paper: Smoking amongst Indigenous Adults	25	Mar 1997	Epidemiological analysis of smoking data
--	Occasional Paper: Overweight and Obesity amongst Indigenous Children and Adults	50	Apr 1997	Epidemiological analysis of nutritional status data
--	Occasional Paper: Housing Satisfaction and Housing Need amongst Indigenous Australians	30	Apr 1997	Analysis of relationships involving housing data
4188.0.15.001	Unit Record File	Floppy-Disk	Apr 1996	File 15,500 of people, family and household data
1138.0	Catalogue of Indigenous Statistics	Floppy Disk	1995	Meta-data of major collections

The following publications also present information from NATSIS:
Australia's Health, ABS Yearbook, Social Trends 1996, The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People.

Data quality issues of the NATSIS and other surveys

Despite the fact that the numbers of Indigenous people in the NATSIS very closely reflected what was expected from the census, there were three major data quality issues concerning the sample of people interviewed. The first concerns the low number of Torres Strait Islanders selected for and responding to the Survey outside Queensland. The second is concerned with the approximately 20 per cent underenumeration of young to middle-aged adult males relative to females, and the third concerns the failure to recruit into the sample almost half the expected number of babies less than one year of age. The impact of the last two issues is much reduced because of the benchmarking process; however, the potential for significant bias remains.

Investigations of the Torres Strait Islander sample anomaly are not complete, and explanations which can be offered for the apparently very substantial sample loss for Torres Strait Islanders outside Queensland are no more than speculation at this time. It should be noted that the sample loss is greatest in the south-east States. Only Torres Strait Islander statistics for Queensland can be considered reliable at this stage.

The sample loss of young adult males and children under the age of one year is a phenomenon observed in previous Australian censuses amongst Indigenous people and in overseas surveys and censuses. However, the magnitude of the sample loss, particularly amongst babies, may be larger in the NATSIS than previously detected in Indigenous results from the Australian Census and will need special attention in any future surveys. The fact that the special NATSIS interviewing techniques did not overcome the problem suggests its cause may be more than an issue of some reluctant male household residents failing to be detected during search and interview phases.

One of the most significant data quality issues in the NATSIS is the failure to adequately detect visitors. Less than 100 of the 15,000+ respondents were recorded as visitors (an issue dealt with further by Taylor, chapter 4). This was unexpected, as special procedures were used to record both 'long-term' and 'short-term' visitors.

The most difficult of all NATSIS data quality issues to estimate and deal with is the differential response (including non-response) to questions which are susceptible to different interpretations from different sections of the Indigenous community. Many data items are fairly objective and probably less at risk to this type of difficulty; for example, recall of major events like admission to hospital over the past two weeks or the characteristics of dwellings. However, 'skin problems' or 'eye problems' may have been differently interpreted by respondents in south-eastern States than in remote northern Australia. This problem is even more significant between the Indigenous and non-Indigenous community, leading to difficulties when comparing Indigenous statistics from NATSIS with non-Indigenous results from mainstream ABS surveys.

There are three national surveys (the 1989 NHS, the 1994 NATSIS and the Indigenous Urban Drug Use Survey of the DHFS in 1994 (Department of Human Services and Health 1996) which have collected data on the prevalence of smoking and the proportion of Indigenous people who drink alcohol. Despite their quite different methodologies, the three surveys produced similar results for both smoking and alcohol prevalence, with the two 1994 surveys having similar results. Although the NATSIS used Indigenous interviewers, the Survey Reference Group which considered alcohol consumption concluded that data on consumption should not be collected in the NATSIS. This raises a number of interesting questions: should the Drug Survey alcohol consumption results be accepted as reliable even though non-Indigenous interviewers were used? If the answer is 'yes', then can non-Indigenous interviewers achieve high quality results elsewhere? In particular, in relation to data quality, how important is it to use Indigenous interviewers in surveys like the NATSIS? Further, could the NATSIS collect and report reliable information on alcohol consumption data?

NATSIS content and its policy relevance

NATSIS contents and questions

For design and interviewing purposes, the NATSIS content was subdivided into separate categories: family and culture, health, housing, employment and income, education and training, and law and justice. Details of the subject matter content and the construction of questions were determined on the basis of advice received from six reference groups which were comprised of Indigenous people, subject matter experts from outside the ABS, and ABS experts and Survey team members. Except where technical feasibility or interview length constraints dictated otherwise, the advice of the reference groups was generally accepted.

Government policies and NATSIS contents

The workshop's subject matter public service experts are best placed to determine the extent to which the NATSIS results have so far been relevant to their areas of government policy. Only certain general considerations about policy relevance are presented here.

Social survey results can be relevant to government policy in six different ways:

i providing quantitative snapshots of social conditions in 1994 for the Indigenous population of Australia;

ii providing comparisons between social characteristics of different subsections of the Australian Indigenous population;

iii providing comparisons between the Indigenous and non-Indigenous populations of Australia;

iv providing insight into the interrelationships between different social characteristics;

v monitoring changes over time in social characteristics, if consecutive survey results were available;

vi monitoring program outcomes and evaluating policy objectives, if appropriate measures are available in consecutive surveys.

The current NATSIS results can be used for (i) and (ii) above at the moment. They can also be used for (iii) depending on the availability of comparable non-Indigenous statistics. As more sophisticated analyses of the interrelationships in the data are undertaken, (iv) will become satisfied. Some uses, particularly those at the end of the list ((v) and (vi)), are more directly relevant than others to government policy and program initiatives. Since consecutive survey results are needed for (v) and (vi), the NATSIS cannot be used in this way until it is repeated.

Aboriginal and Torres Strait Islander health and welfare statistics

In 1995, ABS and the Australian Institute of Health and Welfare commenced a joint program on Aboriginal and Torres Strait Islander health and welfare statistics. The first year's operations have been mainly concerned with establishing the project, staffing and developing a work program through a widely representative advisory committee. The work program comprises regular reporting on Indigenous mortality, a biennial publication on the state of Indigenous health and related factors, work to promote improved identification in health and welfare data collections, a catalogue and a review of quality of Indigenous health and welfare data and statistics. It also includes efforts to work with all individuals and agencies concerned with Aboriginal and Torres Strait Islander health and welfare to develop a plan for improving the collection, dissemination and use of Indigenous health and welfare statistics. At the instigation of the Australian Health Ministers' Advisory Council, the project will consult throughout Australia and will develop a national Aboriginal and Torres Strait Islander health information plan in 1996-97.

ABS priorities in Indigenous statistics

The experience gained with the NATSIS has confirmed the ABS view that the approach adopted by this Survey provides a suitable methodology for

conducting major surveys of Australia's Indigenous people. Along with ATSIC's HCINS collection, the NATSIS and the census must now be considered the priority vehicles for Indigenous data collection at the national level. They are complementary collections, with NATSIS's strength being its ability to cover a wide range of social characteristics in some detail using a common methodology. No other collection achieves this. As yet, very few of the interrelationships between the different social characteristics measured by NATSIS have been investigated. This analysis and reporting will remain a priority for ABS and other agencies. If, and when, results of a second NATSIS become available, as stated above, analysis of the changes in interrelationships will be possible. The ability to report on such changes is fundamental to government policy development and assessment.

ABS has two other high priority areas concerned with the collection of data for Indigenous statistics; both have been discussed above. The first of these is to work closely with State and Territory governments to improve the quality of Indigenous identification in their administrative data collections. ABS does not have sufficient human resources to effect significant improvements in this area on its own, nor does it have the authority to do this without working with State and Territory governments. Its role must be to coordinate and work with others to define and promote best practice in this area and to monitor progress towards achieving high quality Indigenous data and statistics.

The final, but by no means the least, important priority is the range of statistical and information tasks ABS is undertaking to assist others in their efforts to more effectively address the health and welfare of Indigenous people. Making advances in Indigenous health is recognised by governments throughout Australia as one of the highest priority issues. Improvements in Aboriginal health are likely to be gradual and occur over many years. Monitoring these achievements and evaluating the actions which lead to them will be an essential task for the immediate future. Our ability to do this will depend to a large extent on the success of the NATSIS.

Notes

1. Some of the views expressed in this paper are based on personal opinion and, while they broadly reflect current thinking within the Australian Bureau of Statistics (ABS), they should not be taken as indicative of ABS official policy.

References

Australian Bureau of Statistics (ABS) 1995. *Experimental Estimates of the Aboriginal and Torres Strait Islander Population, June 1986 to June 1991*, cat. no. 3230.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *Experimental Projections, Aboriginal and Torres Strait Islander Population*, cat. no. 3231.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *National Aboriginal and Torres Strait Islander Survey, 1994: An Evaluation of the Survey*, cat. no. 4184.0, ABS, Canberra.

Australian Construction Services 1992. *1992 Housing and Community Infrastructure Needs Survey*, Aboriginal and Torres Strait Islander Commission, Canberra.

Commonwealth of Australia 1995. *National Review of Education for Aboriginal and Torres Strait Islander Peoples: Final Report*, Department of Employment, Education and Training, Canberra.

Department of Human Services and Health 1996. *National Drug Strategy Household Survey: Urban Aboriginal and Torres Strait Islander Peoples Supplement, 1994*, Australian Government Publishing Service, Canberra.

Gould, J.D. 1992. '"Maori" in the Population Census', *New Zealand Population Review*, 18 (1 and 2): 35-67.

3. Indigenous demographic data needs: inadequacies and prospects

H. Tesfaghiorghis

This chapter has four main purposes. First, to identify Indigenous demographic data needs both from the perspective of demographers as well as from the perspective of public and private sector interests. Second, to see if the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) has satisfied any of these interests in demographic data. Third, to provide an overview of Indigenous demography and take stock of what is known and unknown. Fourth, to speculate on the prospects of meeting Indigenous demographic data needs.

Demographic data needs

Governments and businesses are increasingly integrating demographic factors into their planning processes. In the context of effective planning to improve the living standards of the Indigenous population, demographic data are among the key planning parameters. The main demographic data requirements for effective planning and policy formulation are in regard to population size and structure, population growth, geographic distribution, fertility, mortality, migration, population projections and annual population estimates. These data are required at all levels from the national down to States and Territories, Aboriginal and Torres Strait Islander Commission (ATSIC) regional councils, rural communities and outstations and are consistent with public and private demand for Indigenous demographic data.

The need for population projections are, for the first time, being met by the Australian Bureau of Statistics (ABS) through its preparation and publication of Indigenous projections by single-year periods from 1991 to 2001 at the national and State/Territory levels (ABS 1996a).[1] However, great interest remains in latest population numbers at the Indigenous community and outstation levels, which ABS is not currently providing. Of the factors of population change, there is also policy interest in mortality data because of the usefulness of cause of death statistics for planning Indigenous health. However, there is little public interest in fertility information except from demographers.

While Australia has well developed and reliable statistical systems which enable most of these demographic parameters to be known with great certainty for the general population, these systems for the Indigenous population are mostly incomplete and unreliable and are in the early stages of development. A brief review of the state of Indigenous demographic

knowledge considered in this paper will attest to this. Whatever understanding of Indigenous demography exists today is based on limited and defective data.

The lack of Indigenous demographic, social and economic data led the Royal Commission into Aboriginal Deaths in Custody to recommend a national survey of the Indigenous population (Commonwealth of Australia 1991: 54-63). Despite the fact that the collection of demographic data was an integral part of the broad survey proposed in Recommendation 49 of the Royal Commission (Commonwealth of Australia 1991: 62), and was seen as a vital survey component by the ABS (Sims 1992) and ATSIC (Menham 1992), demographic questions were omitted from the final survey instrument. However, the Survey did collect some demographic data, such as the age and sex of all respondents and the number of children born to all women aged 13 years and over. However, the NATSIS report (ABS 1995) did not include information on children born, nor any tabulation of the age-sex distribution of respondents, which could have been useful to check if the age-sex distribution of survey respondents was representative of the total population, as indicated by the 1991 Census.

Although the numbers of Indigenous people at the national and State levels (and perhaps at the ATSIC regional council level) were reasonably well known owing to the roughly comparable completeness levels of the 1986 and 1991 Census counts, then at the very least the NATSIS represented a missed opportunity with regard to the collection of other key demographic parameters such as mortality, internal migration and mobility. This lack of focus on the collection of demographic data could have been dictated by the small sample size, which would have resulted in unreliable estimates of demographic parameters, or by the lower priority given to demography in the consultation process, or for both of these reasons.

An overview of Indigenous demography

A brief review of the state of knowledge of the key demographic parameters is undertaken in order to appreciate the status of current demographic data availability and quality as well as the prospects of overcoming data limitations. If we start with one of the basic identified data needs, that of population size, how well do we know the size of the Indigenous population? The completeness levels of Indigenous population counts in the 1986 and 1991 Censuses were, for the first time, roughly comparable, which was a fortunate correspondence as it allowed estimation of Indigenous fertility and mortality during the 1986-91 intercensal period (Gray and Tesfaghiorghis 1993). While the size of the Indigenous population is now reasonably well established, there is still a degree of uncertainty about precise numbers. For example, the corrected Indigenous population for 1991 varied from around 270,000 (Gray and Gaminiratne 1993: 7) to 285,000 (ABS 1996a: 1), compared to the enumerated census population of 265,000.

With respect to the national Indigenous population growth rate, the estimated 2.5 per cent growth per annum for the 1986-91 intercensal period is considered acceptable (Gray and Gaminiratne 1993: 2; Gray and Tesfaghiorghis 1993). However, detailed analysis of census enumeration completeness for Western Australia, South Australia and the Northern Territory revealed that the intercensal growth rates varied from 2.1 per cent per annum in the Northern Territory to 2.6 per cent each in South Australia and Western Australia (Luther, Gaminiratne and Gray 1995).

Neither the 1991 Census nor the 1994 NATSIS collected mortality information, although the 1986 and earlier censuses collected data on the number of children ever born and surviving to a woman for the purposes of estimating infant and child mortality. Despite this lack of mortality data, Gray and Tesfaghiorghis (1993) derived national and State level mortality estimates through the application of demographic analysis methods to 1986 and 1991 Indigenous age structures and the 1981-86 intercensal age-specific death rates. Luther, Gaminiratne and Gray (1995), using better birth and death data and applying a consistent correction procedure, also estimated mortality for the Northern Territory, South Australia and Western Australia. These estimates of life expectancy at birth by Gray and Tesfaghiorghis (1993) and Luther, Gaminiratne and Gray (1995) were consistent except that Gray and Tesfaghiorghis moderately over-estimated life expectancy in the Northern Territory.

On the basis of findings by Gray and Tesfaghiorghis (1993), Indigenous life expectancy at the national level was estimated at 60.6 years for the 1986-91 period (56.9 years for males and 64.4 years for females). Both Gray and Tesfaghiorghis (1993) and Luther, Gaminiratne and Gray (1995) found substantial regional and sex differentials in mortality. Life expectancy by States varied by about seven years for males, from 53 years in the Northern Territory to 60 years in Victoria and Tasmania, and by 11 years for females, from about 60 years in the Northern Territory to 71 years in Victoria and Tasmania. Infant mortality rates calculated from the life tables constructed by Luther, Gaminiratne and Gray (1994: 33-5) for the 1986-91 period were 29 infant deaths per 1,000 live births in Western Australia, 30 in South Australia and 35 in the Northern Territory.

Another significant mortality finding concerns unusually high death rates in early to middle adulthood, particularly for males (Gray and Tesfaghiorghis 1993; Luther, Gaminiratne and Gray 1995). Luther, Gaminiratne and Gray (1995: 159) observed that future improvements in Indigenous survival depend largely on the ability to control deaths during the young and middle adult ages where Indigenous death rates far exceed those of their Australian counterparts.

Data on Indigenous migration come from the census question on 'what was the person's usual address five years before the census?'. A cross-tabulation of usual residence five years prior to the census by place of enumeration distinguishes persons into migrants and non-migrants. These census data have been used to study Indigenous interstate and

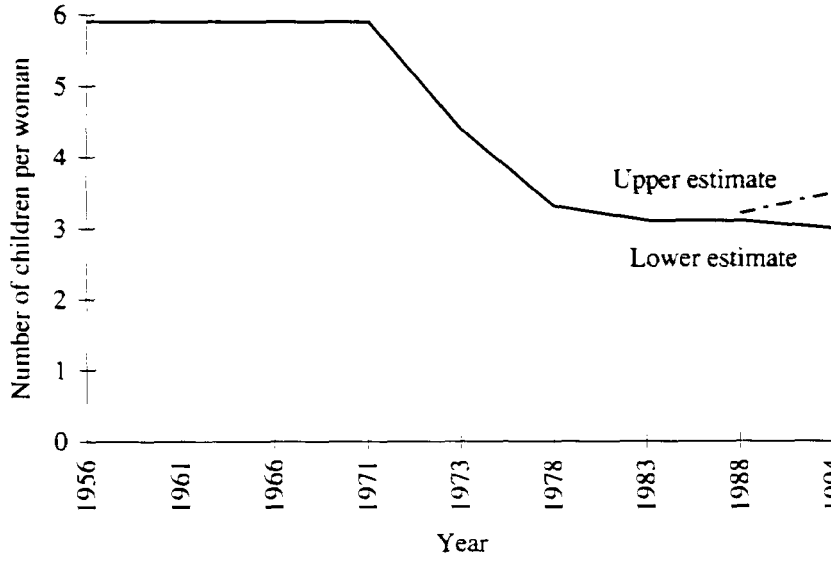
intrastate migration and migration to cities (Gray 1989; Taylor and Bell 1996a, 1996b). The studies found that Indigenous interstate migration was low, as Indigenous migration is highly localised and of very short duration; and that there was negative net migration to Sydney and Melbourne and positive net migration to Brisbane, Adelaide, Perth and the Australian Capital Territory (Gray 1989: 125-132; Taylor and Bell 1996a). However, Taylor and Bell (1996a: 156) have observed that census-based usual residence information fail to capture the significant localised and short-term movements of the Indigenous population. This may be due to several reasons. First, it may be hard to recall usual residence five years before the census for people who move for cultural or other reasons many times during the year or may reside for a period of time in more than one place. Second, census results are not published for small areas such as outstations and small communities because these invariably exist at a scale below that of the Statistical Local Area (SLA) to which migration data are coded. Third, because of the localised, circular and short-term nature of Indigenous mobility, both the usual residence concept and the reference period of five years used to define the migration interval are inappropriate for studying the extent and nature of Indigenous mobility.

The state of knowledge with respect to the level and trend of Indigenous fertility was regarded as reasonably well established on the basis of fertility analyses of the 1986 and earlier censuses. However, this knowledge was brought into question upon analyses of the 1991 Census, the NATSIS, the midwives' data collections and birth registration systems for some States and the Northern Territory (Gray and Tesfaghiorghis 1993; Tesfaghiorghis 1996).

Information on the number of children born collected in the NATSIS has also been utilised to analyse Indigenous fertility (Tesfaghiorghis 1996). The fertility level estimated from the NATSIS suggests a substantial fertility rise compared to previous census-based estimates. The total fertility rate (TFR) estimated from the Survey was 3.5 children per woman.[2] On the basis of the 1981 and 1986 Censuses, Indigenous fertility during the 1981-86 intercensal period was estimated at a TFR of 3.0 children per woman. The detailed fertility analysis based on the 1986 Census and earlier censuses (Gray 1983, 1990; Jain 1989) and as reviewed by Tesfaghiorghis (1996) are depicted in Figure 3.1. This shows that Indigenous fertility reached its peak in the 1960s and began a substantial decline in the 1970s; this decline was expected to continue into the mid-1980s and beyond. Thus, the significant finding from the analysis of the NATSIS was that it points to a rise in Indigenous fertility rather than a decline. The indication from NATSIS of a fertility rise supports the observation of Gray and Tesfaghiorghis (1993), which was questioned by Luther, Gaminiratne and Gray (1995: 157-8), by stating that such a rise could derive from improved enumeration of children aged 0-4 years in the 1991 Census relative to the 1986 Census.

The detailed fertility analyses based on the NATSIS and other data sources suggest that Indigenous fertility since the mid-1980s rose or at least remained constant (Tesfaghiorghis 1996). As the fertility analysis based on midwives' data collections indicated a corrected national TFR estimate of 3.1 children per woman for 1991, and as the estimate from the NATSIS was 3.5 children per woman for 1993-94, it was considered acceptable that the true Indigenous fertility for the first half of the 1990s would be best approximated by an interval estimate ranging from a TFR of 3.0 to 3.5 children per woman. These imply a corresponding national Indigenous birth rate of between 30 and 33 births per 1,000 population. These birth rates are consistent with the estimates of Luther, Gaminiratne and Gray (1995) of 30 per 1,000 for South Australia, 31 for the Northern Territory and 34 for Western Australia for the 1986-91 intercensal period.

Figure 3.1. Trends in estimated Indigenous total fertility rates, 1956-94.



What are the implications of the NATSIS fertility results for Indigenous population projections? First, it appears that earlier projections based upon declining fertility were wrong. The implications are that the estimates of education, employment and infrastructure needs, based on an optimistic assumption that population growth would decline need to be revised upwards. Second, a new set of population projections need to be prepared for 1996 and onwards based on three fertility scenarios: a maximum population based on a continuation of TFR of 3.5 children per woman, a medium population based on a constant fertility of TFR of 3.0 children per woman, and a minimum population based on gradually declining fertility from a TFR level of 3.0 children per woman. Gray and Gaminiratne (1993)

followed the third scenario in their projection of the Indigenous population from 1991 to 2011 by assuming fertility to decline from a TFR of 3.22 in 1991 (based on the Gray and Tesfaghiorghis (1993) finding) to 2.64 in the period 2006-2011.

The ABS (1996a: 8-9) also carried out population projections for 1991-2001 using two assumptions: firstly, holding estimated 1991 maternal and paternal fertility rates constant, and secondly, by assuming a 1 per cent annual decline in Indigenous women's fertility and holding maternal fertility constant. However, the ABS 1991 estimate of Indigenous fertility (a TFR of 2.6), is much lower than that indicated by current research, which includes an estimated TFR of 3.1 by ABS (1996a: 6-7), 3.22 for the 1986-91 intercensal period (Gray and Tesfaghiorghis 1993), and 3.1 to 3.5 for the first half of the 1990s (Tesfaghiorghis 1996).

However, given that the question on number of children ever born to a woman, which is required for estimating fertility, is reinstated in the 1996 Census, it would be expedient to await the census results of fertility analysis before undertaking new population projections. There is also the need to evaluate the data quality of the 1996 Census with respect to the accuracy of Indigenous enumeration. The synthesis of the NATSIS fertility result with a detailed demographic analysis of the 1996 Census is expected to provide a more reliable benchmark projection input on population age-sex distribution and fertility. As both the 1991 and 1996 Censuses did not collect any mortality information, the tasks of estimating the benchmark level and pattern of mortality as well as projecting mortality are going to be difficult.

Prospects for demographic data

Midwives' birth notification collections have the potential to provide data for measuring levels and trends in fertility and perinatal mortality at the national, State and Territory levels. Each State and Territory now has an Indigenous identifier for the child on its birth notification forms. These birth notification forms are completed for each birth by midwives and are processed by the ABS. Those collections that are considered sufficiently complete (South Australia, Western Australia, Northern Territory and the Australian Capital Territory) are also published by the ABS. Perinatal statistics are also supplied for national compilation to the Australian Institute of Health and Welfare's National Perinatal Statistics Unit at the University of Sydney and are published as the *Perinatal Statistics Series* (Lancaster, Huang and Lin 1996). The series currently contains a limited number of tabulations on Indigenous confinements and perinatal deaths (ten such tables out of a total of 78 in the 1993 series).

The perinatal data collection has a maternity race identifier for each birth but not a paternity identifier. The fact that the collections did not distinguish whether the fathers are Indigenous or not may be a limitation for other demographic and social analyses, but with respect to fertility

analysis this does not constitute a constraint, as fertility is conventionally analysed with respect to women. The question of taking paternal fertility into account, in the context of Indigenous demography, arises in undertaking population projections. Available evidence from birth statistics shows that about 20 per cent of all Indigenous births are due to Indigenous fathers with non-Indigenous mothers (ABS 1996a: 7). Evidently, paternal fertility is a significant component of total Indigenous births, and thus corrections have to be made to the conventionally projected Indigenous births based on projected Indigenous women's fertility rates in each projection period to reflect all Indigenous births. In this regard, the ABS (1996a) attempted to project maternal and paternal fertility separately.

The assessment of identification completeness of midwives' data collections by State shows that birth identification was complete, or reasonably complete, in Western Australia, South Australia, Northern Territory, Queensland and the Australian Capital Territory and grossly incomplete in the rest of the States (Luther, Gaminiratne and Gray 1995; Tesfaghiorghis 1996). Tesfaghiorghis (1996) estimated that birth identification in New South Wales was about 70 per cent complete. Because of the substantial incomplete identification of Indigenous births in New South Wales and the large share of the total Indigenous population in this State, this data system at present does not allow reasonable national level estimation of fertility without corrections for incomplete identification in New South Wales. In this regard, an attempt has been made to derive a corrected national Indigenous fertility estimate (Tesfaghiorghis 1996: 7-13).

Reliable fertility and mortality measures from birth and death registration systems will not be available for some time. Although all States and Territories (Queensland starting in 1996) have included an Indigenous identifier in their registration forms, the registration of births and deaths is at present only reasonably complete in South Australia, Western Australia, the Australian Capital Territory and the Northern Territory (see Barnes, chapter 2; Luther, Gaminiratne and Gray 1995).

For the next decade, the five-yearly population censuses will be the major source of Indigenous demographic data until the midwives' collections and vital registration systems mature in completeness and reliability. For this reason, questions on the number of children ever born and surviving should both be reinstated in the 2001 Census in order to facilitate the application of appropriate methods of fertility estimation and to obtain estimates of infant and child mortality at all geographical levels, which are at present lacking. The volume and direction of intercensal internal migration can be directly estimated from the two census questions on usual residence one year and five years prior to the census at the State level as well at ATSIC regional council level, if the council boundaries remain fixed or can be reconstructed for successive censuses. However, as already pointed out, census migration questions are inappropriate to capture the extent of the highly local migrations.

Of the key demographic information, population projections and estimates are the most useful for planning and policy formulation. A survey of data users and uses in Australia found that the most commonly consulted projections are those at the State, national and subnational levels, followed by annual population forecasts (Diamond, Tesfaghiorghis and Joshi 1990). The survey also found that most users have high regard for official projections at the national and State levels, but they are not satisfied with the accuracy and time span of the projections at more local area levels. At the local level, this accuracy is much affected by the quality of migration data and the fact that local data users demand annual population estimates for planning purposes. There is a growing public and private sector demand for small area projections, but this is found lacking as users resort to making their own projections and estimates (Diamond, Tesfaghiorghis and Joshi 1990).

This picture, which depicts the limitations of official population projections and estimates for the general population, is even more true for the Indigenous population. There are several reasons for this. First, existing Indigenous population projections at the national level need to be revised in the light of new evidence regarding fertility from the NATSIS and the 1996 Census. Second, compared to the national level, the State level projections are less reliable given the lack of reliable base level fertility, mortality and internal migration estimates. Third, despite the fact that small area population projections and estimates are in great demand, ABS does not provide population data at the level of Indigenous communities and outstations, although estimated resident population numbers have recently been provided for Community Government Council areas and Incorporated Associations in the Northern Territory (ABS 1996b).

There are significant regional demographic and socioeconomic differences in the Indigenous population (Tesfaghiorghis 1991a, 1991b; Gray and Tesfaghiorghis 1993; Taylor 1993; Luther, Gaminiratne and Gray 1995). These differences are expected to be even larger for local areas. Thus, there is a need to provide disaggregated demographic data at all levels down to outstations. Related to the issue of disaggregated demographic data is the need for data to enable separate demographic analysis of Torres Strait Islanders and Aboriginal people. Because of data limitations, there is no such research to date and the practice has been to lump them together as if they are homogeneous. In addition to demographic interest, there are also political and cultural reasons for a separate study of the Torres Strait Islander people (see Arthur, chapter 15).

In addition to reliable and detailed information on fertility and mortality to undertake regional analysis, a more crucial and unknown demographic parameter in local and small area projections and estimations is internal migration. Although the volume, pattern and direction of internal migration can be reasonably estimated from the census for larger areas, this is difficult to derive for rural Indigenous communities and outstations and even at the level of the ATSIC regional council. This is because the long

census migration interval and the larger areas used for demarcating enumeration areas and for publishing the census results fail to capture the considerable short-term and short distance nature of Indigenous migration (Taylor and Bell 1996a). The case for collecting data on Indigenous internal migration and the nature of the data required has been outlined by Taylor and Bell (1996b).

Conclusion

Indigenous demographic data are currently inadequate in terms of reliability, detail and geographic disaggregation. This detracts from a full understanding of Indigenous demography as well as from planning and policy development. This is most starkly illustrated by the absence of any demographic information regarding the Torres Strait Islander population. Future Indigenous demographic data needs should envisage providing separate and comprehensive demographic data to enable a comparative study of the demography of the Torres Strait Islander people and the Aboriginal population.

The basic argument here is for improved collections. The obvious and practical way of integrating demographic factors into planning, formulating and implementing policies by public and private sectors is through the use of population projections. Accordingly, the need for reliable demographic data to prepare benchmark inputs on population size and age-sex structure, fertility, mortality, migration and other required parameters as well as for charting the future courses of the parameters cannot be overemphasised.

What are the prospects of improving the situation? Given the experience of reasonably complete birth identification in Western Australia, South Australia, the Northern Territory and Queensland, the recommendation by Luther, Gaminiratne and Gray (1995) for universal adoption of midwives' collections is to be supported. States with grossly incomplete birth identification, such as New South Wales, should be urged to raise compliance levels, while those States with complete identification should be supported. With respect to birth and death registrations by States, a call has to be made for much greater effort to achieve complete and reliable registration.

As the census will continue to be the major source of limited Indigenous demographic data for some time to come, it should provide more geographically disaggregated tabulations as long as this does not breach confidentiality. As indicated, the 1996 Census will enable estimation of fertility, but not infant and child mortality, as it failed to reinstate the number of surviving children question. The questions on the number of children ever born and surviving to a woman should both be reinstated in the 2001 and future censuses to allow estimation of fertility, infant and child mortality at national, State and ATSIC regional council

levels. This case has already been made by Gray and Tesfaghiorghis (1993: 98-9).

As there are still gaps in knowledge regarding Indigenous fertility, mortality and internal migration, the possibility that a future NATSIS could fill these should be explored. However, if a survey is to be recommended, it should be of sufficient sample size to allow detailed fertility, mortality and migration analysis at a disaggregated level. The justification for disaggregated study is the significant regional demographic variation found among the Indigenous population. Before the NATSIS, Gray and Tesfaghiorghis (1993: 97) advanced the case that a survey would be an approporiate way to redress the lack of information from the 1991 Census, but a warning was also provided that the Survey might take a form that would probably not lead to a better understanding of Indigenous population dynamics.

The prospects for meeting Indigenous demographic data needs through vital registration and midwives' collection systems seem positive. But this will take some time. In the interim, a comprehensive demographic analysis of the 1996 Census is recommended to measure Indigenous demographic change. This calls for disaggregated demographic analysis and publication of 1996 Census data to bridge the gaps in knowledge regarding Torres Strait Islanders, Aboriginal people and small area demography.

Notes

1. ABS has also prepared population projections at the ATSIC regional council level and supplied them to the regions (pers. comm. John Paice, Director, Demography Section, ABS, Canberra).

2. TFR is defined as the average number of children born to a woman throughout her reproductive life.

References

Altman. J.C. (Editor) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) 1995. *1994 National Aboriginal and Torres Strait Islander Survey: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *Experimental Projections of the Aboriginal and Torres Strait Islander Population: June 1991 to June 2001*, cat. no. 3231.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *Experimental Estimated Resident Population: Community Government Councils and Incorporated Associations Northern Territory*, cat. no. 3233.7, ABS, Darwin.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 2 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Diamond, I., Tesfaghiorghis, H. and Joshi, H. 1990. 'The uses and users of population projections in Australia', *Journal of the Australian Population Association*, 7 (2): 151-70.

Gray, A. 1983. Australian Aboriginal Fertility in Decline, unpublished PhD thesis, Department of Demography, Research School of Social Sciences, The Australian National University, Canberra.

Gray A. 1989. 'Indigenous migration to the cities', *Journal of the Australian Population Association*, 6 (2): 122-44.

Gray, A. 1990. 'Aboriginal fertility: trends and prospects', *Journal of the Australian Population Association* , 7 (1): 57-77.

Gray, A. and Gaminiratne, K.H.W. 1993. 'Indicative projections of the Aboriginal and Torres Strait Islander population to 2011', *CAEPR Discussion Paper No. 52*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Gray A. and Tesfaghiorghis H. 1993. 'Indigenous population prospects', *Journal of the Australian Population Association*, 10 (2): 81-99.

Jain, S.K. 1989. 'Estimates of Aboriginal fertility, 1976-86: an application of the Own-Children Method of fertility estimation', *Occasional Paper*, cat. no. 4127.0, Australian Bureau of Statistics, Canberra.

Lancaster, P., Huang, J. and Lin, M. 1996. 'Australia's mothers and babies 1993', *Perinatal Statistics Series No. 3*, National Perinatal Statistics Unit, Australian Institute of Health and Welfare, Sydney.

Luther, N.Y., Gaminiratne, K.H.W. and Gray, A. 1994. 'Demographic estimates for the Indigenous populations of three regions of Australia: Northern Territory, South Australia and Western Australia, 1986-91', *Working Papers in Demography No. 50*, The Australian National University, Canberra.

Luther, N.Y., Gaminiratne, K.H.W. and Gray, A. 1995. 'Consistent correction of data for the Indigenous population', *Journal of the Australian Population Association*, 12 (2): 147-64.

Menham, J.G. 1992. 'ATSIC's requirements for social statistics in the 1990s', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Sims, G. 1992. 'A national survey of the Aboriginal and Torres Strait Islander population: the proposal', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. 1993. *Regional Change in the Economic Status of Indigenous Australians, 1986-91*, Research Monograph No. 6, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. and Bell, M. 1996a. 'Mobility among Indigenous Australians,' in P.L. Newton and M. Bell (eds) *Population Shift: Mobility and Change in Australia*, Australian Government Publishing Service, Canberra.

Taylor, J. and Bell, M. 1996b. 'Population mobility and Indigenous peoples: the view from Australia', *International Journal of Population Geography*, 2 (2): 153-96.

Tesfaghiorghis, H. 1991a. 'Geographic variations in the economic status of Indigenous people: a preliminary investigation', *CAEPR Discussion Paper No. 2*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Tesfaghiorghis, H. 1991b. 'Indigenous economic status by ATSIC regions: analyses of the 1986 census data', *CAEPR Discussion Paper No. 11*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Tesfaghiorghis, H. 1996. 'Further policy implications of rising Indigenous fertility in the 1990s', *CAEPR Discussion Paper No. 103*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

4. Surveying mobile populations: lost opportunity and future needs

J. Taylor

Despite an extensive literature, major deficiencies remain in the understanding of Indigenous population mobility (Taylor and Bell 1996a: 160-62). While this partly reflects the recency of broad-based social science interest in Indigenous affairs, and a hitherto unsystematic approach to empirical research, one of the key constraints on further analysis continues to be the lack of longitudinal data sets designed to capture the short-term nature of much Indigenous population movement which is so clearly evident in the ethnographic record (Sansom 1982; Altman 1987; Birdsall 1988; Taylor 1988; Young and Doohan 1989). Also problematic is the failure of standard measures of mobility to accommodate a population that tends to conceive of residential space in regional terms, rather than in terms of a single place. This casts some doubt on the efficacy of 'usual place of residence' criteria used by the Australian Bureau of Statistics (ABS) as a benchmark for gauging mobility.

These issues are not new, having been raised when canvassing options for the National Aboriginal and Torres Strait Islander Survey (NATSIS) (Smith 1992; Taylor 1992) and in the course of other analyses (Martin and Taylor 1996; Taylor and Bell 1996b). In its post-NATSIS estimation of non-sampling error, the ABS has also acknowledged the difficulties encountered in applying the concept of usual residence to a mobile population (ABS n.d.).

The purpose of this paper is to review pre-NATSIS deliberations on the inclusion and subsequent exclusion of specific mobility questions in the Survey, to examine empirical evidence of short-term mobility and to consider what lessons can be learnt from other survey attempts to acquire longitudinal mobility data, in particular from the 1992 ABS Survey of Families and the 1991 Canadian post-censal Aboriginal Peoples Survey (APS). Also reviewed are summary findings from the single NATSIS question on mobility which relate to health. In conclusion, the need for data on short-term Indigenous population movement is reiterated from a policy perspective and suggestions are advanced as to what measures may be usefully contemplated.

Mobility and the NATSIS

Consultation regarding the content of the NATSIS commenced in August 1992 with Aboriginal and Torres Strait Islander organisations around the country as well as with State and Commonwealth government departments.

In addition, a Survey Advisory Committee and five small Technical Reference Groups were established to provide expert advice on Survey content and methodology. One early step in the process of deciding the form of the Survey questionnaire was to identify nine topic headings under which information would be sought. One of these headings was 'Culture' and under this topic 'location and mobility' were proposed by a number of agencies as important issues for inclusion in the Survey. In particular, it was felt necessary to acquire data on the movement patterns of household members over a 12-month period before the Survey including the number of moves, duration of each move and reasons for each move. This was deemed by agencies such as the Aboriginal and Torres Strait Islander Commission (ATSIC), the Department of Employment, Education and Training (DEET) and the then Department of Health Housing and Community Services to be of assistance in planning the location of appropriate services such as community infrastructure and social programs.

A somewhat related set of issues was raised in regard to the topic 'Family', with a distinction between usual residents of a household and visitors to a household deemed to be important. Elsewhere, the significance of visitors to Indigenous households in adding to the overcrowding of dwellings has been demonstrated (Jones 1994) while Smith (1992), Daly and Smith (1995) and Smith and Daly (1996) have commented on the fluidity of household boundaries and the interdependence between families living in different households manifest in high rates of 'visitation'. Both of these considerations no doubt lent support to the proposal for a set of questions identifying all movements over a 12-month period.

Notwithstanding the perceived importance of acquiring information on mobility, the NATSIS only responded to the call for information on visitors to households, as specific questions on population movement were for the most part excluded from the final Survey instrument. The original intention was to establish all moves over a 12-month period, linking these to reasons for movement such as to look for work, for schooling, training, health, cultural and social reasons. Due to recall problems, less than adequate responses to mobility questions were obtained in the pilot survey and it was determined that an improvement in data quality would require overly-indulgent, in-depth probing on an already crowded interview schedule. This led to the mobility questions being omitted, with the exception of a question on the number of moves away from the local area for the treatment of health problems.

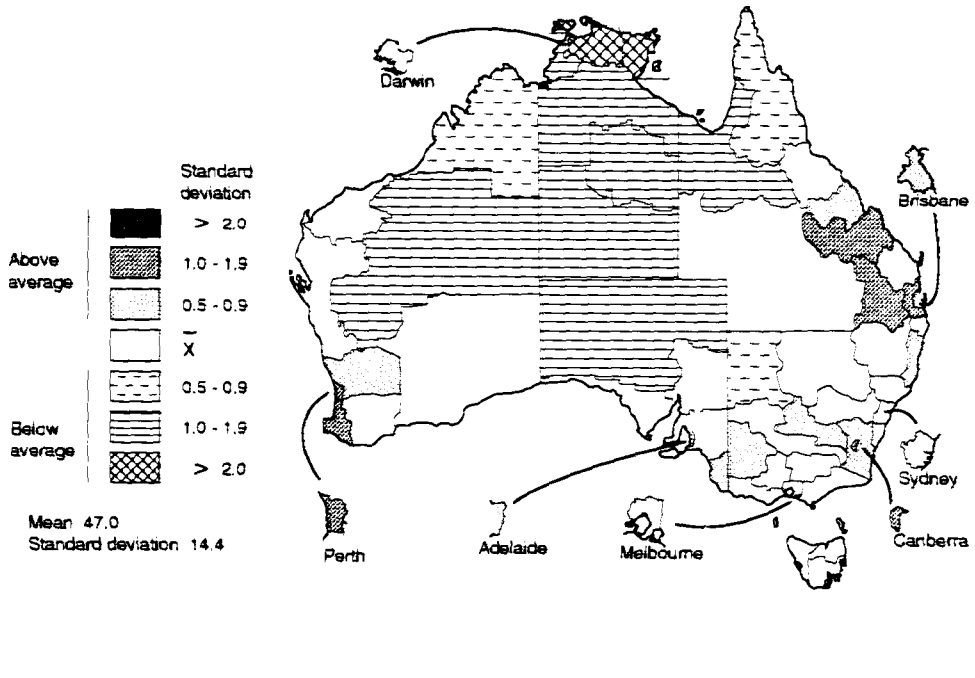
While some prioritisation and culling of Survey content was clearly necessary, the exclusion of questions on population movement means that the census remains the primary source of statistical information on Indigenous mobility. Despite the fact that a somewhat clearer indication of short-term movement will be available following the 1996 Census, due to the re-introduction of a question on 'usual place of residence one year ago', this still can not serve as a substitute for the type of longitudinal data originally sought by the Survey. Unfortunately, the NATSIS also failed to

successfully establish the level and pattern of household visitation. The basis for these observations can be demonstrated empirically.

Empirical findings: census vs NATSIS

One of the reasons why a survey would have been well suited to advance the study of Indigenous population mobility was the fact that census data provide an indication of fixed-period migration only and reveal nothing about successive movements within a given time frame. This can lead to some striking anomalies between census-derived rates of movement and the ethnographic record. In the most comprehensive analysis of census data to date, for example, Taylor and Bell (1996b) employed 54 regions closely aligned with census Statistical Divisions to derive regional rates of mobility for the Indigenous population for the intercensal period 1986-91. The spatial distribution of these rates is shown in Figure 4.1. Overall, 46.7 per cent of the population changed residence over this five-year period but the rates of mobility recorded in remote parts of Northern Australia, including the far north of South Australia and far west of New South Wales, were substantially lower than this.

Figure 4.1. Regional rates of Indigenous population movement, 1986-91.



Source: Taylor and Bell (1996b: 398).

This observation of low migration rates in remote and northern regions is quite misleading, as numerous case studies suggest a high incidence of circular mobility in such areas and stress its importance in the daily, periodic and seasonal round of activities associated with Indigenous social and economic life (Altman 1987: 22-7, 103-27; Hamilton 1987; Taylor 1988; Young and Doohan 1989; Martin and Taylor 1996). The gap between such observations and census-derived rates of movement is a measure of the inability of census questions on fixed-period migration to record short-term and circular mobility.

Some indication of at least the magnitude and spatial pattern of short-term mobility can be derived from census data by cross-tabulating place of enumeration data with place of usual residence data. Such an exercise has recently been attempted in a preliminary way by Taylor (1996) using 1991 data. This confirms observations based on field surveys of a pattern of temporary movement to urban communities (Taylor 1988, 1996). For example, in a 54-region matrix, 80 per cent of non-capital city and non-major urban regions were net losers of short-term movers when absent usual residents were balanced against non-usual residents present. In contrast, all capital cities and major urban regions were net recipients of non-usual residents and the same was true of regional centres such as Alice Springs and Cairns. As for the pattern of short-term movement, this was distinctly localised, with urban centres drawing upon clearly defined adjacent catchment areas. For example, 12 per cent of the Indigenous population enumerated in Darwin were not usual residents of Darwin and of these, 85 per cent were from other parts of the Northern Territory with the bulk (87 per cent) from the Top End, mostly Arnhem Land (Taylor 1996).

One expectation of the NATSIS was that it would provide more direct measures of the level of such visitation, in particular to Indigenous households. Unfortunately, it appears that the Survey failed to adequately identify visitors to households. Only one-half of 1 per cent of people in the Survey were visitors to households while one-tenth of 1 per cent were classified as boarders or lodgers in private dwellings. By comparison, the 1991 Census recorded 5 per cent of the population as visitors to households (ABS n.d.: 22).

Part of the reason for the obvious failure of the Survey to separately identify visitors was probably the shorter time frame used to define usual residents (three months in the household as opposed to six months used in the census), although it also appears that the concepts of 'visitor' and 'usual resident' remain poorly defined for Indigenous households in official surveys, as the ABS acknowledges (ABS n.d.: 22).

The ABS Survey of Families

In a recent paper, Bell (1996) has employed data from the 1992 ABS Survey of Families to develop new measures of chronic mobility for the

Australian population. These he derived from migration history data collected by the Survey, including the year that each person, aged 15 years and over, started living at their 'current address' and the number of times they had moved house over the five-year period prior to the Survey.

From the information on number of moves, it was possible to establish three summary statistics describing relationships between the total population, the total number of movers and the total number of moves. The first of these, which he dubbed the 'single movement rate', simply measures the proportion of the population which moved over the five-year period. However, this differs from the standard census-based measure of five-year movement, by including people making return moves and those temporarily away from home. The second, the total movement rate, represents the average number of moves per person. The third statistic, the repeat mover rate, represents the average number of moves per mover. As for data on duration of residence, these were cross-classified with selected population characteristics including age, marital status, family type, nature of occupancy, labour force status and qualifications.

In Bell's own words, segmenting the population into movers and stayers, as the census does, obscures considerable diversity and frequency of movement. For example, census-type measures of fixed-period mobility were found to understate the total number of moves measured in the Survey of Families by 52 per cent (Bell 1996: 14-15). From the Survey data, just one-quarter of the population moved more than once, yet this group accounted for more than three-quarters of all moves between 1987 and 1992. Also evident was the fact that this chronic mobility is concentrated among particular groups within the population, for example among those in the 20-29 year age group.

As with many other ABS Special Supplementary Surveys, the Survey of Families did not include an Indigenous identifier. In any event, the number of such families included, even in an extended sample, would probably have been too small to generate meaningful results, as the ABS has recently discovered with the Labour Force Survey (ABS 1996). As a consequence, despite clear indications that a substantial amount of mobility among Indigenous Australians is missed by the census, we still have no measure of the extent to which this is so, nor is it possible to establish who the chronically mobile sections of the Indigenous population are. The prospect that comparable data could have been collected by the NATSIS is assessed using information from the 1991 Canadian APS.

The Canadian APS

The 1991 APS was conducted by Statistics Canada following the 1991 Canadian Census to provide statistical information on the social and economic characteristics of Aboriginal peoples.[1] Unlike the NATSIS, the APS devoted a whole section of the survey form to questions on mobility

(Statistics Canada 1993a). These were designed with several aims in mind. First, to establish the length of residence in the place of enumeration. Second, to determine the number and duration of individual moves between residences over the 12 months prior to the Survey (individual moves were defined as a change of residence that lasted at least one month). Third, to establish the duration and spatial pattern of moves over the 12-month period in sequence. Finally, to elicit reasons for each move. In addition to these primary moves, an additional question was asked to capture those who spend periods of time away from home living on the land, for example, at seasonal camps.

By identifying the duration of residence at the place of enumeration, as well as the number of moves over a specified time period, the distinguishing features of this approach are similar to those in the ABS Survey of Families. The sequential questioning for moves over the 12 months prior to the survey, however, was more distinctive and is similar to the life history matrix approach to collecting mobility data used successfully in the developing world (Goldstein and Goldstein 1981: 28-34). Potentially this enables integration of the spatial and temporal sequence of short-term movements and goes considerably beyond standard census output. Whether this data has been fully exploited as yet remains unclear and so far standard output from the APS includes only general information on mobility status (Statistics Canada 1993b). Nonetheless, this provides for new aggregate measures of Canadian Aboriginal mobility along the lines of Bell's summary statistics of chronic mobility for the Australian population (Bell 1996).

Table 4.1. Mobility status of the adult population aged 15 years and over reporting Canadian Aboriginal identity by number of moves in the past 12 months, 1991.

Number of moves	Total population	Total moves	Per cent of: population	movers	moves
0	244,795	0	80.9	0.0	0.0
1	46,768	46,768	15.5	81.1	66.2
2	8,706	17,412	2.9	15.1	24.6
3+	2,171	6,513	0.7	3.8	9.2
Total	302,440	70,693	100.0	100.0	100.0
Movers	57,645				

Source: Statistics Canada (1993b: 228-31).

Table 4.1 shows the mobility status of Canadian Aboriginal adults as revealed by the APS questions on number of moves in the 12 months prior to the Survey. Out of 302,440 adults, 57,645 (19 per cent) indicated that

they moved at least once over the 12-month period. Because of repeat migration, those moving made at least 70,693 moves (as the questionnaire only allowed up to three moves). This converts to an average of 0.23 moves per person or 1.23 moves per mover. Following Bell (1996), it is also possible to estimate the number of moves overlooked if a census-type fixed-period measure of movement over the 12-month period were employed. This is done by allowing only one move per person over the 12-month period instead of a series of moves and it understates the total number of observed moves by as much as 19 per cent.

In recognition of the fact that many Indigenous Canadians retain links with traditional lands and that this involves short-term relocation, the APS attempted to establish the extent of such absences by enquiring about periods of time spent by adults living on the land away from home over the previous 12 months to hunt, fish, trap or teach traditional ways to their children. These results are shown in Table 4.2 and reveal substantial levels of such absenteeism from the usual place of residence. At the same time, considerable variation is apparent between different subgroups in the population.

For example, of the estimated 20,805 Inuit, 51 per cent spent some time away from the usual place of residence living on the land, with this figure rising to as much as 62 per cent among those living in the Northwest Territories (Statistics Canada 1993b). This was a substantially higher overall proportion than among the Indian population (19.6 per cent) which, in turn, was higher than among the Metis (13.4 per cent). It should be noted, however, that the proportion of the Indian population spending time away from the usual place of residence displayed marked geographic variation with much higher rates of movement, involving around one-third of the adult population, in Quebec province, the Northwest Territories and the Yukon (Statistics Canada 1993b). It is interesting to note that these patterns dispel observations derived from census-based analysis of Aboriginal migration in Canada to the effect that those who live in mainly native regions are the least mobile of the population (Norris 1990: 58). This same paradox of low recorded movement in high mobility areas currently pervades Australian analysis which is heavily dependent on census data. In this context, it is interesting to note that the APS regional results resemble the commonly observed, but yet to be measured, mobility associated with outstations.

Using the data in Table 4.2 as a guide, cumulative periods of absence from the usual place of residence can be quite lengthy. For example, around one-third of respondents reported that they cumulatively spent five to 20 weeks or more of the year away from the home base. On the whole, however, the majority of absences were collectively for periods of one month or less. For further analysis, those spending longer periods of time away could be separately identified by sex and broad age category or some other characteristic with a view to assessing possible servicing implications. On the face of it, however, most of this short-term mobility in

Canada would appear to be sufficiently sporadic as to have relatively few service implications, except perhaps among the Inuit and regionally among the Indian population. Whether the same would be the case in Australia remains, of course, a moot point.

Table 4.2. Adult population aged 15 years and over reporting Canadian Aboriginal identity by number of weeks spent on the land away from home in past 12 months, 1991.

Time spent away	Inuit	Indian	Metis
1-2 weeks	31.4	32.4	41.1
3-4 weeks	27.8	21.9	19.2
5-20 weeks	31.5	25.9	28.1
More than 20 weeks	4.1	5.4	2.6
Not specified	5.2	14.3	9.0
Total per cent	100.0	100.0	100.0
Total movers	10,680	56,395	11,270
Total respondents	20,805	288,370	84,160
Per cent of respondents Temporarily absent	51.3	19.6	13.4

Source: Statistics Canada (1993b: 228-31).

Health-related mobility from the NATSIS

One of the pilot-tested mobility questions that was retained in the final NATSIS questionnaire concerned movement away from the local area for health-related reasons. Typically, among the Indigenous population, this refers to medical evacuations to regional centres from rural areas for neo-natal and post-natal care as well as for medical treatment requiring hospitalisation. Respondents were asked to indicate how many times they had gone away and how long they were away for on each of their last three trips.

Overall, the NATSIS recorded 18,647 individuals (6.2 per cent of the population) who moved for health-related reasons over the 12 months prior to the Survey. Not all of these were rural residents as might be expected. As much as 15.8 per cent were resident in capital cities and 42.7 per cent in other urban areas. Only 41.5 per cent (7,735) were rural residents. The fact that more than half of those moving were from urban centres, where hospital care could be expected to be found, may reflect a degree of movement up the health care system to higher order facilities.

Information on the number of trips away was coded up to ten or more. Using this it is possible to follow Bell's (1996) lead and distinguish

the single movement rate (of 6.2 per cent) for health-related mobility from the more accurate total movement and repeat movement rates. While 18,647 individuals moved, many of these were engaged in multiple moves totalling 32,522. The total rate of movement was therefore almost double the single rate at 10.7 per cent while each mover made on average 1.7 moves. This suggests that much of the mobility observed for health-related reasons, for example in statistics on medical evacuations, is due to a subgroup in the population of multiple movers. Furthermore, statistics on the number of health-related movers alone undercount the amount of movement by as much as 41 per cent.

Table 4.3. Age- and sex-specific mover rates for health-related reasons, 1994.

	Age group				
	0-14 years	15-39 years	40-64 years	65+ years	Total
Movers as a per cent of total population					
Males	4.9	5.2	11.9	14.8	6.2
Females	4.0	6.5	10.7	7.2	6.2
Repeat moves as a per cent of movers					
Males	32.2	31.1	36.5	36.4	33.1
Females	28.9	32.3	43.7	13.9	33.8

Source: 1994 NATSIS unit record file.

The variation in short-term movement by age and sex is in line with expectations, given known differentials in Indigenous morbidity (Table 4.3). While the overall rate of movement is the same for males and females, males move at higher rates than females in all ages except those of approximate child-bearing age for females. Also apparent is the fact that male rates of movement increase steadily with each age group while female rates peak in middle age. Among those making repeat moves, again there is no overall difference between the sexes, but young and old age males are more likely than their female counterparts to spend multiple periods of time away from home, while females in the 40-64 year age group display a relatively high rate of repeat movement.

Of further interest here is the duration of time spent away from home as this may have implications by generating associated movement of family and friends. For the most part, this effect would appear to be minimal as three-quarters of all absences (74 per cent) were for less than two weeks. However, 20 per cent of all moves lasted for up to one month and a further 6 per cent were for periods longer than one month.

Implications for future surveys

It should be noted from the outset that a lack of longitudinal data to analyse short-term population movement is a common deficiency in the study of Australian mobility and is certainly not unique to the Indigenous population (Bell 1996; Taylor and Bell 1996a). That being said, some redress has been made for the general population by Bell (1996) using data from the 1992 Survey of Families. For the Indigenous population, it is clearly recognised in the policy community that chronic short-term movement is a common feature of daily life and that this has potential policy implications in areas such as housing, infrastructure, health, education, employment and training. To date, however, this much can only be inferred from the evidence of sporadic case study and anecdotal material. While the *fact* of frequent mobility among Indigenous people is acknowledged, the *facts* remain largely unknown. The question addressed here is to what extent, and in what way, might the NATSIS have contributed these facts? More pointedly, what facts might realistically be expected from such an exercise?

Inevitably, data needs in this context are greater than any national sample survey could hope to fulfil. This is most apparent at the regional or community level where it would be useful to establish the implications of frequent mobility for service provision at different locations, but sample size precludes meaningful spatial disaggregation. Such issues lie at the delivery end of the policy spectrum and really require a community-based approach to analysis as, for example, in the case of certain housing needs studies (Loveday and Lea 1985; Loveday 1987; Pholeros, Rainow and Torzillo 1993; Cooke and Langton 1995).

It is at the aggregate level that survey approaches have most potential benefit, particularly in terms of characterising some of the distinctiveness of Indigenous social and economic life for deliberation of policy issues at the global level. For example, the census indicates that Indigenous Australians are only as mobile as the rest of the population, yet the suspicion is they are much more so over the short term. A basic question, then, is how often do Indigenous Australians move and to what degree do census measures understate mobility? Related to this is the question of who moves. Is the image of frequent movement due to a subgroup of chronic movers, such as young males and the unemployed, as found for the population generally (Bell 1996), or is a cross-section of the whole Indigenous population involved? In short, what are the characteristics of frequent movers and transients compared to those of long-term residents or non-movers? What sorts of households are these categories of movers associated with and what is their impact on household size and composition? Answers to these questions may provide assistance in the construction of policy for appropriate targeting of services.

Finally, there is the vexed question of reasons for movement. While this will remain problematic due to overlapping motives, one of the

benefits of a NATSIS compared to the census lies in providing more detailed and customised information which may include an elicitation of reasons for movement, as in the NATSIS questions on health-related mobility. Together with the provision of public-use unit record data, this opens the possibility of evaluating possible causes of mobility by establishing associations between different types of movers and other survey variables.

Unfortunately, lack of access to unit record data from the APS precluded any use of this source to explore these issues. At the very least, however, the APS indicates that a set of questions can be devised and administered to create new measures of Indigenous mobility. As for the NATSIS questions on health-related mobility, these revealed that, while males and females move for health care at the same rate, the mobility of females is more likely to be because of childbirth and is less of an indicator of morbidity. In terms of the duration of absences due to such mobility, the impact appears to be relatively small, with limited potential to generate associated movement of family and friends, as most moves are of short duration. At the same time, if, over the span of a year, 6 per cent of the population is involved in absences from home for health-related reasons alone and many are also engaged in repeat movements, then the assumed cumulative effect of mobility for additional reasons (such as employment, education, training, cultural and social obligations) does start to emerge as a substantial demographic impact with, as yet, unknown characteristics and policy implications.

Note

1. While response rates to this survey were considered by Statistics Canada to be acceptable, coverage errors involving a difference between the target population and the population sampled were substantial. For further details see Statistics Canada (1993a: 14-16).

References

Altman, J.C. 1987. *Hunter-Gatherers Today: An Aboriginal Economy in North Australia*, Australian Institute of Aboriginal Studies, Canberra.

Australian Bureau of Statistics (ABS) (n.d.). 'ABS Internal working paper on some aspects of non-sampling error issues for 1994 National Aboriginal and Torres Strait Islander Survey', ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996. *Labour Force Characteristics of Indigenous Australians: Statistics, Methodology and Comparisons*, cat. no. 6287.0, ABS, Canberra.

Bell, M. 1996. 'How often do Australians move?', unpublished manuscript, Department of Geography, University of Adelaide, Adelaide.

Birdsall, C. 1988. 'All one family', in I. Keen (ed.) *Being Black: Aboriginal Cultures in Settled Australia*, Aboriginal Studies Press, Canberra.

Cooke, P. and Langton, M. 1995. *Housing Survey Report*, Angurugu 5 Year Housing Plan News Sheet No. 2, Angurugu Council, Groote Eylandt.

Daly, A.E. and Smith, D.E. 1995. 'The economic status of Indigenous Australian families', *CAEPR Discussion Paper No. 93*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Goldstein, S. and Goldstein, A. 1981. *Surveys of Migration in Developing Countries: A Methodological Review*, Papers of the East-West Population Institute No. 71, University of Hawaii, Honolulu.

Hamilton, A. 1987. 'Coming and going: Aboriginal mobility in north-west South Australia 1970-71', *Records of the South Australian Museum*, 20: 47-57.

Jones, R. 1994. *The Housing Need of Indigenous Australians, 1991*, Research Monograph No. 8, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Loveday, P. 1987. *Aboriginal Employment and Housing in Katherine, 1986*, North Australia Research Unit, The Australian National University, Darwin.

Loveday, P. and Lea, J.P. 1985. *Aboriginal Housing Needs in Katherine*, North Australia Research Unit, The Australian National University, Darwin.

Martin, D.F. and Taylor, J. 1996. 'Ethnographic perspectives on the enumeration of Aboriginal people in remote Australia', *Journal of the Australian Population Association*, 13 (1): 17-31.

Norris, M.J. 1990. 'The demography of Aboriginal people in Canada', in S. Shiva, F. Trovato and L. Driedger (eds) *Ethnic Demography: Canadian Immigrant Racial and Cultural Variations*, Carelton University Press, Ottawa.

Pholeros, P., Rainow, S. and Torzillo, P. 1993. *Housing for Health: Towards a Healthy Living Environment for Aboriginal Australia*, Health Habitat, Newport Beach.

Sansom, B. 1982. 'The Aboriginal commonality', in R.M. Berndt (ed.) *Aboriginal Sites, Rights and Resource Development*, University of Western Australia Press, Nedlands.

Smith, D.E. 1992. 'The cultural appropriateness of existing survey questions and concepts', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. and Daly, A.E. 1996. 'The economic status of Indigenous Australian households: a statistical and ethnographic analysis', *CAEPR Discussion Paper No. 109*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Statistics Canada 1993a. *User's Guide to 1991 Aboriginal Data*, Statistics Canada, Ottawa.

Statistics Canada 1993b. *Schooling, Work and Related Activities, Income, Expenses and Mobility*, cat. no. 89-534, Statistics Canada, Ottawa.

Taylor, J. 1988. 'Aboriginal population mobility and urban development in the Katherine region', in D. Wade-Marshall and P. Loveday (eds) *Northern Australia: Progress and Prospects Vol. 1. Contemporary Issues in Development*, North Australia Research Unit, The Australian National University, Darwin.

Taylor, J. 1990. 'The estimation of small town Aboriginal population change', *Journal of the Australian Population Association*, 7 (1): 40-56.

Taylor, J. 1992. 'Population mobility: policy relevance, survey methods and recommendations for data collection', in J.C. Altman (ed.) *Aboriginal Employment Equity by the Year 2000*, Research Monograph No. 2, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. 1996. 'Service delivery and short-term Aboriginal mobility', *CAEPR Discussion Paper No. 118*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. and Bell, M. 1996a. 'Indigenous peoples and population mobility: the view from Australia', *International Journal of Population Geography*, 2 (2): 153-69.

Taylor, J. and Bell, M. 1996b. 'Mobility among Indigenous Australians,' in P.L. Newton and M. Bell (eds) *Population Shift: Mobility and Change in Australia*, Australian Government Publishing Service, Canberra.

Young, E.A. and Doohan, K. 1989. *Mobility for Survival: A Process Analysis of Aboriginal Population Movement in Central Australia*, North Australia Research Unit, The Australian National University, Darwin.

5. Indigenous Australians in the labour market: the NATSIS and beyond

B. Hunter

The historical lack of comprehensive data on the labour market participation of Indigenous Australians, other than the five-yearly census, has been a significant hindrance to research and policy formulation. It was this paucity of policy-relevant information which led to a recommendation of the Royal Commission into Aboriginal Deaths in Custody which resulted in the National Aboriginal and Torres Strait Islander Survey (NATSIS). The Australian Bureau of Statistics (ABS) has conducted an excellent Survey which covers the majority of determinants of Indigenous labour force status. As a result, the Survey provides an invaluable source of information for informing policy decisions. However, several gaps in the existing data sources remain.

The aim of this paper is to assess the success of the NATSIS in measuring Indigenous labour force status and the extent to which its data can be used to inform policy decisions. Some of the topics covered include the cultural appropriateness of the NATSIS data on labour market issues, potential alternative data sources and the remaining statistical needs for information regarding analysis of the position of Indigenous people in the labour market.

Key labour market findings from the NATSIS

While there was a marked improvement in Indigenous employment between the past two censuses, recent studies based on the NATSIS point to a reversal of this trend with negligible growth in Indigenous employment in the mainstream labour market between 1991 and 1994 (Taylor and Liu 1995; ABS/Centre for Aboriginal Economic Policy Research (CAEPR) 1996). Unfortunately, it is more difficult to analyse the trends in other labour force status because of the lack of comparability of the NATSIS and census definitions of unemployment.

The collaborative ABS/CAEPR publication *National Aboriginal and Torres Strait Islander Survey 1994: Employment Outcomes for Indigenous Australians* (ABS/CAEPR 1996) provides a detailed summary of the Indigenous labour market outcomes from the NATSIS. These were as follows

- While the number of Indigenous people in work continued to rise, this expansion barely kept up with growth in the working-age population. The employment/population ratio actually fell for females.

- The survey confirmed the Royal Commission's finding regarding the high levels of unemployment, with over half of the 40,000 unemployed being without work for more than 12 months.
- Indigenous workers have shared the general trend away from full-time employment to part-time employment. Full-time employment was found predominantly in capital cities.
- The NATSIS confirmed the low levels of self-employment noted in Daly (1995). Only 5 per cent of Indigenous workers were self-employed; most of these were males and were located in capital cities.
- Indigenous people operate within distinctly regionalised labour markets with the Community Development Employment Projects (CDEP) scheme providing a buffer to employment in remote areas with restricted access to mainstream labour markets (also see Altman and Hunter 1996).
- Education, demography, geography and several social factors are confirmed as important predictors of Indigenous employment. For the first time, the NATSIS data has demonstrated that having been arrested in the previous five years and having a long-term health condition have a significant negative association with employment for Indigenous people.
- Regression analysis of the CDEP scheme and other employment indicates that there are significant differences in the processes which determine each type of employment.
- More than one-quarter of the Indigenous adult population was engaged in unpaid voluntary work. For the most part this was some form of community-based work, although a significant proportion were engaged in hunting, fishing and gathering bush food.
- The lack of physical access to jobs, absence of work and inadequate skills were cited by the unemployed as the main difficulties in finding work.
- Studying or returning to further studies was the main reason given by youth for not actively seeking work. Young and prime working-age females also cited a lack of available child care and other family responsibilities. For older people, the most prevalent reason was ill health.

It appears that the primary source of growth of Indigenous employment between 1991 and 1994 has been the CDEP scheme. Indeed, if it had not been for expansion in the CDEP scheme the gap between employment and population growth would have been much wider. Most CDEP employment

is part-time, which has meant that Indigenous workers as a whole have become increasingly reliant on part-time employment.

The rise of the CDEP scheme clearly complicates the analysis of Indigenous employment. Given that the processes underpinning the CDEP scheme and other employment are significantly different, it is important that all future analyses make this elementary distinction lest they confuse the institutional processes of the scheme with the workings of the mainstream labour market.

Measuring Indigenous labour market outcomes: pre-NATSIS versus post-NATSIS

The NATSIS has enabled a quantum leap in our knowledge of the place of Indigenous people in the labour market. Given that the unit record file was only released in April 1996, the key findings noted above only scratch the surface of the potential analysis that can be done using NATSIS data. Rather than second-guess possible research questions, the discussion here focuses on how the NATSIS has fared in view of the pre-NATSIS deliberations regarding labour force status of Indigenous people (Daly 1992). Daly proposed a 'wish list' of desirable information about Indigenous labour market participation which the author believed should be covered in the NATSIS, including casual and seasonal work, unemployment, CDEP scheme employment and the transitions from education to work.

The historical lack of information about the casual and seasonal employment of Indigenous workers has only been indirectly and partially addressed by the NATSIS.[1] While the NATSIS does provide information on the number of employers worked for in the past 12 months and the number of months worked in the past year, there are no direct questions which address whether the work is casual or seasonal, rather than permanent work. That is, there is no direct information about movements in and out of work or the reasons for this movement. Furthermore, unlike other ABS surveys, there is no data on the movements between labour market status in the past 12 months (ABS 1996b, 1996c).

The NATSIS proves more successful in addressing gaps in the data on Indigenous unemployment. It provides detailed information on the length of time currently spent in unemployment but there is no information on other spells of unemployment. That is, while the survey provides comprehensive cross-sectional details of unemployment duration, it fails to trace the experience of the unemployed across time. The lack of longitudinal data on movements between labour force status remains one of the major gaps in information and prevents any detailed analysis of the dynamics of Indigenous unemployment.

The attitudinal data in the NATSIS on unemployment and not-in-the-labour-force status comprehensively covers the issues raised by Daly (1992). The NATSIS questionnaire asks about the main difficulties in

finding work, the reasons a person could not start work and whether a person wants to work longer hours. The last two questions allow analysis to determine the extent and nature of the discouraged worker problem and underemployment in the Indigenous population.

The data collected on the CDEP scheme has proved to be one of the successes of the NATSIS. One of the key findings of the preliminary analysis is that CDEP scheme employment is a major element of Indigenous employment, especially in rural areas, and it is qualitatively different from other work. Given that the processes determining the CDEP scheme and other employment are significantly different, it is imperative that all future data collections make this distinction. The omission of a question about the CDEP scheme on the 1996 Census forms that went out to non-remote households means that the crucial distinction between the CDEP scheme and other employment can only be made in remote and rural communities. This means that a case can be made for conducting a NATSIS 'version 2' on the grounds that Indigenous employment outside the CDEP scheme cannot be adequately monitored for some 80 per cent of the population, despite the recent growth of the scheme away from remote areas (Smith 1995).

The information on the transition from education to work is adequately dealt with by the NATSIS. As well as detailing the difficulties experienced by respondents in finding work, such as insufficient education, training and skills, there are questions on the number and type of training courses and the extent to which work and training interact. For example, the survey questionnaire asks whether training has been used for work (or to get a job) and whether work commitments are a problem for a respondent receiving further study or training.

Daly (1992) also suggested that the labour force survey provides a useful benchmark against which the results of the NATSIS should be compared. The ABS has attempted to facilitate such comparisons by providing an alternative set of labour force variables which utilise monthly labour force survey (MLFS) methodology.[2] While this should, in principle, render methodological issues largely irrelevant, there are several areas where a reflection on method may provide some useful insights.

A selective review of NATSIS methodology

The ABS has put considerable effort into analysing the extent to which the NATSIS data are comparable with other data. While it is not appropriate to replicate the more comprehensive discussion of comparability of the NATSIS with MLFS and the census methodologies in ABS (1996a), there is need for a brief review of several important aspects of measurement of Indigenous labour market participation.

Overall, the NATSIS data is so comprehensive that it provides even more information than is available in the monthly surveys. For example, the NATSIS file provides two sets of variables for many labour market

indicators: one which uses all the information available on the NATSIS file and a second which confines itself to the MLFS methodology. While the latter set of variables facilitate comparisons across surveys, they are not optimal as they do not use all available information.

Only 72.8 per cent of those classified as unemployed in the NATSIS would have been classified as unemployed using the strict MLFS methodology. The other 27.2 per cent were classified as unemployed, rather than not in the labour force, if they answered 'yes' to the question about Commonwealth Employment Service (CES) registration. The reclassification occurs because MLFS respondents are not asked specifically about CES registration and are not prompted that such registration constitutes an active step to find work. The census form does not ask a specific question on CES registration but does specify that CES is an active step.

The reclassification of people who were not in the labour force in the NATSIS as unemployed feeds through to all questions involving unemployed respondents, such as length of time not working and looking for work, whether looking for full-time or part-time work and main difficulty in finding work. The variables which describe the characteristics of persons outside the labour force are also affected to the extent that this reclassification reduces the numbers of respondents in the 'not in the labour force' category.

Table 5.1. Comparison of NATSIS and MLFS methodology: length of time not working and looking for work, 1994.

	MLFS method							
NATSIS method	Not applicable	<3 months	3-6 months	6-9 months	9-12 months	Over 12 months	Not stated	Total number
<3 months	20.3	79.7	-	-	-	-	-	8,635
3-6 months	14.8	-	85.2	-	-	-	-	5,588
6-9 months	19.4	-	-	80.6	-	-	-	2,680
9-12 months	28.2	-	-	-	71.8	-	-	2,921
Over 12 months	33.7	-	-	-	-	66.3	-	19,853
Not stated	63.3	-	-	-	-	-	36.7	488

Source: NATSIS unit record file.

Table 5.1 indicates that there is a systematic trend in the difference between NATSIS and MLFS methodology. The method used by MLFS tends to omit more people from the ranks of the long-term unemployed. The likely reason for this is that even though the long-term unemployed are registered with the CES they do not consider this to be actively seeking work. These people cannot be considered discouraged workers because the

very act of registration implies that they are attached to the labour force. Therefore, the NATSIS data may be preferable to MLFS data if one believes it gives a more accurate picture of long-term unemployment among Indigenous Australians. Another reason for preferring the NATSIS definition is that, if Indigenous people are more likely to say they are not actively looking for work, despite being registered at the CES, then MLFS definitions will tend to understate the problem of long-term unemployment in the Indigenous population.

Unfortunately, reliance of the NATSIS on CES variables to classify unemployment may beg the question of what it means to be registered with the CES. Given that the CES question does not specify when a person registered, it may not be possible to identify a person as unemployed rather than not-in-the-labour-force on the basis of this question, since CES registration may not really indicate that a respondent is actively seeking work. That is, the benefits of using the NATSIS definition of unemployment are clouded by the interpretation of the CES question. A closely related problem is that the MLFS questionnaire specifies that a respondent actively sought work in the past four weeks whereas the NATSIS questionnaire does not specify any period. Notwithstanding the relative merits of NATSIS and MLFS methodology on unemployment, there is a clear need to standardise the questions asked, and the order in which these questions are asked, across these surveys.[3]

Table 5.2. Comparison of NATSIS and MLFS methodology: number of unemployed persons in households, 1994.

	MLFS method					
NATSIS method	Not applicable	1 person	2 persons	3 or more people	Not stated	Total number
1 person	38.8	61.1	-	-	-	18,265
2 person	16.8	48.8	34.3	-	-	5,942
3 or more people	9.8	23.8	32.3	34.1	-	1,428
Not stated	-	-	-	-	100.0	13,267

Source: NATSIS unit record file.

The more detailed collection of household/family characteristics in the NATSIS means that the labour force characteristics of household/family members is more completely documented than in the MLFS. Table 5.2 illustrates that the MLFS methodology tends to incorrectly identify the number of household members who are unemployed in a significant proportion of instances. For example, the MLFS method only correctly identifies the number of unemployed persons in a household in 34 per cent of cases when there are two or more unemployed living in a household.

Given the importance of households in Indigenous society the NATSIS should be considered the preferable data source when examining the welfare implications of unemployment in households or families.

One final methodological note of caution is about the NATSIS measurement of seasonal work. To the extent that it is possible to deduce something about seasonal work from the NATSIS, it is important to question how the timing of the survey interviews, conducted between the start of April and mid-July, affected the data (ABS n.d.). While it is difficult to ascertain exactly what effect the timing of interviews will have on the results, it will be useful to speculate on possible impacts on seasonal, casual and traditional forms of work.

The three-month period between autumn and winter (or the transition between the 'wet' to the 'dry' in Northern Australia) represents a change in season which could affect labour mobility, diet or traditional hunting and gathering activities. Labour mobility can also be affected by the stage of the school calendar at which a respondent is interviewed. However, it is important to acknowledge that there is no evidence that the data quality has been affected by seasonality factors. Also the data on hunting and gathering, which are derived from the question on voluntary work, does not specify when the traditional activity was undertaken.

The NATSIS provides a rich source of information about the labour market participation of Indigenous people. On balance, the richness of this data and their relevance to Indigenous cultures mean that it provides the best platform currently available for analysis of Indigenous labour market outcomes.

Cultural appropriateness of NATSIS data on labour market outcomes

The NATSIS has attempted to directly capture the extent to which conventional labour market employment meshes with traditional forms of work. The NATSIS variable, whether work allows cultural obligations to be met, embodies the cultural sensitivity lacking in other surveys of labour market participation.

The relationship of Indigenous people to the labour market is not easily modelled using conventional economic theory. Cultural, social and institutional factors loom large when attempting to describe Indigenous participation in the labour market. Given the indeterminate state of the theoretical literature, it is not surprising that Indigenous welfare outcomes are notoriously difficult to measure (Ross and Mikalauskas 1996). Notwithstanding these problems, NATSIS data allow, for the first time, analysis of the interaction of traditional and non-traditional work.

Table 5.3 indicates the proportion of Indigenous people in each conventional labour market state who are engaged in traditional activities such as hunting, fishing and gathering bush foods. Overall, CDEP scheme employment appears to coincide with participation in such activities relative to other labour market states. The exception to this generalisation

is that not one of those employed in CDEP schemes in capital cities was engaged in traditional activities. However, this exception probably reflects the extremely small numbers of CDEP participants in capital cities and the particular circumstances of their communities (Smith 1995). Notwithstanding these anomalies, NATSIS data illustrate that labour force analysis of Indigenous people should account for the role of traditional work in generating non-pecuniary income or welfare.

Table 5.3. Proportion of Indigenous people engaged in hunting, fishing and gathering bush foods, by labour force status and part-of-State, 1994.

	Capital City		Other Urban		Rural		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
CDEP employed	0	0.0	665	14.3	3,397	29.6	4,062	24.2
Non-CDEP employed	742	4.3	1,924	9.4	1,596	14.8	4,262	8.8
Unemployed	449	4.7	1,489	7.1	1,707	17.6	3,645	9.1
Not-in-labour force	465	2.6	2,124	6.9	4,679	17.1	7,268	9.5
Total	1,655	2.2	6,201	4.7	11,380	11.8	19,236	6.3

Source: NATSIS unit record file.

The other peculiarity in Table 5.3 is that 'time poor' people, working in mainstream, non-CDEP scheme employment, actually engage in more collection of bush foods than 'time rich' people outside the labour force in urban areas. Table 5.4, which examines the proportion of part-time and full-time urban workers engaged in traditional activities, indicates a similar phenomenon. One explanation for this anomaly is that hunting, fishing and gathering for bush foods in urban areas requires a certain level of income to engage in the activities. If we accept this explanation, then caution should be exercised in interpreting traditional activity as an independent alternative to conventional labour market activity. Indeed, hunting, fishing and gathering might, in such circumstances, be interpreted as a consumption activity dependent on the level of income available rather than a productive alternative to market work to provide the daily necessities. Unfortunately, the NATSIS did not collect any other data on traditional 'work' activities. This is understandable since it is exceptionally difficult to assess the productivity of hunting and gathering activities.

The fact that many full-time workers also engage in traditional activities implies that many Indigenous workers have a strong preference for such activities, irrespective of the number of hours worked that they are committed to. Future analysis of the NATSIS data needs to further explore the extent to which cultural obligations and other traditional activities conflict with the ability of Indigenous people to participate in the

mainstream labour market. While the preliminary evidence from Table 5.4 indicates that they are not mutually exclusive activities, it is important that policy research utilise surveys like the NATSIS to assist understanding of the interactions between traditional and non-traditional work.

Table 5.4. Proportion of employed Indigenous people also engaged in hunting, fishing and gathering by part-of-State, 1994.

	Capital City		Other Urban		Rural		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Part-time	5	0.1	800	8.8	3,209	25.0	4,014	15.6
Full-time	736	5.4	1,714	11.2	1,779	19.3	4,229	11.1
Not stated	0	0.0	74	11.2	6	2.7	80	6.2
Total	741	4.2	2,588	10.3	4,994	22.5	8,323	12.8

Source: NATSIS unit record file.

NATSIS and beyond

Selectivity problems are pervasive in most areas of labour economics, including the analysis of Indigenous labour market outcomes. One area in which longitudinal data will help with selectivity problems is in attempting to deal with the effect of variations in ability on the returns to education. Also, it is more difficult to discern the direction of causation of many relationships when there is no time dimension to the data.

The need for longitudinal data to assess the success of labour market outcomes has been acknowledged by several authors (Junankar and Kapuscinski 1991; Daly 1992; Taylor and Hunter 1996). A longitudinal data set would inform policy makers about the dynamics of transition between labour market states. Junankar and Kapuscinski suggest that a longitudinal survey of Indigenous clients could be limited in scope to contain the potential costs.

The lack of a longitudinal dimension to Indigenous labour market participation may be partially addressed by a Department of Employment, Education, Training and Youth Affairs (DEETYA) sponsored survey of Aboriginal and Torres Strait Islander people who have been registered with the CES. While data from this survey will assist our understanding of a particular group of Indigenous job-seekers, it will not allow comprehensive analysis of the transition between all labour market states.

Given the potential importance of casual and seasonal work for Indigenous people (Smith 1991), the lack of data on the movement of individuals into and out of work is an obvious impediment to policy-relevant research. The recent inclusion of an Indigenous identifier in the Labour Force Survey (LFS) and supplements may go some way to

addressing this hole in the data. However, the small size of the Indigenous sub-sample means that the validity of conclusions about seasonal and casual work based on such supplements may be very limited (ABS 1996b).[4] In any case, the ABS has not yet published any LFS statistics on the labour force status of Indigenous people.

One alternative to the inclusion of an Indigenous identifier on existing surveys is to upgrade and standardise administrative databases of the Department of Social Security (DSS), DEETYA or other service agencies. The major difficulties with this strategy is that these databases are designed for administrative purposes and frequently omit information required for effective research (Taylor and Hunter 1996). While increasing access to existing data sources is an important first step towards improving our knowledge of the position of Indigenous people, it only provides information on particular groups of individuals (Daly 1992). That is, CES records can only be used to analyse unemployed persons who register at a CES office and cannot be used to examine the employed or other unemployed who fail to register.

The small size of the Indigenous population means that a survey dedicated to Indigenous issues, such as the NATSIS, is required to ensure a complete analysis of the position of Indigenous people in the labour market. The importance of cultural matters in shaping Indigenous people's relationship with the labour market and the unique position of CDEP scheme employment also lead to the conclusion that the NATSIS needs to be repeated. While the bulk of the preceding discussion has focused on the need for new variables, cost exigencies may dictate that the NATSIS questionnaire be rationalised. Notwithstanding the need for rationalisation, strong arguments can be mounted for the inclusion of several new labour market variables.

The analysis of the NATSIS data on labour market outcomes is constrained by the limited availability of information about characteristics which can be linked to the demand side of the labour market. The variables on the NATSIS unit record file relate almost entirely to the supply characteristics of individuals. The part-of-State breakdown provides some measure of access to jobs in mainstream labour markets and is the only variable which predominantly relates to employment demand.[5] Unfortunately, part-of-State breakdown can only capture the most basic differences in labour market conditions. The withholding of the ATSIC region identifier from the unit record file means that regression analysis cannot explain the majority of demand-related variance in employment outcomes.

Altman and Hunter (1996) have attempted to use the ATSIC regional level data from the NATSIS, the 1991 Census and DSS to explore the relationship between employment demand, CDEP scheme employment and unemployment-related benefits.[6] While the analysis yields some interesting insights, the explanatory power is hampered by large sampling variation in ATSIC regional level data.

Two factors which are heavily influenced by demand-side factors are the industry and occupation of employment. While the census provides a comprehensive source of information on industry and occupation of Indigenous employment, there are major benefits to collecting this information in future versions of the NATSIS. The inclusion of industry and occupation in a survey does not replace the census data: it simply enhances the capacity to analyse the unit record data. That is, it should not be used to estimate changes in the industrial or occupational composition of the Indigenous workforce. Rather, it should be used to add information to individual records about the characteristics of firms in the equivalent industry or occupation. In this way it should be possible to indirectly estimate the effect of demand on Indigenous employment.

Notes

1. The ABS currently determines whether a person is a casual worker by asking whether a person receives holiday pay or sick leave.
2. Over 30,000 private households and a sample of non-private dwellings (such as hotels and caravan parks) are included in the MLFS and information is gathered for all individuals aged 15 years and over. Households participate in the survey for eight months and the sample rotates so that, each month, one-eighth of the sample drops out and is replaced by new respondents. The ABS also conducts the employer-based survey of employment and earnings and the school-based survey of education (ABS 1996d).
3. The issue of the relative merits of using the CES variable to identify the unemployed will not be an option in any future NATSIS exercise given that the organisation will cease to exist in its current form in the coming years.
4. Daly (1992) points out that 'Aboriginal identifiers in existing ABS surveys, unless their geographical scope was redefined, would also provide information on a particular group of Aborigines as these surveys are concentrated in urban areas'.
5. This claim understates the influence of demand on other variables. It is widely accepted that the demand for the highly educated and trained is clearly higher than for the less skilled. However, supply-side factors are also likely to be an important influence on educated people and cannot be easily separated from demand-side factors.
6. Employment demand in this paper is simply modelled to be the proportion of non-CDEP scheme jobs available in a particular Aboriginal and Torres Strait Islander Commission (ATSIC) region.

References

Altman, J.C. and Hunter, B. 1996. 'The geographic distribution of unemployment-related benefits for Indigenous people and inter-relationships with CDEP-scheme employment', *CAEPR Discussion Paper No. 112*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) (n.d.). *ABS Internal Working Paper on Some Aspects of Non-Sampling Error Issues for 1994 National Aboriginal and Torres Strait Islander Survey*, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1993a. *1991 Census of Population and Housing, Basic Community Profile: Collection District Summary File,* cat. no. 2722.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1993b. *Questionnaires Used in the Labour Force*, cat. no. 6232.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *Labour Force Characteristics of Indigenous Australians: Statistics, Methodology and Comparisons*, cat. no. 6287.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *Labour Mobility*, cat. no. 6209.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996c. *Labour Force, Australia: 1978-1995*, cat. no. 6204.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996d. *Schools, Australia: 1995*, cat. no. 4221.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.

Daly, A.E. 1992. 'Aboriginal participation in the labour market', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, CAEPR Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Daly, A.E. 1995. *Aboriginal and Torres Strait Islander People in the Australian Labour Market*, cat. no. 6253, Australian Bureau of Statistics, Canberra.

Junankar, P.N. and Kapuscinski, C.A. 1991. 'Aboriginal employment and unemployment: an overview', *Economic Papers*, 10 (4): 30-43.

Ross, R. and Mikalauskas, A. 1996. 'Income poverty among Indigenous families with children: estimates from the 1991 Census', *CAEPR Discussion Paper No. 110*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. 1991. 'Aboriginal unemployment statistics: policy implications of the divergence between official and case study data', *CAEPR Discussion Paper No. 13*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. 1995. 'Redfern works: the policy and community challenges of an urban CDEP scheme', *CAEPR Discussion Paper No. 99*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. and Hunter, B. 1996. 'Indigenous participation in labour market and training programs', *CAEPR Discussion Paper No. 108*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. and Liu, J. 1995. 'Changes in the relative distribution of Indigenous employment by industry, 1986-96', *CAEPR Discussion Paper No. 96*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

6. Indigenous voluntary work: NATSIS empirical evidence, policy relevance and future data issues

D.E. Smith and L.M. Roach

While there is a growing body of research on voluntary work in Australia (Australian Bureau of Statistics (ABS) 1988, 1996; Vellekoop-Baldcock 1990; Australian Council of Social Services (ACOSS) 1996), there has been almost no information about the involvement of Indigenous Australians in voluntary work until the National Aboriginal and Torres Strait Islander Survey (NATSIS) conducted by the ABS. The exception has been a small number of detailed field studies of subsistence hunting and gathering.[1] In the absence of data, the extent to which Indigenous people engage in voluntary work is unclear. One view is that they contribute a great deal of unpaid work to their own community organisations (McNamara 1983: 168). Another is that 'volunteerism, the mainstay of white efforts in community development, is largely missing from Aboriginal community-based organisations' (Pollard 1988: 105).

An important outcome of the NATSIS is that it provides the first national overview of Indigenous voluntary work and the persons undertaking it. However, the data would be of limited research and policy utility if not for the fortuitous availability of comparative data for the total Australian population obtained by the ABS from a mainstream Voluntary Work Survey (VWS).[2] The VWS provides national benchmarks against which to evaluate the NATSIS findings.

Reconceptualising work

In the 1992 Centre for Aboriginal Economic Policy Research (CAEPR) workshop leading up to the NATSIS, definitional and methodological concerns were raised in regard to the concepts of labour force status and work. It was reported that Indigenous involvement in mainstream employment and training is affected by culturally-based attitudes and behaviours, and that work activities in the informal economy and Indigenous patterns of work participation are of a kind not easily accommodated in official labour force definitions (Altman and Allen 1992).

Smith (1992: 78) argued that ABS definitions create distortions in official labour force rates and impose a misleading rigidity upon dynamic Indigenous work patterns. Altman and Allen (1992) argued for a broadening of the standard definition of employment to include distinctly Indigenous activities in the informal economy, such as unpaid subsistence hunting and gathering and 'own account' production.[3] In the NATSIS, the

ABS attempted to extend the concept of work, stating that 'in recognition of the important unpaid work some people undertake within their communities a question on voluntary work was included in this survey' (ABS 1995: 84).

NATSIS question 59 asked respondents: 'Do you do any work that you are not paid for?'. Respondents chose from six examples: 'caring for sick or aged people'; 'working for community or sporting organisations'; 'working at a school or with youth groups'; 'working on committees'; 'hunting, fishing or gathering bush food'; and an undefined category of 'other things'. These areas of unpaid work were taken by the ABS to constitute the field of voluntary work (ABS 1995: 73). Respondents were also asked how many hours a week they usually spent doing voluntary work.

In the NATSIS (as with the VWS), individuals were able to nominate more than one voluntary activity, but each individual was counted once only for the total voluntary population. Therefore, the total persons undertaking voluntary work are less than the total number of cases of voluntary work nominated by all persons volunteering. Amongst those who volunteered, 70 per cent nominated undertaking only one type of work, 19 per cent nominated two types, 7 per cent nominated three types, and 3 per cent nominated four or five different types of work.

The NATSIS definition of voluntary work

In the NATSIS, voluntary work is defined as unpaid 'community work' primarily conducted within formal organisational contexts and having a wider community benefit. However, the standard definitional approach to voluntary work was broadened to include hunting and gathering activities. While subsistence activities are unpaid work (being non-market work where no monetary remuneration is obtained in exchange for subsistence labour), it is debateable whether it can validly be called voluntary work in an organisational setting. While 'community work' is not defined in the NATSIS, it establishes a definitional boundary whereby certain kinds of unpaid work, like housework and family-based child care, are excluded. The fact that these kinds of work are excluded, while caring for the sick and elderly and subsistence are included, makes the NATSIS definition idiosyncratic and lacking in coherence.

By comparison, the mainstream VWS employed a more standard operational definition of voluntary work; namely, a volunteer 'is someone who willingly gave unpaid help, in the form of time, service or skills, through an organisation or group'. The emphasis was on formal organisational work contexts and 'purely ad hoc, informal and temporary gatherings of people' were excluded. Under this definition, subsistence activities would be excluded. Also, the VWS included a greater range of organisational types of voluntary work than did the NATSIS, a weakness of the latter data set (ABS 1996: 31-2).[4]

Indigenous voluntary work: NATSIS empirical findings

Nationally, a total of 49,515 Indigenous persons aged 15 years or more reported they engaged in some form of voluntary work, including subsistence work. Of these, 49.8 per cent were males and 50.2 per cent were females. This represented an Indigenous voluntary work rate of 27 per cent; male and female voluntary work rates being 26.9 per cent and 26.7 per cent respectively.[5] On the basis of all nominated types of voluntary work, Indigenous Australians engage in voluntary work more than other Australians, amongst whom 19 per cent of the total population aged 15 years and over were engaged in voluntary work over a 12-month period ending June 1995 (see Table 6.1 below, and ABS 1996). However, if those Indigenous persons who nominated only subsistence as their form of voluntary work (numbering 12,322 persons) are deducted from total voluntary workers, the national Indigenous voluntary work rate is revised to 20 per cent; only marginally higher than the mainstream rate.

Table 6.1. Type of voluntary work undertaken by sex and cases[a] nominated by Indigenous adult persons aged 15 years and over, 1994.

Type of voluntary work undertaken	Males Per cent	Females Per cent	Total Per cent	Total Number	Total cases Per cent
Caring for sick or aged people	41.5	58.4	100.0	7,192	10.3
Community or sports	53.7	46.3	100.0	16,007	23.0
School or youth group	38.4	61.6	100.0	10,222	14.7
Committee work	38.6	61.4	100.0	13,996	20.1
Hunting, fishing and gathering	63.0	37.0	100.0	18,945	27.2
Other	53.4	46.6	100.0	3,266	4.7
Total cases	50.0	50.0	100.0	69,628	100.0

a. Cases are episodes of types of voluntary work nominated by Indigenous persons. Multiple cases may be nominated by each person.

Source: NATSIS unit record file.

On the basis of total cases of types of voluntary work nominated (69,628 cases), Table 6.1 indicates that the most common type of Indigenous voluntary work undertaken was hunting and gathering (at 27 per cent), followed by working for 'community or sports' organisations (23 per cent); working on 'committees' (20 per cent); working with 'school or youth groups' (15 per cent); 'caring for sick or aged people' (10 per cent) and lastly, the undefined 'other' category (5 per cent). However, when subsistence is extracted, the largest group of voluntary activities, accounting for 58 per cent, concerned work within the formal community/organisational contexts of 'community or sports', 'school or youth groups' and 'committee work'.

Information on duties performed in each area of voluntary work was not obtained in the NATSIS. The work duty most frequently reported by non-Indigenous Australians as being carried out across types of voluntary work was fundraising (47 per cent of duties), and one could conjecture that fundraising might figure equally highly as a work duty for Indigenous voluntary workers.

Generally, Indigenous voluntary work is conducted on a part-time weekly basis with more than two-thirds (79 per cent) of those engaged being occupied for ten hours or less per week. This part-time engagement is common to all the work types listed in Table 6.1. Full-time voluntary work (35 hours or more per week) was undertaken by 5 per cent of volunteers, with a further 16 per cent undertaking between 11 and 34 hours per week. There are no data on total hours of voluntary work contributed by Indigenous Australians over a stipulated period.

Who volunteers for what work?

In comparison with other Australians where the national volunteer rates are higher for females than for males (21 per cent compared with 17 per cent), amongst Indigenous Australians the voluntary work rate was almost equivalent between males and females (26.9 and 26.7 per cent respectively). However, Table 6.2 indicates there are differences between Indigenous males and females across particular types of voluntary work. Indigenous females nominated 'committee work' as their main activity (25 per cent of total female cases of work nominated), followed by working for 'community or sports groups' (21 per cent) and 'hunting, fishing and gathering' (20 per cent). In comparison, VWS data report that non-Indigenous females were more likely to be involved in 'welfare and community', and 'educational, training and youth development' areas of voluntary work (32 per cent each) (ABS 1996: 10).

The voluntary work attracting most Indigenous males was 'hunting, fishing and gathering' (34 per cent of total male cases of voluntary work), followed by working for 'community or sports groups' (25 per cent) and 'committee work' (17 per cent). By comparison, VWS data indicate that non-Indigenous males were most likely to be involved in 'sporting or recreational' fields of voluntary work (42 per cent) (ABS 1996: 10). Nationally, males were more likely than females to carry out 'hunting, fishing and gathering' activities. Unfortunately, there is no breakdown for the constituent subsistence activities where women have been reported as making a greater contribution to gathering (Meehan 1982; Altman 1987).

Indigenous males were more likely than females to be involved in 'community or sports' work, while females predominated over males in voluntary work with 'schools or youth groups', in 'committee work', and 'caring for the sick and elderly' (see Table 6.2).

Table 6.2. Type of Indigenous voluntary work undertaken by sex, nominated cases[a] and section-of-State, 1994.

	Capital city Per cent	Other urban Per cent	Rural Per cent	Total Per cent	Total cases Number	Total cases Per cent
Males						
Caring for sick and aged	22.3	49.5	28.2	100.0	3,032	8.5
Community or sports	30.2	38.2	31.6	100.0	8,726	24.6
School or youth group	36.8	43.3	19.9	100.0	4,000	11.3
Committee work	24.3	44.0	31.7	100.0	5,883	16.6
Hunting, fishing and gathering	11.4	31.7	56.9	100.0	12,087	34.1
Other	30.9	42.5	26.6	100.0	1,744	4.9
Total	22.9	38.7	38.4	100.0	35,472	49.7
Females						
Caring for sick and aged	25.2	43.8	31.0	100.0	4,315	12.0
Community or sports	30.6	44.2	25.2	100.0	7,501	20.9
School or youth group	33.7	37.6	28.7	100.0	6,456	18.0
Committee work	29.9	40.9	29.2	100.0	8,799	24.6
Hunting, fishing and gathering	3.9	33.1	63.0	100.0	7,151	19.9
Other	45.6	37.5	16.9	100.0	1,607	4.5
Total	25.7	39.6	34.7	100.0	35,829	50.3
Total persons						
Caring for sick and aged	24.0	46.1	29.9	100.0	7,347	10.3
Community or sports	30.4	41.0	28.6	100.0	16,227	22.7
School or youth group	34.9	39.8	25.3	100.0	10,456	14.7
Committee work	27.7	42.2	30.1	100.0	14,682	20.6
Hunting, fishing and gathering	8.6	32.2	59.2	100.0	19,238	27.0
Other	37.9	40.2	21.9	100.0	3,351	4.7
Total	24.3	39.2	36.5	100.0	71,301	100.0

a. Cases are episodes of types of voluntary work nominated by Indigenous persons. Multiple cases may nominated by each person.

Source: NATSIS unit record file.

Age and life-cycle factors

There is some indication from the NATSIS that the pattern of volunteer involvement varied with the age and life stage of volunteers, though the data are not as comprehensive as those in the VWS. The NATSIS data

indicate that Indigenous volunteer workers are generally younger, with some 56 per cent of volunteer workers aged 34 years and under.[6] A fairly even distribution of workers is apparent across the early and middle age ranges, with the highest volunteer rate (30 per cent of total volunteers) occurring amongst persons aged 25-34 years. This a slightly lower age peak than for other Australians whose highest rate (at 27 per cent) is between 35-44 years (ABS 1996: 1).

There are differences between males and females according to age. Males have their peak engagement in voluntary work at a lower age range than females, with the highest male rates being 16 and 14 per cent respectively for ages 20-24 and 25-29 years (compared to 11 per cent and 14 per cent for females). The highest female rate (at 18 per cent) occurs at age 30-34 years compared to males (14 per cent) at that age range. This may reflect the effects of other NATSIS labour force characteristics - such as men's greater involvement in paid employment (28 per cent versus 20 per cent female employment rate) and the sizeable difference between their labour force participation rate (males 72 per cent versus females 44 per cent).

Generally, voluntary work is predominated by Indigenous persons who were married. Of those volunteering, 55 per cent were spouses within households (of whom 51 per cent were male spouses and 49 per cent were female spouses). A further 12 per cent were single parents. Interestingly, another 14 per cent of voluntary workers were non-dependent children within such households; that is, a son or daughter of a couple or one-parent family, aged 15 years and over, and not attending a school or tertiary educational institution full-time.

The labour force status and income of volunteers

The NATSIS data on the labour force characteristics of voluntary workers reveal an interesting picture. Forty-four per cent of Indigenous volunteers were also employed within the mainstream labour force. By comparison, almost two-thirds (65 per cent) of non-Indigenous voluntary workers were also in paid employment. Unfortunately, there are no data as to the occupations of employed Indigenous voluntary workers.

Of Indigenous persons officially employed and also doing voluntary work, three-quarters were in mainstream employment; the remaining one-quarter (5,632 persons) were employed in the Community Development Employment Projects (CDEP) scheme. These latter persons constituted approximately 23 per cent of the national CDEP workforce in 1994.[7] However, it is unclear whether they regard their CDEP employment as the voluntary work they do, or whether they are undertaking voluntary work additional to their CDEP employment.

Of those stating they did voluntary work, 36 per cent were officially classed as being not in the labour force, in comparison to 31 per cent of

non-Indigenous voluntary workers. An additional 20 per cent of Indigenous voluntary workers were classed as officially unemployed; a much higher proportion than non-Indigenous voluntary workers amongst whom 4 per cent were unemployed.

While 39 per cent of voluntary workers said their main source of income came from wages and business income, importantly, an additional 52 per cent of voluntary workers received government transfer payments as their main source of income. In other words, Indigenous voluntary work is significantly supported by welfare payments received as unemployment benefits or as pension benefits by those not in the labour force. However, an alternative perspective is that these persons, officially classed as unemployed or not in the labour force, are nevertheless 'working' part-time for their welfare payments. In such circumstances this group of voluntary workers begin to look rather like CDEP participants; the important difference being that their voluntary work contribution has remained 'hidden' until documented by the NATSIS. As Altman and Allen (1992: 139) suggest, people in receipt of income support from the State can nevertheless be engaged in significant informal work activity. There are no NATSIS data, however, on total hours worked by Indigenous voluntary workers over a set period of time, as there are from the VWS.

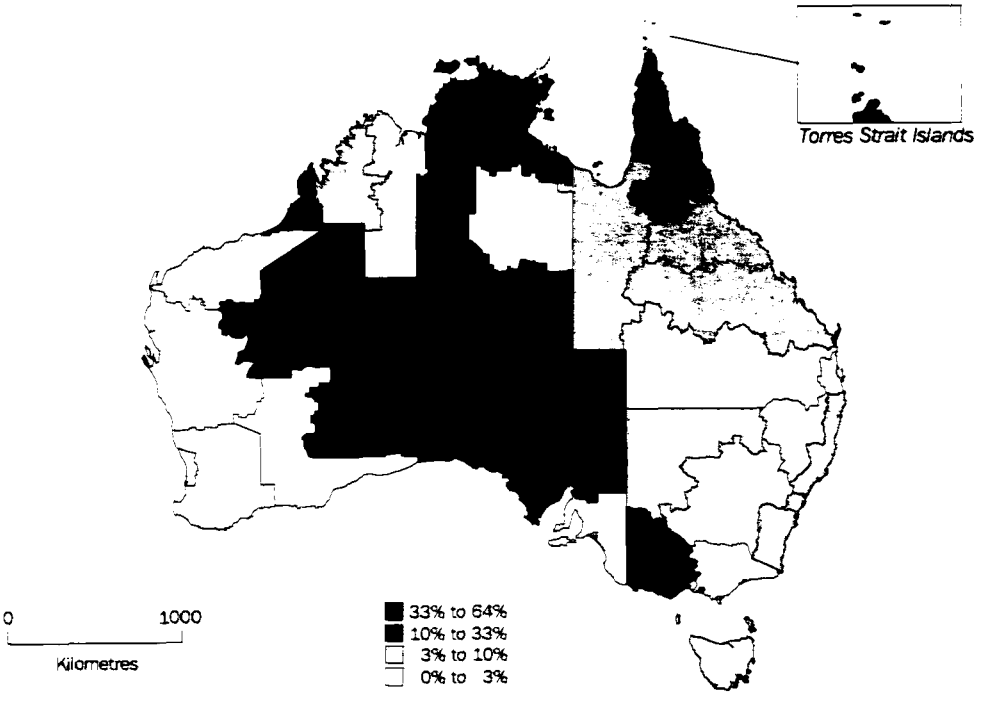
The geographic location of voluntary work

Table 6.2 indicates that Indigenous people are more likely to volunteer if they live outside a capital city; both males and females did the least voluntary work in capital city areas (23 per cent and 26 per cent respectively). Overall, Indigenous volunteer rates are evenly spread between other urban areas (at 39 per cent) and rural areas (36 per cent).

The distribution of all voluntary work identified by the NATSIS on the basis of Aboriginal and Torres Strait Islander Commission (ATSIC) regional council areas indicates that volunteering was most prevalent in remote regions, including the Broome region (with a volunteer rate of 57 per cent of the regional Indigenous working age population 15 years and over), followed by the Top End (43 per cent excluding Darwin), Central Australia (42 per cent), Torres Strait region (41 per cent) and the Western Desert region (40 per cent).

Volunteer rates were consistently high in the Northern Territory, Victoria, Tasmania and South Australia, with other States reporting a wider range of rates (some as low as 9-12 per cent). However, this remote emphasis in the national distribution of Indigenous voluntary work is undoubtedly the result of the 'subsistence effect': for both males and females hunting, fishing and gathering was predominantly carried out in rural areas (57 per cent for and 63 per cent respectively). Otherwise, the remainder of voluntary work types were actually weighted more towards other urban areas.

Figure 6.1. Hunting, gathering and fishing by ATSIC region, persons aged 15 years or more, 1994.



Source: ABS/CAEPR 1996: 44.

The regional distribution of subsistence work derived from the NATSIS data is of particular interest, confirming case study research that it is an activity predominantly occurring in remote regions of Australia (Figure 6.1). Figure 6.1 indicates a highly regionalised pattern with between one-third and two-thirds of adults engaged in subsistence in the central desert region of Aputula, the Top End and Tiwi Islands of the Northern Territory, the Broome region, and Cape York Peninsula region. Other concentrations, where between 10 and 33 per cent of adults are engaged in subsistence, are the Western Desert, the Port Augusta and Ceduna regions of South Australia, the Katherine, Alice Springs and Port Keats regions in the Northern Territory, and the Torres Strait, Cairns and western Victoria regions.

However, there are a number of obvious anomalies in this pattern of distribution. For example, the Kimberley region as a whole reports a voluntary work rate ranging from the highest overall level in the west, to the lowest in the east - as low as eastern Victoria or the Brisbane regions. It is also not clear what might constitute the substantive differences in actual subsistence activities between west and east Victoria; or why Indigenous

people in the Sydney region have a higher subsistence work rate than their counterparts in the rural hinterlands.

Interestingly, there is a strong correlation between persons undertaking subsistence as voluntary work, and certain cultural attitudes or attributes identified by the NATSIS: 94 per cent of subsistence workers also recognise a particular area as their traditional homeland or country; 51 per cent stated they presently live on such homeland country; and 84 per cent stated they identify with a clan, tribal or language group.

Policy relevance and future data issues

The importance of broadening policy definitions of work, of recognising the contribution of Indigenous voluntary work and evaluating its potential for assisting people to gain paid work is especially important given the continuing high levels of Indigenous unemployment and low labour force participation rates. One common assertion is that Indigenous people undertake a significant amount of unpaid work in their own community organisations. The NATSIS data confirm a high rate of voluntary work involvement, much higher than that of non-Indigenous Australians if subsistence work is included in the Indigenous voluntary work rate.

However, further research data are required to pinpoint policy-relevant trends in this 'hidden' area of Indigenous work. Issues with policy significance include the extent to which the more organisationally-based types of voluntary work act as a form of labour market training to provide individuals with much-needed mainstream employment skills. The transition from voluntary work to paid employment is as critical a process, if not more so, as it is for CDEP scheme participants given that the total number of voluntary workers in 1994 (37,193 persons excluding subsistence workers) was one-and-a-half times the total number of CDEP participants in the same year (24,204 persons). Conversely, further information is also required about the extent to which voluntary work restricts people from pursuing paid employment in the mainstream.

Census-based research has documented the substantial occupational segregation between Indigenous and non-Indigenous Australians and, in particular, Indigenous people's poor occupational status and over-concentration in a few industries, mostly in the government and community services sectors (Taylor and Liu 1996). It appears that the duality in the labour market may be parallelled in the voluntary work market; namely, Indigenous and minority ethnic groups may be segregated out of mainstream voluntary work opportunities and concentrated in their own community organisations (Vellekoop-Baldcock 1990: 35, 82). Whether this is the result of demand-side restrictions, or the product of Indigenous work preferences, or both, remains to be elucidated by further research.

While the NATSIS data offer our first view of the extent of Indigenous voluntary work in Australia, they are tantalisingly superficial

and raise further questions and concerns. A number of definitional issues need to be reconsidered for a future NATSIS. Firstly, subsistence activities are clearly significant but should be treated separately to voluntary work in a questionnaire schedule, being more appropriately classified as unpaid own account production in the informal economy, primarily benefiting family and clustered household units.[8] Secondly, the definition of voluntary work could usefully be expanded. For example, it is not clear why certain types of voluntary work included in the mainstream VWS were not included in the NATSIS; in particular the 'law, justice and political', 'arts and culture', 'religious', and 'health' types of voluntary work all seem equally applicable to Indigenous Australians. Work types especially relevant to Indigenous Australians such as land management, land council, resource agency, infrastructure, and family-based child care work could also be included.

The policy utility of NATSIS data about this 'hidden' area of Indigenous work could be refined by obtaining data on the following: the actual work duties carried out; the occupation of employed voluntary workers; the personal, family and community benefits perceived as being attached to voluntary work; the mechanisms by which volunteers are recruited (for example, via family, friends, media); whether the organisations in which they undertake voluntary work are Indigenous or not; the period of time over which they have been involved in voluntary work; and the total hours worked over a 12-month period.

On the basis of the NATSIS data, it appears that volunteers could be making a major contribution to the operational capacities of Indigenous organisations, and that a significant number of these people are volunteering to work while receiving only welfare payments. This preliminary conclusion offers a potentially important correction to the prejudiced notion that welfare-dependent Indigenous people 'don't want to work' (Office of the Minister for Aboriginal and Torres Strait Islander Affairs 1992). Unfortunately, the lack of more detailed NATSIS information about Indigenous voluntary work limits the further policy and program application of such preliminary research conclusions.

Notes

1. See Altman (1987), Altman and Allen (1992) and Altman, Bek and Roach (1996) for a review of the relevant literature.

2. The VWS was conducted as a supplement to the ABS Monthly Population Survey and covered 54,500 persons aged 15 years and over who had undertaken voluntary work in the 12 months previous to mid-June 1995. There is no Indigenous identifier in either the Monthly Population Survey or the supplementary VWS.

3. They gave as examples hunting, gathering, fishing, gardening, house building for domestic use, and artefact manufacture.

4. The VWS fields of voluntary work included: sport, recreation, hobby; welfare and community; health; emergency services; education, training and youth development; religious; environmental and animal welfare; business and professional union; law, justice and political; arts and cultural; foreign and international.

5. The voluntary work rate is the number of Indigenous volunteers expressed as a percentage of the total Indigenous working age population aged 15 years and over.

6. This proportion is reduced only slightly, to 53 per cent, when the age characteristics of subsistence workers are subtracted from total Indigenous voluntary workers.

7. At June 1994 there were 24,204 Indigenous Australians participating in the CDEP scheme.

8. See Altman (1987) and Smith (1992) for a discussion of production and distribution within the subsistence economy, and the concept of clustered household, respectively.

References

Altman, J.C. 1987. *Hunter-Gatherers Today: An Aboriginal Economy in North Australia*, Australian Institute of Aboriginal Studies, Canberra.

Altman, J.C. and Allen, L.M. 1992. 'Indigenous participation in the informal economy: statistical and policy implications', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C., Bek, H.J. and Roach, L.M. 1996. 'Use of wildlife by Indigenous Australians: economic and policy perspectives', in M. Bomford and J. Caughley (eds) *Sustainable Use of Wildlife by Aboriginal Peoples and Torres Strait Islanders*, Bureau of Resource Sciences, Australian Government Publishing Service, Canberra.

Australian Bureau of Statistics (ABS) 1988. *Community and Volunteer Work, South Australia*, cat. no. 4402.2, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996. *Voluntary Work, Australia*, cat. no. 4441.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.
Australian Council of Social Services (ACOSS) 1996. *Volunteering in Australia*, ACOSS Paper No. 74, ACOSS, Sydney.

McNamara, N. 1983. 'Issues of key importance to Aboriginal women', in F. Gale (ed.) *We Are Bosses Ourselves: The Status and Role of Aboriginal Women Today*, Australian Institute of Aboriginal Studies, Canberra.

Meehan, B. 1982. *Shell Bed to Shell Midden*, Australian Institute of Aboriginal Studies, Canberra.

Office of the Minister for Aboriginal and Torres Strait Islander Affairs 1992. *Rebutting the Myths*, Australian Government Publishing Service, Canberra.

Pollard, D. 1988. *Give and Take: The Losing Partnership in Aboriginal Poverty*, Hale and Iremonger, Sydney.

Smith, D.E. 1992. 'The cultural appropriateness of existing survey questions and concepts', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. 1992. 'Occupational segregation: a comparison between employed Aborigines, Torres Strait Islanders and other Australians', *CAEPR Discussion Paper No. 33*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Taylor, J. and Liu, J. 1996. 'Change in the relative occupational status of Indigenous workers, 1986-91', *CAEPR Discussion Paper No. 104*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Vellekoop-Baldcock, C. 1990. *Volunteers in Welfare*, Allen and Unwin, Sydney.

7. Sources and distribution of Indigenous incomes: evidence from the NATSIS

R.T. Ross

This chapter reviews the key findings from the National Aboriginal and Torres Strait Islander Survey (NATSIS) regarding monetary income among Indigenous Australians. The focus here is on the composition and distribution of income.

The composition of income highlights the various sources of Indigenous incomes such as government transfer payments, earnings from employment, and other private income. Two aspects of the distribution of income are highlighted: first, the relative importance of each of these sources of income in determining the level of income available to Indigenous Australians; second, the differences in the levels of income across Indigenous communities. Except where indicated otherwise, all figures presented here are derived from the information contained in the Australian Bureau of Statistics (ABS) publication *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings* (ABS 1995: 45-56).[1]

The income data analysed here were derived from questions in the NATSIS which sought information, for the survey week, on actual dollar amounts of income from government transfer payments and from labour market activity. From the information collected, the ABS calculated each individual's total weekly income. The person's main source of income was determined, by the ABS, as being the source which contributed the largest number of dollars to the total income.

Unfortunately, the ABS did not publish the precise income figures collected. All that is available to researchers is an individual's total income from all sources and the source identified by the ABS as the main source of income. It would have been preferable to have access to information on aggregate income from each source of income, as well as the total weekly income published.

The income figures discussed here are also somewhat incomplete for two reasons. First, no questions were asked on private income other than earnings. For example, no data are available on business income, interest receipts, dividends or profits. Second, the income figures reported relate only to financial income; no estimates are provided of the value of income from subsistence activities, from barter activities or from income received in kind (see Altman and Allen 1992; Smith and Roach, chapter 6).

Sources of income

There are two main sources of income identified: private income, and income from government transfer payments. The most common sources of private income are employment income and business income. Employment income covers wages and salaries income. Business income covers private income received independently of employment, such as property and rental income, interest on savings accounts and dividends from business enterprises. Government transfer payments encompass the full range of social security payments. Unfortunately, the NATSIS did not collect any information on private income other than employment income. Regrettably, this means that the NATSIS results are unable to shed any light on the importance of non-employment sources of private income within the Indigenous population.

The evidence from the NATSIS indicates that a government transfer payment was the main source of weekly income for a clear majority of Indigenous Australians. Fifty-five per cent of working-age Indigenous Australians had a government transfer payment as their main source of income. A further 33 per cent had earned income as their main source and the remaining 14 per cent had no income at all.

Government transfer payments
Among the 55 per cent for whom a government transfer payment was the main source of income, the most common payments were:

i Family Payment (received by 43 per cent of these people);
ii Rent Assistance (20 per cent);
iii Newstart Allowance (18 per cent);
iv Sole Parent Pension (16 per cent);
v Jobsearch Allowance (14 per cent);
vi Age Pension (10 per cent);
vii Disability Support Pension (10 per cent); and
viii Sickness Allowance (2 per cent).

These percentages add to more than 100 per cent, as an individual could receive more than one of the above items. Eligibility for the family payment is determined independently of eligibility for all the other payments, while rent assistance is available to some holders of an allowance or pension.

The poor labour market position of Indigenous people is underscored by these figures. One in three are receiving an allowance directly related to their (unemployed) labour market status (Jobsearch, Newstart), and it is likely that many others are receiving a pension/allowance in lieu of these two entitlements.

Earned income

The NATSIS findings indicate that earned income was the main source of income for only 33 per cent of working-age Indigenous Australians. However, it is almost certain that the proportion of earned income which is not derived from employment is negligible since a higher proportion of people (36 per cent) indicated that they were employed than indicated that earned income was their main source of income (30 per cent).

The role of the Community Development Employment Projects (CDEP) scheme in assisting Indigenous people to gain employment experience can not be overstated. Fully one-quarter of all individuals who cited earned income as their main source of income indicated that their income came from CDEP-funded employment. Without the CDEP scheme, the number of individuals for whom government payments were the main source of income would undoubtedly rise by around 8,500.

The importance of government payments to employed Indigenous Australians is demonstrated in Table 7.1. Only half of all employed persons cited earned income as their main source of income, with this proportion being the same for those in non-CDEP employment as it is for those in CDEP employment. That is, fully half of all employed Indigenous Australians do not regard their employment income as their main source of income.

Table 7.1. Employment status and main source of income at time of the NATSIS, 1994.

Type of employment	Employed (E)	Main source of income (M)	(M) as percentage of (E)
non-CDEP employment	48,300	24,100	49.9
CDEP employment	16,800	8,500	50.6
Total	65,100	32,600	50.0

Source: ABS (1995: Tables 38 and 39).

Why is earned income the main source of income for only half of all employed Indigenous Australians? The explanation for this can be found in the interaction of two sets of figures. First, of those people employed at the time of the NATSIS, a high proportion (40 per cent) were in part-time employment (ABS and Centre for Aboriginal Economic Policy Research (CAEPR) 1996: 17). This is not surprising, since 25 per cent of all employment was in CDEP-funded employment and virtually all of these positions are part-time; there is a limited number of full-time CDEP-funded jobs. Second, job duration is very limited for many employed Indigenous persons. Information was collected in the NATSIS about the

number of jobs people had held in the 12 months up to and including the date on which they were interviewed for the NATSIS (ABS 1995: Table 40). Analysis of these figures indicates that 80,000 people had a job at some stage during that period. Of these, exactly half (40,000) had been employed in one job for the entire 12 months, while another 5,700 had also been employed for the entire 12 months but had held more than one job during that time.

During the year, 33,600 individuals had some employment experience during the year, but jobs lasted less than 12 months. Of these 33,600 individuals, a majority (52 per cent) had been employed for less than half the year. The NATSIS results indicate that:

i 7,900 (24 per cent) had been employed for less than three months;

ii 9,300 (28 per cent) had been employed for between three and six months;

iii 11,200 (33 per cent) had been employed for between six and nine months; and

iv 5,200 (15 per cent) had been employed for more than nine months.

These figures indicate that limited duration of employment continues to be a significant problem for Indigenous Australians.

Distribution of income

The average income for all working-age Indigenous Australians reported in the NATSIS is $14,046 per annum. This average masks considerable variation in the distribution of Indigenous incomes. Here, two aspects of this distribution of incomes are considered:

i variations in the levels of income based on the source of the income; and

ii regional variations in the levels of income.

Impact of source of income on the distribution of incomes

The average weekly incomes by the main source of income are shown in Table 7.2. Not surprisingly, individuals citing non-CDEP employment as their main source of income have the highest incomes and those citing government payments have the lowest incomes. Access to CDEP employment opportunities increases income above that from government payments by almost $3,000 per annum (or $55 per week), although it can not be determined from these figures whether the increase is a direct or indirect result of a period in CDEP employment.

The levels of income reported in the NATSIS are very low. They also indicate some differences with patterns observed among the rest of the population. The averages for females are higher than those for males for

both the CDEP employment and the government payments categories. It is not clear from these data why this is so, although one possible explanation is that family payments are typically paid to female parents.

The figures in Table 7.2 are consistent with previous research that the incidence of financial poverty among Indigenous Australians is very high (see Ross and Whiteford 1992; Ross and Mikalauskas 1996). The average income figures for those on government payments and those in CDEP employment suggest that many of these people will be in families who have incomes below the Henderson poverty line applicable to their family type. A more accurate assessment of the extent of financial poverty is not possible from these data. The measurement of poverty is determined by the size and composition of the family and is based on *after tax* incomes whereas the income figures here are gross, that is, before tax, figures (see also Jones, chapter 12, on this issue). Nevertheless, the gross incomes reported from the NATSIS are sufficiently low to give strong support to the view that poverty among Indigenous families will not have declined between 1991, the basis for the most recent estimates reported by Ross and Mikalauskas (1996), and at the time of the NATSIS in 1994.

Table 7.2. Average weekly income by main source of income at time of the NATSIS, 1994.

Main source of income	Females	Males	Persons
Non-CDEP employment	420	513	477
	($21,873)	($26,689)	($24,802)
CDEP employment	250	234	239
	($13,002)	($12,165)	($12,403)
Government Payment	193	170	184
	($10,038)	($8,888)	($9,576)
Total	244	297	270
	($12,702)	($15,448)	($14,046)

Note: Figures in brackets are annual amounts (ABS 1995: Table 47).

Source: Calculations derived from Table 47, ABS (1995).

Regional variations in the levels of income

Table 7.3 summarises the regional variations in weekly income. First, the national average weekly income for working-age Indigenous Australians was $270. Sixteen of the 36 regional averages are within $20 of this Australia-wide average, although 11 of these 16 regions have averages below the national average, that is, between $250 and $269.

Second, there is considerable variation in these average incomes. Although the averages for the two regions with the highest figures (South Hedland $339; Sydney $338) are only 25 per cent higher than the national

average, these two averages are more than 75 per cent higher than the averages for the two regions with the lowest figures (Warburton $194; Jabiru $193).

Third, in general, the incomes are above average in urban areas and in New South Wales and are below average in more remote areas and in the Northern Territory and Western Australia.

Table 7.3. Average weekly income by ATSIC regions and Torres Strait area.

Region	$ per week	Region	$ per week
South Hedland	339	Darwin	264
Sydney	338	Geraldton	263
Brisbane	317	Torres Strait Area	260
Ballarat	300	Narrogin	259
Rockhampton	298	Perth	259
Wangaratta	297	Cairns	256
Queanbeyan	295	Wagga Wagga	253
Hobart	294	Mount Isa[a]	251
Tamworth	294	Nhulunbuy	242
Townsville[a]	290	Bourke	237
Kalgoorlie	286	Port Augusta	232
Alice Springs	281	Tennant Creek	232
Broome	274	Katherine	225
Coffs Harbour	274	Roma	225
Australia[b]	270	Kununurra	216
Adelaide	269	Aputula	207
Ceduna	269	Derby	202
Cooktown	264	Warburton	194
Jabiru	193		

a. Indicates regions which are $20 above or below the national average.
b. Indicates the national average figure.

Sources: All these figures are taken from the series of ATSIC regional council publications (ABS 1996).

Conclusion

The income figures presented here demonstrate that income levels among Indigenous Australians are still low. They will continue to be low as long as there is a need for reliance on government transfer payments as the main source of income for a significant proportion of working-age Aborigines and Torres Strait Islanders. Clearly there is still a long way to go before equality of income opportunities is achieved in this country. The work of Ross and Whiteford (1992), Daly (1995) and Ross and Mikalauskas (1996) indicates that the only real way for Indigenous people to have any chance

of avoiding the prospect of a life time spent in financial poverty is through greater success in obtaining long-term employment. In this regard, there is a continuing, and crucial, role for CDEP scheme funded employment if it opens up employment prospects for Indigenous people. However, the gains made in Indigenous employment levels via the CDEP scheme must be reinforced through sustained efforts to deliver greater labour market access to all Indigenous Australians wishing to participate in the formal labour market. There remains also the problem that gaining employment is only the first step in the alleviation of poverty. The figures cited above on duration of employment indicate that greater attention is needed to the issue of employment stability and job tenure, not just to breaking the cycle of poverty.

The implications for any future NATSIS is that higher quality income data must be collected and made publicly available.

Notes

1. Unlike Canberra-based participants at the workshop, Dr Ross did not have access to the confidentialised unit record file (CURF) (eds).

References

Altman, J.C. and Allen, L.M. 1992. 'Indigenous participation in the informal economy: statistical and policy implications', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Regional Statistics*, cat. no. 4196.0.00.001-36, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.

Daly, A. 1995. *Aboriginal and Torres Strait Islander People in the Australian Labour Market: 1986 and 1991*, cat. no. 6253.0, ABS, Canberra.

Ross, R. and Mikalauskas, A. 1996. 'Income poverty among Indigenous families with children: estimates from the 1991 Census', *CAEPR Discussion Paper No. 110*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Ross, R. and Whiteford, P. 1992. 'Poverty in 1986: Aboriginal families with children', *Australian Journal of Social Issues*, 27 (2): 92-111.

8. Indigenous participation in schooling: a preliminary assessment of the NATSIS findings

R.G. Schwab

The National Aboriginal and Torres Strait Islander Survey (NATSIS) of 1994 was generated out of the findings and recommendations of the Royal Commission into Aboriginal Deaths in Custody of 1991 (Commonwealth of Australia 1991). The investigations of the Royal Commission highlighted the lack of an adequate statistical profile of Indigenous Australians. One of the outcomes of the final report was a recommendation for a national survey focused on social, demographic, health and economic characteristics. One area of focus in the NATSIS is education, and the results of the survey provide a snapshot of the educational status of Indigenous Australians in 1994.

Though not designed as such, this snapshot makes an important contribution to the development of coordinated baseline data on Indigenous education called for in two recent major policy documents. The Commonwealth Government's Aboriginal Education Policy (AEP) was put into place in 1989. The National Review of Education for Aboriginal and Torres Strait Islander People was a wide-ranging review of the AEP and sought to evaluate the success of the policy (Commonwealth of Australia 1995). Like earlier reviews, this one addressed the effectiveness of existing strategies and outcomes, and identified unmet educational needs. One of the outcomes of the AEP review was a call for more comprehensive data on Indigenous education. Specifically, the review recommended the Australian Bureau of Statistics (ABS) and the recipients of Commonwealth education funding maintain databases and publish annual reports on the state of Indigenous education. As envisaged in the AEP review, these data would depict everything from enrolment patterns to completion rates, to types of institution.

Baseline education data are also promoted in the recent National Strategy for the Education of Aboriginal and Torres Strait Islander Peoples, prepared by a special task force assembled by the Ministerial Council on Employment, Education, Training and Youth Affairs (Hughes 1996). The national strategy builds on the recommendations of the earlier AEP review and includes a collaborative action plan for the early childhood, school, vocational education and training, and higher education sectors. Specifying a range of priorities, outcomes, strategies and performance measures, the action plan is designed to assist State, Territory and Commonwealth system providers to develop and implement, in collaboration with local Indigenous communities, appropriate educational services. According to the national strategy, a critical component of this process will be the

creation of baseline data through consistent reporting and monitoring of educational data.

The education data resulting from NATSIS make an important contribution to the development of national baseline data. This paper attempts to provide a brief, critical glimpse of those data. It begins by placing the NATSIS education data in the context of other national statistics on Indigenous education. It then offers an overview of the school data from the Survey's *Detailed Findings* (ABS 1995). Next, a comparison of school-related data for two Aboriginal and Torres Strait Islander Commission (ATSIC) regions (Adelaide and Ceduna) is provided. The paper concludes with comments on the utility of NATSIS, its limitations and opportunities for its future.

Current sources of educational statistics

Currently, Australian educational data come from a variety of sources. For example, State and Territory departments of education collect data as do non-government systems and unaffiliated independent providers. The Commonwealth Department of Employment, Education, Training and Youth Affairs (DEETYA) maintains its own databases on non-government schools which include, for example, information reported by recipients of specific Commonwealth program funds. While individual States, Territories, and the Commonwealth independently publish educational data in various reports, the *National Report on Schooling in Australia* prepared annually by the Ministerial Council on Employment, Education, Training and Youth Affairs (MCEETYA) provides the most comprehensive overview. MCEETYA also compiles and maintains the National Schools Statistics Collection, Australia's main school data set. These data originate in annual schools censuses undertaken by the individual States, Territories and DEETYA, and form the core of the ABS annual report, *Schools Australia.* Educational data are also compiled by independent but largely government-funded research organisations such as the Australian Council for Education Research and the National Centre for Vocational Education Research.

One might assume that enormous amounts of information on Indigenous Australians are available through these various reports, but in fact that is not the case. While some of these data sets provide a limited glimpse of the educational status of Indigenous people, there are actually very little data identifying individuals by race. Further, reporting procedures, definitions, timelines, and policies sometimes differ significantly among the States, Territories and Commonwealth and so existing data are not always comparable. Consequently, there is actually relatively little information helpful in isolating Aboriginal and Torres Strait Islander people from the wider population. In addition, virtually all of the data cited focus on enrolments, completions, retentions and the like. Such data are clearly of value in establishing baselines and monitoring change

over time, but they provide little insight into some of the more troubling questions pertaining to Indigenous education. For example, there are ample data to show that in comparison to other Australian students, Aboriginal and Torres Strait Islander progression through secondary school drops dramatically after Year 8, but there is little in existing national education data to assist in explaining why this pattern exists. Quantitative measures of participation or retention are not very helpful in answering these sorts of important questions.

Overview of school-related data: NATSIS detailed findings

At the heart of the NATSIS are 114 primary questions, many with additional nested response options, focusing on five issue areas.[1] The majority of primary questions (39) pertain to health, while 26 focus on employment and income, 19 on family and culture and 15 on law and justice. Only 15 of the 114 relate to education and of these, 10 focus on schools; the remaining five deal with school leavers, post-school training and qualifications. This discussion will concentrate on findings related to schools.

The Survey questions and outcomes presented in the *Detailed Findings* focus primarily on the national level, with little information on smaller geographical units. The school data in the *Detailed Findings* are of three major types: those related to characteristics of school students, others that identify type of school and components of curriculum, and still others that address attitudes and perceptions. It is useful to summarise these national data.

Student characteristics

The first set of school-related findings reveal that 40.3 per cent of children between the ages of 3-5 years old attended preschool. The proportion of students aged 5-18 years attending school was 81.7 per cent, double that of pre-school attendance. In terms of the distribution of school students, 64.2 per cent were primary, 32.1 per cent were secondary and 3.7 per cent were enrolled in combined primary/secondary schools.

The NATSIS findings parallel other research showing a marked decline in school participation rates at the secondary level (Commonwealth of Australia 1994; Groome and Hamilton 1995). According to the Survey, the participation rate for 14 year olds was 98 per cent while the rate had dropped to 31 per cent for 17 year olds. The participation rate was somewhat lower for males. For example, the male participation rate for 17 year olds was 29 per cent compared to a rate of 35 per cent for females of the same age. An overall participation rate was not given.

Schools and curriculum

The NATSIS findings provide data on the distribution of Indigenous students across the various types of schools. While most of the data in the

Detailed Findings appear as percentages rather than numbers of students, these data include counts of students in each type of school. For example, of the 82,700 primary and secondary students identified in the Survey 71,900 (86.9 per cent) attended government schools, while 6,800 (8.2 per cent) students were enrolled in Catholic schools. Of the remaining students, 2,000 (2.4 per cent) attended Aboriginal independent schools and 900 (1.1 per cent) other non-government schools; the type of school was not identified for 1,100 students (1.3 per cent).

For the first time the NATSIS provides insight into student experiences with Indigenous curriculum content at the national level. Among primary and secondary students, 52.2 per cent were taught about Aboriginal or Torres Strait Islander culture at school; 47.4 per cent had no such instruction. Only 18.4 per cent of students were taught Aboriginal or Torres Strait Islander languages at school while such language instruction was absent for the majority (76.8 per cent).

Another interesting set of findings specifies the role of Indigenous individuals who delivered instruction to Indigenous students. Among primary and secondary students, 13.7 per cent were taught by an Aboriginal or Torres Strait Islander teacher, 21.8 by an Indigenous education worker, and another 11.9 per cent by a community member. Over half (55.8 per cent) of the students had no instruction from Indigenous teachers, education workers or community members.

Attitudes and perceptions

Among the most interesting school-related findings are those that gauge perceptions and attitudes toward the educational experience of Indigenous students. Data of this nature have never before been available at the national level so are particularly intriguing. A clear majority of respondents (85.5 per cent) indicated they are happy with the education their children are receiving at school; a further 10.3 per cent were unhappy while 4.0 per cent indicated they did not know, or they did not respond to the question. There is interesting variation in response to this question according to 'part-of-State'. Over 90 per cent of parents in rural areas were happy with their children's education while 80.8 per cent of parents in capital cities indicated the same satisfaction. Conversely, while 15.6 per cent of capital city parents were unhappy with the education their children were receiving at school, only 7.5 per cent of parents in rural regions were dissatisfied. The high levels of reported satisfaction with education is surprising in light of the recent National Review of Education for Aboriginal and Torres Strait Islander People's emphasis on equity and reconciliation in the educational arena and suggests the need for further investigation.

Again, many will be surprised to find that the majority of Indigenous parents (84.0 per cent) indicated they feel welcome in their children's schools; only 2.6 per cent felt unwelcome. Slightly fewer parents in capital cities feel welcome (82.2 per cent) than do parents in rural regions (87.9 per cent). The generally higher positive perceptions of schools among rural

parents continues when participation in school decision-making is assessed. Nearly half (46.8 per cent) of the rural parents report they are involved with decision-making at their children's school; this compared to 37.6 per cent of capital city parents; overall, 39.2 per cent of the respondents indicated they are involved in decision-making at their children's schools. Unlike the findings pertaining to happiness with education and feeling welcome in schools, there are interesting differences when the sex of the respondent is taken into consideration. Only 30 per cent of males described themselves as involved in decision-making at their children's schools while 45.6 per cent of females indicated they were involved.

Finally, the NATSIS provides the first national data on Indigenous attitudes toward Aboriginal community controlled schools. When asked if they would prefer to send their children to such a school, 33.2 per cent of respondents indicated they would, while nearly half (48.0 per cent) indicated they would not. On closer examination of the responses of those who would prefer to send their children to community controlled schools, there appear to be no meaningful differences among the responses of capital city or rural or male or female parents.

A preliminary overview of NATSIS school-related data for two ATSIC regions: Adelaide and Ceduna

The *Detailed Findings* are based on averages for the whole of the country, but statistics have also been published for each of the ATSIC regions. One of the problems in assessing the findings at the regional level is that, as the numbers of respondents decrease in the sub-samples, the relatively smaller estimates based on those numbers are subject to increasingly large standard errors. Consequently, the reliability of estimates for some of the regional findings are problematic. Still, it is possible to tease apart many of the national findings related to schools and education for the regional level. Table 8.1 summarises the major NATSIS school-related findings for two contrasting ATSIC regions: Ceduna and Adelaide. These two regions have been selected for illustrative purposes because they represent geographically proximate yet distinctive regions, one dominated by a capital city, the other largely rural.

The Adelaide ATSIC region covers an area of 98,800 square kilometres in the south-eastern corner of the State of South Australia. The population of the region was estimated at 11,020 in 1994; the largest Indigenous population in this ATSIC region is found in the Adelaide metropolitan area (3,815). According to the NATSIS, there were 2,940 primary and secondary students in the Adelaide ATSIC region.

The Ceduna ATSIC region covers an area of 355,200 square kilometres in the south-west corner of South Australia. It has the smallest Aboriginal and Torres Strait Islander population of all the ATSIC regions, with 1,740 people in 1994. The largest population centres were Port

Lincoln (400), Ceduna (400), Yalata (310) and Koonibba (140). The NATSIS revealed 510 primary and secondary students in the Ceduna ATSIC region.

Table 8.1. Aboriginal and Torres Strait Islander (ATSI) student characteristics, schools and curriculum, and attitudes and perceptions: Ceduna ATSIC region, Adelaide ATSIC region, and Australia, 1994.

	Adelaide ATSIC region Per cent	Ceduna ATSIC region Per cent	Australia Per cent
Student characteristics			
Preschool attendance	*39.5	64.0	40.3
School attendance	84.1	83.8	81.7
Level attending:			
primary	69.4	78.4	64.2
secondary	29.2	11.8	32.1
combined	*1.4	*9.8	3.7
Participation rate (overall)	70.0	50.0	n/a
Schools and curriculum			
Type of school			
Government	89.8	80.4	86.9
Aboriginal independent	*4.8	17.6	2.4
other	*4.1	*2.0	9.3
Students taught:			
ATSI culture	49.0	86.3	52.2
ATSI language	17.7	60.8	18.4
by ATSI teacher	*7.8	*5.8	13.7
by ATSI education worker	*11.2	66.7	21.8
by community member	*5.8	35.8	11.9
Attitudes and perceptions			
Happy with children's education	n/a	n/a	85.5
Feel welcome in children's school	n/a	n/a	84.0
Involved in school decision-making	35.0	59.6	39.2
Would prefer Aboriginal community controlled school	25.1	*20.0	33.2

* Relative standard error is greater than 25 per cent.
n/a not available.

Source: ABS 1995; 1996a; 1996b.

It is interesting to consider regional data in that they uncover distinctive patterns that are hidden in the averages of national level data, yet one of the difficulties in considering such findings is that they often raise more questions than they answer. Nonetheless, those questions are in themselves of value for future research and planning. Comparing the Adelaide and Ceduna ATSIC regions reveals several interesting differences. While the preschool attendance rate for Adelaide is probably similar to the average

rate for all of the ATSIC regions in the country (relative standard error for this figure for the Adelaide region is greater than 25 per cent), the Ceduna preschool attendance rate is remarkably high. In fact, at 64.0 per cent it is greater than 1.5 times the rate for the average of all regions (40.3 per cent) and has the highest attendance rate of all ATSIC regions. On the other hand, the very high primary to secondary enrolment ratio (78.4 per cent to 11.8 per cent) for the Ceduna region is typical of regions that are mainly rural. The high ratio is also related to the relatively lower overall participation rate in Ceduna (50 per cent) as compared to Adelaide (70 per cent).

The data on type of school are unremarkable for the Adelaide region. The proportion in government schools for the region (89.8 per cent) is similar to the national average of all ATSIC regions (86.9 per cent). The proportion of students in Aboriginal independent schools in the Ceduna region, however, is extremely high. Nearly one in five students (17.6 per cent) attend such schools in the region. That figure is over seven times the national average for all regions (2.4 per cent). In the case of the Ceduna ATSIC region, it is likely that the high proportion of students in Aboriginal independent schools can be accounted for by the relatively small number of students in the region (510) and the presence of the Crossways Lutheran School in Ceduna where 65 Aboriginal or Torres Strait Islander primary students were enrolled in 1994 (DEETYA unpublished data).

Considering the proportion of students who were taught Indigenous culture or languages, the Adelaide region figures are again unremarkable and parallel the national averages. The Ceduna region figures are above the averages of all ATSIC regions. Students in the Ceduna region were over one-and-a-half times more likely to be taught Indigenous culture and over three times more likely to be taught an Indigenous language. Only four ATSIC regions reported higher percentages of students being taught Indigenous culture: Tennant Creek (91.1 per cent), Torres Strait (91.2 per cent), Jabiru (94.4 per cent) and Nhulunbuy (97.0 per cent). Three ATSIC regions reported higher levels of instruction of Indigenous language: Jabiru (85.5 per cent), Tennant Creek (86.5 per cent) and Nhulunbuy (90.9 per cent).

Even allowing for the high relative standard error, the percentage of students in both the Adelaide and Ceduna regions who receive instruction from an Indigenous teacher is below the national average of 13.7 per cent, but the percentage of Ceduna region students who are taught by Indigenous education workers (66.7 per cent) and community members (35.8 per cent) is over three times the national averages (21.8 and 11.9 per cent, respectively).

There is no explanation presented in the regional statistics volumes for the lack of regional data on parents' happiness with their children's education and perceptions of feeling welcome in those schools. One possible explanation is that these questions are potentially politically volatile and, given the small samples in some regions, the ABS is loath to

show responses to these questions for fear that communities or schools might be too easily identified. If this is indeed the case, it is a problem worthy of further discussion since this masks important data relevant to one of the Survey's most intriguing findings. There are, however, data available pertaining to involvement of parents in school decision-making. With 35 per cent of parents in the Adelaide ATSIC region indicating they are involved in decision-making at their children's schools, the region is again close to the national average of 39.2 per cent. Yet 59.6 per cent of Ceduna region parents report they are involved in school decision-making; this is one-and-a-half times the national average and nearly double the Adelaide figure.

Finally, regional differences in preference to sending children to Aboriginal community controlled schools are of interest. While 25.1 per cent of Adelaide ATSIC region respondents indicated they would prefer to send their children to such schools, even fewer Ceduna ATSIC region parents appear to prefer this option. Though the figure for the Ceduna region parent preference for such schools (20 per cent) is subject to a standard error of more than 25 per cent, the opposite response (not shown in Table 8.1) - 'would not prefer' - is 80 per cent and is not subject to standard error. In other words, given the choice, 80 per cent of parents in the Ceduna region would not choose to send their children to Aboriginal community controlled schools. Yet, interpreting this response is not as straightforward as it may seem. There are a range of possible explanations for this pattern which may have less to do with aversion to community control of education than with the complexities of local politics and history (Schwab 1996).

Discussion

Utility of the NATSIS

Though the 1994 NATSIS leaves some gaps in data and raises additional important questions about the educational experience of Indigenous Australians, it has been a very useful exercise and one which could provide even higher quality data if repeated. While some of the Survey questions yielded data available from other sources (for example, persons attending school), other NATSIS findings provide for the first time attitudinal and perception data for both the whole of the nation and (within limits set by the ABS) regional levels. We know a great deal about the characteristics of schools and much about the characteristics of students, but never before has a snapshot of Indigenous parents' perceptions of their children's educational experience been possible; this is a significant contribution to the development of educational baseline data. Furthermore, while the coordination of State and Territory educational statistics is improving all the time, these statistics are collected by educational agencies and so are unlikely to ever provide the sort of objective assessment possible through the NATSIS.

Limitations and opportunities

There are a number of factors that will affect the analysis of the NATSIS school-related data. The delayed release of the unit record files has slowed analyses of the NATSIS data, and the ABS decision not to release data at lower geographical levels will certainly limit the range and usefulness of some important analyses. For some areas of data, this decision has veiled answers to important questions that could steer policy and service delivery. In addition, while there are some intriguing analyses to be carried out, many of these will be hampered by large standard errors around the estimates for many of the sub-samples. However, decreasing the standard errors would require a much larger - and more expensive - survey.

The cost and scale of the survey is a critical factor and if the exercise is repeated it is crucial that every question yields useful data; though much of the data from the education section is useful, there is clearly room for improvement. For example, question 27, 'Do you think teachers should go to an ATSI cultural awareness program?' was answered affirmatively by 89 per cent of the respondents. While this is worth knowing, it provides little insight into the real issues presumably underlying the question and response. While it is conceivable that those who developed the survey merely wanted to gauge opinion regarding such programs, it seems more likely that there was an assumption that the experience of Indigenous students suggests the need for such programs. Yet, the data fail to identify the basis of that need. To get at the real issue, it would be necessary to revise the question and sharpen the focus and address concrete behaviours and experiences. Thus it would appear far more useful, for policy purposes, to ask a question that begins to measure if and/or how often a student has experienced racism or discrimination in the classroom.

Question 28, 'Would you prefer that ATSI people had more say in their children's education?' is another question that yields little of value. The question is framed in such a way as to suggest the appropriate answer and perhaps not surprisingly, 89 per cent of respondents agreed. It is, in fact, hard to imagine a circumstance where Indigenous parents would not want 'more say' in their children's education. Even if they did not, there is nothing in the question to assist in understanding why this might be the case. Similarly, question 34, 'At school, are you able to study the subjects you want to?' provides nothing of value in understanding the complexities of providing appropriate curricula for Indigenous students. For those respondents who indicated dissatisfaction by indicating 'no', there is no way to separate, let alone identify, those individuals who desired options to study an Indigenous language or Indigenous dance from those who bemoaned the lack of motor vehicle repair or chemistry courses. As with question 27, there is a need for a much sharper question to identify the real needs, not just vague dissatisfaction.

Finally, question 29d, 'Are you happy with the education your children are receiving at school?' raises far more issues than it resolves. The recent National Review of Education for Aboriginal and Torres Strait

Islander Peoples documents the relatively lower performance of Indigenous Australians across the range of key national educational indicators (Commonwealth of Australia 1995), yet NATSIS respondents overwhelmingly indicated happiness with the educational experiences of their children. There is something seriously amiss, but the Survey questions provide no assistance in understanding this disparity. There is clearly a need to dissect the issue more carefully in any future survey.

The 1994 Survey also highlights the difficulty in interpreting some of the school-related findings. As noted earlier, 46.8 per cent of rural persons with children in school indicate they are involved in decision-making at the school. This is an astounding finding and, even allowing for increased participation through the Aboriginal Student Support and Parent Awareness Program, if accurate, probably exceeds parental participation at all but the most exclusive non-government schools in the country. Yet it is difficult to interpret this figure because the Survey question is so unfocused. Again, like the problem with sample size, getting better data may increase the cost of the survey, but it may also be possible to merely sharpen the questions. For example, the existing question on involvement in decision-making could be replaced by a question that attempts to quantify membership of school committees, number of school meetings attended and visits to classroom. This would be enormously useful in attempts to better understand the practical reality of Indigenous parental involvement in schools, and would address what every major educational review of the last 20 years has identified as a critical issue for Indigenous education (Schwab 1995).

The use of open-ended questions in the education section of the 1994 NATSIS also resulted in some problematic results. For example, question 29e asks 'What is the main reason you are not happy with your children's education?' The respondent is provided an open box to fill in the reason; this contrasts with other questions in the education section where respondents are offered a range of possible reasons and an 'other (specify)' option. As a result, the data yielded by question 29e are very difficult to interpret. For example, the open-ended responses of 4.0 per cent of those who indicated they were not happy were clustered under the reason 'bad teaching'. This is so broad as to be virtually meaningless. In a survey of this sort, it would be far more efficient and ultimately more useful to pilot an open-ended question and from that exercise develop a range of meaningful options. This approach would also be useful for developing a question to address the reasons why such a high proportion of Indigenous Australians indicate they are happy with their children's education.

Still, there is much that is useful in the findings and good potential for analyses of the interrelationship of some of the key educational and other variables. For example, one of the most striking findings among the education data is the high level of reported parental satisfaction with children's education. This finding is difficult to understand in the face of other data from a range of sources indicating the performance, participation

and retention of Indigenous students is well below that of other Australians. Using simple chi-square analyses on data from the Confidentialised Unit Record Files, a range of variables were related to the 'happy with children's education' variable in search of factors that might shed some light on this finding. Among the variables examined were: family income, participation in cultural activities, visits to homelands, the speaking of an Indigenous language, Aboriginality of household, employment status, distance from school, and involvement with an Aboriginal organisation. While in some cases there was a highly statistically significant relationship between the variables (due in part to the large numbers) the differences in the proportions who reported being happy or not happy with their children's education (for example, 82.1 per cent involved with an Aboriginal organisation and 92.3 per cent not involved with such an organisation) were not sufficient to have any real policy relevance. Clearly, there are many more analyses to be carried out on the unit record data. It is hoped that research with this important new data resource will be instrumental in expanding understanding of the factors that influence the educational success of Indigenous Australians.

Note

1. There are in fact 129 primary questions, but questions 1 and 2 were intended to establish whether or not the respondent is a visitor to the household and whether or not he or she is of Aboriginal or Torres Strait Islander descent. The final 13 questions of the Survey were asked only of non-Indigenous people in the surveyed household.

References

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *National Aboriginal and Torres Strait Islander Survey 1994: Adelaide ATSIC Region*, cat. no. 4196.00.017, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *National Aboriginal and Torres Strait Islander Survey 1994: Ceduna ATSIC Region*, cat. no. 4196.00.018, ABS, Canberra.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vols 1-4 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Commonwealth of Australia 1994. *National Review of Education for Aboriginal and Torres Strait Islander Peoples: A Discussion Paper*, (Chair M. Yunupingu), Department of Employment, Education and Training, Canberra.

Commonwealth of Australia 1995. *National Review of Education for Aboriginal and Torres Strait Islander Peoples: Final Report*, (Chair M. Yunupingu), Department of Employment, Education and Training, Canberra.

Groome, H. and Hamilton, A. 1995. *Meeting the Educational Needs of Aboriginal Adolescents*, National Board of Employment, Education and Training, Australian Government Publishing Service, Canberra.

Hughes, P. (Chair) 1996. 'A national strategy for the Education of Aboriginal and Torres Strait Islander Peoples 1996-2002' (unpublished draft), Ministerial Council on Education Employment, Training and Youth Affairs, Melbourne.

Schwab, R.G. 1995. 'Twenty years of policy recommendations for Indigenous education: overview and research implications', *CAEPR Discussion Paper No. 92*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Schwab, R.G. 1996. 'Having it 'both ways': the continuing complexities of community-controlled Indigenous Education', *CAEPR Discussion Paper No. 111*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

9. Post-secondary qualifications and training for Indigenous Australians

A.E. Daly

Many aspects of government policy have focused on the importance of education and training as a means by which the economic status of Indigenous Australians may be raised. The Aboriginal Employment Development Policy (AEDP) and the Aboriginal Education Policy (AEP), for example, both emphasise the role of improved education and training in raising Indigenous incomes. The Royal Commission into Aboriginal Deaths in Custody (Commonwealth of Australia 1991) also emphasised the association between lack of education, lack of employment opportunities and the relatively high incidence of incarceration among Indigenous Australians. This emphasis on the role of education and training is further supported by research findings. Daly (1995), using 1991 Census data, concluded that, holding other things constant, the probability of an Indigenous male with a university degree being in full-time employment was 21 percentage points higher than for one with no qualifications. The effect for females was even stronger; the probability of an Indigenous female with a university qualification being in employment was 48 percentage points higher than for one without qualifications. Similar results came out of a more recent study using data from the National Aboriginal and Torres Strait Islander Survey (NATSIS) (Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996). As considerable resources have been directed toward Indigenous education and training and there is strong evidence that these variables are important determinants of employment status and income, the results of the NATSIS on education and training are of particular interest to policy makers.

The Census of Population and Housing has provided a valuable source of information on the educational status of Indigenous Australians since 1971. The census includes questions for those undertaking further post-secondary education at the time of the census, on the institution and type of course they are undertaking, and whether study is being undertaken on a full-time or part-time basis. There are also questions relating to the stock of educational qualifications held by those aged over 15 years. Individuals are asked to state their age on leaving school, their highest level of qualification attained and the field of that qualification. These questions, among others, have also been covered by the NATSIS. This paper focuses on the NATSIS results, making some comparisons with the census where applicable.

There are a number of questions which policy makers might be interested in answering with the NATSIS data. The first group of questions relates to the extent of education and training received by Indigenous Australians, that is, a description of the broad facts; a second group of questions relates more to particular policies in this area. Given the limited space available, it is proposed to concentrate on the second group of questions with a brief summary of some of the broader conclusions.

The broad picture

There are a number of stylised facts which come out of the NATSIS and which support, to varying extents, earlier census results. Indigenous Australians, on average, have relatively little in the way of post-secondary qualifications (Table 9.1). One of the difficulties in going beyond broad statements about education and training such as this one arises from this fact. The NATSIS is a survey and Indigenous Australians who have received post-secondary education are relatively small in number. This limits the ability of the researcher to use these data to look at particular issues in more detail. The census and administrative data sets such as the one collected for the review on the AEP (Commonwealth of Australia 1994) may prove more useful for addressing some issues.

Table 9.1. Highest qualification held by Indigenous Australians aged 15 years and over, 1991-94.

Level of highest qualification	1991 Census Per cent	1994 NATSIS Per cent
Post-secondary qualifications		
Tertiary diplomas and degrees	0.9	3.4
Certificates	8.4	13.3
No post-secondary qualifications	90.7	83.1
Total	100.0	100.0

Source: ABS 1995: Table 32; Daly 1995: Table 1.2.

However, the NATSIS sample is sufficient in size to make other generalisations. Those who do have educational qualifications are more likely to be in employment than those without, and are more likely to live in urban than rural areas (ABS 1995; ABS/CAEPR 1996). Higher educational qualifications are associated with higher median incomes (Table 9.2).

There are some features of Tables 9.1 and 9.2 which require comment given the emphasis of this workshop on statistical issues. Table

9.1 presents a broad comparison between census and NATSIS data on the stock of qualifications held by Indigenous Australians. The difference in the findings has already been commented on (ABS/CAEPR 1996: 36). It is difficult to accept that such large changes in the stock of education actually took place over three years. Differences between the census and the NATSIS in response rates and the effectiveness in recording information may account for the different results, but it is an issue which requires further investigation.

Table 9.2. Level of highest qualification by median income, males and females, 1994.

Level of highest qualification	Males $	Females $
Bachelor/postgraduate	33,393	24,727
Diploma	25,293	16,617
Skilled vocational	23,903	15,323
Basic vocational	13,607	13,939
Year 12 certificate	18,445	10,979
Year 10 certificate	11,624	18,035
No qualifications	9,341	9,166

Source: NATSIS unit record file.

Another issue deserving comment is the high median income of Indigenous females with Year 10 certificates (Table 9.2). The data show a bi-modal income distribution for this group with observations concentrated in the $8,001-$12,000 category and the $25,001-$30,000 category. It would be interesting to know more about the industry and occupation of those in the higher income category. It is not possible to check these results against the census, as the census does not include Year 10 certificates among the recorded qualifications.

Some policy-related results

Given the limited space available here, it was decided to focus on four questions which may be of interest to policy makers. These questions are related to the Survey results on training, as this seems the area where the NATSIS data have the ability to provide most new information compared with the census. The results show that 15,600 Indigenous people aged 15 years and over (9.1 per cent of the population) attended some training course in the 12 months before the Survey. They cover all those who have undertaken a training course. Some courses were 'less than four weeks duration', meaning they may have only involved half a day of training,

while other courses were longer than 26 weeks. The results therefore cover a range of training courses designed, presumably, to meet very different ends. The one-day training course offered to employees on a new computer package serves a very different end to a 26-week course conducted by a university. These differences should be remembered when considering the aggregate results presented here.

The first of these questions has been addressed in the ABS/CAEPR study of employment outcomes: is additional training associated with a higher probability of employment? The ABS/CAEPR study concluded, with the aid of regression analysis, that attendance at a training course in the last 12 months was associated with a higher probability of being in employment for both males and females. Of those who did attend a training course, 57.6 per cent of males and 45.3 per cent of females were in employment (either Community Development Employment Projects (CDEP) scheme or non-CDEP employment). These figures compared with 43.8 per cent of males and 25.6 per cent of females who had not attended courses but were in employment (ABS/CAEPR 1996: 38). However, before any causal links between training and employment are made, it is important to consider the question asked in the NATSIS. The question related to any training courses undertaken in the past 12 months, so positive answers were given by those already in employment and sent on a training course by their employer. Employment causes training for this group, not the other way around. For the policy analyst interested in knowing whether training programs help people into jobs, the NATSIS data are of limited interest. A more focused question on whether training preceded employment would be more relevant. The Department of Employment, Education, Training and Youth Affairs (DEETYA) administrative data set for employment programs may be of more use in addressing this question (Taylor and Hunter 1996).

The second question to be considered is what types of training were undertaken and what was the rate of completion of these different types of courses. For the policy maker interested in what type of training services to provide, these data provide some interesting information. Tables 9.3 and 9.4 present some results. Table 9.3 shows that most of the training courses undertaken by men were in trade, transport and 'other' categories. The highest rates for not completing courses were in English, trade and management courses. Indigenous females attended different types of courses from Indigenous males. Clerical, 'other' and general computing were the major types of courses. The relatively high levels of incompletion of courses for Indigenous females were for the clerical and general health courses. The rates of incompletion should be treated with caution where there are a small number of course participants and the results may be heavily influenced by a few individuals.

The second aspect of the types of courses being undertaken relates to their length and the training provider (see Table 9.4). About one-third of courses for both males and females were of short duration, four weeks or

less. Over half of the courses were provided outside the public education system of universities and TAFE colleges. It is not clear from the data how these outcomes were specifically determined; was it in response to demands for particular types and lengths of training courses or were the outcomes determined by the type of training supplied? Once again, for policy makers designing training courses, it would be helpful to be able to distinguish training undertaken when in employment from training aimed at increasing the probability of employment.

Table 9.3. Type of training by whether completed or not, Indigenous males and females, 1994.

Type of training	Completed Per cent (1)	Still studying Per cent (2)	Not completed Per cent (3)	Total Per cent (1+2+3)
Males				
Management	2.7	1.6	0.8	5.2
Trade	12.7	2.5	3.0	18.3
Clerical	1.6	3.2	0.5	5.3
Sales	3.2	1.8	0.2	5.2
Transport	15.2	2.9	2.2	20.3
General computing	7.3	1.5	0.3	9.1
General health	3.7	1.2	0.1	5.0
English	1.4	1.6	0.9	3.9
Personal development	7.0	2.8	0	9.8
Other	12.0	4.2	1.7	17.9
Total [a]	66.7	23.5	9.8	100.0
(Number)	(5,476)	(1,927)	(801)	(8,204)
Females				
Management	6.8	1.4	0.4	8.6
Trade	0.0	0.0	0.1	0.1
Clerical	13.2	0.9	6.6	20.7
Sales	9.9	1.0	1.3	12.2
Transport	2.6	0.5	0.3	3.4
General computing	11.7	3.0	0.2	14.9
General health	4.9	2.5	1.1	8.5
English	3.3	1.4	0.3	5.0
Personal development	7.6	2.0	1.1	10.6
Other	9.3	5.1	1.4	15.8
Total [a]	69.3	17.9	12.9	100.0
(Number)	(4,257)	(1,097)	(790)	(6,144)

a. Excludes the 'not stated' category.

Source: NATSIS unit record file.

A third issue highlighted here relates to the role of the CDEP scheme in increasing the skill base of Indigenous Australians. The question of interest

is what types of training did CDEP scheme participants receive and how did they differ from those of other Indigenous Australians employed outside the CDEP scheme. Table 9.5 compares the types of training for Indigenous Australians in CDEP and non-CDEP employment. For males, training was concentrated much more in trade courses for CDEP scheme participants than for those in non-CDEP scheme employment, but it is important to note the small sample size for females participating in the CDEP scheme. For females, there was more clerical and sales training and less management training for CDEP scheme participants compared with others in employment. Training courses for CDEP scheme participants included fewer courses of four weeks or less duration than for those employed elsewhere. The evidence presented here suggests that the training courses received by CDEP scheme participants differ from those received by Indigenous Australians in employment elsewhere. The reasons for these differences remain an area for future research. They may well reflect the different initial skill levels of the two groups.

Table 9.4. Length of training course by training provider, males and females, 1994.

	Provider			
Length of course	University Per cent	TAFE Per cent	Other Per cent	Total Per cent
Males				
4 weeks or less	0.1	9.2	23.8	33.8
5-8 weeks	1.7	5.4	13.8	20.9
9-13 weeks	0.7	7.9	12.0	20.6
14-26 weeks	0.0	5.0	7.4	12.4
27 or more weeks	2.2	2.5	7.6	12.2
Total[a]	5.4	30.0	64.6	100.0
(Number)	(299)	(1,662)	(3,579)	(5,540)
Females				
4 weeks or less	5.7	4.9	20.9	31.5
5-8 weeks	0.4	5.5	13.5	19.4
9-13 weeks	0.0	7.7	10.2	17.9
14-26 weeks	1.1	9.8	8.3	19.1
27 or more weeks	3.6	4.5	3.9	12.1
Total[a]	10.9	32.3	56.7	100.0
(Number)	(506)	(1,500)	(2,632)	(4,638)

a. Excludes the 'not stated' category.

Source: NATSIS unit record file.

The final issue to be considered relates to the training received by unemployed Indigenous Australians. Indigenous Australians are one of the

disadvantaged groups recognised by DEETYA for early attention when unemployed. If this policy goal were effective, then a relatively high proportion of unemployed Indigenous Australians might be expected to have been on a course. It is important to remember, however, that there are other forms of assistance which can be offered to the unemployed, so not all unemployed people could be expected to have been on courses. Some results on training courses for the unemployed are presented in Table 9.6. They show that, while 15 per cent of the unemployed had been on courses, 85 per cent answered 'no' to the question 'Have you done any study or training courses in the last year?' It would be interesting to compare these numbers with the numbers of registered Indigenous unemployed at the Commonwealth Employment Service (CES) offices who had received training.

Table 9.5. Type of training for Indigenous males and females in CDEP and non-CDEP employment, 1994.

Type of training	CDEP employment Per cent	Non-CDEP employment Per cent	Total Per cent
Males			
Management	3.8	5.9	5.6
Trade	38.0	15.8	19.1
Clerical	0	8.1	6.9
Sales	2.7	4.2	4.0
Transport	9.6	22.4	20.5
General computing	1.3	10.1	8.8
General health	3.9	7.6	7.1
English	2.8	2.7	2.7
Personal development	7.8	3.7	4.3
Other	3.0	19.3	20.9
Total[a]	100.0	100.0	100.0
(Number)	(637)	(3,686)	(4,323)
Females			
Management	3.7	14.5	13.7
Trade	0.0	0.0	0.0
Clerical	22.3	13.3	14.0
Sales	18.6	8.7	9.5
Transport	0.0	2.1	1.9
General computing	7.4	17.1	16.4
General health	8.8	15.0	14.5
English	10.7	2.6	3.2
Personal development	2.3	8.8	8.3
Other	26.0	18.0	18.6
Total[a]	100.0	100.0	100.0
(Number)	(215)	(2,588)	(2,803)

a. Excludes the 'not stated' category.

Source: NATSIS unit record file.

The data do not show any obvious trend of increasing participation in courses with duration of unemployment spell. They show that unemployed females were more likely to go on courses than males; 17 per cent compared with 13 per cent. It is difficult from the table presented here to derive any firm conclusions about the availability of training programs to the unemployed, especially when the unemployed identified here may be different from the unemployed registered at the CES. The DEETYA administrative data sets may provide more information on the training available to the unemployed.

Table 9.6. Length of unemployment spell by number of training courses attended, Indigenous male and female, 1994.

Length of unemployment spell	Number of training courses attended: One Per cent	Two Per cent	Three Per cent	Not applicable Per cent	Total[a] Number
Males					
Less than 3 months	7.3	2.7	0.0	90.0	100.0 (4,875)
3-6 months	8.4	3.9	0.0	87.5	100.0 (3,659)
6-9 months	20.7	1.8	0.4	77.1	100.0 (1,894)
9-12 months	5.8	1.6	0.0	92.7	100.0 (1,651)
12 or more months	11.2	2.2	0.0	86.5	100.0 (11,918)
Females					
Less than 3 months	15.9	4.1	2.7	77.3	100.0 (3,759)
3-6 months	19.5	8.1	0.0	72.3	100.0 (1,930)
6-9 months	11.1	2.5	0.0	86.4	100.0 (786)
9-12 months	21.4	3.6	0.0	75.0	100.0 (1,270)
12 or more months	7.6	3.8	0.2	88.5	100.0 (7,933)

a. Excludes the 'not stated' category.

Source: NATSIS unit record file.

Conclusion

This chapter has considered some of the evidence from the NATSIS on post-secondary education and training. The NATSIS shows, as the census has before, that Indigenous Australians have relatively low levels of educational qualifications. The collection of additional variables in the

NATSIS offers the opportunity to consider, for example, how health status and involvement with the criminal justice system may affect educational attainment. However, as qualified Indigenous people are in the minority, the extent to which further research on the group is possible using the NATSIS is limited by the size of the sample.

The focus here has been on the results about participation in training programs. The NATSIS shows that about 9 per cent of the Indigenous population aged 15 years and over had attended a training program in the 12 months before the Survey. Attendance at training programs was associated with employment, but it was not clear whether training increased the probability of employment or the other way around. Indigenous people were engaged in a variety of training activities, but most of the courses were of short duration and conducted outside the publicly provided education system. There was some evidence that, for those in employment, CDEP participants received different types of training from other employed Indigenous people. A final issue considered here was the accessibility of training programs for the unemployed. The data show that 15 per cent of the unemployed in the Survey had been on a training program in the last 12 months, but there was no obvious correlation between duration of unemployment and attendance at a training course. However, given the range of programs available to the unemployed, and the problems of matching the unemployed in this Survey with the unemployed registered at the CES, it is not clear whether this is a matter of concern or not.

The NATSIS offers the opportunity to consider a range of questions related to Indigenous Australians, with its systematic and nationwide coverage. However, there are limitations to the data and, for many specific policy questions, it is likely that administrative data sets will continue to provide the best sources. One major issue for any future survey is to distinguish between training which has helped people into jobs and training, supplied by employers, which aims to improve the performance of those already employed.

References

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vols 1-4 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Commonwealth of Australia 1994. *National Review of Education for Aboriginal and Torres Strait Islander Peoples: Statistical Annex*, (Chair M. Yunupingu), Department of Employment, Education and Training, Canberra.

Daly, A.E. 1995. *Aboriginal and Torres Strait Islander People in the Australian Labour Market*, cat. no. 6253.0, Australian Bureau of Statistics, Canberra.

Taylor, J. and Hunter, B. 1996. 'Indigenous participation in labour market and training programs', *CAEPR Discussion Paper No. 108*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

10. Housing data from the NATSIS: can it assist with program evaluation?

W. Sanders

In the 1992 publication of the Centre for Aboriginal Economic Policy Research (CAEPR) prospectively examining options for a national survey of Indigenous Australians, Gray contrasted data available on Aboriginal housing from population censuses with Aboriginal health data. The former, together with administrative data, 'provided a quite satisfactory basis for analysis of many of the issues in Aboriginal housing, at least in terms of describing the stocks of housing available to Aboriginal families and housing costs' (Gray 1992: 116). It had been possible, he argued, citing his own earlier work (Gray 1989), 'to produce a more or less complete analysis of the program efforts of Commonwealth and State authorities in housing Aborigines' (Gray 1992: 116). Gray did, however, go on to identify 'two aspects of census description of housing' which had 'caused problems' and on which a survey of Indigenous Australians might improve. One of these was distinguishing ownership of 'standard' housing from improvised dwellings and the other was distinguishing 'dwellings rented from Aboriginal community housing organisations' from dwellings rented from 'other non-government landlords' (Gray 1992: 116-7). Both, he argued, were 'important distinctions to make in any analysis of housing programs' for Indigenous Australians (Gray 1992: 117). But the censuses had little to offer on either. Gray also went on to argue that care was needed in asking:

> attitudinal questions about housing in a survey. If people (Aboriginal or non-Aboriginal) are asked whether they would like a different type of house, or something additional in their present house, they may well answer 'yes' without considering everything that an affirmative answer entails (Gray 1992: 117).

What could be validly asked, he suggested, was 'whether people are satisfied, or not, with aspects of their (present) housing, in particular whether amenities in the house work properly' (Gray 1992: 117).

These comments of Gray's appear to have been fairly well taken into account in designing the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). As a result, the NATSIS does yield some new and useful information about Indigenous housing. Rental from Indigenous housing organisations is clearly distinguished from other private rental, providing potential for a range of issues to be explored about different rental housing tenures which could not be explored through census data. Improvised dwellings are excluded from the NATSIS tenure breakdown, thereby overcoming the possibility of ownership of improvised dwellings being confused with ownership of 'standard' dwellings. The NATSIS also

includes a number of more detailed questions about housing, such as whether dwellings meet the perceived needs of households and whether amenities in the dwelling have not worked in the last four weeks. These sorts of questions add a new dimension of housing information which was unavailable from censuses.

So what does the 1994 NATSIS tell us about the housing status of Indigenous Australians? And can it assist with housing program evaluation? To begin to answer these questions we need to have some idea of policy objectives, programs outputs and tenure outcomes in Aboriginal and Torres Strait Islander housing.

Policy objectives, program outputs and tenure outcomes

One policy objective in Indigenous housing over recent years has been to increase levels of home ownership. The program instrument for achieving this objective has been a subsidised home loans scheme run by the Aboriginal and Torres Strait Islander Commission (ATSIC) and its predecessors, the Aboriginal Development Corporation (ADC) and the Department of Aboriginal Affairs (DAA). From its inception in 1974 to the time of the NATSIS, this program had approved 6,823 loans, 3,843 of which remained current in mid-1994 (ATSIC 1994: 129).

Other policy objectives in Indigenous housing have been focused more broadly on the four A's of housing provision: adequacy, appropriateness, affordability and accessibility. Beyond the home loans scheme, there have been three other Commonwealth programs over the last 25 years which have pursued these policy objectives. One is a community rental housing program run by ATSIC and previously by ADC and DAA. Administrative data suggest that since its inception in 1973 this program has funded the acquisition or construction of about 500 dwellings per year by over 400 Indigenous housing organisations (ADC, DAA, and ATSIC Annual Reports, various years). A second is a States grants program which has funded the acquisition of public rental housing for Indigenous people, and in recent years also funded some community rental housing. Administrative data suggest that this program had funded the acquisition of some 17,000 dwellings since its inception in 1969 and that some 11,000 of these remained in the public rental housing stock around the time of the 1994 NATSIS (Department of Housing and Regional Development 1993: 26). A third Commonwealth program has been the provision and funding of hostel accommodation by Aboriginal Hostels Limited (AHL). In 1994, AHL owned and ran 50 hostels and funded 120 others. Together these offered 3,500 beds nightly to Aboriginal and Torres Strait Islander people (AHL 1994: 12).

As Gray suggests, censuses have provided some information in the past of relevance to a number of these programs. Combining Gray's 1989 work and output from the 1991 census produces Table 10.1. This can be

used to say a certain amount about home ownership/purchase and public/government rental among Indigenous people, but nothing useful about community and private rental. The 1994 NATSIS information, set out in Table 10.2, can be used to confirm findings related to home ownership/purchase and public/government rental and to say some things for the first time about community and private rental.

Table 10.1. Census estimates of private dwellings occupied by Indigenous households, by tenure/nature of occupancy, 1971-91.

	1971	1976	1981	1986	1991
Owned					
Number (,000)		5.4	5.0	5.4	7.4
Per cent		15	12	11	12
Being purchased					
Number (,000)	10.5	5.0	6.2	8.2	10.3
Per cent	30	14	15	16	16
Public/government rental					
Number (,000)	4.7	6.8	13.8	19.7	19.7
Per cent	14	18	33	39	30
Private and community rental					
Number (,000)	11.4	14.1	12.8	15.5	22.0
Per cent	33	38	31	31	34
Not stated					
Number (,000)	7.5	5.7	3.6	1.8	5.2
Per cent	22	15	9	4	8
Total					
Number (,000)	34.5	36.9	41.4	50.6	64.7
Per cent	100	100	100	100	100

Sources: Gray 1989; Australian Bureau of Statistics (ABS) 1993: 10, plus additional ABS information for lone person Indigenous households.

The censuses suggest that home ownership/purchase has been increasing among Indigenous Australians in absolute terms, but not in percentage terms. Numbers of home owners/purchasers among the Indigenous population have risen from around 10,000 or 11,000 in the 1970s to around 17,000 in the early 1990s, but have remained in percentage terms at just over one-quarter of Indigenous-occupied dwellings (see Table 10.1). The NATSIS tends to confirm this information. It estimated that there were 21,600 Indigenous home owners/purchasers in 1994, but that in proportional terms, this was still just above a quarter of Indigenous-occupied dwellings (see Table 10.2).

Table 10.2. NATSIS estimates of private dwellings occupied by Indigenous households, by tenure/nature of occupancy and part-of-State, 1994.

	All	Capital city	Other urban	Rural or remote
Owned				
Number (,000)	10.8	3.8	4.3	2.7
Per cent	13	13	12	13
Being purchased				
Number (,000)	10.8	5.9	3.5	1.4
Per cent	13	21	9	7
Public rental				
Number (,000)	25.4	8.9	14.8	1.6
Per cent	30	31	40	8
Other government rental				
Number (,000)	2.3	.5	.9	.9
Per cent	3	2	2	5
Private rental				
Number (,000)	15.5	7.4	6.1	2.0
Per cent	18	26	16	10
Community rental				
Number (,000)	12.5	0.8	4.3	7.3
Per cent	14	3	12	36
Other rental				
Number (,000)	3.8	0.4	1.9	1.2
Per cent	4	1	5	6
Other/not stated				
Number (,000)	5.2	0.7	1.0	3.5
Per cent	6	3	3	17
Total				
Number (,000)	86.4	28.6	37.5	20.5
Per cent	100	100	100	100

Sources: ABS 1995: 29: NATSIS unit record file.

How these outcomes might be evaluated in relation to the ATSIC/ADC/DAA home loans program is open to interpretation. They might be seen as positively indicating that numbers of Indigenous home owners/purchasers are indeed increasing. That the increase appears to be by about the number of loans given out through the ATSIC/ADC/DAA program, or perhaps a few thousand more, could be interpreted either positively or negatively. A positive interpretation might suggest that this demonstrates the necessity of the ATSIC/ADC/DAA program if Indigenous home ownership/purchase is to increase. A negative interpretation might suggest that other sources of home loans for Indigenous people appear not to be very evident and that other organisations may have used the existence of the ATSIC/ADC/DAA

program to abdicate their potential role in relation to Indigenous people and home ownership/purchase. That the proportion of Indigenous home owners/purchasers has remained just above one-quarter might also be evaluated either negatively or positively; negatively in that it has not increased, but positively in that just holding the proportion at slightly above one-quarter may be seen as a significant achievement in itself, particularly given the continuing low income status of Indigenous Australians and the decreasing levels of home ownership/purchase in the general Australian population over the last 20 years.

In relation to public/government rental, the censuses suggest that this tenure has become very significant among Indigenous Australians over the last couple of decades, both in absolute numbers and proportional terms; although in proportional terms there is some suggestion of a decrease between 1986 and 1991. Public/government rental appears in recent years to account for around one-third of Indigenous-occupied private dwellings (see Table 10.1). The 1994 NATSIS confirms this significance by suggesting that 25,400 or 30 per cent of dwellings occupied by Indigenous households are in public rental, and another 2,300 or 3 per cent are in other government rental (see Table 10.2).

How these outcomes might be interpreted in relation to the States grants rental housing program for Aboriginal and Torres Strait Islander people is, again, an open matter. Clearly the increase in public/government rental over the last two decades has been far larger than the 11,000 dwellings currently held in the public housing stock specifically for Indigenous people as a result of the States grants program. This is, at one level, to be expected. Indigenous people have a right to apply for general public rental housing and, given their low income status, should generally qualify. It may seem unnecessary, therefore, to have had an Indigenous-specific States grants program. However, the Indigenous-specific program may have produced houses for Indigenous people in locations where they might not have been built or acquired under general public housing programs and it may also have shortened waiting periods for public housing for Indigenous Australians. Both would seem to be important gains in terms of the policy goals of accessibility and appropriateness. More broadly, the Indigenous-specific program might be seen as having sensitised State housing authorities to the specific housing needs of Aboriginal and Torres Strait Islander Australians. The program may, therefore, have contributed something more than the specific 11,000 dwellings to the overall far larger increase in the numbers of Indigenous households in public/government rental housing.

As Gray observed, the censuses could contribute virtually no insights on the tenures of community rental or private rental. Together, these tenures seemed to constitute a fairly constant one-third of private dwellings occupied by Indigenous households (see Table 10.1). But given that these were in all probability very different tenures, effected very differently by program interventions, this really told us very little. Here,

the 1994 NATSIS is far more informative. It distinguishes between 15,500 private rental dwellings and 12,500 community rental dwellings (see Table 10.2).

This 1994 NATSIS community rental figure would seem fairly consistent with administrative data which suggests that the supply of community rental housing for Indigenous people has been increasing at a rate of about 500 dwellings per year since 1973. This suggests that community rental has become a quite important tenure for Indigenous people over the last 20 years; moving from accounting for virtually no dwellings occupied by Indigenous households to accounting for some 14 per cent of such dwellings. Conversely, private rental as a tenure among Indigenous people would appear to have decreased in importance; from something over 30 per cent two decades ago down to 18 per cent of occupied private dwellings in recent years. Given that private rental is perhaps the most problematic housing tenure in Australia, both in relation to long-term housing costs and security, this apparent shift away from private rental might itself be counted as a fairly significant policy and program achievement. The NATSIS can assist in making this point through rent comparison. However, before examining rent comparisons, it may be useful to note one other feature of the NATSIS tenure breakdown figures in Table 10.2; geographic differentiation across part-of-State.

Table 10.2 clearly demonstrates that the housing tenures of Indigenous people vary greatly across part-of-State. The tenure profile of Indigenous people in the capital cities shows continuing high levels of private rental and very little community rental. It also shows slightly higher home purchase than for the total Indigenous population nationally. In other urban areas, the Indigenous housing tenure profile appears to be skewed fairly significantly towards government rental in comparison to the national profile, but not greatly at the expense of any one other tenure. In rural and remote areas, there is a quite major skew towards community rental and away from purchasing, private and public rental.

Two other notable features of the tenure breakdown in rural and remote areas are the maintenance, perhaps contrary to expectations, of national average levels of dwelling ownership (13 per cent) and high level of tenure 'not stated'. These two features together suggest that Gray's idea of separating out ownership of 'standard' from 'non-standard' dwellings among Indigenous Australians might not be as simply achieved as eliminating 'improvised dwellings' from the NATSIS tenure breakdowns. These NATSIS tenure breakdowns of non-improvised dwellings in rural and remote areas probably include significant numbers of dwellings, of varying standards, on inalienable Indigenous group land. Some of these non-improvised dwellings may possibly be classified as owned, some as tenure 'not stated' and some as community rental. So there may still be elements of what Gray thought of as 'non-standard' dwelling ownership in the NATSIS figures, as well as in the census figures. Distinguishing

between different types of ownership in Indigenous housing, as Gray suggests is required, might not be as simple or as feasible as he thought.

The general point to be drawn from these NATSIS tenure breakdowns by part-of-State is that the impact of various Indigenous housing programs might be quite geographically differentiated. Some caution is required, therefore, in discussing tenures and programs in comparison to each other at aggregate geographic levels.

Rent comparisons and affordability

In its publication on the Aboriginal and Torres Strait Islander population from the 1991 Census, the ABS gave a rent comparison between public/government and private/community landlords. The comparison showed the rents of private/community landlords to be slightly higher than those of public/government landlords (ABS 1993: 10). However, those with any practical knowledge of Indigenous housing would probably suggest that these comparisons were of little use because of major differences between private and community renting. The NATSIS housing data, with its better tenure breakdown, confirms this suggestion.

Table 10.3. Rented private dwellings occupied by Indigenous households: weekly rent by type of landlord, 1994.

	Type of landlord		
Weekly rent ($)	Private Per cent	Public Per cent	Community Per cent
0-47	5.8	27.1	55.2
48-77	17.1	43.0	29.3
78-107	15.2	16.8	8.6
108-137	27.3	7.5	4.2
138-167	22.2	2.3	0.6
168+	12.4	3.2	2.1
Total	100.0	100.0	100.0
Number (,000)	15.6	25.4	12.5

Source: ABS 1995.

The NATSIS data on rents does suggest some fairly major housing cost differences between private, public and community rental tenures (see Table 10.3). Of the three, private rental was by far the most expensive, while community rental was by far the cheapest. Eighty-five per cent of community rents were below $77 per week, while 77 per cent of private rents were above that level. This finding emphasises the lack of utility of the census's rental tenure breakdown, which has until now combined these

two tenure categories.[1] Public rental occupies something of a middle position between these two cost extremes, though perhaps somewhat closer to community rental than private rental (see Table 10.3). A tenure shift towards public and community rental, and away from private rental, would seem, therefore, to be contributing quite significantly to the policy objective of affordability in Indigenous housing.

Table 10.4. Rented private dwellings occupied by Indigenous households: weekly rent by type of landlord by part-of-State, 1994.

Weekly rent ($)	Type of landlord		
	Private	Public	Community
Capital city			
0-47	*4.6	29.8	**10.6
48-77	11.9	40.4	**54.9
78-107	6.7	18.2	*19.7
108-137	25.6	*5.8	**12.1
138-167	31.4	*3.2	**2.7
168+	19.8	*2.6	**0.0
Total	100.0	100.0	100.0
Number (,000)	7.7	8.6	0.8
Other urban			
0-47	*3.5	25.0	28.9
48-77	15.4	43.8	45.1
78-107	26.3	17.2	15.0
108-137	34.4	9.0	*7.3
138-167	16.7	*2.0	**1.2
168+	*3.7	*2.9	**2.4
Total	100.0	100.0	100.0
Number (,000)	6.1	15.3	4.3
Rural and remote			
0-47	*18.5	*33.0	75.7
48-77	44.2	51.1	17.2
78-107	*14.3	**3.9	*3.6
108-137	*11.0	**1.0	**1.4
138-167	**1.8	**0.0	**0.0
168+	*10.2	*10.9	*2.1
Total	100.0	100.0	100.0
Number (,000)	1.8	1.4	7.3

* Standard error between 25 per cent and 50 per cent of estimate.
** Standard error greater than 50 per cent of estimate.

Source: ABS 1995.

Bearing in mind the very geographically differentiated tenure patterns of Indigenous people revealed in Table 10.2, it may be useful to examine the rents of these three different tenures broken down by part-of-State. Table

10.4, which does this, suggests that the position of private rental as the most expensive rental tenure remains clear across all part-of-State, but that the cost differential between public and community rental is not always so clear. In capital cities, it looks as if public rental is in fact somewhat cheaper than community rental and in other urban areas the two tenures have fairly close to equal rent profiles (see Table 10.4). The aggregate national pattern of community rental being cheaper than public rental appears to be derived entirely from rural and remote areas, where community rental is not only more abundant but also associated with very low rents; 76 per cent of the 7,300 community rental dwellings in this part-of-State having rents below $48 per week. Equally, it can be observed that community and private rental do become significantly cheaper lower down the urban hierarchy, but public rental only gets marginally cheaper.

Adequacy and appropriateness

While NATSIS rents data provide new insights relating to housing affordability for Indigenous people, they do not tell us anything about other policy goals such as dwelling adequacy or appropriateness. However, there are other aspects of NATSIS which can give us some insights in this area. One question asked whether the dwelling met the needs of the people living there, and then, in cases where it did not, probed the nature of problems. As well as for the three major rental tenures, responses can be usefully identified for purchasers and owners, as set out in Table 10.5.

Table 10.5. Indigenous households in private dwellings by tenure: whether dwelling meets needs of household and problems identified if not, 1994.

	Private rental	Public rental	Community rental	Purchaser	Owner
Dwelling					
Meets needs (per cent)	86	74	62	91	95
Does not meet needs (per cent)	14	26	38	9	5
Total number (,000)	15.6	25.4	12.5	10.8	10.8
Per cent identifying problem					
Needs repair	7	14	28	*3	*2
Inadequate bathing facilities	4	4	16	*3	*2
Needs better insulation/ventilation	4	7	13	*2	**1
Not enough bedrooms	7	12	24	7	*2
Not enough living area	7	11	21	6	*1

* Standard error between 25 per cent and 50 per cent of estimate.
** Standard error greater than 50 per cent of estimate.

Source: ABS 1995: NATSIS unit record file.

There is clearly a hierarchy among the tenures ranging from community rental being the least successful at meeting perceived household needs, through public rental, private rental, and then purchasing and owning being the most successful. This hierarchy, even among the renters, suggests that the affordability of public rental, and particularly community rental, may have some costs in terms of the adequacy and appropriateness of the housing provided. At one level this might seem a little surprising. While public rental might be expected to attract some criticism for its centralised bureaucratic administration and standardised inflexible rules, community rental is often portrayed as a tenure which is responsive and flexible to the wishes of its clientele. This does not seem to be borne out by the high levels of perceived unmet needs and problems identified by community renters. The image of community rental which one might extract from the NATSIS is rather one of a very cheap tenure with significant problems about the adequacy of the housing provided. Another NATSIS question which asked whether the dwelling's toilet had not worked in the last four weeks tends to confirm this image. Table 10.6 shows that 8.3 per cent of community renters indicated that the dwelling's toilet had not worked at some time in the last four weeks, compared to 4.5 per cent of public renters and 3.6 per cent of private renters. The low rents of community housing may, of course, be partly responsible for these adequacy problems, since low rents may mean few resources for community organisations with which to attend to repairs and maintenance.

Table 10.6. Indigenous households in private dwellings by tenure: whether toilet did not work in last four weeks, 1994.

	Private rental	Public rental	Community rental
Number toilets not working	561	1,138	1,053
Total number (,000)	15.5	25.4	12.5
Per cent	3.6	4.5	8.3

Source: NATSIS unit record file.

Given the disproportionate numbers of community renters in rural and remote areas, there is the possibility that low rents and high unmet needs and problems among community renters are a geographically-focused phenomenon, not symptomatic of the community rental program as a whole. They may derive more from life and conditions in rural and remote part-of-State than from the operations of the community rental program *per se*. One test of this possibility is to examine numbers of dwellings which housholders felt did not meet their needs, broken down by part-of-State, which is done in Table 10.7. This suggests that perceptions of dwellings

not meeting household needs were high among community renters across all part-of-State. The phenomenon does seem to be symptomatic of the whole community rental program, and not just an artifact of its differential geographic representation (see Table 10.7). Equally, public rental and other tenures retain their general places in the hierarchy of perceptions of unmet needs across all part-of-State. Some aspects of dwelling adequacy may, however, be related to remoteness rather than tenure. For example, the rate for toilets not working in the last four weeks rose to 10.7 per cent among community renters in rural and remote areas.

Table 10.7. Dwelling did not meet needs, by tenure by part-of-State, 1994.

	Private rental	Public rental	Community rental	Purchased	Owned
Per cent					
Dwelling did not meet needs					
Capital cities	13	34	43	9	*6
Other urban	15	22	29	*8	**1
Rural and remote	13	23	42	*10	*11

* Standard error between 25 per cent and 50 per cent of estimate.
** Standard error greater than 50 per cent of estimate.

Source: ABS 1995: NATSIS unit record file.

Conclusion

Housing data from the NATSIS does appear to provide some new insights and to assist in a number of ways with program evaluation in Indigenous housing. Together with census and administrative data it suggests that there have been some significant housing tenure shifts among Indigenous Australians in recent years and that these may have had significant gains for housing affordability. However, more affordable public and particularly community rental housing does emerge from the NATSIS as having some problems with its adequacy. This finding opens fertile ground for further thought and research about relationships between affordability and adequacy in Indigenous housing.

Note

1. The 1996 Census appeared to differentiate between community and private rental. So census analysis may in the future be able to provide a more useful three-way rental tenure breakdown.

References

Aboriginal and Torres Strait Islander Commission (ATSIC) 1994. *ATSIC Annual Report 1993-94*, ATSIC, Canberra.

Aboriginal Hostels Limited (AHL) 1994. *Annual Report 1993-94*, AHL, Canberra.

Australian Bureau of Statistics (ABS) 1993. *Australia's Aboriginal and Torres Strait Islander Population: 1991 Census*, cat. no. 2740.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Department of Housing and Regional Development 1993. *Annual Report 1992-93*, Department of Housing and Regional Development, Canberra.

Gray, A. 1989. *20 Years of Aboriginal Housing: Reflections and Prospects*, National Centre for Epidemiology and Population Health, The Australian National University, Canberra.

Gray, A. 1992. 'Health and housing in Aboriginal and Torres Strait Islander communities', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

11. The NATSIS and policy and planning in Aboriginal health

I. Anderson and B. Sibthorpe

The Royal Commission into Aboriginal Deaths in Custody (RCIADIC) was a significant event in Australian Indigenous affairs. The final report of the Commission documented key dimensions of the disadvantage experienced by Indigenous Australians today and its recommendations encompassed many facets of Indigenous life. Government reponses to the RCIADIC resulted in a number of concrete initiatives, including the National Aboriginal and Torres Strait Islander Survey (NATSIS).

The final report of the RCIADIC supported the development of a national survey, though it did not detail its objectives or methods. It recommended:

> That proposals for a special national survey covering a range of social, demographic, health and economic characteristics of the Aboriginal population with full Aboriginal participation at all levels be supported. The proposed census should take as its boundaries the ATSIC boundaries. The Aboriginal respondents to the census should be encouraged to nominate their traditional/contemporary language affiliation. I further recommend that the ATSIC regional councils be encouraged to use the special census to obtain an inventory of community infrastructure, assets and outstanding needs which can be used as data for the development of their regional plans (Commonwealth of Australia 1991a: 62).

This recommendation arose in the context of a discussion concerning the development of social indicators. Such indicators were described as 'pieces of factual information, often presented in the form of statistics, that may be used to point (or 'indicate') the way ahead' (Commonwealth of Australia 1991b: 50). In developing its view on these issues, the Commission had considered some work presented by Gray and Tesfaghiorghis (subsequently published 1991) who analysed existing data in order to demonstrate trends in Aboriginal population structure and distribution and key social and economic indicators. Health-related information focused primarily on assessment of mortality rates, including infant mortality rates. They also outlined a strategy for the use of data collection processes in the development of policy (Gray and Tesfaghiorghis 1991: 12-15). In the RCIADIC report Johnston commented that, provided indicators are 'accurate, comprehensive and appropriate to the task for which they are being used ... they may contribute to effective policy making' (Commonwealth of Australia 1991b: 50). In this context, the RCIADIC report emphasised the need to develop social indicators that are culturally appropriate, and which provide a balanced mix of processual and outcome

data. However, it is also noted that: 'The Aboriginal population is highly heterogeneous. Data aggregated up to the national (or even State) level are frequently of limited assistance in targeting government programs accurately, and may actually obscure major differences in the Aboriginal populations' (Commonwealth of Australia 1991a: 53). Thus the recommended national survey was intended to produce data that could be aggregated at the Aboriginal and Torres Strait Islander Commission (ATSIC) regional council level.

The NATSIS was implemented as part of the Commonwealth Government's response to the RCIADIC. In this, the Commonwealth received support from all States and Territories, with the partial exception of Queensland. The Queensland position was that 'this recommendation confuses the concepts of 'survey' and 'census''. A specific census for the Indigenous population was not supported, but the collection of additional data through the national census was supported (Commonwealth of Australia 1992: 162). Nevertheless, the Australian Bureau of Statistics (ABS) commenced work on developing the NATSIS in 1992-93. Technical Reference Groups (TRGs) were established for each of the subject areas to be covered by the Survey. Data collection took place between April and July 1994. Approximately 90 Aboriginal and Torres Strait Islander people were recruited and trained to undertake personal interviews with respondents and around 15,700 Aboriginal people were interviewed (ABS 1995).

For the health area, the TRG included Aboriginal health professionals working in both the State and community controlled sector and representatives from ATSIC, the ABS, the Australian Institute of Health and Welfare (AIHW), and the Department of Human Services and Health.

In keeping with the Commissioner's view that the Survey should cover 'a range of social, demographic, health and economic characteristics' (Commonwealth of Australia 1991a: 62) the NATSIS had a broad range of stakeholders, drawn in both by the process of implementing a response to the RCIADIC, as well as their programmatic and institutional interests. This array of interests included ATSIC and its components, including the regional councils; national programmatic interests, such as the employment, housing and health sectors; and local Indigenous Australian communities and their representative bodies.

Such a complex web of concerns and interests produces a number of competing pressures in a project of this scope. Institutions have differing information needs for planning and policy development. ATSIC required data useable at a regional council level in order to facilitate regional planning. The information needs of community organisations are shaped by factors such as concerns expressed by community members, and the development and delivery of local programs. State and Commonwealth bureacracies again have distinctive institutional requirements. Further, programmatic concerns overlay institutional needs; health was but one of a

number of program areas needing information, and its complex institutional framework produced a number of distinctive requirements for information.

Information needs in Aboriginal health are complex and health policy may draw on data from a range of sources. The final report of the RCIADIC commented on a range of research and data collection strategies which could guide the development of Aboriginal health policy and program delivery, including a survey, a census, administrative databases and strategic policy-driven research projects.[1] Another specific outcome of the RCIADIC was a household survey of drug use patterns among urban Aboriginal and Torres Strait Islander people (Department of Human Services and Health 1995). Each data source has its strengths and limitations and its value in a policy context depends on the objectives of information collection.

While the policy papers presented in the context of development of the NATSIS suggested value in collecting health-related information, and detailed potentially useful questions (Gray and Tesfaghiorghis 1991; Gray 1992), no-one appears to have addressed the value of a national survey in the context of a global consideration of the information needs in Aboriginal health policy and planning. This is despite the fact that prior to the conception of the NATSIS some commentators had stressed the importance of the development of the Survey within the context of a 'coordinated and holistic approach to data collection' (Altman 1992: 159). Such an approach would have considered global information needs, but in relation to methodological and cost limitations of different data sources.

While the *methodology* of the NATSIS seems to have been decided before there was any clear articulation of the specific questions the data needed to address, there was a general sense that the proposed Survey would 'value-add' to existing sources of information. In particular, it might address one of the significant gaps in existing information identified by the RCIADIC, which was a more accurate description of the diversity of need and capacity across Aboriginal and Torres Strait Islander Australia. Given the specific reference to ATSIC regional councils in the Commision's recommendation, there was also a sense that this diversity might be described in a way which would be meaningful to policy and planning at the ATSIC regional level.

We have taken as given then, that the NATSIS was intended to inform health policy and planning and 'value-add'. Our attention focused on two principal lines of inquiry: what is the *relative* burden of morbidity and risk and what is the capacity to respond. We were interested in the capacity of the NATSIS to produce useful information on both internal and external relativities. Through a very preliminary analysis, we hoped to identify questions that might be pursued in further detail and some of the strengths and limitations of this data set.

Morbidity

In the NATSIS, questions on illness and disease are of three types: a generic question which seeks information about the presence of any health problem, illness or physical or mental condition or disability; questions which relate to the presence of specific diseases or types or conditions; and questions which relate to sickness or injuries which resulted in health care seeking behaviour or limitations to usual activities in the last two weeks. There are thus both prevalence and incidence data available.

We will look in more detail at selected questions to explore the issues of relativities and value-adding. One of the best potential sources of information on relative prevalence or incidence of illness or disease is the National Health Survey (NHS). Questions asked in the two surveys about the prevalence of three major health problems are shown in Table 11.1.

Table 11.1. Comparison of selected health questions in the NHS 1994 and the NATSIS 1994.

	NATSIS 1994	National Health Survey 1994
Disease Prevalence		
Asthma	Do you get asthma?	Apart from colds or other infections, when breathing out has your chest ever sounded wheezy or whistly?
		Apart from colds or other infections, have you ever woken at night from your own coughing?
		In the last 12 months, during physical exertion have you had a wheezy chest?
		In the last 12 months, during physical exertion, have you had a bout of coughing?
		Do you have any of these conditons? asthma?
Diabetes	Do you have diabetes?	Have you ever been told by a doctor or a nurse that you have: diabetes? high sugar levels in your urine?
		Do you currently have (diabetes/high sugar levels)?
		Do you expect you may currently have: diabetes? high sugar levels in your urine?
Heart disease	Do you have any heart problems?	(none specific)

Table 11.1. Continued.

	NATSIS 1994	National Health Survey 1994
Health Care Seeking Behaviour		
Hospital outpatients/ emergency	In the last 2 weeks, have you visited emergency or outpatients at a hospital for your own health?	In the last two weeks, have you visited the outpatients section of a hospital for your own health?
		In the last two weeks, have you visited a casualty or emergency ward for your own health?
Doctor	In the last 2 weeks, have you seen a doctor, other than at the hospital?	(Apart from consultations during any hospital visits mentioned). In the last two weeks have you consulted: a general practitioner? a specialist?
Disease/illness incidence		
Visit to doctor	What sickness or injury did you have?	What were the medical reasons for this consultation?
Health-related limitations		
	In the last 2 weeks have you taken any days off or cut down on anything you usually do because you were sick?	In the last two weeks have you stayed away from your (work/ school/place of study) for more than half the day because of any illness or injury you had?
		On how many days in the last two weeks have you stayed away from your (work/ school/place of study)?
		Apart from when you were away from (work/school/your place of study). On any other days in the last two weeks have you had to cut down on anything you usually do because of [ ] illness or [ ] injury?

As can be seen, in no case is the wording in the questions exactly the same. For disease prevalence, it might be reasonable to compare the results of the two *direct* questions on asthma, but the additional questions in the NHS mean that the NHS has much higher senstivity in relation to asthma prevalence. For diabetes, it seems surprising that the NHS question: 'Have you ever been told by a doctor or a nurse that you have diabetes? high sugar levels in your urine?' was not used in the NATSIS, given the extent to which diabetes is recognised as 'sugar' by Aboriginal people. In this instance, the NHS question is probably better defined in cultural terms and so is a more sensitive instrument. There is no question in the NHS comparable to the NATSIS question on 'heart problems', though both seek information on 'high blood pressure'.

Though the wording is not the same for the disease/illness incidence questions, one might draw some comparisons between the results. For the questions which look at health-related limitations, the conflation of 'taking days off' and 'cutting down on usual activities', in the NATSIS greatly limits the potential to make comparisons with the NHS data.

The differences between the NATSIS and NHS questions possibly reflect decisions made in the interests of juggling competing interests, keeping the NATSIS to a manageable size and making the questions more 'user friendly' and culturally appropriate. Advice provided in the context of the TRGs and policy forums, such as that hosted by the Centre for Aboriginal Economic Policy Research in 1992 (Altman 1992) would have helped frame NATSIS questions from a cultural perspective. Published reports of the NATSIS do not detail the use of particular qualitative methodologies in the development of the survey instrument.

However, during the testing program the ABS documents report that all questions were 'tried out...' and 'Questions that were not found to be acceptable to the people participating in the tests have not been included in the final survey' (ABS 1995: 5). In the absence of more details in the development of this aspect of the survey it is difficult to assess the trade-off that was made with the loss of direct comparability of NATSIS and NHS questions. However, whilst it is not entirely clear why particular differences between NHS and NATSIS questions emerged, the result is a significant undermining of the extent to which a range of health indicators for Indigenous Australians can be compared with those for all Australians.

Turning now to the issue of value-adding, it is clear that, notwithstanding the limitations outlined above, the NATSIS data do add value to the information on Indigenous health already available, or likely to be available through other sources. Before 1994, statistics on Indigenous health at the national level were derived largely from the national collections, including death and hospital morbidity data, from which infant mortality, age and cause of death, and so on, were measured. Data on a wide range of other indicators such as the prevalence of self-reported diabetes or hypertension were available only through one-off local or regional research projects. It has been possible to aggregate these data to provide a more or less comprehensive picture of Indigenous health, relative to non-Aboriginal Australia (for example, Reid and Trompf 1991; Saggers and Gray 1991; Bhatia and Anderson 1995), in spite of the epidemiological problems which arise from comparison of data created using different methodologies. These accounts detailed the contours of health relativities, and the patterns from a policy and planning perspective were consistent enough to draw conclusions about need relative to non-Aboriginal Australia. However, methodological difficulties, and biases in the focus of research effort (for example, Lake 1992), made it very difficult to produce a comprehensive picture of Aboriginal and Torres Strait Islander health that adequately accounts for its internal relativities. Before 1994, the National Trachoma and Eye Health Program (NTEHP) was perhaps the

only survey process that produced national data capable of demonstrating regional differences in the prevalence of some acute infectious conditions such as trachoma and upper respiratory infections; although it relied on clinical assessment and had a quite narrow morbidity focus (NTEHP 1980).

An increasingly important indicator of health is self-assessed health, and a question to measure this was included in the NATSIS. This provides the possibility of comparative data since the same question is included in the NHS, but it also highlights some of the conceptual and practical difficulties in developing survey measures that might be used to better understand the burden of health care need in Indigenous Australia.

In the NATSIS, 88 per cent of the people surveyed identified themselves as being in good, very good or excellent health. It is in this context that the connotations and meanings of various constructs are most apparent. Without labouring the point, health is a culturally dense concept. This is true in a non-Aboriginal and Aboriginal context. Depending on cultural context as well as the particular circumstance, 'healthy' might imply an absence of acute distress; being personally mobile and non-institutionalised; not having 'trouble' within kin and community relationships; or being cardiovascular fit. As such, perceived 'health' may not diminish even with the presence of disease that has long-term and life threatening consequences. We note, for example, that of the diabetics identified in the NHS, about 60 per cent under the age of 40 years, and 42 per cent of those aged 40 years and older believed themselves to have good or excellent health (Knuiman, Welborn and Bartholomew 1996).

What then does it mean that 88 per cent of surveyed people believed themselves to be healthy, given the apparent poor health status of Indigenous peoples in Australia? Does it imply lack of knowledge, failure to internalise the health messages of providers, or individual perceptions altered by the high background level of morbidity in the community? Or does it reflect a dysjunction between biomedical constructs of health that increasingly encompass abstract bio-physiological and population health parameters, and lay experiences of wellbeing and illness?

While it may not be possible to extract useful information from this question on external relativities, it provides some internally useful information. For example, the proportion reporting themselves to be in fair or poor health increases with increasing number of self-reported diseases (see Table 11.2). This observation itself is not particularly remarkable, but it points to the possibility of defining associations between self-reported health status and other NATSIS variables in which there is a relative decline in self-reported health status. This might be useful in the development of health priorities and strategy. We note, for example, that self-reported health status has been shown in other contexts to be a good predictor of mortality in the elderly (McCallum, Shadbolt and Wang 1994).

Reliance on self-reporting to develop health indicators is another methodological issue raised by the NATSIS. In some instances, such as

the questions on asthma and diabetes, the focus is specifically biomedical, and even though cultural factors still influence responses, the range of meanings is more narrow and thus less open to misinterpretation. Nevertheless, even in these cases bias needs to be accounted for in interpretation. Self-reporting diabetes is not possible outside a relationship with the health care system, as is the case for most of the chronic diseases measured in the NATSIS. As researchers in this field have noted: 'community surveys in many different population groups suggest that for each person known to have diabetes there is often at least one undiagnosed case' (Philips, Patel and Cabaron 1990: 317). There are a number of factors that might influence the size of the pool of people who have undiagonised diabetes, such as the effectiveness of screening programs; accessibility of health care; the quality of communication in the clinical context; and the processes through which individuals subjectify the presence of disease following medical diagnostic processes. The implications of this are twofold: firstly, the Survey will underestimate actual morbidity load; secondly, the more poorly developed health care infrastructure is, the greater this underestimate becomes. Parodoxically, then, higher levels of self-reporting may actually imply better existing levels of service provision.

Table 11.2. Chronic disease and self-reported health status: 18 years and older, 1994. [a]

Disease score[b]	Number	Rate health as fair/poor Per cent
0	106,400	10
1	38,349	27
2	12,653	47
3	2,781	60
4	952	75
5	120	100

a. Self-reported prevalences of asthma, diabetes, heart problems, chest problems and high blood pressure combined to give a numeric disease load score of 0-5.

b. Chi-squared for trend +21590.067, p=<.00001. Overall for this group: 81 per cent reported good to excellent health and 19 per cent fair/poor.

Risk

The other important policy area in which the NATSIS could potentially make a contribution is the prevalence of risk. Health risk is assessed in the NATSIS across a number of domains including housing and other health 'hardware' such as sanitation and electricity; social factors including employment, income and personal exposure to threat or attack; and

behavioural and physical factors such as smoking, diet, alcohol consumption and weight. Housing sector risk, which we have not analysed, might point to important strategies in inter-sectoral collaboration. We have chosen to focus on two of those risk variables in which individual behavioural elements are believed to be significant elements: smoking and the prevelance of obesity. These are examples of indicators used to monitor the impact of risk reduction strategies within population health programs.

As with morbidity, a well established pattern of risk factors in Aboriginal relative to non-Aboriginal Australia has already been established. From the perspective of health sector policy, the contours of Indigenous health risk are better accounted for with comprehensive local or regional surveys (that are able to use a better array of clinical measures) which can be compared through a process of meta-analysis. Limitations in methodology and time in the NATSIS process mitigate against the provision of more comprehensive information in this context. The most useful information that the NATSIS could have provided was the regional distribution of population health risk factors. The other relevant analysis in this context would relate the identified health risk factors with key sociometric variables provided by the NATSIS. This analysis might provide relevant public health planning information about the economic and socio-cultural context of Aboriginal health risk.

One of the most striking things about the data on Body Mass Index (BMI) is the large amount of missing data. For just over one-quarter (26 per cent) of participants in the NATSIS, the measurements used to calculate BMI (weight and height) were not recorded. Our experience is that those who are very overweight are the most reluctant to be weighed, so the results are likely to significantly underestimate the extent of overweight/obesity in the Indigenous population. Nevertheless, the NATSIS does provide some nationally comparable data which indicate that, of the Indigenous people 18 years and over for whom data were available, 58 per cent were overweight or obese, compared to 55 per cent of Australian men and 35 per cent of Australian women (25-64 years old) (AIHW 1996). The NHS employed a self-report method and did not use direct measurement as was the case in the NATSIS; further, the extent of non-reporting of data in the NHS is not known. Despite these problems in comparability, the NATSIS does indicate that overweight/obesity is a significant health risk in Aboriginal communities. There are some urban/rural differences in the level of overweight/obesity among Indigenous men (62 per cent compared to 54 per cent) though not among Indigenous women, but non-recording of information on weight and height was higher in rural areas (AIHW 1996). There is therefore little evidence on which to confidently base an urban focus for any intervention. What of ATSIC regional differences? The raw data on ATSIC regions are not available outside the ABS, so researchers cannot readily look at this information. Based on the information provided in the Regional Summaries, the proportion who are overweight/obese by ATSIC region

ranges from 64 per cent in the Torres Strait to 4 per cent in Apatula, but similar problems with non-recording make these data difficult to interpret. Non-recording of weight by ATSIC region ranged from 89 per cent in Apatula to 1 per cent in Kununurra. Even in the Torres Strait, weight was not recorded for 17 per cent.

In the NATSIS, smoking was reported by 54 per cent of men and 46 per cent of women 13 years and over. This compares with 28 per cent for men and 24 per cent for women for all Australians 16 years and over (AIHW 1996). These data indicate that smoking is a major health problem, again warranting public health intervention. But what of ATSIC regional differences? There is a wide variation reported, from 29 per cent in Alice Springs to 61 per cent in Jabiru. Community surveys have documented a prevalence of current smokers as 64.4 per cent in two country towns in the south-east (Guest et al. 1992), and 54 per cent in an urban survey (Department of Human Services and Health 1995). Clinic-based surveys have demonstrated even higher smoking prevalences, possibly reflecting the bias of a clinical sample (Lake 1989; McKendrick 1993; Holmes, Phillips and Thorpe 1993). However, in a review of this literature, Guest et al. (1992: 401) notes both evidence of internal regional variation in smoking rates and patterns, as well as some marked differences between the Indigenous people in Australia and internationally. Some of the lower regional figures may reflect different patterns of tobacco consumption. For example, Northern Territory data indicate that a significant proportion of people chew tobacco (10.8 per cent of males and 37.9 per cent of women) (Guest et al. 1992: 401).

When interpreting the NATSIS data it is important to take into account the response of interviewees to the Survey process. Indigenous Australians have frequently articulated concerns about the ethics and impact of the research and data collection process on those who provide information or who are the subjects of research (for example, National Aboriginal and Islander Health Organisation 1988; Anderson 1996). What this points to is a widespread suspicion in Indigenous communities about official information collection processes. One possible strategy to account for this might be to assess, in Survey pilots, how interviewees perceived the Survey in global terms and what range of meanings they attached to key questions. For example: how did people respond to questions asked about substance use? What did they believe to be the purpose of such information? Did they perceive that there was any personal risk attached to answering the questions as accurately as possible? In this way not only do we need to assess the cultural appropriateness of particular questions, we also need to assess the overall cultural response to survey instruments such as the NATSIS, as this would provide crucial intelligence about the validity of the instrument, its questions and the context of their presentation.

If we ignore for the moment some of the apparant problems in the quality of the data, what use might we make of documented regional

differences in risk profiles? Documented regional differences in the distribution of risk, such as associated with smoking or obesity when considered within the context of comprehensive population health programs, should guide regional strategy in determining the relative emphasis given to different components of a program. The development of strategy may define different regional resource needs. However, there is no simple direct way to transform regional profiles into resource allocation equations. Further, given the distribution of health risk relative to non-Aboriginal Australia, reducing for example the prevalence of overweight and obesity is a priority for action in all Indigenous communities and as such all regions need the capacity to address this problem.

Capacity to respond

In the NATSIS, data on health care interventions are collected as a part of the household survey. Given that health care in the Aboriginal community seems to be organised within the dynamics of extended family structure,[2] 'household' is a more appropriate categorical unit than that of the 'family'. However, extended family structures encompass a number of households, and the relative dynamics between households (which may be close or distant geographically) are factors shaping health care. For example, aunts and grandmothers may well be influential in shaping the health care of Aboriginal children, both as members of the same or other households. This latter set of dynamics is difficult to account for in a survey process of this nature.

Table 11.3. Questions on health care seeking behaviour in the NATSIS 1994 and the NHS 1994.

	NATSIS 1994	NHS 1994
Hospital outpatients/ emergency	In the last 2 weeks, have you visited emergency or outpatients at a hospital for your own health?	In the last two weeks, have you visited the outpatient section of a hospital for your own health? In the last two weeks, have you visited a casualty or emergency ward for your own health?
Doctor	In the last 2 weeks, have you seen a doctor, other than at the hospital?	(Apart from consultation during any hospital visits ... mentioned) In the last two weeks have you consulted: a general practitioner? a specialist?

The relevant comparable questions regarding health care behaviour in the NATSIS and NHS are presented in Table 11.3. For health care seeking behaviour, outpatients and emergency departments are dealt with separately in the NHS but have been conflated in the NATSIS, making any comparison difficult. Given the important questions which need to be explored about the extent to which Indigenous Australians make differential use of hospital emergency departments over other primary care providers, particularly general practitioner services (and the possible reasons for this), the wording of the NATSIS question results in a significant loss of information. Similarly, important information is lost in the conflation of specialist with general pracitioner in the 'doctor' questions in the NATSIS.

What types of policy issues might we address by analysing health care utilisation? NHS data has been used to analyse patterns of service utilisation by diabetics (Knuimann, Welborn and Bartholomew 1996). Similar types of analysis of the NATSIS data might also be productive, and point to, for example, deficiencies in services to Aboriginal people with diabetes. This type of analysis could be used to inform resource allocation and strategy. However, the lack of differentiation within the NATSIS questions between types of health care makes this type of analysis difficult. The most striking gap in the data from the NATSIS in relation to health service utilisation is in the coding of responses to the question 'what sickness or injury did you have', which was asked of those respondents who had seen a provider in the previous two weeks. Responses to these questions were coded at ICD chapter level; conflating terminal, chronic and acute conditions, and diseases, signs and symptoms into broad level disease categories. The effect is to categorise 'head-ache' the same as 'brain tumor', and 'cough' as 'lung cancer'. In essence this has fundamentally undermined any meaningful analysis of patterns of health care utilisation from the NATSIS. By entering and retaining the raw data as text, to allow subsequent recoding by researchers (for example using a Primary Care based coding system), it would have been possible to establish the patterns of precipitants of health care seeking behaviour. This information would assist in the strategic development of clinical services and the building of opportunistic health promotion strategies.

Given these limitations, we have taken a brief look at some indicators of need for services. What can the NATSIS tell us about the availability of services to meet those needs? Potential sources of information about this issue include the questions 'Are you happy with your local health services?' and, 'Are there problems with your local health services?' Seventy-nine per cent said they were happy with their local health services, and another 6 per cent that they were sometimes happy. There were no differences in levels of happiness by geographic location (capital city, other urban, rural or remote). But again, what does this measure in a concrete policy sense? Such information is difficult to interpret, given the absence of comparable data for Australians in general.

'Happiness' is again a culturally dense concept - and responses might suggest low expectations. In addition, it is not clear, in an Indigenous context, just what '*your* local health services' might encompass. It might be taken to mean only Indigenous-controlled services only; alternatively, some respondents might assume it also included mainstream health services. The interpretation of responses to this question is unclear, and consequently the results need to be treated with appropriate caution. This highlights a more general but important point that can be made about many of the NATSIS questions. The research question or information needs which the Survey addresses appear poorly defined. This has resulted in a critical lack of specificity in the Survey questions, consequently limiting the value of the information obtained.

The results of the question designed to identify problems with local health services are summarised in Table 11.4. Because of the problems alluded to above, these data could not be used to document, in an absolute sense, levels of disapproval of aspects of service provision. However, in a relative sense it is possible to draw some tentative conclusions. Problems concerning waiting times for treatment were more frequently identified relative to any other option provided with response, except for 'do not use'/'do not know'. Again there are no directly comparable data that could be used to make external relativity comparisons with non-Aboriginal Australia. However, it is the case that consumers in general commonly have problems with waiting times in doctors' surgeries (Steven and Douglas 1988).

Table 11.4. Results of question on problems with local health services in the NATSIS, 1994.

Category	Capital city[a] Per cent	Other urban[b] Per cent	Rural/remote[c] Per cent
No problems	79.8	76.0	77.5
Have to wait too long to be treated	5.0	10.2	7.1
Hours of operation not adequate	2.4	1.6	2.2
Inadequate facilities or staffing	0.9	1.0	1.8
Inadequate/poor treatment by staff	2.0	1.9	0.8
Other problems	1.8	2.1	5.7
Do not use/do not know	9.1	8.5	6.3
Not stated	0.2	0.3	0.8

a. Capital city - all State and Territory capital city statistical divisions.
b. Other urban - all centres with population 1,000 and over excluding capital cities.
c. Rural - remote-areas and towns with population less than 1,000; includes most remote communities.

In analysing health sector utilisation patterns, data need to be aggregated in a manner that reflects established differences in health infrastructure. The

most useful distinction in this instance might be at the level of major urban, urban and remote/rural regions. It is possible to do this at a national and State level (and perhaps this is sufficient). However, at an ATSIC regional level, sampling issues would not allow meaningful analysis.

Conclusions

There are significant limitations in using the NATSIS as a tool in the development of Aboriginal health policy and planning. We acknowledge that it would have been fairly difficult to develop a survey that would satisfy the diverse interests and pressures that were manifest in this case, *and* maximise its potential value for our particular health information concerns.

The lack of direct comparability in key health-related questions with the NHS significantly limits the development of external relativities that are central to defining Aboriginal health priorities. This is perhaps the key issue within Aboriginal health policy. Without external relativities it is very difficult to define the broad boundaries within which attention should focus, identify the key players within those boundaries, and designate an overall budget for implementation. Fundamental to the development of policy is the issue of relative need, both between sections of society and over time.

Further, limitations in the NATSIS data set have undermined the ability to develop the understanding of the relative distribution of morbidity, 'risk' and health care capacity between Indigenous communities. Planning involves the iterative development of strategies to turn policy into practice. At the strategy level, the importance of external relativities is replaced to a large extent by issues of internal relativity. In attempting to match service to need, information is required on who within a defined population is most in need and what is available to them. In an Indigenous Australian context, differences in health status and health care capacity would appear to be subtle and complex. Consequently, strategy must be developed that takes account of such differences, whilst recognising that in all contexts broad action in Indigenous health remains a priority according to the external relativities with non-Aboriginal Australia.

It may also be the case that a national survey is not the most appropriate method for establishing these internal relativities. Differences in Indigenous health patterns and health care service capacity do not exist in a simple continuum of appalling to bad. Clarification of such differences may require a strategy that first builds a more comprehensive picture of the distribution of morbidity and risk and capacity across major demographic regions (such as major urban; other urban; rural and remote). A survey with a smaller sample than that of the NATSIS could feasibly employ a greater array of clinical measures and questions with a health focus. This process could at the least identify categories of difference that might

feasibly be investigated within the context of a national survey. In the development of survey processes designed to add value to existing policy and planning information resources, it is important that these objectives be clearly articulated so that survey questions can be appropriately designed.

However, our approach to considering the policy value of the NATSIS is preliminary. In this chapter we have identified a number of issues that could be analysed further. For example, the NHS questions on alcohol consumption could feasibly be examined in context with the companion *National Drug Strategy, Household Survey, Urban Aboriginal and Torres Strait Islander Peoples Supplement* (Department of Human Services and Health 1995). We have also identified other questions for further examination. Yet, whilst this analysis may provide valuable insights, we acknowledge that much health planning happens at the service level and utilises local data. This points to the development of local information infrastructure as the key to enhancing Aboriginal health planning. It is unreasonable to expect national survey instruments to replace, in any comprehensive sense, the need for the development of a diverse array of information processes such as local level processes.

Notes

1. For example: recommendation 246 proposed 'That State, Territory and Commonwealth governments act to put an end to the situation where insufficient accurate and comprehensive information on inputs to and activities of Aboriginal health programs is available .... [in order] to develop appropriate policies and programs to address existing and newly emerging needs'. Recommendations 268 and 269 proposed that the National Health and Medical Research Council stimulate strategic research action; and promote compliance with its 'advisory notes on Aboriginal health research ethics' (Commonwealth of Australia 1991a: 91-92). Recommendation 270 promoted the involvement of Aboriginal people and Aboriginal health advisory bodies in the development of health statistics; to ensure that 'priority is given to the collection, analysis, dissemination and use of those Aboriginal health statistics most relevant to Aboriginal health development' (Commonwealth of Australia 1991a: 92). A group of recommendations were proposed in relation to the development of research and statistical information systems concerning issues of alcohol and other drug use (see recommendations 64-69; 71) (Commonwealth of Australia 1991a: 45-47). These recommendations encompassed a range of different processes for collecting information in order to improve Aboriginal health outcomes. However, the RCIADIC report did not consider in detail the Aboriginal health information needs in a global sense nor the relative merits of different information development strategies.

2. This observation is based on clinical experience, but would seem to concur with other anthropological descriptions (such as Smith 1992) that describe the relation between household structure, extended family structure, and the dynamics of resource utilisation.

References

Altman, J.C. (Editor) 1992. 'Statistics about Indigenous Australians and the role of the national survey: where to now?', in J.C. Altman (ed.) *A National Survey of Indigenous*

Australians: Options and Implications, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Anderson, I. 1996. 'Ethics and health research in Aboriginal communities', in J. Daly (ed.) *Ethical Intersections*, Allen and Unwin, Sydney.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Institute of Health and Welfare (AIHW) 1996. *Australia's Health 1994. The Fourth Biennial Health Report of the Australian Institute of Health and Welfare*, Australian Government Publishing Service, Canberra.

Bhatia, K. and Anderson, P. 1995. *An Overview of Aboriginal and Torres Strait Islander Health: Present and Future Trends*, Aboriginal and Torres Strait Islander Health Unit, Australian Institute of Health and Welfare, Canberra.

Commonwealth of Australia 1991a. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 2 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Commonwealth of Australia 1991b. *Royal Commission into Aboriginal Deaths in Custody, National Report Overview and Recommendations*, (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Commonwealth of Australia 1992. *Aboriginal Deaths in Custody. Response by Governments to the Royal Commission*, Australian Government Publishing Service, Canberra.

Department of Human Services and Health 1995. *National Drug Strategy, Household Survey, Urban Aboriginal and Torres Strait Islander Peoples Supplement*, Australian Government Publishing Service, Canberra.

Gray, A. 1992. 'Health and housing in Aboriginal and Torres Strait Islander communities', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Gray, A. and Tesfaghiorghis, H. 1991. 'Social indicators of the Aboriginal population of Australia', *CAEPR Discussion Paper No. 18*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Guest, C., O'Dea, K., Carlin, J. and Larkings, R. 1992. 'Smoking in Aborigines and non-Aborigines in southeastern Australia: prevalence and its association with cardiovascular risk factors', *Australian Journal of Public Health*, 16: 397-402.

Holmes, W., Phillips, J. and Thorpe, L. 1993. A Survey of Exposure of Young Koori Children in Melbourne to Cigarette Smoke, Victorian Aboriginal Health Service, Melbourne.

Kaplan, G. and Comacho, T. 1983. 'Perceived health and mortality: a nine-year follow-up of the Human Population Laboratory Cohort', *American Journal of Epidemiology*, 117: 292-98.

Knuiman, M., Welborn, T. and Bartholomew, H. 1996. 'Health and use of health services by diabetic and non-diabetic persons', *Australian and New Zealand Journal of Public Health*, 20: 241-46.

Lake, P. 1989. 'Alcohol and cigarette use by urban Aboriginal people', *Aboriginal Health Information Bulletin*, 11: 20-2.

Lake, P. 1992. 'A decade of Aboriginal health research', *Aboriginal Health Information Bulletin*, 17: 15-22.

McCallum, J., Shadbolt, B. and Wang, D. 1994. 'Self-rated health and survival: a 7-year follow-up study of Australian elderly', *American Journal of Public Health*, 84: 1100-5.

McKendrick, J. 1993. A Psychosocial Survey of An Urban Aboriginal General Practice Population, dissertation, Department of Psychiatry, University of Melbourne, Melbourne.

National Aboriginal and Islander Health Organisation (NAIHO) 1988. Report of the National Workshop on Ethics of Research in Aboriginal Health, National Aboriginal and Islander Health Organisation and National Health and Medical Research Council Workshop, Camden, New South Wales, August 1987.

National Trachoma and Eye Health Program (NTEHP) 1980. *National Trachoma and Eye Health Program of the Royal Australian College of Ophthalmologists*, Royal Australian College of Ophthalmologists, Sydney.

Philips, C., Patel, M. and Cabaron, Y. 1990. 'Diabetes among Aboriginal people in central Australia: a high prevalence based on health service attendance', *Medical Journal of Australia*, 153: 314-18.

Reid, J. and Trompf, P. (Editors) 1991. *The Health of Aboriginal Australia*, Harcourt Brace and Jovanovich, Sydney.

Saggers, S. and Gray, D. 1991. *Aboriginal Health and Society*, Allen and Unwin, Sydney.

Smith, D.E. 1992. 'The cultural appropriateness of existing survey questions and concepts', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Steven, I. and Douglas, R. 1988. 'Dissatisfaction in general practice: what do patients really want?', *Medical Journal of Australia*, 148: 280-82.

12. Indigenous families and households

R.G. Jones

The family and household information collected in the National Aboriginal and Torres Strait Islander Survey (NATSIS) is similar to that collected in the 1991 Census, with additional information on:

i the child care arrangements used for Indigenous children aged 12 years and under;

ii forced separation of children from their families; and

iii the number of children born (excluding stillbirths) to women aged 13 years and over.

Detailed Findings (Australian Bureau of Statistics (ABS) 1995) summarises these data in four tables, showing the distribution of family types (single-parent families, couples and couples with children) by Aboriginal and Torres Strait Islander Commission (ATSIC) regions, States and the Northern Territory (Table 12.1); a more detailed breakdown of family types by whether or not all family members are Indigenous (Table 12.2); the numbers and proportions by age group who were separated from their natural family (Table 12.4); and the families using child care arrangements or wanted to use them in the last four weeks (Table 12.5). Similarly, the *Regional Statistics* (ABS 1996) show, in less detail, the univariate distributions of household type, number of people in household, family type, family composition, child care arrangements and separation from family. No analyses of the fertility question are included in either publication.

The release of a NATSIS Confidentialised Unit Record File (CURF) by the ABS gives researchers an opportunity to investigate more closely, and with greater facility, the characteristics of Indigenous family and household members and the associations between these characteristics and the other topics covered by the Survey, such as child care, health status, housing conditions, employment and income. Only one of these topics, child care, will be considered specifically here, the other topics being examined in other chapters of this monograph.

Before examining this topic, however, an analysis of some of the characteristics of Indigenous family households and Indigenous families as evidenced by the NATSIS was undertaken. While intended to provide a brief summary of Indigenous households and families, the analysis gives

rise, inevitably, to a number of comments on and questions about the NATSIS CURF. In some cases, these issues could be addressed by better documentation of the variables included on the data file, particularly household and family variables derived from a person's information. Other comments, however, identify problems which, while unlikely to be addressed with outputs from the current survey, should be resolved in any future NATSIS data file release.

The results are presented according to a regional classification defining capital city, urban, rural and remote populations derived from the 'part-of-State' variable (GEO101). The additional remote population category includes communities whose distance from the nearest Technical and Further Education (TAFE) college is greater than 100 kilometres.[1] Given the interest in remote Indigenous populations, the inclusion of a geographical classification identifying metropolitan, rural and remote populations would, I believe, have been preferable to the part-of-State code provided. While accepting that 'there is no nationally agreed upon criterion for what constitutes a remote area' (ABS undated: 17), a classification 'has been developed in response to the growing need for knowledge and information about issues of concern to rural and remote Australia' (Department of Primary Industry and Energy and Department of Human Services and Health 1994), which aggregates Statistical Local Areas (SLAs) to define rural and remote regions on the basis of population density and distance to capital cities and other large urban centres.

Indigenous family households

The ABS estimates from the NATSIS show about 86,400 Indigenous households nationally, of which some 10,000 are non-family households (ABS 1995: 2). Table 12.1 shows the distribution of these family households between regions and some summary measures of household size. The results in Table 12.1 follow the general pattern established by numerous analyses of census data, namely a relatively high proportion of multi-family dwellings compared to non-Indigenous Australians, increasing household size progressively from capital cities to urban to rural and remote areas in terms of the average number of families (and average family size), persons, adults and dependants per household.

It should be noted that the definition of an Indigenous household used in the NATSIS required only one person in the household to identify as being of Aboriginal or Torres Strait Islander origin (ABS 1995: 69), whereas ABS analyses of the 1991 Census refer to families in which the family reference person or their spouse are Indigenous (ABS 1993: corrigendum). Based on the NATSIS definition, the author found that almost one-in-seven Indigenous one-family households in the census had one or more Indigenous children but no Indigenous parent present (Jones 1994: 20).

However, the NATSIS file does include a variable 'Aboriginality of household census' (ATI101) which appears to determine Indigenous family households on the same basis as the census analyses. This variable identifies 5,883 or 8 per cent of the NATSIS family households as non-Indigenous, (6 per cent on the basis of Indigenous dependants with no Indigenous parent present and 2 per cent from non-dependent family members), with 95 per cent of these being one-family households and the remainder two-family households. The inclusion of these family households in analyses will thus increase the number and proportion of one-family households and decrease the average household size relative to published census estimates. After excluding these households, the NATSIS weighted estimate of 70,500 Indigenous family households is, however, substantially higher than the 1991 Census estimate of 58,200 households (ABS 1993: 10).

Table 12.1. Indigenous family households and household size by region, 1994.

	Capital city	Urban	Rural	Remote	Total
Family households					
Number	22,718	29,837	11,017	12,814	76,386
Per cent	29.7	39.1	14.4	16.8	100.0
Number of families in household					
1 family	95.6	93.7	87.5	77.6	90.7
2 families	4.4	5.2	9.4	15.8	7.4
3+ families	0.0	1.1	3.1	6.5	2.0
Total	100.0	100.0	100.0	100.0	100.0
Total families					
Number	23,718	32,076	12,817	16,850	85,461
Per cent	27.8	37.5	15.0	19.7	100.0
Total persons					
Number	89,354	125,243	52,041	73,041	339,679
Per cent	26.3	36.9	15.3	21.5	100.0
Mean household size					
Families/household	1.04	1.08	1.16	1.32	1.12
Persons/household	3.93	4.20	4.72	5.70	4.45
Dependants/household	1.48	1.69	1.78	2.22	1.75

Source: ABS (1995).

Table 12.2 shows the substantial variations in housing tenure between regions and, by the way, the importance for analyses of the Indigenous population of adding community housing to the 1996 Census classification of landlord. In remote areas, over three-quarters (77 per cent) of all

households are in rented dwellings, the majority (43 per cent) being rented from community-based housing associations. In rural areas, home ownership and home buying appear to be viable alternatives to rented community-based housing. In capital cities and urban centres, rented government housing is the most common form of tenure, along with an increased reliance on the private rental market and some increase in home buying in the capital cities.

Table 12.2. Housing tenure of Indigenous family households by region, 1994.

Housing tenure	Capital City	Urban	Rural	Remote	Total
Owned and other/not stated	17	13	28	15	17
Buying	18	12	13	3	12
Rent-private	24	16	12	8	16
Rent-community	3	9	22	43	15
Rent-government	36	43	16	17	33
Rent-other/not stated	2	5	5	9	5
Improvised dwelling	1	3	5	2	
Total	100	99	100	100	100
Number	22,718	29,837	11,017	12,814	76,386

Source: ABS (1995).

Inexplicably, despite the fact that respondents were asked specifically whether their dwelling was owned or being bought, a variable identifying these categories is not included on the NATSIS CURF. Home buyers can be identified as those paying off loans, but home owners cannot be separated from the 'other/not stated' tenure category which increases from about 3 per cent of households in urban areas to 17 per cent of the rural and remote households (ABS 1995: 29). To omit such an important characteristic is unfortunate for policy analysts.

Average household incomes (Table 12.3) vary little across regions although showing, somewhat surprisingly, higher (mean) average incomes for households in remote areas, where fewer households report low incomes than elsewhere. For example, only 4 per cent of households in remote areas report incomes below $12,000 with 23 per cent below $20,000, compared with 8 per cent and 30 per cent respectively of households in other regions. The likely explanation is that low-income families and other adults are more likely to be living together in larger households in remote areas. Certainly when adjusted for any of the measures of mean household size in Table 12.1, average incomes do decline from capital cities to remote areas.

Household income after housing costs has also been calculated by the ABS. However, household income after housing costs should be based on net rather than gross income amounts, giving disposable income after housing costs and allowing levels of after-housing poverty to be assessed (see, for example, Jones 1994). The ABS in fact reports applying an algorithm to 'gross up' incomes given on a net basis (ABS 1995: 85). For this variable, a more useful approach would have been to reverse the algorithm to 'net down' gross incomes before subtracting housing costs. To do this accurately requires access to income data as collected, in single dollar amounts, rather than the grouped income data available in the CURF. While protection of confidentiality is essential, it is not at all obvious how the retention of income in single dollar amounts, or perhaps (less threateningly) $1,000 intervals, would increase the likelihood of identification, except perhaps for those with unusually high incomes.

Table 12.3. Household income, household income after housing costs and housing costs of Indigenous family households by region, 1994.

	Capital City	Urban	Rural	Remote	Total
Household income					
mean/household ($,000)	33.5	31.5	33.1	36.2	33.0
median/household ($,000)	30.3	27.5	29.3	32.7	29.6
After housing costs					
mean/household ($,000)	29.4	27.8	30.1	34.3	29.6
median/household ($,000)	24.8	23.1	26.5	30.4	24.8
Housing costs by tenure ($,000)					
buying	6.6	6.0	6.0	5.7	6.2
rent-private	7.1	6.1	4.5	2.9	6.2
rent-community	4.0	3.6	2.2	1.7	2.4
rent-government	3.8	3.6	3.0	3.3	3.6
rent-other/not stated	4.3	4.2	2.6	1.8	3.2

Source: ABS (1995).

Weekly rental costs (ACM111) and monthly mortgage payments (LON148) are included as single dollar amounts in the NATSIS data file, a distinct improvement on the broad groupings provided by census data. Average costs of home buying and government rental housing vary little across regions, but the costs of community-based and private rental housing are substantially lower in rural and remote areas than in the capital cities and other urban centres. Given the differences in tenure patterns, housing costs appear to be much less of a burden on Indigenous household incomes in rural and remote areas than for their counterparts in urban areas and capital cities particularly.

A substantial number of family households, 20 per cent overall and 28 per cent in remote areas, have 'not stated' household incomes, giving rise to some concern about the usefulness of household income data. 'Not stated' household income can arise in two ways: first, by any adult usual resident refusing to state their personal income and, secondly, if any usual resident of the household is absent at the time of interview (ABS 1995: 69). Of the (weighted) 15,031 family households with missing household income data, 11,514 households and about 12,00 families have been identified as having one or more adults who avoided being interviewed or were reported as absent from the household for a month or more, presumably reflecting the under-representation in the sample of young males aged 20-44 years (ABS n.d.: 13).[2]

Indigenous families

The coding of family type in the NATSIS 'was undertaken according to the standard ABS family classification', although some difficulties were experienced in identifying family relationships in large households in rural and remote areas: female single-parent families may be over-represented because of the under-representation in the sample of young adult males, and, relative to the census, visitors appear to be under-represented and 'other related individuals' over-represented (ABS 1995: 83).

As with households, the NATSIS CURF includes two definitions of an Indigenous family: any Indigenous family member (ATI200 = 1 'Only Aboriginal/Torres Strait Islander' or = 2 'Mixed'), or an Indigenous husband, wife or sole parent or, in a one-family household of related adults, an Indigenous adult (ATI201 = 1). The latter definition excludes some 5,500 families, of which 4,600 include an Indigenous child with non-Indigenous parent(s) and some 900 have only Indigenous non-dependent related adults. A further 750 families have no Indigenous members. Note that these estimates are derived by applying the household weight (WT101) rather than the family weight (WT201) provided on the CURF. This latter applies a zero weight to all non-Indigenous families (ATI200 = 3) and non-family members (FAM200 = 0, 32 or 99) to give population estimates for Indigenous only or mixed families.

The distribution of families by family type, including the small number of non-Indigenous families, shows little variation between regions (Table 12.4), except that couples with dependent children are somewhat more likely to live with other non-dependent adults in rural and remote areas and single-parent families are more common in the capital city and urban areas than in rural/remote areas.

Unlike the census, which limits the number of families coded in a household to three, the NATSIS codes every family, six being the maximum number occurring in any household. The additional number of families coded is, however, very slight; only one-half of 1 per cent of the

family households have four or more families, adding just 460 families and giving a total of about 9,100 secondary families. In both absolute and proportional terms, this is high relative to the 1991 Census counts, despite ABS concerns of some undercount of multi-family households in rural and remote areas. Daly and Smith (1995, Table 12.3) identify 4,110 secondary families from the 1991 Census, 6 per cent of all families, compared to the 11 per cent found here. This clearly suggests that there is an undercount of secondary families in the census, and that it is more probably associated with the identification of households than with the restriction on coding at most three families (Smith and Daly 1996: 4).

Table 12.4. Per cent of family type by region, 1994.

Family type	Capital City	Urban	Rural	Remote	Total
Couple and dependants	27.6	31.3	31.3	30.1	30.1
Couple, dependants and other	13.6	13.3	17.6	21.6	15.7
Couple only	13.7	13.1	14.5	12.9	13.4
Couple and other	9.8	8.2	10.5	7.5	8.9
Parent and dependants	19.4	16.6	10.8	14.7	16.2
Parent, dependents and other	6.6	8.7	7.7	6.6	7.6
Parent and other	6.2	4.4	3.5	4.9	4.9
Other	3.0	4.3	4.0	1.7	3.4
Total	100.0	100.0	100.0	100.0	100.0
Number	23,718	32,076	12,817	16,850	85,461

Source: ABS (1995).

Table 12.5. Relationship of secondary families to primary family, 1991 Census and 1994 NATSIS.

Relationship to primary family	1991 Census Per cent	NATSIS Per cent
Mother's/father's family	11	9
Grandparent's family	0	3
Son's/daughter's family	41	50
Grandchild's family	1	2
Brother's/sister's family	25	15
Other related family	16	19
Unrelated family	6	1
Total secondary families	4,110	9,100
Per cent of all families	6	11

Source: 1991 Census and ABS (1995).

While there are some differences in the distributions of relationships of secondary to primary families between the 1991 Census and 1994 NATSIS, the broad pattern is the same (Table 12.5). Son's or daughter's family living with their parents, or vice versa, are the most common relationships, accounting for 60 per cent of the secondary families in NATSIS and 52 per cent in the census. Brothers, sisters and other relatives' families account for most of the remainder. The fact that grandparents' and grandchildren's families appear more frequently in the NATSIS and unrelated families less frequently may reflect the effect of coding additional families. The NATSIS data emphasise, more than does the census, the multigenerational composition of multi-family Indigenous households.

Table 12.6. Family income and family size by family type and region, 1994.

Family type, mean income and mean family size	Capital City	Urban	Rural	Remote	Total
Couple only					
mean income/family ($,000)	33.3	26.8	25.7	22.9	27.8
Couple and dependants					
mean income/family ($,000)	35.6	32.5	28.9	29.0	32.1
mean number of dependants	2.28	2.49	2.30	2.43	2.39
Couple and other					
mean income/family ($,000)	53.0	43.1	44.3	32.9	44.4
mean number of others	1.52	1.51	1.72	1.52	1.56
Couple, dependants and other					
mean income/family ($,000)	43.7	40.7	37.7	39.9	40.6
mean number of dependants	2.11	2.10	2.50	2.60	2.30
mean number of others	1.30	1.39	1.46	2.04	1.53
Parent and dependants					
mean income/family ($,000)	15.1	15.5	12.6	14.2	14.8
mean number of dependants	1.96	2.02	1.94	1.83	1.96
Parent and other					
mean income/family ($,000)	24.1	26.0	18.3	30.0	25.1
mean number of others	1.10	1.50	1.42	2.07	1.44
Parent, dependants and other					
mean income/family ($,000)	27.7	26.2	34.5	30.8	28.6
mean number of dependants	1.92	2.02	1.62	2.01	1.93
mean number of others	1.52	1.39	1.59	1.84	1.52
Other					
mean income/family ($,000)	35.6	24.4	20.1	22.5	24.5
mean number of others	2.09	2.24	2.24	2.36	2.24

Source: ABS (1995).

For those families with reported family income, Table 12.6 shows mean family income by family type, and the average number of dependent

and 'other', non-dependent family members. For couple-only families, average incomes range from around $33,300 in capital cities down to just less than $23,000 in remote areas. By comparison, couples with dependants have higher average incomes and the differential between regions is less, perhaps reflecting the effect of family payments, although age-related differences in the characteristics of couples with and without children could also influence this comparison.

The inclusion of other adults in couple families has a substantial impact on family income. The average income of couple and other adult families is 60 per cent higher than that of couples only, while adult family members add 25 per cent to the average income of couple with dependants families. The different impact of non-dependent family members seems likely to reflect different characteristics. For couples with dependants, the average contribution to family income from each 'other' family member is about $5,500 per annum with little variation across regions, roughly what might be expected from a teenage family member. For couples only, another adult in the family adds, on average, roughly $13,000 in capital cities, about $11,000 in urban and rural areas, but only about $6,500 in remote areas. Other things being considered approximately equal, these figures appear more appropriate to older family members. Similarly, for single-parent families with dependants surviving on incomes of about $15,000 a year on average, living with other adults adds about $9,000 per adult to family income, increasing the average income per family member from $5,000 to about $6,500 per annum.

Child care arrangements

Families with Indigenous children aged 12 years and under were questioned on their use of child care. Of the 85,460 families in Indigenous family households, 731 were non-Indigenous families, 30,158 had no children in this age group, 933 had no Indigenous children of this age and 1,290 with children in this age group failed to report their child care arrangements (2.4 per cent of the eligible Indigenous families). The following analysis briefly summarises the child care arrangements reported by the remaining 52,350 Indigenous families for their 111,000 Indigenous children aged 12 years and under. Families living in remote areas are slightly more likely than those elsewhere to include children under 13 years of age, and those in capital cities are slightly less likely to have four or more children of this age group.

Table 12.7 shows comparisons between regions of the families and children using formal child care arrangements. Families living in the capital cities are about twice as likely to use child care services as those in other urban centres, and four to five times more likely than those in rural and remote areas. Families in multi-family households are less likely to use child care services than families living alone, although this difference is not substantial in capital city populations, and single-parent families

appear somewhat less likely to use these services than couple-families. However, having income from non-Community Development Employment Projects (CDEP) scheme employment as the main source of family income, rather than relying on CDEP employment or government program payments, appears to have a considerable influence on use of child care. This effect is also evident among families with higher than average family incomes and, not surprisingly, where one or two family members are in employment. 'Parents working' is also the most frequently reported reason for using child care.

Table 12.7. Use of formal child care services: Indigenous families with Indigenous children aged 0-12 years, 1994.

	Capital City	Urban	Rural	Remote	Total
Families with child age 0-12 years					
Number	13,422	20,069	7,732	11,126	52,349
Per cent	25.6	38.3	14.8	21.3	100.0
Per cent use formal child care total	24.1	11.5	5.5	5.8	12.6
by number of families in household					
1 family household	24.4	12.7	6.4	8.4	14.6
2+ family household	19.3	3.3	2.1	1.9	3.9
by family type					
1 parent family	18.4	10.0	3.7	4.2	10.7
couple family	27.6	12.4	6.2	6.4	13.6
by principal source of income					
earned income (non-CDEP)	31.7	18.6	10.4	10.6	20.6
earned income (CDEP)		9.6	5.1	3.9	5.0
government payments	16.6	8.6	3.4	3.9	9.1
Children aged 0-12 years					
Number	27,064	43,105	16,671	24,278	111,119
Per cent	24.4	38.8	15.0	21.8	100.0
Per cent use formal child care total	17.2	7.6	3.3	3.3	8.3
by age group					
0-3 years	19.2	14.8	2.8	4.4	12.0
4 years	31.6	8.2	11.6	3.4	14.1
5 years	7.5	4.9	2.8	3.0	4.8
6-9 years	11.5	2.9	2.1	3.3	4.9
10-12 years	17.3	2.5	1.9	1.4	5.7
Reasons use child care (per cent)					
parents working	49	43	44	24	45
parents need a break	22	23	14	11	21
good for child	27	16	17	32	23
Type of child care used most (per cent)					
before/after school care	18	10	9	6	13
long day care	22	27	19	14	23
family day care	23	26	55	28	26
occasional care	12	21	4	45	17
pre-school/kindergarten	24	15	13	4	19

Source: ABS (1995).

Table 12.8. Wanted formal child care services in last four weeks: Indigenous families with Indigenous children aged 0-12 years not using services in 1994.

	Capital City	Urban	Rural	Remote	Total
Families with child age 0-12 years not using formal child care services					
Number	10,192	17,754	7,305	10,484	45,736
Per cent	22.3	38.8	16.0	22.9	100.0
Per cent like to use formal child care	16.5	15.9	8.6	5.8	12.5
by number of families in household					
1 family household	17.3	16.4	10.2	6.1	14
2+ family household	5.5	12.3	3.4	5.3	6.8
by family type					
1 parent family	23.3	13.2	7.5	7.3	14
couple family	11.6	17.3	9.1	5.1	11.8
by principal source of income					
earned income (non-CDEP)	14.2	16	5.4	5.0	12.1
earned income (CDEP)	14.5	0	4.8	5.5	
government payments	18.8	16.4	7.1	4.6	13.3
Children aged 0-12 years not using formal child care services					
Number	22,419	39,837	16,122	23,504	101,883
Per cent	22.0	39.1	15.8	23.1	100
Per cent like to use formal child care	14.8	11.9	7.4	5.5	10.3
by age group					
0-3 years	20.7	16.1	6.2	6.2	13.3
4 years	13.5	12.7	16.9	9.1	12.7
5 years	10.4	16.3	5.8	6.6	11.5
6-9 years	14.2	8.8	6.9	4.5	8.8
10-12 years	9.0	7.5	6.2	3.9	6.7
Type of child care like to use (per cent)					
before/after school care	33	37	20	49	35
long day care	3	26	7	43	19
family day care	10	21	34	75	26
occasional care	36	26	5	43	29
pre-school/kindergarten	25	19	18	5	15
Reasons did not use child care (per cent)					
does not exist	6	25	56	84	30
cost/too expensive	31	32	15	1	26
no place/no time available	33	11	2	4	16

Source: ABS (1995).

In capital cities, use of child care services increases with age up to primary school entry, presumably reflecting the use of pre-school/kindergarten attendance, then declines for five year olds and increases as children get older, perhaps reflecting greater use of before/after school care arrangements. In other urban areas, use declines as age increases, although

the reasons given for use of services and the type of services used are similar to the pattern in capital cities. Family day care appears the dominant service used in rural areas, with pre-school/kindergarten likely to explain the increased use at age four years, while occasional care followed by family care are the most frequently used services in remote areas.

Table 12.8 provides a similar summary for families and children who report that they would have liked to use some such service in the last four weeks. Families now using child care services are excluded from this analysis. The characteristics of families wanting to use child care services are quite similar to those of current users, except that having earned income from non-CDEP employment no longer influences the desire for access to formal child care. Whereas higher family income and employment are clearly associated with higher use of child care, there are no such effects here. Unfortunately, the NATSIS did not identify the reasons why people who do not use child care services would like to use them so that comparisons with users could be made.

In capital cities particularly, relatively few of these families want long day care or family day care, the services wanted most by current users. This is consistent with the constraints that costs and competition for places impose on lower-income families. Outside the capital cities, however, the lack of service provision appears increasingly as the main constraint on use of child care, with a majority of rural families and almost all remote families having no formal child care service available to them.

Summary

Daly and Smith (1995) note the lack of 'an aggregate statistical picture' of the structure of Indigenous families and present some comparisons of the economic status of Indigenous and other Australian families. In a recent paper they present some preliminary analyses of the characteristics of Indigenous households (Smith and Daly 1996). In both cases, their analyses are constrained by the need to accept ABS definitions of family and household relationships, despite their reservations about the appropriateness of these definitions for the Indigenous population, and by having to rely on statistics and tables produced at a distance by the ABS. The NATSIS CURF gives researchers the opportunity to take a 'hands-on' approach to such analyses. Although coding procedures impose some constraints, the characterisation of households and family units can be reassessed not only in terms of the relationships between household members but also their contribution to household income, main sources of income, and the importance of that income to the economic status of the household.

However, some unfortunate coding decisions have been identified, namely:

i the exclusion of a remote area identifier, particularly in light of the efforts made to ensure adequate coverage of the remote population and the significance of this population to policy development;

ii the exclusion of a specific tenure variable and, in particular, of home ownership;

iii the decision to set household and family income data to 'not stated' when an adult is absent, rather than coding the number of absent household members and retaining the known household income information;

iv the coding of household income after housing costs based on gross rather than net income; and

v the broad income categories applied to individual-level income variables in particular, making it impossible to estimate net (after-tax) income levels adequately. The grouping of variables, such as hours worked, into broad categories further constrains potentially important analyses of wage rates.

Some of these decisions arise from the justified concerns of the ABS to protect individual confidentiality. Nevertheless, all too often, these decisions appear to be made without proper consideration of their effect on the usefulness of the data for meeting the purposes for which they were collected. The ability to investigate Indigenous poverty, for example, must surely be an essential requirement of the NATSIS data, a requirement which cannot be met by analysis of the NATSIS CURF and for which we must now rely on the ABS. While it is unlikely that any changes can now be made to the publicly available data file, the Australian Statistician should be informed of the constraints on important analyses imposed by confidentialisation processes.

Researchers making comparisons between the NATSIS CURF and census outputs need to be aware of the different definitions that have been applied to define Indigenous households and families. The all inclusive definitions applied in the NATSIS are clearly the easiest to apply, but may not be the most appropriate for housing and family policy analyses. However, comparison of the NATSIS and census estimates of family and household characteristics is not a particularly useful exercise, since the census gives a more accurate and comprehensive view of these characteristics as captured by the definitions and classifications used in both collections. Where the NATSIS adds very considerable value to the census, despite some failings, is by allowing us to examine the associations between these characteristics and other topics covered such as health status, housing conditions, education and training, employment and income.

Notes

1. This approach to defining remote areas was suggested by Dr Boyd Hunter, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

2. The age, sex and relationships of absent household members were identified in the NATSIS Household Form and were taken into account in deriving variables such as household size, family size and family type. A person record is included for each absent person in the NATSIS CURF, although the person's weight variable (WT401) is set to zero so that they, along with non-Indigenous household members, do not appear in any weighted tables.

References

Australian Bureau of Statistics (ABS) 1993. *Australia's Aboriginal and Torres Strait Islander Populations*, cat. no. 2740.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994, Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *National Aboriginal and Torres Strait Islander Survey 1994: ATSIC Regional Statistics*, cat. no. 4196.0.00.001-036, ABS, Canberra.

Australian Bureau Statistics (ABS) (n.d.). *ABS Internal Working Paper on Some Aspects of Non-Sampling Error Issues for 1994 National Aboriginal and Torres Strait Islander Survey*, ABS, Canberra.

Daly, A.E. and Smith, D.E. 1995. 'The economic status of Indigenous Australian families', *CAEPR Discussion Paper No. 93*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Department of Primary Industries and Energy (DPIE) and Department of Human Services and Health (DHSH) 1994. *Rural, Remote and Metropolitan Areas Classification 1991 Census Edition (draft)*, DPIE and DHSH, Canberra.

Jones, R. 1994. *The Housing Need of Indigenous Australians*, Research Monograph No. 8, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. and Daly, A.E. 1996. 'The economic status of Indigenous Australian households: a statistical and ethnographic analysis', *CAEPR Discussion Paper No. 109*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

13. Cultural issues

N. Peterson

The stated purpose of the National Aboriginal and Torres Strait Islander Survey (NATSIS) was to provide 'a stronger information base for planning for the empowerment of Australia's Indigenous peoples and for measuring progress in meeting their objectives, aspirations and needs' (Australian Bureau of Statistics (ABS) 1995: iii). Curiously, however, the nature of these objectives, aspirations and needs is not spelt out, suggesting that they are taken for granted by those involved in compiling the Survey. This makes the assessment of the Survey's findings a more ambiguous task than if the goals were clearly defined, since the nature of the aspirations, objectives and needs has to be assumed or deduced from the questions asked. Obviously the inclusion of a number of questions under the heading 'Culture' suggests that it was either seen as relevant in planning for the empowerment of Aboriginal and Torres Strait Islander people or for measuring progress in meeting their objectives, aspirations and needs.

Culture is a classically ambiguous term for which Kroeber and Kluckhohn (1963) listed 164 different definitions, but there are two somewhat opposed usages that have common currency. On the one hand, the term can be used in the objectified sense reflected in the notion of high culture with its overtones of the aesthetic, the recreational or leisure time pursuit such as playing or listening to music, painting and dancing. This construction tends to fetishise particular kinds of activity and objects and to ignore a more encompassing understanding which sees either the activity or the object as an integral part of social life. On the other hand, there is the anthropological usage which understands culture as the beliefs, values and practices that go to make up a distinctive way of life.

At the workshop convened before the organisation of the Survey to canvass ideas about how it might be structured and the sort of information needed (Altman 1992), a number of participants argued for the importance of the data collection procedures being culturally appropriate and for the need to recognise the existence of considerable cultural variation within the Indigenous population (see Smith 1992). Smith was primarily concerned with the extent to which Indigenous social and cultural practices make the collection of accurate data difficult and the ways in which the regional variation could be documented through a survey. Smith recommended five general ways in which the then proposed Survey could be made more culturally appropriate and, thus, more effective in collecting accurate data:

- introducing definitional flexibility in order to include Aboriginal perspectives on economy, work, income, expenditure, housing and residence;

- incorporating an Aboriginal corrective into the constructions of social and economic indicators;
- obtaining longitudinal and long-term data which are especially important for assessing trends in social justice and Aboriginal economic wellbeing;
- basing survey design and data analysis on a more dynamic model of Aboriginal interaction with the mainstream economy; and
- developing an expanded sampling method to investigate the known cultural and geographic variation evident within Aboriginal society (Smith 1992: 80-81).

It is not entirely clear how far the NATSIS went in embracing these suggestions for ways to make the data collection as effective and accurate as possible in the context of regional variation and cultural difference and, in any case, it is only one important aspect of the relevance of culture to the NATSIS. As a methodological issue it is quite different from asking survey questions about culture. Indeed, no mention of questions dealing with culture is made in the contribution to the workshop by the then Assistant Statistician, Social and Demography Branch, ABS who canvassed a wide range of areas that could be covered by the NATSIS (see Sims 1992).

Three general reasons for including questions on culture in the survey come to mind. First, they could help in the design of culturally appropriate policies. Second, they could be required to assist in formulating policies on cultural maintenance and in identifying where intervention might be helpful. A third possibility is more difficult. Culture has often been treated as a problem in social change contexts and as an obstacle to development, particularly by economists working in third world situations. Thus, for example, some peasant farmers have been seen to be held back in improving their agricultural practice and productivity by ideas about gender, honour and shame that prevent women doing certain kinds of work. In the Australian situation it might be argued, for instance, that Indigenous beliefs about sorcery are a problem in improving health in certain situations.

An analysis of the way the concept of culture is used in the survey helps throw light on which of these three purposes seems to be most important in the Survey. The concept of culture that underwrites the 11 questions in the Survey under this heading is closer to the first usage of the term referred to above than the second. This is because it is largely identified with discrete, identifiable activity that involves groups of people getting together. Thus ATI4201 asks, 'Whether GONE to any Aboriginal/Torres Strait Islander cultural activities in the last 12 months' (emphasis added). Questions ATI4203, 4 and 5 also use the verb 'gone';

questions ATI4202, ATI421 use the verb 'attend'; and questions ATI422 and 3 include the phrase 'place to meet'. Question ATI4206 which at first sight seems to be out of place under the heading 'Culture' asks, 'Whether involved with any Aboriginal/Torres Strait Islander organisations in the last 12 months'. However, when it is realised that the most common activity associated with organisations is the holding of meetings, it fits the same understanding of culture as formalised group activity. Two other questions relate to obstacles to attending gatherings, leaving a final two questions on other topics. This means there are only two questions under the heading 'Culture' that do not have this emphasis: ATI401 'Whether identifies with clan, tribal or language group' and ATI402 'Importance of role of Elders'.

In the light of this analysis, it seems clear that the interest in culture is primarily to do with cultural maintenance, a declared aim of the Aboriginal and Torres Strait Islander Commission's policy, and that attending gatherings is seen as an index of this or indeed as *the* cultural activity. Further, there seems to be a firm implication that people should be involved in these collective activities and that they can be fostered by bureaucratic support in the form of policy and the allocation of resources as the question, 'Whether needs a place to meet for cultural activities' suggests.

If, on the other hand, the broad anthropological view of culture is taken then many other sections of the Survey document are either going to be affected by distinctive cultural beliefs and practices or indicate them. This would be true at the least for the sections of the Survey on family, language, homelands, child care, health actions, attitudes to health, health risk factors, access and attitudes to health services and facilities, housing and for education and training. However, it is not clear that the Survey designers have always been aware of this and, more importantly, if they have been, whether their interest arises from the desire to document the existence of distinctive practices, to promote them or because they wish to see if they might be problematic in respect to some aspects of the achieving of some objectives and aspirations or meeting some needs.

These diverse purposes are not, of course, always incompatible. This is clearest in the case of the questions under the heading 'Language' which is quintessentially a cultural practice. Clearly, the answers to the questions in this section can be related both to cultural maintenance and to the issue of difficulties having an impact on social change.

Survey findings on culture

As has been indicated above, all but two of the questions in this section relate to cultural maintenance through participation in group activities. The activities recognised are funerals, ceremonies, festivals, carnivals and organisation meetings, which are markedly different kinds of cultural

activity, as the questionnaire recognises by separating them into three groups. Broadly speaking, it might be expected that the funerals and ceremonies were independently organised and funded by the individuals and members of the social networks involved, while festivals, carnivals and meetings are more likely to be State subsidised.

The findings of the Survey are much what might be expected and reflect the urban-rural continuum, with what the Survey defines as cultural practices strongest in rural areas, with the exception of attendance at organisation meetings which is the reverse. Interestingly, attendance at festivals and carnivals was nearly equal along the continuum. The obstacles to attending gatherings highlight the significance of transport, as half the people who could not attend cultural activities gave lack of transport, rather than money, as the problem.

Question AT1401 on identification with clan, tribal or language group produced the result that only 59.8 per cent of respondents did identify with one of these groups. This is somewhat surprising in the light of the Mabo judgement and the *Native Title Act 1993* and suggests the existence of a discrepancy between those Indigenous people who receive media coverage and the so-called 'grass roots' people. It seems likely that there will be an increase in these forms of identification in the future, given that proving continuity of connection with the land is a central prerequisite for the recognition of Native Title.

The most curious of the questions under the 'Culture' heading is that on the importance of elders. Eighty-four per cent of people 13 years and over said their role was important. This is essentially a motherhood matter which tells one little and seems like a wasted question. In the pre-Survey deliberation the reason given for adding in this question were that it might improve the information on cultural maintenance, although just how it might do that is unclear. This question should be dropped from any further survey for a more productive item.

Survey findings on language

The seven questions under language seem well targeted and useful. They not only identify specific needs, but also allow for cross-tabulations between language and education, employment, health and housing which may help pinpoint important areas for assisting people.

The Survey indicates that 54,300 people aged five years and over speak an Indigenous language, representing 74 per cent of the Northern Territory population, 23 per cent of the South Australian population, 21 per cent of the Western Australian and 15 per cent of the Queensland population. If this is an accurate finding it is most positive. In 1990 Schmidt made a 'rough estimate' of the number of Aboriginal language speakers and arrived at the figure of 30,000 or 10 per cent (Schmidt 1990: 1). If the NATSIS figure does accurately record the number of people who are completely fluent in an Indigenous language, rather than being inflated

by including people who have some smattering of competence in an Indigenous language, it is most encouraging. Even if the figure is somewhat inflated it is still positive given that children under five are not included. If a conservative estimate of only 15 per cent, rather than the NATSIS national percentage of 21 per cent, of the children aged three and four speak an Indigenous language, the figure of 54,300 is boosted by a further 2,300 to 56,600. This is not to suggest that the threat to the Indigenous language heritage is still not dire, but it does hold out some hope for the future.

Survey findings on homelands

Nine questions are related to the issue of 'Homelands'. Homelands is an ambiguous term. In remote Australia it would probably be most frequently understood as a synonym for outstations, since the outstation movement is often referred to as the homeland movement. Elsewhere it is more likely to be specifically the country people identify with or own in Aboriginal terms. While outstations are frequently on people's own country, they are not always located there.

While the findings indicate that 75 per cent of people aged 13 and over recognise an area as their homeland, it is interesting that 49 per cent of remote Indigenous people were 'Not allowed to visit' their homeland and that this was true for 34 per cent of males and 64 per cent of females. This discrepancy suggests that a number of factors are in operation here, some internal to Indigenous societies and some external.

Conclusion

While many of the NATSIS's immediate findings raise cultural questions such as that on self-assessed health status, it is important to be sure that such obviously outstanding findings are not the product of poor interviewing methods and inadequate communication. The cross-tabulation of the 'cultural' variables with other elements of the NATSIS could prove rewarding in turning up correlations that stimulate further investigation. All in all, however, the place of culture in the Survey does not seem to have been fully thought through which is, in part, due to the apparent lack of defined objectives for the Survey as a whole. While the purpose of the Survey is phrased in rather upbeat terms, meeting those terms may have prevented the gathering of a range of other practical material that would have been more informative in policy-making.

An alternative approach to some sections of the NATSIS would have been a rather more open-ended one directed at finding out people's objectives, aspirations and needs. This is the technique adopted in the interesting community survey carried out by Moisseeff (1994). In this

survey, for instance, she asked people about their main priorities for the community, offering them 12 possibilities. This list of possibilities was generated by the researcher and a senior Aboriginal member of the community and then submitted to the community council: apart from providing concrete evidence on people's priorities, it produced interesting differences between the weight and ranking given to priorities between men and women.

Such an approach in the NATSIS might well have shown, for instance, that cultural maintenance was high on a list of priorities of some, many or all communities and could have been elaborated with supplementary questions which would have indicated the varying ways different communities felt it best to go about achieving it.

There seem to be many other issues not canvassed by the NATSIS on which it would have been useful to have information. For instance, given the high levels of unemployment among Indigenous people it would be of considerable interest to know how they would like to spend their time: questions about recreation, access to televisions and video players would be helpful. In terms of understanding standard of living it would be useful to know about access to cars, refrigerators, telephones and other items considered basic by the population at large. In respect of culturally-based activity, it is surprising that there are no questions related to the art and craft industry as the Aboriginal Arts and Crafts Industry review of 1989 commented that there are no readily available statistics on the industry (see Altman 1989: 31). This is a vital industry for Aboriginal people, particularly in remote Australia, which is the subject of constant changes in policy without adequate information.

More generally, it is questionable just how sensitive an instrument a large-scale national survey like NATSIS can be in trying to capture the diversity and strength of Aboriginal ways of life, particularly in respect to something as complex as culture. While it is certainly of sociological interest to know about attendance at funeral ceremonies and meetings, it is hard to see how this information can be effectively used in policy planning unless, of course, it is the basis for a policy of subsidisation to make sure that increased numbers of people can participate in these activities. But that of itself is not unproblematic since it can create further dependencies on the state and enmeshment of personal, social and cultural life in a bureaucratic web which may eventually be destructive. It would be of greater policy significance if the Survey questions were more down to earth, focusing on information needs and facilities that directly affect people's daily life.

References

Altman, J.C. 1989. *The Aboriginal Arts and Crafts Industry: Report of the Review Committee*, Australian Government Publishing Service, Canberra.

Altman, J.C. (Editor) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Kroeber, A and Kluckhohn, C. 1963. *Culture: A Critical Review of Concepts and Definition*, Vinlege Books, New York.

Moisseeff, M. 1994. *Davenport Community Profile 1993: Aspects of an Aboriginal Village in South Australia*, Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra.

Schmidt, A. 1990. *The Loss of Australia's Aboriginal Language Heritage*, Aboriginal Studies Press, Canberra.

Sims, G. 1992. 'A national survey of the Aboriginal and Torres Strait Islander population: the proposal', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D. 1992. 'The cultural appropriateness of existing survey questions and concepts', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

14. Law, justice, Indigenous Australians and the NATSIS: policy relevance and statistical needs

C.A. Carcach and S.K. Mukherjee

There now exists abundant evidence which shows that the living conditions of Indigenous Australians are far inferior to those of the rest of the population. Official statistics and surveys reveal this disadvantage in terms of health, education, housing, employment and income, and access to public services. The 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) highlights these differences (Australian Bureau of Statistics (ABS) 1995). Although this Survey did not collect comparable data from the rest of the Australian population, there are numerous other surveys that enable comparison between demographic groups. The situation is no different in the sphere of law and justice; the NATSIS merely tells us what we already know. The Survey *inter alia* informs us that one in five Indigenous Australians were arrested at least once in the last five years. Data from prisons, juvenile corrective institutions, courts and police lock-ups show a disproportionate level of contacts between the Indigenous Australian population and the criminal justice system.

Indigenous over-representation in the criminal justice system is perhaps the issue that has captured the attention of researchers and policy makers in Australia and abroad. The work initiated by the Royal Commission into Aboriginal Deaths in Custody (RCIADIC) (McDonald and Biles 1992) and further research (Mukherjee and Carcach 1996a) suggest that the over-representation of Indigenous people in the criminal justice system is a problem requiring urgent solutions.

The reasons behind the unusually high rates of contact between Indigenous people and the criminal justice system, especially at the police level, have not yet been fully investigated. Recent research by Mukherjee and Carcach (1996b) suggests that the relationship between the Indigenous Australian community and the police requires urgent examination. What are the factors that lead to such excessive contact and what can be done in order to reduce it to acceptable levels are in our opinion important policy questions. Answering such questions would naturally lead to gathering and interpretation of data on related issues such as crime and violence, the role of the police, and the relevance of Indigenous Australian customary law.

This chapter discusses the main results of the NATSIS conducted by the ABS. The chapter defines, at a very broad level, informational needs related to law and justice in an Indigenous context and discusses the relevance of the Survey to support policy formation and decision-making on the relationship between Indigenous Australians and the law.

The chapter contains a discussion of informational needs with regard to law and justice, presentation of the main results from the NATSIS for the topics collected under the heading of law and justice, and discussion of the policy relevance of the Survey results, and highlights some of its limitations, and, finally, conclusions.

Law, justice and Indigenous people

The relationship between Indigenous Australians and the legal system has been of most concern for Indigenous organisations, the academic community and policy makers. Official statistics show that the rate at which Indigenous Australians enter into contact with the criminal justice system exceeds that for the rest of the population. Studies by the Australian Institute of Criminology (AIC) have consistently produced evidence of the over-representation of Indigenous Australians at the different stages of the criminal justice system. For example, the National Police Custody Surveys conducted by the AIC in 1988, 1992 and 1995 showed that Indigenous Australians were between 26 and 27 times more likely to be taken into police custody than the rest of Australians (AIC 1994, 1996). On the other hand, data from the National Prison Census (AIC 1982-1993) showed Indigenous people as being 13 or 14 times more likely to be in prison than the rest of the population.

The high rate of contact of Indigenous Australians with the criminal justice system is certainly influenced by a complex set of economic, social, cultural and institutional factors. Since very little is known about the reasons for the high level of Indigenous Australian over-representation, there is a need for extensive data on all the aspects surrounding the social, economic, cultural and institutional life of Indigenous Australians and their communities. Such data would support exploratory studies to isolate the factors with greatest potential to help us in beginning to understand this complex issue. On the other hand, there is also need for data about the way Indigenous Australians interact with the rest of the society in general and the legal system in particular. The NATSIS constituted a first step in the direction of gathering data to improve our knowledge about the characteristics of Indigenous Australians.

Methodological issues and main findings

The NATSIS was conducted by the ABS during April to July 1994 as part of the Government's response to the RCIADIC. The NATSIS comprised a sample survey of all people identifying as Aborigines and Torres Strait Islanders who live in Australia as well as non-Indigenous people usually residing in households with Indigenous people.

The Survey used a multi-stage sample design stratified by the 35 Aboriginal and Torres Strait Islander Commission (ATSIC) regions and

the Torres Strait area. The sample consisted of approximately 5,000 dwellings throughout Australia from which 15,700 interviews were obtained. A sample of prisoners was included in the NATSIS. The data were collected by trained Indigenous interviewers through personal interviews. With regard to law and justice, data were sought on the following topics:

- experiences with the justice system;
- access to and use of legal services;
- attitudes to family violence;
- victims of crime;
- attitudes to policing; and
- voting patterns.

Regarding the sensitive nature of issues included under law and justice, such as personal safety and family violence, some under-reporting is expected to have occurred. The extent of such under-reporting and its effect on the Survey estimates is not known (ABS 1994: 85).

Survey results

The Survey results have been summarised elsewhere (for more details see ABS 1995; Mukherjee 1996). This section presents and discusses the main results from the Survey in what is relevant to policy formulation in the law and justice area.

Arrest rates and reasons for arrest

- Nationally, over 20 per cent of the Indigenous people aged 13 years and over were estimated to have been arrested at least once during the five years before the Survey.
- More than three times as many males were arrested as females.
- Almost 47 per cent of people in the age group 18-24 years were arrested at least once during the five years before the Survey.
- About two in three arrests were for disorderly conduct and/or drink driving, and outstanding warrants and breach of orders. Almost six out of ten people arrested had drunk alcohol during the last week before the Survey. The percentage of people arrested who had consumed alcohol during the week before the Survey increased with age.

Access to and use of legal services

- A little over one out of six persons aged 13 years and over used legal services during the 12 months before the Survey. More than half of the users were people with arrest experience.

- A substantial proportion of the Indigenous population had to depend on legal services that were situated more than 50 kilometres away from their homes; more than eight out of ten Indigenous Australians who lived in rural Australia were in this situation.

Perceptions of family violence in Indigenous Australian households

- Seven in ten Indigenous Australians felt that family violence was a common problem in their area. A relatively high proportion of persons in the age group 25-44 years felt this way.
- Residents of capital cities (except in the Northern Territory) perceived family violence a less common problem than residents of other areas (other urban and rural).

Experience of criminal victimisation

In the category of attack and verbal threats of violence:

- Almost 13 per cent of Indigenous Australians aged 13 years and over were attacked or verbally threatened during the 12 months before the Survey. About one in six residents of capital cities were victims of such acts. The victimisation rate for rural areas was one in ten.
- Of Indigenous Australians aged 13 years and over, (6.5 per cent) were physically attacked in the last incident.
- More than 15 per cent of the victims were attacked or verbally threatened ten or more times during the 12-month period. Females were over 20 per cent more likely to be victims of attack or verbal threats than males.
- Thirty seven per cent of last incidents of attack and/or verbal threats were reported to the police.

In relation to break and enter with theft:

- 11.2 per cent of Indigenous Australian households reported to have been victims of break and enter with theft. This victimisation rate is over one and a half times higher than that reported for the national Crime and Safety Survey 1993 (ABS 1994).
- Households in capital cities were one and a half times more likely to be victims than their counterparts in rural areas.
- Only in 53 per cent of the incidents were the police told of the break-in. This rate was substantially lower than that found in the Crime and Safety Survey 1993 (ABS 1994).

Attitudes to policing

In terms of police performance in dealing with crime:

- More than one in four (26.9 per cent) of the respondents perceived the police as not doing a good job in dealing with crime in the area with residents of capital cities; young adults aged 18-24 years expressed more negative views on the issue.
- To have been arrested was associated with perceptions about police performance in dealing with crime. Those with previous arrest experiences, especially young people in the age group 18-24 years, said the police were not doing a good job in dealing with crime, a perception that became more negative with age. More than 40 per cent of people in the age group 25-44 years had a negative perception of police performance in dealing with crime.

Perceptions of police performance in dealing with violence:

- Perceptions of police performance in dealing with violence and family violence varied across age groups. People aged under 18 and those aged 45 years and over had more positive views than the rest.

Regarding negative perceptions of police performance:

- The three most frequent reasons given for negative perceptions of police performance were the police being 'too slow to respond', they 'don't fully investigate' crime, violence or family violence, and the police 'don't understand Aboriginal culture'. However, only less than 10 per cent of respondents gave any of these reasons.

Responses to questions regarding relations with the police and perceptions of police treatment indicated that:

- Sixty per cent of respondents considered the relationship between police and Indigenous people to have improved or remained unchanged compared to five years ago. On the other hand, about one in five respondents perceived the relationship between police and Indigenous Australians as being worse now than it was five years ago. In the Northern Territory, where Indigenous Australians make up most of the population, 71 per cent considered that the relationship with police has remained the same or improved over the last five years.
- About two out of three Indigenous people believed they were treated fairly or sometimes treated fairly by police.

Policy relevance

The results from the NATSIS confirm previous findings regarding the relationship between Indigenous people and the justice system. The NATSIS confirmed that the two most serious problems of the relationship between Indigenous people and the legal and justice system are their high rates of arrest and the generalised opinion that family violence is a

common problem among Indigenous households. Moreover, Indigenous Australians held negative views on the performance of police in dealing with crime, violence and family violence.

This section examines the relevance that the NATSIS findings have for policy formation. The relevant policy questions for each of the major issues are first formulated and the information required to answer them is then identified. The information available from the NATSIS is assessed on the basis of the information required, so a judgement about the relevance of the Survey can be made.

Arrest rates

The relevant policy question is how to reduce the incidence of arrest among Indigenous Australians.

In order to answer this question we need to know in the first place whether arrest rates among Indigenous people are higher than among other groups in the population; if so, whether or not the difference in arrest rates justifies further examination. Assuming that the seriousness of the arrest problem among Indigenous Australians has been established, a second issue would refer to why Indigenous Australians are arrested by the police and how their reasons for arrest compare to those for other groups in the population. A third issue requiring data is the arrest incident by itself. What the main facts leading to and associated with an arrest are and how Indigenous people interpret these facts are crucial in understanding the role that cultural factors might play in the contacts between Indigenous Australians and the police. Why, where, how and by whom was the person arrested are basic characteristics of the arrest incident about which data should be sought.

The NATSIS asked the question of whether the person had been arrested by the police during the last five years or not. had happened and the reasons for the last arrest. The Survey did not ask any more details regarding the last arrest.

As mentioned earlier, most of the arrests were for disorderly conduct and/or drink driving, and outstanding warrants and breach of orders. Data show that alcohol consumption might have been associated with the reason(s) for arrest; a result consistent with findings from the National Police Custody Survey (AIC 1996). The links between alcohol and crime (violence, disorder and acquisitive crime) are well documented (see Ramsay (1996) for a recent review on this topic). Previous research would suggest that alcohol might have been involved in incidents of violence both in and outside the family, and in cases where the arrest was due to property crimes (for example, Tuck 1989). Had the NATSIS asked for details about arrest incidents with regard to alcohol consumption, data would have been available to assess the real extent of the problem, so what Nimmer (1971) identified as the 'social service concern' of the criminal justice system could be removed.

Information on arrest incidents is also vital to appreciate the role that cultural factors play in the relationship between Indigenous people and the criminal justice system. The NATSIS included a section on culture (see chapter 13) which collected *inter alia* general data on attendance at cultural activities; availability of a place to meet for cultural activities; self-identification with a clan, tribal or language group; role of the elders; recognition of an area as their homelands/traditional country; and experiences with forced separation of children from their families. While possibly relevant for other purposes, these variables do not add any valuable information when considering arrest experiences. More detailed questions regarding the dynamics of arrest are required if survey data on culture are to assist policy formation aimed at reduction of arrest incidence among Indigenous Australians.

Family violence in Indigenous households

The fact that a majority of respondents perceived family violence as a common problem in Indigenous households raises the important policy question as to how to reduce its level. However, perceptions are determined by the meaning that concepts have to people. In this case, how respondents interpret the concept of family violence is as important as asking them their perceptions about the presence of the problem in their communities. In order to penetrate into the interpretation of the concept of family violence among Indigenous Australians, it is necessary to ask for its explicit manifestations. Questions relating to the forms of family violence prevailing in Indigenous Australian households are warranted. It is also relevant to gather data on Indigenous Australians' perceptions about family violence and its manifestations in the rest of Australian households. Finally, the reasons why Indigenous people consider, or do not consider, family violence to be a common problem are relevant to any initiative aimed at managing this issue.

The NATSIS limited itself to ask whether family violence in Indigenous households was a common problem in the resident's area or not. The possibility of a link between family violence and alcohol consumption has already been raised in the previous section. However, the information on this issue is too limited to inform any serious policy initiative.

Victimisation

The NATSIS question on personal victimisation referred to composite incidents made up of two offences with differential degrees of seriousness: attack and verbal threats. An incident may have either involved verbal threats only or attack only or both offences. The absence of a screening question on how many incidents involved verbal abuse only or attack only does not enable us to identify the cases where the person was a victim of both offences. This information is relevant to understand issues relating to possible precipitation by victims. More importantly, it is not possible to

compare the results from the survey with those from the national Crime and Safety Survey 1993 (ABS 1994). Apart from differences in the scope population, the survey questions regarding attack (or assault) are totally different. The same can be said for the question about reasons not to tell the police about the last incident.

Perceptions of police performance and relationship with the police
The NATSIS puts too much emphasis on the respondents' perceptions about police performance and the relationship between Indigenous people and the police. In fact, this seems to have been the main topic under law and justice. A major weakness in this field is the absence of a question on perceptions about the amount of crime in the area to give some background qualifier to the question on police performance in dealing with crime. Moreover, the NATSIS included among the reasons for the police not doing a good job in dealing with crime, that they 'Don't understand Aboriginal/Torres Strait Islander people/culture', which suggests that the question on police performance was referring to crime in Indigenous areas or perhaps among Indigenous people. However, the question was worded in such a way that it did not mention crime by Indigenous people or among Indigenous people at all. The same comments apply to the questions regarding police performance in dealing with violence and family violence.

An area of concern has to do with the highly sensitive questions regarding victimisation of Indigenous people by police, such as hassling and physical attack. The results show that almost one in ten respondents were hassled and about one in 40 were attacked by police. The NATSIS lacked additional details on incidents involving hassling or police attack, such as whether they were related to an arrest and, if so, whether or not the person resisted arrest or tried to avoid the arrest of another person.

Perceptions about quality of the relationship between Indigenous people and the police and about the treatment received from police were in general positive. Again, there was no question on whether the relationship with police was good or bad five years ago. What is the meaning of a relationship being qualified as the same (four in ten qualified this relationship as being the same)? Does 'same' mean good or bad?

Conclusions

The NATSIS covered most of the topics of interest in the area of law and justice. Perhaps its major drawback is to have been designed as an 'omnibus survey' where limited data about too many issues were collected. The NATSIS findings suggest areas for further research. We have stressed that over-representation is a major problem in the relationship between Indigenous people and the criminal justice system which has already been advanced in previous research. The NATSIS, however, did not collect data to gain new insights into this issue. From this perspective, the use of the

Survey to support policy formation is very limited. The same can be said about family violence. The approach to gathering information on Indigenous Australian culture was too conservative for law and justice use and there were not explicit links between the issues of culture, victimisation and deviant behaviour.

Much remains to be done in the area of collecting data on law and justice among Indigenous Australians and between them and the rest of the Australian population. Of especial relevance is the issue of arrest rates and related factors as outlined above. Equally important are the issues of crime, violence and family violence. If the NATSIS is to be repeated, more attention should be paid to these issues, perhaps by including special categories in the main survey.

References

Australian Bureau of Statistics (ABS) 1994. *Crime and Safety Australia April 1993*, cat. no. 4509.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994. Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Institute of Criminology (AIC) 1982-1993. *Australian Prisoners*, AIC, Canberra.

Australian Institute of Criminology (AIC) 1994. *National Police Custody Survey 1992, Preliminary Report on Deaths in Custody, Australia No. 2*, AIC, Canberra.

Australian Institute of Criminology (AIC) 1996. *National Police Custody Survey August 1995*, Preliminary Report, AIC, Canberra.

McDonald, D. and Biles, D. 1992. 'Methodological issues in the calculation of over-representation and exposure to risk in custody', in D. Biles and D. McDonald, *Deaths in Custody Australia, 1980-1989*, Australian Institute of Criminology, Canberra.

Mukherjee, S.K. 1996 (forthcoming). *National Aboriginal and Torres Strait Islanders Survey 1994: Law and Justice*, Australian Institute of Criminology and Australian Bureau of Statistics. Canberra.

Mukherjee, S.K. and Carcach, C. 1996a. Methodological Issues with Measuring Over-representation, unpublished report, Australian Institute of Criminology, Canberra.

Mukherjee, S.K. and Carcach, C. 1996b. Aboriginal and Torres Strait Islanders in the Criminal Justice System, unpublished report, Australian Institute of Criminology, Canberra.

Nimmer, R.T. 1971. *Two Million Unnecessary Arrests. Removing a Social Service Concern from the Criminal Justice System*, American Bar Foundation, Chicago.

Ramsay, M. 1996. 'The relationship between alcohol and crime', *Research Bulletin*, 38: 37-43, Home Office Research and Statistics Directorate, London.

Tuck, M. 1989. *Drinking and Disorder: A Study of Non-Metropolitan Violence*, Home Office Research Study 108, Home Office, London.

15. Torres Strait Islanders

W.S. Arthur

This chapter deals with a subset of the Indigenous population, namely Torres Strait Islanders. Initially, recommendations of the workshop which took place before the National Aboriginal and Torres Strait Islander Survey (NATSIS) (Altman 1992) about Torres Strait are discussed, and the political and institutional changes that have occurred since that workshop and the data sets that might be considered necessary to allow a comprehensive and policy-relevant analysis of Torres Strait Islander (Islander) issues are examined.[1] In particular, it is argued that from a distributive, social and political viewpoint, the Islander population has both Torres Strait and mainland components and that data sets should be available which describe these two components. The chapter then goes on to assess whether these data sets are available from the NATSIS before ending with a brief discussion about the quality of the NATSIS data and some recommendations for future surveys.

Policy-relevant data sets

Torres Strait Islanders and Aborigines

The pre-NATSIS workshop in 1992 noted that standard Australian Bureau of Statistics (ABS) census publications did not differentiate between Torres Strait Islanders and Aborigines (Arthur 1992). It was argued then that, because Islanders were a distinct Indigenous group, both culturally and politically, they should be treated separately from Aborigines; an Islander identifier was included in the survey. More recently there have been calls from some Islanders for a Commission for Islanders, totally separate from the present Aboriginal and Torres Strait Islander Commission (ATSIC) (ATSIC 1996: 10). In July this year the chairman of the Torres Strait Regional Authority (TSRA) had discussions with the Prime Minister with the aim of pursuing the push, started in the late 1980s, for political and economic autonomy for the Strait (O'Rourke 1988). Therefore, it is clear that the distinction between Aborigines and Torres Strait Islanders remains and, indeed, may be increasing. This reinforces the requirement for discrete Islander data.

The Torres Strait and mainland Australia

There are also compelling reasons for considering the Islander population in two sections: one section in the Strait and one on the mainland. The pre-

NATSIS workshop noted that, following the Second World War, many Islanders left the Strait, and recent estimates indicate that 80 per cent of the Islander population now live on the mainland, mostly in coastal towns and cities (Arthur and Taylor 1994).

The reality of relatively distinct Islander populations in the Strait and on the mainland is reflected by institutional arrangements. Islanders in the Strait have had some form of representative body for the last 60 years. In 1939 the Queensland Government established the Island Advisory Council and this was reconstituted as the Island Coordinating Council in 1985. At the Federal level, the Strait became one of the ATSIC regions in 1989 and, in 1993, to increase self-governance, the ATSIC legislation was amended to establish the TSRA (Sanders 1994). This gave the Strait a special status and made a further distinction between Aborigines and Islanders, as well as between the Strait and the mainland. In 1987, Islanders in the Strait called for independence from Australia (O'Rourke 1988) although it was not clear at the time what was meant by the term 'independence' (see Sanders 1994). Then, in July this year, the chairman of the TSRA had discussions with the Prime Minister with the aim of pursuing the issue of devolution for the Strait and in August the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs was requested by the Minister for Aboriginal and Torres Strait Islander Affairs to establish an inquiry to look into the issue.

Regarding the position of Islanders on the mainland, in 1989 the ATSIC legislation established the Office of Torres Strait Islander Affairs (OTSIA), located within ATSIC in Canberra. OTSIA was given the responsibility for representing the needs of Torres Strait Islanders living on the mainland. Islanders on the mainland are in the minority (vis-à-vis other Indigenous Australians), they live away from their homelands, and there is some evidence that they feel marginalised in obtaining services for Indigenous people (ATSIC 1996). Although the 1991 Census provided some data on mainlanders, much more is known about the conditions of the 20 per cent of Islanders who live in the Strait than about the 80 per cent who reside on the mainland. All of the factors noted above make it relevant to consider the Islander population in two components, that in the Strait and that on the mainland, and to analyse statistics accordingly.

Data sets from standard NATSIS publications[2]

None of the standard NATSIS output provides data specifically on Islanders. However, a range of data are produced for the Indigenous population of the Torres Strait in the two standard NATSIS publications entitled *Detailed Findings* and *Torres Strait Area* and, as Islanders account for 96 per cent of the population of the Strait, then these data present a fairly accurate picture of the Strait's Islander population (ABS 1995, 1996). That is to say, over a wide range of categories, the two NATSIS standard publications noted provide data on Islanders in the Strait. However, the

standard publications do not present data on Islanders at the national level, the State level, or the ATSIC region level on the mainland.

Other NATSIS data on Islanders

In an attempt to provide an analysis of Islanders from the NATSIS data, the ABS and the Centre for Aboriginal Economic Policy Research (CAEPR) are producing a joint publication specifically on Islanders, covering the major variables in the Survey such as family and culture; health; education and training; employment and income; law and justice (ABS/CAEPR 1996). To make the publication relevant to the policy bodies discussed earlier, it was initially intended that it would describe the situation of Islanders both in the Strait and on the mainland. However, this has not been possible because of limits imposed by the sample survey.

The representativeness of the sample varied considerably at the State and regional level. The Strait was over-represented while some of the eastern and southern States were under-represented; for example, less than half of one per cent of the Islander population was surveyed in New South Wales, Victoria and South Australia. The result of this is that the NATSIS data on Islanders are considered reliable only within Queensland, limiting the possible units of analysis to: Torres Strait; mainland Queensland; and all of Queensland. Therefore, the position of Islanders in the Strait and those on the Australian mainland cannot be described using the NATSIS data. The closest possible approximation is a description of Islanders in the Strait and Islanders in the rest of Queensland. A sample of these data are shown in Tables 15.1 and 15.2 and are summarised below.

Generally, Islanders have a strong sense of culture and identity (Table 15.1). They identify with clans or language groups, recognise a homeland, and attend cultural activities. As expected, these cultural markers are present in the Strait but they are also present on the mainland and tend to confirm other sources which note that Islanders on the mainland retain a strong sense of culture and identity (Beckett 1987). This point is reinforced by the high proportion of mainlanders who still view the Torres Strait as their homeland and who feel they can live there if they wish.

On the other hand, at a social and economic level, it is possible to see some differences between the two populations which reflect their different social and economic environments.

For example, Islanders on the mainland tend to be more highly educated than those in the Strait, have a better command of English, are more interested in doing further study and experience fewer difficulties in taking on such study (Table 15.1). Also, mainlanders are more likely to be in full-time employment and to be unemployed for shorter periods than those in the Strait (Table 15.2). These results appear to reflect the different circumstances in the Strait and on the mainland: there are relatively more educational facilities on the mainland and the labour market demands

higher levels of education and qualification. While the Strait's labour market is heavily influenced by the Community Development Employment Projects scheme, which appears to be less discerning regarding education, the mainstream labour market on the mainland seems more sensitive to skills in English (Table 15.2).

Despite the generally higher level of education and post-school qualification found on the mainland, Islanders in the Strait are more involved in school decision-making, no doubt reflecting the more community-oriented schooling there (Table 15.1).

Table 15.1. Characteristics of Torres Strait Islander population in the Strait and rest of Queensland, 1994.

Characteristics	Strait Per cent	Rest of Queensland Per cent
Family and culture		
Identify with clan/language group	72	58
Recognise homeland	94	80
Recognise and feel free to live in homeland	99	96
Recognise and currently live in homeland	70	12
Main language is English	12	71
Main language is Islander Creole	65	12
Use more than one language	10	45
Single family households	74	75
Health		
Very good-excellent	63	56
Fair-good	37	42
Having a long-term health condition	18	25
Smokers	41	42
Drinkers	44	60
Body fat index, overweight/obese	60	54
Diabetes seen as a major health problem	81	31
Alcohol seen as a major health problem	79	60
Alcohol seen as a major substance problem	84	79
Marijuana seen as major substance problem	73	63
Petrol sniffing as a major problem	17	21
Satisfied with local health service	92	83
Education and training		
Having below Year 10 certificate	51	42
Having Year 10 to Year 12 certificate	41	49
Having a post-school qualification	10	21
School leavers wanting further study	30	49
Have difficulty taking up further studies	86	48
Parents involved in school decision-making	63	34

Source: ABS/CAEPR 1996.

Other socioeconomic differences are also reflected in the NATSIS results. Earlier research has pointed out that job opportunities are limited in the Strait (Arthur 1994) and this is borne out by the Survey data which show that a higher proportion of unemployed Islanders feel that there are simply no jobs available for them there (Table 15.2). On the other hand, the results also show that Islanders in the Strait undertake more fishing and gardening than those on the mainland, perhaps a direct indicator of the greater access to natural resources there than on the mainland (Arthur and Taylor 1994). Despite some of these differences, personal median incomes are very similar in the Strait and on the mainland.

Table 15.2. Characteristics of Torres Strait Islander population in the Strait and rest of Queensland, 1994.

Characteristics	Strait Per cent	Rest of Queensland Per cent
Employment		
Employment to population ratio	37	39
Unemployment rate	38	33
Participation rate	59	58
Employed full-time	44	55
Employed non-CDEP and having no difficulty with English	49	87
Unemployed who considered no jobs were available	43	9
Unemployed 6 months or more	66	52
Those 15 years and over who hunted and gathered	26	15
Median personal income	$10,194	$10,032
Law and justice		
Improved relations with police	22	20
Worsening relations with police	12	26
Arrested in last five years	2	16
Attacked or threatened in last 12 months	3	12
Needed legal service in last 12 months	5	11
Access to Indigenous police officers	77	60
Voting patterns		
Voted in last Federal election	82	62
Voted in last State election	82	66
Voted in last local government election	86	62
Voted in last ATSIC/TSRA election	47	39
Voted in none of the above	9	26

Source: ABS/CAEPR 1996.

Although a high percentage of Islanders in the Strait consider themselves to be in good health, they are much more likely to be overweight or obese

(Table 15.1). Generally, the data suggest that Islanders, particularly those in the Strait, are highly aware of health issues; they consider several as problematic, the major one of these being diabetes. Those on the mainland, meanwhile, view alcohol as their major health problem. Indeed, in all cases, alcohol emerges as the biggest perceived substance problem, marijuana being seen as the second greatest problem (Table 15.1).

Islanders on the mainland are more likely to have some contact with the police and the legal system than are those in the Strait (Table 15.2). Mainlanders also have a more negative perception of the police than those in the Strait (Table 15.2). Again, these findings may reflect the fact that mainlanders live in urban areas, which may be more stressful than living in the Islander communities in the Strait. Also, mainlanders' perceptions of the police may be affected by their more limited access to Indigenous police services (Table 15.2).

Regarding voting patterns, Islanders in the Strait participate in voting to a higher degree than those on the mainland (Table 15.2). This may reflect the social and political situation there. For example, it is the region from which Native Title legislation derived, there is a TSRA which has the potential to give the region greater decision-making powers than ATSIC regional councils on the mainland, and there are continuing pressures for the region to have greater political autonomy from Australia (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1996).

Beyond NATSIS 1994

The NATSIS has provided new and useful data which highlight and confirm some of the differences between the socioeconomic status of Islanders in the Strait and those on the mainland of Queensland. The Islander data which the NATSIS has not been able to supply and which are still required are those for each of the States other than Queensland, and those for all of the Australian mainland and Tasmania.

One reason that the NATSIS has not been able to provide sufficiently accurate data relates to the sampling method, which resulted in very few Islanders being identified and sampled in States and Territories outside Queensland. Therefore, to fill these gaps in the database, it could be argued that in the future there should be a separate Islander survey, or a subsection of a general survey which relates just to Islanders and which has its own sampling frame.

The NATSIS cannot provide data on population. However, two points must be made on Islander population in general. First, the size and location of the Islander mainland population remains uncertain, especially outside Queensland, and should be further assessed (Arthur 1992). It is thought, for example, that some of those identifying as Torres Strait Islanders are in fact Pacific Islanders and Bass Strait Islanders (Arthur

1992). Regarding population size alone, it is noteworthy that the Torres Strait Islander population has increased fivefold from around 5,000 at contact (Beckett 1987) to 27,000 in 1991 (Arthur 1994), whereas the Aboriginal population may only now be approaching between 50 and 100 per cent of its size in 1788. The possible policy implications of this differential growth rate alone make it important to obtain accurate Islander population data. Therefore, at the census level, the questions relating to Torres Strait Islander identity should be modified to minimise any ambiguities that result in poorly defined enumeration.

Notes

1. In this paper, the term 'Islander' refers to Torres Strait Islanders.

2. Although the censuses include an Islander identifier, standard ABS publications do not provide information about Islanders except for the size of the population in each State (see ABS 1993). However, standard census data sets are available for the Indigenous population of the TSRA, and as Aborigines account for only 4 per cent of this population (Arthur 1992) these data provide a fairly accurate picture of the Strait's Islander population. In addition, special data sets from the census can be obtained from the ABS for the Islander population on the mainland and these have already been used for analysing the situation there (see Arthur and Taylor 1994).

References

Aboriginal and Torres Strait Islander Commission (ATSIC) 1996. *The Regional Councillor*, May 1996, ATSIC, Canberra.

Altman J.C. (Editor) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Arthur, W.S. 1992. 'The provision of statistics about Torres Strait Islanders', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Arthur, W.S. 1994. 'The relative economic status of Indigenous Australians within the jurisdiction of the Torres Strait Regional Authority', *CAEPR Discussion Paper No. 71*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Arthur, W.S. and Taylor, J. 1994. 'The comparative economic status of Torres Strait Islanders in Torres Strait and mainland Australia', *Australian Aboriginal Studies*, 1995/1: 18-30.

Australian Bureau of Statistics (ABS) 1993. *Australia's Aboriginal and Torres Strait Islander Population, 1991 Census*, cat. no. 274.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996. *National Aboriginal and Torres Strait Islander Survey 1994: Torres Strait Area*, cat. no. 4196.0.00.015, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996. *1994 National Aboriginal and Torres Strait Islander Survey: Torres Strait Islanders in Queensland*, cat. no. 4179.3, ABS, Canberra.

Beckett, J. 1987. *Torres Strait Islanders: Custom and Colonialism*, Cambridge University Press, Melbourne.

House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1996. *Inquiry Into Greater Autonomy for Torres Strait Islanders: Inquiry Information*, House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs, Canberra.

O'Rourke, D. (Chairman) 1988. *Report of the Interdepartmental Committee on the Torres Strait Islands*, Department of Aboriginal Affairs, Canberra.

Sanders, W. 1994. 'Reshaping governance in Torres Strait: the Torres Strait Regional Authority and beyond', *Australian Journal of Political Science*, 30 (3): 500-24.

16. The NATSIS as a regional planning and policy tool

D.F. Martin

The prospective role of the National Aboriginal and Torres Strait Islander Survey (NATSIS), as a tool for the Aboriginal and Torres Strait Islander Commission (ATSIC) regional planning, arose in large part from recommendations of the Royal Commission into Aboriginal Deaths in Custody. Recommendation 49 reads, in part:

> That proposals for a special national survey covering a range of social, demographic, health and economic characteristics of the Aboriginal population with full Aboriginal participation at all levels be supported. The proposed census should take as its boundaries the ATSIC boundaries ... I further recommend that the ATSIC Regional Councils be encouraged to use the special census to obtain an inventory of community infrastructure, assets and outstanding needs which can be used as data for the development of their regional plans (Commonwealth of Australia 1991: 62).

In this chapter, I wish to briefly examine the role of data provided in the NATSIS in ATSIC's regional planning and policy development processes to date. In essence, I will suggest that irrespective of the validity and utility or otherwise of NATSIS data when disaggregated to the ATSIC regional council level, regional council planning and decision-making is not typically based on 'technocratic' principles. Two policy questions are thus raised: could a future, redesigned NATSIS provide better data at the ATSIC regional council level, and even if it could, how could the data provided be better integrated into ATSIC's regional planning? I will further suggest that these questions are thrown into sharp relief by some of the broader policy implications of recent major cuts in the discretionary area of ATSIC's global budget allocations.

ATSIC's planning regime

As other commentators have noted, there is a significant degree of inherent tension in the complex ATSIC structure, between its administrative and elected arms, and between national and regional levels of both arms (for example, Finlayson and Dale 1996; Smith 1996). There has been increasing pressure from what Smith (1996: 35) calls a 'regionalist constituency' within ATSIC to increasingly decentralise operations to the regional level, with proposals such as one-line funding arrangements and geographically-based program structures potentially leading to independent

regional authorities such as that already established in the Torres Strait (for example, see Dillon 1996: 102).

Reflecting this complexity, the ATSIC structure incorporates at least four levels of planning by Indigenous people themselves: at the national level by the Board of Commissioners, at the State level (particularly through the State Advisory Councils), at the regional council level, and at the local community level.

A particular challenge confronting ATSIC is to ensure that these various levels of planning are coordinated, and that in turn they are coordinated with the strategic and operational planning of its administrative arm, through the central, state and regional offices. Finlayson and Dale (1996: 72) note that ATSIC's 1993 Corporate Plan was finalised well before plans were developed at either regional or community levels, and more recently attention has been given by ATSIC to developing a more coordinated planning regime (ATSIC 1994).

The present 35 ATSIC regional councils (in addition to the Torres Strait Regional Authority) are of fundamental importance in the ATSIC structure. Regional councils are separate legal entities with a range of statutory functions. Section 94 of the *Aboriginal and Torres Strait Islander Commission Act 1989* sets out the statutory functions of regional councils. It requires each regional council to develop, and subsequently revise from time to time, a regional plan for improving the economic, social and cultural status of the Indigenous residents of its region. Other statutory functions include assisting ATSIC and Commonwealth, State and Territory agencies in the implementation of regional plans, and allocating ATSIC program funding on the basis of priorities established through them.

Thus, in broad terms regional councils have the responsibility to develop and monitor all ATSIC policy and program delivery at the regional level, as well as to advise other Commonwealth, State, Territory and local government bodies operating in their region on the needs and aspirations of the Indigenous population, and to monitor the operations of these other agencies.

ATSIC guidelines for regional (strategic) planning emphasise the importance of developing a 'regional profile' as a key step in identifying needs and issues of regional importance, and providing an analysis of their underlying causes. Regional profiles should cover the following areas (Menham 1992; ATSIC 1994: D8-14):

- physical and environmental profiles of the region;
- historical and cultural background of Indigenous peoples of the region;
- a description of the communities making up the region;
- demographic and socioeconomic statistics;
- a description and analysis of the 'needs' of Indigenous residents;

- the resources available to meet these needs, such as government services; and
- an analysis of the local and regional economy.

It is envisaged by ATSIC that regional councils will work towards developing links between their own planning processes and those of Commonwealth, State and Territory, and local governments in their regions. Ultimately, it is intended that the ATSIC regional planning framework should be able to coordinate regional service delivery to Indigenous people by other levels of government with those of the Commonwealth, provide a mechanism to monitor the effectiveness and appropriateness of policies and services, and enable Indigenous participation in the planning processes of other agencies (ATSIC 1994: E3). The regional planning process is envisaged by ATSIC as providing 'a significant step in Aboriginal people and Torres Strait Islanders achieving self-determination and self-management' (ATSIC 1992b: 6).

NATSIS data and regional planning

Clearly, reliable and pertinent data would be an invaluable tool in such a process; in fact, arguably an essential one. As Altman and Liu (1994) maintain, for both the 'bottom-up' regional planning and also for 'top-down' decision-making concerning resource allocation, the availability of good data is crucial. Furthermore, along with more substantive information on agency expenditures in regions, longitudinal data disaggregated to the regional level could provide one means of assessing socioeconomic changes and thus program effectiveness across agencies (Altman and Liu 1994: 2). It would seem that this necessity for the availability of appropriate data on the regional level was a core reason for ATSIC's insistence that the NATSIS data be made available disaggregated to the regional council level.

However, it would seem that even in the best of circumstances, the NATSIS data could be of only marginal utility to the ATSIC regional planning process. In part, this is due to issues of data reliability when disaggregated to this level. Some comparative data can be extracted on a regional basis; for example, Ross (chapter 7) has presented some preliminary but potentially useful figures on regional variations in weekly incomes across the ATSIC regions. However, Sanders (chapter 10) suggests that while the NATSIS may have some utility for the evaluation of Indigenous housing programs, its value does not lie at the regional level, but at the national policy one. Anderson and Sibthorpe (chapter 11) maintain that limitations in the NATSIS data set have seriously reduced its capacity to further understanding of the relative distribution of morbidity, 'risk' and health care capacity within and between Indigenous communities,

and suggest that a national survey may not be the most appropriate means to establish these internal relativities.

Such questions were raised in the very establishment of the NATSIS methodology. For instance, in his 1992 discussion of the role of a national Indigenous survey, Altman noted that there were diverging perspectives between those who argued it should inform national policy debates, and those who felt it should focus more on regional interests. However, he provided a cautionary warning, arguing that given the large range in regional council population sizes, the significant diversity of community types within each council region, and issues to do with sample size, data from a national survey would be of limited utility for regional planning. He suggested the survey would have no more than limited usefulness in allocative decision-making between regions. Rather, national survey data disaggregated to State and section-of-State levels would allow them to inform broader policy issues such as the division of resources between major areas such as health, education, and community infrastructure (Altman 1992: 156-8).

It is important to note here too that regional council planning of necessity emphasises factors *internal* to each region. For most ATSIC regions, there is a great diversity of circumstances of Indigenous residents, and in making allocative decisions, establishing priorities, negotiating with service providers and so forth, regional councils typically require information concerning specific local areas or communities. Thus data which pertain to the overall region may be of only marginal usefulness.

Furthermore, a changed emphasis in regional council planning means that each council is not expected to comprehensively plan for its entire ATSIC region, but rather to address differential priorities across Indigenous communities within a region (ATSIC 1994: A20). The utility of NATSIS data then disaggregated to the ATSIC regional level becomes even more problematic as a regional planning tool. At best, it may offer some broad-level comparative data for allocations between regions as mentioned previously, rather than serve as a reliable planning tool for the assessment of particular needs within a region.

ATSIC regional councils: political representatives or bureaucratic planners?

The usefulness, or otherwise, of NATSIS and other such data to the regional planning process is not only a matter of the validity of the data. Regional councils are deeply embedded within the local and regional Indigenous social, cultural and political domains, and decisions, particularly those on program delivery and funding allocations, are typically made on the basis of particular Indigenous principles, rather than on any objective needs-based assessments.

This Indigenous domain is typically highly factionalised and characterised by the complex, highly fluid and often cross-cutting

allegiances which individuals have to groupings based on families, clans, ancestral lands and so forth, as well as to contemporary forms such as Indigenous organisations. A defining characteristic of this domain is an emphasis on the primacy of the 'local' over that of the 'community' or the region. Competition for resources within this domain is often intense, but such resources serve particular Indigenous social ends and it is ultimately in social capital rather than other forms that value lies (Martin 1995; Martin and Finlayson 1996).

ATSIC councillors may be construed by the wider bureaucratic system as 'representing' their regional constituencies, and many indeed seek to do so. However, they are also embedded within particular networks of kin, have attachments to particular locales and language or other traditionally-based groupings, are associated with particular community organisations, and so forth. They are therefore embedded within specific matrices of rights, obligations, and shifting allegiances which are crucial constitutive elements of the Indigenous social and political realm. Furthermore, there is often an entirely different culturally located view of the instrumental, of what might be the causal relations between phenomena, in which the kinds of connections which the bureaucratic culture might draw from socioeconomic data are of peripheral concern. The complex social calculus upon which decisions are made and social relations negotiated within this realm can not be easily discarded as councillors enter the regional council meeting, to be replaced with one predicated upon data-based analysis, objective assessment of competing demands for scarce resources, and setting aside of individual and family interests in favour of those of a broader community (Martin and Finlayson 1996: 6).

I suggest that it is such factors, rather than simply a lack of skills as such, or subsidiary matters like the culturally inappropriate presentation of data, which underlie the difficulties regional council support staff often have in achieving a more 'professional' and 'objective' planning and decision-making regime. These views are borne out by my observations of decision-making by a range of Indigenous bodies over many years. I also conducted a brief survey of all the ATSIC regional offices servicing the regional councils, concerning their awareness of the regional statistics publications produced jointly by ATSIC and the ABS from the NATSIS, the usefulness or otherwise of the information in them, whether the NATSIS data or that from other sources played a role in regional council planning, and if not, whether this was due to a lack of skills or because it was not culturally appropriate. A copy of the survey form is included in Appendix A16.1.

Offices servicing 15 of the 35 mainland regional councils responded to the survey, either verbally or in written form or in both, and the results are shown in Table 16.1. An attempt was made to identify any variation in the use and perception of data according to location. Although only half of all regional councils were represented, there does not appear to be any

relationship. Eleven of the councils, or over 70 per cent, felt that the NATSIS data was not useful to them. Of these, six stated that they did not use any socioeconomic or other data in regional planning. Nine of the respondent offices felt that the reason why data were not used by the councils was not only that it was not in a 'culturally appropriate' form, but that it was not culturally appropriate to use hard data as such for planning. A number of the verbal and written responses stressed that the principles of decision-making by councils were located in the imperatives and concerns of the local Indigenous domain and not in a technically-based and nominally objective planning regime.

Table 16.1. Usefulness and appropriateness of NATSIS data in regional planning.

Regional council location	NATSIS useful?	Any data used?	Hard data not useful?	Not culturally appropriate to use?
Remote	yes	yes	n/s	n/s
Remote	yes	yes	n/s	n/s
Remote	no	yes	n/s	n/s
Remote	no	no	no	yes
Remote	no	no	yes	yes
Rural	yes	yes	n/s	n/s
Rural	no	no	no	yes
Rural	no	no	yes	yes
Rural	yes	yes	n/s	n/s
Rural	no	yes	yes	yes
Rural	no	yes	yes	yes
Rural	no	no	yes	yes
Urban	no	no	yes	yes
Urban	no	yes	no	yes
Urban	no	yes	n/s	n/s

n/s not stated.

I would suggest then, perhaps provocatively, that the main utility of at least these regional statistics publications lies partly in the attitudinal data they contain. Also, within the Indigenous realm, in terms of their symbolic value, their usefulness lies in demonstrating cultural maintenance, emphasising relative disadvantage in a broad fashion, and in the omnipresent politics of Indigenous identity. In this regard, I thought it suggestive that the reported comments of the Torres Strait Islander representatives in the evaluation of the NATSIS conducted by the ABS and other Commonwealth agencies, as reported by Sarossy (chapter 17), appeared to centre on matters of distinct Torres Strait Islander identity as much as on substantive data issues. Adverse comment was made, for

example, to the effect that the Aboriginal artwork on the publications was unacceptable to Islander people.

ATSIC planning and the requirements for data: the challenges

The problems with the NATSIS as a regional planning tool, I suggest, are therefore twofold: firstly there are methodological issues inherent in the disaggregation of national Survey data to this level, and, secondly, issues arise from the conflict between the demands for a nominally rational and technocratic planning process located within the dominant political and administrative culture, and those based more on the imperatives of the Indigenous political, social and economic domain. This conflict mirrors to some extent that between the administrative and representative arms of ATSIC, and indeed between 'self-management' and 'self-determination', and ultimately may be irresolvable within present ATSIC structures and policies. However, the issue may not be resolution as such, but creative management of the disparate imperatives and tensions.

Certainly, in the current time of severe budgetary restraint for ATSIC, there will be an extremely strong imperative for regional councils to ensure that their program funding is utilised effectively and equitably within their regions. The current political and budgetary climate in fact places regional councils in a double bind; their levels of discretionary funding will be quite severely cut back, at the same time as there are ever increasing demands for financial accountability and demonstrable program outcomes.

The historical focus of regional councillors has been on their role in allocating funds to Indigenous organisations in their regions, rather than, for example, on monitoring the effectiveness of other agencies in service delivery to Indigenous people. This poses a major challenge for ATSIC in the present policy climate, given the concomitant pressure towards devolution of significant program areas and decision-making to regional councils and, indeed, towards their ultimate reconstitution as regional authorities. Such a move inevitably carries with it the requirement for a high degree of professionalism at the regional council level, and for systematic integration of planning and service delivery with other levels of ATSIC and with other agencies.

This will require policy guidelines based on reliable, longitudinal socioeconomic data which would allow for better allocative decision-making within the ATSIC structure (see Smith 1993a: 14-15; Smith 1993b: 2-3), and for the evaluation by ATSIC of program delivery by other agencies, such as in the employment, health, education, law and justice, and community infrastructure areas. ATSIC, is of course, well aware of these issues; the Office of Evaluation and Audit (OEA), for example, recommended that ATSIC 'establish a framework which enables the identification and prioritisation of infrastructure needs on a national basis',

with prioritisation based on data identifying areas of relative disadvantage between regions (OEA 1991: 75). It does not seem feasible for the NATSIS to provide more than supplementary data for these crucial purposes, even if it is eventually available on a longitudinal basis. The work of Altman and Liu (1994), in generating Indices of Socioeconomic Advantage from 1986 and 1991 Census data disaggregated to the regional council level, would appear to be more promising as a planning tool at national as well as regional levels.

The critical lesson I draw, however, is that both in the use of longitudinal census data in the generation of potentially useful planning information, and in considering possible future national Indigenous surveys, careful attention needs to be given to what the realistic roles for the resultant data might be, in light of the experience with the 1994 NATSIS. The domain in which such matters are raised is not simply generated by the requirements of the wider political and bureaucratic system for more rigorous and systematic planning and decision-making processes, but by the imperatives of the Indigenous system itself, in which ATSIC and particularly its regional councils are embedded. Thus, the development of relevant census and survey methodologies in this arena can not, in my view at least, be seen as an essentially technical exercise, but one characterised by inherent conflicts and ambiguities, some perhaps irresolvable.

References

Aboriginal and Torres Strait Islander Commission (ATSIC) 1992a. *The ATSIC Budget Development Process*, Finance Branch, ATSIC, Canberra.

Aboriginal and Torres Strait Islander Commission (ATSIC) 1992b. *Aboriginal and Torres Strait Islander Commission Corporate Plan 1992-1996*, ATSIC, Canberra.

Aboriginal and Torres Strait Islander Commission (ATSIC) 1994. *The Regional Planning Framework: A Guide to Regional Council Planning in the Context of Other Planning Activities Within Regions*, (3rd edition), ATSIC, Canberra.

Altman, J.C. 1992. 'Statistics about Indigenous Australians and the role of a national survey: where to now?', in J.C. Altman (ed.) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Altman, J.C. and Liu Jin 1994. 'Socioeconomic status at the ATSIC regional level, 1986 and 1991: data for regional planning?', *CAEPR Discussion Paper No. 76*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Attorney General's Department 1996. *Improving ATSIC's Decision-making and Review of Decisions*, Attorney General's Department, Canberra.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vol. 2 (Commissioner E. Johnson), Australian Government Publishing Service, Canberra.

Dillon, M. 1996. 'Institutional structures in Indigenous affairs: the future of ATSIC', in P. Sullivan (ed.) *Shooting the Banker: Essays on ATSIC and Self-determination*, North Australia Research Unit, The Australian National University, Darwin.

Finlayson, J.D. and Dale, A. 1996. 'Negotiating Indigenous self-determination at the regional level: experiences with regional planning', in P. Sullivan (ed.) *Shooting the Banker: Essays on ATSIC and Self-determination*, North Australia Research Unit, The Australian National University, Darwin.

Martin, D.F. 1995. 'Money, business and culture: issues for Aboriginal economic policy', *CAEPR Discussion Paper No. 101*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Martin, D.F. and J.D Finlayson 1996. 'Linking accountability and self-determination in Aboriginal organisations', *CAEPR Discussion Paper No. 116*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Menham, J.G. 1992. 'ATSIC's requirements for social statistics in the 1990s', in J.C. Altman (ed.) *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Royal Commission into Aboriginal Deaths in Custody 1991. *Recommendations*, Australian Government Publishing Service, Canberra.

Smith, D.E. 1992. 'The cultural appropriateness of existing survey questions and concepts', in J.C. Altman (ed.) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. 1993a. 'ATSIC's mechanisms for resource allocation: current policy and practice', *CAEPR Discussion Paper No. 41*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. 1993b. 'The fiscal equalisation model: options for ATSIC's future funding policy and practice', *CAEPR Discussion Paper No. 42*, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Smith, D.E. 1996. 'From cultural diversity to regionalism: the political culture of difference in ATSIC', in P. Sullivan (ed.) *Shooting the Banker: Essays on ATSIC and Self-determination*, North Australia Research Unit, The Australian National University, Darwin.

Sullivan, P. (Editor) 1996. *Shooting the Banker: Essays on ATSIC and Self-determination*, North Australia Research Unit, The Australian National University, Darwin.

Appendix A16.1. Survey: NATSIS regional statistics publications.

	Yes	No
Is your regional office aware of the NATSIS *Regional Statistics* publication for your region(s)?	_____	_____
Is your regional council aware of this publication?	_____	_____
Has this publication provided useful information for your regional planning?	_____	_____
Does your regional council use any socioeconomic and other data in its regional planning?	_____	_____

If so, what kind of data, and from what sources?

_____

_____

_____

_____

_____

_____

If not, is this because:

(a)	there are not the skills in the regional council to utilise it	_____	_____
(b)	there are not the skills and resources in the regional office to utilise it	_____	_____
(c)	the data is not useful for regional planning	_____	_____
(d)	the data is not presented in a culturally appropriate form	_____	_____
(e)	it is not culturally appropriate to develop plans using 'hard' data, since Indigenous planning follows different principles?	_____	_____

Do you have any general comments you feel are relevant to these questions?

_____

_____

_____

_____

_____

_____

17. Findings from the NATSIS evaluation

G. Sarossy

A review of the first National Aboriginal and Torres Strait Islander Survey (NATSIS) was included in the Treasury Portfolio Evaluation Plan for 1995-96 (Australian Bureau of Statistics (ABS) 1996). The evaluation was undertaken in the period November 1995 to March 1996. The emphasis of the evaluation was on gauging the usefulness of the output to users interested in dealing with issues of Indigenous peoples.

The evaluation was overseen by a steering committee chaired by the ABS with representatives from several Commonwealth departments and agencies. The evaluation aimed to assess the effectiveness of the NATSIS in meeting its objectives to provide the most needed statistics in a range of social, demographic, health and economic areas, to provide a stronger information base for planning the empowerment of Australia's Indigenous peoples and for meeting and measuring progress in meeting their objectives, aspirations and needs. It was felt by the steering committee that, since the survey utilised a robust sample design, had a large sample, had input into the questionnaire from both a widely constituted Survey Advisory Committee (SAC) and five Technical Reference Groups involving the Indigenous community and response rates achieved were above 90 per cent, that less emphasis should be given to methodological aspects. A number of methodological issues and options for obtaining data other than via a special survey were, nevertheless, considered as part of the evaluation process.

The key issues addressed by the evaluation were:

i the applicability of the NATSIS content to issues relevant to the condition and experience of Aboriginal and Torres Strait Islander peoples;

ii the effectiveness of the Survey, if ongoing, as a base for monitoring outcomes for Australia's Indigenous peoples;

iii the appropriateness of the output mediums;

iv the accessibility of results to Australia's Indigenous people, their organisations and government service providers; and

v the opportunity to garner views on the appropriateness of the NATSIS against alternative strategies for meeting needs for statistical information on the social and economic experience of Australia's Indigenous peoples.

The evaluation methodology was to:

i examine the original submissions to the NATSIS, the Royal Commission into Aboriginal Deaths in Custody (RCIADIC) Report and the associated response by governments, and other material that informed the development of, was produced as part of, or was an outcome of the NATSIS;

ii hold discussions with ABS NATSIS managers and other ABS staff, Aboriginal and Torres Strait Islander Commission (ATSIC) officers and other key people involved in the development and design of the Survey;

iii examine the dissemination strategy for the NATSIS outputs;

iv consult key stakeholders including Aboriginal and Torres Strait Islander organisations, Commonwealth and State departments and agencies, and research institutions and professional groups;

v assess stakeholders' responses; and

vi develop a set of findings and recommendations.

Applying this methodology to the key issues addressed by the evaluation resulted in the following findings.

On the issue of applicability of the NATSIS content to issues relevant to the conditions and experience of Aboriginal and Torres Strait Islander peoples, there was general consensus by Commonwealth and State Government agencies, Indigenous organisations and research institutes that the Survey content was relevant to the Indigenous community.

Law and justice was a NATSIS subject area that several stakeholders regarded as providing national information that was highly relevant, reliable, comprehensive and comparable when there had previously been no other sources of data available. This availability had greatly assisted in the development of a number of research projects and reports on key issues in Aboriginal communities (for example, extent of domestic violence, and perceptions of, and attitudes to, the police).

Education and health were two areas that stakeholders regarded as very important in the Survey and which have the potential to provide better information in the future.

There was a general feeling by some Commonwealth, State and Aboriginal organisation stakeholders that the published result of the question 'Are you happy with the education your children are receiving at school' was not consistent with other perceptions and statistics (for example, Department of Employment, Education and Training's [now Department of Employment, Education, Training and Youth Affairs] retention rates, State statistics, and statistical annex to the National Review of Education for Aboriginal and Torres Strait Islander Peoples

(Commonwealth of Australia 1994)). There was a concern by these stakeholders that publication of high satisfaction levels could lead to a lack of activity in improving education levels or even as a justification for less funding by government. However, an alternative view was that the NATSIS data provided invaluable information on where resources should be targeted that is, at the areas of high satisfaction which could indicate a low expectation on the part of many Aboriginal and Torres Strait Islander people of what the education system should provide. Nevertheless, to facilitate interpretation it was felt that, as well as seeking satisfaction levels, information should be obtained on a more objective level as well.

The Commonwealth, research institutes and the Australian Medical Association's Aboriginal Health advocate raised a number of issues in relation to the health section of the Survey. While the self-reporting method was considered to be valuable by some organisations, the issue was raised by several others of the validity of results; for example, one suggestion was that clinical data would be a better benchmark for the percentage of the Aboriginal population with diabetes.

In respect of separate Torres Strait Islander estimates, only results for Queensland could be presented for the Torres Strait Islander population. It has not been possible, therefore, to break down the results for the mainland Torres Strait Islander population in each State. The representatives of two Torres Strait Islander organisations (Magani Malu Kes Resource and Information Centre, Townsville, and Iina Torres Strait Islanders Corporation, Brisbane) agreed that it is incorrect and unacceptable to have a survey that treats both Aboriginal people and Torres Strait Islanders as one identity, as there are many cultural differences. This difference in cultural heritage was emphasised by another Torres Strait Islander person, who cited enforced separation from the natural family as being a key issue that had affected the Aboriginal but not the Torres Strait Islander community. It was considered, therefore, that the content and questions of the Survey would be affected by the fact that certain issues do not apply to Torres Strait Islanders. Moreover, both representatives considered that the Aboriginal central artwork on the NATSIS publications was unacceptable for a publication purporting to represent both cultures. Although there was a regional councillor from the Torres Strait on the SAC, for these two representatives the concept of ATSIC regional representation, both as a basis for the Survey sampling and on the SAC, was seen as representing Aboriginal interests and marginalising Torres Strait Islanders further. It was emphasised that Torres Strait Islanders must be actively involved in the development of any future survey and that this may mean a separate component of the survey. Dissemination of findings had to be in a way that was acceptable to the Torres Strait Islander population.

An overall theme that emerged from the consultations was that a basis for comparison between the existing and any future survey results should be developed. The current main use for the NATSIS data is to

provide a snapshot picture of how the situation is now and many stakeholders agreed that the information does fulfil this role. However, while this was seen as meeting a vital statistical need, many users also believed that the data should not stand alone, but rather be used in conjunction with other data and with some basis for comparison.

On the key issue of effectiveness of the Survey, if ongoing, as a base for monitoring outcomes for Australia's Indigenous peoples, the findings were that while the evaluation focused on the results of the Survey there were many comments from stakeholders that reflected well on the process followed during the development of the NATSIS and that these should be followed in any future survey.

There were a number of views on the effectiveness of the NATSIS to date and on the possibility of another survey, on the existing NATSIS output and proposed outputs and use of the consultancy service through the National Centre for Aboriginal and Torres Strait Islander Statistics. Organisations consulted for the evaluation universally agreed that it was imperative to have information that was kept up to date. Many stakeholders considered that another NATSIS would meet this criterion but that, in the light of experience, a number of modifications were required.

A key issue with the NATSIS is that currently no baseline exists with which to compare it. A common theme from consultations was that another survey would not only give comparative data, but also greatly enhance the use of NATSIS because trends would be established. The continuation of the NATSIS was seen as providing information to monitor policies, progress and the effectiveness of funding, as well as meeting the need of assessing whether the basic situation and overall attitudes had altered. It was generally considered that the statistical need in relation to Aboriginal and Torres Strait Islander people would continue to be significant and that it was important to continue to gather this information.

There were varying views on how frequently the NATSIS should be conducted, with four to five years being seen as a period that would enable trends to be identified while also taking account of the fact that policy and structure in Aboriginal and Torres Strait Islander issues was changing rapidly.

While it was thought that the issue of varying the content would appropriately be addressed by those involved in any future development of the Survey, suggestions for improvement included additional topics on the environment (land management and economic development); on consumers' perceptions of services provided; more information concerning language (such as including Kreol); and including a Commonwealth Electoral Roll question. The role of the Community Development Employment Projects scheme in the measure of employment would need to be examined, while youth and gender issues (particularly relating to women) were considered important by some Torres Strait Islander representatives.

An important issue raised by stakeholders related to the relevance and applicability of any future NATSIS. A general thread emerged about the importance of ensuring comparable data between the existing and any future Survey. Some stakeholders linked this to a desirability of only marginally changing existing questions to ensure comparability, while others saw more scope to modify a number of questions to make them more useful for future analysis.

On the key issue of ensuring accessibility to information, there were comments from both government agencies and Aboriginal and Torres Strait Islander organisations on a lack of awareness of the NATSIS publications. While there was a perception that there was a lot of publicity about the NATSIS at the time of its development and launch, some of those consulted in the evaluation process suggested that the ABS should be addressing the issue of marketing the output, to ensure that organisations have accessibility to the results.

As well as ensuring availability of publications, the issue of whether there is a responsibility on the ABS to ensure accessibility to potential users through assisting their understanding of data was also raised. Comments indicated that for many organisations, particularly Aboriginal and Torres Strait Islander organisations at the grassroots level, ensuring that data are understood involves training, including improving an understanding of statistics, outlining their relevance in decision-making, and facilitating their use. This is a crucial issue for many of those organisations and a primary reason why the results are not being used as effectively as they could be.

While stakeholders may have had knowledge of future NATSIS outputs, such as the thematic publications and the joint ABS/ATSIC regional statistics books, it was difficult to draw any firm conclusions from their comments about how they might use this information. This is because they were commenting on a concept rather than on an actual product that had been developed and distributed. It will therefore be useful to assess, further down the track, how well the regional statistics books met the intended purpose in assisting regional planning, which was an integral component of the RCIADIC's recommendation 49 (Commonwealth of Australia 1991).

Various stakeholders indicated that they would welcome additional information and analysis in forthcoming NATSIS outputs. There was some interest in being able to access NATSIS information in computer-readable form. In addition, there was a degree of interest in the unit record file by some Commonwealth agencies and research institutes. In general, government and research institute stakeholders advised that there was an existing published finding that suited their purpose. While this means that there was an output medium that was accessible to their organisation, this did not necessarily translate into satisfaction with the product.

In general, there was satisfaction with the format of the *ATSIC Regional Overviews* and the *Detailed Findings*, and a high level of

satisfaction with the ABS consultancy service. There was a view that, with future surveys, dissemination of survey results should be in close succession at national, State and regional levels, with ongoing follow-up after the launches, and linking into other areas of the ABS. The ATSIC system of regional offices and councils provides the infrastructure to disseminate results within ATSIC and regional councils, but the responsibility for distribution of material to Aboriginal and Torres Strait Islander organisations should continue to rest with the ABS.

The *ATSIC Regional Overviews* were regarded as being in an accessible and suitable format. Suggestions for improvement to these overviews included more artwork; standardisation of the wall chart information; and inclusion of regional photos which would lead to greater identification with, and interest in, the information. It was suggested that results should be disseminated in the languages of Aboriginal and Torres Strait Islander peoples and that regional versions of the *Getting Results Summary* would be an ideal addition. Pie charts and graphs were seen by a number of representatives of Aboriginal and Torres Strait Islander organisations as very important in disseminating results effectively to Australia's Indigenous people. An issue raised was the importance of acknowledging that not all people are literate in English. The development of tailored outputs with more graphical material could assist in meeting the need of those not proficient in the English language.

These consultations with Aboriginal and Torres Strait Islander organisations have identified the importance of face-to-face feedback and the need for training to assist Aboriginal and Torres Strait Islander people with the interpretation of data. Representatives of a number of organisations indicated that they would like to use the published data but that there was a lack of skilled persons available to interpret and make best use of it. It was explained that because it requires certain training, quantitative research often locks out Aboriginal people.

On the key issue of whether there might be alternative strategies to a NATSIS, the steering committee overseeing the NATSIS evaluation examined relevant overseas practice. The closest international equivalent to the NATSIS, a survey of a small Indigenous population, was the survey of the Canadian Indian and Innuit populations conducted by Statistics Canada following their 1990 Census. The ABS has been advised that there is no Canadian/Indigenous survey proposed following the 1996 Census. The ABS closely examined the content and the methodology of the Canadian survey in designing the 1994 NATSIS. The ABS understands the methodology was chosen for two principal reasons:

i it led to a coordinated collection of national census information and information specific to Indigenous communities. This overall package was attractive to Indigenous communities, many of whom had not participated well in previous censuses; and

ii it was seen to be more cost-effective than locating Indigenous people in an independent survey sample.

This methodology was not considered appropriate for the 1994 NATSIS because no advice had been given to the providers of census information that names or addresses could be used as a basis for a follow-up survey and forms from the 1991 Census were destroyed once processing was completed. As an alternative, the ABS at first investigated locating Aboriginal people by obtaining addresses from local organisations or individuals, but found this to be neither efficient nor effective. It then developed the NATSIS methodology whereby ABS interviewers visited selected census collections districts to determine the addresses of Indigenous people at the time of the Survey. The Survey sample was then selected from these addresses.

This methodology was found to be much more effective than the Canadian methodology in that it achieved a response rate of around 90 per cent, which was considerably higher than the Canadian survey. In discussions with staff of Statistics Canada, the ABS established that the Australian cost per respondent of conducting the search operation to provide the addresses for sampling was far below what the Canadians anticipated it would have cost them when they first selected their methodology.

The ABS does not intend to change its practices in respect of the retention of census forms. Census practice over many years has been to destroy names and addresses after the census to guarantee confidentiality of individual information. Establishing coverage via the census would mean the retention for a considerable period of names and addresses which, if they became known, could affect the quality of the census itself. The prospect of using addresses from census forms as the possible future methodology of an Indigenous survey was, at one stage, put to the ATSIC Commissioners who responded that they did not want such a list of Indigenous addresses compiled.

The ABS believes that a future NATSIS would best be conducted by refining and improving the sample design collection methodology developed for the 1994 Survey. An outcome of the evaluation recommends, however, that the ABS continues to be aware of international developments and their possible applicability to the development of any future NATSIS.

Some alternative options to conducting a national survey were also considered. The first option considered was to expand the role of the census to include the NATSIS topics within it. The advantages of this approach were seen to be the availability of comprehensive data for small regions and population groups and the enabling of direct comparisons between the Indigenous and non-Indigenous population. The ABS regarded this option as not being feasible due to several factors, principally the high cost of including extra questions in the census. Additional factors

were the high response load that would be imposed on both the Indigenous and non-Indigenous populations through the census being self-enumerated rather than interview-based, and that concepts, classifications and data items were unlikely to be appropriate to both the Indigenous and non-Indigenous populations.

A second option put forward was to include a sizeable sample of Indigenous people in the regular ABS population/household surveys which use field interviewers to collect the data. The ABS has reservations about the validity of information collected via a common collection instrument purporting to be suitable across different cultures. However, the ABS has agreed to implement an enhanced Indigenous sample in the 1995 National Health Survey to assess whether this approach to provide comparable data of a high quality is in fact possible.

The ABS is still of the opinion that a future NATSIS-type survey offers the best prospects for monitoring the progress of the Indigenous population. Development work is still required on how best to translate these results to allow comparisons with the non-Indigenous population.

Conclusions from the evaluation

The overall conclusions from the evaluation were that the purpose of the first NATSIS to provide the most needed statistics in a range of social, demographic, health and economic areas, thereby providing a stronger information base for planning for the empowerment of Australia's Indigenous peoples and for measuring progress in meeting their objectives, aspirations and needs, was achieved.

Stakeholders consulted as part of the evaluation process were generally very aware of the NATSIS. For some, the awareness of the survey results appeared to link strongly to the positive perceptions gained during the development and subsequent launch of the initial results, rather than through any detailed use of the information (see chapter 16).

Current and potential uses for the information were many and varied and included policy and planning; funding and other submissions; discussion papers, research work; press releases; housing and infrastructure planning; monitoring the performance of policy and programs; ATSIC Annual Report for reporting on individual programs; various regional council annual reports and for planning and monitoring projects; ATSIC regional planning and as a needs basis formula for funding regional councils; presentations; speeches; and to develop indicators to measure change in the underlying issues raised by the RCIADIC.

The evaluation found that the ABS had ensured the involvement of Aboriginal and Torres Strait Islander people in both the development of the content of the Survey and also in its conduct. The comments by stakeholders, together with comments from any future consultative process, will assist in informing the development of a future survey in terms of approach, content and dissemination. As there was some criticism

of the appropriateness of the NATSIS to their circumstances by representatives of Torres Strait Islander organisations, consideration would need to be given to more adequately covering the situation of the Torres Strait Islander population (see chapter 15). Recommendations have been developed to help ensure that the ABS continues to improve its performance in meeting this objective through encompassing these issues in any future survey.

Whether the NATSIS has been effective in providing a stronger information base for planning the empowerment of Aboriginal and Torres Strait Islander people, and for meeting and measuring progress in meeting their objectives, aspirations and needs, is somewhat more difficult to assess. While part of this difficulty may be due to a wide variety of outputs of the NATSIS that had not yet been released at the time of the evaluation, there is also the issue of ensuring that the results are able to be interpreted by the Aboriginal and Torres Strait Islander community. Evaluation recommendations have therefore been developed to address this factor. Moreover, planning for future surveys should ensure a more timely release of results, that these results be disseminated so that they are readily understood by Aboriginal and Torres Strait Islander people, and that training be given by the ABS on how to interpret the results and how to then use this interpretation in practical ways, such as policy formulation and funding submissions.

The recommendations arising from the evaluation were as follows:

Recommendation 1: To ensure effective monitoring of change in the social, health, education and economic characteristics of the Aboriginal and Torres Strait Islander population, there be follow-up surveys to the NATSIS at about five-yearly intervals.

Recommendation 2: An integral part of the development should be the participation of Aboriginal and Torres Strait Islander people in the development and operation of the survey. As was the case with the first NATSIS, a body comprising Indigenous people, other stakeholders and the ABS should be established to advise on the development and operations of the survey.

Recommendation 3: Consistent with their integral role in the survey, Aboriginal and Torres Strait Islander people should be given the opportunity to participate in both the collection and dissemination phases of the next survey.

Recommendation 4: Account should be taken of inherent differences among Aboriginal and Torres Strait Islander peoples. Survey procedures, where appropriate, should be modified to take account of those differences and ensure the relevance of the survey to Torres Strait Islanders and major groups within the Aboriginal population.

Recommendation 5: The dissemination strategy for any future survey should ensure that results are readily available to the Aboriginal and Torres Strait Islander population, and sufficient funding should be allocated for this component. To ensure accessibility and subsequent use of the information, the ABS should seriously consider delivering basic statistical training in the interpretation of results to the Aboriginal and Torres Strait Islander community.

Recommendation 6: That, in respect of the last recommendation and the fact that a considerable amount of statistical output is yet to be released from the 1994 survey, the ABS determine and test how such a strategy might best be developed and implemented before the next survey.

Recommendation 7: While the evaluation found that the methods used by the NATSIS were sound and alternative methods were not currently considered likely to be more effective or efficient, it is recommended that the ABS continues to be aware of international developments and that these be taken into consideration during the development of any future survey.

Conclusion

The evaluation found that there was substantial support for the methodology, process and output from the 1994 NATSIS. Strong views were expressed by users for additional surveys to be undertaken at about five-yearly intervals. Users emphasised the need for continuity of data across the surveys but there was also recognition that some segments of the survey could be improved to yield higher quality data. Indeed, for certain elements in the health and education area there were suggestions that responses in the NATSIS should be combined with administrative data. Cognisance will therefore need to be taken of how best to meld future data from the NATSIS with both administrative data and data from the five-yearly census to produce a more comprehensive, timely and relevant statistical database than has been possible to date.

References

Australian Bureau of Statistics (ABS) 1996. *National Aboriginal and Torres Strait Islander Survey - An Evaluation of the Survey*, cat. no. 4184.0. ABS, Canberra.

Commonwealth of Australia 1991. *Royal Commission into Aboriginal Deaths in Custody, National Report*, vols 1-4 (Commissioner E. Johnston), Australian Government Publishing Service, Canberra.

Commonwealth of Australia 1994. *National Review of Education for Aboriginal and Torres Strait Islander Peoples: A Discussion Paper*, (Chair M. Yunupingu), Department of Employment, Education and Training, Canberra.

18. Statistical needs in Indigenous affairs: future options and implications

J.C. Altman and J. Taylor

The workshop 'Statistical needs for effective Indigenous policy: findings from the 1994 National Aboriginal and Torres Strait Islander Survey' provided a timely opportunity to examine the value of outputs from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) from a number of disciplinary perspectives. While most papers presented at the workshop were prepared by academics, the workshop was very policy-focused; as the appended list of workshop participants indicates, a wide range of appropriate departmental and agency interests were represented. This concluding chapter aims to capture the key themes that emerged during the workshop both in discussion and in the concluding open forum.[1]

At some future time, it is likely that the undertaking of the 1994 NATSIS will be regarded as a watershed in the collection of statistics about Indigenous Australians. The conduct of this Survey in 1994 was certainly an important and timely statistical experiment. At the national level, information has been collected about Indigenous Australians in five-yearly censuses since 1971. But the Census of Population and Housing is, first and foremost, a means to collect information about all Australians and the fact that information is also generated about Indigenous Australians is merely a by-product of including an Indigenous identifier: a question about Indigenous origin. No attempt is made to accommodate cultural, social or economic difference in the construction of questions, except to a very limited extent on remote area interview forms.

The 1994 NATSIS was different from the five-yearly census in two important ways. First, it was focused exclusively on a large, representative sample of the Indigenous population (with some information about non-Indigenous household members also being generated). Second, it allowed questions to be targeted at the Indigenous population in a manner that was quite different from either the census or other Australian Bureau of Statistics (ABS) surveys where Indigenous people are included but not separately identified.

The 1994 NATSIS was also a bold experiment funded by the Commonwealth with a special appropriation of $4.4 million. Part of the aim of the workshop, whose proceedings are reported here, was to assess whether this experiment had worked. In broad terms, the response to this assessment must be answered in the affirmative because a considerable body of data has been generated. As demonstrated by Barnes in chapter 2, some of these data have already been published by the ABS at national

(ABS 1995), State and Territory (ABS 1996a) and regional (ABS 1996b) levels. Other data on particular themes have also been analysed and published either by the ABS (for example, ABS 1996c, 1996d) or jointly by the ABS and others (see, for example, ABS/Australian Institute of Health and Welfare (AIHW) 1996; ABS/Centre for Aboriginal Economic Policy Research (CAEPR) 1996a). The chapters in this monograph, which focus on 14 themes identified for separate treatment, attest to this enormous body of new data generated by the 1994 NATSIS. Much of the analysis in the chapters in this monograph was made possible by the innovative and welcome availability of a Confidentialised Unit Record File (CURF); this was purchased jointly at The Australian National University by a consortium consisting of the Social Science Data Archives (SSDA), CAEPR and the National Centre for Epidemiology and Population Health (NCEPH). While the information on this CURF is far from ideal, as highlighted especially by Jones in chapter 12, it nonetheless provided the first opportunity for academics to independently scrutinise available information in a large number of important areas.[2]

If the 1992 workshop 'A National Survey of Aboriginal and Torres Strait Islander Populations: Problems and Prospects' was timely owing to its convening only a week after the Government's policy and financial commitment to the 1994 NATSIS, this workshop has been timely for a different set of reasons: the ABS publicly released its own evaluation of the NATSIS on 21 August 1996 (ABS 1996e), just a week before the workshop. While workshop participants clearly did not have an opportunity to consider this evaluation before writing pre-circulated papers, the release of the evaluation heightened a perception that the workshop was addressing an issue of immediate public policy significance. ABS participants at the workshop articulated a view that the workshop, and its outcomes recorded here, would provide timely and rigorous input to planning the next NATSIS to be undertaken, probably in 1999. This demonstrates the enormous lead time required to refine existing data collection mechanisms; discussions in 1996 will have ramifications for statistical collections that will be the cornerstone of monitoring Indigenous wellbeing into the 21st century.

Emerging workshop issues

In 1992, the watershed issue was the potential for a national survey and a general agreement that more statistics were needed for policy formulation and monitoring in Indigenous affairs. In 1996, the more sophisticated question needs to be addressed: not just what statistics need to be collected, but what statistics are most relevant and need to be given priority in the next five to ten years.

This change in direction can be explained in part because the crucial question, from Indigenous, academic and policy perspectives in 1992, was whether there should be a national survey at all; now it is clear that the

NATSIS has considerable momentum and that there will probably be another survey in 1999, with some outputs available in 2000. The size and scale of such a survey will depend, in part, on its aims, but will also be influenced by how it is financed, an issue that is returned to below.

It is important to note that the 1994 NATSIS has been enormously important, because of the questions it has raised as well as the questions it has answered. Not only has it raised the whole profile of Indigenous statistics and resulted, in part, in the establishment by the ABS of a National Centre for Aboriginal and Torres Strait Islander Statistics in Darwin, but it has also raised expectations that, now a 1994 baseline exists, a repeat statistical collection is needed to provide comparative (over time) data and analysis.

In very broad terms, the papers in this monograph highlight both positive and negative aspects of the 1994 NATSIS. On the positive side the 1994 Survey does provide an opportunity to ask special questions about a special population, although it is always important to assess whether these questions are meaningful in any social, scientific and policy sense. It became clear during the course of the workshop that some questions were problematic for a variety of reasons.

On the negative side, it also emerged that the 1994 NATSIS did not generate enough data that are strictly comparable with information available about the total Australian population. One example of this relates to measures of labour force status with different criteria applied to define unemployment in the NATSIS compared to the census and the monthly Labour Force Survey (LFS) (ABS/CAEPR 1996a). Two broad options were canvassed as a means to overcome this sort of problem: one is to ask the same questions in the NATSIS (on a range of topics) that is asked of the general population in other special surveys; the other is to extend the NATSIS sampling frame to include a non-Indigenous component. Although, methodologically, the latter option was considered to be the safest approach, in practical terms the former option appears the more likely.

Survey shortcomings

Because of a failure to define from the outset the specific issues to be addressed by the Survey, some of the questions asked in the NATSIS generated results which were relatively meaningless and were certainly counter-intuitive. Such questions, as Peterson demonstrated in chapter 13, were often about cultural issues. The answers generated some questions (for example, the question on the importance of elders which resulted in the finding that 84 per cent of people 13 years old and over said their role was important) were either 'motherhood' statements or else will not value-add to policy deliberation.

The actual process whereby particular questions were included in the NATSIS is now hard to deconstruct, and in many ways does not matter. What needs to be recognised is that there is a tension between an 'ideology

of sameness' perpetrated by some Indigenous and non-Indigenous Australians and the heterogeneity of the contemporary living reality and conditions of Indigenous people. Of course, it may be the case that some questions which generate meaningless or relatively valueless outcomes are part of the price that must be paid to ensure full Indigenous participation. But if this is so, then the ABS either has to more clearly explain the aims of the NATSIS, or else those who seek the inclusion of such questions should demonstrate that they are actually using the resulting output in some way.

Attitudinal questions: making them work

A similar problem was experienced with some attitudinal questions, although the outcomes here were mixed. One problem occurred with the use of the term 'happy with' (for example, local health services, housing or child's education). Such a happiness index was fairly meaningless unless it could be cross-classified with some other parameter. Hence, for example, Sanders in chapter 10 was able to link happiness with housing with different types of housing tenure and different levels of rental payment. Schwab in chapter 8, on the other hand, was faced with the anomaly of people being 'happy' with educational services but reporting poor general educational outcomes. Clearly happiness needs to be correlated with some other parameter so that a hypothesis of some type can be tested.

Geographic coverage

Geographic coverage is a problematic issue in the collection of statistics about Indigenous Australians because of the differences between the distribution of the Indigenous and non-Indigenous populations. Although the proportion of Indigenous people living in urban places has risen over the past 30 years, one-third of this population still lives in rural areas compared to only 14 per cent of non-Indigenous people. Also in contrast are the proportions resident in major cities where just over one-quarter of Indigenous people are found, compared to two-thirds of non-Indigenous people. It is this fundamental difference that makes sampling frames used for special surveys that do use an Indigenous identifier statistically unreliable for the entire Indigenous population. It could be debated, though, and should be, whether an enhanced Indigenous sample would make any significant difference in special surveys.

One coverage problem which was underlined by the NATSIS relates to the enumeration of Torres Strait Islanders in official collections. As both Barnes and Arthur demonstrated (chapters 2 and 15), Torres Strait Islanders were heavily under-represented in the Survey in all States and Territories outside Queensland, even though a large proportion of Torres Strait Islanders no longer live in that State. Given the relatively small size of the Torres Strait Islander population and its widespread dispersion, it appears that adequate representation in a sample survey is only guaranteed in places where Islanders comprise the bulk of the Indigenous population,

most notably in the Torres Strait and to a lesser extent in Queensland as a whole. This limited scope is demonstrated by the focus of a recent joint ABS/CAEPR publication which was restricted to Torres Strait Islanders in Queensland (ABS/CAEPR 1996b). Given heightened policy interest in Torres Strait Islander affairs, and not least in developing suitable mechanisms for servicing Islanders wherever they live, one question that should be raised for consideration is that of a separate survey for Torres Strait Islanders.

Another issue of regional coverage is whether disaggregation of data to the Aboriginal and Torres Strait Islander Commission (ATSIC) regional council level (ABS 1996b) will continue to be necessary. Disaggregation to this level is potentially problematic for two reasons. First, there is quite significant variation in regional council populations which results in a need for variation in sample size for each regional council. Second, council boundaries can, quite legitimately, change, which will make comparative research over time fairly meaningless. This was evident, for example, in the reduction of regional councils from 60 to 36 after amendment of the ATSIC legislation in 1993.

Perhaps more significantly, one can question whether regional councils actually use 1994 NATSIS data, a question that is by and large answered in the negative by Martin in chapter 16. Furthermore, as noted in chapter 1, one can ask for what purposes regional council data might be used after the next NATSIS, especially if there is a continuing decline in discretion afforded the ATSIC Board of Commissioners in making funding allocations to the regions and a parallel decline in discretion available to regional councils. Alternatively, by the time of the next NATSIS, there may be political arguments for collecting regional data for particular 'self-governing' regions like the jurisdiction of the Torres Strait Regional Authority. With the possibility of increased mainstreaming and a devolution of service delivery to State and Territory departments and agencies (or private sector service providers), there may be a need for a set of questions that addresses the issue of 'a social wage' (the full accessing of citizenship entitlements).

The politics of participation

The ABS was quite frank at the workshop that there were some pragmatic trade-offs in order to secure Indigenous participation and collaboration in the NATSIS. If a price for this was the collection, generation and publication of some fairly meaningless (in a policy or statistical sense) data, the so-called 'feel-good questions', then so be it. There was a recognised trade-off between the politics of ensuring participation and the reality of unusability of some subsequently generated data. There is a possibility that after the experimental 1994 NATSIS, the ABS (and other stakeholders) will be more skilled in determining the appropriate trade-off between these two extremes.

NATSIS versus other statistical collections: an emerging dichotomy?

A key issue to emerge, which may be viewed to some extent as an internal ABS concern, is a need to define the appropriate information role of a NATSIS-type exercise in the total context of official statistics on Indigenous Australians. For example, is it the intention that NATSIS will take the place of efforts to generate data by using an Indigenous identifier in special surveys or will it be used to focus solely on issues that special surveys do not address?

In this context, it is interesting that some ABS publications using NATSIS data on particular subjects like health (ABS 1996c) and housing (ABS 1996d) are already making broad comparisons between NATSIS outputs and other special household survey outputs. For example, comparisons between the NATSIS and Australian Housing Survey 1994 indicate that 13 per cent of Indigenous people are home owners compared to 42 per cent of all Australians and that 20 per cent of Indigenous Australians feel that housing is not meeting their needs in contrast to 3 per cent of all Australians. Comparisons between the NATSIS and the 1989-90 National Health Survey indicated, somewhat paradoxically, that 3.2 per cent of Indigenous Australians self-assessed their health status as poor, compared to 4.5 per cent of all Australians; and 15.8 per cent as fair, compared to 16 per cent of all Australians. Such comparisons have great potential policy significance.

Unfortunately, the ABS needs to qualify such comparisons made in its own publications with the rider 'Due to differences in the techniques and methods used in the two surveys, care must be taken in interpreting such comparisons and it is recommended that technical and explanatory notes from both surveys are consulted before doing so' (ABS 1996c: 1). It seems to us that it is important that the techniques and methods used in any future NATSIS and other special surveys should be identical, if at all possible. Differences can often be so minor as to be almost inexplicable. For example, in a question on self-assessed health status in the NATSIS an additional category 'very good' was included in addition to the National Health Survey's 'good' and 'excellent'. Another example was provided above with the definition of unemployment. Clearly, such minor technical differences need to be rectified in the next NATSIS.

There seems to be a growing assumption that the ABS faces a choice between conducting another NATSIS or including Indigenous identifiers in its existing special surveys. It is our view that in the next few years both approaches may be needed; even the outcomes of ABS experimental collections should be published with appropriate caveats. It remains somewhat unclear if sampling frames for special surveys like the monthly LFS and the National Health Survey have been modified to more accurately reflect the geographic distribution of the Indigenous population. We argue below that in the absence of intercensal statistics about key issues in Indigenous affairs, like labour force status, any available information needs to be widely disseminated.

Political and statistical cycles

There is an urgent need to monitor outcome changes in Indigenous affairs in the next few years as policy takes new directions. Not only is there limited intercensal data about the socioeconomic status of Indigenous Australians, but also something of a mismatch between political and statistical cycles. As noted in chapter 1, assuming full parliamentary terms, the next two Federal elections will be in early 1999 and early 2002. The 1996 Census has just been completed, but outcomes from it will not reflect changes in Indigenous affairs introduced by the Howard Government. The next census in August 2001 will provide the first opportunity to collect information on the socioeconomic status of Indigenous Australians vis-à-vis other Australians. Published outputs from that census will not be available until late 2002 or early 2003, after a possible 2002 election. In short, there is a danger that the electorate generally, and Indigenous Australians in particular, will not enjoy the opportunity to be informed about the positive or negative impacts of new policy directions.

Indigenous Australians are only one interest group in Australian society, but they are a very special interest group and there is national and international interest in monitoring change in their wellbeing, not least to assess the effects of government policy and program spending. Also, in the present political climate of claim and counter-claim in Indigenous affairs, such a data void would potentially be detrimental to the broader aims of reconciliation. In these economic and political contexts, a re-honed NATSIS would provide an important intercensal comparative snapshot of Indigenous Australians. But there is also a need, in our opinion, for some more regular assessment of Indigenous socioeconomic status. Existing special surveys, like the monthly LFS, should be utilised to at least provide indicative information about change.

Financial considerations

The ABS has the fiscal capacity to undertake NATSIS as a regular five-yearly special survey if this area is given enough priority. Arguably, such prioritisation is more necessary now than before, owing to the above-mentioned poor correlation between political and statistical cycles. There is an understandable ABS view that as the 1994 NATSIS was funded by a special Commonwealth appropriation of $4.4 million, arguably similar support will be needed for a repeat NATSIS.

It seems to us that a 1999 NATSIS could be undertaken more cheaply than in 1994, but that such a repeat survey should not be contingent on additional Commonwealth resourcing, but should be a priority in its own right, negotiated with ATSIC. One possible lesson that can be learnt from the 1994 NATSIS is that there is a danger that with too many key stakeholders, there is the potential to end up with too many potential interest groups with a shopping list of data requests and some leverage to ensure that this will be delivered (or at least that questions will

be asked). Were the ABS to finance the NATSIS alone it would have far greater power to ensure that meaningful questions are included in the NATSIS, and that meaningful outcomes ensue.

Concluding comments and recommendations

It became apparent at the workshop, even within a relatively small group of academics and policy makers and implementers, that despite broad agreement there was also some diversity of views about the appropriate balance between data integrity, analytic amenability and policy worthiness of the 1994 NATSIS. This diversity reflected, in part, variation in the evident success of the 1994 NATSIS in generating meaningful output about some broad issues such as education and culture. But it also reflected a degree of divergence between academic and bureaucratic cultures. The academic focus tends to be on issues such as what policy questions are we seeking to answer with survey data and whether these data have integrity and meaning. There is some tendency for academics to problematise data collection and highlight issues associated with the robustness of data. Bureaucratic interests, on the other hand, are somewhat more pragmatic and positivist: there is concern to use data to broadly evaluate specific agency programs first, and broad policy second, and a generally-held view that some data are better than none.

Even though Indigenous bureaucrats and Indigenous academics participated in the workshop, it is important to note that the workshop did not seek input from a wide-ranging Indigenous constituency and it is certain that if such an approach had been taken the diversity of views at the workshop would have expanded greatly.

We end this monograph with the following three general recommendations to be considered initially and urgently by the ABS and ATSIC, and then by the Commonwealth Government. We make these recommendations influenced only in part by the tenor of current debates about the depressed socioeconomic wellbeing of many Indigenous Australians and the efficacy of past measures to improve this situation.

First, there is no doubt in our minds that the general consensus of the workshop was that the NATSIS should be repeated in 1999, although there is urgent need to clearly define the specific role that such an exercise would play in the context of an increasingly varied range of data sources for Indigenous Australians. At the very least this will generate some longer-term official statistics that can be compared with 1994 NATSIS and 1996 Census outputs. In so doing, it would provide some measure of the impacts of current government policy on Indigenous people instead of waiting for the next available census data to appear from 2002 onwards. However, as a number of chapters in this monograph indicate, there are aspects of the NATSIS that generated data of questionable meaning and relevance and these parts of the Survey should probably be deleted. The

workshop appeared comfortable with the summary proposition that a 1999 NATSIS should be leaner, meaner and, especially, sharper. The term 'sharper' is intended to indicate that all NATSIS questions should be included to clearly answer particular policy questions.

Second, while there was no unanimity there was certainly a strong view expressed at the workshop that the availability of official statistics about Indigenous Australians on five-yearly cycles (census and, possibly, NATSIS cycles) was insufficient, especially for broad policy and program monitoring and evaluation purposes. One option is for the intercensal NATSIS to generate additional information about Indigenous Australians; this would mean that official data were available about every three years. However, for these data to be comparable with census data and information from other household-based special surveys (like the monthly LFS) identical questions are needed. Such adjustment of at least a core of 1999 NATSIS questions is recommended. However, it is possible that as an interim measure it may be necessary to ask some questions in the 1999 NATSIS that are directly comparable with those asked in 1994. Clearly, the ABS will need to carefully consider the appropriate trade-offs between asking new questions to allow strict comparison with other data sets and repeating old questions that are deficient.

Third, another option exists that is continually raised. This would require enhanced sampling of Indigenous Australians in other ABS household-based surveys, for example, the monthly LFS and the Household Expenditure Survey and the National Health Survey. Such enhanced sampling would be needed because of the inability of the standard sampling frame for the general population to include sufficient Indigenous Australians to validly (in a statistical sense) represent their characteristic owing to the markedly different geographic distribution of the non-Indigenous 98 per cent of the Australian population. There is still need for more transparent debate about this issue, including a rigorous assessment of the financial trade-offs between a more targeted NATSIS and regular (perhaps annual, if not monthly) enhancement of sampling to accurately reflect the comparative circumstances of Indigenous Australians.

Notes

1. Jon Altman made a brief summary presentation 'Statistical needs in Indigenous affairs' to kick-start the concluding workshop session, elements of which are incorporated in this chapter. In opening the workshop an undertaking was provided that we would provide a concluding chapter, as at earlier CAEPR workshops, that would canvass the general views of the workshop.

2. The CURF was primarily utilised by staff employed by, or affiliated with SSDA, CAEPR and NCEPH. We would like to acknowledge the considerable assistance provided by Jin Liu, research officer at CAEPR, to all CAEPR staff and affiliates in interrogating the CURF.

References

Altman, J.C. (Editor) 1992. *A National Survey of Indigenous Australians: Options and Implications*, Research Monograph No. 3, Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.

Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, cat. no. 4190.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996a. *National Aboriginal and Torres Strait Islander Survey 1994: State Statistics*, cat. no. 4190.1-7, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996b. *National Aboriginal and Torres Strait Islander Survey 1994: ATSIC Regional Statistics*, cat. no. 4196.0.00.001-36, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996c. *Health of Indigenous Australians, National Aboriginal and Torres Strait Islander Survey*, cat. no. 4395.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996d. *Housing Characteristics and Conditions, National Aboriginal and Torres Strait Islander Survey*, cat. no. 4187.0, ABS, Canberra.

Australian Bureau of Statistics (ABS) 1996e. *National Aboriginal and Torres Strait Islander Survey: An Evaluation of the Survey*, cat. no. 4184.0, ABS, Canberra.

Australian Bureau of Statistics and Australian Institute of Health and Welfare (ABS/AIHW) 1996. *Occasional Paper: Mortality of Indigenous Australians*, cat. no. 3315.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996a. *1994 National Aboriginal and Torres Strait Islander Survey: Employment Outcomes for Indigenous Australians*, cat. no. 4199.0, ABS, Canberra.

Australian Bureau of Statistics and Centre for Aboriginal Economic Policy Research (ABS/CAEPR) 1996b. *1994 National Aboriginal and Torres Strait Islander Survey: Torres Strait Islanders in Queensland*, cat. no. 4179.3, ABS, Canberra.

Index

1992 NATSIS workshop, 1–2, 194
  performance evaluation, 5–6
  statistical information, 9
1994 NATSIS, 1–11, 21–2
  findings, 156
  health matters, 118–32
  housing matters, 106, 110–6
  output products, 21–2
  statistical needs, 193–201
  see also general heading NATSIS
1996 NATSIS
  planning, 2
  statistical information, 9

A
abbreviations & acronyms, xii–iii
Aboriginal & Torres Strait Islander Commission (ATSIC)
  ABS/ATSIC regional statistics books, 187
  allocation of funds, 7
  effect of poor performance evaluation, 6
  funding, 7
  home loans scheme, 107
  planning regime, 173–5
  program cutbacks, 3
  regional councils, 174–82
    resources, 7
  regional policy & planning, 173–80
  regional profiles, 174–5
  review of HCINS, 17
  use of ACS survey results, 5
Aboriginal & Torres Strait Islander Health & Welfare Information Unit, 13–4
Aboriginal arts & crafts industry, statistics, 154
Aboriginal Education Policy (AEP), 84,
  review 13–4
Aboriginal Employment Development Policy (AEDP), evaluation, 7
Aboriginal Hostels Limited (AHL), 107
Aborigines & Torres Strait Islanders *see under individual headings*
  see also Torres Strait Islanders
alcohol
  need for local information, 132
  relationship with crime, 161
  use surveys, 17, 24
Australian Bureau of Statistics
  ABS/ATSIC regional statistics books, 187
  attitude to NATSIS, 3, 25–6
  Census 1996, 14–5
  Census of Population & Housing, 14
    Indigenous education, 84
  evaluation of NATSIS, iii, 14, 183–92
  Experimental Population Estimates of Indigenous population, 14
  families & households, classification standards, 16–7
  health & welfare statistics, 25
  Indigenous Enumeration Strategy, 14
  Indigenous status, 15–6
  input into surveys, 1, 4–5, 8, 10
  National Health Survey (NHS), Indigenous data, 17
  program funding, 14
  rent comparison of Indigenous people, 112, 113
  review of Aboriginal education statistics collection, 14
  use of census & other surveys, 5, 10, 14–5, 189
Australian Construction Services (ACS), housing & infrastructure survey, 5, 17
Australian Institute of Criminology (AIC), 157
Australian Institute of Health & Welfare, 14
  health & welfare statistics, 25
  perinatal statistics, 33

B
births, deaths & marriages, statistics, 20

C
Canada, survey of Indigenous people, 44–7, 50, 188–9
Centre for Aboriginal Economic Policy Research (CAEPR), *iii*
  data on Aboriginal health & housing, 106
  publications specific to Islanders, 167
  role, vi
  study of employment outcomes, 53, 99
child care arrangements, 143–6
Community Development Employment Projects (CDEP) scheme, 9
  effect on use of child care, 144, 146
  employment growth, 54–5
  identification of participants, 10
  importance, 79, 83
  influence on the Torres Strait labour market, 168
  training program participation, 101–2
Community Housing & Infrastructure Program, 9
Confidentialised Unit Record File (CURF), 9, 135–6, 146, 147, 194
cultural issues, 149–54
  appropriateness of survey questions, 127, 150–1
  definition of culture, 149
  findings on homelands, 153
  improvements to data collection, 149–50
  language findings, 152–3
  survey findings, 151–4

D
data
  collection strategies, 4–5, 8, 197
  use of Indigenous collectors, 24, 119

see also NATSIS
see also statistical information
demographic data
data needs, 28–9
inadequacies & prospects, 28–39
major source, 34
population projections, 28–9
regional differences, 35
Dept of Employment, Education, Training & Youth Affairs (DEETYA)
data collection, 5
data on employment programs, 99
data on Indigenous education, 85
Indigenous programs, 6, 14
use of CES data, 61
use of Indigenous identifiers, 62
Dept of Health & Family Services (DHFS)
1994 National Drug Strategy: Urban Aboriginal & Torres Strait Islander Survey, 17
Indigenous programs, 6, 13
Dept of Social Security (DSS)
data collection, 5
use of Indigenous identifiers, 62
diabetes *see* health
drug & alcohol issues, survey, 17

E

education & training
national review, 84
statistics, 14
see also post-secondary qualifications & training
see also schooling
evaluation
evaluation of NATSIS & recommendations, 183–92
performance evaluation, 5–6, 9

F

families & households, 135–48
ABS survey, 43–4
average income, 138–43
classification standards, 16
coding of family type, 140–2, 146–7
concepts of visitors & usual residents, 43
definition of household, 136–7
estimates, 136
families & income units, 16–7
family violence, 159, 160–1, 162
mobility, 41
NATSIS data, 135–41
see also child care arrangements

G

governments, State & Territory liaison in collection of data, 26

H

health & welfare
Body Mass Index (BMI), 126–7
health care utilisation, 129
diabetes,124–5
information needs, 119–20
funding, framework for agreements, 13
health care providers, 128
health risk, 125–8
Indigenous identification in data, 20
morbidity, 121–5
national plan, 25
indicators, 118–9
services, 129–31
policy & strategy, 131–2
self-reporting, 124–5
statistics, 25
suspicion of surveys, 127
see also smoking
homelands *see* culture
Housing and Community Infrastructure Needs Survey (HCINS), 5, 17
housing
1992 CAEPR publication, 106
adequacy & appropriateness, 114–16
geographical variations in tenure, 109, 111, 137–8
home loans schemes, 107
housing survey questions, 106
policy & tenure, 107–12
private rental & community rental, 108–9, 111
public/government rental, 110
rent comparisons & affordability, 112–4, 116
ABS 1991 findings, 112, 113
geographic variations, 112–4, 139
standard & non-standard dwellings, 106, 111
use of data in program evaluation, 106–16
need for accurate statistics, 6
new directions in Indigenous affairs, 2–3, 6–7, 9
identifiers
birth & death collections, 20, 33, 34
use in surveys, 17
incomes
average weekly income by ATSIC region, 82
average weekly income by main source, 81
distribution of income, 80–1
employment status & main source of income, 79
regional variations in income levels, 81–2, 138–9
sources & distribution, 77–83
Indigenous organisations, use of CURF, 9
Indigenous peoples
definition, 15–6
developments in collection of statistics, 13–27
socioeconomic status measurement, iii
standards for information, 14–21
as data collectors, 24
see also individual headings
Indigenous programs, non-ATSIC program resources, 6
Inuit people, *see* Canada

L

Labour Force Survey (LFS), 5

use of Indigenous identifier, 61–2
utilisation of monthly figures, 199
labour market, 53–6
cultural appropriateness of NATSIS data, 59–60
inadequacy of participation data, 53
key findings from NATSIS, 53–4
measurements, 55–6
methodology, 56–9
selectivity problems, 61, 62
traditional occupations, 60–1
language *see* culture
law & justice, 156–64
access & use of legal services, 158–9
AIC studies, 157
arrest rates, 161
attitudes to policing, 159–61
family violence, 159, 160–1, 162
methodological issues & main findings, 157–8
over-representation in the criminal justice system, 156, 157
perception of police performance, 163
relationship with police, 156, 163
theft, 159
victimisation, 159, 162–3

M

Mabo judgement, 152
medical services, funding of Aboriginal services, 6
see also health
migration, interstate & intrastate, 30–1, 35–6
Ministerial Council on Employment, Education, Training & Youth Affairs (MCEETYA), 85
mobile populations, 40–52
difficulties for surveys, 40–2, 49–50
health-related mobility, 47–8
regional rates of movement, 42–3

N

National Aboriginal & Torres Strait Islander Survey (NATSIS), iii–iv, 118–9
contents & questions, 24
cultural issues, 149–54
data quality, 23
demographic data collection, 29
diversity in need across Indigenous peoples, 120
evaluation of NATSIS, 183–92
evaluation of statistical output, 9
families & households, 135–48
classification standards, 16
fertility rate, 31–3
findings from NATSIS, 183–92
future surveys, 3–4, 8–9, 10
Indigenous participation in schooling, 84–94
labour market, 53–60
law & justice, 156–64
policy & planning in Aboriginal health, 118–32
policy relevance, 24
post-secondary qualifications & training, 95–104
recommendations, 200–1
regional policy & planning, 173–80
sources & distribution of incomes, 77–83
targeting of publications, 177, 182
Torres Strait Islanders, 165–71, 178–9, 185
use of housing data in program evaluation, 106–16
voluntary work, 65–74
see also CURF
see also individual surveys by year
National Aboriginal Health Strategy (NAHS), review, 13–14
National Health Information Management Group, ABS standard for statistics, 20
National Health Survey (NHS), comparisons with NATSIS, 121–24, 128–29, 198
National Trachoma & Eye Health Program (NTEHP), 123–24
Native Title, 152
New Zealand, Maori identification, 16

O

Office of Aboriginal & Torres Strait Islander Health Services, data deficiencies, 13
Office of Evaluation and Audit (OEA), recommendation on ATSIC, 179–80

P

police *see* law & justice
policy
health data, 118–9, 131–2
key demographic information, 35
law & justice policy, 160–3
relevance of NATSIS results, 24
relevance of social surveys, 24–5
see also regional policy & planning
population of Indigenous people, 29
1996 Census, 14–5
ABS population estimates, 14
Census of Population & Housing, 14
geographical classification, 14–5
growth rate, 30
Indigenous Enumeration Strategy, 14
Indigenous fertility, 31–4
life expectancy, 30
mobility, 40
mortality data, 30, 33, 34
perinatal statistics, 33
projections, 28, 35
see also mobile populations
post-secondary qualifications & training, 96–104
CDEP training, 101–2
highest qualification held, 97, 98
length of course by provider & sex of participants, 101
NATSIS findings, 97–104
training for CDEP & non-CDEP employment, 102
type of training & whether completed, 100
use of Census of Population & Housing, 96

R
recommendations, 200–1
regional policy & planning
  ATSIC regional councils, 174–82
  NATSIS data, 175–9
  use of NATSIS, 183–90, 197
remote regions, 9
  average incomes 138
  definition, 136
  exclusion from statistics, 31
  housing costs, 139
Royal Commission into Aboriginal Deaths in Custody
  National Report, recommendation 49, 1
  reasons for high incarceration rates, 1
  recommendation for regional planning, 173
  request for national survey of Indigenous population, 29, 118
  research & data collection strategies for health data, 120
rural regions *see* remote regions

S
schooling
  current sources of educational statistics, 85–6
  data from Adelaide & Ceduna, 88–91
  Indigenous participation, 84–94
  NATSIS findings, 86–8, 91–4
  reviews & national strategy, 84–5
smoking, surveys, 24, 127
social surveys, relevance to government policy, 24–5
Statistical Local Areas (SLAs), 136
statistical information
  ABS/ATSIC regional statistics books, 187
  administrative collections, 20
  births, deaths & marriages, 20
  availability, 1
  sources of educational statistics, 85–6
  developments in collection of statistics, 13–27
  Directory of Indigenous Education & Training Statistics, 14
  education & training, 21
  evaluation & use, 9
  geographical differences, 10, 196
  increasing importance, 6–8
  Indigenous incarceration rates, 1
  major national collection activities, 17–9
  Management Group, ABS standard for statistics, 20
  National Health Information
  population statistics, 14–5
  prison statistics, 21
  responsibility for collection, 2
  standard for Indigenous status, 15–6
  statistical & political cycles, 199
  statistical needs in Indigenous affairs, 193–201
  see also data

T
Torres Strait Islanders, 165–71
  CAEPR publication, 167
  characteristics, 168–70, 178–9, 185
  NATSIS data, 166–70
  necessity for discrete Islander data, 165, 166, 178–9, 185, 196–7
  Office of Torres Strait Islander Affairs (OTSIA), 166
  Strait & mainland populations, 165–6, 167–8
  Torres Strait Regional Authority (TSRA), 165, 166
total fertility rate (TFR), 31–2

U
unemployment
  length of unemployment, 103
  training for unemployed, 101–2
urban Indigenous Australians, focus, 9–10

V
violence *see* law & justice
voluntary work, 65–74
  age & life-cycle factors, 69–70
  differences between sexes, 68–9
  geographic location of work, 71
  NATSIS definition, 66
  NATSIS findings, 67–8
  policy relevance, 73
  status & income of volunteers, 70–1
  traditional work by ATSIC region, 72–3

CENTRE FOR ABORIGINAL ECONOMIC POLICY RESEARCH (CAEPR)

MONOGRAPHS

1. *Aborigines in the Economy: A Select Annotated Bibliography of Policy-Relevant Research 1985-90*, L.M. Allen, J.C. Altman and E. Owen (with assistance from W.S. Arthur), 1991.

2. *Aboriginal Employment Equity by the Year 2000*, J.C. Altman (ed.), published for the Academy of the Social Sciences in Australia, 1991.

3. *A National Survey of Indigenous Australians: Options and Implications*, J.C. Altman (ed.), 1992.

4. *Indigenous Australians in the Economy: Abstracts of Research, 1991-92*, L.M. Roach and K.A. Probst, 1993.

5. *The Relative Economic Status of Indigenous Australians, 1986-91*, J. Taylor, 1993.

6. *Regional Change in the Economic Status of Indigenous Australians, 1986-91*, J. Taylor, 1993.

7. *Mabo and Native Title: Origins and Institutional Implications*, W. Sanders (ed.), 1994.

8. *The Housing Need of Indigenous Australians, 1991*, R. Jones, 1994.

9. *Indigenous Australians in the Economy: Abstracts of Research, 1993-94*, L.M. Roach and H.J. Bek, 1995.

10. *The Native Title Era: Emerging Issues for Research, Policy and Practice*, J. Finlayson and D.E. Smith (eds), 1995.

11. *The 1994 National Aboriginal and Torres Strait Islander Survey: Findings and Future Prospects*, J.C. Altman and J. Taylor (eds), 1996.

For information on earlier CAEPR Monographs please contact Publication Sales, Centre for Aboriginal Economic Policy Research, Faculty of Arts, Australian National University, Canberra ACT 0200. Phone (06) 279 8211 Fax (06) 249 2789. Abstracts of all CAEPR Publications can be found at the following WWW address: http://online.anu.edu/caepr/

Papers presented at the CAEPR workshop 'Statistical needs for effective Indigenous policy: findings from the 1994 National Aboriginal and Torres Strait Islander Survey', held at The Australian National University, Canberra, August 1996. The papers provide a review and evaluation of Survey results, focusing on recent developments in the collection of Indigenous statistics and future statistical needs.

CONTRIBUTIONS BY

Jon Altman
Ian Anderson
Bill Arthur
Tony Barnes
Carlos Carcach
Anne Daly
Boyd Hunter
Roger Jones
David Martin
Satyanshu Mukherjee
Nic Peterson
Linda Roach
Russell Ross
Will Sanders
George Sarossy
Beverly Sibthorpe
Jerry Schwab
Diane Smith
John Taylor
Habtemariam Tesfaghiorghis

ISSN 1036-6962
ISBN 0 7315 2662 7

Centre for Aboriginal Economic Policy Research

Australian National University