Australian Bureau of Statistics

4102.0

Australian Social Trends 2006

EMBARGO: 11.30 AM (CANBERRA TIME) THURS 20 JUL 2006

Australian Social Trends 2006

Dennis Trewin
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 4102.0

ABS Catalogue No. 4102.0

ISSN 1321–1781

Produced by the Australian Bureau of Statistics

INQUIRIES

- For further information about these and related statistics contact the National Information and Referral Service on 1300 135 070, or refer to contacts listed at the back of this publication.

Front cover picture credits:

The image of cheese and other delicatessen items on a small stall run by a Greek family at the Queen Victoria Markets, Melbourne (2006) is reproduced courtesy of the National Library of Australia (nla.pic-an12549240-32) and is from the Aspects of Australian life, leisure, recreation and tourism collection. The image of children paddling at a beach with their father at a textile worker's picnic is from the Hood Collection, State Library of New South Wales (Home and Away 1088). The child pegging a painting image is courtesy of Arthur Mostead of AMphotography. The image of a father and child looking at a newspaper is reproduced by permission of PhotAlto.

Contents

Page

Preface

Australian Social Trends 2006 is the 13th edition of an annual series that presents information on contemporary social issues and areas of public policy concern. By drawing on a wide range of ABS statistics, and statistics from other official sources, *Australian Social Trends* describes aspects of Australian society, and how these are changing over time. It is designed to assist and encourage informed decision-making, and to be of value to a wide audience including those engaged in research, journalism, marketing, teaching and social policy, as well as anyone interested in how we live today and how we've changed over recent decades.

The material presented in *Australian Social Trends 2006* is organised into nine chapters. As in previous editions, each of the first seven chapters represents a major area of social concern (i.e. population, family and community, health, education and training, work, economic resources, and housing), with an eighth chapter covering other areas of concern (e.g. crime and justice, culture and leisure, and the environment). The ninth chapter provides international comparisons for a number of these areas. *Australian Social Trends* also contains an introduction which is designed to further explain the rationale behind the publication and describe its main aims and features.

The opportunity has been taken to present some articles which expand and update analysis of topics examined in previous editions using the most recently available data. For example, in this edition, such articles cover government and non-government schooling, migrants' labour force participation and the environmental impact of household energy use. There are also articles on topics of interest not previously examined, such as Aboriginal and Torres Strait Islander youth, community participation of people with a disability, the distribution and composition of household wealth, and mortality improvements among people in their 50s. The number of articles listed in the cumulative index now comes to over 400, published across all 13 editions.

The national and state summary tables which present key social indicators in each of the seven major areas of social concern have been updated, as have the tables comparing Australia with major OECD countries, our closest neighbours, and our trading partners.

I would like to thank the people throughout the ABS who compiled, wrote and edited *Australian Social Trends 2006*, and Francis Mitrou, David Lawrence (Curtin University of Technology), John De Maio (Telethon Institute of Child Health Research) and the Western Australian Aboriginal and Child Health Survey team who authored an article for the Education and training chapter. I would also like to thank reviewers from a range of Australian Government agencies and departments who gave their time and expertise, and various organisations that assisted in other ways by providing data and advice, in particular the Department of Eduation, Science and Training.

The ABS welcomes readers' suggestions on how the publication could be improved. To convey your views or to ask for more information, please contact the Director of Social Analysis and Reporting at the address below.

Dennis Trewin
Australian Statistician

Australian Bureau of Statistics
Locked Bag 10
Belconnen ACT 2616
July 2006

Introduction

ABS framework for social statistics

The broad framework ABS uses to develop and organise its social statistics program was published in *Measuring Wellbeing: Frameworks for Australian Social Statistics* (ABS cat. no. 4160.0) in 2001. This framework describes the scope of social statistics and the linkages both within this field of statistics and with economic statistics. It also describes commonly used definitions, classifications and counting rules and, where relevant, is consistent with national accounting standards. Its systematic approach supports the identification and analysis of data needs and helps to ensure that a comprehensive and well balanced array of data items are collected across the social statistics program. It also facilitates integration across the social and economic fields, particularly in areas such as economic resources and work.

The concept of wellbeing is central to the framework. This multifaceted concept recognises a range of fundamental human needs and aspirations, each of which can be linked to an area of social concern. These needs and aspirations are the focus of government social policy and service delivery, and are reflected in many of the structures of government.

...key dimensions

A number of key areas of social concern form one dimension of the framework. The areas identified are: population; health; family and community; education and training; work; economic resources; housing; crime and justice; and culture and leisure. Each of these areas has its own more detailed framework, or set of frameworks, and is explored through a series of questions:

- How does this area relate to the wellbeing of both individuals and society?
- What are the key social issues that need to be informed in this area?
- What groups are at risk of disadvantage?
- What are the social and economic transactions that affect individual wellbeing?
- What detailed frameworks relate to this area?
- What definitions, classifications and units of measurement will result in effective social indicators for the area?
- What data sources relate to this area?

	Areas of social concern								
Selected population groups	Population	Family and community	Health	Education and training	Work	Economic resources	Housing	Crime and justice	Culture and leisure
Unemployed people	✓			✓	✓	✓	✓	✓	
Retirees	✓					✓			
Aboriginal and Torres Strait Islander peoples	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lone parents	✓	✓		✓	✓	✓			✓
Children	✓	✓	✓						
Migrants	✓	✓		✓	✓				✓
Older people	✓	✓	✓			✓	✓		
People with low income	✓	✓	✓	✓	✓	✓	✓	✓	✓
People with a disability	✓	✓	✓		✓		✓		
Crime victims	✓		✓					✓	

Another dimension of the framework focuses on a variety of population groups which are of special interest to the community and to governments. These groups include, for example, older people, children, youth, families with children, the unemployed, lone parents, people with disabilities, carers, recipients of various government benefits, low income earners, Aboriginal and Torres Strait Islander peoples, and people whose language background is other than English.

These two basic dimensions of the framework are brought together in the form of a matrix showing areas of social concern by population groups. The diagram on the previous page illustrates this matrix, showing how each area of concern can be related to selected population groups and how different areas of concern can be interconnected. The scope of social statistics in Australia is broadly defined by reference to this matrix and the relationship of its elements to various aspects of human wellbeing, both at the level of the individual and for society as a whole. The ABS aims to provide information about the elements of this matrix over time through its work program activities.

...application of the framework in Australian Social Trends

AST is structured according to the framework's areas of concern. It draws on a wide range of data, sourced both from ABS and other agencies, to present a contemporary picture of Australian society. For each area of concern it provides a set of national and state/territory indicators which describe how key aspects of wellbeing in that area have been changing over time and how circumstances differ between states/territories. It also provides comparisons with other countries.

Aims of Australian Social Trends

AST provides an overview of some key social trends in the various areas of social concern and brings together information from across the different areas to address complex social issues. AST aims to:

- inform decision-making, research and discussion on social conditions in Australia, social issues of current and ongoing concern, population groups of interest, and changes in these over time, by drawing together up-to-date social data and analysis from both ABS and other sources, and incorporating readily understood commentary about the statistics

- support the monitoring and review of progress towards social goals, changes in social conditions, and levels of population wellbeing, by presenting a comprehensive set of social indicators on a regular basis.

Each year, the selection of topics for the articles aims to address the current or perennial social issues which may be informed using recent data, and to provide answers to key social questions across the range of areas of concern. The suite of articles changes each year, with some topics refreshed as new data become available. The aim of this approach is for each edition to remain responsive to contemporary concerns, while accumulating a more comprehensive picture of Australian social conditions across editions. To enhance this objective, articles often include cross references to other relevant articles in the current edition, and in previous editions.

AST aims to increase the accessibility of information on important social issues and so a key aspect of the publication is its readability. Information is deliberately presented in non-technical language that can be readily understood by the general reader. Statistics are organised to illustrate specific issues, and to highlight the meaning behind the data and the main patterns and exceptions. As far as possible, technical terms are defined separately from the flow of the main story, but are included within each article, so each article can stand alone.

In keeping with these aims, AST articles focus strongly on people and social issues. Each article aims to tell a story, providing a sense of the social and historical context in which a particular issue is embedded, moving from the general to the specific, and using statistics to bring light to the issue. Articles aim to balance 'what' analysis (relating the relevant statistical facts surrounding the issue, e.g. number, characteristics, change over time, sex, age and other differences), with 'why' analysis (providing context and explanation through highlighting

relevant social changes and events and the chronologies of these). For example, each article may examine current circumstances, how circumstances have changed over time, how different groups of people have been affected, and how various factors may be linked to observed trends.

Social indicators and progress

AST complements the biennial ABS publication, *Measures of Australia's Progress* (MAP) (ABS cat. no. 1370.0), and the annual electronic publication, *Measures of Australia's Progress: Summary Indicators* (ABS cat. no. 1383.0.55.001). MAP presents a suite of indicators for reporting on economic, social and environmental progress and considers the interrelationships between these aspects of life. Three headline dimensions are used to discuss progress in the wellbeing of individuals: health; education and training; and work. Three further headline dimensions are used to measure progress in the way we live together as a society: family, community and social cohesion; crime; and democracy, governance and citizenship. Headline dimensions in the economy and economic resources domain include national income, national wealth, productivity, economic hardship and housing. The national income and wealth dimensions include information on the distribution of economic resources across households, while the economic hardship dimension includes information about people living in households with low economic resources. MAP focuses on progress, while AST presents a detailed set of social indicators and profiles diverse aspects of society in short articles.

Features of Australian Social Trends

Structure

Seven core areas of social concern form the chapters of each edition: population, family and community, health, education and training, work, economic resources, and housing. An additional chapter covers other areas of social concern or interest, such as culture and leisure, transport, crime and justice, and the environment. Occasionally an AST edition will focus on a theme. Past themes have included a regional issues theme (2003) and the wellbeing of older Australians (1999).

Chapters

Summary tables — The summary tables at the beginning of each chapter are a fundamental element of AST. They present a range of statistics that summarise the key aspects of each area. They show at a glance changes that have taken place at a national level over a decade, and differences across states and territories for the most recent year. AST on the ABS website contains spreadsheets of national as well as state and territory data for a 10 year period.

Articles — Each chapter contains several articles, each 3–7 pages long. The articles focus on specific social issues or population subgroups. They are designed to stand alone, while complementing one another in terms of content. Most articles contain references to other AST articles that provide more background or in-depth discussion of a topic. Endnotes at the end of each article direct readers to further Australian and international references on specific issues.

Sources and definitions — The main data sources used in an article, and definitions of key terms used, generally appear on the first page of the article, in the upper right hand corner. Data sources and definitions for the summary tables are provided directly following these tables.

Other features

International comparisons — A set of international summary tables covering the areas of population, health, education and work are located towards the end of the publication. These tables enable the reader to consider Australia's international standing in relation to various key social indicators.

Cumulative topic list — This index lists all articles, from all AST editions, under topic subheadings.

AST seminars — The dissemination of AST includes biennial seminars held in most states and territories (next planned for 2007). These are based on articles from the most recent edition supported by related statistics, with a state or territory focus where feasible. For information contact the client liaison area in ABS Regional Offices.

Access — All editions of AST can be accessed via the ABS website. The website version includes Excel spreadsheet versions of the summary tables. Hard copies of the publication are available from ABS state and territory offices. For more information, see p.216 of this edition.

General information

Inquiries about these statistics

General inquiries about the content and interpretation of statistics in this publication should be addressed to:

Director
Social Analysis and Reporting Section
Australian Bureau of Statistics
Locked Bag 10
Belconnen ACT 2616

Telephone Canberra (02) 6252 7187

Inquiries about the availability of more recent data from the ABS should be directed to the National Information and Referral Service on 1300 135 070.

ABS publications and services

A complete list of ABS publications produced in Canberra and each of the Regional Offices is contained in the ABS *Catalogue of Publications and Products* (ABS cat. no. 1101.0), which is available from any ABS office or the ABS website. The ABS also issues a daily release advice on the website which details products to be released in the week ahead.

ABS Information Consultants can provide a wide range of ABS data tailored to meet your individual needs. For further information about the ABS Information Consultancy Service phone 1300 135 070, or email client.services@abs.gov.au.

Abbreviations

The following abbreviations have been used in this publication.

Australia, states and territories of Australia

Aust.	Australia
NSW	New South Wales
Vic.	Victoria
Qld	Queensland
SA	South Australia
WA	Western Australia
Tas.	Tasmania
NT	Northern Territory
ACT	Australian Capital Territory

Other abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ABSCQ	ABS Classification of Qualifications
ACE	Adult and Community Education
ACER	Australian Council for Educational Research
ASCCSS	Australian Standard Classification of Countries for Social Statistics
AD/HD	Attention Deficit/Hyperactivity Disorder
AEC	Australian Electoral Commission
AGSRC	Average Government School Recurrent Costs
AIHW	Australian Institute of Health and Welfare
ANU	Australian National University
ANZSIC	Australian and New Zealand Standard Industry Classification
ARIA	Accessibility/Remoteness Index of Australia
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
AST	Australian Social Trends
CAAH	Centre for Advancement of Adolescent Health
CDEP	Community Development Employment Project
CPI	Consumer Price Index
CRA	Commonwealth Rent Assistance
CSA	Child Support Agency
DEST	Department of Education Science and Training
DOHA	Department of Health and Ageing
DSF	Dusseldorp Skills Forum
ERP	Estimated Resident Population
FTE	Full-time Equivalent
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GJ	Gigajoules
GL	Gigalitre
GSS	General Social Survey
HALE	Health Adjusted Life Expectancy
HECS	Higher Education Contribution Scheme
HES	Household Expenditure Survey
ICD	International Classification of Diseases
ICHR	Institute of Child Health Research
ISCED	International Standard Classification of Education
KJ	Kilojoules
LFS	Labour Force Survey
LGA	Local Government Area
LORI	Level of Relative Isolation
MAP	Measures of Australia's Progress
MCD	Multiple Cause of Death
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
ML	Megalitre
Mt	Megatonnes
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey 2004–2005
NATSISS	National Aboriginal and Torres Strait Islander Social Survey 2002
NGS	National Greenhouse Strategy
NHMRC	National Health and Medical Research Council

Other abbreviations continued

OAD	Overseas Arrivals and Departures
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
PJ	Petajoules
ROGS	Report on Government Services
SCRGSP	Steering Committee for the Review of Government Service Provision
SD	Statistical Division
SES	Socioeconomic Status
SIH	Survey of Income and Housing
SACC	Standard Australian Classification of Countries
SDAC	Survey of Disability, Ageing and Carers
SDQ	Strengths and Difficulties Questionnaire
TAFE	Technical and Further Education
TFR	Total Fertility Rate
TMHC	Transcultural Mental Health Centre
UK	United Kingdom
UNPD	United Nations Population Division
USA	United States of America
VET	Vocational Education and Training
WAACHS	Western Australian Aboriginal Child Health Survey
WACHS	Western Australian Child Health Survey
WHO	World Health Organisation

Symbols

The following symbols and usages mean:

billion	1,000 million
n.a.	not available
n.e.c.	not elsewhere classified
n.f.d.	not further defined
n.p.	not published
n.y.a.	not yet available
no.	number
p	preliminary — figures or series subject to revision
r	figures or series revised since previous edition
'000	thousand
'000m	thousand million
$	dollar
$m	million dollars
$b	billion dollars
$US	American dollar
%	per cent
*	estimate has a relative standard error of 25% to 50% and should be used with caution
**	estimate has a relative standard error of greater than 50% and is considered too unreliable for general use
. .	not applicable
—	nil or rounded to zero (including null cells)

Other usages

Figures have been rounded. Therefore discrepancies may occur between the sums of the component items and totals.

Unless otherwise stated, where source data used included a non-response category (i.e. not stated), data in this category have been excluded prior to the calculation of percentages. Total numbers shown with such percentages include the number of non-responses.

Each chapter contains a national summary table which provides, where possible, ten years of data for a particular indicator. These time series are designed to give a long-term overview and readers should be cautious when interpreting small year to year variations, as some may not be statistically significant.

Unless otherwise stated, all data from the Census of Population and Housing are based on the location of people on census night, i.e. their place of enumeration.

Unless otherwise stated, all data from the Census of Population and Housing exclude overseas visitors.

Population

Population: national summary(a)

COMPOSITION	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1 Total population	'000	18 072	18 311	18 518	18 711	18 926	19 153	19 413	19 641	19 873	r20 092	p20 329
2 Male population	'000	8 994	9 108	9 203	9 295	9 397	9 505	9 631	9 753	9 873	r9 991	p10 111
3 Female population	'000	9 078	9 203	9 314	9 417	9 529	9 648	9 783	9 888	9 999	r10 101	p10 218
4 Indigenous population(b)	'000	405.0	414.4	423.4	432.2	441.1	449.9	458.5	466.9	475.4	484.0	492.7
5 Born overseas(c)	%	23.0	23.3	23.3	23.2	23.1	23.0	23.1	23.2	23.4	23.6	p23.8
6 Born in United Kingdom	%	6.8(d)	6.4	6.2	6.1	6.0	5.9	5.8	5.7	5.7	5.6	p5.6
7 Born in Europe	%	13.3(e)	13.2	13.0	12.8	12.5	12.3	12.0	11.9	11.7	11.6	p11.4
8 Born in East, Central or Southern Asia	%	4.9(f)	5.1	5.3	5.3	5.3	5.4	5.5	5.7	5.8	6.0	p6.2
9 Population living in capital cities	%	r63.6	r63.7	63.6	63.7	63.7	r63.7	63.7	63.8	63.8	63.8	p63.7
10 Population aged 0–14 years	%	21.5	21.4	21.2	21.0	20.9	20.7	20.5	20.3	20.0	19.8	p19.6
11 Population aged 15–64	%	66.6	66.6	66.7	66.7	66.8	66.9	66.9	67.0	67.2	r67.2	p67.3
12 Population aged 65 and over	%	11.9	12.0	12.1	12.2	12.3	12.4	12.5	12.7	12.8	13.0	p13.1
13 Population aged 80 and over	%	2.6	2.6	2.7	2.8	2.8	2.9	3.1	3.2	3.3	3.4	p3.5
14 Median age of total population	years	33.7	34.0	34.4	34.8	35.1	35.4	35.7	36.0	36.2	36.4	p36.6
15 Median age of Indigenous population(b)	years	r20.5	r20.5	r20.5	r20.5	r20.4	r20.4	20.5	20.6	20.7	20.8	21.0
16 Sex ratio of population aged 0–64	ratio	102.5	102.4	102.2	102.0	101.8	101.7	101.5	101.7	101.8	r101.9	p101.9
17 Sex ratio of population aged 65 and over	ratio	76.7	77.1	77.5	77.9	78.4	78.7	79.2	79.8	80.4	81.0	p81.6

POPULATION GROWTH	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
18 Total population growth	'000	217.0	239.0	206.9	193.7	214.6	227.5	259.9	227.7	231.7	r218.9	p237.1
19 Births(g)	'000	258.2	250.4	253.7	249.1	250.0	249.3	247.5	247.4	247.4	r252.1	p257.9
20 Deaths(g)	'000	126.2	126.4	127.3	129.3	128.3	128.4	128.9	130.3	132.2	r133.2	p130.9
21 Natural increase	'000	132.0	124.0	126.4	119.9	121.7	120.9	118.6	117.2	115.2	r118.9	p127.0
22 Net overseas migration	'000	80.1	104.1	87.1	79.2	96.5	107.3	135.7	110.6	116.5	r100.0	p110.1
24 Population growth rate	%	1.22	1.32	1.13	1.05	1.15	1.20	1.36	1.17	1.18	r1.10	p1.18
25 Net overseas migration to total growth	%	36.9	43.6	42.1	40.9	45.0	47.1	52.2	48.5	50.3	r45.7	p46.4

MIGRATION	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
27 Total settler arrivals(h)	'000	87.4	99.1	85.8	77.3	84.1	92.3	107.4	88.9	93.9	111.6	123.4
28 Skilled settler arrivals	%	23.1	20.2	23.0	33.6	33.2	35.1	33.3	40.5	41.0	46.2	43.0
29 Family settler arrivals	%	42.4	46.9	42.6	27.3	25.6	21.6	18.8	26.3	29.9	26.5	26.9
30 Humanitarian settler arrivals	%	15.6	13.9	11.5	11.4	10.4	7.9	7.1	7.6	10.2	9.3	10.7

PROJECTIONS — SERIES B	Units	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	2101
31 Total population	'000	r20 555	r21 699	r22 808	r23 871	r24 873	r25 773	r26 536	r27 169	r27 704	r28 170	r30 595
32 Population aged 0–14 years	%	r19.3	r18.3	r17.5	r16.9	r16.5	r16.1	r15.8	r15.5	r15.2	r15.1	r14.8
33 Population aged 15–64	%	r67.4	r67.1	r65.7	r64.3	r62.8	r61.5	r60.5	r59.9	r59.6	r59.1	r57.8
34 Population aged 65 and over	%	r13.3	r14.6	r16.8	r18.7	r20.7	r22.4	r23.7	r24.6	r25.2	r25.8	r27.4
35 Population aged 80 and over	%	r3.6	r4.1	r4.4	r4.9	r5.7	r6.9	r7.9	r8.8	r9.5	r10.0	r11.0
36 Median age of total population	years	r37.0	r38.5	r39.6	r40.7	r41.8	r42.8	r43.7	r44.4	r44.9	r45.2	r46.1
37 Population living in capital cities	%	r63.8	r63.9	r64.1	r64.3	r64.4	r64.7	r64.9	r65.2	r65.4	r65.7	n.a.

(a) Includes Other Territories.
(b) Based on 2001 Census data. From 2002, figures are low series population projections.
(c) Includes country of birth not stated.
(d) Prior to 1996 data was based on the ASCCSS classification and grouped United Kingdom and Ireland together.
(e) Prior to 1996 data was based on the ASCCSS classification and grouped the former USSR with Europe.
(f) Prior to 1996 data was based on the ASCCSS classification and did not include central Asia.
(g) Year of occurrence basis.
(h) Total settler arrivals includes special eligibility and non-program migration in addition to family, skilled and humanitarian migration.

Reference periods: Data for indicators 1–17 and 31–37 are at 30 June.
Data for indicators 18–30 are for the financial year ending 30 June.

Population: state summary

COMPOSITION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
1 Total population	'000	2005p	6 774	5 022	3 964	1 542	2 010	485	203	325	p20 329
2 Male population	'000	2005p	3 370	2 479	1 982	764	1 008	239	107	161	p10 111
3 Female population	'000	2005p	3 405	2 543	1 982	778	1 002	246	96	164	p10 218
4 Indigenous population(b)	'000	2005	143.8	30.3	136.8	27.6	70.9	18.3	60.4	4.3	492.7
5 Born overseas(c)(d)	%	2001	24.8	24.6	18.0	21.2	28.5	10.8	16.1	22.9	23.1
6 Born in United Kingdom(c)	%	2001	4.6	4.7	5.3	8.9	11.6	5.0	3.9	5.8	5.8
7 Born in Europe(c)	%	2001	10.7	13.7	8.7	16.0	17.4	7.7	7.4	12.4	12.0
8 Born in East, Central or Southern Asia(c)	%	2001	7.4	6.3	2.9	2.9	5.4	1.1	4.4	5.8	5.5
9 Population living in capital cities	%	2005p	62.8	72.4	45.7	73.2	73.5	42.0	54.9	99.9	63.7
10 Population aged 0–14 years	%	2005p	19.5	19.1	20.4	18.4	19.9	19.9	24.9	19.2	19.6
11 Population aged 15–64	%	2005p	66.9	67.4	67.5	66.4	68.3	65.6	70.5	71.2	67.3
12 Population aged 65 and over	%	2005p	13.7	13.5	12.1	15.2	11.8	14.5	4.6	9.6	13.1
13 Population aged 80 and over	%	2005p	3.7	3.7	3.1	4.4	3.0	3.8	0.8	2.4	3.5
14 Median age of total population	years	2005p	36.8	36.8	35.9	38.8	36.2	38.7	30.9	34.5	36.6
15 Median age of Indigenous population(b)	years	2005	20.6	21.5	20.5	21.4	21.2	20.2	22.6	21.0	21.0
16 Sex ratio of population aged 0–64	ratio	2005p	102.2	100.6	102.1	102.3	103.1	100.4	110.7	100.0	p101.9
17 Sex ratio of population aged 65 and over	ratio	2005p	80.9	79.7	85.9	78.4	83.5	81.5	117.8	81.0	p81.6

POPULATION GROWTH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
18 Total population growth	'000	2004–05p	53.5	59.4	75.9	9.3	32.0	3.0	3.0	1.0	237.1
19 Births	'000	2004–05p	88.1	61.9	51.6	17.4	25.2	6.0	3.5	4.3	257.9
20 Deaths	'000	2004–05p	45.7	32.5	24.3	11.3	11.1	3.8	0.9	1.4	130.9
21 Natural increase	'000	2004–05p	42.5	29.4	27.3	6.1	14.1	2.2	2.6	2.9	127.0
22 Net overseas migration	'000	2004–05p	36.7	32.3	17.1	6.7	16.5	0.7	0.4	-0.3	110.1
23 Net interstate migration	'000	2004–05p	-25.7	-2.4	31.5	-3.5	1.5	0.2	—	-1.6	. .
24 Population growth rate	%	2004–05p	0.80	1.20	1.95	0.61	1.62	0.63	1.48	0.32	1.18
26 Net interstate migration rate	%	2004–05p	-0.38	-0.05	0.81	-0.23	0.07	—	—	-0.50	. .

PROJECTIONS — SERIES B	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
31 Total population	'000	2051	r8 743	r6 574	r6 899	r1 581	r3 165	r453	r350	r402	r28 170
32 Population aged 0–14 years	%	2051	r15.3	r14.6	r15.3	r13.8	r14.9	r14.8	r21.5	r15.3	r15.1
33 Population aged 15–64	%	2051	r59.0	r59.1	r59.4	r56.3	r59.5	r53.9	r66.9	r61.9	r59.1
34 Population aged 65 and over	%	2051	r25.7	r26.3	r25.4	r29.9	r25.6	r31.3	r11.6	r22.8	r25.8
35 Population aged 80 and over	%	2051	r9.9	r10.3	r9.4	r12.4	r9.9	r12.9	r2.9	r9.0	r10.0
36 Median age of total population	years	2051	r44.9	r45.5	r45.2	r48.5	r45.3	r49.8	r35.0	r42.4	r45.2
37 Population living in capital cities	%	2051	r64.2	r76.7	r48.6	r76.2	r77.5	r48.5	r66.4	n.a.	r65.7

(a) Includes Other Territories.

(b) Low series population projections based on 2001 Census data.

(c) State and territory data only available in census years.

(d) Includes country of birth not stated.

Reference periods: Data for indicators 1–17 and 31–37 are at 30 June.
Data for indicators 18–30 are for the financial year ending 30 June.

Population: data sources

INDICATORS	DATA SOURCE
1–3, 18–26	*Australian Demographic Statistics* (ABS cat. no. 3101.0).
4, 15	*Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Population* (ABS cat. no. 3238.0).
5–8	*Migration, Australia* (ABS cat. no. 3412.0).
9–14, 16–17	*Population by Age and Sex, Australian States and Territories* (ABS cat. no. 3201.0).
27–30	Department of Immigration, Multicultural and Indigenous Affairs: *Immigration Update.*
31–37	*Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0).

Population: definitions

Births

live births occurring in that year. A live birth is the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any evidence of life such as a heartbeat. Estimates may differ from estimates given in the Family and Community chapter of this publication, which are based on the year in which the birth was registered.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Deaths

based on the year in which the death occurred. Death is the permanent disappearance of all evidence of life after birth has taken place. The definition excludes deaths prior to live birth. Estimates may differ from estimates given in the Health chapter of this publication, which are based on the year in which the death was registered.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

East, Central and Southern Asia

includes the countries of North-East, South-East and Southern and Central Asia. Countries are classified according to the *Standard Australian Classification of Countries (SACC), 1998* (ABS cat. no. 1269.0).

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Europe

includes the United Kingdom and Ireland.

Reference: *Standard Australian Classification of Countries (SACC), 1998* (ABS cat. no. 1269.0).

Family settler arrivals

migrants who have been sponsored by a relative who is an Australian citizen, or permanent resident of Australia, under the family stream of the migration program.

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Humanitarian settler arrivals

comprise: those who arrive under the refugee program (which provides protection for people who have fled their country because of persecution); those who arrive under the special humanitarian programs (those suffering persecution within their own country or who have left their country because of significant discrimination amounting to gross violation of human rights); and those who arrive under the special assistance category (groups determined by the Minister to be of special concern to Australia and in real need, but who do not come under the traditional humanitarian categories. It includes those internally and externally displaced people who have close family links in Australia).

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Indigenous population

people who identify, or were identified by another household member, as Aboriginal or Torres Strait Islander origin. Data referring to the size of the Indigenous population are experimental estimates in that the standard approach to population estimation is not possible because satisfactory data on births, deaths and migration are not generally available. Furthermore, there is significant intercensal volatility in census counts of the Indigenous population, due in part to changes in the propensity of persons to be identified as being of Aboriginal or Torres Strait Islander origin.

Reference: *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians* (ABS cat. no. 3238.0).

Long-term arrivals and departures

long-term arrivals comprise overseas visitors who intend to stay in Australia for one year or more (but not permanently) and Australian residents returning after an absence of one year or more overseas. Long-term departures comprise Australian residents who intend to stay abroad for one year or more (but not permanently), and overseas visitors departing who stayed one year or more.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Median age

for any distribution the median value is that which divides the relevant population into two equal parts, half falling below the value, and half exceeding it. Thus, the median age is the age at which half the population is older and half is younger.

Reference: *Population by Age and* Sex, *Australian States and Territories* (ABS cat. no. 3201.0).

Natural increase

the excess of births over deaths during the year.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Net interstate migration

the difference between the number of persons who have changed their place of usual residence by moving into a given state or territory and the number who have changed their place of usual residence by moving out of that state or territory during a specified time period. The difference can be either positive or negative. Net interstate migration rate expresses this as a proportion (per cent) of the population at the beginning of the year.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Net overseas migration

is net permanent and long-term overseas migration, adjusted for changes in traveller duration, intention and multiple movement error.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population: definitions continued

Other Territories

includes Jervis Bay Territory, as well as Christmas Island and the Cocos (Keeling) Islands.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Permanent arrivals

comprise of travellers who hold migrant visas, New Zealand citizens who indicate an intention to settle, and those who are otherwise eligible to settle.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Permanent departures

are Australian residents (including former settlers) who on departure state that they are departing permanently.

Reference: *Migration, Australia* (ABS cat. no. 3412.0).

Population

estimated resident population (ERP). ERP is the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population growth

for Australia, is the sum of natural increase and net overseas migration. For states and territories, population growth also includes net interstate migration. After the census, intercensal population growth also includes an allowance for intercensal discrepancy.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Population projections

the ABS uses the cohort-component method for producing population projections of Australia, the states, territories, capital cities and balances of state. This method begins with a base population for each sex by single year of age and advances it year by year, for each year in the projection period, by applying assumptions regarding future fertility, mortality and migration. The assumptions are based on demographic trends over the past decade and longer, both in Australia and overseas. The projections are not predictions or forecasts, but are simply illustrations of the change in population which would occur if the assumptions were to prevail over the projection period. A number of projections are produced by the ABS to show a range of possible future outcomes. The base year for these projections is 2004.

Reference: *Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0).

Sex ratio

the number of males per 100 females.

Reference: *Population by Age and Sex, Australian States and Territories (*ABS cat. no. 3201.0).

Skilled settler arrivals

the skill stream component of the migration program is designed to contribute to Australia's economic growth. Settlers under this program meet a demand in Australia for their particular occupational skills, outstanding talents or business skills.

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

Total settler arrivals

comprised largely of those who arrived under the Migration and Humanitarian programs and those who are not required to seek a visa before travelling (mostly New Zealand citizens). These programs include the following categories: the family stream; the skilled stream; special eligibility migrants; refugees; special humanitarian and special assistance migrants.

Reference: *Immigration Update, June Quarter 2001*, Department of Immigration and Multicultural and Indigenous Affairs.

People in their 50s: then and now

POPULATION COMPOSITION

The proportion of 50–59 year olds that were divorced increased from 5% in 1981 to 13% in 2001.

People in their 50s are members of the group known as 'mature age people' (those aged 45–64 years). This group is identified as a population of significance in government policies which address the challenges posed by the ageing population. A comparison drawn between people in their 50s now and people in their 50s twenty years ago illustrates how the characteristics of this group have changed over time and sheds some light on the issues being faced by this group of people. At the start of the 21st century people in their 50s have significantly improved health outcomes and different living arrangements compared with people of the same age in 1981. The gap between women and men's educational attainment and incomes has narrowed – changes related to the increase in women's labour force participation over the period.

Demographic characteristics

The 1981 Census of Population and Housing counted 1.5 million Australians aged 50–59 years, making up 10% of the population. In 2001, there were 2.2 million people in this age group, making up 12% of the population. The higher proportion of people in their 50s in 2001 was largely the result of the older members of the baby boomer cohort (those born from 1946 to 1965 inclusive) who began to enter this age group, and the declining fertility that followed the baby boom. The number of people aged 50–59 years is projected to be between 3.0 and 3.1 million in 2021, or 13% of Australia's projected population.[1]

Persons aged 50–59 years: selected indicators — 1981 and 2001

	1981	*2001*
	%	%
Of the total population	10.2	11.8
Male	50.6	50.2
Living in a capital city	64.2	62.3
Born overseas	29.3	34.6
No religious affiliation(a)	8.1	13.2
	'000	'000
Persons aged 50–59 years	**1 477.6**	**2 219.2**

(a) Answering the religion question is optional in the Census.

Source: ABS 1981 and 2001 Censuses of Population and Housing.

Data sources

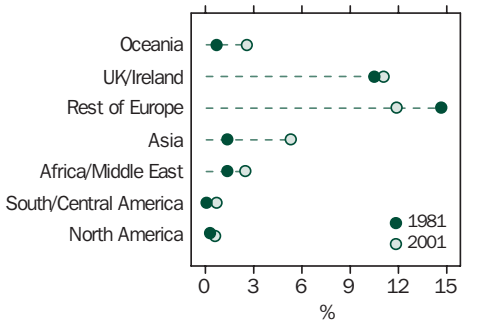
Demographic characteristics are drawn from the 1981 and 2001 Censuses of Population and Housing. Overseas visitors have been excluded from the data. Some definitions and classifications have changed between 1981 and 2001. To enable comparison over time, unless otherwise stated, adjustments have been made to take account of these changes.

Mortality data are drawn from the ABS Deaths Collection. Employment data are from the monthly ABS Labour Force Survey. Income data are from the ABS 1982 Income and Housing Survey and ABS 2003–04 Survey of Income and Housing. Education data are from the ABS Labour Force Survey, February 1984 and the ABS 2005 Survey of Education and Work.

In 1981, almost two-thirds (64%) of 50–59 year olds lived in capital city Statistical Divisions (SDs), compared with 62% in 2001. Conversely, the rest of the population living in capital city SDs rose slightly from 1981 (63%) to 2001 (64%).

A smaller proportion of people aged 50–59 years in 1981 were born overseas, compared with people in this age group in 2001 (29% and 35% respectively). This increase in the proportion born overseas occurred as many people that migrated to Australia during the post-war period had entered their 50s by 2001 (see *Australian Social Trends 2001,* Coming to Australia, pp. 16–20; *Australian Social Trends 2002,* Older overseas-born Australians, pp. 17–21).

Persons aged 50–59 years: proportion born overseas, region of birth — 1981 and 2001



Source: ABS 1981 and 2001 Censuses of Population and Housing.

Although patterns of migration to Australia have changed over the years, Europe remains the major birthplace for overseas born people in their 50s. The UK/Ireland proportion stayed about the same (around 11% of all people aged 50–59 years) and the rest of Europe decreased from 15% in 1981 to 12% in 2001. The proportions of 50–59 year olds born in Asia and Oceania increased the most. In 1981, 1.4% of people in their 50s were born in Asia. In 2001 this had increased to 5.3%. The proportion of people born in Oceania in 1981 was 0.7%, compared with 2.2% in 2001.

The increase in the proportion of 50–59 year olds born in Oceania in 2001 was reflected in changes to the top six countries of birth. In 1981 these were: England; Italy; Scotland; Greece; Germany; and Poland. In 2001 New Zealand was in third place behind England and Italy, and ahead of Germany, Greece and Scotland. The New Zealand proportion increased by more than three times (from 0.6% to 2.6%).

Consistent with the increasing secularisation of Australian society there have been some shifts in the religious affiliations of 50–59 year olds over the past 20 years (see *Australian Social Trends 2004,* Religious affiliation and activity, pp. 181–184). In 1981, 8% reported having no religious affiliation. In 2001, this had increased to 13%. Christianity remained the main religious affiliation for people in this age group, although the proportion of Christians dropped from 90% in 1981 to 81% in 2001.

Life expectancy

Health outcomes for people aged 50–59 years have improved significantly over the last two decades. Advances in medical treatments and drugs, and a reduction in some risk factors have contributed to people living longer (see *Australian Social Trends 2006,* Mortality trends of people aged 50 years and over, pp. 74–77). Life expectancy for men at age 50 in 1980–1982 was 75.1 years,[3] and in 2002–2004 had increased to 80.6 years.[4] Women at age 50 in 1980–1982 could expect to live to 80.7 years of age,[3] and in 2002–2004 to 84.6 years.[4] Although women at age 50 continue to have a greater life expectancy than men of the same age, the improvement in life expectancy for men over this period has been slightly greater than that of women.

Consistent with the increases in life expectancy were considerable decreases in death rates for both men and women. The death rate for men aged 50–59 years in 2004 (448 deaths per 100,000 population) was less than half (43%) the rate in 1981 (1,033 per 100,000 population). For women aged 50–59 years, the 2004 death rate of 272 per 100,000 population was just over half (55%) the death rate in 1981 (496).

The death rates for each of the five selected underlying causes of death decreased over this period. In 1981, these selected causes accounted for 94% of all causes, and in 2004 for 89%. The death rate for diseases of the circulatory system dropped by about three-quarters for both men and women aged 50–59 years (from 483 to 118 deaths per 100,000 population for men, and from 160 to 41 deaths per 100,000 population for women). Neoplasms (cancer) replaced diseases of the circulatory system as the leading selected cause of death, although the death rate for neoplasms also dropped, by just over one-third for men (from 306 to 195 deaths per 100,000) and by just over one-quarter for women (from 215 to 159 deaths per 100,000 population).

An ageing population

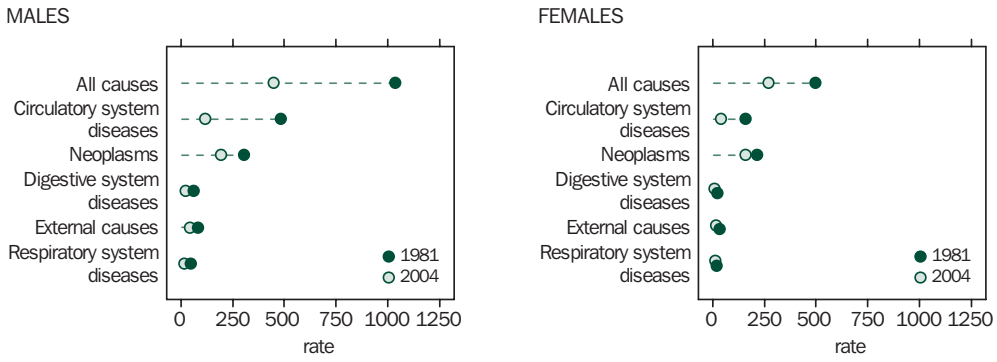
People in their 50s in 1981 were born between 1921–22 and 1930–31, before and during the Great Depression. People in their 50s in 2001 were born between 1941–42 and 1950–51, during World War II and in the early baby boomer years.

The ageing of Australia's population is a key policy area for all levels of government. As the population ages over the coming decades, a higher proportion of the population will be in retirement, and growth of the working age population will slow. This is likely to result in slowing economic growth and further increases in public expenditure, particularly in the health sector.[2]

During recent years the Federal Government has released several strategic documents addressing the challenges associated with the ageing population. The *National Strategy for an Ageing Australia (*Department of Health and Aged Care, 2001) notes that a high priority across the life span will be good health and wellbeing. As the population ages there will be a change in patterns of disease and disability, with subsequent implications for health care. As well as those aged 65 years and over, mature age persons (those aged 45–64 years) are of interest, particularly in terms of health service availability and use. The ability, or otherwise, of people to fund their own health care will become increasingly important as the proportion of people of working age decreases.

One of the strategies identified by the *Intergenerational Report* (Department of Treasury, 2002) and *Economic Implications of an Ageing Australia* (Productivity Commission, 2005) is to encourage an increased participation of mature age people in the labour force.

Selected underlying causes of death: 50–59 years death rates(a) — 1981 and 2004(b)



(a) Deaths per 100,000 population.
(b) Causes of death are classified according to International Classification of Diseases (ICD) 9 for 1981 and ICD–10 for 2004. To overcome differences between these classifications adjustment factors have been applied to the 1981 rates.

Source: ABS Causes of Death Collection.

Family characteristics

The living arrangements and family characteristics of Australians have been changing over the last few decades (see *Australian Social Trends 2003,* Changing Families, pp. 35–39). The changes with particular impact for the 50–59 year population group are decreases in the proportion of those living as partners in couple families with children and the propensity for their older children to stay at home longer.

In 1981 a larger proportion of people aged 50–59 years lived in a couple family with children (43%) compared with people in this age group in 2001 (35%). Conversely there was an increase in the proportion of 50–59 year olds who had children aged 25 years and over living with them, from 9% to 14%.

Associated with the decrease in those living as partners in couple families with children was a two and a half times increase in the proportion of divorced 50–59 year olds – from 5% in 1981 to 13% in 2001. The proportion married decreased from 79% in 1981 to 72% in 2001.

Women in their 50s in 2001 had, on average, given birth to fewer children than their counterparts in 1981. Women aged 50–59 years in 2001 averaged 2.4 babies each, compared with 2.9 babies for women aged 50–59 years in 1981.

Most informal care of older people or people with disabilities is provided by family (see *Australian Social Trends 2005,* Carers, pp. 39–43). In 2003, 21% of people aged 50–59 years were carers.[5] Almost one-quarter of those providing care (5% of all 50–59 year olds) were the primary carer of a person limited in daily activities such as walking, dressing or communicating. Most often the primary carer was caring for a family member in the same household.

Housing

There was a ten percentage point reduction in the proportion of people aged 50–59 living in owner without mortgage households from 1982 (56%) to 2003–04 (46%). This change

Persons aged 50–59 years: selected living arrangements(a) — 1981 and 2001

	1981	*2001*
	%	%
Partner in a couple family without children	33.1	35.7
Partner in a couple family with children of any age	43.0	35.1
With at least one child under 15 years	14.5	8.2
With children 15 years and over only	28.5	26.9
Lone parents	5.6	5.3
With at least one child under 15 years	1.6	0.9
With children 15 years and over only	4.0	4.4
Lone person	9.8	11.1

(a) Includes private dwellings only. The scope for private dwellings in 2001 was broader than in 1981.

Source: ABS 1981 and 2001 Census of Population and Housing.

corresponded with an increase in the proportion of 50–59 year olds that were living in owner with a mortgage households, from 28% in 1982 to 38% in 2003–04.

The average house size (in terms of number of bedrooms) occupied by 50–59 year olds increased from an average of 2.9 bedrooms in 1981 to 3.2 in 2001. Over the same period the average number of people living in these dwellings decreased from 3.0 to 2.7.

Education and training

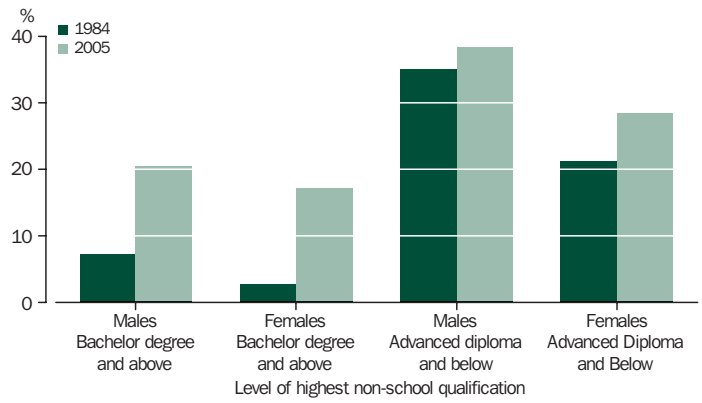
Over the last few decades the Australian population has become more qualified (see *Australian Social Trends 1999,* Educational profile of Australians, pp. 83–86). The proportion of 50–59 year olds with a non-school qualification increased from 33% in 1984 to 52% in 2005.

A narrowing of the gap between men's and women's educational achievement has also occurred (see *Australian Social Trends 1994,* Gender differences in higher education, pp. 90–93). From 1984 to 2005 the proportion of 50–59 year old women with a bachelor degree or above as their highest non-school qualification increased by more than five and a half times (from 3% to 17%). The proportion of men with this qualification increased by almost three times (from 7% to 20%).

Working life

As people are living longer, there may be a need for them to work longer in order to provide adequately for a comfortable retirement. Employers may therefore need to become more flexible and open to hiring and retaining older workers.[2] The proportion of mature age people in the labour force has increased over the past two decades (see *Australian Social Trends 2004,* Mature age workers pp. 114–117).

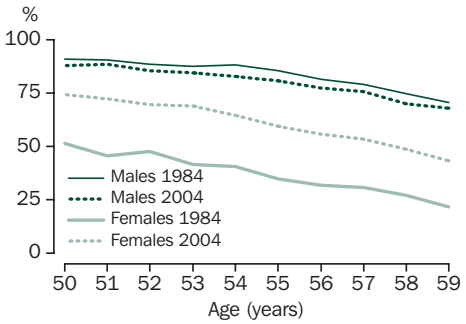
Males and females aged 50–59 years: level of highest non-school qualification(a) — 1984 and 2005



(a) Between 1984 and 2005 there were several changes to the Education Classification.

Source: ABS Labour Force Survey, February 1984 and ABS 2005 Survey of Education and Work.

Males and females aged 50–59 years: labour force participation rate(a) — 1984 and 2004



(a) Annual averages. The months of January, September and December are not included for 1984.

Source: ABS Labour Force Survey.

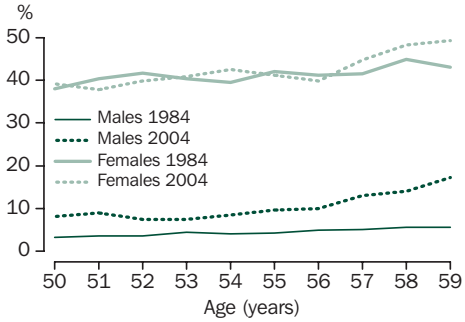
Participation in the labour force for people aged 50–59 years increased from 61% in 1984 to 71% in 2004. This was the result of women's participation increasing from 37% in 1984 to 62% in 2004. Men's participation decreased slightly from 83% to 80%. The 50s age groups are a time of transition to retirement for many people, and the participation rates for men and women decreased steadily between the ages 50 and 59 years in both 1984 and 2004.

In 1984, the unemployment rate for 50–59 year olds was 5% and in 2004 the figure was at 3%. Although this represents a decrease between the two points in time, unemployment levels have fluctuated with the economic cycle over the decades. The decrease in the unemployment rate was greatest for men, from 6% in 1984 to 4% in 2004. The unemployment rate for women decreased from 4% in 1984 to 3% in 2004.

The proportion of 50–59 year old unemployed men who were long-term unemployed (for a period of 52 weeks or more since last full-time job) decreased from 49% in 1984 to 42% in 2004.

In 1984, the proportion of 50–59 year olds in the labour force that were employed part-time was 15%. By 2004 the proportion had risen to 24%. This was driven in part by the increase in men working part-time – from 4% of those in the labour force in 1984 to 10% in 2004. For women in the labour force, the proportion working part-time was similar in each period (41% and 42% respectively).

Males and females aged 50–59 years in the labour force: part-time employed(a) — 1984 and 2004



(a) Annual averages. The months of January, September and December are not included for 1984.

Source: ABS Labour Force Survey.

The prevalence of people in their 50s working part-time increased with age and was particularly evident in 2004. The proportion of men in the labour force employed part-time more than doubled from 8% for 50 year olds to 17% for 59 year olds. For women in 2004, part-time employment increased from 39% at age 50 years to 49% at age 59 years.

There was a reduction in the proportion of 50–59 year olds in the labour force that were employed full-time from 1984 (80%) to 2004 (73%). This was partly due to a decrease in the proportion of men employed full-time, from 90% (1984) to 86% (2004). For women the proportion was similar in each period (56% and 55%).

The main industry of employment for 50–59 year old employed men in both 1984 and 2004 was Manufacturing. The proportion of men employed in this industry decreased from 21% in 1984 to 15% in 2004. Health and Community Services remained the main industry of employment for employed women. The proportion of women employed in this industry rose from 18% to 23% between 1984 and 2004 .

Employed males and females aged 50–59 in selected industries — 1984 and 2004

	1984(a)	2004(b)
	%	%
Males		
Manufacturing	21.1	15.2
Construction	8.2	11.6
Property & Business Services	5.0	11.5
Retail Trade	8.0	8.9
Transport & Storage	8.1	7.7
Females		
Health & Community Services	17.9	23.0
Education	13.9	16.0
Retail Trade	15.2	11.5
Property & Business Services	6.8	10.5
Manufacturing	12.2	7.1

(a) Data are for November.
(b) Annual average.

Source: ABS Labour Force Survey.

Income data

Income analysis in this article uses the ABS 2003–04 Survey of Income and Housing, which ran for the financial year, and the ABS 1982 Income and Housing Survey, which ran from September to December. 1982 data may therefore be affected by seasonality.

All 1982 dollar figures have been CPI adjusted to 2003–04 dollars.

Equivalised gross household income is household income adjusted on the basis of the household's size and composition. The equivalised amount is adjusted to be comparable to the income of a lone person. Household income is used in recognition of the sharing of income between partners in a couple relationship, parents and dependent children, and to a lesser degree sharing between other members of the household. Even where there is no transfer of income, members of a household are likely to benefit from the economies of scale that arise from the sharing of dwellings. For more information see *Measures of Australia's Progress 2006* (ABS cat. no. 1370.0).

Personal incomes

Included in this analysis are the personal incomes of women and men aged 50–59 years.

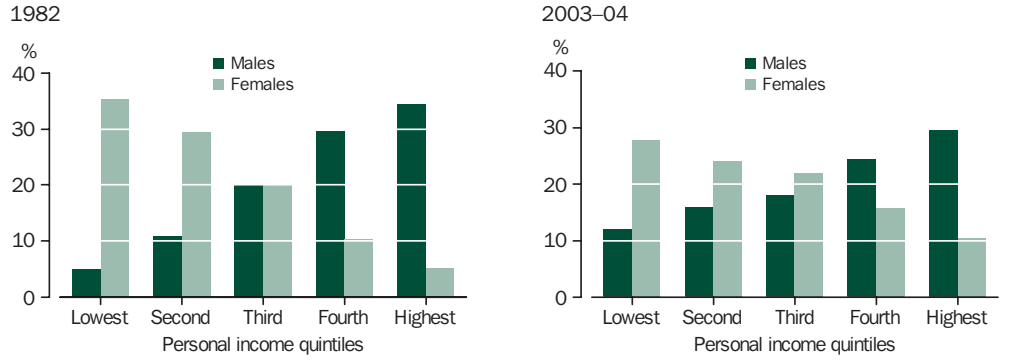
Personal income is current gross weekly income, including income from employment, self-employment, rents and investments, child support, private transfers and government pensions and allowances. Negative incomes, which were only collected in 2003–04, are set to zero.

Income quintiles are formed by ranking all persons in ascending order by level of income, and then dividing them into five groups, each containing 20% of people in the population.

Income

Changes in the workforce over the past two decades, particularly the increase in women's participation, have also contributed to changes in personal income for men and women aged 50–59 years.

Proportion of males and females aged 50–59 in personal income quintiles(a) — 1982 and 2003–04



(a) Upper quintile points for 1982 were: Lowest $92; Second $259; Third $601; Fourth $834. Upper quintile points for 2003–04 were: Lowest $189; Second $366; Third $650; Fourth $1000.

Source: ABS 1982 Income and Housing Survey and ABS 2003–04 Survey of Income and Housing.

These changes have narrowed the gap between 50–59 year old women's and men's personal incomes. One commonly used measure of the distribution of income between the sexes is the proportion of women and men in each personal income quintile. In both 1982 and 2003–04, women were more heavily concentrated in the two lowest quintiles, while men were more heavily concentrated in the two highest quintiles. However, the male-female differences were considerably less in 2003–04 than in 1982. In 1982 nearly two-thirds (65%) of women were in the lowest two personal income quintiles in the population aged 50–59 years, compared with around half (52%) in 2003–04.

The trends in labour force participation for men and women aged 50–59 years are also reflected in changes in the main sources of income for persons aged 50–59 years. The proportion of women whose principal source of income was employment earnings increased from just over a third in 1982 (35%) to over half in 2003–04 (53%). The proportion of men whose principal source of income was employment earnings decreased from 80% in 1982 to 70% in 2003–04.

The proportion of men who had a government allowance as their principal source of income increased from 10% in 1982 to 17% in 2003–04. The majority (64%) of the 50–59 year old men who had a government allowance as their main source of income in 2003–04 were in receipt of the Disability Support Pension. The proportion of women who had a government allowance as their main source of income decreased slightly from 1982 (28%) to 2003–04 (26%).

A household's capacity to purchase goods and services is best measured by analysis of changes in real median equivalised disposable household income over time. However, disposable income is not available for 1982, only gross income. Ignoring the effects of changes in taxation rates, household incomes for 50–59 year olds, as for Australians overall, have risen considerably over recent decades. The real median equivalised gross household income per week for 50–59 year olds increased by almost $90 a week, from $574 in 1982 to $661 in 2003–04.

People in their 50s are entering their pre-retirement years, a time of planning for retirement and consolidation of wealth (see *Australian Social Trends 2006,* Distribution of household wealth, pp. 145–150). As the population ages, increasing importance is being placed on the provision of retirement income through superannuation. The proportion of 50–59 year olds not in the labour force with superannuation as their principal source of household income doubled over the past twenty years from 4% in 1982 to 8% in 2003–04.

Endnotes

1 Australian Bureau of Statistics, *Population Projections, Australia, 2004* (Series A and C) cat. no. 3222.0, ABS, Canberra.

2 Organisation for Economic Cooperation and Development 2005, *Ageing and Employment Policies Australia*, OECD Publishing, Paris.

3 Office of the Australian Government Actuary 1985, *Australian Life Tables 1980–1982*, Australian Government Publishing Service, Canberra.

4 Australian Bureau of Statistics 2005, *Deaths, Australia, 2004,* cat. no. 3302.0, ABS, Canberra.

5 Australian Bureau of Statistics, 2003 Survey of Disability, Ageing and Carers.

Young Aboriginal and Torres Strait Islander peoples

POPULATION CHARACTERISTICS

In 2002, nearly half (47%) of all Indigenous young people aged 15–24 years were participating in full-time education, full-time work or in a combination of part-time education and part-time work.

While Australia as a whole faces an ageing population, the Aboriginal and Torres Strait Islander population is younger and growing at a faster rate. Young people aged between 15–24 years comprised 18% of the Indigenous population in 2001, compared with 14% of the non-Indigenous population.[1]

Successful transition in youth from school to work and/or further study enables young people to gain the necessary skills and experience to participate in long-term employment.[2] Both education and employment outcomes for Indigenous youth have improved over the past 10 years, with more Indigenous young people continuing their education beyond Year 10, and higher proportions participating in the labour force. However, young Indigenous Australians remain disadvantaged across a range of areas of social concern when compared with non-Indigenous youth.

The young Indigenous population

At 30 June 2001, there were an estimated 84,000 young Indigenous people living in Australia. This population is projected to grow to between 102,000 and 110,000 by mid 2006.[1]

In 2001, almost one-third (32%) of young Indigenous people were living in major cities, with 42% in regional areas and 26% in remote areas. In contrast, over two-thirds (70%) of non-Indigenous young people lived in major cities, while only 2% lived in remote areas. Consequently, the proportion of young Australians who were Indigenous varied from 1% in major cities to 50% in very remote areas. This geographic distribution reflects that of the total Indigenous population.

National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

This article uses data from the ABS 2002 NATSISS together with data from other collections, such as the ABS 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), to examine the socioeconomic circumstances and the health and welfare issues faced by Aboriginal and Torres Strait Islander youth. In most cases, the population of interest is Indigenous young people aged 15–24 years. However, in some places the population has been restricted to 18–24 years for relevance, while in others the 18–24 years age-group is used in order to make comparisons with the non-Indigenous population using data from the ABS 2002 General Social Survey (GSS), or the ABS 2004–05 National Health Survey.

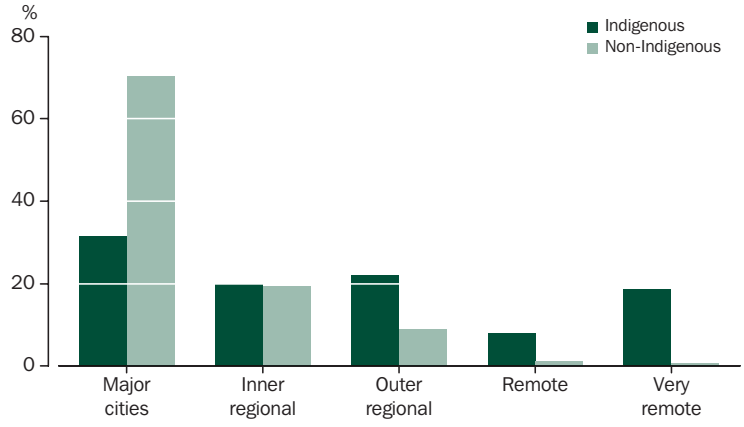
Unless otherwise stated, *young people* in this article refers to those aged 15–24 years.

Remoteness areas

The ABS remoteness classification is based on road distance to different sized population centres, where the population is considered to govern the range and type of services available.

In this article, remote areas include the Remoteness categories Remote Australia and Very Remote Australia, while non-remote areas include Major Cities of Australia, Inner Regional Australia and Outer Regional Australia. For further information see *Statistical Geography: Volume 1 - Australian Standard Geographical Classification (ASCG) 2001* (ABS cat. no. 1216.0).

Australia's young people(a): Population by remoteness area — 2001



(a) Persons aged 15–24 years.

Source: ABS 2001 Census of Population and Housing.

Education

A major focus of Indigenous education initiatives has been to encourage young people to continue their education beyond Year 10 in order to increase their future employment prospects and opportunities for post-school education.[3] The ABS National Schools Statistics Collection shows that Indigenous retention beyond Year 10 steadily increased between 1996 and 2004, with the Year 11 rate rising from 47% to 61% and the Year 12 rate rising from 29% to 40%. The gaps in retention rates between Indigenous and non-Indigenous students are also slowly

Young people(a)(b): Highest year of school completed

	Indigenous				Non-Indigenous
	1994	2002			2002
	Total	Non-remote	Remote	Total	Total
	%	%	%	%	%
Year 12	(e)23.3	31.6	19.9	(e)28.3	71.1
Year 10/11	(e)43.7	45.3	45.3	(e)45.3	24.2
Year 9 or below(c)	(e)32.5	23.2	34.9	(e)26.5	4.7
Total(d)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000
Persons aged 18–24 years(b)	**46.8**	**36.3**	**14.3**	**50.6**	**1 811.9**

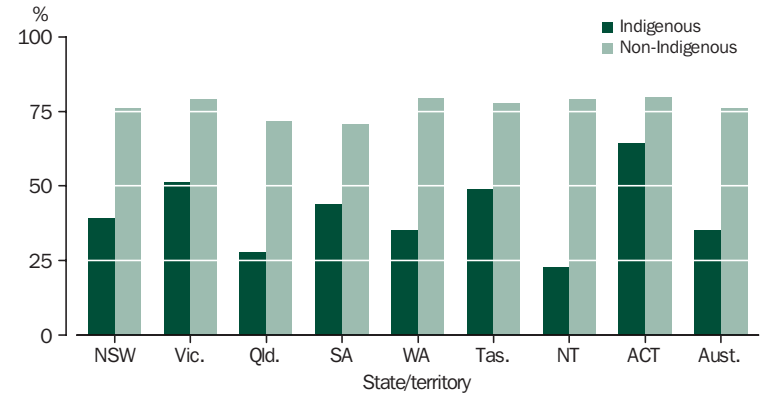
(a) Persons aged 18–24 years.
(b) Excludes persons still attending secondary school.
(c) Includes persons who never attended school.
(d) 1994 total includes persons who did not state their highest year of school completed.
(e) Difference between 1994 and 2002 data is not statistically significant.

Source: ABS 1994 National Aboriginal and Torres Strait Islander Survey, 2002 National Aboriginal and Torres Strait Islander Social Survey and 2002 General Social Survey.

closing. Nevertheless, Indigenous retention rates remain substantially lower than those for non-Indigenous students.

Successful completion of Year 12 has long been considered a key component to improving the economic and social status of Indigenous people.[4] The 2002 NATSISS showed that 28% of Indigenous young people aged 18–24 years reported having completed Year 12. A further 45% had completed Year 10 or 11. Indigenous young people who had completed Year 12 reported higher levels of mainstream employment, lower levels of financial stress and were more likely to be studying or working full-time than those who had not completed school to this level.

Young people fully engaged(a), states and territories — 2002



(a) Persons aged 18–24 years who were in either full-time work, full-time study or in both part-time work and part-time study.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey and ABS 2002 General Social Survey.

...transition from school to work

The transition from school to further study or full-time employment can have long-term implications for Australia's young people. Those who are not fully engaged in either education and/or work (i.e. not in full-time work, full-time study or in a combination of both part-time work and part-time study) during this period may be at risk of becoming long-term unemployed, underemployed, or only marginally attached to the labour force (see *Australian Social Trends 2005*, Young people at risk in the transition from education to work, pp. 93–98).

Among those aged 18–24 years, Indigenous people were half as likely as non-Indigenous people to be fully engaged in education and/or work in 2002 (35% compared with 76%). Across the states and territories, there was relatively wide variation in the proportion of Indigenous young people fully engaged compared with non-Indigenous young people. The ACT had the highest proportion of Indigenous young people who were fully participating in education or work, followed by Victoria and Tasmania.

In 2002, 57% of Indigenous teenagers (aged 15–19 years) and 34% of Indigenous young adults (aged 20–24 years) were fully engaged in education and/or work. In both age groups, young males were more likely than young females to be fully engaged.

Young people(a): Labour force status

	Indigenous		Non-Indigenous
	1994	2002	2002
	%	%	%
Employed(b)	38.2	47.7	72.0
Full-time	(c)22.8	(c)20.9	41.2
Part-time	14.9	26.6	30.7
Unemployed	(c)25.3	(c)20.3	10.3
Not in the labour force	(c)36.4	(c)32.0	17.7
Total	**100.0**	**100.0**	**100.0**
	'000	'000	'000
Persons aged 18–24 years	**47.3**	**51.9**	**1 869.2**

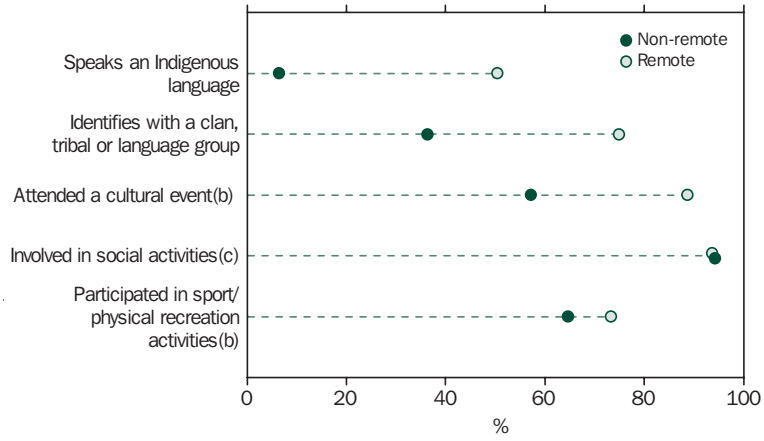
(a) Persons aged 18–24 years.
(b) Includes persons whose full-time/part-time status was not stated. Includes persons who were employed in CDEP.
(c) Difference between 1994 and 2002 data is not statistically significant.

Source: ABS 1994 National Aboriginal and Torres Strait Islander Survey, 2002 National Aboriginal and Torres Strait Islander Social Survey and 2002 General Social Survey.

Work

Between 1994 and 2002, the proportion of Indigenous young people aged 18–24 years who were employed rose from 38% to 48%. In 2002, 30% of Indigenous young people were in mainstream employment and an additional 18% were participants in the Community Development Employment Projects (CDEP) scheme. Mainstream employment was more common among Indigenous young people in non-remote areas, whereas most CDEP participation was located in remote regions.

Young people(a): Social and cultural participation — 2002



(a) Indigenous persons aged 15–24 years.
(b) In the last 12 months.
(c) In the last 3 months.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey

Labour force concepts

Employed persons are those who, during the week prior to interview, worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm; or worked without pay in a family business; or had a job but were not at work.

Persons employed full-time are those who usually work 35 hours or more per week.

Persons employed part-time are those who usually work at least one hour, but less than 35 hours, per week.

Persons fully engaged are those who were in either full-time work, full-time study or in both part-time work and part-time study.

There was a strong relationship between educational attainment and employment for Indigenous young people in 2002, with those in full-time employment being more than twice as likely as those who were unemployed to have completed Year 12 (49% compared with 21%).

Indigenous young people continue to experience lower levels of employment and higher levels of unemployment than non-Indigenous young people. In 2002, Indigenous young people aged 18–24 years were only about two-thirds as likely as non-Indigenous young people to be employed (48% Indigenous compared with 72% non-Indigenous), and twice as likely to be unemployed (20% and 10% respectively).

Social participation

Social activities, including involvement in sport and exercise, can be more than just a source of enjoyment for young people. Taking part in social activities may promote positive social behaviour as well as build stronger communities and enhance cultural identity (See *Australian Social Trends 2005*, Social and sporting activities of Aboriginal and Torres Strait Islander peoples, pp. 52–57).

In 2002, the vast majority of Indigenous young people aged 15–24 years (94%) had been involved in social activities in the three months prior to interview, and two-thirds (67%) had participated in sport or physical recreation activities in the 12 months prior to interview.

In remote areas, attending a sporting event as a spectator and involvement in sport or physical recreational activities were the most commonly reported social or sporting activities undertaken in the last 3 months. In non-remote areas, the most common social activities for Indigenous young people were going out to a cafe, restaurant or bar, or to the movies, a theatre or a concert.

Culture and language

A young person's identification with a particular culture is a major protective factor in promoting their overall wellbeing. For example, the findings from the Western Australian Aboriginal Child Health Survey suggest that growing up in areas of extreme isolation, where adherence to traditional culture and ways of life is strongest, may be protective against emotional and behavioural difficulties in Aboriginal children[5]. The sense of belonging and support that young people gain from their culture helps build resilience, self-esteem and a strong personal identity.[6]

In 2002, 62% of Indigenous young people recognised their homelands/traditional country; 47% reported that they identified with a clan, tribal or language group; and 66% had attended a cultural event in the last 12 months. For each of these measures of cultural attachment, higher rates were reported in remote areas.

Similarly, Indigenous languages were more commonly used in remote areas. Overall, one-half (50%) of Indigenous young people in remote areas spoke an Indigenous language, compared with 6% in non-remote areas. The proportions for whom an Indigenous language was the main language spoken at home was 37% in remote and 2% in non-remote regions.

Health

Young people generally enjoy good physical health. The 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) showed that 59% of young Indigenous people aged 15–24 years reported being in excellent or very good health, 32% were in good health and only 9% reported being in fair or poor health.

However, youth is a time of heightened risk behaviour, and young people are at a greater risk of illness and injury from motor vehicle accidents, violence, substance use and unsafe sexual behaviour.[7]

...smoking

In 2004–05, half (50%) of all Indigenous young people aged 18–24 years were current daily (or regular) smokers, similar to the rate reported in 2001 (53%). Indigenous young people were nearly twice as likely as non-Indigenous young people to smoke on a daily basis (50% compared with 26%). Indigenous young people smoked at the same rate as the adult Indigenous population. Young Indigenous smokers reported higher rates of other substance use in 2004–05. The NATSIHS showed that in non-remote areas, young regular smokers were twice as likely as non-smokers to have recently used illicit substances (42% compared with 20%).

Alcohol consumption

The 2002 NATSISS included a measure of alcohol consumption risk level that was designed to measure short-term risk, or binge drinking. This was based on the *largest* quantity of alcohol consumed in a single day during the fortnight prior to interview. Alcohol consumption risk levels were based on the 1992 National Health and Medical Research Council's (NHMRC) guidelines for short-term patterns of drinking.

The 2004–05 NATSIHS collected information on usual patterns of alcohol consumption. Risk levels were derived from the average daily consumption of alcohol in the seven days prior to interview, and were based on the 2001 NHMRC guidelines for long-term patterns of drinking.

Illicit substance use

The term 'illicit substances' refers to a variety of substances that are either illegal to possess (e.g. heroin) or legally available, but used inappropriately (e.g. misuse of prescription medication, inhalation of petrol).[8]

The 2004–05 NATSIHS provides the most recent information on illicit substance use within the Indigenous population. Data is only available for Indigenous people living in non-remote areas.

...binge drinking

The 2002 NATSISS showed that around one-third (35%) of Indigenous young people aged 15–24 years reported consuming risky or high risk amounts of alcohol on a single day during the fortnight prior to interview. Young males were more likely than young females to binge drink at risky/high risk levels, and risky/high risk drinking was more common among youth living in non-remote areas.

While there is no comparable data on binge drinking available for non-Indigenous young people for 2002, the 2004–05 NATISHS contains information on long-term risk from average daily consumption of alcohol for both Indigenous and non-Indigenous people. The results show that while Indigenous young people aged 18–24 years were less likely than their non-Indigenous peers to drink alcohol, the rates of risky/high risk drinking from average daily consumption were similar for both Indigenous and non-Indigenous young people (16% compared with 14%).

Indigenous young people(a): Alcohol consumption(b)—2002

	Remoteness area		Sex		
	Non-remote	Remote	Males	Females	Total
	%	%	%	%	%
Consumed alcohol(c)	46.5	30.3	48.3	36.1	42.1
Low risk	8.1	*3.4	6.4	7.3	6.8
Risky/high risk	37.5	26.4	41.1	28.1	34.5
Did not consume alcohol	53.5	69.7	51.7	63.9	57.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Persons aged 15–24 years.
(b) Alcohol consumption in the last 2 weeks.
(c) Includes persons whose risk level was not stated.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

...illicit substance use

In 2004–05, over one-third (36%) of Indigenous young people aged 15–24 years living in non-remote areas reported having recently used an illicit substance (i.e. in the 12 months prior to interview). Half (50%) had reported having tried at least one illicit substance in their lifetime, with half (50%) having never tried illicit substances.

Marijuana was the most commonly reported illicit substance used by this group in 2004–05. Nearly half (46%) reported having tried marijuana and 31% had used it in the last 12 months. Amphetamines/speed was the next most frequently reported substance ever used (15%) or recently used (9%) by Indigenous young people living in non-remote areas.

Law and justice

Crime and its consequences can have serious and long-term implications for both offenders and victims. Young offenders who come in contact with the criminal justice system typically experience lower levels of educational attainment and are at greater risk of long-term unemployment than other young people. Similarly, young victims of violent crime can suffer both physically and emotionally, and are at greater risk of suicide (See *Australian Social Trends 2005*, Aboriginal and Torres Strait Islander peoples: Contact with the law, pp. 187–191).

...victimisation

In 2002, one-third (33%) of young Indigenous people aged 18–24 years reported being a victim of physical or threatened violence in the last 12 months. This was twice the rate reported for non-Indigenous young people (15%).

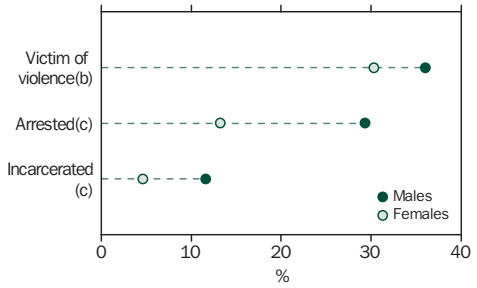
The disparity was greatest among young females, with Indigenous females being three times as likely as non-Indigenous females to report having been victimised (31% compared with 10%).

...arrest and incarceration

In 2002, one in five (21%) young Indigenous people aged 15–24 years reported that they had been arrested by police in the last five years and 8% reported having been incarcerated in the last five years. Rates of arrest and incarceration for young males were more than twice as high as those for young females.

Indigenous young people continue to be over represented in the Australian prison system. In 2005, Indigenous young people aged 18–24 years were 13 times more likely than non-Indigenous young people to be in prison.[9]

Law and justice(a) — 2002



(a) Indigenous persons aged 15–24 years.
(b) In the last 12 months.
(c) In the last 5 years.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey.

Indigenous youth(a): proportion with selected characteristics by whether arrested or incarcerated — 2002

	Whether arrested(b)		Whether incarcerated(b)		
	Arrested	Not arrested	Incarcerated	Not incarcerated	Total(c)
Selected characteristics	%	%	%	%	%
Unemployed	37.8	17.9	*34.0	21.1	22.1
Highest year of school completed Year 9 or below(d)	51.9	23.0	67.2	26.4	30.6
Fair/poor self-assessed health	*11.5	7.1	*14.9	7.5	8.1
Has a disability or long-term health condition	31.6	20.3	30.4	22.1	22.7
Has used substances in last 12 months(e)	57.1	22.3	65.5	26.8	30.2
Relatives removed from natural family	46.2	27.8	54.9	29.7	31.7
First formal charge at 15 years or below	36.6	5.0	49.0	8.4	11.7
Arrested more than once in last 5 years	62.0	..	72.2	7.9	13.1
Victim of physical or threatened violence(f)	54.5	27.4	50.0	31.7	33.1
	'000	'000	'000	'000	'000
Indigenous persons aged 15–24 years	**17.5**	**65.2**	**6.7**	**76.0**	**82.7**

(a) Aged 15–24 years.
(b) In the last 5 years.
(c) Total includes persons who did not state whether they were arrested or incarcerated in the last 5 years.
(d) Excludes persons still attending secondary school. Includes persons who never attended school.
(e) For persons living in non-remote areas only.
(f) In the last 12 months.

Source: ABS 2002 National Aboriginal and Torres Strait Islander Social Survey

In 2002, contact with the criminal justice system was associated with poorer health and socioeconomic outcomes for young Indigenous Australians. Those aged 15–24 years who had been arrested or incarcerated in the last five years were more likely than those who had not been arrested and/or incarcerated to be: unemployed, to have left school before Year 10, to have relatives who were removed from their natural families and to have been a victim of physical or threatened violence.

Endnotes

1 Australian Bureau of Statistics 2004, *Experimental Population Estimates and Projections, Aboriginal and Torres Strait Islander Australians,* cat. no. 3238.0, ABS, Canberra.

2 Dusseldorp Skills Forum, 2005, How Young People are Faring, Key Indicators 2005, DSF, Sydney.

3 Australian Bureau of Statistics and the Australian Institute of Health and Welfare 2005, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, cat. no 4704.0, ABS, Canberra.

4 Technology 2000, *National Indigenous English Literacy and Numeracy Strategy,* DEST, viewed 17 February 2005. <http://www.dest.gov.au/schools/indigenous/publications/ nielnsreport. htm>.

5 Steering Committee for the Review of Government Service Provision 2005, *Overcoming Indigenous Disadvantage: Key Indicators 2005,* Productivity Commission, Canberra.

6 Zubrick, SR, Silburn, SR, Lawrence, DM, Mitrou, FG, Dalby, RB, Blair, EM, Griffin, J, Milroy, H, de Maio, JA, Cox, A, Li, J 2005, *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young people*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

7 Kang, M & Chown, P 2004, *Adolescent Health: Enhancing the skills of General Practitioners in caring for young people from culturally diverse backgrounds,* TMHC and CAAH, viewed 5th January 2006, <http://www.caah.chw.edu.au/resources/gp-section1.pdf>.

8 Australian Institute of Health and Welfare 2004, *Australia's Health 2004*, (AIHW Cat. No. AUS 44), AIHW, Canberra.

9 Australian Institute of Health and Welfare 2004, *Australia's Health 2004*, (AIHW Cat. No. Aus 44), AIHW, Canberra.

10 Australian Bureau of Statistics 2005, *Prisoners in Australia* (ABS cat. no. 4517.0), ABS, Canberra.

Australian expatriates in OECD countries

POPULATION DISTRIBUTION

In 1999–2003 there were around three Australian-born people aged 15 years and over living in another OECD country for every 100 Australian-born people in that age group living in Australia.

International migration has increased markedly as a result of the rise of the global labour market, more affordable international transport and sophisticated communication technologies. The movement of Australians overseas is an important issue not only because of its impact on the size of the Australian resident population, but also through its impact on the labour force and the economy.

Highly skilled workers are more likely to be mobile than people without relevant skills. In Australia, the loss of skilled workers (the so-called 'brain drain') has been offset by a gain of migrants through the skilled migration program.[1] While overall Australia could be considered a net beneficiary of the transnational movement of skilled labour, the loss of Australians to overseas work has been considered a significant issue and the subject of a 2005 Senate inquiry.[2] In some Organisation for Economic Cooperation and Development (OECD) countries, the retention and repatriation of qualified persons are challenges which governments have started to respond to.[3]

This article examines the Australian expatriate population, with a particular focus on those living in the member countries of the OECD.

Long-term and permanent departures from Australia

The number of long-term and permanent departures of Australian residents has increased considerably over the 20 years to 2005. In the 12 months to December 2005, there were 158,000 departures by Australian residents for an intended period of 12 months or more. This was more than twice the number of Australian residents who departed in 1985 (69,600). In 2005, almost two-thirds (64%) of all departures (or 101,000) were to OECD countries.

The age profile of Australian residents departing for a period of 12 months or more in 2005 differed from that of the overall Australian population. Most noticeable was the peak in the 25–29 years and the 30–34

Australian departures to overseas destinations

Overseas Arrivals and Departures (OAD) data are compiled from passenger cards that are collected from people arriving in or departing from Australia. Passenger cards collect information on the stated intentions of travellers, including country of destination/future residence and the length of intended stay.

Permanent departures are departures of Australian residents (including former settlers) who intend to live in another country permanently.

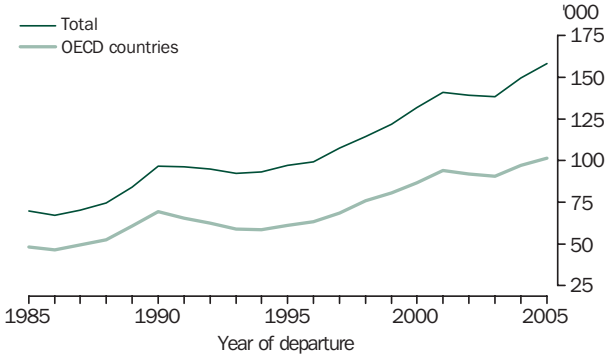
Long-term departures are departures of Australian residents (including former settlers) who intend to stay abroad for a period of 12 months or more (but not permanently).

As movements by passengers are categorised according to intentions, long-term departures in migration data do not account for the significant proportion of people who return to Australia before being away for a period of at least 12 months. For example, in the year to June 2004, half (50%) of all long-term departures from Australia returned to live in Australia within one year of their original departure.

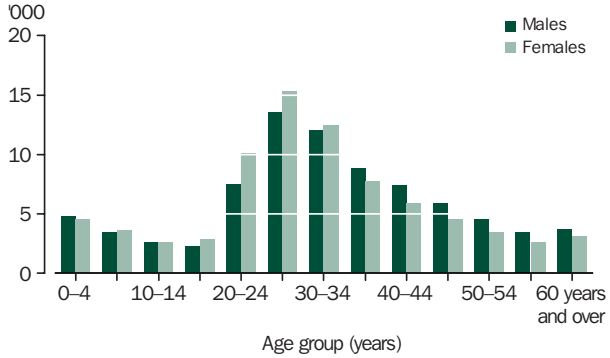
Source: Overseas Arrivals and Departures, Australia (ABS cat no. 3401.0); *Australian Demographic Statistics* (ABS cat no. 3101.0).

Long-term and permanent departures of Australian residents:

TO OECD AND TOTAL COUNTRIES — 1985–2005



AGE OF PEOPLE DEPARTING — 2005



Source: ABS, Overseas Arrivals and Departures.

years age-groups. One-third (34%) of all departures were of people aged in these groups yet people aged 25–34 years made up only 14% of the Australian resident population.

Overall, the numbers of males and females departing was fairly even, with 102 Australian resident males departing for every 100 females in 2005. However, the male-female pattern differed markedly by age group. At the younger adult ages (from 15–34 years) female departures outnumbered those of males with just 87 males for every 100 females (largely accounted for by the higher proportions of females in this age group going to the United Kingdom, Ireland and New Zealand). Among departures of people aged 35 years and over, there were 124 male departures for every 100 female departures.

Expatriate Australians living in OECD countries

According to the censuses and surveys of the 29 OECD countries in the period 1999–2003, there were an estimated 346,000 Australian-born people living in other OECD countries. Of these, 84% (290,000) were aged 15 years or over. This was equivalent to almost three Australian-born people aged 15 years and over living in OECD countries for every 100 Australian-born people of the same age group

Australian expatriates(a) aged 15 years and over in selected OECD countries — 1999–2003

Country of residence	*Australian expatriates* '000	*Proportion of total expatriates* %	*Proportion with high level of education qualification (b)(c)* %
United Kingdom	96.9	33.4	53.5
United States of America	65.2	22.5	49.3
New Zealand	42.0	14.5	30.7
Greece	19.4	6.7	23.8
Canada	17.8	6.1	57.1
Italy	17.2	5.9	12.6
Japan	5.6	1.9	84.3
Ireland	4.4	1.5	55.9
Balance of OECD	21.8	7.5	39.6
Total in OECD	**290.2**	**100.0**	**44.4**

(a) Australian-born people counted in censuses/surveys within OECD countries.
(b) High level includes ISCED5A: Academic tertiary, ISCED5B: Vocational tertiary, ISCED 6: Advanced research.
(c) Around 5% of the Australian expatriate population in the OECD had no information on educational attainment, these have been excluded from the total in calculating the proportion.

Source: OECD database on immigrants and expatriates, last viewed 3 July 2006, <http://www.oecd.org/document/51/0,2340,en_2649_201185_34063091_1_1_1_1,00.html>.

Expatriates in the OECD

Expatriates in this article refer to persons living in an OECD country other than their country of birth, regardless of the current or eventual duration of their stay abroad.[3]

The Organisation for Economic Cooperation and Development (OECD) has compiled data on the foreign-born populations living within 29 OECD countries. These countries include: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, the Slovak Republic, Switzerland, Sweden, Turkey, the United Kingdom and the United States of America.

The data was sourced from the censuses and national surveys conducted by member countries in the 1999–2003 period. Australian expatriates therefore include Australian-born people who were counted as part of the population in the national censuses or surveys of these countries. Some people may have been counted in the national censuses of more than one OECD in the 1999–2003 period, but it is assumed the number would be very small.

As this article excludes expatriates in a range of other significant destinations for Australian expatriates (e.g. Singapore), it cannot be seen as wholly representative of Australian-born people living abroad. Furthermore, the number of expatriates enumerated in OECD member country censuses and surveys is likely to be an underestimate of the true number of such people. This is because some censuses may seek to exclude persons who were not citizens and/or permanent residents. Also, some expatriates may have avoided being counted if they perceived that the census was not relevant to them.

The *expatriate ratio* used in this article is the number of expatriates per 100 people living in the country of birth of the expatriate population with the same country of birth as the expatriates. For example, there were 290,000 Australian-born people aged 15 years and over living in other OECD countries and 10.3 million Australian-born people aged 15 years and over living in Australia which gives an expatriate ratio of: 290,000 / 10.3 million x 100 = 2.8 per 100 Australian-born in Australia.

High level education is as defined by the OECD using the International Standard Classification of Education (ISCED) to make education comparisons among countries. The ISCED levels that make up high level education are: ISCED5A: Academic tertiary, ISCED5B: Vocational tertiary, ISCED 6: Advanced research. In Australia, this grouping is equivalent to diploma/advanced diploma and above.

Source: OECD Database on immigrants and expatriates, <http://www.oecd.org/document/51/0,2340,en_2649_201185_34063091_1_1_1_1,00.html >

living in Australia (the expatriate ratio). More than two-thirds (70%) of Australia's expatriate population were living in the top three destinations. The United Kingdom had 33% (96,900 people), followed by the United States with 22% (65,200) and New Zealand with 14% (42,000). These were followed by Greece with 7%, and Canada and and Italy with 6% each.

The reasons Australians give for migrating overseas are commonly related to employment. According to a 2002 emigration survey[1], 43% of expatriates cited 'better employment opportunities', 36% 'professional development' and 32% gave 'higher income' as a reason for emigrating. On the other hand, 'lifestyle' and 'marriage/partnership' were reasons given by 23% and 22% of expatriates respectively, while 15% gave 'education/study' as a reason.

Expatriates(a) from selected OECD countries to other OECD countries — 1999–2003

Country	*Expatriates* '000	*Expatriate ratio(b)* Ratio	*Expatriates with a high level of education (c)(d)* %	*Migrant to Expatriate ratio with high education (c)(d)(e)* Ratio
Australia	290.2	2.8	44.4	7.0
Canada	1 074.2	5.8	40.3	1.9
Germany	3 113.8	6.1	29.2	0.3
France	1 130.3	2.7	33.7	0.9
United Kingdom	3 270.0	7.6	41.1	0.4
Greece	726.3	8.8	17.4	0.5
Ireland	791.7	29.3	27.5	0.5
Italy	2 375.7	5.1	13.1	0.4
Japan	580.6	0.5	49.8	0.2
Mexico	8 436.2	13.5	5.6	0.1
New Zealand	413.1	19.3	44.8	0.6
Turkey	2 029.3	4.4	6.8	0.7
United States	872.3	0.5	49.2	6.0
Total OECD	**32 205.7**	**4.0**	**21.9**	**1.0**

(a) Aged 15 years and over.
(b) The expatriate ratio is the number of expatriates per 100 people with the same country of birth living in that country of birth.
(c) High level includes ISCED5A: Academic tertiary, ISCED5B: Vocational tertiary, ISCED 6: Advanced research.
(d) Overall, 3% of OECD expatriates in the OECD had no information on educational attainment. These have been excluded from the total in calculating the proportion.
(e)The migrant to expatriate ratio for people with a high level of education for a particular country is: the ratio of the number of migrants from other OECD countries with a high level of education living in that country, to the number of that country's expatriates with a high level of education.

Source: OECD Database on immigrants and expatriates, last viewed 3 July 2006, <http://www.oecd.org/document/51/0,2340,en_2649_201185_34063091_1_1_1_1,00.html>.

Educational status of expatriates

Across all OECD countries, 44% of Australian expatriates aged 15 years and over had a high level of educational attainment. Among the top eight OECD countries of destination for Australian expatriates, there was great variability in the proportions of expatriates with a high level of education. Australian expatriates in Japan were on average the most highly educated of Australian expatriates with 84% having a high level of education. In contrast, only 13% of Australian expatriates in Italy had a high level of educational attainment. Just over half (54%) of Australian expatriates in the United Kingdom had a high level of education, while less than one-third (31%) of Australian expatriates in New Zealand did so.

Comparison with other OECD countries

...expatriate ratio

In comparison with most other OECD countries, Australia's expatriate ratio (2.8 Australian-born people aged 15 years or over per 100 Australian born people aged 15 years and over within Australia) was relatively low. Ireland had the highest ratio with 29 Irish-born people aged 15 years and over in other OECD countries for every 100 in Ireland. New Zealand had the second highest expatriate ratio with 19 per 100, while Portugal had 16 and Luxembourg and Mexico 14 each. The lowest OECD expatriate ratio was the United States of America with less than one person in other OECD countries per 100 USA-born within the USA.

The OECD country with the largest expatriate population aged 15 years and over was Mexico with 8.4 million expatriates (99% of whom were in the USA). The United Kingdom had the second largest diaspora (3.3 million) followed by Germany (3.1 million) and Italy (2.4 million).

...education

Australian expatriates were among the most highly educated among the OECD expatriate populations, with 44% of expatriates in other OECD countries having a high level of education. Japan had the highest proportion with 50%, followed by USA (49%) and New Zealand (45%).

The transnational movement of skilled people can provide net benefits to countries. One way of evaluating the net benefit from international migration of skilled people is to look at the ratio of highly educated migrants in a country

(i.e. expatriates from other countries) to the number of highly educated expatriates of that country who have left. However, this comparison does not account for whether the education was acquired in the host country.

Within the OECD countries in the 1999–2003 period, Australia had seven highly educated migrants for every one highly educated Australian who was living elsewhere in the OECD. This ratio was the highest in the OECD and while it reflects Australia's history (and official policy) of attracting skilled migrants, it should also be noted that in 2005 nearly half (47%) of overseas born Australian residents had obtained their qualifications in Australia.

The USA had the second highest ratio with six highly educated immigrants for every highly educated USA-born person living elswhere. Most OECD countries had a ratio much closer to one, and many were less than one. For example, the United Kingdom and Italy each had 0.4 while New Zealand had 0.6 migrants with a high level of education for every one expatriate with a high level of education.

Endnotes

1 Hugo, G, Rudd, D and Harris, K, 2003, *Australia's Diaspora: Its Size, Nature and Policy Implications*, Information paper no. 80, Committee for Economic Development of Australia, Melbourne.

2 Senate Legal and Constitutional References Committee, 2005, *They still call Australia home: Inquiry into Australian expatriates*, Australian Senate, Canberra.

3 Dumont, J and Lemaitre,G 2005, *Counting immigrants and expatriates in OECD countries: a new perspective*, OECD Social, Employment and Migration Working Paper no. 25, Organisation for Economic Co-operation and Development, Paris, viewed 8 May 2006, <http://www.oecd.org/dataoecd/34/59/35043046.pdf>.

Pace of ageing: Australia and Japan

POPULATION GROWTH

In 2005 Japan had the highest median age of all countries in the world, while Australia's population was only moderately aged. Some 50 years ago the demographic situation was quite different, with the median age of Australia's population being seven years older than Japan's.

The ageing of the population is a major issue for Australian policy makers, particularly in regard to the long-term implications for reduced economic growth and the increasing demand for Age Pensions, and health and aged care services.[1,2] As the population ages, growth in the number of people of working age will slow, while the proportion of people of retirement age will increase.

Sustained population ageing also leads to slowing or negative population growth. While declining population growth in developed countries is welcomed by some environmentalist and social scientists,[3] economists tend to agree that population decline brings gloomy economic prospects. In addition to the decrease in the labour supply, the demand side of the economy may be affected through shrinking markets for goods and services.

How quickly this occurs depends on the dynamics of fertility, mortality and overseas migration. While a moderate pace of demographic change allows for gradual adjustment of the economy and policies to the changing population demographics, rapid changes are more difficult to manage. As a result, governments and society as a whole may need to take actions to address these issues. But how severe is the ageing of Australia's population, relative to other countries?

One way of applying a degree of perspective to the ageing debate is to compare ageing in Australia with that of other countries. This article examines the population structures in Australia and Japan and the demographic forces that shape the respective populations, both historically and projections for the future.

In 2005 Japan's population was ranked the oldest in the world, with half the people aged over 42.9 years. In comparison, Australia's median age is not projected to reach this level until 2032. Japan's population is projected to decline by 21% between 2005 and 2050 (from 128 million to 101 million).

Measures of population age

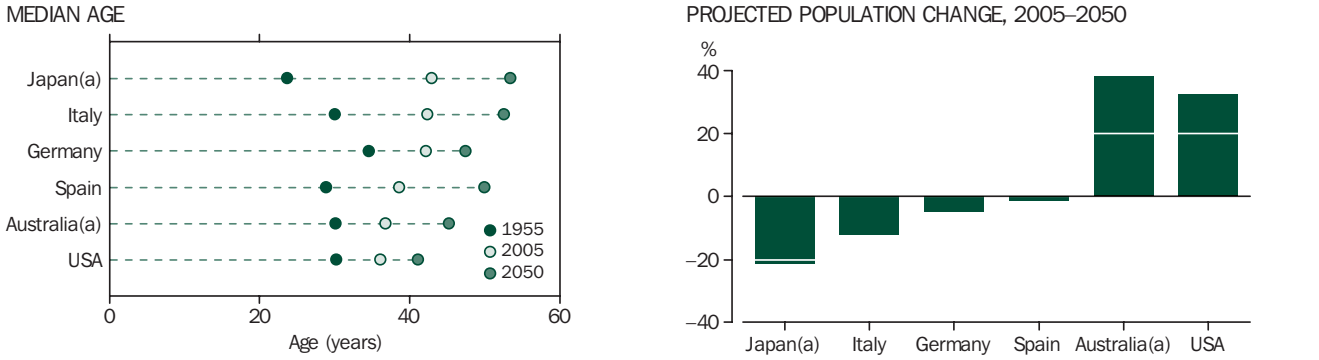
Median age of a population is the age that divides the population into two groups of the same size, such that half the total population is younger than this age, and the other half older.

Age ratios are measures used to compare the size of particular age groups in the population and are a standard summary measure of the age structure of a population:

- *Young age ratio* is the number of persons aged 0–14 years per 100 persons aged 15–64 years;
- *Older age ratio* is the number of persons aged 65 years and over per 100 persons aged 15–64 years;

Age ratios can be used to indicate the relative size of the "working age" population to the "non-working age" population, sometimes referred to as the dependency ratio. However, age ratios oversimplify the implication of dependency, for example, many young adults are dependent on their parents during post-school study, many people aged 15–64 years are not part of the workforce, many people retire before 65 years of age, while others continue to work beyond age 65.

Pace of population ageing: projected changes in median age and population size



(a) 2005 and 2050 data for Japan and Australia based on each country's official population projections.

Source: United Nations 2005, *World Population Prospects, The 2004 Revision, Highlights*, New York; UNPD: <http://esa.un.org/unpp/> (accessed 11 May 2006); National Institute for Population and Social Security Research 2002[4]; *Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0).

Over the same period, Australia's population is projected to increase by 38% from 20 million to 28 million people.

Fifty years ago the demographic situation of these countries was the reverse, with Australia's median age (30.1 years) being almost 7 years older than that of Japan (23.7 years).

Pace of population ageing

Demographic modelling shows that a persistent decline in fertility rates accompanied by rising life expectancy leads, in its initial stage, to a shift in the age structure towards older ages – that is, ageing of the population. Once the population has relatively fewer young people relative to the number of older people, even increases in fertility rates will be of limited effect in adding to the population because of the reduced number of women in reproductive ages. In later phases (and in the absence of significant migration intake), population ageing is therefore accompanied by population decline as the number of deaths exceeds the number of births (negative natural increase).

...changes in the age structure

Measured by world standards, the pace of ageing in Australia is moderate. While Japan's median age increased by 19.2 years (to 42.9 years) over the last five decades to 2005, in Australia it rose by a third of that amount (6.6 years) to be 36.7 years in 2005. Although ageing is projected to accelerate in Australia in the future, the speed of change will be

Population projections

This article makes use of population projections produced by the ABS for Australia and by the National Institute of Population and Social Security Research for Japan. The projections should not be considered as predictions or forecasts, but as illustrations of the population change that would occur if certain assumptions about future fertility, mortality and overseas migration were to hold true over the projection period.

For both countries, medium variant projections are used with the following assumptions:

- For Australia, the *total fertility rate (TFR)* to decline to 1.70 babies per women by 2018 (from 1.77 in 2005) and remain constant thereafter. The TFR is a hypothetical measure of the total number of babies a women would have in her lifetime based on the age-specific birth rates of that year. The Japanese projections assume a decrease in the TFR to 1.31 in 2007 and a gradual upward change thereafter, reaching 1.39 by 2049;
- In Australia life expectancy at birth to reach 84.9 years for males and 88.0 years for females by 2050–51 and remain constant thereafter. In Japan, the assumption is for life expectancy at birth to rise to 81.0 years for males and 89.2 years for females by 2050;
- Australian annual net overseas migration gain to be constant at 110,000 people per year throughout the projection period. Japan's migration assumption is based on annual averages of Japanese population migration between 1995 and 2000, and a projection of international migration from 1970 to 2000.

Source: ABS Population Projections, Australia, 2004 to 2101 (ABS cat. no. 3222.0); National Institute for Population and Social Security Research 2002.[4]

Measures of ageing, Australia and Japan

		Australia					*Japan*				
Measure	Units	1955	1980	2005	2025	2050	1955	1980	2005	2025	2050
Population	'000	9 200	14 695	20 329	24 679	28 081	89 276	117 060	127 708	121 136	100 593
Aged 0–14 years	%	29.0	25.3	19.6	16.5	15.1	33.0	23.5	13.9	11.6	10.8
Aged 15–64 years	%	62.6	65.1	67.3	63.1	59.2	61.3	67.4	66.2	59.7	53.6
Aged 65 years and over	%	8.4	9.6	13.1	20.3	25.7	5.3	9.1	19.9	28.7	35.7
Age ratio											
Young age(a)	no.	46.4	38.8	29.1	26.2	25.5	54.4	34.9	21.0	19.5	20.1
Older age(b)	no.	13.4	14.8	19.5	32.2	43.5	8.7	13.5	30.0	48.0	66.5
Total young and older age(c)	no.	59.8	53.5	48.6	58.4	69.0	63.1	48.4	51.0	67.5	86.7
Median age	years	30.1	29.4	36.7	41.6	45.2	23.7	32.7	42.9	49.8	53.4

(a) Number of people aged 0–14 years per 100 population aged 15–64 years.
(b) Number of people aged 65 years and over per 100 population aged 15–64 years.
(c) Total number of people aged 0–14 years and 65 years and over per 100 population aged 15–64 years.

Source: Australian Historical Population Statistics, 2006 (ABS cat. no. 3105.0.65.001); *Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0); Statistics Bureau, Ministry of Internal Affairs and Communications: http://www.stat.go.jp/english/data/jinsui/2.htm (accessed 1 February 2006); National Institute for Population and Social Security Research 2002.[4]

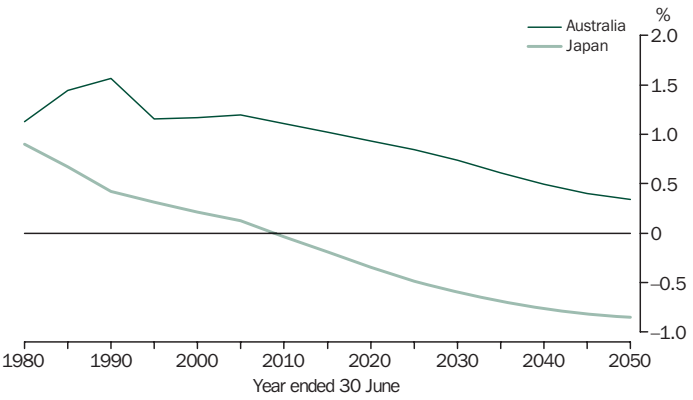
slower than in most other developed countries, and much slower than in Japan. By 2050 Japan's median age is projected to increase by 10.5 years, to 53.4 years, while Australia's is projected to rise by 8.5 years, to 45.2 years.

The rapid increase in the median age of the Japanese population is reflected in changes in other measures of the age structure: very fast growth of the population aged 65 years and over, a decrease in the proportion of dependent children (aged 0–14 years), and a gradual decline in the proportion of people in the age group 15–64 years, which covers the years when labour force participation tends to be strongest. In Japan, the proportion of the population aged 65 years and over increased almost fourfold between 1955 and 2005, compared with a 57% increase in Australia. At the same time, the proportion of children decreased 58% in Japan and 33% in Australia. These trends are projected to accelerate in the future.

...changes in population size and growth

The changes in the age structures of the Australian and Japanese populations described above will result in changes in their respective sizes and growth rates. Between 2005 and 2050 the population of Japan is projected to decline by 21%, or a loss of 27.1 million people. Over the same period Australia's population is projected to grow 38%, or 7.8 million people to be 28.1 million people in 2050.

Population growth rate, Australia and Japan



Source: Australian Historical Population Statistics (ABS cat. no. 3105.0.65.001); *Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0); Statistics Bureau, Ministry of Internal Affairs and Communications: http://www.stat.go.jp/english/data/jinsui/2.htm (accessed 01 February 2006); National Institute for Population and Social Security Research 2002.[4]

Drivers of population ageing

The magnitude and speed of ageing results from the changes and dynamics of three demographic variables: fertility, mortality (longevity) and net overseas migration.

...fertility

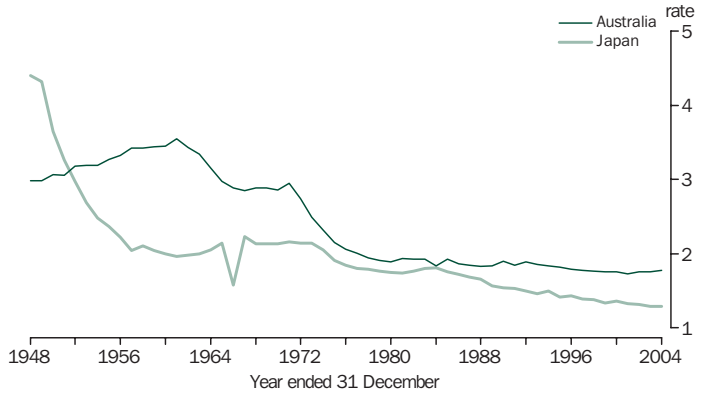
Fertility decline is the major driver of population ageing (see *Australian Social Trends 2005*, Recent fertility trends, pp.23–27). Declines in fertility lead not only to fewer people in the present and short-term but also to fewer younger people in future decades, as low birthrates translate into smaller numbers of women in childbearing ages in two or three decades. For this reason even small changes in fertility can have significant implications for the current and future population size and age structure.

Fertility has been declining in both Japan and Australia, though large falls occurred considerably earlier in Japan. In the years following 1949, Japan's total fertility rate (TFR) decreased rapidly, falling from over 4 births per woman to below 2.1 (the so-called 'replacement level') in 1957, although it did recover slightly and hovered around the replacement level until the mid-1970s. Australia's TFR, on the other hand, remained above 3 babies per woman until the mid-1960s, and only fell below replacement level in 1976. Australia's longer baby boom produced a younger age structure as measured by the median age, which decreased slightly between 1955 and 1980.

In the future, the speed of ageing in Australia and Japan will depend greatly on the level and stability of each country's TFR. If the trend towards fertility decline accelerates, population ageing will dramatically speed up in both countries. Recent Australian fertility data suggest fertility rates have stabilised somewhat following the steep declines in TFR that have occurred since the 1970s.[5] Japan's TFR on the other hand has continued to decline, and the 2004 level of 1.3 was amongst the lowest in the world.

Is it possible to keep the TFR stable? Some commentators say "no", claiming low effectiveness of pro-natalist policies, due to the fact that the most significant causes of fertility decline lie in the areas beyond the reach of the state, such as individual choices or partner relationships.[6] Alternatively, many argue that there is a significant role for governments to play in creating more family friendly environments, enabling the reconciliation of paid work and child rearing/bearing responsibilities, increasing the availability of affordable childcare and

Total fertility rate, Australia and Japan — 1948 to 2004



Source: Australian Historical Population Statistics, 2006 (ABS cat. no. 3105.0.65.001); *Population Projections, Australia, 2004 to 2101* (ABS cat. no. 3222.0); Ministry of Health and Welfare: http://www.mhlw.go.jp/english/database/db-hw/populate/index.html (accessed 1 February 2006).

education of children, and easing the tax burden of parents.[7,8] Japanese fertility continued to fall throughout the 1990s, despite a number of Japanese government initiatives aimed at encouraging women to have more children.[9] However, it is uncertain how steep the decline in fertility would have been had no government action been taken.

...longevity

Declines in mortality at older ages are considered to be the second most important driver of population ageing. Improvements in life expectancy, especially life expectancy at older ages, have an immediate impact in increasing the proportion of people in these age groups in the population.

Over the past 50 years both Australia and Japan have witnessed substantial improvements in life expectancy at birth. As a result of improved health care, and changes in lifestyle, the number of years a newborn baby (combined males and females) can expect to live increased by 9.1 years for Australia between 1970–1972 and 2002–2004, and by 10.1 years for Japan between 1970 and 2004. In both countries the majority of improvements taking place over this period can be attributed to mortality reductions at older ages. These changes have directly resulted in higher numbers and proportions of people in older age groups and also contributed to increases in overall costs of health and aged care.[1,2] This situation will escalate in the future if, as projected, life expectancies in Australia and Japan continue to increase. To alleviate anticipated fiscal and labour market pressures, both Australian and Japanese governments have taken actions to encourage higher labour force participation of older workers, such as privately funded superannuation in Australia and, in Japan, to shift the cost of elderly care back to families.[1,10]

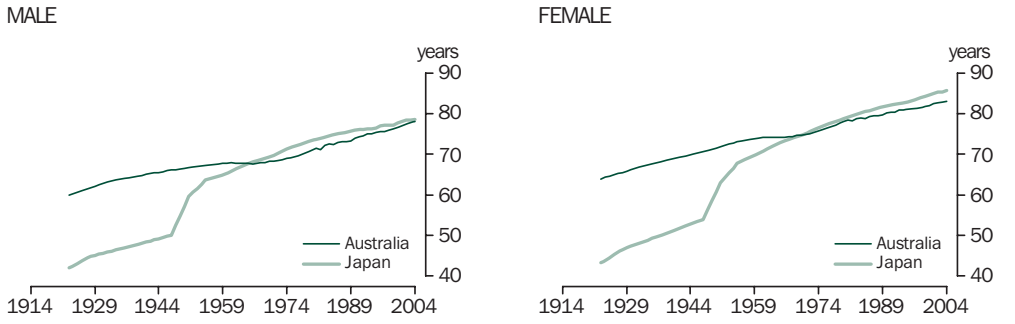
The difference between the numbers of births and deaths within a country is its natural increase. Natural increase has been falling in both Australia and Japan, although Japan's has been falling at a faster rate. In 2006, Japan's natural increase is projected to become negative and then continue to decline, while Australia is projected to maintain positive natural increase until 2044.

...overseas migration

Overseas migration contributes to changes in population size and, to a lesser extent, age structure. As the age profile of newly arriving migrants is, on average, younger than that of the resident population, overseas migration tends to make the age structure of a population younger than it would otherwise be. However, increases in fertility rates have a greater effect in reducing the age structure than migration has.

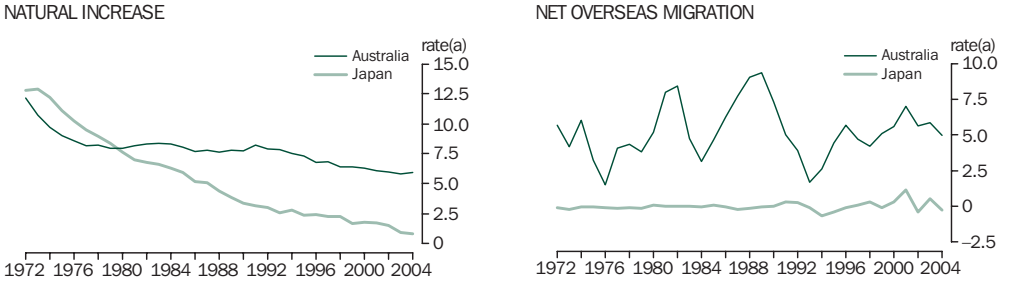
The impact of overseas migration for population growth and age structure varies according to the relative volume of migration received by a given country. In Australia, a

Life expectancy, Australia and Japan



Source: *Australian Historical Population Statistics, 2006* (ABS cat. no. 3105.0.65.001); Ministry of Health and Welfare: <http://www.mhlw.go.jp/english/database/db-hw/lifetb04/1.html> (accessed 1 February 2006).

Natural increase and net migration rates, Australia and Japan



(a) Per 1,000 population.

Source: *Australian Historical Population Statistics, 2006* (ABS cat. no. 3105.0.65.001); Bureau of Statistics, Ministry of Internal Affairs and Communication 2006, *Japan Statistical Yearbook*, Tokyo.

moderate-level immigration country, overseas migration has significantly contributed to population growth, and to a lesser extent to reducing the overall age of the population. Had there been no overseas migration between 1945 and 2000, Australia would have had 7 million fewer people in 2000, with the proportion of the population aged 50 years and over increasing by just 1.3 percentage points (from 28.2% to 29.7%).[11] In Japan, a country which has historically received very little overseas migration, population growth and changes in age structure have essentially been driven by natural increase (the excess of births over deaths). Overseas migration has played only a marginal role, and its contribution to population growth has been negligible.

More recently, migration has been increasingly viewed by the Japanese government as a useful tool in overcoming problems of ageing related labour force shortages. A number of amendments have been made to very strict immigration law, in order to allow for importing unskilled labour and health care workers from neighbouring Asian countries.[12]

Overseas migration will also continue to be important in sustaining population growth in Australia. The medium variant population projections for Australia assume a long-term level of net overseas migration of 110,000 people per year, resulting in an extra 7.1 million people in Australia by 2051. In the absence of this level of overseas migration Australia's population is projected to begin to decline in 2033. As well as contributing to population growth, overseas migration, and in particular skilled migration, has also been acknowledged to be helpful in overcoming skill deficits and ageing related fiscal pressures in Australia.[1]

Endnotes

1 Productivity Commission 2005, *Economic Implications of an Ageing Australia, Research Report*, Canberra.

2 Department of Treasury 2002, *Budget Paper No. 5: Intergenerational Report 2002–03*, Commonwealth of Australia, Canberra.

3 Eckersley R. 2004, *Well & Good. Morality, meaning and happiness*, Text Publishing, Melbourne.

4 National Institute for Population and Social Security Research 2002, *Population Projections for Japan: 2001–2050. With Long-range Population Projections: 2051–2100*, viewed 1 February 2006,<http://www.ipiss.go.jp/pp-newest/e/ppfj02/ppfj02.pdf>.

5 Australian Bureau of Statistics, 2005, *Births, Australia, 2004*, cat. no. 3301.0, ABS, Canberra.

6 Lutz W. 1999, Determinants of low fertility and ageing prospects for Europe, in *Family issues between gender and generations*, European Commission, Vienna pp. 50-69.

7 McDonald P. 2000, 'Gender Equity, Social Institution and the Future of Fertility,' *Journal of Population Research*, vol. 17, no.1, pp. 1–15.

8 Longman P. 2004, *The Empty Cradle. How Falling Birthrates Threaten World Prosperity And What To Do About It*, Basic Book, New York.

9 National Institute of Population and Social Security Research 2003, *Child Related Polices in Japan*, IPSS, Tokyo.

10 Ogawa N. and R.D. Retherford 1997, 'Shifting Costs of Caring for the Elderly Back to Families in Japan: Will it Work?', *Population and Development Review*, vol. 23, no. 1, pp. 703–741.

11 McDonald P. and R. Kippen 2000, 'Australia's Population in 2000: The Way We Are and The Way We Might Have Been', *People and Place*, vol. 8, no. 3, pp.10–17.

12 Ogawa N. 2000, Policy Options for Meeting the Challenge of an Ageing Society, in Japan Ageing Research Cente, *Ageing in Japan 2000*, JARC, Tokyo.

Family and community

Family and community: national summary

LIVING ARRANGEMENTS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1 Total households(a)	'000	6 668	6 762	6 910	7 015	7 127	7 250	7 367	n.y.a.	n.y.a.	n.y.a.	n.y.a.
2 Lone-person households(a)	%	22.9	23.0	23.6	23.7	24.1	24.6	24.5	n.y.a.	n.y.a.	n.y.a.	n.y.a.
3 Households with three or more persons(a)	%	44.7	44.5	43.8	43.2	43.1	42.5	42.5	n.y.a.	n.y.a.	n.y.a.	n.y.a.
4 Total families	'000	4 791	4 834	4 899	5 027	5 056	5 116	5 242	5 355	5 441	5 528	5 596
5 Families with children aged under 15 years	'000	2 100	2 092	2 130	2 160	2 166	2 172	2 179	2 211	2 191	2 224	2 229
6 Couple families(b)	'000	4 051	4 080	4 090	4 158	4 197	4 265	4 349	4 423	4 526	4 550	4 660
7 De facto couple families – of all couple families	%	n.a.	10.1	n.a.	n.a.	n.a.	n.a.	12.4	n.a.	n.a.	n.a.	n.a.
8 Couple-only families – of all couple families(b)	%	r40.7	r41.4	r41.2	r41.9	r42.2	r42.9	r44.2	r44.8	r45.9	r46.2	46.0
9 Couple-only families with female partner aged under 40 years – of all couple only families(b)	%	21.6	21.3	20.9	21.3	21.3	21.5	21.4	22.2	r22.6	r21.9	22.7
10 Couple families with children aged under 15 – of all families with children aged under 15(b)	%	81.5	81.6	80.0	78.4	78.8	79.1	78.4	77.0	78.3	76.9	78.6
11 Lone-father families with children aged under 15 – of all families with children aged under 15	%	1.9	2.0	2.3	2.0	1.9	2.3	2.3	2.7	2.5	2.8	2.7
12 Lone-mother families with children aged under 15 – of all families with children aged under 15	%	16.6	16.3	17.7	19.5	19.3	18.6	19.3	20.3	19.3	20.3	18.7
13 Families with at least one child aged under 5 – of all families with children aged under 15	%	47.4	47.7	47.8	46.2	45.0	r46.1	44.9	43.9	44.8	45.1	45.0
14 Average family size – persons	no.	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0
15 Children aged under 15 living in one-parent families – of all children aged under 15	%	16.4	16.3	18.0	19.5	19.0	18.2	19.6	20.6	19.8	20.8	18.9
16 Persons aged 20–24 living with parents – of all persons aged 20–24	%	r45.5	r45.0	r46.7	r48.4	r47.1	r45.2	45.6	45.6	45.0	46.8	47.1
17 Persons aged 25–34 living with parents – of all persons aged 25–34	%	r10.8	10.7	r11.7	r12.5	r11.9	r12.2	12.4	12.5	11.6	12.5	11.9
18 Persons aged 15–64 who live alone – of all persons aged 15–64	%	r7.1	r7.3	r7.6	r7.7	r7.9	r8.1	r8.4	r8.4	r8.6	r8.7	8.5
19 Persons aged 65 and over who live alone – of all persons aged 65 and over	%	r26.1	r26.2	r26.5	r25.5	r26.2	r27.3	r25.8	r26.8	r26.9	r25.3	26.2
20 Children aged 0–17 with a natural parent living elsewhere – of all children aged 0–17(c)	%	n.a.	n.a.	21.2	n.a.	n.a.	n.a.	n.a.	n.a.	r22.5	n.a.	n.a.

FAMILIES AND WORK	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Couple families with children aged under 15 years(b)												
21 Both parents employed – of all couple families with children aged under 15	%	56.2	54.5	54.4	55.6	54.9	56.3	56.8	57.2	57.7	r57.4	60.4
22 Neither parent employed – of all couple families with children aged under 15	%	8.4	7.9	8.6	8.5	7.9	7.5	7.5	7.2	6.3	r6.3	5.3
23 One-parent families with children aged under 15, parent employed – of all one-parent families with children aged under 15	%	43.2	42.8	42.9	42.1	44.0	47.3	46.6	46.3	46.4	48.0	49.3
24 Children aged under 15 living in families where no resident parent is employed – of all children aged under 15(d)	%	18.2	16.2	18.6	17.7	n.a.	17.9	17.4	n.a.	16.2	15.7	n.a.

Family and community: national summary cont.

FAMILY FORMATION	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Registered marriages												
25 Number of marriages	'000	109.4	106.1	106.7	110.6	114.3	113.4	103.1	105.4	106.4	111.0	n.y.a.
26 Crude marriage rate (per 1,000 population)	rate	6.1	5.8	5.8	5.9	6.0	5.9	5.3	5.4	5.4	5.5	n.y.a.
27 Marriages where both partners married for the first time – of all marriages	%	67.5	66.4	66.6	66.7	66.9	66.6	66.9	66.3	66.4	67.2	n.y.a.
28 Median age of males at first marriage	years	27.3	27.6	27.8	27.9	28.2	28.5	28.7	29.0	29.2	29.4	n.y.a.
29 Median age of females at first marriage	years	25.3	25.7	25.9	26.2	26.4	26.7	26.9	27.1	27.3	27.5	n.y.a.
30 Median age at remarriage – divorced males	years	41.1	41.6	41.8	42.0	42.2	42.7	43.1	43.6	43.6	44.3	n.y.a.
31 Median age at remarriage – divorced females	years	37.6	38.0	38.2	38.4	38.6	39.1	39.5	39.8	40.2	40.7	n.y.a.
Divorce												
32 Number of divorces	'000	49.7	52.5	51.3	51.4	52.6	49.9	55.3	54.0	53.1	52.7	n.y.a.
33 Crude divorce rate (per 1,000 population)	rate	2.8	2.9	2.8	2.7	2.8	2.6	2.9	2.7	2.7	2.6	n.y.a.
34 Median duration of marriage until final separation	years	7.6	7.6	7.7	7.8	7.9	8.2	8.3	8.6	8.7	8.7	n.y.a.
35 Divorces involving children aged under 18 years – of all divorces	%	n.a.	53.6	54.0	53.4	53.9	52.7	51.2	49.7	50.1	49.8	n.y.a.
36 Children aged under 18 involved in divorce	'000	n.a.	52.5	51.7	51.6	53.4	49.6	53.4	50.5	49.9	49.3	n.y.a.
Fertility												
37 Births(e)	'000	256.2	253.8	251.8	249.6	248.9	249.6	246.4	251.0	251.2	254.2	n.y.a.
38 Total fertility rate (per female)	rate	r1.82	1.80	1.78	1.76	r1.75	1.76	1.73	1.76	1.75	1.77	n.y.a.
39 Births to mothers aged under 20 – of all births	%	4.9	4.9	4.9	4.7	4.7	4.6	4.8	4.6	4.3	4.3	n.y.a.
40 Births to mothers aged 35 and over – of all births	%	13.7	14.6	15.3	16.1	16.8	17.4	17.8	18.4	19.1	19.9	n.y.a.
41 Births outside marriage – of all births	%	26.6	27.4	28.1	28.7	29.2	29.2	30.7	31.3	31.6	32.2	n.y.a.
42 Births outside marriage acknowledged by father – of all births outside marriage	%	83.3	84.2	85.5	87.1	88.2	88.2	87.9	88.0	88.2	89.2	n.y.a.
43 Females aged 35 and over giving birth for the first time – of all females aged 35 and over giving birth	%	20.8	21.2	22.4	23.3	23.7	24.7	25.2	25.6	26.2	n.y.a.	n.y.a.
44 Median age of mothers at first birth	years	26.9	27.1	27.3	27.5	27.6	27.9	28.0	28.0	28.0	n.y.a.	n.y.a.

(a) Data from 1995–2000 based on 1996 census. 2001 data based on 2001 census.

(b) From 2001 data includes both opposite-sex and same-sex couple families.

(c) Excludes children with no natural parent living in the household.

(d) Data for this indicator are derived from the Survey of Income and Housing; results are benchmarked by age for children aged 1–4 years and 5–14 years. These data are not necessarily consistent with data for indicator 15, which are derived from the Labour Force Survey and are not benchmarked for people aged less than 15 years.

(e) Based on registered births.

Reference periods: Data for indicators 1–3 are at June 30.
Data for indicators 4–6 and 8–19, 21–23 are at June.
Data for indicator 7 are at census date.
Data for indicator 20 are at April 1997 & June 2003.
Data for indicator 24 are for financial year ending 30 June.
Data for indicators 25–44 are for the calendar year.

Family and community: national summary cont.

CHILD CARE	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
45 Children aged under 3 using formal care – of all children aged under 3(f)(g)	%	n.a.	r21.1	n.a.	n.a.	r22.0	n.a.	n.a.	r25.0	n.a.	n.a.	28.2
46 Children aged under 3 using informal care – of all children aged under 3(g)	%	n.a.	39.3	n.a.	n.a.	43.0	n.a.	n.a.	36.9	n.a.	n.a.	38.4
47 Children aged 3–4 using formal care – of all children aged 3–4(f)(g)	%	n.a.	r27.4	n.a.	n.a.	r34.8	n.a.	n.a.	r41.4	n.a.	n.a.	45.5
48 Children aged 3–4 using informal care – of all children aged 3–4(g)	%	n.a.	41.2	n.a.	n.a.	43.2	n.a.	n.a.	36.4	n.a.	n.a.	38.3
49 Median weekly hours of care received by children aged under 3 – formal and informal combined(f)	hours	n.a.	12	n.a.	n.a.	11	n.a.	n.a.	r14	n.a.	n.a.	14
50 Median weekly hours of care received by children aged 3–4 – formal and informal combined(f)	hours	n.a.	r13	n.a.	n.a.	14	n.a.	n.a.	16	n.a.	n.a.	16

COMMUNITY	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
51 Persons aged 18 and over – volunteer rate in previous 12 months(h)	%	23.6	n.a.	n.a.	n.a.	n.a.	31.8	n.a.	34.4	n.a.	n.a.	n.a.
52 Carers for person with a disability – of all persons(i)	%	n.a.	n.a.	n.a.	12.6	n.a.	n.a.	n.a.	n.a.	13.0	n.a.	n.a.
53 Primary carers for person with severe/profound disability – of all persons(i)	%	n.a.	n.a.	n.a.	2.4	n.a.	n.a.	n.a.	n.a.	2.4	n.a.	n.a.
58 Persons aged 18 and over – attendance rate at any sporting event in previous 12 months	%	43.3	n.a.	n.a.	n.a.	46.3	n.a.	n.a.	48.2	n.a.	n.a.	n.a.
59 Persons aged 18 and over – participation rate in organised sport in previous 12 months(j)	%	n.a.	n.a.	26.5	28.3	30.3	28.9	n.a.	31.4	n.a.	n.a.	n.a.
60 Persons aged 18 and over – attendance rate at live performances in previous 12 months	%	45.5	n.a.	n.a.	n.a.	43.3	n.a.	n.a.	46.9	n.a.	n.a.	n.a.

(f) Excludes preschool.

(g) Includes children who used a combination of formal and informal care.

(h) Differences in survey methods and question design influences such as question sequencing and question wording may account for some part of the differences observed in these time series data. For details of differences affecting the 1995 and 2000 estimates see *Voluntary Work, Australia, 2000* (ABS cat. no. 4441.0).

(i) Excludes persons living in institutions.

(j) Data for the years from 1997–2000 were collected in four quarters of the financial year ending in year shown and for the year 2002 from March to July. Differences in survey methods and question design influences such as question sequencing and question wording may account for some part of the differences observed in these time series data. For details of differences between 2002 and previous years see *Participation in Sport and Physical Activities, Australia* (ABS cat. no. 4177.0).

Reference periods: Data for indicators 45–50 are at March 1996, and June for 1999, 2002 and 2005.
Data for indicator 51 are at June 1995, through 4 quarters of 2000, and March–July 2002.
Data for indicators 52–53 are at April–June 1998 and August–November 2003.
Data for indicators 58 and 60 are at March 1995, April 1999, and March–July 2002.
Data for indicator 59 are collected through the financial year ending June 1997–2000 and at March–July 2002.

Family and community: state summary

	LIVING ARRANGEMENTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1	Total households(a)(b)	'000	2001	2 455	1 817	1 383	613	724	192	63	120	7 367
2	Lone-person households(a)(b)	%	2001	23.9	24.4	23.8	28.0	24.7	27.7	21.3	23.8	24.5
3	Households with three or more persons(a)(b)	%	2001	43.9	43.5	41.6	37.5	42.1	37.6	49.9	43.9	42.5
4	Total families	'000	2005	1 844	1 387	1 122	428	553	136	39	87	5 596
5	Families with children aged under 15 years	'000	2005	755	531	454	161	223	51	19	34	2 229
6	Couple families(c)	'000	2005	1 528	1 153	942	357	463	113	31	73	4 660
7	De facto couple families – of all couple families	%	2001	11.5	11.1	14.0	12.4	14.3	14.3	23.2	14.3	12.4
8	Couple-only families – of all couple families(c)	%	2005	43.2	45.2	49.3	49.2	47.2	51.4	45.3	45.1	46.0
9	Couple-only families with female partner aged under 40 years – of all couple only families(c)	%	2005	21.0	24.3	24.0	18.9	24.7	18.7	34.0	28.1	22.7
10	Couple families with children aged under 15 – of all families with children aged under 15(c)	%	2005	78.6	80.5	78.1	76.2	78.4	74.5	73.1	79.4	78.6
11	Lone-father families with children aged under 15 – of all families with children aged under 15	%	2005	3.0	2.6	2.4	2.9	2.1	3.4	4.8	1.4	2.7
12	Lone-mother families with children aged under 15 – of all families with children aged under 15	%	2005	18.4	16.9	19.4	20.9	19.4	22.1	22.1	19.3	18.7
13	Families with at least one child aged under 5 – of all families with children aged under 15	%	2005	44.4	45.2	46.5	43.4	46.2	39.9	41.4	41.8	45.0
14	Average family size – persons	no.	2005	3.1	3.0	3.0	3.0	3.0	2.9	3.1	3.0	3.0
15	Children aged under 15 living in one-parent families – of all children aged under 15	%	2005	18.1	18.1	19.6	21.4	19.3	21.2	25.1	17.9	18.9
16	Persons aged 20–24 living with parents – of all persons aged 20–24	%	2005	52.3	52.6	34.7	48.8	41.9	43.5	26.8	44.3	47.1
17	Persons aged 25–34 living with parents – of all persons aged 25–34	%	2005	13.9	14.3	6.8	10.9	9.8	10.6	9.9	11.3	11.9
18	Persons aged 15–64 who live alone – of all persons aged 15–64	%	2005	8.3	8.2	7.6	10.4	9.7	9.9	8.2	8.0	8.5
19	Persons aged 65 and over who live alone – of all persons aged 65 and over	%	2005	25.5	25.6	24.0	32.6	28.2	27.9	24.6	25.6	26.2
20	Children aged 0–17 with a natural parent living elsewhere – of all children 0–17(d)	%	2003	r21.8	r20.0	r24.6	r26.7	r21.2	r28.7	r21.3	r26.8	r22.5
	FAMILIES AND WORK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Couple families with children aged under 15 years(c)											
21	Both parents employed – of all couple families with children aged under 15	%	2005	60.1	60.0	61.6	62.6	55.2	58.1	76.8	76.0	60.4
22	Neither parent employed – of all couple families with children aged under 15	%	2005	5.3	5.1	5.1	5.2	6.2	8.8	*2.6	*1.5	5.3
23	One-parent families with children aged under 15, parent employed – of all one-parent families with children aged under 15	%	2005	52.0	46.3	46.2	50.3	53.2	42.0	43.5	62.0	49.3
24	Children aged under 15 living in families where no resident parent is employed – of all children aged under 15(e)	%	2003–04	15.7	13.1	17.3	17.1	16.5	24.4	*15.4	*8.0	15.7

(a) Based on 2001 census data.

(b) Australian total does not include other territories.

(c) Includes both opposite-sex and same-sex couple families.

(d) Excludes children with no natural parent living in the household.

(e) Data for this indicator are derived from the Survey of Income and Housing; results are benchmarked by age for children aged 1–4 years and 5–14 years. These data are not necessarily consistent with data for indicator 15, which are derived from the Labour Force Survey and are not benchmarked for people aged less than 15 years.

Reference periods: Data for indicators 1–3 are at June 30.
Data for indicators 4–6, 8–19 and 21–23 are at June.
Data for indicator 7 are at census date.
Data for indicator 20 are at June 2003.
Data for indicator 24 are for financial year ending 30 June.

Family and community: state summary continued

	FAMILY FORMATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Registered marriages											
25	Number of marriages	'000	2004	37.4	25.6	24.3	7.9	10.6	2.6	0.8	1.7	111.0
26	Crude marriage rate (per 1,000 population)	rate	2004	5.6	5.2	6.3	5.1	5.4	5.5	3.9	5.3	5.5
27	Marriages where both partners married for the first time – of all marriages	%	2004	69.2	69.9	63.6	65.1	66.1	58.6	61.3	67.8	67.2
28	Median age of males at first marriage	years	2004	29.2	29.6	29.4	29.2	29.6	29.8	30.2	29.1	29.4
29	Median age of females at first marriage	years	2004	27.4	28.0	27.3	27.0	27.6	27.9	28.1	27.3	27.5
30	Median age at remarriage – divorced males	years	2004	43.8	43.8	44.1	45.6	45.5	44.2	45.8	44.4	44.3
31	Median age at remarriage – divorced females	years	2004	40.4	39.7	40.3	43.0	41.8	41.8	41.7	41.0	40.7
	Divorce											
32	Number of divorces	'000	2004	15.0	12.5	13.3	4.1	4.3	1.4	0.4	1.6	52.7
33	Crude divorce rate (per 1,000 population)(f)	rate	2004	2.2	2.5	3.4	2.7	2.2	2.9	2.2	n.a.	2.6
34	Median duration of marriage until final separation	years	2004	7.6	8.8	9.1	10.0	9.1	10.6	8.0	9.7	8.7
35	Divorces involving children aged under 18 – of all divorces	%	2004	46.7	49.8	53.0	51.8	49.8	52.1	50.2	45.6	49.8
36	Children aged under 18 involved in divorce	'000	2004	12.8	11.7	13.5	4.0	4.0	1.4	0.4	1.4	49.3
	Fertility											
37	Births(g)	'000	2004	85.9	62.4	49.9	17.1	25.3	5.8	3.6	4.2	254.2
38	Total fertility rate (per female)	rate	2004	1.79	1.70	1.81	1.71	1.81	1.93	2.24	1.64	1.77
39	Births to mothers aged under 20 – of all births	%	2004	3.9	2.7	5.8	4.0	5.4	6.8	11.3	2.3	4.3
40	Births to mothers aged 35 and over – of all births	%	2004	20.1	22.4	17.3	20.7	18.5	15.3	15.8	25.8	19.9
41	Births outside marriage – of all births	%	2004	28.5	26.8	37.8	35.6	37.3	46.3	64.3	27.8	32.2
42	Births outside marriage acknowledged by father – of all births outside marriage	%	2004	88.2	92.9	89.6	90.9	89.7	85.4	65.0	91.2	89.2

Family and community: state summary continued

CHILD CARE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(h)	ACT	Aust.
45 Children aged under 3 using formal care – of all children aged under 3(i)(j)	%	2005	25.9	23.4	36.9	25.3	28.9	32.3	*40.8	40.1	28.2
46 Children aged under 3 using informal care – of all children aged under 3(j)	%	2005	41.9	37.3	32.5	43.5	37.3	38.3	*28.6	46.0	38.4
47 Children aged 3–4 using formal care – of all children aged 3–4(i)(j)	%	2005	46.0	42.6	53.7	38.8	36.0	49.1	*42.6	58.6	45.5
48 Children aged 3–4 using informal care – of all children aged 3–4(j)	%	2005	38.2	43.4	30.7	50.6	35.0	35.1	*29.4	35.3	38.3
49 Median weekly hours of care received by children aged under 3 – formal and informal combined (i)	hours	2005	16	12	16	12	10	14	25	17	14
50 Median weekly hours of care received by children aged 3–4 – formal and informal combined (i)	hours	2005	18	12	18	11	15	12	30	20	16

COMMUNITY	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(h)	ACT	Aust.
51 Persons aged 18 and over – volunteer rate in the previous 12 months	%	2002	33.4	33.3	35.7	34.7	35.6	37.0	39.5	41.4	34.4
52 Carers for person with a disability – of all persons(k)	%	2003	11.4	14.1	14.3	14.8	12.7	14.8	n.a.	10.8	13.0
53 Primary carers for person with severe/profound disability – of all persons(k)	%	2003	2.3	2.4	3.0	2.5	2.0	3.1	n.a.	1.2	2.4
54 Contact with family or friends living outside the household in last week – of all persons aged 18 and over	%	2002	94.8	95.4	95.4	96.6	96.4	96.5	95.6	98.0	95.4
55 Persons who feel unsafe or very unsafe at home alone after dark – of all persons aged 18 and over	%	2002	7.4	8.6	8.7	9.5	10.5	7.4	10.1	6.5	8.4
56 Could ask for small favours from persons living outside the household – of all persons aged 18 and over	%	2002	92.4	92.2	94.3	95.1	95.3	95.3	94.3	95.4	93.3
57 Persons able to ask for support in time of crisis from persons living outside the household – of all persons aged 18 and over	%	2002	93.2	93.4	94.8	95.3	95.0	96.0	94.1	96.5	94.0
58 Persons aged 18 and over – attendance rate at any sport in previous 12 months	%	2002	43.7	51.6	46.8	51.9	53.5	47.0	56.7	55.7	48.2
59 Persons aged 18 and over – participation rate in organised sport in previous 12 months	%	2002	31.1	32.2	32.3	30.7	38.2	32.2	36.6	40.8	31.4
60 Persons aged 18 and over – attendance rate at live performances in previous 12 months	%	2002	47.9	47.9	44.1	42.9	48.1	43.5	47.1	59.1	46.9

(f) Based on the location of the Family Court where the divorce is granted and registered. Due to the large number of divorces granted in the Australian Capital Territory to usual residents of another state, the divorce rate for the Australian Capital Territory is not representative of the Australian Capital Territory population.

(g) Based on registered births.

(h) Estimates for the Northern Territory refer to mainly urban areas only.

(i) Excludes preschool.

(j) Includes children who used a combination of formal and informal care.

(k) Excludes persons living in institutions.

Reference periods: Data for indicators 25–42 are for the calendar year.
Data for indicators 45–50 are at June 2005.
Data for indicators 51 and 54–60 are at March–July 2002.
Data for indicators 52–53 are at August–November 2003.

Family and community: data sources

INDICATORS	DATA SOURCE
1–3	*Australian Demographic Statistics* (ABS cat. no. 3101.0).
4–6, 8–19, 21–23	ABS Labour Force Survey.
7	ABS 2001 Census of Population and Housing.
20	ABS Family Characteristics Survey; *Family Characteristic, Australia, June 2003* (ABS cat. no. 4442.0).
24	ABS Surveys of Income and Housing.
25–26	*Australian Demographic Statistics* (ABS cat. no. 3101.0); *Marriages, Australia* (ABS cat. no. 3301.0).
27–31	*Marriages, Australia* (ABS cat. no. 3301.0).
32–33	*Australian Demographic Statistics* (ABS cat. no. 3101.0); *Divorces, Australia* (ABS cat. no. 3307.0.55.001).
34–36	*Divorces, Australia* (ABS cat. no. 3307.0.55.001).
37–38	*Australian Demographic Statistics* (ABS cat. no. 3101.0); ABS Births Collection.
39–42	ABS Births Collection.
43–44	National Perinatal Data Collection, AIHW National Perinatal Statistics Unit.
45–50	ABS Child Care Survey.
51	*General Social Survey: Summary Results, Australia 2002* (ABS cat. no. 4159.0); *Voluntary Work 2000* (ABS cat. no. 4441.0); Voluntary Work Survey 1995 (reprocessed).
52–53	ABS Survey of Disability, Ageing and Carers; *Disability, Ageing and Carers Australia: Summary of Findings* (ABS cat.no. 4430.0).
54–58, 60	*General Social Survey: Summary Results, Australia 2002* (ABS cat. no. 4159.0).
59	*Participation in Sport and Physical Activities, Australia 1999–2000* and *2002* (ABS cat. no. 4177.0).
59 (state)	ABS General Social Survey, 2002.
60	ABS Survey of Attendance at Selected Culture and Leisure Venues 1995 and 1999.

Family and community: definitions

Average family size

for any group of families, the total number of family members divided by the number of families in the group.

Reference: *Labour Force Status and Other Characteristics of Families* (ABS cat. no. 6224.0).

Births

live births registered in that year. A live birth is the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any evidence of life such as a heartbeat.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Births outside marriage

is the birth of a child whose parents are not legally married to each other at the time of the child's birth. Also known as exnuptial births.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Births outside marriage acknowledged by the father

births outside registered marriage where the father's name is recorded on the birth certificate. Also known as paternity-acknowledged birth.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Carer

a carer is a person of any age who provides any informal assistance, in terms of help or supervision, to persons with disabilities or long-term conditions, or older persons (i.e. aged 60 years and over). This assistance has to be ongoing, or likely to be ongoing, for at least six months.

Reference: *Disability, Ageing and Carers, Australia: Summary of Findings* (ABS cat. no. 4430.0).

Child aged under 15 years

a related or unrelated person aged under 15 years who forms a parent-child relationship with one person aged 15 years or over resident in the household.

Reference: *Family Characteristics, Australia* (ABS cat. no. 4442.0).

Couple family

a family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family may include any number of dependants, non-dependants and other related individuals. It is not necessary for a parent-child relationship to be formed, thus a couple family can consist of a couple without children present in the household.

Reference: *Family Characteristics, Australia* (ABS cat. no. 4442.0).

Couple-only family

a couple family with no children (of any age) present.

Crude divorce rate

the number of decrees absolute granted during the calendar year per 1,000 estimated resident population at 30 June. It should be noted that for divorce rates relating to state and territory data, the numerator and demominator are based upon different types of data, reducing the accuracy. While state or territory of usual residence is used as the denominator, the numerator is based upon state or territory of registration. Therefore, divorce applicants may contribute to the divorce rates of states and territories where they are not usual residents.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Family and community: definitions continued

Crude marriage rate

is the number of marriages registered during the calendar year per 1,000 estimated resident population at 30 June. In the interpretation of this rate, it must be kept in mind that a large and varying proportion of the population used in the denominator is below the minimum age of marriage or is already married.

Reference: *Marriages, Australia* (ABS cat. no. 3306.055.001).

De facto couple

two people (of the same or opposite sex) who live together in the same household who are not registered as married to each other but reported being either: de facto, partner, common law husband/wife/spouse, lover, boyfriend or girlfriend.

Reference: 2001 Census of Population and Housing.

Divorce

decree absolute of dissolution of a registered marriage.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Divorces involving children

divorces of couples with unmarried children of the registered marriage who were aged under 18 years at the time of application for divorce. Under the Family Act 1975, adopted and ex-nuptial children and children from a former registered marriage may be included (in certain cases). Children who are registered as married or aged 18 years and over are not subject to custody and guardianship orders and are excluded.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Duration of marriage until separation

the interval measured in complete years between the date of marriage and the date of separation.

Reference: *Divorces, Australia* (ABS cat. no. 3307.0.55.001).

Employed person

persons aged 15 years and over who either worked for one hour or more during the reference week for pay, profit, commission, payment in kind or without pay for one hour or more in a family business, or who had a job but were not at work. Also includes employers, own account workers or contributing family workers who had a job, business or farm, but were not at work.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Estimated resident population

the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months. It excludes overseas residents who are in Australia for less than 12 months.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Family

two or more persons, one of whom is aged 15 years or over, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Feels unsafe at home

feels very unsafe or unsafe at home alone after dark.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Formal child care

regulated care, away from the child's home. The main types of formal care are: before and after school care; long-day care; family day care and occasional care.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Has contact with family or friends

has contact with family and friends at least once a week, either face to face or by other means of communication.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Has source of support in time of crisis

the expectation that support would be available in time of crisis from friends, family or organisations. Types of support may include advice on what to do, emotional support, help during an illness or with maintaining family or work responsibilities, or support with money, accommodation or food.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Household

a group of two or more related or unrelated people who usually reside in the same private dwelling, or a person living alone in a private dwelling. Households include group households of unrelated persons, same-sex couple households, single-parent households as well as one-person households. A household usually resides in a private dwelling (including caravans etc. in caravan parks). Persons usually resident in non-private dwellings, such as hotels, motels, boarding houses, jails and hospitals, are not included in household estimates. This definition of a household is consistent with the definition used in the census.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Informal assistance

informal assistance is unpaid help or supervision that is provided to persons with one or more disabilities or persons aged 60 years and over living in households. It includes only assistance that is provided for one or more of the tasks associated with the activities of communication, mobility, self care, health care, paperwork, transport, housework, meal preparation, light property maintenance and cognition or emotion because of a person's disability or age. Informal assistance may be provided by family, friends or neighbours. For the Survey of Disability, Ageing and Carers, any assistance received from family or friends living in the same household was considered to be informal assistance regardless of whether or not the provider was paid.

Reference: *Disability, Ageing and Carers, Australia: Summary of Findings* (ABS cat. no. 4430.0).

Informal child care

non-regulated care, arranged by the child's parent/guardian, either in the child's home or elsewhere. It comprises care by (step) brothers or sisters, care by grandparents, care by other relatives including a parent living elsewhere and care by other (unrelated) people such as friends, neighbours, nannies or babysitters. It may be paid or unpaid.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Is able to ask for small favours

examples of small favours are looking after pets, watering your garden, collecting mail or checking your house while you are away from home, minding a child for a brief period, help with moving or lifting objects, help out when you are sick or injured, or lending equipment.

Reference: *General Social Survey* (ABS cat. no. 4159.0).

Live performance

these performances comprise the following events: popular music concerts; classical music concerts; dance performances, theatre performances; operas and musicals.

Reference: *Attendance at Selected Cultural Venues and Events* (ABS cat. no. 4114.0).

Lone parent

a person who has no spouse or partner present in the household but who forms a parent-child relationship with at least one dependent or non-dependent child usually resident in the household.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Family and community: definitions continued

Lone person

a person who makes provision for their food and other essentials for living without combining with any other person to form part of a multi-person household. They may live in a dwelling on their own or share a dwelling with another individual or family.

Reference: *Australian Labour Market Statistics , Australia* (ABS cat. no. 6105.0).

Marriage

refers to registered marriages only.

Reference: *Marriages, Australia* (ABS cat. no. 3306.0.55.001).

Median

the value at which half the population falls above and half falls below.

Median age

the age at which half the population is older and half is younger.

Reference: *Population by Age and Sex, Australian States and Territories* (ABS cat. no. 3201.0).

Median age of mothers at first birth

the median age of mothers at the end of first confinement. A confinement is a pregnancy which results in at least one live birth: multiple births (e.g. twins) may be involved.

Reference: Australian Institute of Health and Welfare, *Australia's Mothers and Babies* (1996).

Median hours of care

is defined as the number of hours a child attended child care in the survey reference week. Median hours of care is the number of hours of care per week at which half the children who received formal and/or informal child care fall below the value and half above.

Reference: *Child Care, Australia* (ABS cat. no. 4402.0).

Median value

for any distribution, the median value (for example, age, duration) is that value which divides the relevant population into two equal parts, half falling below the value and half exceeding it. Where the value for a particular record has not been stated, that record is excluded from the calculation.

Natural parent

a parent who is related to his or her child(ren) by either birth or adoption.

Reference: *Family Characteristics, Australia* (ABS cat. no. 4442.0).

Natural parent living elsewhere

one of a child's natural parents who is not usually resident in the same household as the child.

Reference: *Family Characteristics, Australia* (ABS cat. no. 4442.0).

Non-resident parent

persons aged 15 years and over who have one or more natural children aged 0–17 years living elsewhere.

Reference: *Family Characteristics, Australia* (ABS cat. no. 4442.0).

One-parent family

a family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Other Territories

includes Jervis Bay Territory, as well as Christmas Island and the Cocos (Keeling) Islands.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Primary carer

a primary carer is a person who provides the most informal assistance, in terms of help or supervision, to a person with one or more disabilities. The assistance has to be ongoing, or likely to be ongoing, for at least six months and be provided for one or more of the core activities (communication, mobility and self care). In the Survey of Disability, Ageing and Carers, primary carers only include persons aged 15 years and over for whom a personal interview was conducted. Persons aged 15 to 17 years were only interviewed personally if parental permission were granted.

Reference: *Disability, Ageing and Carers, Australia: Summary of Findings* (ABS cat. no. 4430.0).

Provides support for other relatives living outside the household

any of the following types of support provided to relatives such as elderly parents, children aged 25 years and over, grandchildren who live outside the household:

- give money to pay rent and/or other housing costs
- give money to pay bills or meet debt
- provide or pay for food
- provide or pay for clothing
- let them borrow the car
- drive them places
- pay for educational costs or textbooks
- provide pocket money or an allowance
- buy or give them money to buy big cost items such as a car, computer, sound system, etc.

Reference: *General Social Survey, Summary Results,* 2002 (ABS. cat. no. 4159.0).

Registered marriage

formally registered marriage for which the partners hold a marriage certificate.

Reference: *Marriages, Australia* (ABS cat. no. 3306.0.55.001).

Total fertility rate

the sum of age-specific fertility rates (live births at each age of mother per female population of that age). It represents the number of children a female would bear during her lifetime if she experienced current age-specific fertility rates throughout her reproductive life.

Reference: *Births, Australia* (ABS cat. no. 3301.0).

Volunteer

a volunteer is someone who willingly gave unpaid help in the form of time, service or skills, through an organisation or group, in the previous 12 months.

Reference: *Voluntary Work* (ABS cat. no. 4441.0).

Volunteer rate

for any group, the volunteer rate is the number of volunteers in that group expressed as a proportion of the total population in that same group.

Reference: *Voluntary Work* (ABS cat. no. 4441.0).

Fathers' work and family balance

FAMILY FUNCTIONING

A father has many roles in a family, and balancing these roles with paid work can be an issue. In 2003, 91% of fathers with children aged under 15 years were employed with 85% employed full-time.

Traditional gender roles cast men as the main income provider or breadwinner in families and women primarily responsible for domestic and caring roles. With the increase in women's participation in the labour force, many mothers have less time available to undertake domestic activities. At the same time, there has been increasing recognition that the father's role and relationship with a child is important.[1] A father can have many roles in the family, ranging from income provider to teacher, carer, playmate and role model. Therefore, balancing paid work and family responsibilities can be an important issue for both fathers and mothers in families.

This article examines the characteristics of fathers who live with their children, including living arrangements, patterns of employment arrangements within couple families with children, and use of working arrangements to balance work and family.

Fathers and families

In 2003, there were over 5.5 million families in Australia and 87% of the population lived in a family household. Despite the growing numbers of couples without children (including those whose children have left home) and one-parent families in Australia, families consisting of a father, mother and child(ren) aged less than 15 years are still relatively common, accounting for around one-third (1.7 million) of all families in 2003.

In total, there were around 1.8 million fathers living with their children aged less than 15 years in 2003. Almost all (97%) of these fathers were in couple families, with the remaining 3% (or 58,000) being lone fathers.

Of the 3.9 million children aged less than 15 years in 2003, 80% lived with both a father and mother, 2% were in lone father families and 18% were in lone mother families.

Data sources and definitions

Data for this article are drawn from several ABS surveys: the 1992 Family Survey, the 1997 and 2003 Family Characteristics Surveys, the monthly Labour Force Survey, the 2003 Persons Not in the Labour Force Survey, the 2003 Working Arrangements Survey and the 2002 Child Care Survey.

Fathers can be natural or step fathers of children. A *natural father* is one who is related to his child by birth or adoption, and a *step father* is related to his child solely through his relationship (or former relationship) with the child's natural mother. In this article *fathers* are restricted to those in families with dependent children aged 0–14 years who are usually resident in the household. An exception is the data sourced from the 2003 Working Arrangements Survey and the 2002 Child Care Survey where only fathers of children aged 0–12 years are included.

A *child* may be a natural, adopted, step or foster son or daughter of a couple or lone parent, usually resident in the same household, and without a child or partner of their own usually resident in the household.

A *family* consists of two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household.

Among the 3.2 million children who lived with a father, 95% were with a natural father, while 5% lived with a step father.

Age of fathers

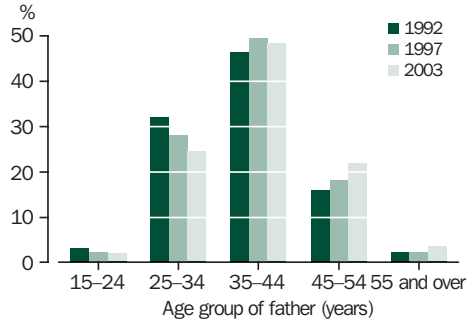
The age profile of fathers has been changing. Just as there has been a trend for delaying births by women, men have also been delaying parenthood.[2] Additionally, some men may appear to arrive late to fatherhood due to starting a second family with a different partner. Most noticeable is the fall in the proportion of fathers in the younger age groups and the rise in the proportion of fathers in the older age groups.

Family type of fathers with children aged 0–14 years — selected years

	1992	*1997*	*2003*	*2003*
	'000	'000	'000	%
Couple families with children	1 721.1	1 703.9	1 738.1	96.8
Lone fathers with children	37.0	52.4	57.7	3.2
Total fathers	**1 758.1**	**1 756.3**	**1 795.8**	**100.0**

Source: ABS 1997 and 2003 Family Characteristics Surveys and 1992 Family Survey.

Age of fathers in families with children aged 0–14



Source: ABS 2003 and 1997 Family Characteristics Surveys, ABS 1992 Family Survey.

In 1992, around one-third (35%) of fathers in families with children aged 0–14 years were aged less than 35 years. This proportion had fallen to little over one-quarter (26%) by 2003. Just under half (48%) of all fathers of children in this age range were aged 35–44 years old in 2003, similar to the proportion in 1992 (46%). The proportion of fathers aged 45 years and over increased from 19% in 1992 to 25% in 2003.

Fathers as income earners

In 2003 in couple families with children aged under 15 years, fathers were more likely than mothers to be employed (91% compared with 62% respectively) and more likely to be employed full-time (84% compared with 24%).

Nuptial and ex-nuptial births

In 2003, 68% of births were *nuptial births*, meaning that the parents were married at the time of the child's birth. *Exnuptial births*, where the parents are not in a registered marriage at the time of the child's birth, accounted for the remaining 32% of births that year.

With an exnuptial birth there is a chance that the father may not be aware of or otherwise acknowledge the child's birth. While the number of exnuptial births has more than doubled between 1983 and 2003, the number of births not being acknowledged (i.e. the father is not named on the birth certificate) has decreased slightly. In terms of total births, paternity-not-acknowledged births have decreased from roughly 5% of all births in 1983 to just under 4% in 2003.[2]

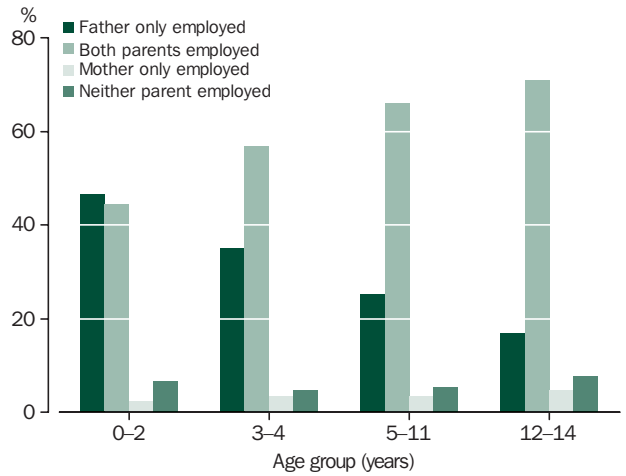
Births — selected years

	1983	*1993*	*2003*
	'000	'000	'000
Nuptial	206. 9	195.4	171.9
Total exnuptial	35.6	64. 9	79.3
Exnuptial, paternity acknowledged	23.0	53.0	70.0
Exnuptial, paternity not acknowledged	12. 7	11.9	9.4
Total births	**242.6**	**260.2**	**251.2**

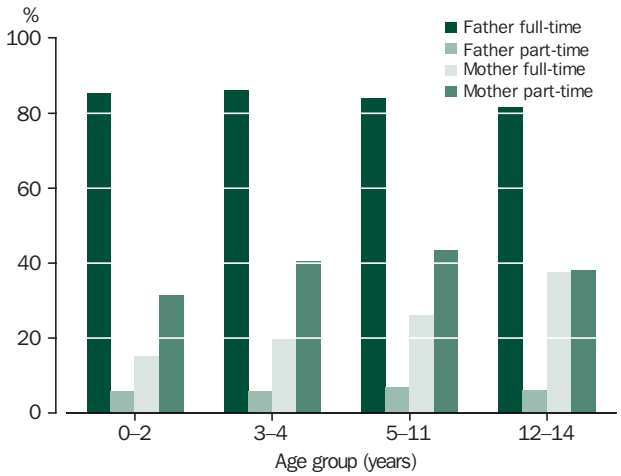
Source: *Births, Australia, 2003* (ABS cat. no. 3301.0)

Labour force arrangements of parents in couple families(a) by age of youngest child — 2003

EMPLOYMENT DISTRIBUTION WITHIN FAMILIES



FULL-TIME / PART-TIME EMPLOYMENT



(a) With children aged 0–14 years.

Source: ABS 2003 Family Characteristics Survey.

Fathers as carers

How much time fathers spend with their children is a question at the heart of much research over the past three decades.[3] *Paternal engagement*, a father's direct contact with his child through caretaking and shared activities such as play or leisure, is one aspect of a father's involvement with his child. A common method of measuring a father's engagement is through time use studies. ABS Time Use Surveys were conducted in 1992 and 1997.

In 1997, on average, fathers of children aged less than 15 years did less than half as much of the direct caring of children than mothers (28 hours and 61 hours per week respectively). Fathers, however, spent considerably more time in activities relating to employment than mothers, reflecting traditional gender roles and family responsibilities (see *Australian Social Trends 1999*, Looking after the children, pp. 39–41).

Between 1992 and 1997, fathers had increased the amount of time spent in child care activities by an average of almost 47 minutes per week.

Not employed fathers in couple families(a) — 2003

Unemployed or not in the labour force; and for those not in the labour force the reason not actively looking for work.

	%
Unemployed(b)	29.1
Not in the labour force	71.0
Did not want to work	29.2
Wanted to work but not actively looking for work	30.2
Permanently unable to work	9.0
Wanted to work and actively looking for work, but not available to start within four weeks	2.6
Total not employed	**100.0**
	'000
Total not employed	**162.7**

(a) With children aged 0–14 years.
(b) Unemployed by definition requires the active search for work and availability to start work.

Source: ABS 2003 Persons Not In the Labour Force Survey.

The higher levels of engagement in employment seen among fathers reflects the divisions of couples' time between paid employment and caring/domestic activities. Employment dynamics within couple families are closely related to the age of the youngest child in the household. Mothers' employment patterns in particular are linked with the age of the youngest child while, overall, fathers' working patterns vary only slightly.

Nearly half (47%) of all families where the age of the youngest child was 0–2 years had only the father employed, compared with 17% where the youngest child was aged 12–14 years. Correspondingly, the tendency for both parents to be employed increased with age of youngest child from 45% in families with children aged 0–2 years to 71% in families where the age of the youngest child was 12–14 years.

While mothers' employment levels (both part-time and full-time) increased with the age of their youngest child, fathers' employment levels for both full-time and part-time work remained virtually unchanged for all age-groups of youngest child under 15 years.

Stay at home fathers

Of the 1.7 million couple families with children aged 0–14 years in June 2003, there were 57,900 (or 3.4%) families where the father was not employed while mothers worked either full-time or part-time. A further 108,100 (or 6.3%) couple families with children aged less than 15 years had neither parent working.

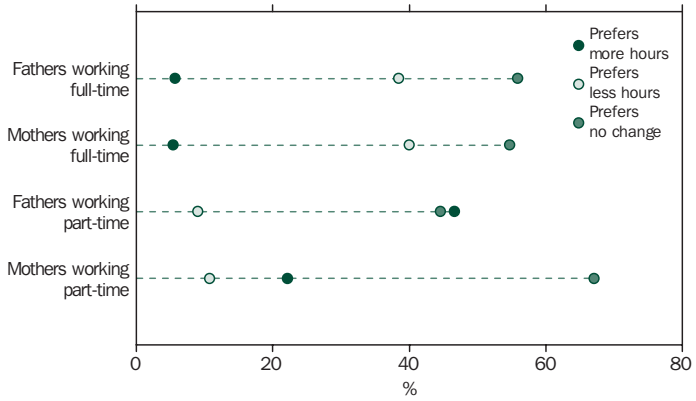
Some couples may choose to have the father stay at home to undertake principal caring roles for children. For other couples, circumstances such as unemployment or an inability participate in the labour force (e.g. through disability) may necessitate the father staying at home. In September 2003, some 47,500 fathers (or 29% of those who were not employed) stated that they did not want to work. A greater majority (62%) did want to work and these included: 47,300 (29%) who were actively looking for paid work, 49,100 (30%) fathers who wanted to work but were not actively looking and a small number (4,200 or 3%) who wanted to work and were looking, but were not able to start. Fathers who were permanently unable to work made up 14,700 (9.0%) of the fathers that were not employed.

Fathers' working hours

In 2004–05, there was an annual average of 1.6 million employed fathers and 1.3 million employed mothers with children under the age of 15 years within both couple families and one-parent families. In these families, the vast majority (93%) of fathers who were employed worked full-time while most employed mothers worked part-time (60%).

Research has shown that fathers are expressing a desire for greater involvement with their children,[1] and children would also prefer more time with their working fathers.[4]

Preference for working hours of parents with children aged under 12 years — November 2003



Source: Working Arrangements, Australia, November 2003 (ABS cat. no. 6342.0).

The proportion of employed fathers with children who work part-time, while low compared with mothers, has increased from 4% in June 1994 to almost 7% in June 2005. Yet fathers working full-time have maintained their working hours at around 42 to 43 hours per week on average over the 15 years to 2004–05. One-third (33%) of fathers working full-time in 2004–05 worked 50 hours or more per week, while 16% worked for 60 hours or more.

...overtime worked

In many cases, working overtime contributes to the large number of hours worked. The proportion of fathers working regular overtime has increased from 46% in August 1993 to 50% in November 2003. Fathers had twice the level of regular overtime compared with mothers (24%).[5] Given the vast majority (90%) of people working regular overtime in November 2003 were full-time employees, the higher proportion among fathers is partially explained by the higher proportion of fathers in full-time employment.

...preference for working hours

There were similarities in preferences for working hours between those fathers and mothers who worked full-time and who had primary school aged children. In November 2003, fathers who worked full-time were mainly satisfied with the hours they worked (56%) as were full-time working mothers (55%). Full-time working fathers and mothers also had similar levels of preference for working fewer hours (38% and 40% respectively).

Of the fathers working part-time, nearly half (47%) would have preferred to work more hours while just over one-fifth (22%) of mothers working part-time wanted more hours. That being said, just under half (45%) of fathers and two-thirds (67%) of mothers working part-time were satisfied with the hours they worked and did not want to change their hours.

Fathers and flexible work arrangements

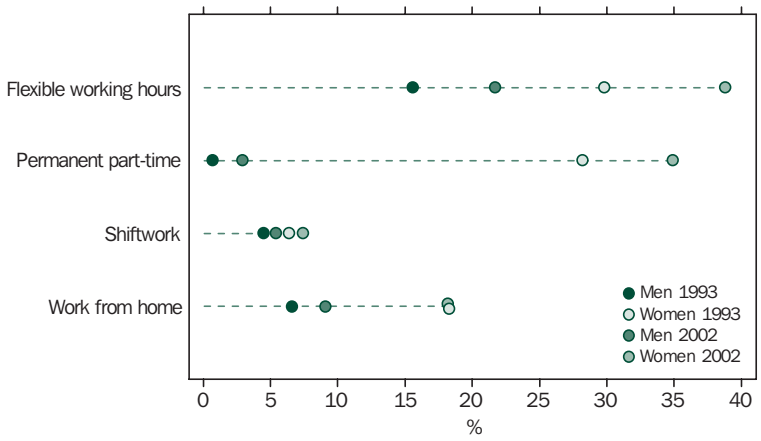
Employers and workplaces are increasingly acknowledging that workers need to be able to balance the demands of both the workplace and the family, including caring for children. A range of flexible working arrangements have been introduced over time to help parents with the work/family balancing act. Flexible work arrangements used by parents

Selected working arrangements available to employed parents with children aged under 12 years — 1993 and 2003

	Fathers				*Mothers*			
	Full-time		*Part-time*		*Full-time*		*Part-time*	
	1993	*2003*	*1993*	*2003*	*1993*	*2003*	*1993*	*2003*
	%	%	%	%	%	%	%	%
Able to work extra hours in order to take time off	36.3	45.3	19.7	28.2	40.1	46.5	31.6	42.0
Start and finish times are not fixed	42.1	40.1	45.8	40.3	32.2	30.7	77.6	32.1
Able to choose times day-to-day	27.2	28.9	22.3	25.2	24.5	22.1	21.3	22.8
	'000	'000	'000	'000	'000	'000	'000	'000
Total employed parents of children under 12 years	**966.7**	**1 046.8**	**50.7**	**73.4**	**260.6**	**290.1**	**410.0**	**545.8**

Source: Working Arrangements, Australia, August 1993 (ABS cat. no. 6342.0) and *Working Arrangements, Australia, November 2003* (ABS cat. no. 6342.0).

Working arrangements used by parents to help care for their children aged under 12 — selected years



Source: Child Care, Australia, June 2002 (ABS cat. no. 4402.0).

to help with the care of their children include flexible work hours, permanent part-time work and working at home.[6]

In 1993, the option to work extra hours in order to take time off was available to 36% of fathers employed full-time with children under the age of 12 years. By 2002, this had increased to 45%. At the same time, 40% of full-time working fathers with children under the age of 12 years had flexible start and finish times, while 29% were able to choose their start and finish times on a day-to-day basis.

Although flexible work arrangements may be available to many employees, fathers may feel economic or social pressure not to use them.[1] In 2002, 30% of fathers used some form of flexible working arrangements to help care for their children aged less than 12 years. This was an increase from 24% in 1993. In contrast, 70% of working mothers used flexible work arrangements in 2002.

Working fathers tended to use different flexible work arrangements to care for children than working mothers. The most frequently used arrangements used by fathers in 2002 were flexible working hours (22%) followed by working from home (9%).

Working fathers had lower levels of use of each of the flexible arrangements than working mothers. The arrangement with the greatest difference was the use of permanent part-time work. Part-time work is one of the most popular methods of balancing paid work and family commitments used by working mothers (35%) but is rarely used by fathers (3%).

Endnotes

1 Human Rights and Equal Opportunity Commission 2005, *Striking the balance: women, men, work and family*, Discussion paper 2005, HREOC, Sydney.

2 Australian Bureau of Statistics 2001, *Births, Australia, 2000*, cat. no. 3301.0, ABS, Canberra.

3 Lamb M and Tamis-Lemonda C 2004, 'The role of the father: an introduction' in *The role of the father in child development*, Hoboken, NJ: John Wiley & Sons.

4 Pocock, B and Clarke, J 2004, *Can't buy me love? Young Australians' views on parental work, time guilt and their own consumption*. Discussion Paper Number 61, The Australia Institute, Canberra

5 Australian Bureau of Statistics 2004, *Working arrangements, Australia, November 2003*, cat. no. 6342.0, ABS, Canberra.

6 Australian Bureau of Statistics 2003, *Child care, Australia, June 2002*, cat. no. 4402.0, ABS, Canberra.

Children living apart from one parent

In 2003, 22% of all children aged 0–17 years had a parent living elsewhere.

Many Australian children live apart from one of their natural parents, mostly due to family breakdown. Family law reforms introduced in 1996 reinforced the right of children to have regular contact with both parents and emphasised joint parental responsibility for children following separation. Recent legislation has strengthened the obligation on relevant courts to consider shared parenting time, although there is no presumption of equal parenting time.[1]

This article looks at the living arrangements of children with a parent living elsewhere, the characteristics of non-resident parents and the contact between children and their non-resident parent.

Children with a parent living elsewhere

In 2003, just over 1 million children aged 0–17 years lived with one parent and also had a natural parent living elsewhere. This represented 22% of children in this age group, a similar proportion to that in 1997.

In cases of separation or divorce of their parents, most children live in one parent families for some period of time. They are much more likely to live with their mother than their father and right from birth some children live with their mother only. In 2003, 87% of children with one non-resident parent had a father living elsewhere and 13% had a mother not living with them.

Data sources and definitions

Most of the data used in this article are drawn from the ABS 1997 and 2003 Family Characteristics Surveys (ABS cat. no. 4442.0).

Children with a parent living elsewhere are children aged 0–17 years who live with one natural parent and also have a natural parent who lives elsewhere.

Parents are natural, step, adoptive or foster mothers or fathers of a child usually resident in the same household. In this article guardians or main carers aged 15 years or over, who usually reside in the same household, are also classified as parents.

Non-resident parents are persons aged 15 years and over who have one or more natural children aged 0–17 years not living with them.

A *family* is two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household.

One-parent family is a family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is usually resident in the household.

Couple family is a family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family may include any number of dependent and non-dependent children (regardless of age) and other related individuals.

Living arrangements of children aged 0–17 years with a parent living elsewhere

	1997		2003	
Family type	'000	%	'000	%
Children in couple families	222.6	22.8	239.3	23.0
Step families	130.3	13.3	142.0	13.6
Blended families	92.3	9.4	97.3	9.3
Children in one-parent families	755.8	77.2	803.1	77.0
Lone mother families	667.1	68.2	705.4	67.4
Lone father families	88.7	9.1	97.7	9.4
Total	**978.4**	**100.0**	**1 042.4**	**100.0**
Father living elsewhere	**859.9**	**87.9**	**911.5**	**87.4**
Mother living elsewhere	**118.5**	**12.1**	**130.9**	**12.6**

Source: ABS 1997 and 2003 Family Characteristics Surveys.

Where lone parents repartner, children can live in step families (with or without children from the step parent). Step families become blended families if the couple in the step family also have natural children of their own.

Between 1997 and 2003 there was little change in the living arrangements of children aged 0–17 years with a parent living elsewhere. In 2003, just over three quarters (77%) of these children lived in one-parent families, 14% in step families and 9% in blended families. The proportions were similar regardless of which of the child's parents lived elsewhere.

Non-resident parents

In 2003, there were 4.8 million parents of children aged 0–17 years. Just over 10% of these (493,000) were non-resident parents, that is, they had a natural child aged under 18 years not living with them.

Non-resident parents: living arrangements and relationship in household — 2003

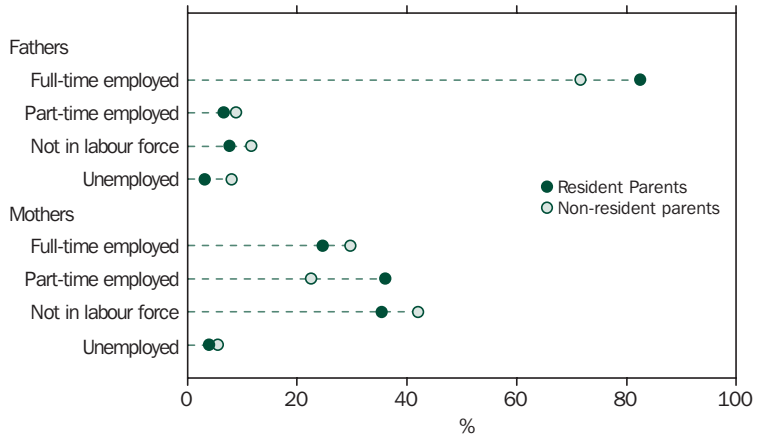
	Males	*Females*
	%	%
Family households	59.9	85.9
Husband, wife or partner	40.2	47.7
Lone parent	6.4	32.9
Dependent student/ non-dependent child	7.8	*1.7
Other family member/ unrelated individual	5.5	*3.5
Lone person household	32.4	9.7
Group household	7.7	*4.5
Total	**100.0**	**100.0**
	'000	'000
Total	**403.4**	**89.8**

Source: ABS 2003 Family Characteristics Survey.

Some non-resident parents (175,000) were also parents, guardians or main carers of children aged under 18 years in the household in which they currently lived. These included non-resident parents who had repartnered and either had further children with their new partner or were step-parents to their new partner's children, or lone parents who lived with one or more of their children as well as having children that did not live with them.

Of the 493,000 non-resident parents, the great majority (82%) were fathers. Just over two in five (42%) non-resident parents were aged 35–44 years and just over a quarter (26%) were aged 25–34 years. The age distribution of non-resident parents was very similar to that of parents who lived with their children.

Parents with children aged 0–17 years: labour force status — 2003



Source: ABS 2003 Family Characteristics Survey.

...living arrangements

In 2003, the living arrangements of non-resident mothers and fathers differed quite markedly, with a much greater proportion of non-resident mothers living in family households (86%) compared with fathers (60%).

Of the 403,000 non-resident fathers in 2003, 40% lived in a family household in the role of husband or partner, 8% as dependent students or non-dependent children and 6% as the lone parent in one-parent families. Almost one in three (32%) non-resident fathers lived in lone person households and 8% in group households. Those who were living as dependent students or non-dependent children are likely to be fathers who have returned to their parent's home following divorce or separation. Some could also be fathers who have never lived with their child.

Compared with non-resident fathers, the 90,000 non-resident mothers were more likely to be living as a lone parent and less likely to be living alone. Almost one half (48%) of non-resident mothers were living as a wife or partner in a new family and one third (33%) as a lone parent. One in ten (10%) were living alone.

...work

In 2003, the labour force participation rate of non-resident fathers was 4 percentage points lower than that of fathers who lived with their children aged less than 18 years (88% compared with 92%). Non-resident fathers were less likely to be employed (80%) than other fathers (89%) and the proportion employed full-time was also lower (72% compared with 82%). In addition, a higher proportion of non-resident fathers were unemployed (8%) compared with fathers who lived with their children (3%).

There is little information on the life transitions of non-resident parents, so it is uncertain whether their lower employment levels reflect their situation prior to becoming non-resident parents or are related to their separation or divorce.

A 2004 study by the Centre for Population and Urban Research using data from the Child Support Agency (CSA) examined incomes of non-resident fathers prior to registration with the CSA (which in most

cases was prior to separation). The study found that, in 1997, a high proportion of non-resident fathers had incomes of a level which indicated that they were likely to be either unemployed or only marginally involved in the labour force.[2] This suggests that lower labour force participation and income of non-resident parents may be associated with parental separation.

The study also looked at changes in income following separation. It concluded that while there were some fathers whose income reduced following separation, there was no clear pattern of non-resident parents reducing income following separation.[2]

In 2003, just over one half (52%) of the 90,000 non-resident mothers of children aged less than 18 years were employed, compared with 61% of mothers who lived with their children of the same age group. The lower proportion of non-resident mothers who were employed is consistent with the higher proportions of non-resident mothers who were lone parents (33%) compared with mothers who lived with their children (19%).

Income by family type — 2003

	Families with children 0–17 years		
	Families with children with a parent living elsewhere(a)	*Families with a non-resident parent(a)(b)*	*Other families(c)*
	$	$	$
Median weekly equivalised gross household (parental) income(d)	304	446	575
Main source of income(e)	%	%	%
Wages and salaries	44.5	60.5	70.6
Business or rental property income	6.7	7.5	12.0
Government pensions, benefits or allowances	47.3	27.8	9.2
	'000	'000	'000
Total families	**644.5**	**168.3**	**1 793.9**

(a) Some families are counted in both 'Families with children with a parent living elsewhere' and 'Families with a non-resident parent' categories.
(b) Families where one or both parents have children aged 0–17 years who do not live with them.
(c) All families with children aged 0–17 years excluding those with children who have a parent living elsewhere and those with a non-resident parent.
(d) Income of parents in household only. Income of other household members not collected.
(e) The categories shown here exclude families where income was nil, not stated or there was no regular source but these families are included in the total.

Source: ABS 2003 Family Characteristics Survey.

Families with children

In 2003, there were 2.5 million families in Australia with children aged 0–17 years. Of these, 645,000 were families where the children had a natural parent who lived elsewhere and 168,000 were families with a non-resident parent (i.e. families where one or both parents had children aged 0–17 years that did not live with them). The families with a non-resident parent were likely to be parenting and providing financial support for children in more than one household. Those who are lone parents in such households may face particular financial and child care difficulties.

...income

In 2003, households with children aged 0–17 years where the children had a natural parent living elsewhere (mainly one-parent families) had much lower incomes than other households with children of the same age, after incomes were adjusted (equivalised) to take account of different household size and structure. Their median weekly equivalised gross household (parental) income was $304, compared with $446 for families with a non-resident parent and $575 for other families with children aged 0–17 years. The income estimates for families with children with a parent living elsewhere include any child support payments from non-resident parents.

Consistent with the fact that families where children had a natural parent living elsewhere had the lowest incomes, a greater proportion of these families depended on government benefits and allowances than the other two types of families. Almost half (47%) of families where children had a parent living elsewhere had government pensions, benefits or allowances as their main source of income, compared with 28% of families with a non-resident parent and 9% of families in neither of these categories. This pattern is closely related to the high proportion (75%) of one-parent families among families with children with a parent living elsewhere. Other

Equivalised gross household income

Equivalised gross household income is a standardised income measure which has been adjusted for the different income needs of households of different size and composition. It takes into account the greater needs of larger households and the economies of scale achieved by people living together. Equivalised income data presented in this article includes the income of parents in the household only, as the income of other household members was not collected in the 2003 Family Characteristics Survey.

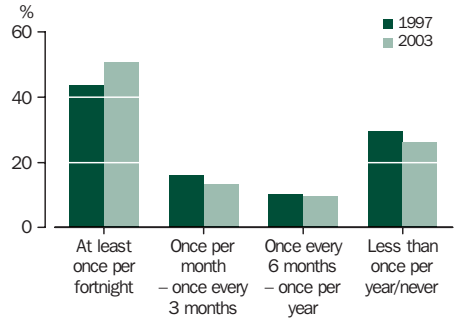
families were most likely to rely on wages or salary (71%) or business or rental property income (12%) as their main source of income. Wages and salaries were the main source of income for 61% of families with a non-resident parent and for 45% of families where children had a parent living elsewhere.

As families with children that had a parent living elsewhere had lower equivalised incomes than families with a non-resident parent and other families, children in the former group may be at higher risk of economic disadvantage compared with children in the latter two groups. However, some of the income of many of the families with a non-resident parent may be needed to pay child support and this would reduce the amount of money available to support the resident children.

Childrens' contact with their parent living elsewhere

There can be many factors influencing the frequency of face to face contact between children and their parent living elsewhere. These can include responsibilities of the non-resident parent in their current family that hinder frequent contact with their children that do not live with them. Children and their non-resident parent can be separated by distance and contact might only be feasible at certain times of the year. Conflict between the resident and non-resident parent may also hinder contact. In contrast, a good relationship between parents may enable more frequent contact between the child and their parent living elsewhere.[3]

Face to face contact with parents living elsewhere



Source: ABS 1997 and 2003 Family Characteristics Surveys.

In 2003, 51% of children aged 0–17 years with a parent who lived elsewhere had face to face contact with that parent at least once per fortnight, an increase from 44% in 1997. At the other end of the scale, 26% had face to face contact less than once per year or never, a decrease from 30% in 1997. This 26% with contact less than once per year or never included 6% who had only indirect contact with their parent who lived elsewhere, such as communicating by phone, e-mail or letter.

The frequency of face to face contact varied according to the family type of the child.

Children(a): face to face contact with their parent living elsewhere — 2003

	At least once per fortnight	*Once per month – once every 3 months*	*Once every 6 months – once per year*	*Less than once per year/never*	*Total*	
	%	%	%	%	%	'000
Family type of child(b)						
Lone mother family	53.5	11.8	8.8	25.9	100.0	705.4
Lone father family	64.9	13.4	7.8	14.0	100.0	97.7
Couple family	37.2	17.9	13.2	31.7	100.0	239.3
Age of child (years)						
0–2	65.5	9.4	*4.0	21.1	100.0	99.9
3–4	60.9	9.1	*7.3	22.6	100.0	98.0
5–11	52.1	12.1	9.9	25.9	100.0	445.7
12–14	46.7	15.0	11.1	27.1	100.0	213.7
15–17	39.0	18.8	12.1	30.0	100.0	185.2
Total	**50.8**	**13.3**	**9.7**	**26.1**	**100.0**	**1 042.4**

(a) Aged 0–17 years with a parent living elsewhere.
(b) Family in which child usually lives.

Source: ABS 2003 Family Characteristics Survey.

Children living in lone father families were most likely to have frequent (that is, at least once per fortnight) contact with their parent who lived elsewhere (65%) and least likely to have contact less than once per year or never (14%). This contrasts with children in couple families who were the least likely to see their parent who lived elsewhere frequently (37%) and most likely to have contact less than once per year or never (32%). Just as children whose resident parent has repartnered have less contact with their parent living elsewhere, data from the Household, Income and Labour Dynamics in Australia survey show that non-resident parents who have repartnered have much less frequent contact with their children who do not live with them than those who remain single.[4]

Frequency of face to face contact varied according to the age of the child. The proportion of children who saw their parent who lived elsewhere at least once per fortnight declined as the age of children increased, from 66% for children aged 0–2 years to 39% for those aged 15–17 years.

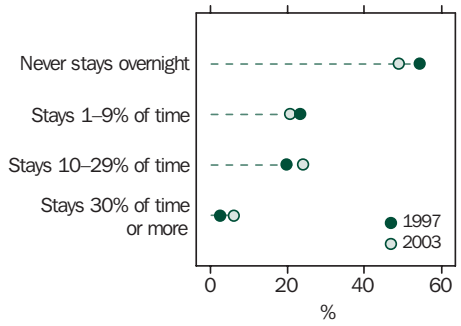
...overnight visits

Although contact between children and their parent living elsewhere is usually considered beneficial, overnight visits provide further opportunities for family activities and emotional bonding.[5] In 2003, 49% of children aged 0–17 years who had a parent living elsewhere did not have an overnight visit with that parent in that year, a lower proportion than in 1997 when 54% of children did not have an overnight visit. In 2003, a further 21% of children in this age group stayed with their parent who lived elsewhere for less than 10% of nights each year. The number of children who stayed overnight with their parent who lived elsewhere for 30% or more of nights is small, but increased substantially from 1997 (3%) to 2003 (6%).

Once again, there is a strong association between the frequency of overnight stays and the child's family type. Children living in lone father families, a comparatively small group, were most likely to stay overnight with their parent who lived elsewhere for 30% or more of nights (17%) compared with children living in couple families (7%) and children living in lone mother families (4%). This pattern also holds when looking at children who never stayed overnight with their parent who lived elsewhere. Over half (52%) of children who lived in lone mother families never stayed overnight, followed by 44% of children in couple families and 36% in lone father families.

The association between overnight stays and the age of the child was less clear. The age group 0–2 years had the highest proportion of children who never stayed overnight (66%), compared with 51% of the 3–4 years age group and 57% of those aged 15–17 years. Children aged 5–11 and 12–14 years had the lowest proportion who never stayed with their parent who lived elsewhere (43% and 45% respectively.)

Children(a): overnight stays with their parent living elsewhere — 1997 and 2003



(a) Aged 0–17 years with a parent living elsewhere.

Source: ABS 1997 and 2003 Family Characteristics Surveys.

Endnotes

1 Parliament of the Commonwealth of Australia, Senate, 2006, *Family Law Amendment (Shared Parental Responsibility) Bill 2005, Revised Explanatory Memorandum.*

2 Silvey, J, and Birrell, B, 2004, 'Financial Outcomes for Parents after Separation', *People and Place,* vol. 12, no. 1, pp. 45–56.

3 Smyth, B 2004, 'Summary and Conclusions', in *Parent-child Contact and Post-separation parenting arrangements, Research Report no. 9,* ed. Smyth, B, Australian Institute of Family Studies, Sydney.

4 Headey, B, Warren, D, and Harding, G, 2006, *Families, Incomes and Jobs: A Statistical Report of the HILDA survey*, Melbourne Institute of Applied Economic and Social Research, University of Melbourne.

5 Caruana, C and Smyth, B 2004, 'Daytime-only contact', in *Parent-child Contact and Post-separation parenting arrangements,* Research Report no. 9, ed. Smyth, B, Australian Institute of Family Studies, Sydney.

Social participation of young people

COMMUNITY FUNCTIONING

In 2002, 28% of people aged 18–24 years had undertaken voluntary work in the previous 12 months.

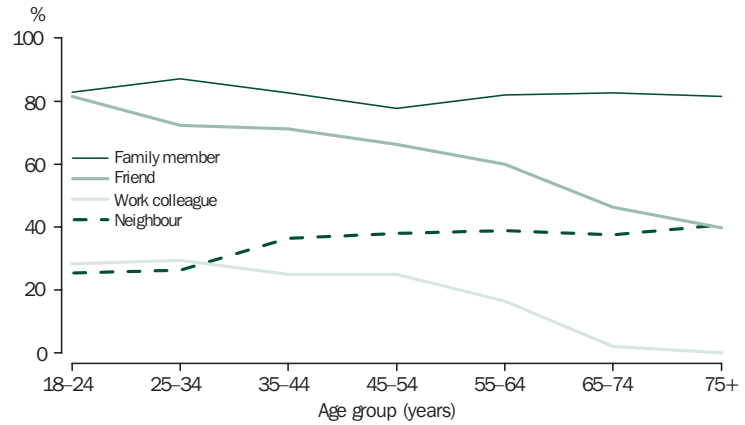
Social participation — in the sense of engaging with others in the domains of life appropriate to one's stage of life — can benefit individuals while also helping to make communities safer and stronger. Ideas about social attachment and social capital, together with government approaches such as the Stronger Families and Communities Strategy, have encouraged interest in the extent to which people are supported by links with family, friends and wider communities; take part in informal socialising; participate in community-oriented activities such as volunteering; and are engaged by wider political life. These aspects of young people's lives are the focus of this article.

While young people's participation in work and study is an important aspect of their social participation, this topic is not discussed here as it has been covered by previous articles in this publication (see *Australian Social Trends 2003,* Pathways from school to work, pp. 96–100 and *Australian Social Trends 2005,* Young people at risk in the transition from school to work, pp. 93–98.)

Family and community support

Family and friends living in the same household are central to most people's social networks and the first point of call for care, practical help, and emotional support. In 2002, 95% of the 1.9 million people aged 18–24 years lived with others, while 5% lived alone, a lower proportion than at older ages.

Sources of support outside the home in times of crisis(a) — 2002



(a) Excludes formal providers such as health professionals.

Source: ABS 2002 General Social Survey.

Data sources and definitions

This article draws principally on results from the ABS 2002 General Social Survey (GSS), which collected data on the characteristics of adults aged 18 years and over living in private dwellings. Some GSS data in this article relate to social participation in the 3 months prior to interview. More detailed data on sports and voluntary work relate to the 12 months prior to interview. For more information see *General Social Survey: Summary Results, Australia, 2002* (ABS cat. no. 4159.0).

Data from the ABS 1995 and 2000 Surveys of Voluntary Work are also included.

In this article *young people* are those aged 18–24 years.

Data on political participation are from a published study by Assoc. Prof. Murray Print et al, commissioned by the Australian Electoral Commission.[6,7]

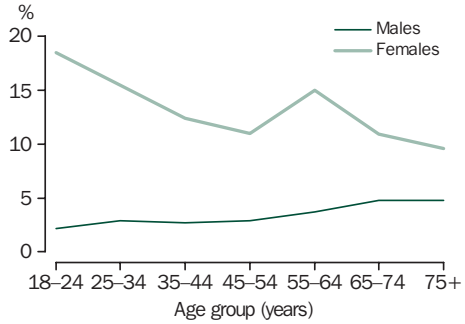
Some of the social networks beyond their household that young people are part of may be indicated by the people they nominate as potential sources of support in times of crisis. In 2002, the great majority of young people aged 18–24 years felt they could call on someone living outside their home for support in times of crisis (98%). Among young people, family and friends were about equally as likely to be named as a source of support in times of crisis (83% and 82% respectively) whereas people in other age groups were more likely to name family than friends. Young people were about as likely as those aged 25–34 years to name work colleagues as a source of support (28% compared with 29%), even though a smaller proportion of young people were employed at the time of interview (72% compared with 78%). Neighbours were also seen as sources of support in times of crisis (25%), although this was more common at older ages (35 years and over).

Most young people also felt they could ask small favours from people living outside their household (93%), and had had contact with family or friends living outside their household in the last week (95%). These results were similar to those for older adults.

Community safety

Social participation may be limited by negative behaviour in the community, such as criminal behaviour, and by people's perceptions

People who felt unsafe or very unsafe at home alone after dark — 2002

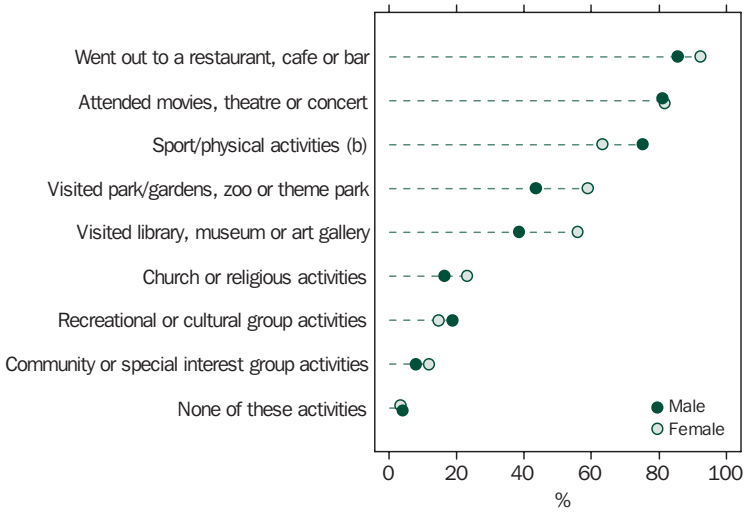


Source: ABS General Social Survey 2002.

regarding the extent of such behaviours and how vulnerable they are to them. Feelings of safety when at home alone are one indication of the level of trust in one's neighbourhood and community, although many factors may influence these feelings.

Relatively few young people felt unsafe or very unsafe alone at home in the day (around 2%), while 10% felt this way at home alone after dark. There were substantial differences between men and women in respect of feeling unsafe: 19% of women aged 18–24 years felt unsafe or very unsafe home alone after dark, higher than for any other age group of either sex. In contrast, around 2% of young men of this age felt unsafe or very unsafe at home after dark. This was despite the fact that young men were the most likely of any age group of either sex to have experienced actual or threatened violence (21%). Young women were less likely than young men to have experienced actual or threatened violence (10%). Both young men and women were more likely than people of other ages to have experienced a break-in or attempted break-in (15% for both sexes).

People aged 18–24 years: participation in social activities(a), — 2002



(a) In the three months prior to interview.
(b) Included participating, attending or watching.

Source: ABS 2002 General Social Survey.

Social activities outside the home

Relationships between people are held together by interaction. As well as support from family and close friends, people are thought to benefit from being part of wider communities of people with shared interests or circumstances, and also from being able to form more loose ad-hoc social connections with other people, outside of these networks. Interacting with people at work or through study and training is an important part of young people's social interaction. Taking part in social activities is also thought to benefit physical and mental health.[1]

In 2002, young people aged 18–24 years had higher levels of participation in social activities outside the home than other adults, with 96% participating in at least one of eight selected activities in the three months prior to interview. Participation declined gradually with age to 79% of the oldest age group (75 years and over) (see *Australian Social Trends, 2004*, Social interactions outside the home, pp. 35–40). Relatively few young people had not participated in any of the selected social or sporting activities (4% or 72,000 young people).

The most common of the selected activities were going out to a cafe, bar or restaurant (89%), attending movies, theatre or concerts (81%) and watching, attending or participating in sporting events (69%). Taking part in community or special interest group activities was the least common of the selected activities (10%).

Sport and physical recreation

Nearly three quarters of 18–24 year olds (73%) had actively participated in sport or physical recreation in the previous 12 months. Just under two-thirds of these participants had taken part in at least one sport or physical recreation activity which was organised by a club, association or other body (65%), while the remainder had participated in non-organised activities only. Almost all participants had been players (99%), and 16% had taken on at least one non-playing role such as coach, instructor or teacher (10%) or referee, umpire or official (7%).

Young men participated in sport and physical recreation at a higher rate than young women (78% compared with 68%). Male participants were more likely to have been involved in at least one organised activity than female participants (68% compared with 62%) and to have taken on at least one non-playing role (16% compared with 13%).

Young men also participated in different activities from young women, with team sports predominating among the leading five. Among the 754,000 young men who had participated in sport or physical activity in the previous twelve months, basketball was the leading sport (played by 19%). This was followed by Australian Rules football (17%), and soccer, aerobics/fitness workouts, and cricket (each around 15%). Among the 636,000 young female participants, the leading activities were aerobics/fitness workouts (32%), walking (31%), swimming (26%), netball (26%) and tennis (12%).

Attending sporting events may also bring social benefits to young people, e.g. by providing a forum for social interaction, and helping to forge the bonds and networks associated with support of local or national teams. In 2003, almost two-thirds of young people (65%) had attended a sporting event in the previous 12 months. As with sport participation, rates for attending sports were higher for young men (70%) than young women (59%), but men and women tended to attend the same sports, with Australian Rules Football the most common.

Religious and community-oriented activities

Church and religious activities are one way that young people bind into communities. In 2002, 20% of young people had attended church or participated in other religious activities in the previous three months (16% of males and 23% of females).

Membership of clubs and associations, especially taking on official roles in them, is regarded as an indicator of civic participation. While direct information on membership of clubs and societies is not available from the 2002 GSS, some data on social activities outside the home may indicate 'associational activity'.[1] In the three months prior to interview, cultural and recreational group activities were undertaken by 17% of young people and community and special interest group activities by 10%. Young men were more likely than young women to have participated in cultural and recreational group activities, which includes activities associated with sports clubs (19% compared with 15%). The reverse was observed for community and special interest group activities (undertaken by 8% of males and 12% of females).

Voluntary work

Some young people undertake unpaid work on behalf of an organised group such as a social or sporting club, welfare organisation, community group, professional association or union. Volunteering generally involves face to face interaction, bringing together a variety of people for the benefit of others, and both develops and draws on social networks (see *Australian Social Trends 2002,* Voluntary work, pp. 146–150).

In 2002, 28% of 18–24 year olds had undertaken voluntary work in the previous 12 months (534,990 young people). Voluntary work through a sport, recreation or hobby group was the most common type of volunteer work among young volunteers (40%). This was followed by welfare and community volunteer work (28%). Young men were more often volunteers in sport, recreation and hobbies, while young women were more often volunteers in welfare and community.

In 2002, volunteering rates were similar for 18–24 year olds (28%) and 25–34 year olds (29%) but these rates were significantly lower than for 35–44 year olds (42%). This was the age group in which volunteering peaked, and probably mainly reflects parental involvement with school and other child-based activities.

ABS surveys show an increase in young people's rate of volunteering between 1995 (17%) and 2000 (27%), the rate then remaining stable to 2002 (28%). Although volunteering increased in all ages groups between 1995 and 2000, the increase was proportionally higher for young people.

In 2000, when detailed information was collected on voluntary work, the most common reasons young volunteers gave for doing voluntary work were 'for personal satisfaction' (40%), 'to help others/the community' (40%) and 'to do something worthwhile' (21%). These were also the leading reasons among people of other ages. Reasons which were more common among people aged 18–24 years than among people of other ages were 'to gain work experience' (17%) and 'to learn new skills' (13%).

As with people of other ages, volunteering seemed to grow out of young people's social networks. Most young people had become involved in volunteering because they knew someone involved (30%), because someone asked them (31%), or because they were already involved with the organisation (24%).

Political participation

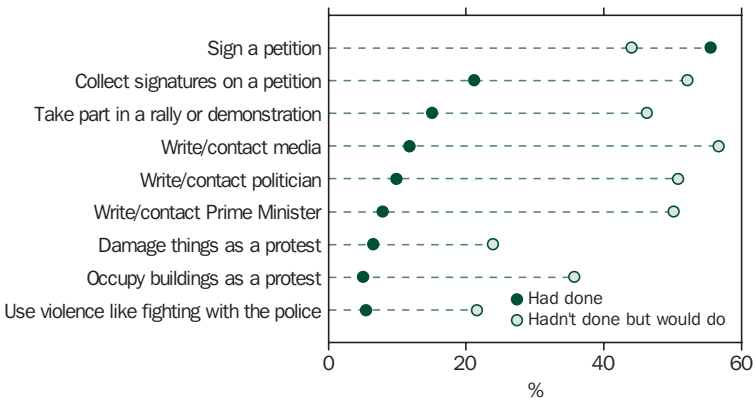
...voting

Youth disengagement from political processes (particularly from voting in national elections) has become a subject of debate in North America and the United Kingdom.[2,3,4] There is concern in these countries that recent low rates of voting among young people may reflect not only a lifecyle stage but also continue a historical change to lower levels of voting.[4] Australia has a high voter turnout because voting is compulsory, and so the extent of underlying engagement is harder to assess. The Australian Electoral Commission (AEC) has commissioned research on this theme.

People in Australia are required to register on the electoral roll and vote from 18 years of age. According to the AEC, young people are less likely to be registered to vote than older people. The AEC estimates that about 400,000 18–25 year olds (19%) were not registered in 2005.[5] This contrasts to 4% of the total population who were thought to be unregistered.

Year 12 school students are a focus of the study commissioned by the AEC, partly because school courses on civics and citizenship have the potential to influence whether young people vote after reaching 18 years.[6] As part of the study, a national survey of Year 12 school students found that a large majority (82%) agreed that 'voting was important' and 87% reported they would vote in Federal elections when eligible. However, only 50% felt that they would vote if it were not compulsory.

Political activities by whether year 12 students had done or would do them — 2004



Source: Print, M, Saha L and Edwards K (2005) *Youth Electoral Study Report 2 Youth, political engagement and voting*<http://www.aec.gov.au>.

...other actions

Year 12 students were asked about other political actions.[7] The activity they were most likely to report that they either had done or would be prepared to do was signing a petition (56% and 44% respectively). Other relatively well supported actions included letter writing (e.g. 12% had written a letter to the media and 57% would do it) and attending rallies or demonstrations (15% had attended and 46% would do so).

Protest activities that appeared to involve at least some degree of law breaking or violence were less well supported. That said, as many as 5–6% of students reported they had taken part in such actions, and the proportion who reported they would do them ranged from 22% for 'using violence, like fighting with the police' to 36% for 'occupying buildings as a protest'. The same questions regarding activities that students 'had done' were asked in surveys in 1987 and 1992, and the results showed little change over the period.

Endnotes

1 Australian Bureau of Statistics 2004, *Information paper: measuring Social Capital; an Australian framework and indicators, 2004*, ABS cat. no. 1378.0, ABS, Canberra.

2 United Kingdom The Electoral Commission 2002, *General Election 2001,* viewed 18 May 2006, <http:www.electoralcommission.org.uk/about-us/election01results.cfm>.

3 Centre for Research and Information on Canada 2004, *Canadian Democracy: bringing youth back into the political process*, Centre for Research and Information on Canada, Montreal.

4 Putnam, R D 2000, *Bowling alone: the collapse and revival of American community*, Chatham, New Jersey.

5 Australian Electoral Commission 2005, *Annual Report 2004–05*, viewed 19 June 2006, <http:www.aec.gov.au/what/publications>.

6 Print, M, Saha, L, Edwards, K 2005, *Youth Electoral Study - Report 1 Enrolment and voting*, viewed 15 April 2006, <http://www.aec.gov.au/_content/What/publications/_youth_study_2/index.htm>.

7 Print, M, Saha, L, Edwards, K (2005) *Youth Electoral Study - Report 2 Youth, political engagement and voting,* viewed 15 April 2006, <http://www.aec.gov.au/_content/What/publications/_youth_study_2/index.htm>.

Community participation of people with a disability

COMMUNITY FUNCTIONING

In 2003, over two-thirds of people aged 18 years and over with a disability usually left their home as often as they liked.

It is widely held that people's engagement with their community enhances their feeling of wellbeing and forges stronger community spirit. This is as much the case for people with disabilities as for the broader population. People with disabilities may be restricted in participation in some areas because of their particular activity limitation or impairment. But factors in their living environment, such as the attitudes of the people among whom they live, the constructed environment and the framing of social institutions may also act as barriers to participation.[1]

People with disabilities are less likely to be employed than people in the broader population, are more likely to have lower income and may rely on a carer. Personal networks are particularly important in supporting the integration of people with disabilities into the wider community. This article examines the extent to which disability is associated with restrictions in community participation and how participation varies with the type and severity of disability.

Trends in community participation

Between 1998 and 2003, the number of Australians aged 18 years and over with a disability who were living in a household increased from 3.1 million to 3.4 million. This increase is largely due to population growth and ageing, combined with policies of deinstitutionalisation and

Data sources and definitions

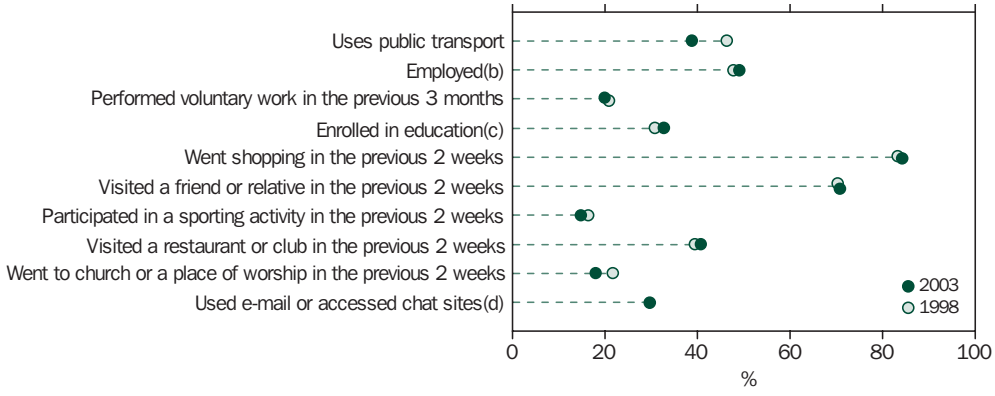
Data presented in this article are from the 1998 and 2003 ABS Survey of Disability, Ageing and Carers (SDAC) and the ABS 2002 General Social Survey (GSS). Unless otherwise stated, data refer to people aged 18 years and older (adults). GSS data refer to people living in private dwellings and SDAC data are confined to people living in *households* (comprising private dwellings and some non-private dwellings such as hostels for the homeless, boarding houses, staff quarters and camping grounds). In this article, when describing data, *people* and *persons* refer only to those living in such dwellings.

A *community* can be seen as an interconnected group of people who can influence one another's wellbeing.[2] *Community participation* is interaction between such people or any action taken to protect or promote the wellbeing of another. Community participation could occur from home.

Disability as defined in SDAC refers to a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months. This definition is consistent with the International Classification of Functioning, Disability and Health,[3] which defines disability as an umbrella term for impairments, activity limitations and participation restrictions.

People with a *profound core-activity limitation* always need help with self care, mobility or communication, or are unable to do these tasks. People with a *severe core-activity limitation* sometimes need help with self care, mobility or communication; or have difficulty understanding or being understood by family or friends; or communicate more easily using sign language or other non-spoken forms of communication.

Selected measures of community participation by people with a disability(a)



(a) Aged 18 years or older who live in a household.
(b) Limited to those aged 18–64 years.
(c) Limited to those aged 18–24 years.
(d) Via the Internet within the previous year.

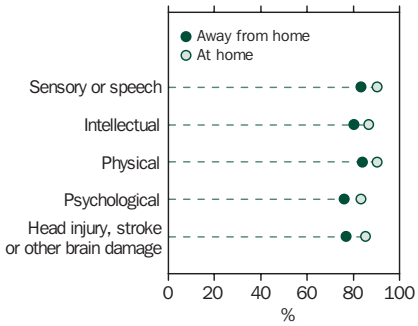
Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

non-institutionalisation of people with a disability.[4] After adjusting data to take account of the different age structures, there was no significant change in Australia's overall rate of reported disability between 1998 and 2003.[5]

Yet there was some change in some of the ways that adults with a disability experienced interaction with others in their community. Public transport use was lower in 2003, with 39% using any type of public transport (down from 46% in 1998). The proportion who went to church or a place of worship in the previous fortnight was also lower (down from 22% in 1998 to 18% in 2003). It is not known whether these changes occurred among adults without a disability as well.

On the other hand, several measures of community participation by adults with a disability were unchanged. For example, the proportion who visited a friend or relative in the previous fortnight was very similar in 1998 and 2003, as was the proportion who went shopping in the previous fortnight (about 84%). In addition, the rate of educational enrolment among those aged 18–24 years remained at about 32% in both 1998 and 2003 and the proportion of those aged 18–64 years who were employed was close to 50% in both years. For analysis of how disability limits participation in paid work (an activity that often generates social networks within a community) see *Australian Social Trends 2005*, Labour force characteristics of people with a disability, pp. 130–135.

Face to face contact with a friend or relative living elsewhere(a) — 2003



(a) Proportion of people aged 18 years or older in each disability group who had such contact within the previous three months.

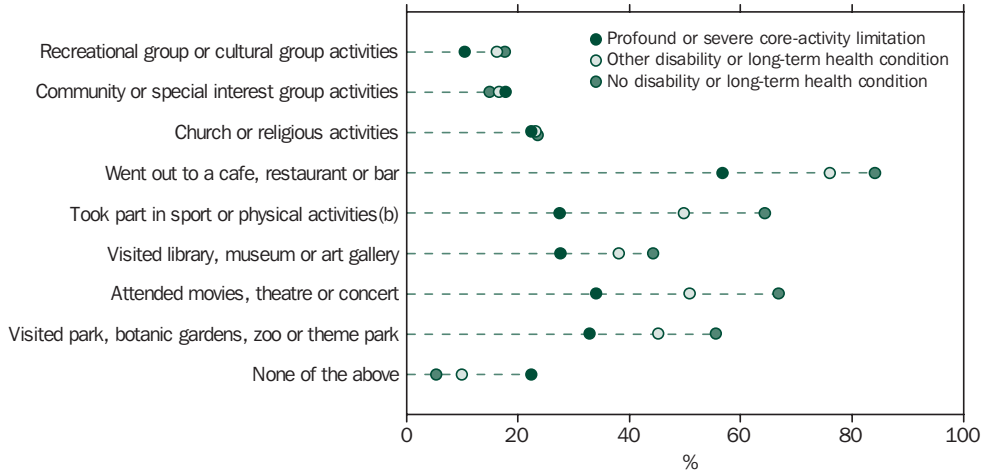
Source: ABS 2003 Survey of Disability, Ageing and Carers.

Variation by type and severity of disability

Some disability groups and those with greater severity of disability have lower rates of participation in selected community activities away from home, and at home. In 2003, adults with a psychological disability were a little less likely than those with a physical disability to have visited, or been visited by, a friend or relative within the previous three months.

In 2002, increased severity of disability among adults living in private dwellings was associated with lower rates of participation within the previous three months in a range of activities offering potential for community interaction. For example, 64% of those with

Rate of participation in selected activities in the previous three months(a) — 2002



(a) Limited to people aged 18 years or older living in a private dwelling.
(b) Includes attendance at a sporting event as a spectator.

Source: ABS 2002 General Social Survey.

no disability or long-term health condition either took part in sport or physical activities or attended a sporting event as a spectator within the previous three months. Participation in this activity within the same recall period was lower (50%) among those with a disability or a long-term health condition who did not have a profound or severe core-activity limitation. It was lower still among those with a profound or severe core-activity limitation (28%).

Going out to a cafe, restaurant or bar, attending a movie, theatre or concert and visiting a library, museum, art gallery, park, botanic gardens, zoo or theme park were other activities for which increased severity of disability was associated with reduced participation. Yet increased severity of disability was not associated with markedly lower rates of participation in group activities such as recreational, cultural, community and special interest group, church or religious activities.

A person's level of participation in a particular activity may be influenced by their disability status. But it may also reflect the preferred activities of people of a certain age. Because rates of disability and rates of profound or severe core-activity limitation rise with age,[5] people with no disability or long-term health condition tend to be younger than people with a disability or a long-term health condition who do not have a profound or severe core-activity limitation. People with a profound or severe core-activity limitation

Disability groups

Disabilities can be broadly grouped depending on the type of functional limitation. A person could be classified to more than one of the following five disability groups:

- *Sensory or speech* (loss of sight or hearing, or speech difficulties)
- *Intellectual* (difficulty in learning or understanding things)
- *Physical* (such as chronic or recurrent pain, incomplete use of arms or fingers, disfigurement or deformity, etc.)
- *Psychological* (nervous or emotional condition, or mental illnesses or conditions)
- *Head injury, stroke or other brain damage* (with long-term effects that restrict everyday activities).

Physical limitations were the most common form of disability, followed by sensory or speech limitations.

Whether leaves home as often as would like and main reason for not doing so — 2003

	Selected disability groups					*All people aged 18 years or older with a disability living in a household (a)*
	Sensory or speech	*Intellectual*	*Physical*	*Psychological*	*Head injury, stroke or other brain damage*	
	%	%	%	%	%	%
Leaves home as often as would like	69.6	59.1	63.2	42.4	49.6	67.4
Leaves home but less often than would like	29.3	38.4	35.6	55.9	48.0	31.6
Own disability / condition or old age	15.9	20.3	18.5	29.3	27.3	15.0
Cost / can't afford to	3.2	5.4	4.8	6.5	6.2	4.6
Another person's health condition or age	2.3	*0.9	2.3	*2.2	*1.6	2.5
Could not be bothered / nowhere to go	2.6	*2.8	2.9	3.2	*3.1	2.6
Fear / anxiety	*0.9	4.3	1.7	9.5	*3.8	1.6
Other reason	4.5	4.7	5.3	5.2	5.9	5.2
Does not leave home	1.1	*2.5	1.2	*1.7	*2.5	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total	**1 013.4**	**284.6**	**2 480.9**	**382.0**	**234.4**	**3 354.0**

(a) Total may be less than the sum of the components as persons may be classified to more than one disability group.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

tend to be the oldest. Nevertheless, in 2002, social participation was substantially lower among people with a profound or severe core-activity limitation than among those without a disability in each of the 18–34, 35–64 and 65 years and over age groups.

In 2003, most adults with a disability who were living in a private dwelling and who participated in social or community activity away from home were usually accompanied to their main social or community activity away from home. Those with a profound or severe core-activity limitation were more likely to be accompanied (81%) than those with less severe core-activity limitation (65%). Accompaniment was most often provided by one or more family members, and in particular by a spouse. Only 2% of those with a profound or severe core-activity limitation usually attended or participated in their main social or community activity away from home as part of an organised group. Among others with a disability, this rate was lower than 1%.

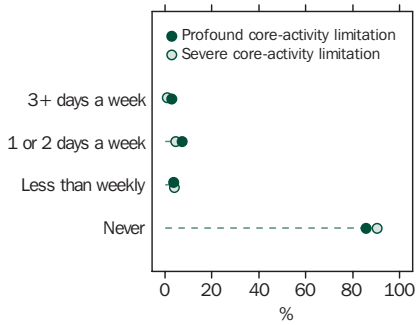
Barriers to participation

In 2003, over two-thirds (67%) of adults with a disability left their home, and usually left as often as they liked. A further 32% also left home, but usually left less often than they would like. Only a very small proportion (1%) did not leave their home at all, including those who did not want to leave their home. The proportion who did not leave home at all varied very little between disability groups, being less than 3%.

There were much larger differences between disability groups in the extent to which people left home as often as they liked. For example, 70% of those with a sensory or speech disability reported that they usually go out of their home as often as they would like. The proportion was considerably lower among those with a psychological disability (42%) and those with head injury, stroke or other brain damage (50%).

Relatively high proportions of these latter two disability groups reported that their disability, health condition(s) or old age mainly prevented them from leaving home as often as they wanted. Cost was also a more commonly reported main barrier to leaving home by people in these two disability groups. Of all the disability groups, those with a psychological disability were most likely to report leaving home less often than desired mainly because of fear/anxiety (10%).

Frequency of attendance(a) at a supervised activity program — 2003



(a) By people aged 18 years and over with a profound or severe core-activity limitation who live in a household.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Supervised activity programs

Activity programs undertaken at safe places under supervision enable people to spend stimulating time away from home where they can meet others in similar life circumstances and participate in group activities such as craft work, sport and dancing. A day care program for frail older people held at a senior citizens club is one example of a supervised activity program.

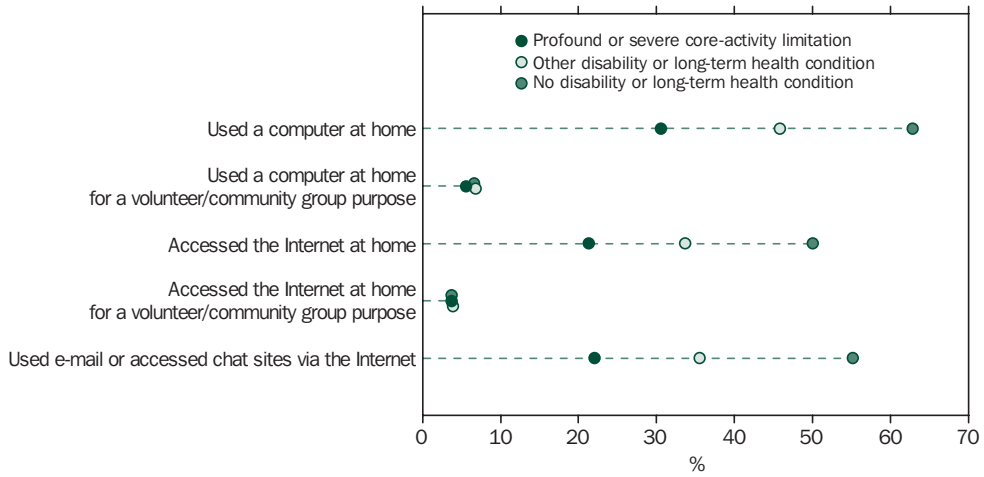
In 2003, the vast majority of adults with a profound or severe core-activity limitation reported they never attend a supervised activity program (86% and 90% respectively). Very small proportions of those with a profound (3%) or severe (1%) core-activity limitation attended a supervised activity program for three or more days per week.

Community participation from home

People can participate in community activity from home, as community participation encompasses establishing and developing relationships with family and friends, socialising, participating with others in activities enjoyed and valued for their own sake and participating in activities that contribute to the overall wellbeing of society.[1]

In 2003, people aged 18 years and over with a disability participated in a range of community activities from inside their home within the previous 3 months. The rate of participation varied by activity: 90% had participated in visits from family/friends, 93% in telephone calls with family/friends, 14% in art/craft work (for/with other people), 8% in church/special community activities, and 8% in voluntary work (including advocacy).

Computer use and Internet access within the previous year(a) — 2002



(a) Limited to people aged 18 years or older living in a private dwelling.

Source: ABS 2002 General Social Survey.

Computers, e-mail and the Internet

Technological change over the past decade has created new ways to participate in community activity from home. Home computers, e-mail, chat sites and a range of other Internet sites offer potential for fresh modes of community interaction.

In 2002, the majority (55%) of adults living in private dwellings had used a computer at home at some time within the previous year. Usage rates were higher among those without a disability or long-term health condition (63%) and lower among those with more severe levels of core-activity limitation. The rate among those with a profound or severe core-activity limitation was 31%. Rates of accessing the Internet at home within the previous year, and of using e-mail or accessing chat sites via the Internet within the previous year, followed similar patterns albeit at lower levels, with increased severity of disability associated with lower rates of participation.

Part of these observed differences are attributable to the different age profiles of the three groups of people with differing severity of disability, as the rate of participation in these particular activities tends to be much higher among younger people than among older people.[6] However, when rates are examined within ten year age ranges, lower participation with increased severity of disability remains clearly evident.

Disability is not associated with lower rates of home-based participation in some aspects of community life. In 2002, regardless of whether or not a person had a disability, the proportion of adults living in a private dwelling who used a computer at home within the previous year for a volunteer/community group purpose was around 6%. Similarly, nearly 4% of adults, irrespective of whether or not they had a disability, accessed the Internet at home for this purpose within the same timeframe.

Endnotes

1 Australian Bureau of Statistics 2004, *Measuring Social Capital: An Australian Framework and Indicators, 2004, Information Paper*, cat. no. 1378.0, ABS, Canberra.

2 Australian Bureau of Statistics 2001, *Measuring Wellbeing: Frameworks for Australian Social Statistics*, cat. no. 4160.0, ABS, Canberra.

3 World Health Organization 2001, *International classification of functioning, disability and health*, WHO, Geneva.

4 Australian Institute of Health and Welfare 2005, *Australia's welfare 2005*, AIHW Cat. No. AUS 65, AIHW, Canberra.

5 Australian Bureau of Statistics 2004, *Disability, Ageing and Carers, Australia: Summary of Findings, 2003*, cat. no. 4430.0, ABS, Canberra.

6 Australian Bureau of Statistics 2003, *General Social Survey: Summary Results, Australia, 2002*, cat. no. 4159.0, ABS, Canberra.

Health

Health: national summary

	HEALTH STATUS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Life expectancy(a)												
1	Life expectancy at birth – males	years	r75.0	r75.2	r75.7	75.9	76.2	76.6	77.0	77.4	77.8	78.1	n.y.a.
2	Life expectancy at birth – females	years	r80.8	r81.1	r81.4	81.5	81.8	82.0	82.4	82.6	82.8	83.0	n.y.a.
3	Life expectancy at age 65 – males	years	r15.7	r15.8	r16.2	16.3	16.6	16.8	17.2	17.4	17.6	17.8	n.y.a.
4	Life expectancy at age 65 – females	years	r19.5	r19.6	r19.9	20.0	20.2	20.4	20.7	20.8	21.0	21.1	n.y.a.
5	Disability-free life expectancy at birth – males	years	n.a.	n.a.	n.a.	57.9	n.a.	n.a.	n.a.	n.a.	59.1	n.a.	n.a.
6	Disability-free life expectancy at birth – females	years	n.a.	n.a.	n.a.	62.0	n.a.	n.a.	n.a.	n.a.	62.2	n.a.	n.a.
7	Males surviving to age 50 years	%	r93.6	r93.7	93.8	93.9	93.9	94.0	94.2	94.4	94.7	94.8	n.y.a.
8	Females surviving to age 50	%	r96.6	r96.7	96.7	96.7	96.7	96.7	96.9	96.9	97.0	97.1	n.y.a.
9	Males surviving to age 70	%	r72.5	r73.2	74.1	74.7	75.5	76.3	77.3	78.1	78.7	79.3	n.y.a.
10	Females surviving to age 70	%	r84.2	r84.5	85.0	85.2	85.7	86.1	86.6	86.8	87.1	87.4	n.y.a.
11	Males surviving to age 85	%	r25.6	r26.3	28.0	28.6	29.9	31.2	32.9	34.0	35.2	36.2	n.y.a.
12	Females surviving to age 85	%	r45.2	r45.9	47.0	47.8	48.9	50.2	51.6	52.2	53.0	53.7	n.y.a.
	Mortality(b)												
13	Total number of deaths	'000	125.1	128.7	129.4	127.2	128.1	128.3	128.5	133.7	132.3	132.5	n.y.a.
14	Standardised death rate (per 1,000 population)(c)	rate	7.8	7.8	7.6	7.2	7.1	6.8	6.6	6.7	6.4	6.3	n.y.a.
15	Infant mortality rate (per 1,000 live births)	rate	5.7	5.8	5.3	5.0	5.7	5.2	5.3	5.0	4.8	4.7	n.y.a.
16	Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	rate	9.4	10.0	9.2	8.3	8.5	8.3	8.4	8.0	8.0	8.0	n.y.a.
	Morbidity and disability prevalence(c)												
17	Cancer(d)	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.4	n.a.	n.a.	n.a.	1.7
18	Ischaemic and other heart disease(d)	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.0	n.a.	n.a.	n.a.	1.8
19	Diabetes(d)	%	2.4	n.a.	n.a.	n.a.	n.a.	n.a.	3.0	n.a.	n.a.	n.a.	3.5
20	Asthma(d)	%	10.9	n.a.	n.a.	n.a.	n.a.	n.a.	11.6	n.a.	n.a.	n.a.	10.2
22	High/very high levels of psychological distress – aged 18 years and over	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	12.6	n.a.	n.a.	n.a.	13.0
23	Arthritis(d)	%	15.6	n.a.	n.a.	n.a.	n.a.	n.a.	13.9	n.a.	n.a.	n.a.	14.9
24	Persons with a disability(e)	%	n.a.	n.a.	n.a.	r19.9	n.a.	n.a.	n.a.	n.a.	r19.8	n.a.	n.a.
25	Persons with a profound/severe core activity restriction(e)	%	n.a.	n.a.	n.a.	r6.3	n.a.	n.a.	n.a.	n.a.	r6.2	n.a.	n.a.

	CAUSES OF DEATH	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Rates are per 100,000 population(b)												
	Leading causes(c)												
26	Cancer	rate	205	205	199	196	191	189	189	188	183	181	n.y.a.
27	Ischaemic heart disease	rate	187	182	175	162	153	142	135	130	123	115	n.y.a.
28	Stroke	rate	82	80	75	71	69	66	63	62	59	56	n.y.a.
	Selected cancers(c)												
29	Lung cancer – males	rate	64	63	59	59	57	55	54	53	49	50	n.y.a.
30	Lung cancer – females	rate	22	22	22	21	21	22	23	24	22	22	n.y.a.
31	Breast cancer – females	rate	29	29	28	27	25	25	25	25	25	23	n.y.a.
32	Prostate cancer – males	rate	41	42	37	37	35	36	35	35	34	32	n.y.a.
33	Skin cancer	rate	8	8	7	7	7	7	8	7	7	7	n.y.a.
	Heart disease and diabetes(c)												
34	Ischaemic heart disease – males	rate	248	240	229	214	202	185	176	170	161	150	n.y.a.
35	Ischaemic heart disease – females	rate	141	136	132	122	115	108	102	98	93	86	n.y.a.
36	Diabetes mellitus	rate	17	18	18	16	16	16	16	17	16	17	n.y.a.
	Motor vehicle accidents												
37	Motor vehicle traffic accident(c)	rate	11	11	9	9	9	9	9	8	8	7	n.y.a.
38	Males aged 15–24 years	rate	33	32	28	27	27	28	27	24	23	20	n.y.a.
39	Females aged 15–24 years	rate	11	8	10	9	9	10	7	8	7	8	n.y.a.
	Suicide												
40	Suicide(c)	rate	13	13	15	14	13	12	13	12	11	10	n.y.a.
41	Males(c)	rate	21	22	24	23	22	20	20	19	18	17	n.y.a.
42	Females(c)	rate	6	5	6	6	5	5	5	5	5	4	n.y.a.
43	Males aged 15–24 years	rate	25	26	31	27	23	20	20	19	18	14	n.y.a.
44	Females aged 15–24 years	rate	6	4	7	6	6	6	5	4	4	5	n.y.a.
	Drug induced(c)												
45	Drug induced	rate	6	6	7	9	9	8	5	5	5	5	n.y.a.
46	Males	rate	9	8	10	12	13	11	7	6	6	6	n.y.a.
47	Females	rate	4	4	4	5	5	5	4	4	3	3	n.y.a.

Health: national summary continued

RISK FACTORS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Immunisation status(f)												
48 Fully immunised children aged 12–15 months	%	n.a.	n.a.	n.a.	r84.5	r87.0	r91.3	r90.4	r91.7	91.0	91.2	91.0
49 Fully immunised children aged 24–27 months	%	n.a.	n.a.	n.a.	68.8	74.9	r85.1	r88.0	r89.4	91.6	91.7	92.1
50 Fully immunised children aged 72–75 months	%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	r82.2	83.7	83.6	84.0
Drinking and smoking(c)												
51 Risky/high-risk drinkers – of males aged 18 years and over	%	10.3	n.a.	n.a.	n.a.	n.a.	n.a.	r13.1	n.a.	n.a.	n.a.	15.2
52 Risky/high-risk drinkers – of females aged 18 years and over	%	6.1	n.a.	n.a.	n.a.	n.a.	n.a.	8.5	n.a.	n.a.	n.a.	11.7
53 Current smokers – of males aged 18 years and over	%	r28.4	n.a.	n.a.	n.a.	n.a.	n.a.	r27.2	n.a.	n.a.	n.a.	26.2
54 Current smokers – of females aged 18 years and over	%	21.8	n.a.	n.a.	n.a.	n.a.	n.a.	r21.2	n.a.	n.a.	n.a.	20.4
Diet and exercise(c)												
55 Overweight/obese adults – of males aged 18 years and over	%	r48.8	n.a.	n.a.	n.a.	n.a.	n.a.	r54.3	n.a.	n.a.	n.a.	58.3
56 Overweight/obese adults – of females aged 18 years and over	%	r32.4	n.a.	n.a.	n.a.	n.a.	n.a.	r38.1	n.a.	n.a.	n.a.	39.9
57 Adults with low usual intake of fruit – of males aged 18 years and over	%	53.2	n.a.	n.a.	n.a.	n.a.	n.a.	r53.3	n.a.	n.a.	n.a.	52.4
58 Adults with low usual intake of fruit – of females aged 18 years and over	%	44.7	n.a.	n.a.	n.a.	n.a.	n.a.	r41.8	n.a.	n.a.	n.a.	40.2
59 Adults who are physically inactive – of males aged 18 years and over	%	35.0	n.a.	n.a.	n.a.	n.a.	n.a.	30.9	n.a.	n.a.	n.a.	33.6
60 Adults who are physically inactive – of females aged 18 years and over	%	r35.4	n.a.	n.a.	n.a.	n.a.	n.a.	r32.2	n.a.	n.a.	n.a.	34.4
High blood pressure(c)(d)												
61 Hypertension – of males aged 18 years and over	%	r14.1	n.a.	n.a.	n.a.	n.a.	n.a.	r13.0	n.a.	n.a.	n.a.	13.6
62 Hypertension – of females aged 18 years and over	%	r14.7	n.a.	n.a.	n.a.	n.a.	n.a.	r14.2	n.a.	n.a.	n.a.	13.8

SERVICES	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
63 Hospital separations (per 1,000 population)(c)	rate	279	291	296	304	309	312	320	328	334	338	n.y.a.
64 Hospital beds (per 1,000 population)	rate	4.5	4.6	4.4	4.3	4.2	4.1	4.1	4.0	4.0	4.0	n.y.a.
65 Average length of stay in hospital	days	4.3	4.3	4.2	4.1	3.9	3.8	3.7	3.6	3.5	3.4	n.y.a.
66 Doctors (per 100,000 population)	no.	n.a.	241	n.a.	n.a.	n.a.	n.a.	248	n.a.	n.a.	n.a.	n.a.
67 Residential aged care places (per 1,000 population aged 70 years and over)(g)	rate	r90.9	r91.1	89.2	87.1	r85.0	r82.9	r81.4	r80.8	r81.8	83.1	n.y.a.
Medicare usage												
Average Medicare services processed(h)												
68 Per person	no.	10.4	10.7	10.7	10.8	10.9	10.9	11.0	11.2	11.1	11.3	11.6
69 Per male	no.	8.3	8.6	8.7	8.8	8.9	8.9	9.0	9.2	9.1	9.3	9.6
70 Per female	no.	12.5	12.8	12.8	12.8	12.9	13.0	13.0	13.3	13.2	13.2	13.6
71 Proportion of Medicare services used by persons aged 65 years and over	%	22.5	23.0	23.6	24.2	24.6	25.3	25.8	26.4	27.4	28.3	29.0

EXPENDITURE	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
72 Persons with private health insurance	%	34.9	33.6	31.9	30.6	30.6	43.0	44.9	44.3	43.5	42.9	42.9
73 Total health expenditure (current prices) per person per year (1999–2000 reference year)	$	2 183	2 313	2 459	r2 594	r2 733	r2 901	r3 196	r3 418	r3 667	3 931	n.y.a.
74 Total health expenditure (current prices) as a proportion of GDP	%	8.3	8.4	r8.6	8.6	8.7	8.9	9.2	r9.4	r9.6	9.7	n.y.a.

(a) Expectation of life is based on three years of data ending in the year shown in the table heading.
(b) Based on deaths registered during the year.
(c) Rates are age-standardised to the Australian population as at 30 June 2001.
(d) Caution should be used when comparing long-term conditions data from different National Health Surveys. Changes in survey methodology and classification may reduce direct comparability between surveys. For more details see: *Occasional Paper: Long-term Health Conditions – A Guide To Time Series Comparability From The National Health Survey, Australia, 2001* (ABS cat. no. 4816.0.55.001); *National Health Survey, 2004–05 User's Guide*, Chapter 7 (ABS cat. no. 4363.0.55.001).
(e) Differences indicated between 1998 and 2003 are not statistically significant.
(f) As a proportion of all children in that age group on the Australian Childhood Immunisation Register.
(g) Ratios calculated by AIHW from data supplied by DoHA. Place numbers are taken from mainstream residential aged care services and do not include places provided, for example, by the EACH program, Multi Purposes Services or places funded under the Aboriginal and Torres Strait Islander Aged Care Strategy.
(h) Average number of services processed per Australian resident.

Reference periods: Data for indicators 1–12 are calculated using data for the three years ending in the year shown in the table heading from 1997 onwards.
Data for indicators 13–16 and 26–47 are for the calendar year.
Data for indicators 17–23 and 51–62 are according to the reference period for the most recent National Health Survey. For 1995 indicators 57–58 are according to the reference period for the 1995 National Nutrition Survey.
Data for indicators 24–25 are according to the reference period for the survey of Disability, Ageing and Carers.
Data for indicators 48–50 are at 31 December.
Data for indicators 63–65 and 67–74 are for the financial year ending 30 June.
Data for indicator 66 are at census night.

Health: state summary

HEALTH STATUS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Life expectancy(a)											
1 Life expectancy at birth – males	years	2002–04	78.0	78.5	77.8	78.0	78.6	76.7	72.3	79.7	78.1
2 Life expectancy at birth – females	years	2002–04	83.3	83.3	82.9	83.1	83.3	81.8	78.0	83.9	83.0
7 Males surviving to age 50 years	%	2002–04	95.0	95.3	94.4	94.7	94.9	94.2	87.8	95.8	94.8
8 Females surviving to age 50	%	2002–04	97.2	97.2	97.0	96.9	97.0	96.6	92.9	97.7	97.1
9 Males surviving to age 70	%	2002–04	79.2	80.4	78.8	79.2	80.5	77.0	66.2	82.8	79.3
10 Females surviving to age 70	%	2002–04	88.0	88.0	87.3	87.4	87.8	85.7	78.1	89.6	87.4
11 Males surviving to age 85	%	2002–04	35.6	37.1	36.1	35.9	37.8	31.4	26.5	40.9	36.2
12 Females surviving to age 85	%	2002–04	54.5	54.5	53.7	54.4	55.1	49.1	40.5	56.3	53.7
Mortality(b)											
13 Total number of deaths	'000	2004	46.4	32.5	24.5	11.6	11.2	3.9	0.9	1.4	132.5
14 Standardised death rate (per 1,000 population)(c)	rate	2004	6.3	6.0	6.5	6.2	6.0	7.1	8.2	5.6	6.3
15 Infant mortality rate (per 1,000 live births)	rate	2004	4.6	4.5	5.2	3.2	3.9	3.6	10.7	6.9	4.7
16 Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	rate	2004	7.2	9.2	8.4	6.9	7.4	6.9	11.2	11.0	8.0
Morbidity and disability prevelance(c)											
17 Cancer	%	2005	1.4	1.8	2.2	1.4	1.9	1.4	n.a.	1.9	1.7
18 Ischaemic and other heart disease	%	2005	1.7	1.5	2.0	1.7	1.9	2.1	n.a.	1.6	1.8
19 Diabetes	%	2005	3.7	3.0	3.3	3.7	4.2	2.8	n.a.	3.7	3.5
20 Asthma	%	2005	9.2	10.2	10.8	11.6	11.2	13.3	n.a.	10.2	10.2
21 Recent injury	%	2005	17.2	18.7	19.3	21.1	19.4	17.5	n.a.	17.6	18.5
22 High/very high levels of psychological distress – aged 18 years and over	%	2005	12.6	13.1	14.4	12.3	11.7	12.8	n.a.	11.9	13.0
23 Arthritis	%	2005	14.5	14.2	16.1	16.4	13.7	18.9	n.a.	14.2	14.9
24 Persons with a disability(d)	%	2003	r17.5	r19.7	r22.2	r22.4	r21.2	r22.4	n.p.	r19.8	r19.8
25 Persons with a profound/severe core activity restriction(d)	%	2003	5.4	r6.4	r7.5	r6.4	6.2	r7.3	n.p.	r6.2	r6.2

CAUSES OF DEATH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Rates are per 100,000 population(b)(f)											
Leading causes(c)											
26 Cancer	rate	2002–04	181	186	186	184	182	213	185	164	184
27 Ischaemic heart disease	rate	2002–04	123	115	136	124	110	134	139	96	122
28 Stroke	rate	2002–04	64	54	63	57	51	56	51	58	59
Selected cancers(c)											
29 Lung cancer – males	rate	2002–04	50	50	53	48	53	58	58	37	51
30 Lung cancer – females	rate	2002–04	22	22	23	22	24	30	22	17	23
31 Breast cancer – females	rate	2002–04	24	26	23	27	23	24	22	19	24
32 Prostate cancer – males	rate	2002–04	32	36	36	32	29	44	26	34	34
33 Skin cancer	rate	2002–04	8	6	9	5	8	8	5	8	7
Heart disease and diabetes(c)											
34 Ischaemic heart disease – males	rate	2002–04	162	152	172	167	144	175	163	139	160
35 Ischaemic heart disease – females	rate	2002–04	92	87	105	91	83	102	110	65	92
36 Diabetes mellitus	rate	2002–04	14	20	16	16	17	25	44	15	17
Motor vehicle accidents											
37 Motor vehicle traffic accident(c)	rate	2002–04	7	7	8	10	9	10	22	5	8
38 Males aged 15–24 years	rate	2002–04	18	21	26	28	26	26	45	10	22
39 Females aged 15–24 years	rate	2002–04	6	6	9	9	11	9	32	5	8
Suicide											
40 Suicide(c)	rate	2002–04	10	11	13	12	11	16	25	9	11
41 Males(c)	rate	2002–04	15	16	21	19	18	26	41	14	18
42 Females(c)	rate	2002–04	4	5	5	5	5	7	7	3	5
43 Males aged 15–24 years	rate	2002–04	14	14	20	18	20	20	70	13	17
44 Females aged 15–24 years	rate	2002–04	3	4	5	5	5	3	12	5	4
Drug induced(c)											
45 Drug induced	rate	2002–04	5	5	4	5	3	5	3	5	5
46 Males	rate	2002–04	6	7	6	7	4	5	4	5	6
47 Females	rate	2002–04	3	4	3	4	3	4	3	5	3

Health: state summary continued

	RISK FACTORS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Immunisation status(e)											
48	Fully immunised children aged 12–15 months	%	2005	90.7	92.0	91.1	91.2	88.8	93.4	90.1	93.7	91.0
49	Fully immunised children aged 24–27 months	%	2005	91.7	92.5	91.9	92.6	91.4	94.4	93.1	94.8	92.1
50	Fully immunised children aged 72–75 months	%	2005	84.7	87.3	81.4	81.8	79.5	86.6	83.1	88.2	84.0
	Drinking and smoking(c)											
51	Risky/high-risk drinkers – of males aged 18 years and over	%	2004–05	14.8	13.0	16.1	15.9	20.2	13.2	n.p.	15.6	15.2
52	Risky/high-risk drinkers – of females aged 18 years and over	%	2004–05	11.1	11.3	12.4	13.4	12.1	10.1	n.p.	12.7	11.7
53	Current smokers – of males aged 18 years and over	%	2004–05	25.1	26.5	28.8	26.8	23.3	28.1	n.p.	19.6	26.2
54	Current smokers – of females aged 18 years and over	%	2004–05	20.2	20.5	20.5	19.7	19.6	24.7	n.p.	14.3	20.4
	Diet and exercise(c)											
55	Overweight/obese adults – of males aged 18 years and over	%	2004–05	58.5	57.1	60.3	57.9	58.3	54.3	n.p.	56.1	58.3
56	Overweight/obese adults – of females aged 18 years and over	%	2004–05	40.2	40.8	38.9	40.6	38.0	42.4	n.p.	41.6	39.9
57	Adults with low usual intake of fruit – of males aged 18 years and over	%	2004–05	52.2	50.3	54.7	56.5	49.6	52.9	n.p.	52.3	52.4
58	Adults with low usual intake of fruit – of females aged 18 years and over	%	2004–05	40.5	38.1	40.4	45.2	39.6	41.8	n.p.	39.3	40.2
59	Adults who are physically inactive – of males aged 18 years and over	%	2004–05	34.0	31.6	36.8	34.4	31.8	35.9	n.p.	23.0	33.6
60	Adults who are physically inactive – of females aged 18 years and over	%	2004–05	36.9	32.0	36.5	34.0	30.4	31.0	n.p.	25.4	34.4
	High blood pressure(c)											
61	Hypertension – of males aged 18 years and over	%	2004–05	13.3	13.5	13.1	13.5	15.7	14.1	n.p.	13.1	13.6
62	Hypertension – of females aged 18 years and over	%	2004–05	13.4	14.2	13.6	13.9	14.0	17.0	n.p.	16.2	13.8

	SERVICES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
63	Hospital separations (per 1,000 population)(c)	rate	2003–04	294	369	357	359	340	n.p.	n.p.	n.p.	338
64	Hospital beds (per 1,000 population)	rate	2003–04	4.0	3.8	4.1	4.5	4.1	n.a.	n.a.	n.a.	4.0
65	Average length of stay in hospital	days	2003–04	3.7	3.3	3.2	3.6	3.4	n.p.	n.p.	n.p.	3.5
66	Doctors (per 100,000 population)	rate	2001	251	252	234	276	232	235	253	287	248
67	Residential aged care places (per 1,000 population aged 70 years and over)(g)	no.	2003–04	81.9	82.7	85.2	88.0	80.4	85.1	82.5	74.0	83.1
	Medicare usage											
	Average Medicare services processed(h)											
68	Per person	no.	2004–05	12.5	11.6	11.4	11.6	10.3	10.6	6.6	9.4	11.6
69	Per male	no.	2004–05	10.5	9.6	9.4	9.6	8.2	8.6	5.1	7.4	9.6
70	Per female	no.	2004–05	14.4	13.6	13.4	13.6	12.3	12.5	8.3	11.3	13.6
71	Proportion of Medicare services used by persons aged 65 years and over	%	2004–05	29.3	30.0	27.8	32.1	26.7	30.1	11.1	22.8	29.0

	EXPENDITURE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
72	Persons with private health insurance	%	2005	44.2	42.1	40.1	43.8	46.1	42.3	31.4	(i)	42.9

(a) Expectation of life is based on three years of data ending in the year shown in the table heading.
(b) Based on deaths registered during the year.
(c) Rates are age-standardised to the Australian population as at 30 June 2001.
(d) Disability estimates for Northern Territory relate to mainly urban areas only.
(e) As a proportion of all children in that age group on the Australian Childhood Immunisation Register.
(f) Rates are calculated for the three year period 2002 to 2004.
(g) Ratios calculated by AIHW from data supplied by DoHA. Place numbers are taken from mainstream residential aged care services and do not include places provided, for example, by the EACH program, Multi Purposes Services or places funded under the Aboriginal and Torres Strait Islander Aged Care Strategy.
(h) Average number of services processed per resident.
(i) The Australian Capital Territory is included in New South Wales.

Reference periods: Data for indicators 1–2 and 7–12 are calculated using the average of three years of data.
Data for indicators 13–16 and 26–47 are for the calendar year.
Data for indicators 17–23 and 51–62 are according to the reference period for the most recent National Health Survey.
Data for indicators 24–25 are according to the reference period for the Survey of Disability, Ageing and Carers.
Data for indicators 48–50 are at 31 December.
Data for indicators 63–65 and 67–72 are for the financial year ending 30 June.
Data for indicator 66 as at census night.

Health: data sources

INDICATORS	DATA SOURCE
1–4, 7–15	*Deaths, Australia* (ABS cat. no. 3302.0).
5–6	ABS 1998 and 2003 Survey of Disability, Ageing and Carers.
16	*Causes of Death, Australia* (ABS cat. no. 3303.0).
17–23, 51–56, 59–62	ABS 1995, 2001 and 2004–05 National Health Survey.
24–25	*Disability, Ageing and Carers, Australia: Summary of Findings*, 1998 and 2003 (ABS cat. no. 4430.0).
26–47	ABS Causes of Death Collection.
48–50	Australian Childhood Immunisation Register <http://www.hic.gov.au/providers/health_statistics/statistical_reporting/acir.htm> last accessed 25 January, 2006.
57–58	ABS 1995 National Nutrition Survey; ABS 2001 and 2004–05 National Health Survey.
63–65	AIHW, *Australian Hospital Statistics,* (AIHW Cat. No. HSE–37).
66	ABS 1996 and 2001 Census of Population and Housing and *Australian Demographic Statistics, September Quarter,* 1996 and 2001 (ABS cat. no. 3101.0).
67	AIHW, *Residential Aged Care in Australia: A Statistical Overview* (AIHW Cat. No. AGE–43).
68–71	Department of Health and Ageing, 2006 <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/medstat-jun05-tables-d> last accessed 25 January, 2006.
72	Private Health Insurance Administration Council <http://www.phiac.gov.au/statistics/membershipcoverage/hosyear.htm> last accessed 25 January, 2006.
73–74	AIHW, *Health Expenditure Australia* (AIHW Cat. No. HWE–32).

Health: definitions

Arthritis (prevalence)

based on people reporting arthritis as a long-term condition (lasting or expecting to last six months or more), including osteoarthritis, rheumatoid arthritis, other arthritis and arthritis type unknown.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Asthma (prevalence)

based on people reporting having asthma. Asthma was assumed to be a long-term condition (lasting or expecting to last six months or more).

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Average length of stay in hospital

the total number of occupied bed days in both public and private hospitals divided by the total number of separations.

Reference: *Australian Hospital Statistics, 2003–04* (AIHW Cat. No. HSE–37).

Average Medicare services processed

average number of services processed per Australian resident per year.

Reference: *Medicare Statistics 1984/85 to September Quarter 2005,* Department of Health and Ageing.

Breast cancer deaths

deaths where malignant neoplasm of the breast is identified as the underlying cause (ICD-9 codes 174–175 up to 1996, ICD-10 code C50 from 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Cancer (prevalence)

based on people reporting a malignant neoplasm (cancer). Cancer was assumed to be a long-term condition (lasting or expecting to last six months or more).

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Cancer deaths

deaths where malignant neoplasms are identified as the underlying cause (ICD-9 codes 140–208 up to 1996, ICD-10 codes C00–C97 from 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Causes of death

underlying causes of death are classified to the International Classification of Diseases 9th and 10th Revision (ICD-9 up to and including 1996, and ICD-10 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Current smokers

persons aged 18 years and over who reported being current smokers (includes current daily smokers and other current smokers). Smoking included manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes. Smoking excludes chewing tobacco and smoking of non-tobacco products.

Reference: *National Health Survey: Summary of Results, 1*995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Deaths

based on the year in which the death was registered. Death is the permanent disappearance of all evidence of life after birth has taken place. The definition excludes deaths prior to live birth. For the purposes of the Deaths and Causes of Death collections conducted by the ABS, a death refers to any death which occurs in, or en route to Australia and is registered with a state or territory Registry of Births, Deaths or Marriages.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Diabetes (prevalence)

based on people reporting diabetes as a long-term condition (lasting or expecting to last six months or more). Diabetes Mellitus Type I and II were assumed to be long-term conditions.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Health: definitions continued

Diabetes mellitus deaths

deaths where diabetes mellitus was identified as the underlying cause (ICD-9 code 250 up to 1996; ICD-10 codes E10–E14 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Disability

is an umbrella term for impairments, activity limitations and participation restrictions. Disability (as collected) is the presence of a limitation, restriction or impairment due to a physical, emotional or nervous condition which had lasted or was likely to last six months or more.

Reference: *International Classification of Functioning, Disability and Health 2001,* World Health Organisation and *Disability, Ageing and Carers, Australia, 2003: Summary of Findings* (ABS cat. no. 4430.0).

Disability-free life expectancy

the average number of years at birth a person might expect to live free of disability.

Reference: *Australian Health Trends, 2001,* (AIHW Cat. No. PHE–24).

Doctors per 100,000 population

the number of practising general and specialist medical practitioners per 100,000 estimated resident population on Census night of that year.

Reference: *2001 Census of Population and Housing,* (ABS cat. no. 2008.0).

Drug induced deaths

any death directly caused by an acute episode of poisoning or toxicity to drugs, including deaths from accidental overdoses, suicide and assault, and any death from an acute condition caused by habitual drug use. The term 'drug' refers to substances classified as drugs that may be used for medicinal or therapeutic purposes and those that produce a psychoactive effect excluding alcohol, tobacco and volatile solvents (e.g. petrol).

Reference: *Information paper: Drug-Induced Deaths – A Guide to ABS Causes of Death Data* (ABS cat. no. 4809.0.55.001).

Fetal death

the delivery of a child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat.

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Fully immunised children

children recorded as having received all the required vaccinations scheduled for their age, or who are following a prescribed catch-up schedule, as a proportion of all children on the Australian Childhood Immunisation Register. The required vaccinations are based on the Australian Standard Vaccination Schedule funded vaccines recommended under the National Immunisation Program.

Reference: Australian Childhood Immunisation Register.

Health expenditure

expenditure on health goods and services, health-related services and health-related investment. Health goods expenditure includes expenditure on pharmaceuticals, aids and appliances; health services expenditure includes expenditure on clinical interventions, health-related services expenditure includes expenditure on public health, research and administration, and health-related investment includes expenditure on capital formation. Health expenditure does not include: expenditure that may have a health related outcome but which is undertaken outside the health sector, (such as expenditure on building safe transport systems or the education of health professionals); expenditure on personal activities not directly related to maintaining or improving personal health; and expenditure that does not have health as the main area of expected national benefit.

Reference: *Health and Welfare Expenditure Series, Number 25: Health Expenditure Australia 2003–04,* (AIHW Cat. No. HWE–32).

Hospital beds (per 1,000 population)

the total number of beds in all hospitals providing acute care services per 1,000 population averaged over each month of the financial year. Hospitals providing acute care services are those in which the treatment typically require short durations of stay.

Reference: *Australian Hospital Statistics, 2003–04,* (AIHW Cat. No. HWE–37).

Hospital separations (per 1,000 population)

the total number of separations in all hospitals (public and private) providing acute care services per 1,000 estimated resident population at 31 December of the reference year. A separation is an episode of care which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay ending in a change of status (for example from acute care to rehabilitation). The inclusion of status changes has been progressively introduced since 1995–96. Hospitals providing acute care services are those in which the treatments typically require short durations of stay.

Reference: *Australian Hospital Statistics, 2003–04,* (AIHW Cat. No. HSE–37).

Hypertension (prevalence)

based on people reporting hypertension (high blood pressure) as a long-term condition (lasting or expecting to last six months or more). People are considered hypertensive if they are on tablets for high blood pressure and/or their systolic blood pressure is 160 mmHg or greater and/or their diastolic blood pressure is 95 mmHg or greater.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Infant mortality rate

the number of deaths of children under one year of age in one calendar year per 1,000 live births in the same calendar year.

Reference: Deaths, Australia (ABS cat. no. 3302.0).

Ischaemic and other heart disease (prevalence)

based on people reporting ischaemic or other heart disease as a long-term condition (lasting or expecting to last six months or more), including heart attack, angina and other heart disease. Heart attack and rheumatic heart disease were assumed to be long-term conditions.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Ischaemic heart disease deaths

deaths where coronary heart diseases, including heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris), are identified as the underlying cause (ICD-9 codes 410–414 up to 1996; ICD-10 codes I20–I25 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Life expectancy

refers to the average number of additional years a person of a given age and sex could expect to live if the age specific death rate of the given period continues throughout his / her life time. Life expectancies are calculated from Life Tables which are statistical models of levels of mortality in a population of different ages. The life tables used for 1995 and 1996 are annual life tables. From 1997, life tables are based on three years ending in the reference year of the table.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Live birth

the birth of a child, who, after delivery, breathes or shows any other evidence of life such as a heartbeat.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Health: definitions continued

Low usual intake of fruit

includes persons who reported usually eating one serve or less of fruit (excluding drinks and beverages) each day and persons who do not eat fruit. Fruit includes fresh, dried, frozen and tinned. A serve of fruit is approximately 150 grams of fresh fruit or 50 grams of dried fruit.

Reference: *1995 National Nutrition Survey* and *National Health Survey: Summary of Results,* 2001 and 2004–05 (ABS cat. no. 4364.0).

Lung cancer deaths

deaths where malignant neoplasm of the trachea, bronchus and lung are identified as the underlying cause (ICD-9 code 162 up to 1996; ICD-10 codes C33–C34 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Medicare services

Medicare is Australia's universal health insurance scheme. Services include access to free treatment as a public (Medicare) patient in a public hospital, and free or subsidised treatment by medical practitioners including general practitioners, specialists, participating optometrists or dentists (specified services only).

Reference: Medicare Australia <http://www.medicareaustralia.gov.au>, accessed 25 January, 2006.

Motor vehicle traffic accident deaths

deaths where motor traffic accidents are identified as the underlying cause (ICD-9 codes E810–E819 up to 1996; ICD-10 relevant codes selected from V01–V89 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Neonatal deaths

deaths of any child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) who was born alive (as defined under live birth) and who died within 28 days of birth.

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Overweight or obese adults

overweight is defined by a body mass index (BMI) greater than or equal to 25 and less than 30, while obesity is defined by a BMI greater than or equal to 30. BMI is body weight in kilograms divided by the square of height in metres. Calculations are based on self reported height and weight.

Reference: *National Health Survey: Summary of Results, 2001 and 2004–05* (ABS cat. no. 4364.0).

Perinatal mortality rate

the annual number of fetal and neonatal deaths per 1,000 live births and fetal deaths combined (where birthweight was at least 400 grams).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Persons with private health insurance

proportion of the total population with private health insurance.

Reference: *Membership Statistics*, Private Health Insurance Administration Council (PHIAC), Canberra, <http://www.phiac.gov.au/statistics/>, accessed 25 January, 2006.

Physically inactive

includes persons who reported that within the two-week reference period they did not undertake any deliberate exercise activities, including walking, for sport, recreation or fitness and persons who exercised at a very low level based on the frequency, duration and intensity of their reported exercise.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Private health insurance

provides cover against all or part of hospital theatre and accommodation costs in either a public or private hospital, medical costs in hospital, and costs associated with a range of services, not covered under Medicare including private dental services, optical, chiropractic, home nursing, ambulance, natural therapies and other ancillary services.

Reference: Private Health Insurance Administration Council, *Insure? Not Sure?* <http://www.phiac.gov.au/insurenotsure/pdf/insure.pdf>, accessed 16 January, 2006.

Profound/severe core activity restriction

the person: is unable to do, or needs help with, a core activity task (communication, mobility or self-care); or, has difficulty understanding or being understood by family or friends; or can communicate more easily using sign language or other non-spoken forms of communication.

Reference: *Disability, Ageing and Carers, Australia: Summary of Findings* (ABS cat. no. 4430.0).

Prostate cancer deaths

deaths where malignant neoplasm of the prostate gland is identified as the underlying cause (ICD-9 code 185 up to 1996; ICD-10 code C61 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Psychological distress

derived from the Kessler 10 Scale (K10). This is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the four weeks prior to interview. The K10 is scored from 10 to 50, with high scores indicating a high level of distress, and low scores indicating a low level of distress. Scores are grouped as follows:

- Low (10–15)
- Moderate (16–21)
- High (22–29)
- Very High (30–50).

Reference: *National Health Survey: Summary of Results,* 2001 and 2004–05 (ABS cat. no. 4364.0).

Recent injury

proportion of people reporting injury (as a result of selected event(s) occurring in the 4 weeks prior to interview) which resulted in medical consultation or treatment, or a reduction in usual activities. Injuries included cuts, fractures, dislocations, sprains, wounds, bruising, concussion, burns and poisoning (other than food poisoning) as well as a range of other injuries.

Reference: *National Health Survey 2004–05 User's Guide* (ABS cat. no. 4364.0).

Residential aged care places (per 1,000 population aged 70 years and over)

the number of beds which are provided for long-term nursing care to chronically ill, frail or disabled persons, and beds provided for people who are unable to live wholly independently but do not require nursing care, per 1,000 of the population aged 70 years and over.

Reference: *Residential Aged Care in Australia 2003–04: A statistical overview* (AIHW Cat. No. AGE–43).

Risky/high-risk drinkers

males aged 18 years and over who reported drinking more than 50 ml and up to and including 75 ml of absolute alcohol (risky) or more than 75 ml (high-risk) on average per day, and females aged 18 years and over who reported drinking more than 25 ml and up to and including 50 ml of absolute alcohol (risky) and more than 50 ml (high-risk) on average per day.

Reference: *National Health Survey: Summary of Results,* 1995, 2001 and 2004–05 (ABS cat. no. 4364.0).

Health: definitions continued

Skin cancer deaths

deaths where malignant neoplasm of the skin, including both melanoma and non-melanocytic skin cancer is identified as the underlying cause (ICD-9 codes 172–173 up to 1996; ICD-10 codes C43–C44 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Standardised rates

these enable the comparison of rates between populations with differing age structures by relating them to a standard population. These rates are the overall rates that would have prevailed in the standard population if it had experienced at each age the rates of the population being studied. The standard population used is the Estimated Resident Population for Australia (persons) at 30 June, 2001. Age standardised rates may vary from those published previously because of different standard populations used and different age groups used for standardisation. Age groups (0–4, then 10 year age groups to 75 years and over), were used in the calculation of age-standardised rates from the National Health Survey and the Survey of Disability and Ageing. Five-year age groups (0–4, 5–9,... 80–84, 85 years and over) were used for age-standardisation for ABS Causes of Death data.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0) and *National Health Survey: Summary of Results, 2004–05* (ABS cat. no. 4364.0).

Stroke deaths

deaths where cerebrovascular disease (causing a blockage (embolism) or rupture (haemorrhage) of blood vessels within or leading to the brain) is identified as the underlying cause (ICD-9 codes 430–438 up to 1996; ICD-10 codes I60–I69 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Suicide deaths

deaths where suicide is identified as the underlying cause (ICD-9 codes E950–E959 up to 1996; ICD-10 codes X60–X84 for 1997 and onwards).

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Survival to 50, 70 and 85 years

the probability of survival to specific ages represents the proportion of survivors from birth to that age in a life table. Estimates are based on life tables calculated by the Australian Bureau of Statistics. The life tables used for 1995 and 1996 are annual life tables. From 1997, life tables are based on three years ending in the reference year of the table. In accordance with this, for 1995 and 1996 the probability of survival is based on annual life tables. From 1997 onwards, the probability of survival is based on three years of data ending in the reference year of the table.

Reference: *Deaths, Australia* (ABS cat. no. 3302.0).

Total number of deaths

Based on the year in which the death was registered. Estimates may differ from estimates given in the Population chapter of this publication, which are based on the year in which the death occurred.

Reference: *Causes of Death, Australia* (ABS cat. no. 3303.0).

Chronic conditions and disability

Arthritis and related disorders, and back problems, were the two conditions most commonly reported as causing most problems for people with a disability.

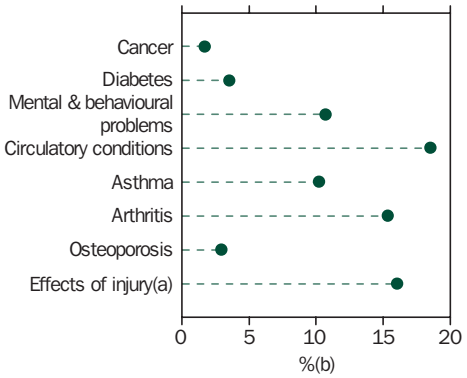
Chronic conditions account for more of the burden of disease in Australia than conditions that are resolved more quickly, such as most infectious diseases. This is a result of medical advances in treating and preventing infectious diseases; increases in life expectancy and an ageing population; and the prevalence of behavioural risk factors such as smoking.[1] Increasingly, chronic conditions are major contributors to the burden of disease worldwide.[2] In 2005, the Australian Health Ministers established the National Chronic Disease Strategy to encourage coordinated action in response to the growing impact of chronic conditions.[1] In 2006, the Council of Australian Governments agreed to a package of measures to address prevention and early detection of avoidable chronic disease.[3]

Chronic conditions

In 2004–05, over three-quarters (77%) of the 19.7 million people living in private dwellings had at least one chronic health condition. The proportion of the population with at least one condition increased with age, from 41% of children aged under 15 years to almost 100% of people aged 65 years and over. These high proportions partly reflect the large number of people with some very common but less serious conditions. For example, the most commonly reported conditions were long sightedness (27%), short sightedness (22%) and hayfever and allergic rhinitis (16%).

However, other chronic conditions had the potential for more serious effects on a person's wellbeing. The more serious long term conditions reported in 2004–05 included some prioritised[1,4] by the Australian Health Ministers. These comprise some large groups of conditions: circulatory conditions (reported by 18% of the population living in private dwellings), mental and behavioural disorders (11%) and cancer (2%); as well as some more specific conditions: asthma (10%), diabetes (4%), arthritis (15%) and osteoporosis (3%).

Selected chronic conditions — 2004–05



(a) Any long term condition reported as resulting from injury. People reporting such conditions are also included in the count for the particular condition.
(b) Proportion of the household population with a health condition that has lasted or is expected to last for six months or more.

Source: ABS 2004–05 National Health Survey.

Data source and definitions

The ABS 2004–05 National Health Survey collected information on the health status of the population, including the prevalence of long term conditions. The survey scope was people in private dwellings; people in health establishments such as hospitals or nursing homes, or in other non-private dwellings, were not covered. See *National Health Survey: Summary of Results, 2004–05* (ABS cat. no. 4364.0).

The ABS 2003 Survey of Disability Ageing and Carers collected information on the characteristics of people with a disability, older people and carers. Its scope was people living in private and non-private dwellings, including health establishments such as hospitals or nursing homes. See *Disability, Ageing and Carers, 2003: Summary Results* (ABS cat. no. 4430.0).

Chronic health condition is a condition which has lasted, or is expected to last, six months or more (also referred to in this article as *long term health condition* or *chronic disease*).

Disability is a limitation in everyday activities, restriction in participation in education or employment, or physical impairment, which has lasted, or is likely to last, for six months or more.

People with *more severe disability* are those who have a *profound or severe core activity limitation*: they sometimes or always need help with mobility or self care, or have difficulty communicating.

Disability type causing most problems is the persons' sole disability or the one nominated as causing most problems for the person.

Main condition is the long term health condition causing most problems for a person with a disability (or is the person's sole long term health condition). It is as reported in response to a question about which condition was causing most problems.

Conditions are classified to systems adapted from the International Classification of Diseases (version 10).

Injury prevention and control is also a priority area and 16% of the population reported that they had long term effects of injury.

Some conditions are present from birth (e.g. congenital conditions like Down syndrome) while others often appear in childhood (e.g. asthma) or later in life (e.g. hypertension). Asthma was the most common condition among children (12%) and hayfever and allergic rhinitis among youth (19%). Among people aged 25–64 years the leading conditions were sight problems (63%) and back problems (23%). Among people aged 65 years and over, the most common conditions were sight problems (96%), arthritis (49%), hypertension (39%) and hearing loss (34%).

Chronic conditions and disability

One of the ways people with chronic disease may be affected by their illness is through disability. That is they may be limited in being able to carry out at least one everyday activity, or in participating in education or employment, or have a physical impairment. The disability people experience results from several factors, including the combination of conditions they have, the severity of these conditions and external factors such as the physical environment, the attitudes of others, and the assistance available to them.

In 2003, 20% of the Australian population, or 4 million people, had a disability. This included 6% of the population (1.2 million people) with more severe disability. These were people who sometimes or always needed help with everyday tasks like walking or dressing, or who had difficulty communicating. The rates of disability increased with age and more severe disability accounted for a greater proportion of all disability at older ages.

People with disability usually had more than one chronic health condition. While there are various approaches to analysing the relationship between the health conditions and the disabilities reported, a simple question 'What is the condition causing most problems?' was included in the disability survey. The most common specific main condition was a musculoskeletal condition: back problems, reported by 610,000 people. The ten leading specific main conditions were reported by 53% of people with a disability.

...musculoskeletal conditions

The 1.4 million people reporting a musculoskeletal condition as the condition causing most problems comprised 34% of the 4 million people with a disability. Back problems and arthritis were the most common main conditions within this group, reported by 15% and 14% of people with a disability respectively. They were also the most common specific main conditions reported out of any condition group.

The types of disability which caused most problems for people with musculoskeletal conditions as the main condition were: chronic or recurring pain or discomfort (39%), restriction in physical activities (23%) and difficulty gripping or holding things (11%).

People with a disability: leading main conditions(a) — 2003

Condition group and specific conditions(b)	'000	%
Musculoskeletal conditions	*1 355.1*	*34.2*
Back problems	610.5	15.4
Arthritis and related disorders	561.3	14.2
Mental and behavioural conditions	*636.9*	*16.1*
Depression/mood affective disorders	110.9	2.8
Circulatory system conditions	*349.8*	*8.8*
Hypertension	80.8	2.0
Stroke	69.8	1.8
Diseases of the ear/mastoid process	*275.9*	*7.0*
Deafness/hearing loss(c)	218.8	5.5
Nervous system conditions	*259.6*	*6.6*
Migraine	92.3	2.3
Injuries and poisoning	*259.4*	*6.6*
Leg/knee/foot damage	115.0	2.9
Respiratory conditions	*240.5*	*6.1*
Asthma	148.9	3.8
Endocrine/nutritional/ metabolic conditions	*115.5*	*2.9*
Diabetes	86.2	2.2
Other conditions	*465.7*	*11.8*
Total	**3 958.3**	**100.0**

(a) Conditions reported as the condition causing most problems for a person with a disability (or which were the person's sole condition).
(b) The eight leading conditon groups (e.g. musculoskeletal conditions) reported as main conditions for people with a disability and the ten leading specific conditions (e.g. back problems).
(c) Complete or partial.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

...mental and behavioural disorders

People with a mental or behavioural disorder as their main condition comprised 16% of people with a disability. The most common main conditions within this group were depression/mood (affective) disorders, reported as a main condition by 3% of people with a disability, followed by developmental disorders (2%) and nervous tension or stress (2%). The disability types causing most problems when mental and behavioural disorders were the main condition were: being slow at learning or understanding (33%), mental illness (20%), nervous or emotional conditions (18%) and speech difficulties (8%).

...circulatory conditions

People reporting circulatory conditions as their main condition accounted for 9% of people with a disability. The specific circulatory conditions most commonly reported as main conditions were hypertension (2%), stroke (2%) and heart disease (2%). The types of disability that people with circulatory conditions as their main condition reported as causing most problems were restriction in physical activities or work (28%), loss of hearing (13%), breathing difficulties (11%) and chronic or recurring pain or discomfort (9%).

More severe disability

Mental and behavioural conditions were more prominent as main conditions for more severe disability than for disability as a whole. They were reported as the conditions causing most problems for 23% of people with profound or severe core activity limitations compared with 16% of all people with disability. Nevertheless, musculoskeletal conditions were the most commonly reported main conditions for people with more severe disability (30%) as they were for all people with disability (34%).

Depression was one of the leading ten specific main conditions for more severe disability and disability as a whole. Three other specific mental and behavioural disorders were among the leading ten specific main conditions for more severe disability although they ranked lower for all disability. These were dementia, attention deficit/hyperactivity disorder (AD/HD) and autism and related disorders. (The three conditions that ranked among the leading ten for all disability but not for more severe disability were leg damage, migraine and hypertension.)

Stroke ranked fourth among main conditions for more severe disability and tenth for disability as a whole.

Overall, 31% of all people with a disability had more severe disability. However, almost all of the 58,600 people with disability and with dementia as the main condition had more severe disability. Another leading main condition which was strongly associated with more severe disability was stroke: 49,000 of the 70,000 people who had a disability and who reported stroke as the main condition had more severe disability (71%). Of people with attention deficit/hyperactivity disorder

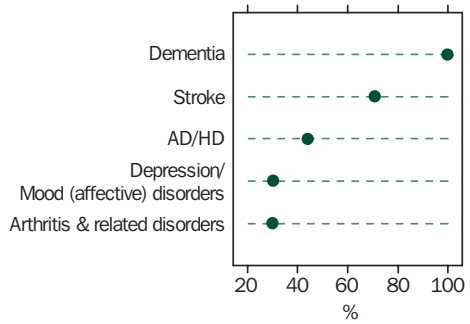
People with more severe disability: leading main conditions(a) — 2003

Condition group and specific conditions(b)	'000	%
Musculoskeletal conditions	*376.1*	*30.2*
Arthritis and related disorders	168.8	13.6
Back problems	149.0	12.0
Mental and behavioural conditions	*290.6*	*23.3*
Dementia	58.6	4.7
Depression (mood) affective disorders	33.6	2.7
Mental retardation/ intellectual disability	31.6	2.5
Attention deficit disorder/ hyperactivity (AD/HD)	25.9	2.1
Circulatory system conditions	*116.5*	*9.4*
Stroke	49.5	4.0
Nervous system conditions	*84.9*	*6.8*
Respiratory conditions	*68.3*	*5.5*
Asthma	32.4	2.6
Injuries and poisoning	*65.4*	*5.3*
Leg/knee/foot/hip damage	31.9	2.6
Diseases of the ear and mastoid process	*49.7*	*4.0*
Deafness/hearing loss(c)	33.9	2.7
Diseases of the eye and adnexa	*35.6*	*2.9*
Other conditions	*157.4*	*12.1*
Total	**1 244.5**	**100.0**

(a) Chronic conditions reported as the condition causing most problems for a person with more severe disability (or which were the person's sole chronic condition).
(b) The eight leading conditon groups (e.g. musculoskeletal conditions) reported as main conditions for people with more severe disability and the ten leading specific main conditions (e.g. back problems).
(c) Complete or partial.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

People with more severe disability(a) as a proportion of all people with disability, by main condition — 2003



(a) Profound or severe core activity limitation.

Source: ABS 2003 Survey of Disability Ageing and Carers.

(AD/HD) as the main condition, 44% had more severe disability. Similarly, 30% of people with disability and depression/mood (affective) disorders as the main condition, and 30% of people with arthritis and related disorders as the main condition, had more severe disability.

Reported cause of main conditions

In 2003, 7% of people with a disability had a main condition which had been present at birth. Other people's main conditions were perceived to arise over the life cycle, being reported as due to: accident or injury (15%), disease, illness or hereditary factors (14%), working conditions, work or overwork (11%), stress, personal or family problems (4%) or allergy, smoking or side effects (4%). However, main conditions were most commonly perceived as having 'just come on' or as due to old age (28%). The reported causes 'present from birth', 'disease, illness or hereditary' and 'just came on or due to old age' were more prominent for people with profound or severe core activity limitation than for all people with a reported disability. People's perceptions of the causes of main conditions do not necessarily correspond to medical opinion. Among conditions reported as having 'just come on' would be some which could potentially have been prevented through changes to diet, exercise, smoking or other behaviour.

Main conditions: reported causes — 2003

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Selected age groups

...children 0–14 years

The leading main conditions among children varies from the total picture, which is dominated by adults and particularly by older people. In 2003, 8% of children aged 0–14 years had a disability (320,000 people). This included 4% of the age group who had more severe disability (167,000 people). Restriction in education is a form of disability which is particularly prevalent among children. There were 200,000 children with restrictions in education (5%). Most children with more severe disability (i.e. who sometimes or always needed help with mobility, self care or communication) also had a restriction in education (70%).

Mental and behavioural disorders were the most commonly reported main conditions for children with a disability (47% or 151,000 children), followed by respiratory conditions (13%). The leading mental and behavioural condition reported as causing most problems for children was attention deficit/hyperactivity disorder (AD/HD), reported for 12% of children with a disability. This was followed by developmental disorders other than learning disorders (10%), autism and related disorders (5%) and mental retardation/ intellectual disability (4%). Asthma accounted for most children with a respiratory condition as main condition (12%).

Some other common specific main conditions (from other disease groups) were speech impediments (6%), unspecified speech difficulties (5%) and complete or partial deafness/hearing loss (4%). Children's main conditions were most often reported as present from birth (33%), to have 'just came on' (20%) or as due to disease, illness or hereditary (16%). Consistent with the main conditions, the disability types causing most problems for children were being slow at learning or understanding (39%), speech difficulties (20%) and breathing difficulties (8%).

...people aged 45–64 years

The differences between the leading main conditions for children and adults reflects both the greater number of years adults have lived, resulting in an increased chance of having experienced injury or contracted conditions, and the effects of ageing. Adults aged 45–64 years are of interest because early diagnosis of chronic conditions, followed by treatment and/or lifestyle changes, could improve health at older ages.

Of adults aged 45–64 years, 27% had a disability (1.2 million people) including 6% of this age group who had more severe disability (289,000 people). The proportion of the population with an employment restriction increases with age up to 65 years. Restrictions in schooling or employment were reported by 901,000 people in this age group (19%). Most of the 289,000 people with more severe disability had an employment or schooling restriction (89%) as well as being limited in core everyday activities.

Diseases of the musculoskeletal system was the most common main condition group (45%), followed by mental and behavioural disorders (10%). The leading specific main conditions reported for people with a disability were back problems (22%), arthritis (17%), complete or partial deafness or hearing loss (5%) and depression and mood (affective) disorders (3%).

In this age group 'just came on or due to old age' was the most common reported cause of main conditions (23%) followed by 'accident or injury' (20%) and 'work, working conditions and overwork' (17%). The disability types causing most problems for people aged 45–64 years were chronic or recurring pain or discomfort (27%), restriction in physical activities or work (19%), loss of hearing (9%) and difficulty gripping and holding things (9%).

...people aged 65 years and over

More than half of people aged 65 years and over had a disability (56% or 1.4 million people). Compared with 45–64 year olds, disability tended to be more severe in this age group: 23% of those aged 65 years and over (around 40% of those with a disability in this age group) had a profound or severe core activity limitation (562,000 people). The rate of disability increased with age among older people, as did their need for assistance (for more information see *Australian Social Trends 2005*, Older people with disabilities. pp. 74–77 and *Australian Social Trends 2006*, Older people in cared accommodation, pp. 84–88.)

The leading main condition group was diseases of the musculoskeletal system (36%), followed by diseases of the circulatory system (16%), mental/behavioural conditions (9%) and diseases of the ear and mastoid processes (9%). The leading specific main conditions reported among people aged 65 years and over were: arthritis and related disorders (21%), back problems (9%) and complete or partial deafness (8%).

Main conditions were most commonly reported to have just come on or to be due to old age (43%) followed by being due to disease, illness or hereditary (15%). The disability types reported as causing most problems among older people were restriction in physical activities or work (21%), complete or partial deafness/hearing loss (18%) and chronic or recurring pain or discomfort (16%).

Endnotes

1 National Health Priority Action Council 2006, *National Chronic Disease Strategy*, Australian Government Department of Health and Ageing, Canberra.

2 World Health Organisation, *Global Strategy on Diet, Physical Activity and Health*, viewed 12 May 2006, <http:// www.who.int/ dietphsyicalactivity/strategy/eb11344/strategy_ english_web.pdf>.

3 Department of Health and Ageing, *Australian Better Health Initiative: promoting good health, prevention and early intervention*, viewed 18 May 2006, <http://www.health.gov.au/internet/wcms/ publishing.nsf/Content/feb2006coag03.htm>.

4 Department of Health and Agening, *Health priorities*, viewed 25 May 2006, <http://www.health.gov.au/internet/wcms/ publishing.nsf/Content/Health+Priorities-1>.

Mortality trends of people aged 50 years and over

Between 1970–72 and 2002–04, reductions in mortality of people aged 50 years and over have been responsible for 70% of the male and 73% of the female increase in life expectancy at birth.

Australians today are living longer than ever with life expectancies amongst the highest in the world. A boy born in 2002–04 could be expected to live on average to 78.1 years of age, while a girl could be expected to live to age 83.0 years, gains of 10.3 and 8.5 years respectively over the 32 years from 1970–72.

Increases in life expectancy are desirable insofar as they represent improving health and longevity of the population, but they also present challenges. Greater life expectancy, by definition is a contributor to population ageing, and thus has implications for future government spending in health and aged care as well as provision of income for a potentially longer retirement.

Throughout the 20th century, significant gains were made in life expectancy of Australians. These gains can be viewed as having occurred in two broad phases. The first phase was driven by declines in infant and child mortality, while the second was driven primarily by reductions in death rates of people aged 50 years and over. The transition between the phases occurred just before the middle of the century (1946–48) for females and around 1970–72 for males.[1]

The increase in life expectancy at birth since 1970–72 has resulted from reductions in death rates at all ages, although reductions in mortality of people aged 50 years and over have been responsible for 70% of male and 73% of female life expectancy improvement. This article examines the age-groups, and specific causes of death for each sex that have contributed to the increasing longevity of the population aged 50 years and over.

Life expectancy and mortality

Life expectancy and survival rates are based on life tables. Life tables are statistical models used to show the levels of mortality of a population at different ages. The two sets of life tables used in this article (1970–72 and 2002–04) are based on mortality rates for each of the three year periods. The life table depicts the mortality experience of a hypothetical group of newborn babies throughout their entire lifetime. It is based on the assumption that this group is subject to the age-specific mortality rates of the three year reference period.

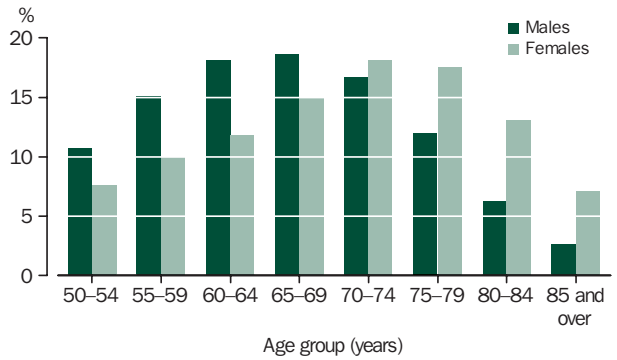
Increases in life expectancy in the population result from overall reductions in death rates over time. A statistical method[2] has been used to determine the age-groups' relative contribution to the improvement. The two critical factors determining the increase in life expectancy are: 1) the age at which reductions in deaths occur (the younger the reductions occur, the greater the average life-years to be lived in the future); and 2) the absolute size of the reduction in death rates.

The 1970–72 life tables used in this analysis were prepared by the Australian Government Actuary (although published by the ABS), while the 2002–04 life tables were produced by the ABS.

Age groups contributing to increased life expectancy

In 2002–04 males aged 50 years could expect to live a further 31 years on average to age 81

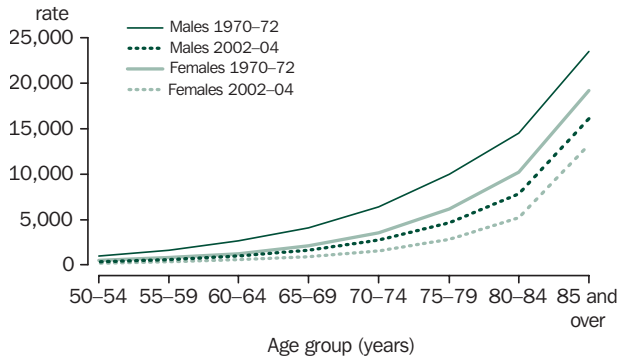
Age contribution(a) to increased life expectancy at age 50 years between 1970–72 and 2002–04



(a) Percent contribution from reduction in mortality at each age group (sum of age groups = 100%).

Source: Australian Government Actuary, Australian life tables 1970–72, (ABS Ref. no. 4.31); *Deaths, Australia, 2004* (ABS cat. no. 3302.0).

Age-specific death rates(a) for the population aged 50 years and over — 1970–72, 2002–04



(a) Deaths per 100,000 population.

Source: ABS Causes of Death collection.

years, an increase of 7.8 years over the 1970–72 life expectancy. The female life expectancy at 50 years of age increased by 6.5 years over the same period. In 2002–04 females aged 50 years could expect to live an extra 35 years to almost 85 years of age.

The gains in life expectancy at age 50 years for males were achieved predominantly through mortality declines at the younger end of the 50 years and over population, with 63% of the increase in life expectancy coming from those aged 50 to 69 years. In contrast, only 44% of the female increase in life expectancy came from mortality improvements of those aged from 50 to 69 years, with the majority of the gains (56%) being achieved through the mortality reductions of those aged 70 years and over. The older age contribution for the female gain in life expectancy results from the female death rate being already quite low for those aged 50–69 years in 1970–72. Therefore, despite age-specific death rates for females aged 50–69 years more than halving over the 32 years to 2002–04, the absolute decline in death rates in that age group was not as influential in increasing female life expectancy as the decline in the death rates of women over 70 years of age.

Selected causes of death and their contribution to gains in life expectancy at age 50 years

In 1970–72, six specific causes of death were responsible for 80% of all deaths of people aged 50 years and over. In 2002–04, these same selected causes of death were responsible for 75% of all deaths of people aged 50 years and over. However, the death rates in the latter period were generally much lower than in 1970–72 with the all-cause standardised death rate falling by around half for both males (down 51%) and females (down 48%).

As would be expected, the causes of death with the highest death rates have a greater potential to contribute to improved life expectancy through their reduction than the less significant causes.

Reductions in deaths from ischaemic heart disease and cerebrovascular disease (stroke) have been key to improvements in life expectancy at age 50 years in recent decades. Reductions in associated risk factors and improvements in treatment and care have been instrumental in reducing deaths from these causes.[4] On the other hand, the small overall declines in cancer death rates for people aged 50 years and over have not translated into significant gains in life expectancy.

Death rates and age standardising

Death rates in this article use averages of three years of deaths data for each period (i.e. 1970–72 and 2002–04) and the estimated resident population for the middle year of each period as the death rate denominator.

Death rates used for comparisons of particular causes of death over time have been age standardised. Age standardising adjusts death rates to remove the effect of differing age structures of populations when making comparisons of death rates. The standard population used was the 2001 estimated resident population.

Cause of death data are drawn from the ABS Causes of Deaths collection and are presented according to the ICD–10 classification. ABS publish comparability factors[3] to account for the introduction of the Automated Coding System in 1997 and these have been applied to the 1970–72 deaths.

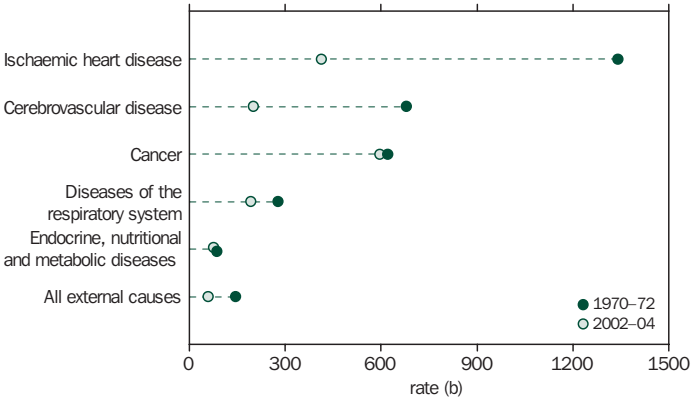
Underlying and multiple causes of death

Analysis in this article uses the concept of the underlying cause of death. Underlying causes of death are classified by the disease or injury which initiated the train of morbid events leading directly to death.

In addition to the underlying cause of death, it is possible to examine other contributing causes of deaths. Multiple cause of death (MCD) coding was introduced in 1997 to record all information from the death certificate on morbid conditions, diseases and injuries. MCD data can provide insights of the number and type of combinations of causes that contribute to deaths.

In 2003, 81% of deaths of people aged 50 years and over had more than one cause contributing, compared with 75% of deaths of people aged less than 50 years. Of the deaths that had more than one contributing cause, the average number of contributing causes was 3.5.

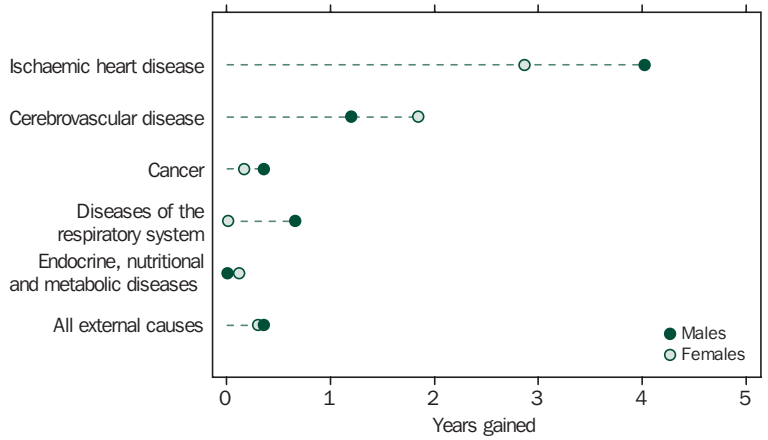
Selected causes of death(a) — 1970–72 and 2002–04



(a) Persons aged 50 years and over.
(b) Deaths per 100,000 population. Standardised to 2001 Australian population.

Source: ABS Causes of Death collection.

Gain in life expectancy at age 50 years in 2002–04 from decreases in selected causes of death from 1970–72



Source: Australian Government Actuary, Australian life tables 1970–72, (ABS Ref. no. 4.31); *Deaths, Australia, 2004* (ABS cat. no. 3302.0); ABS Causes of Death Collection.

...ischaemic heart disease

In 2002–04 ischaemic heart disease accounted for one-fifth (20%) of deaths of people aged 50 years and over. In 1970–72, over one-third (35%) of deaths were attributed to ischaemic heart disease. The male and female standardised death rates for ischaemic heart disease of those aged 50 years and over fell by around two-thirds (70% and 68% respectively). For males aged 50 years, the result of this decrease has been a gain of 4 years of life expectancy (just over half of the total gain in the period). Females gained 2.9 years (or 45% of the total female increase in life expectancy at age 50 years) from declines in ischaemic heart disease death rates.

...cerebrovascular disease

Cerebrovascular disease (stroke) was responsible for 10% of deaths of people aged 50 years and over in 2002–04 and 16% in 1970–72. Over the period, death rates also decreased dramatically with declines of 70% for males and 71% for females. These were estimated to have contributed 1.1 years to male and 1.8 years to female life expectancy at age 50 years in 2002–04.

...cancer

Cancer was the cause of more deaths than any other selected cause for people aged 50 years and over in 2002–04 with 29% of all deaths. In 1970–72 the proportion was 17%.

Compared to the other major causes of death, cancer death rates have declined relatively slowly. In the 32 years to 2002–04, the standardised death rates for people aged 50 years and over declined by only 6% for males and 4% for females. This small reduction in death rates was reflected in a minor contribution to increased life expectancy at age 50 years – around five months for males and two months for females.

Males had an 18% decrease in the lung cancer death rate over the 1970–72 to 2002–04 period, contributing around three months to male life expectancy at 50 years of age. Females, on the other hand, had an increase of more than two and half times (163%) in their lung cancer death rate, equivalent to almost a three month reduction in life expectancy for women aged 50 years. This reflects an increase in smoking rates among women in the latter third of the 20th century.[4]

Female breast cancer and colorectal cancer death rates declined by 13% and 37% respectively. Together they added around three months to life expectancy. Males also

Health Adjusted Life Expectancy (HALE)

While improving life expectancies indicate increasing longevity of the population, they are unable to measure the health states of the population. Health-adjusted life expectancy (HALE) is a type of life expectancy that measures the equivalent number of years lived in full health that a person can expect to live. HALE is measured by deducting the time spent in poor health from life expectancy.[5]

The World Health Organisation (WHO) has published HALE at birth and at age 60 years for all member states for 2002. At 60 years of age, Australian males and females could expect an average additional 16.9 and 19.5 years of life, free of poor health respectively. These HALEs were close to those ranked highest in the world.

Healthy life expectancy at age 60 years, selected countries — 2002

	Males	*Female*
Country	Years	Years
Australia	16.9	19.5
Canada	16.1	19.3
France	16.5	20.3
Japan	17.5	21.7
New Zealand	16.0	18.2
Switzerland	17.1	20.4
Sweden	17.1	19.6
United Kingdom	15.0	16.9
United States of America	15.3	17.9

Source: WHO 2004 World Health Report.

had a (17%) decline in colorectal cancer death rates, although the impact on life expectancy was less than one month.

...diseases of the respiratory system

Deaths from diseases of the respiratory system (mainly pneumonia and other obstructive pulmonary disease) made up 9% of all deaths in 2002–04 and 7% in 1970–72.

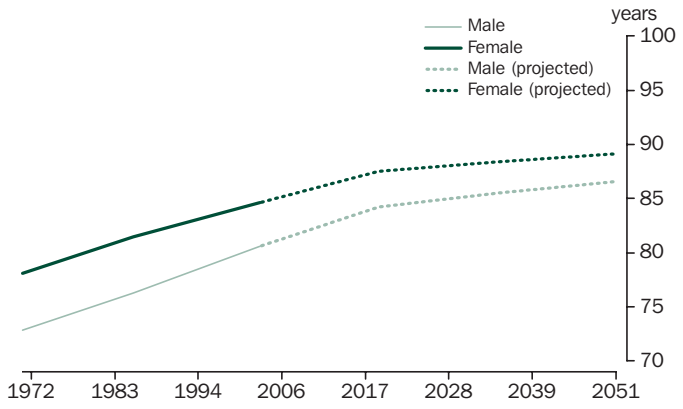
For males aged 50 years and over, the standardised death rate for diseases of the respiratory system decreased by 46% and contributed around 8 months to male life expectancy at age 50 years. Among females however, there has been no reduction in the death rate from this cause. As with lung cancer, this may also be attributed to the increase in womens' smoking prevalence in the latter part of the 20th century.[4]

...endocrine, nutritional and metabolic diseases

Deaths from endocrine, nutritional and metabolic diseases (mostly diabetes mellitus) was the underlying cause of 4% of deaths for people aged 50 years and over in 2002–04 and 2% in 1970–72.

Between age 50 and 79 years, males experienced a decline in the death rates for endocrine, nutritional and metabolic diseases, but this was offset by an increase in the death rate from age 80 years. Females had a similar pattern except the increase in the age-specific death rate was seen at age 85 years and over only. The impact on life expectancy at age 50 years for males was negligible, and only around two months for females.

Total life expectancy from age 50 years(a)



(a) Data for 1970–72 and 2002–04 and projections to 2051.

Source: Australian Government Actuary, Australian life tables 1970–72, (ABS Ref. no. 4.31); *Deaths, Australia, 2004* (ABS cat. no. 3302.0); ABS Population Projections.

...external causes

External cause of death (accidents, poisonings and violence) contributed 3% of all deaths of people aged 50 years and over in 2002–04, and 4% in 1970–72.

The standardised death rate for this cause has halved for both males and females. As a lower order cause of death however, the effect on life expectancy at age 50 has been small – around 4 months for both males and females. Suicide deaths contributed one-quarter (26%) of male external causes of death, although the rate was 39% less in 2002–04 than in 1970–72.

Projections

ABS has produced population projections from 2005 to 2101 that are underpinned by assumptions of future mortality in addition to fertility and overseas migration. The medium series projection assumes life expectancy will continue to increase until 2051 where males aged 50 years could expect to live to 86.6 years, while females aged 50 years could expect to live to 89.1 years. These projections represent increases of 6.0 years for males and 4.5 years for females over the 47 years from 2002–04 to 2051. They also point to a halving of the rate of increase in life expectancy experienced over the past three decades. While the average rate of increase in life expectancy at age 50 years for males was 3.1 months per year between 1972 and 2002, between 2004 and 2051 it is assumed to increase by an average of around 1.5 months per year. For females the rate of increase in life expectancy at age 50 years averaged 2.6 months per year between 1972 and 2002, while the assumption over the 2004 and 2051 period is for an increase of 1.1 months per year.

Endnotes

1 Australian Bureau of Statistics 1998, *Deaths, Australia, 1997*, cat. no. 3302.0, ABS, Canberra.

2 Pollard, J. H. 1989, 'Mortality changes and their economic consequences, with particular reference to cause of death', in *Studies in Contemporary Economies*, eds A. Wenig &K. F. Zimmerman, Demographic Change and Economic Development, Sprigen-Verlag, Berlin, Heidelberg.

3 Australian Bureau of Statistics 2006, *Causes of death, Australia, 2004*, cat. no. 3303.0, ABS, Canberra.

4 Australian Institute of Health and Welfare 2004, *Australia's Health 2004*, AIHW, Canberra.

5 World health Organisation 2004, World Healthreport, viewed 30 March 2006, <http://www.who.int/whr/2002/annex_table4.xls>.

Disability among Aboriginal and Torres Strait Islander peoples

HEALTH STATUS

In 2002, over one-third (36%) of Aboriginal and Torres Strait Islander peoples, aged 15 years and over, had a disability or long-term health condition.

Health and disability can affect people in a number of life areas, including the capacity to go to school, work and earn an income. Aboriginal and Torres Strait Islander peoples are more likely to have a disability or long-term health condition than non-Indigenous people, and about twice as likely to have a profound or severe disability as non-Indigenous people.

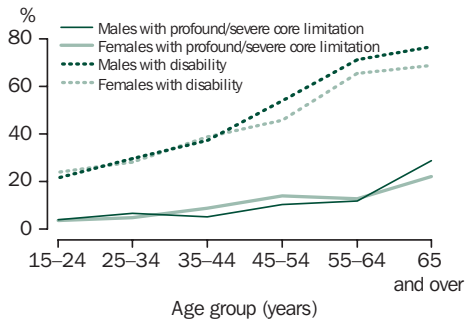
The National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003–2013 was endorsed by all Australian governments in July 2003. It provides a commitment to improving Indigenous health and also recognises the impact of many economic and social factors on health status. One of the goals identified is improved services and employment assistance for Indigenous people with disabilities.[1]

Prevalence of disability

The 2002 NATSISS estimated that 103,000 (36%) Indigenous people aged 15 years and over, living in remote and non-remote areas, had a disability or long-term health condition. The proportion of Indigenous people with a disability was similar for both men (37%) and women (36%) and increased with age. In the 15–24 years age group, 22% of men and 24% of women had a disability or long-term health condition, increasing to 77% of men and 69% of women aged 65 years and over.

The prevalence of disability or long-term health condition for the remote and non-remote Indigenous populations aged 15 years and over were the same (both 36%).

Indigenous persons(a): disability — 2002



(a) Aged 15 years and over.

Source: ABS 2002 NATSISS.

National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

This article uses data from the ABS 2002 NATSISS to examine disability among Indigenous people aged 15 years and over, in remote and non-remote areas, using a common set of disability criteria. The relationship between disability and other socioeconomic indicators is also examined.

The 2002 NATSISS used a broader criteria to measure disability in the non-remote Indigenous population than in the remote Indigenous population. The broader criteria was comparable to criteria used in the ABS 2002 General Social Survey (GSS) for the non-remote Australian population. After age standardising this data, it is possible to make comparisons between Indigenous people aged 18 years and over in non-remote areas and non-Indigenous people of the same age.[2] Further details of the disability measures are provided in the box on page 82.

Limitations and disability

Disability or long-term health condition as defined in the 2002 NATSISS refers to a limitation, restriction, impairment, disease or disorder, which has lasted, or was likely to last for six months or more, and which restricted a person's ability to perform everyday activities.[2]

Core activity limitation refers to a limitation in the performance of one or more core activities such as self-care (eating, washing, dressing, toileting), mobility or communication. People with a *profound core activity limitation* always need help or supervision with self-care, communication or mobility, or are unable to perform these tasks themselves. People with a *severe core activity limitation* sometimes need help with self-care, communication or mobility, have difficulty understanding or being understood by friends or family, or can communicate more easily using sign language or other non-spoken forms of communication.[2]

These estimates of disability or long-term health condition underestimate the likely prevalence of disability. They are based on a short question set to identify people with a disability that is asked in both remote and non-remote areas rather than the broader disability question set that is only asked in non-remote areas. (See box on p.82 for more information about the measures of disability.)

Severity of disability

People with a disability may be limited in their ability to perform everyday activities, sometimes needing help from others. The severity of their disability relates to how much

Indigenous persons(a): disability type — 2002

	Age group (years)			
	15–44	*45–64*	*65 and over*	*Total*
Disability type(b)	%	%	%	%
With a disability or long-term health condition	29.0	55.7	72.4	36.5
Sight, hearing, speech	10.2	20.7	39.9	13.7
Physical	17.4	40.1	51.6	23.6
Intellectual	6.9	6.1	*11.1	7.0
Type not specified	10.3	32.7	42.0	16.3
No disability or long-term health condition	71.0	44.3	27.6	63.5
Total	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
Total	**211.6**	**57.7**	**12.9**	**282.2**

(a) Aged 15 years and over.
(b) People may have more than one disability type.

Source: ABS 2002 NATSISS.

assistance they need. People with a profound or severe limitation need assistance with at least one core activity (such as walking, toileting, dressing or communicating).

In 2002, 21,800 (8%) Indigenous people aged 15 years and over had a profound or severe core activity limitation, with little difference between the rates for men and women. There was also no significant difference in the rates of profound or severe core activity limitation between Indigenous people of this age living in remote and non-remote areas of Australia (9% in remote and 7% in non-remote areas). However, women aged 65 years and over living in remote areas had higher rates of profound or severe limitation (33%) than those in non-remote areas (17%).

Indigenous persons(a): proportion indicating fair or poor self-assessed health — 2002

	Age group (years)			
	15–44	*45–64*	*65 and over*	*Total*
	%	%	%	%
With a disability or long-term health condition	36.3	65.0	69.7	48.3
No disability or long-term health condition	7.7	14.7	21.4	9.0
Proportion in age group	**16.0**	**42.7**	**56.4**	**23.3**
	'000	'000	'000	'000
Total in age group	**211.6**	**57.7**	**12.9**	**282.2**

(a) Aged 15 years and over.

Source: ABS 2002 NATSISS.

Remoteness areas

The ABS Remoteness classification splits Australia into six areas according to their relative *remoteness*. The six Remoteness Areas are: Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia; and Migratory. For further information see *Statistical Geography Volume 1 – Australian Standard Geographical Classification (ASGC), 2001* (ABS cat. no. 1216.0). In this article, *remote areas* refers to Remote Australia and Very Remote Australia and *non-remote areas* refers to Major Cities of Australia, Inner Regional Australia and Outer Regional Australia.

Disability types

A person could be classified to one or more of the following disability groups:

- *Sight, hearing or speech* includes people with sight problems not corrected by glasses or contact lenses; hearing or speech problems
- *Physical* includes people experiencing shortness of breath; blackouts, fits, loss of consciousness; chronic or recurring pain; limited use of arms, fingers, legs or feet; head injuries, stroke or brain damage
- *Intellectual* includes people who have difficulty in learning or understanding things
- *Disability type not specified* includes those restricted in everyday activities due to a long-term condition that requires treatment or medication; or due to any other long-term condition such as arthritis, asthma, heart disease, Alzheimer's disease, dementia etc.

Disability types

Among Indigenous people aged 15 years and over, 24% had a physical disability, 14% had a sight, hearing or speech disability and 7% had an intellectual disability. One in six (16%) had an unspecified long-term health condition requiring treatment.

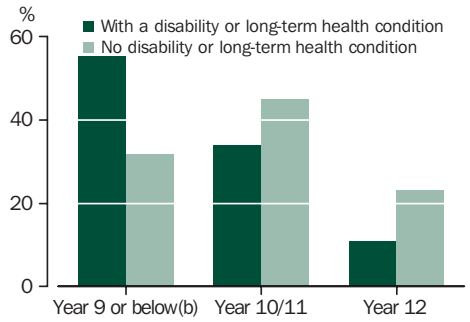
The prevalence of physical disability and sight, hearing and speech disability, increased steadily with age. Slightly more men than women reported a sight, hearing or speech disability, with differences most evident in the 65 years and over age group (46% of men compared with 35% of women). There was little difference in the proportions of men and women with physical or intellectual disabilities.

Disability and major life areas

...health

Among Aboriginal and Torres Strait Islander peoples aged 15 years and over, those with a disability or long-term health condition were far more likely to report fair or poor

Indigenous persons(a): highest level of school completed — 2002



(a) Aged 18 years and over, excludes people still at school.
(b) Includes people who never attended school.

Source: ABS 2002 NATSISS.

health (48%) than those without a disability or long-term health condition (9%). There were higher proportions of people reporting fair or poor health in older age groups, and it was in these age groups that the difference between those with a disability or long-term health condition and those without was most pronounced. In the 45–64 years age group, 65% of Indigenous people with a disability reported having fair or poor health, compared with 15% of those without a disability. For Indigenous people aged 65 years and over, the proportions were 70% and 21% respectively.

...education

The 2002 NATSISS collected school completion information for the 251,000 Indigenous people aged 18 years and over. In 2002, Indigenous adults with a disability completed fewer years of education, on average, than those without a disability. Excluding those still at school, 11% of Indigenous adults with a disability had completed Year 12, compared with 23% of those without a disability. At the other end of the scale, Indigenous adults with a disability were more likely to have left school after completing Year 9 or earlier (55%), than those without a disability (32%). However, for many of these people, their disability or long-term health condition would have commenced after their school years, and so there would be no direct link between disability and schooling completed.

...work

Some limitations experienced by Indigenous people with a disability may impact on the type of work they can do and the hours they are able to work. In addition, there is a strong association between employment levels for Indigenous people and educational attainment, with the proportions of people employed increasing with the level of educational achievement.[3] In 2002, Indigenous people aged 18 years and over with a disability or long-term health condition

Indigenous persons(a): labour force status — 2002

	Males			*Females*		
	Profound or severe core activity limitation	*With a disability or long-term health condition*	*No disability or long-term health condition*	*Profound or severe core activity limitation*	*With a disability or long-term health condition*	*No disability or long-term health condition*
Labour force status	%	%	%	%	%	%
Total Employed(b)	29.8	44.4	69.8	22.5	31.5	49.4
Employed full-time	*10.8	25.0	45.9	*4.2	12.6	21.9
Employed part-time	*19.0	19.3	23.8	18.2	18.8	27.5
Unemployed	*14.3	15.5	16.3	*5.5	10.2	10.4
Not in the labour force	56.0	40.1	13.9	72.0	58.3	40.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total	**7.7**	**41.6**	**71.7**	**9.8**	**44.9**	**80.3**
	%	%	%	%	%	%
Participation rate	44.0	59.9	86.1	28.0	41.7	59.8
Unemployment rate	*32.4	25.9	18.9	*19.6	24.6	17.3

(a) Aged 18–64 years.
(b) Includes people in the Community Development Employment Projects scheme.[2]

Source: ABS 2002 NATSISS.

had completed fewer years of education, on average, than those without a disability. This factor, combined with limitations arising from their disability, may have impacted on their ability to gain employment and on the hours they were able to work.

Labour force participation (working and looking for work) provides an indication of both the desire for paid work and the ability to obtain and perform such work. In 2002, Indigenous people aged 18–64 years with a disability or long-term health condition experienced lower labour force participation rates than those without a disability. The participation rate for men with a disability or long-term health condition was 60%, compared with 86% of men without a disability, while for women, the participation rates were 42% and 60% respectively.

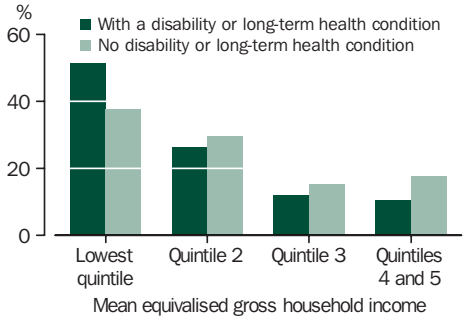
In 2002, the proportion of Indigenous people with a disability who were employed was substantially lower than for those without disability, and lower still for those with a profound or severe core activity limitation. The largest difference in employment levels was for Indigenous men aged 18–64 years, where 30% with a profound or severe limitation were employed compared with 70% with no disability. For women aged 18–64 years, the difference was also large, with 23% of those with a profound or severe limitation employed, compared with 49% with no disability or long-term health condition.

...income and financial stress

Indigenous people with a disability or long-term health condition were more likely to be living in low income households than people without a disability or long-term health condition. Over half (51%) of Indigenous people aged 15 years and over with a disability were in households in the lowest income quintile, compared with two-fifths (38%) of Indigenous people without a disability. In 2002, three-quarters (76%) of Indigenous people aged 15 years and over with a profound or severe limitation and 65% of those with a disability or long-term health condition reported government pensions or allowances as their main source of income, compared with 42% of Indigenous people without a disability or long-term health condition.

In 2002, financial stress was experienced by a large proportion of Indigenous people. However, those with a disability or long-term health condition were more likely to be in households experiencing financial stress. Among Indigenous people aged 15 years and over with a disability or long-term health condition, 62% were living in households that could not raise $2000 in an emergency, and 52% were in households that had experienced days without money in the last 12 months.

Indigenous persons(a): household income — 2002



(a) Aged 15 years and over.

Source: ABS 2002 NATSISS.

Indigenous persons(a): indicators of financial stress(b) — 2002

	With a disability or long-term health condition	*No disability or long-term health condition*	*Total*
Living in households that:	%	%	%
Were unable to raise $2000 within a week for something important	62.4	49.7	54.3
Had days without money in last 12 months	51.5	39.3	43.7
Had days without money in last 2 weeks	39.0	27.7	31.8
	'000	'000	'000
Total	**102.9**	**179.3**	**282.2**

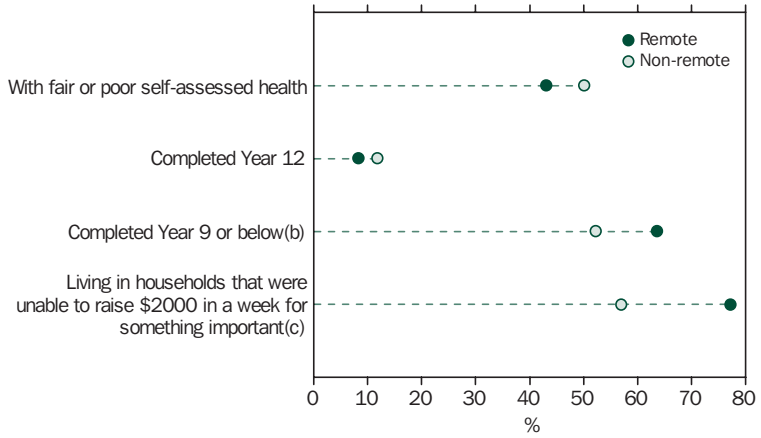
(a) Aged 15 years and over.
(b) Information provided by a household spokesperson on behalf of all household members.

Source: ABS 2002 NATSISS.

Indigenous people in remote and non-remote areas

In 2002, 205,000 (73%) Indigenous people aged 15 years and over lived in non-remote areas, and 77,100 (27%) lived in remote areas of Australia. While the proportion of Indigenous people in this age group with a disability or long-term health condition in remote and non-remote areas was the same (both 36%), there were some differences in the characteristics of Indigenous people with a disability living in remote and non-remote areas.

Indigenous people(a) with a disability or long-term health condition: selected indicators — 2002



(a) Aged 15 years and over, except for 'Completed Year 12' and 'Completed Year 9 or below' categories that are for those aged 18 years and over.
(b) Includes people who never attended school.
(c) Information provided by a household spokesperson on behalf of all household members.

Source: ABS 2002 NATSISS.

In 2002, of the 103,000 Indigenous people aged 15 years and over with a disability or long-term health condition, a greater proportion living in non-remote areas reported their health as poor or fair (50%) compared with those living in remote areas (43%).

Looking at schooling and restricting the population to those aged 18 years and over, Indigenous adults living in non-remote areas were more likely to have completed higher levels of schooling than those living in remote areas. In non-remote areas, 12% of adults with a disability had completed school to Year 12, compared with 8% in remote areas. At the other end of the scale, 64% of Indigenous adults in remote areas with a disability did not complete school beyond Year 9, compared with 52% of their non-remote peers. Issues relating to the participation of Indigenous people with a disability in education, such as limitations on access and community expectations, are different in remote and non-remote areas and may have contributed to some of these differences.

Indigenous people aged 15 years and over with a disability living in remote areas were more likely to be living in a household which experienced financial stress than those living in non-remote areas. For example, 77% from remote areas were living in a household unable to raise $2000 within a week for something important, compared with 57% in non-remote areas.

Disability measures – the common and broader criteria

In the 2002 NATSISS, the questions used to identify people with a disability in remote areas differed slightly from those used in non-remote areas in order to take account of language differences and life circumstances.[2] The questions used in both non-remote and remote areas are called the '*common criteria*'. In this article, the common criteria have been used to describe disability among Indigenous people.

Indigenous people in non-remote areas were also asked some additional questions about disability and long-term health conditions. This slightly larger set of questions is called the '*broader criteria*'. The additional questions in the broader criteria asked about conditions that would restrict physical activity or work, disfigurement or deformity, mental illness or restrictions due to nervous or emotional conditions. In this article, the broader criteria has been used for comparisons between Indigenous and non-Indigenous people (using data from the 2002 General Social Survey). This broader criteria is relatable to that used in the main ABS survey on disability: the Survey of Disability, Ageing and Carers (SDAC), although SDAC uses different collection methods which result in some differences in the populations identified. For more information on the questions asked see *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, 2005 (ABS cat.no. 4704.0).

Using a smaller set of disability questions in remote areas may have resulted in an underestimate of Indigenous people with a physical and/or psychological disability. An additional 21,300 Indigenous people aged 15 years and over in non-remote areas were identified using the broader criteria – an increase of 10 percentage points (from 37% to 47%) compared with the common criteria. However, the proportions having a profound or severe limitation were very similar – 8% using the broader criteria and 7% with the common criteria.

Indigenous persons(a): disability status identified through the common and broader criteria — 2002

	Common	*Broader*
	%	%
With a disability or long-term health condition	36.9	47.2
No disability or long-term health condition	63.1	52.8
Total	**100.0**	**100.0**
	'000	'000
Total	**205.1**	**205.1**

(a) Indigenous persons aged 15 years and over in non-remote areas.

Source: ABS 2002 NATSISS.

Persons in non-remote areas(a): ratio of Indigenous to non-Indigenous disability(b)(c) — 2002

	Profound or severe core activity limitation	*With a disability or long-term health condition*
Age group (years)		
18–24	*2.0	1.5
25–34	3.1	1.6
35–44	1.9	1.7
45–54	3.5	1.5
55–64	1.9	1.4
65 and over	1.6	1.1
Sex(d)		
Males	2.5	1.4
Females	1.8	1.4
Persons(d)	2.1	1.4

(a) Aged 18 years and over.
(b) Disability measure based on broader disability criteria.
(c) Indigenous disability rate divided by the non-Indigenous disability rate.
(d) Based on aged-standardised data.

Source: ABS 2002 NATSISS and ABS 2002 GSS.

Comparisons with the non-Indigenous population

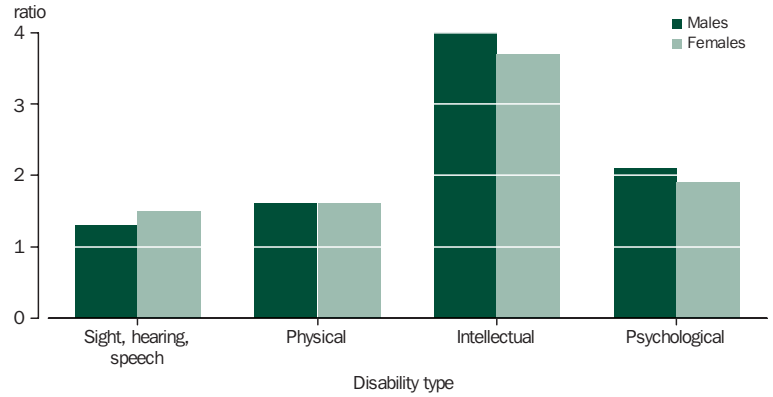
Comparisons can be drawn between the Indigenous non-remote population using the 2002 NATSISS and the non-Indigenous population using the 2002 GSS. The Indigenous and non-Indigenous populations have different age structures. This is reflected in both the differences in median age and proportions of Indigenous people aged 65 years and over. In 2001, the median age was 21 years for the Indigenous population and 36 years for the non-Indigenous population. In the same year, the proportion of Indigenous people aged 65 years and over was 3% compared with 13% of the non-Indigenous population.[2] For this reason, data has been age standardised for the two populations.

In 2002, Indigenous adults in non-remote areas were 1.4 times more likely to have a disability or long-term health condition than non-Indigenous adults and at least twice as likely to have a profound or severe core activity limitation. The difference in disability rates between these two groups peaked in the 35–44 years age group with Indigenous people in non-remote areas 1.7 times more likely to have a disability than non-Indigenous people. However, in the 65 years and over age group the proportions of people with a disability were very similar.

Rates of profound and severe core activity limitation were much higher among Indigenous adults in non-remote areas in all age groups. Indigenous people in the 45–54 years age group were three and a half times more likely to have a profound or severe core activity limitation than non-Indigenous people of the same age, with the rate for Indigenous people aged 45–54 years as high as that among non-Indigenous people aged 65 years and over. This suggests that Indigenous people with a disability have a relatively higher need for assistance and disability-related services at younger ages than is the case for non-Indigenous people.[2]

Indigenous people had higher disability rates for all disability types than non-Indigenous people. The difference was greatest for intellectual disability, with Indigenous people nearly four times more likely to be limited by an intellectual disability than non-Indigenous people.

Persons in non-remote areas(a): ratio of Indigenous to non-Indigenous disability by type(b)(c) — 2002



(a) Aged 18 years and over.
(b) Disability measure based on broader disability criteria.
(c) Indigenous disability rate divided by the non-Indigenous disability rate. Based on aged-standardised data.

Source: ABS 2002 NATSISS and ABS 2002 GSS.

Endnotes

1 Department of Health and Ageing, *National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003–2013: Australian Government Implementation Plan 2003–2008*, DoHA, Canberra.

2 Australian Bureau of Statistics and the Australian Institute of Health and Welfare 2005, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, (ABS cat. no. 4704.0), ABS, Canberra.

3 Senate Employment, Workplace Relations, Small Business and Education committee (SEWRSBEC) 2000, KatuKalpa — *Report on the Inquiry into the effectiveness of education and training programs for Indigenous Australians*, Parliament of the Commonwealth of Australia.

Older people in cared accommodation

HEALTH STATUS

In 2003, 167,000 people aged 60 years and over lived in cared accommodation. The main health condition of almost a third of these people was Alzheimer's disease or other dementia.

Residential aged care assists older people who cannot continue to live at home due to disability or age-related frailty. Since the mid 1980s there has been a strong policy of reform of aged care, to assist older people's desire to 'age in place'. The number of residential aged care places per 1,000 people aged 70 years and over decreased after 1985, while community-based care of various kinds was developed and expanded. Current arrangements stem from the Aged Care Act 1997 which restructured the residential aged care system. Further changes followed from the Review of Pricing Arrangements for Residential Aged Care in 2004.[1] This process of reform, and other factors such as population ageing, means that people in aged care are likely to be an older and frailer group than in the past. This article examines the current characteristics of people aged 60 years and over in cared accommodation and compares them with other people of this age.

Use of cared accommodation

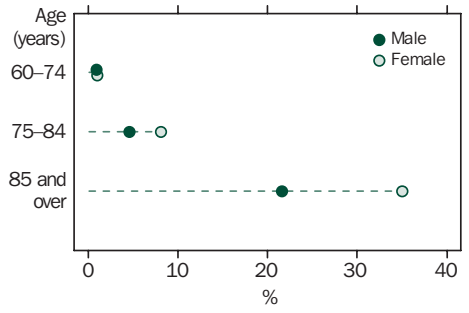
There were 167,000 people aged 60 years and over in cared accommodation in 2003 or 5% of the population of that age. The median age of older people in cared accommodation was 85 years. The use of cared accommodation was concentrated in the oldest age groups. Only 1% of people aged 60–74 years were living in cared accommodation, increasing to 7% of those aged 75–84 years and 31% of those aged 85 years and over.

Women made up 72% of all older people in cared accommodation. Their median age was 86 years, compared with a median of 82 years for men. A greater proportion of older women than older men were in cared accommodation (7% compared with 3%). In the age group 60–74 years about 1% of both women and men were in cared accommodation, but there were differences in the older age groups. Women aged 75–84 years were considerably more likely than men of this age to be in cared accommodation (8% compared with 5%) and there was also a difference among people aged 85 years and over (35% of women and 22% of men were in cared accommodation).

Women's longer average life expectancy may influence their use of cared accommodation. The oldest age groups include more women than men. The more severe levels of disability are more prevalent among very old women than among the smaller number of men who survive to the oldest age groups. Women are more likely than men to outlive a partner, and very old people with disability living alone are less likely to continue at home than people living with partners[2] (see *Australian Social Trends 2005*, Older people with disabilities, pp. 74–78 and Carers, pp. 39–43).

People with more severe disability are of special interest when examining the use of care. In 2003, 37% of older people with a profound limitation and 6% of older people with a severe limitation were in cared accommodation.

Proportion(a) of older people in cared accommodation — 2003



(a) People who were in cared accommodation as a proportion of the population of each age group.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Data sources and definitions

This article draws on data from the ABS 1998 and 2003 Surveys of Disability, Ageing and Carers. As part of these surveys, data was collected about the characteristics of a sample of people in cared accommodation, via a questionnaire filled in by staff of these establishments.

Older people in this article are those aged 60 years and over.

Cared accommodation in the Survey of Disability Ageing and Carers comprises health establishments such as hospitals, nursing homes, aged care hostels, hostels for people with disabilities and some cared components of retirement villages. *People living in cared accommodation* are those who had been or were expected to be in cared accommodation for three months or more.

Households in the Survey of Disability Ageing and Carers refers to all living arrangements other than cared accommodation, and includes people living alone or with others, in private dwellings or non-private dwellings such as boarding houses, staff quarters or religious institutions.

Proportion of older people in cared accommodation(a) — 1998 and 2003

	1998	2003
	%	%
Aged 60 years or more	5.7	5.0
Aged 60–74 years	1.3	1.0
Aged 75–84 years	8.3	6.6
Aged 85 years or more	36.3	30.7
Male	3.7	3.1
Female	7.3	6.6
Profound core activity limitation	41.0	37.0
Severe core activity limitation	9.0	6.3
Any reported disability	11.0	9.5

(a) Older people in cared accommodation as a proportion of all older people with that characteristic. All data are on a crude basis.

Source: ABS 1998 and 2003 Surveys of Disability, Ageing and Carers.

The proportion of older people living in cared accommodation in 2003 was lower than in 1998, when 6% of those aged 60 years and over were living in cared accommodation (171,000 people). For those older people with a profound core activity limitation the decrease in the proportion in cared accommodation was from 41% to 37%, and the decrease for those aged 85 years and over was from 36% to 31%.

Over the same period, the proportion of older people living in a household who received some kind of formal care increased, from 20% to 22%. This represents older people, with or without a disability, who received care which would have ranged from help with one task such as home maintenance to more intensive help with personal activities like walking or dressing.

Limitations and need for assistance with everyday activities

The great majority of older people in cared accommodation in 2003 had either a profound (85%) or severe (10%) core activity limitation. That is, they needed assistance with at least one personal activity (such as walking or dressing), or could not undertake an activity at all, or had difficulty communicating. Those 5% of older people in cared accommodation who did not have a profound or severe core activity limitation mainly comprised people with a less severe disability and those with a long term health condition, without disability.

Number of residential places

Under the Aged Care Act (1997) the Australian Government subsidises residential aged care places and community care packages. Community care packages provide an older person at home with a level of care equivalent to residential care. A combined ratio of places and packages per 1,000 people aged 70 years and over is used in planning by the Department of Health and Ageing.

In 1985 there were 99 residential aged care places per 1,000 population aged 70 years and over[3] and this decreased to 89.2 by 1997 and then to a low of 82.2 in 2002. Recent increases have seen the first upward movement in the level of provision of residential aged care since 1985, to 84.2 in 2004.[4] A new target of 108 places/packages per 1,000 people aged 70 years and over was set in 2004–05, 88 of which should be residential places.[1]

Aged care places and packages

		1997	2004
Places	No.	139 058	156 580
	ratio(a)	89.2	84.2
Packages(b)	No.	6 124	29 923
	ratio(a)	3.9	16.1
Total	No.	145 182	186 503
	ratio(a)	93.1	100.3

(a) Number of places and/or packages per 1,000 people aged 70 years and over.
(b) As well as Community Aged Care packages, 2004 data includes 860 Extended Aged Care at Home packages.

Source: Australian Institute of Health and Welfare 2005, *Residential Aged Care in Australia 2003-2004: a statistical overview*, Aged Care Statistics Series no. 20, (AIHW Cat. No. AGE43), AIHW, Canberra.

Specific personal activities, such as getting out of a bed or a chair, walking up stairs or showering, can be grouped into activity areas, such as mobility or self care. A majority of older people in cared accommodation needed assistance with: self care (91%), mobility (87%), oral communication (63%), health care (95%) and emotion and cognition (85%). (The latter refers to needing assistance in areas such as maintaining relationships, understanding others or dealing with emotion). More than half of older people in cared accommodation needed help with all five of these areas (55%) and a further 26% needed assistance with four areas.

Among people in cared accommodation, there was not a great deal of variation in the need for assistance by age group. The area showing the greatest difference was mobility: 81% of those aged 60–74 years needed assistance with this area, increasing to 89% of those aged 85 years and over.

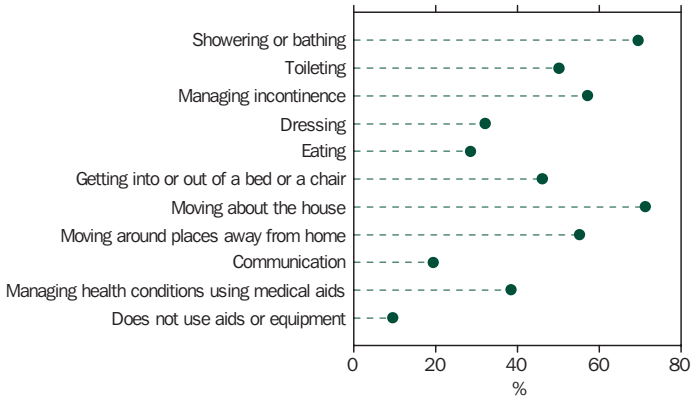
Most older people in cared accommodation used an aid of some kind (92%). The most common were aids that assisted people to move around their accommodation, used by 73%. Also common were aids used in showering or bathing (71%) and aids used in managing incontinence (57%). This high level of use of aids is consistent with the high levels of need for assistance reported for this group. In addition, aids tend to be routinely installed in cared accommodation (for example, showering aids) which seems likely to contribute to the high rates of use.

...compared with those at home

As might be expected, this level of limitation and need for assistance contrasted with that of older people living in households, who were on average a much younger group (a median age in whole years of 70 years). The need for assistance of older people living in households ranged from 1% who needed assistance with oral communication to 17% who needed assistance with health care. Further, while 82% of older people in cared accommodation needed assistance with at least four of the five activity areas, this was observed for just 2% of older people in households. Consistent with these results, 8% of older people in households were considered to have a profound core activity limitation (compared with 85% of those in cared accommodation) and 7% to have a severe core activity limitation (compared with 10% of those in cared accommodation).

In each age group, much lower levels of need for assistance were reported for those living in households compared with those living in cared accommodation.

Older people in cared accommodation: use of aids — 2003



(a) Proportion of older people in cared accommodation who used various aids. Some 4,200 people who did not have a disability were not asked about the use of aids but are included in the denominator.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Disability

Disability as defined in the ABS 2003 Survey of Disability, Ageing and Carers refers to a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months. This definition is consistent with the International Classification of Functioning, Disability and Health, which defines disability as an umbrella term for impairments, activity limitations and participation restrictions.

Core-activity limitation refers to a limitation in the core-activities of self care, communication or mobility. Levels of severity of these limitations are: profound, severe, moderate, mild.

People with a *profound core-activity limitation* always need help or supervision with self care, communication or mobility, or are unable to perform these tasks themselves. People with *severe core-activity limitations* sometimes need help with self care, communication or mobility, have difficulty understanding or being understood by friends or family, or can communicate more easily using sign language or other non-spoken forms of communication.

Health conditions

Long term health condition is a condition that has lasted or is likely to last 6 months or more; or a disease, disorder or event (e.g. stroke, poisoning, accident etc.) which produces an impairment or restriction that has lasted or is likely to last 6 months or more. Conditions are coded to a classification based on the International Classification of Diseases, version 10 (ICD–10).

Main health condition is the long term condition causing the most problems. Where only one long-term condition is reported, this is the main condition.

Disability groups

Consistent with the tendency to need assistance across a range of areas, older people in cared accommodation tended to have limitations in several broad areas of functioning. For example, a person might have both physical and psychological disabilities. Among the 97% of people in cared accommodation who had a disability, physical disabilities were the most common (91%), followed by sensory or speech disabilities (72%), intellectual disabilities (60%), psychological disabilities (57%), and disabilities related to head injury, stroke or brain damage (31%). It can be seen from the high proportions across the groups that many older people in cared accommodation did have more than one broad type of disability. For almost half (49%) of older people in cared accommodation the disability that caused the most problems was psychological while for 42% it was physical.

Older people: need for assistance — 2003

	In cared accommodation	*In households*
	%	%
Need for assistance		
Self care	90.5	7.7
Mobility	86.9	12.3
Oral communication	62.6	1.3
Health care	95.3	17.1
Emotion and cognition	84.7	5.9
Needed assistance with at least four of the above activity areas	81.7	2.2
Had a profound core activity limitation(a)	84.5	7.6
Had a severe core activity limitation(b)	9.6	7.5
Total persons ('000)	**167.4**	**3 350.2**

(a) Always needed assistance with at least one of: mobility, self care, communication.
(b) Sometimes needed assistance with at least one of: mobility, self care, communication.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Compared with people in cared accommodation, a much lower proportion ofolder people in households had a disability (49%) and the balance was weighted more towards physical disabilities and sensory or speech disabilities. Of the 49% of older people in households who had a disability, 78% had a physical disability and 41% had sensory or speech disabilities, while intellectual disabilities (5%), psychological disabilities (7%) and disabilities relating to head injury, stroke or brain damage (7%) were less common.

Health conditions

Disability is generally related to long term conditions, although the effects of conditions vary from person to person, and the interaction of multiple conditions may have an important influence on how much disability a person experiences. Older people in cared accommodation tended to have multiple long term conditions: 74% had four or more and less than 1% had none. This compared with 27% of older people in households who had four or more long term conditions and 17% who had none.

The conditions reported ranged from eyesight problems correctable by glasses to dementia. Therefore information was sought on which condition caused most problems. The medical condition most commonly reported as the one that caused most problems for older people in cared accommodation was Alzheimer's disease and other dementia (32%). In total, Alzheimer's disease and dementia together with other mental and behavioural disorders were reported as the main condition for 42% of people in cared accommodation. After mental and behavioural disorders, circulatory system conditions (17%) was the second most common main condition group, with stroke as the largest component (10%). The third largest group was conditions of the musculoskeletal system (14%) with arthritis as the largest component (10%).

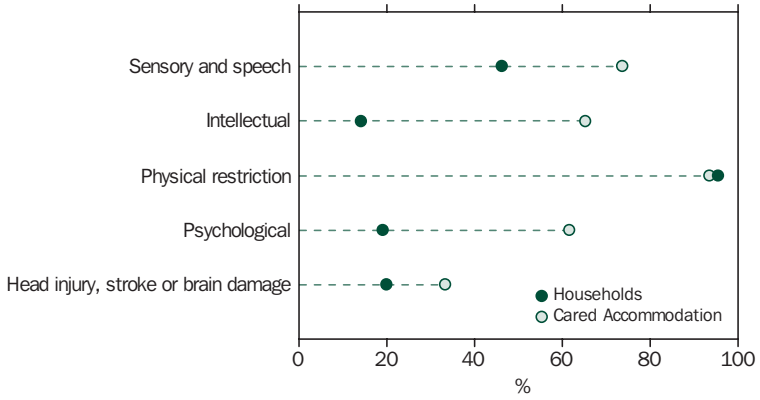
Among the 2.6 million older people in households who reported having at least one long term condition, the main condition was most often physical. Diseases of the musculoskeletal system and connective tissue were the most common main condition group (35%), with arthritis (17%) and back problems (10%) predominating within this group. This was followed by diseases of the circulatory system (22%) with hypertension as the most common main condition (12%) and diseases of the endocrine system (8%) with diabetes as the most common main condition (5%). Mental or behavioural conditions were reported as a main condition by only 4%.

People with a profound disability living in households

Compared with the 95% of older people who lived in households, the 5% of older people in cared accommodation were an older and more frail group. But were there people in households with a similar disability and health profile? As 85% of people in cared accommodation have a profound core activity limitation, one comparison might be to people with this limitation aged 60 years and over living at home. There were 241,000 such people in 2003, 1.7 times the 141,000 older people with a profound limitation living in cared accommodation.

Compared with people in cared accommodation with a profound core activity limitation, these people were on average younger, with a median age of 79 years compared with 85 years. Although both groups included more women than men, this was less pronounced among people in households than among people in cared accommodation (66% in households were female compared with 72% in cared accommodation). Those in households included a greater proportion of married people (43% compared with 18%). As well as demographic differences, there were differences in the disability and health profiles of the two groups which indicate what types and levels of disability may trigger entry to cared accommodation.

Older people with profound core activity limitation(a): broad disability groups by living arrangement — 2003



(a) People could have more than one type of disability therefore components do not add to 100%.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Almost all people with a profound core activity limitation had a physical disability regardless of where they lived (96% of those in households and 94% of those in cared accommodation). Sensory or speech disabilities were also relatively common (46% of those in households and 74% of those in cared accommodation). However, older people in households with a profound core activity limitation were much less likely than people with a profound disability in cared accommodation to have a disability which was intellectual (14% compared with 65%) or psychological (19% compared with 62%).

The proportion of people with a profound core activity limitation living in households who needed assistance ranged from 12% for oral communication to 91% for mobility. This compared with very high levels of need across all five activity areas for people with profound core activity limitation in cared accommodation, from 70% for oral communication to over 90% for each of the other activity groups. Further, at a finer level of detail, differences are apparent even in the more comparable areas. For example, in respect of self care activities, the greater contrasts between the two groups of people was in the need for assistance with fundamental activities such as eating (22% of people in households, 76% of those in cared accommodation) or toileting (16% compared with 79%). There was less difference in the need for assistance with more advanced self-care tasks such as showering (44% compared with 97%) or dressing (46% compared with 95%).

People with a profound core activity limitation living in households were less likely than people with such limitations in cared accommodation to have a mental or behavioural disorder as their main condition (10% compared with 45%). Diseases of the musculoskeletal system (33%) and diseases of the circulatory system (19%) were the leading main conditions among those in households.

These survey results are broadly consistent with administrative data from aged care assessment teams. These show that people were more likely to be assessed as needing residential care if they: had dementia; were assessed as dependent in the areas of mobility, continence or orientation (awareness of surroundings); or were in hospital at the time of assessment.[3]

Older people with profound core activity limitations(a): need for assistance — 2003

Selected characteristics	*In households* %	*In cared accommodation* %
Needed assistance with personal activity areas		
Mobility(b)	*91.1*	*94.9*
Getting around away from home	86.4	86.1
Moving about the home	34.8	83.5
Self care	*61.1*	*98.6*
Dressing	46.0	97.0
Going to the toilet	15.8	84.9
Oral communication	12.0	70.3
Health care	79.4	99.5
Emotion and cognition	33.8	90.1
Needed assistance with more than three of the above five personal activity areas	22.3	91.2
Mental or behavioural condition was main condition	9.7	45.2
Total persons ('000)	**141.5**	**240.8**

(a) Always needed assistance with at least one of: mobility, self care, communication.

Source: ABS 2003 Survey of Disability, Ageing and Carers.

Endnotes

1 Australian Institute of Health and Welfare 2005, *Australia's Welfare 2005* (AIHW Cat. No. AUS65), Canberra, AIHW and also see earlier editions of this biennial report.

2 Gibson, D. and Liu, Z 1999 'Do families matter?' *Family Matters*, No 52 ,Autumn 1999, Australian Institute of Family Studies, Melbourne.

3 Australian Institute of Health and Welfare 1997, *Australia's Welfare 1997* (AIHW Cat. No. AUS65), Canberra, AIHW.

4 Australian Institute of Health and Welfare 2005, *Residential Aged Care in Australia 2003-2004: a statistical overview*, (Aged Care Statistics Series no. 20. (AIHW Cat. No. AGE43), AIHW, Canberra.

5 Lincoln Gerontology Centre 2004, *Aged Care Assessment Program national minimum data set report July 2002–June 2003*, viewed 15 April 2006, <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/ageing-reports-acapmds.htm>.

Education and training

Education and training: national summary

	PARTICIPANTS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	School students(a)	'000	3 109	3 143	3 172	3 199	3 227	3 247	3 268	3 302	3 319	3 332	3 348
2	Students in government schools(a)	%	71.0	70.7	70.3	70.0	69.7	69.2	68.8	68.4	67.9	67.5	67.1
3	Females – of all Year 11 and 12 students(a)	%	51.8	51.8	51.8	52.0	52.1	52.1	51.8	51.5	51.4	51.6	51.8
4	Year 7/8 to Year 12 apparent retention rate – males(b)	%	66.7	65.9	66.2	65.9	66.4	66.1	68.1	69.8	70.3	70.4	69.9
5	Year 7/8 to Year 12 apparent retention rate – females(b)	%	77.9	77.0	77.8	77.7	78.5	78.7	79.1	80.7	80.7	81.2	81.0
6	Year 7/8 to Year 12 apparent retention rate – Indigenous(b)	%	30.6	29.2	30.9	32.1	34.7	36.4	35.7	38.0	39.1	39.5	39.5
7	Year 7/8 to Year 12 apparent retention rate – non-Indigenous(b)	%	73.2	72.4	72.9	72.7	73.2	73.3	74.5	76.3	76.5	76.8	76.6
8	Education participation – of all aged 15–19	%	73.9	74.0	77.4	76.9	77.8	77.6	77.4	77.3	77.5	76.2	76.0
9	Education participation – of all aged 20–24	%	28.0	31.5	31.0	32.1	34.4	34.4	34.8	37.2	37.5	37.7	38.9
10	Vocational Education and Training (VET) students(c)(d)	'000	1 269	1 341	1 449	1 510	1 615	1 708	1 679	1 683	1 718	1 595	n.y.a.
11	Apprentices and trainees(e)	'000	138.9	157.2	172.0	193.0	251.0	271.3	310.0	351.8	r404.8	r400.2	391.2
12	Females – of all VET students (c)(d)	%	46.2	46.5	46.3	7.3	48.7	49.0	48.5	48.1	48.6	47.7	n.y.a.
13	Higher education students(f)	'000	604.2	634.1	658.8	671.9	686.3	695.5	842.2	896.6	930.0	945.0	n.y.a.
14	Females – of all higher education students(f)	%	53.9	54.3	54.4	54.7	55.0	55.2	54.4	54.4	54.4	54.3	n.y.a.
15	Overseas students – of all higher education students(f)(g)	%	7.6	8.4	9.6	10.7	12.1	13.7	18.7	20.6	22.6	24.2	n.y.a

	EDUCATION OUTCOMES	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	With non-school educational qualifications of all persons aged 15–64 years(h)												
16	Of all aged 15–64(i)(j)	%	41.0	42.3	40.4	41.9	43.7	43.8	47.2	48.2	49.1	50.9	51.5
17	Bachelor degree or above	%	11.9	12.8	13.6	14.3	15.4	15.7	17.0	17.8	18.1	18.9	19.6
18	Advanced diploma and diploma or below	%	29.1	29.4	26.8	27.6	28.3	28.1	29.1	29.8	30.2	31.3	30.7
19	Females – of all with non-school educational qualifications	%	43.9	44.1	44.6	45.1	45.2	45.8	46.9	46.8	46.5	47.6	47.7
	With non-school educational qualifications of all persons aged 25–64(h)												
20	Of all aged 25–64(i)(j)	%	46.4	47.7	45.5	47.3	49.3	49.5	53.3	54.4	55.3	57.5	58.1
21	Bachelor degree or above	%	13.8	14.8	15.6	16.6	17.7	18.1	19.7	20.4	20.9	21.9	22.7
22	Advanced diploma and diploma or below	%	32.6	32.9	29.9	30.7	31.7	31.4	32.3	33.2	33.4	34.7	34.1
23	Higher education students completing courses	'000	141.0	145.3	155.3	161.7	164.4	170.9	187.0	200.7	215.1	n.y.a.	n.y.a.
	Without non-school educational qualifications of all persons aged 15–64(h)												
24	Of all aged 15–64(i)	%	59.0	57.7	59.6	58.1	56.3	56.2	52.8	51.8	50.9	49.1	48.5
25	Did not complete Year 12(k)	%	36.1	34.8	36.3	34.2	32.7	32.0	36.1	34.9	33.8	32.3	31.2
	Reading – proportion of Year 5 students reaching national benchmarks(l)												
26	Males	%	n.a.	n.a.	n.a.	n.a.	83.4	85.2	87.8	87.2	86.8	n.y.a.	n.y.a.
27	Females	%	n.a.	n.a.	n.a.	n.a.	88.4	89.6	92	91.5	91.6	n.y.a.	n.y.a.
	Numeracy – proportion of Year 5 students reaching national benchmarks												
28	Males	%	n.a.	n.a.	n.a.	n.a.	n.a.	89.4	89.5	89.9	90.3	n.y.a.	n.y.a.
29	Females	%	n.a.	n.a.	n.a.	n.a.	n.a.	89.8	89.8	90.2	91.4	n.y.a.	n.y.a.

Education and training: national summary cont.

	LABOUR MARKET OUTCOMES	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Unemployment rate (aged 15–64)												
30	With non-school educational qualifications(h)(i)(j)	%	5.5	5.3	5.4	5.0	4.6	4.4	4.6	4.2	4.3	3.8	3.6
31	Bachelor degree or above	%	3.6	3.8	3.5	3.1	3.0	3.0	2.8	2.7	3.1	3.0	2.6
32	Advanced diploma and diploma or below	%	6.3	6.0	6.5	6.0	5.5	5.2	5.7	5.1	5.0	4.3	4.2
33	Without non-school educational qualifications(i)	%	11.1	11.3	11.6	10.9	10.3	9.1	9.6	9.1	8.6	8.0	7.5
34	Completed Year 12(k)	%	9.9	10.0	8.9	8.6	7.7	7.2	7.5	7.0	6.4	6.6	5.1
35	Did not complete Year 12(k)	%	11.7	12.0	13.0	12.2	11.8	10.3	10.8	10.3	10.0	9.0	9.1

	FINANCIAL RESOURCES	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	Government expenditure on education(m)												
36	Proportion of GDP	%	4.6	4.5	4.5	4.4	5.2	5.1	5.2	5.3	5.4	5.4	n.y.a.
37	Primary and secondary	$'000m	12.5	13.0	13.9	14.7	17.3	18.2	19.5	21.3	23.3	23.7	n.y.a.
38	Tertiary	$'000m	7.6	7.6	8.1	8.0	11.7	12.1	12.8	13.6	15.1	16.1	n.y.a.

	HUMAN RESOURCES	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	FTE Student/teaching staff ratio												
39	All schools(n)	ratio	15.4	15.4	15.3	15.3	15.0	14.9	14.7	14.7	14.5	14.3	14.2
40	Government schools(n)	ratio	15.4	15.4	15.3	15.3	14.9	14.9	14.7	14.8	14.6	14.5	14.4
41	Primary schools(n)	ratio	18.2	18.1	17.9	17.9	17.3	17.3	17.0	16.9	16.6	16.4	16.2
42	Secondary schools(n)	ratio	12.7	12.8	12.8	12.8	12.7	12.6	12.5	12.5	12.4	12.3	12.2
43	Higher education	ratio	15.1	15.9	17.3	18.0	18.0	18.3	18.7	19.5	20.1	r19.8	n.y.a.
	Female teachers/academic staff												
44	Of all primary school teachers	%	76.1	76.2	76.9	77.5	78.0	78.3	78.7	79.1	79.1	79.4	79.7
45	Of all secondary school teachers	%	52.3	52.6	53.1	53.5	54.1	54.4	54.9	55.1	55.3	55.6	56.0
46	Of all higher education academic staff(o)	%	33.5	34.1	34.4	35.1	35.5	36.3	37.5	38.1	38.7	39.5	n.y.a.

	PROVIDERS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
47	Schools	no.	9 648	9 630	9 609	9 587	9 590	9 609	9 515	9 612	9 607	9 615	9 623
48	Government schools – of all schools	%	73.8	73.6	73.2	73.0	72.7	72.6	72.3	72.3	72.1	72.2	72.0

(a) Refers to full-time students only.

(b) Refers to the number of full-time students in Year 12 divided by the number of full-time students in the first year of secondary school (Year 7 in NSW, the ACT, Vic. and Tas.; Year 8 in Qld, SA, the NT and WA) when the Year 12 cohort began secondary school. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

(c) Private providers were included from 1996, and VET in schools was included from 1997 to 2001.

(d) In 2003 Queensland introduced a unique student identifier for all students covered by the collection which creates an apparent reduction in overall student numbers when compared with previous annual collections.

(e) Data have been revised following a major review of the estimation method. Under the new method, data will not be finalised for eight quarters after initial estimation.

(f) The scope of the data from 2002 is different to that used for reporting students in previous publications in the Selected Higher Education Statistics series. 2001 data has been recalculated by the Department of Education, Science and Training to align with the change in scope. Refer to *Students 2002: Selected Higher Education Statistics* for more detail.

(g) Prior to 1996, New Zealand students were counted as being overseas students.

(h) There have been two major breaks in the series between 1995 and 2005. The breaks listed below are considered to have impacted on the comparability of data relating to qualifications. In 1997 prompt cards were no longer used and computer assisted coding methodology was adopted, resulting in changes in the relative distribution within vocational education qualifications, and in 2001, the Australian Bureau of Statistics Classification of Qualifications (ABSCQ) was replaced by the Australian Standard Classification of Education (ASCED) (cat. no. 1272.0).

(i) Estimates refer to recognised qualifications only.

(j) Includes persons who have a qualification where the level can not be determined.

(k) Includes persons who are still at school.

(l) In 1999, data do not include a number of Queensland students, who were formally exempted from testing.

(m) Data for the 1998–99 financial year onwards are not comparable with estimates in previous financial years. Prior to 1998–99, this indicator refers to cash outlays on education including capital outlays. From 1998–99 onwards, when accrual accounting was implemented in Government Finance Statistics (GFS), this indicator refers to Operating Expenses and does not include a capital component.

(n) FTE student/teaching staff ratios are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

(o) Data cover full-time and fractional full-time staff but exclude casual academic staff.

Reference periods: Data for indicators 1–7, 39–42, 44–45 and 47–48 are at August.
Data for indicators 8–9, 16–22, 24–25 and 30–35 are at May.
Data for indicators 10–12 are at 30 June.
Data for indicators 13–15, 23, 43 and 46 are at 31 August from 2002 and 31 March prior to 2002.
Data for indicators 26–29 are at August.
Data for indicators 36–38 are for the financial year ending 30 June.

Education and training: state summary

	PARTICIPANTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
1	School students(b)	'000	2005	1 108	826	647	249	338	83	37	60	3 348
2	Students in government schools(b)	%	2005	66.8	65.0	69.7	66.0	67.6	73.5	76.4	59.3	67.1
3	Females – of all Year 11 and 12 students(b)	%	2005	52.3	52.2	51.4	51.0	51.2	53.7	50.6	49.9	51.8
4	Year 7/8 to Year 12 apparent retention rate – males(c)	%	2005	66.0	73.9	75.3	64.3	67.2	58.4	56.8	87.2	69.9
5	Year 7/8 to Year 12 apparent retention rate – females(c)	%	2005	76.3	87.6	84.7	77.6	78.0	76.5	61.5	87.9	81.0
8	Education participation – of all aged 15–19	%	2005	77.7	81.4	71.8	72.0	69.7	74.8	65.9	76.7	76.0
9	Education participation – of all aged 20–24	%	2005	40.4	42.4	34.1	38.2	34.8	34.0	26.4	48.1	38.9
10	Vocational Education and Training (VET) students(d)(e)	'000	2004	517.5	480.7	278.8	111.3	126.5	38.5	19.7	22.3	1 595.2
11	Apprentices and trainees	'000	2005	118.3	112.7	76.1	33.8	28.4	12.9	3.2	5.9	391.2
12	Females – of all VET students(d)(e)	%	2004	48.8	47.5	45.7	50.0	46.8	43.1	46.7	51.6	47.7
13	Higher education students(f)(g)	'000	2004	296.5	241.8	182.6	65.5	93.6	18.1	6.0	28.2	945.0
14	Females – of all higher education students(f)(g)	%	2004	54.2	53.5	53.9	56.1	55.8	50.3	66.0	50.2	54.3
15	Overseas students – of all higher education students(f)(g)	%	2004	22.5	27.6	23.8	25.0	26.1	17.5	4.0	19.9	24.2
	EDUCATION OUTCOMES	*Units*	*Years*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT(a)*	*ACT*	*Aust.*
	With non-school educational qualifications of all persons aged 15–64 years											
16	Of all aged 15–64(h)(i)	%	2005	54.2	57.2	49.5	47.4	52.2	44.8	52.2	58.8	51.5
17	Bachelor degree or above	%	2005	21.2	24.3	16.6	15.7	18.4	15.3	18.1	32.6	19.6
18	Advanced diploma and diploma or below	%	2005	31.6	32.0	32.0	29.8	32.6	28.2	33.0	24.5	30.7
19	Females – of all with non-school educational qualifications	%	2005	48.2	48.1	46.3	46.5	47.7	48.7	47.1	50.1	47.7
	With non-school educational qualifications of all persons aged 25–64											
20	Of all aged 25–64(h)(i)	%	2005	61.1	50.6	55.3	53.3	58.7	51.1	60.7	68.7	58.1
21	Bachelor degree or above	%	2005	24.5	21.0	19.0	18.2	21.2	18.3	22.7	39.5	22.7
22	Advanced diploma and diploma or below	%	2005	35.1	28.6	35.1	33.0	36.1	31.6	37.0	27.1	34.1
23	Higher education students completing courses(j)(f)	'000	2003	70.5	56.0	37.2	15.5	21.6	3.7	1.0	6.8	215.1
	Without non-school educational qualifications											
24	Of all aged 15–64(h)(i)	%	2005	45.8	49.4	50.5	52.6	47.8	55.3	47.8	41.2	48.5
25	Did not complete Year 12(k)	%	2005	29.5	31.0	31.9	36.5	31.8	42.0	30.6	19.0	31.2
	Reading – proportion of Year 5 students reaching national benchmarks											
26	Males	%	2003	89.7	87.0	78.4	86.5	92.1	93.9	76.5	95.1	86.8
27	Females	%	2003	93.9	92.2	84.8	90.7	94.8	96.6	81.2	97.1	91.6
	Numeracy – proportion of Year 5 students reaching national benchmarks											
28	Males	%	2003	90.4	94.3	86.6	90.1	90.0	91.6	74.6	91.7	90.3
29	Females	%	2003	92.2	95.2	86.4	91.3	90.8	93.3	77.6	92.1	91.4

Education and training: state summary continued

	LABOUR MARKET OUTCOMES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	Unemployment rate (aged 15–64)											
30	With non-school educational qualifications(h)(i)	%	2005	3.8	3.4	4.0	3.8	2.8	2.9	*3.8	1.8	3.6
31	Bachelor degree or above	%	2005	3.0	2.4	2.9	2.7	2.2	*1.9	**2.7	*0.8	2.6
32	Advanced diploma and diploma or below	%	2005	4.3	4.2	4.5	4.4	3.2	3.4	*4.6	*3.2	4.2
33	Without non-school educational qualifications(h)	%	2005	7.8	8.0	7.2	6.5	6.8	8.1	*6.1	6.4	7.5
34	Completed Year 12(k)	%	2005	4.6	5.1	5.7	4.6	5.8	6.3	5.3	3.3	5.1
35	Did not complete Year 12(k)	%	2005	10.0	10.1	8.2	7.5	7.4	8.8	6.6	11.1	9.1

	HUMAN RESOURCES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	FTE Student/teaching staff ratio											
39	All schools (l)	ratio	2005	14.4	13.9	14.4	14.5	14.4	14.5	13.0	13.6	14.2
40	Government schools (l)	ratio	2005	14.6	14.1	14.5	14.6	14.5	14.7	12.9	12.9	14.4
41	Primary schools (l)	ratio	2005	16.8	16.1	15.7	16.3	16.4	16.1	14.2	15.0	16.2
42	Secondary schools (l)	ratio	2005	12.2	11.9	12.8	12.3	12.1	13.0	11.2	12.3	12.2
43	Higher education(f)(g)	ratio	2004	19.4	19.3	22.2	18.8	19.3	19.8	18.6	18.3	r19.8
	Female teachers/academic staff											
44	Of all primary school teachers	%	2005	81.0	80.1	78.5	76.5	79.3	79.0	81.1	82.9	79.7
45	Of all secondary school teachers	%	2005	55.4	57.8	57.0	50.7	53.5	55.1	59.9	60.5	56.0
46	Of all higher education academic staff(g)(m)	%	2004	38.0	42.6	38.3	40.2	38.9	36.3	50.4	32.3	39.5

	PROVIDERS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
47	Schools	no.	2005	3 106	2 305	1 734	805	1 068	279	186	140	9 623
48	Government schools – of all schools	%	2005	70.6	70.0	73.8	75.2	72.8	76.3	81.2	68.6	72.0

(a) Estimates for Northern Territory refer to mainly urban areas only for indicators 8–9, 16–22, 24–25 and 30–35.

(b) Refers to full-time students only.

(c) Refers to the number of full-time students in Year 12 divided by the number of full-time students in the first year of secondary school (Year 7 in NSW, the ACT, Vic. and Tas.; Year 8 in Qld, SA, the NT and WA) when the Year 12 cohort began secondary school. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

(d) Excludes VET in schools and students who were granted credit transfer for all of their 2004 enrolment activity.

(e) In 2003 Queensland introduced a unique student identifier for all students covered by the collection which creates an apparent reduction in overall student numbers when compared with previous annual collections.

(f) State and territory totals exclude students of the Australian Catholic University which has campuses in more than one state or territory.

(g) Australian total includes multi-state universities.

(h) Estimates refer to recognised qualifications only.

(i) Includes persons who have a qualification where the level can not be determined.

(j) Excludes VET in schools.

(k) Includes persons who are still at school.

(l) FTE student/teaching staff ratios are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

(m) Data cover full-time and fractional full-time staff but exclude casual academic staff.

Reference periods: Data for indicators 8–9, 16–22, 24–25 and 30–35 are at May.
Data for indicators 10–12 are at 30 June.
Data for all other indicators are at August.

Education and training: data sources

INDICATORS	DATA SOURCE
1–7, 39–42, 44–45, 47–48	*Schools, Australia* (ABS cat. no. 4221.0).
4–5 (state)	National School Statistics Collection.
8–9, 19–22, 25	ABS Survey of Education and Work.
10, 12	National Centre for Vocational Education Research, *Australian Vocational Education and Training Statistics: Students and Courses.*
11	National Centre for Vocational Education Research, *Apprentices and Trainees*.
13–15	Department of Education, Science and Training, *Students: Selected Higher Education Statistics.*
16–18, 24, 30–35	*Education and Work, Australia* (ABS cat. no. 6227.0).
23	Department of Education, Science and Training, *Students (First half year): Selected Higher Education Statistics.*
26–29	Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), *National Report on Schooling in Australia*.
36–38	*Government Finance Statistics, Education, Australia* – Electronic delivery (ABS cat. no. 5518.0.55.001).
43	Department of Education, Science and Training, *Selected Higher Education Statistics.*
46	Department of Education, Science and Training, *Staff: Selected Higher Education Statistics.*

Education and training: definitions

Academic staff

those appointed wholly or principally to undertake a teaching-only function or a research-only function or a teaching-and-research function in an educational institution, or those appointed by an educational institution to be responsible for such people.

Reference: Department of Education, Science and Training, *Staff: Selected Higher Education Statistics*.

Advanced diploma and diploma or below

includes qualifications at the Advanced Diploma Level, Associate Degree Level, Diploma Level, Certificate IV Level, Certificate III Level, Certificate II Level, or Certificate I Level.

Reference: *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1272.0).

Apprentices and trainees

persons undertaking vocational training through contract of training arrangements. Contracts of training are legal agreements entered into by employers and trainees who are engaged in employment-based training.

Reference: National Centre for Vocational Education Research, *Australian Apprentice and Trainee Statistics.*

Bachelor degree or above

includes qualifications at the Bachelor Degree Level (including Honours), Graduate Certificate Level, Graduate Diploma Level, Master Degree Level or Doctorate Degree Level.

Reference: *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1272.0).

Education participation

all persons enrolled for a course of study in the survey month at any institution whose primary role is education. Included are schools, higher education establishments, Technical and Further Education colleges (TAFEs) and any other educational institutions.

Reference: *Education and Work, Australia* (ABS cat. no. 6227.0).

Full-time Equivalent (FTE) teaching staff

a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The calculation of FTE for part-time staff is based on the proportion of time worked compared with that worked by full-time staff performing similar duties. Casual staff are excluded.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Full-time Equivalent (FTE) student

a full-time student is one who undertakes a workload equivalent to, or greater than, that prescribed for a full-time student of that year level. This may vary between states and territories and from year to year. The FTE of a full-time student is equal to 1.0. The FTE of a part-time student is calculated by dividing the student's workload by that which is considered to be a full workload by that state or territory, resulting in an estimate in the range 0 to 1.

Reference: *Schools, Australia* (ABS cat.no. 4221.0).

FTE student/teaching staff ratios

are calculated by dividing the number of FTE students by the number of FTE teaching staff. Student/teaching staff ratios should not be used as a measure of class size. They do not take account of teacher aides and other non-teaching staff who may also assist in the delivery of school education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

GDP (Gross Domestic Product)

total market value of goods and services produced in Australia within a given period after deducting the cost of goods used up in the process of production, but before deducting allowances for the consumption of fixed capital (depreciation).

Reference: *Government Finance Statistics, Education, Australia – Electronic delivery* (ABS cat. no. 5518.0.55.001).

Government expenses on education

total government final expenditure on education services and facilities; government transfer payments paid for the purpose of facilitating education but not intended to be spent directly on educational services (such as personal benefit payments to students and advances to persons for the Higher Education Contribution Scheme (HECS)); and other miscellaneous expenditure on education by government.

Reference: *Government Finance Statistics, Education, Australia – Electronic delivery* (ABS cat. no. 5518.0.55.001).

Government school

one administered by the Department of Education under the Director-General of Education (or equivalent) in each state or territory.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Education and training: definitions continued

Higher education student

a person who has been admitted to a higher education institution and who is enrolled (either full-time, part-time or externally) in a higher education award course, an enabling course or a non-award course to be undertaken in the semester used as the reference period. State totals are the number of students enrolled at all higher education institutions within a particular state or territory.

Reference: Department of Education, Science and Training, *Students: Selected Higher Education Statistics 2002.*

Higher education student/teaching staff ratios

the number of students, measured by the full-time equivalent (FTE) student unit for all students attending a higher education institution in Australia (excluding the FTE study load of work experience students), divided by the FTE of teaching staff (staff whose function was teaching only or teaching and research) in an Academic Organisational Unit, which includes full-time, fractional full-time, and casual staff.

Reference: *Education and Training Indicators, Australia, 2002* (ABS cat. no. 4230.0).

Non-government school

any school not administered by a Department of Education, but including special schools administered by government authorities other than the state and territory education departments.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Non-school educational qualification

an award for attainment as a result of formal learning from an accredited non-school institution. From 2001, with the implementation of the *Australian Standard Classification of Education (ASCED)* (ABS cat. no. 1262.0), non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. This includes qualifications at the Post Graduate Degree Level, Master Degree Level, Graduate Diploma and Graduate Certificate Level, Bachelor Degree Level, Advanced Diploma and Diploma Level, and Certificates I, II, III and IV Levels. Non-school qualifications may be attained concurrently with school qualifications.
Prior to 2001, educational qualifications were classified according to the *ABS Classification of Qualifications (ABSCQ)* (ABS cat. no. 1262.0). The level of attainment included higher degrees, postgraduate diplomas, bachelor degrees, undergraduate and associate diplomas, and skilled and basic vocational qualifications.

Reference: *Education and Work, Australia* (ABS cat. no. 6227.0).

Numeracy — national benchmarks

the numeracy benchmarks describe nationally agreed minimum acceptable standards for numeracy at particular school year levels. They represent the minimum acceptable standard of numeracy without which a student will have difficulty making sufficient progress at school.

Reference: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling, 2000.*

Overseas higher education student

a higher education student who is not an Australian citizen, is not a New Zealand citizen and does not have Permanent Residence status.

Reference: Department of Education, Science and Training, *Students: Selected Higher Education Statistics.*

Primary education

full-time education which typically commences around age five years and lasts for seven to eight years. It does not include sessional education such as preschool education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Reading — national benchmarks

the reading benchmarks describe nationally agreed minimum acceptable standards for literacy at particular school year levels. They represent the minimum acceptable standard of literacy without which a student will have difficulty making sufficient progress at school.

Reference: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia, 2000.*

School

an educational institution which provides primary or secondary education on a full-time daily basis, or the provision of primary or secondary distance education.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

School student

a person who is formally enrolled in a school and active in a course of study, other than preschool or Technical and Further Education (TAFE) courses.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Secondary education

education which typically commences after completion of primary education, at around age 12 years, and lasts for five or six years.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Tertiary education

for finance statistics used in this publication, formal education beyond secondary education, including higher education, vocational education and training, or other specialist post-secondary education or training. Also called post-secondary education or further education.

Reference: *Education and Training Indicators, Australia* (ABS cat. no. 4230.0)

Unemployed

persons aged 15 years and over who were not employed during the reference week, and:
had actively looked for full-time work or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Unemployment rate (of persons aged 15 years and over)

for any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Vocational Education and Training (VET) student

a person for whom there is a full-time or part-time vocational stream enrolment in a TAFE college or agricultural college or state-recognised Adult and Community Education (ACE) provider, or a publicly-funded vocational course enrolment in a registered private training organisation during the reference year. Persons enrolled in non-vocational courses given by TAFE and ACE are excluded.

Reference: National Centre for Vocational Education Research, *Australian Vocational Education and Training Statistics: Students and Outcomes.*

Year 7/8 to 12 apparent retention rate

the percentage of full-time students of a given cohort group who continue from the first year of secondary schooling (Year 7 in New South Wales, the Australian Capital Territory, Victoria and Tasmania; Year 8 in Queensland, South Australia, the Northern Territory and Western Australia) to Year 12. Care should be taken in interpreting apparent retention rates as they do not account for students repeating a year or migrating into or out of the relevant school student population.

Reference: *Schools, Australia* (ABS cat. no. 4221.0).

Education of Aboriginal and Torres Strait Islander children and young people

EDUCATIONAL ATTAINMENT

Contributed by Francis Mitrou, David Lawrence (Curtin University of Technology), John De Maio (Telethon Institute of Child Health Research) and the WAACHS team.

In 2002, more than half of Indigenous students aged 4–16 years (58%) in Western Australia were rated by their teachers as having low overall academic performance.

One of the most powerful tools for socioeconomic improvement is improving educational outcomes. Aboriginal and Torres Strait Islander peoples experience relative disadvantage across a range of socioeconomic indicators, with education being one of those indicators. The education sector is well placed to make positive long-term change to the life outcomes of Indigenous children, families and communities.

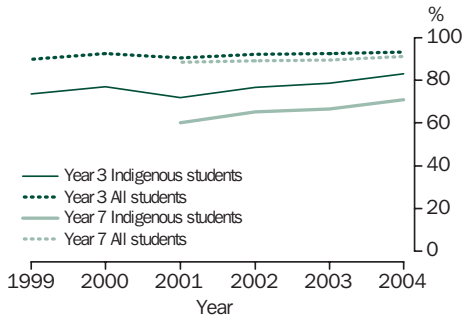
This article focuses on the academic performance of Indigenous children and young people. The article initially examines Australian National Benchmark data for literacy and numeracy, comparing Indigenous students and all Australian students in Years 3 and 7. Indigenous students' overall academic performance and factors influencing performance are then examined using data from the Western Australian Aboriginal Child Health Survey (WAACHS).

While WAACHS relates specifically to Western Australia, information collected about factors associated with academic performance may be relevant to Indigenous students' academic performance at the national level.

Literacy and numeracy

Basic literacy and numeracy skills are essential for functioning in work and everyday life, and people who carry lower levels of literacy and numeracy through to adulthood are more likely to be unemployed than people with higher levels of literacy and numeracy.[3]

School children(a) achieving reading benchmarks, Australia



(a) In Years 3 and 7.

Source: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia, Preliminary Paper, 2004*.

Data sources

This article discusses the academic performance of Indigenous students. It mainly focuses on the factors associated with the academic performance of Indigenous students in Western Australia, drawing on findings from the 2002 Western Australian Aboriginal Child Health Survey (WAACHS).[1] Data presented on the academic performance of non-Indigenous students are from the 1993 Western Australian Child Health Survey (WACHS).[2]

Australian National Benchmark data for literacy and numeracy are from the Ministerial Council on Education, Employment, Training and Youth Affairs' *2004 National Report on Schooling*. National literacy and numeracy benchmarks represent minimum standards for aspects of literacy and numeracy below which students will have difficulty progressing at school. Testing is conducted for children in Years 3, 5 and 7 over four areas: numeracy, reading, writing and spelling.

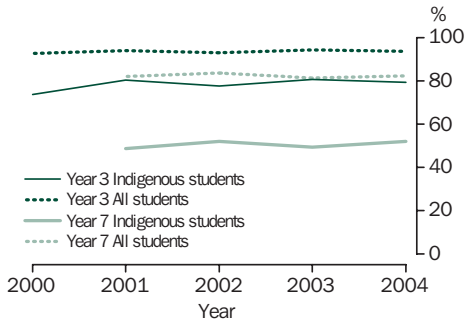
There have been improvements in the proportion of Indigenous students achieving reading benchmarks in recent years. The proportion of Indigenous students in Year 7 achieving reading benchmarks increased from 60% to 71% between 2001 and 2004. The proportion of Year 7 Indigenous students achieving numeracy benchmarks has remained around 50% over the period.

Despite improvements in reading literacy, the proportion of Indigenous students in Year 7 meeting national benchmarks remains much lower than for all Australian students. In 2004, 91% of all Year 7 students achieved reading benchmarks (compared with 71% of Indigenous students in Year 7) and 82% achieved numeracy benchmarks (compared with 52% of Indigenous students).

The gap between the proportion of Indigenous students and all Australian students achieving national benchmarks has narrowed in recent years. Between 2001 and 2004 the gap between Indigenous students and all students achieving Year 7 reading benchmarks decreased eight percentage points (to 20 percentage points in 2004). For Year 7 numeracy benchmarks there was a three percentage point decline in the gap over the period (to 30 percentage points in 2004).

The proportion of Indigenous students in Year 7 achieving national benchmarks is well below the proportion achieving benchmarks

School children(a) achieving numeracy benchmarks, Australia



(a) In Years 3 and 7.

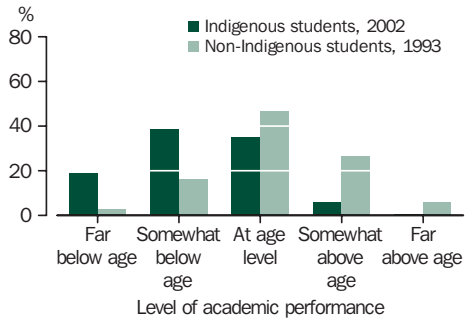
Source: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia, Preliminary Paper, 2004*.

in Year 3. For example, in 2004 the proportion of Indigenous students achieving numeracy benchmarks in Year 7 (52%) was well below the proportion achieving numeracy benchmarks in Year 3 (79%). While this pattern is also evident among all students, the difference between Years 3 and 7 in the proportion achieving the national benchmarks is more pronounced for Indigenous students.

Overall academic performance

There is a high level of disparity in the overall academic performance of Indigenous and non-Indigenous students in Australia. In 2002, the WAACHS found that more than half of Indigenous students aged 4–16 years (58%) in Western Australia were rated by their teachers as having low overall academic performance.

Students(a) academic performance(b), Western Australia



(a) Students aged 4–16 years.
(b) Teacher rated academic performance.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey[1], ICHR and ABS 1993 Western Australian Child Health Survey.[2]

Western Australian Aboriginal Child Health Survey

The WAACHS was conducted between 2000 and 2002 by the Telethon Institute for Child Health Research (ICHR) and examined the health, wellbeing and education of Western Australian Aboriginal and Torres Strait Islander children aged 0–17 years.[1]

While the WAACHS collected several measures of academic performance this article focuses on *teacher rated academic performance*. School teachers of survey respondents rated students in comparison with other students of the same age. Students with *low academic performance* were those who were rated below age level. Students with *average or above average academic performance* were those who were rated at or above age level.

WAACHS teacher rated academic performance data was validated by comparing teacher ratings with Indigenous students performance in national benchmark testing for numeracy, reading, writing and spelling conducted by the Western Australian Literacy and Numeracy Assessment. The strong associations between the WAACHS teacher ratings and students performance on the national benchmark tests suggest that the teacher rated academic performance collected in WAACHS is a reliable measure of academic performance.

Western Australian Child Health Survey

The WACHS was conducted in 1993 by ICHR in collaboration with the ABS, and surveyed the health, wellbeing and education of children aged 4–16 years in Western Australia. There was no specific focus on Indigenous children, with those sampled outside of the Perth metropolitan area excluded from the survey. The WACHS methodology served as a template for the WAACHS, hence many data items are comparable between the two surveys.

In this article, the academic performance of Indigenous students based on 2002 WAACHS data is compared with 1993 WACHS data for non-Indigenous students. These two surveys used the same method to collect teacher rated academic performance, with assessment of academic performance based on comparisons with other students of the same age, rather than against benchmarks of academic achievement. So even if there have been changes in the level of academic achievement, the distribution of teacher assessed academic performance for all students is expected to be similar in 1993 and 2002. It is therefore feasible to use the two surveys to compare the academic performance of Indigenous and non-Indigenous students despite the gap in time between the two collections.

The incidence of low academic performance is considerably higher among Indigenous students than non-Indigenous students. In comparison, in 1993 less than one-fifth of non-Indigenous students aged 4–16 years (19%) in Western Australia were rated as having low overall academic performance according to the WACHS.

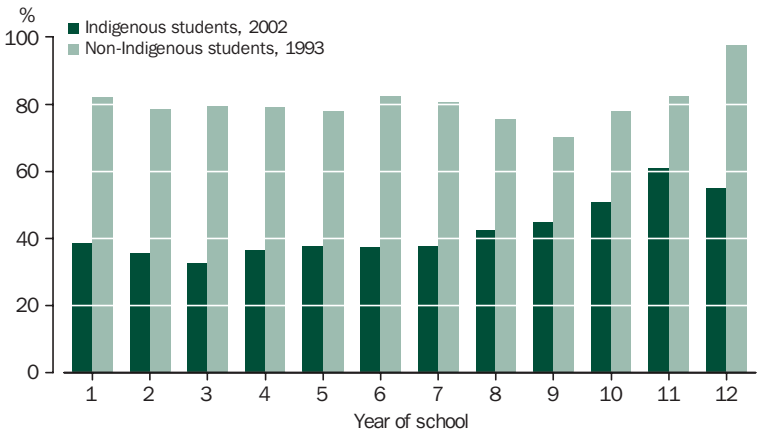
Teacher rated academic performance for Indigenous students for numeracy and literacy was similar to overall academic performance. In 2002, 59% of Indigenous students aged 4–17 years in Western Australia were rated as having low academic performance in literacy, and 57% were rated as having low academic performance in numeracy.

The disparity in academic performance between Indigenous students and non-Indigenous students is evident from the earliest years of schooling onwards, and is maintained until the early high school years. For example, similar proportions of Western Australian Indigenous students in Year 1 (39%) and Year 7 (38%) were rated as having average or above average academic performance. In comparison, 82% of non-Indigenous students in Year 1 and 81% in Year 7 were rated as having average or above average academic performance.

The apparent rise in performance among Indigenous students observed from Year 8 onwards merely reflects the fact that some of the lower performing Indigenous students have by then left school.

Evidence suggests that if a student begins school with a learning deficit, and has not caught up to their peers by their fourth year of schooling, it is most likely they will never catch up.[4, 5] Some researchers suggest that the key to achieving educational parity for Indigenous children may lie in the pre-school and early school years.

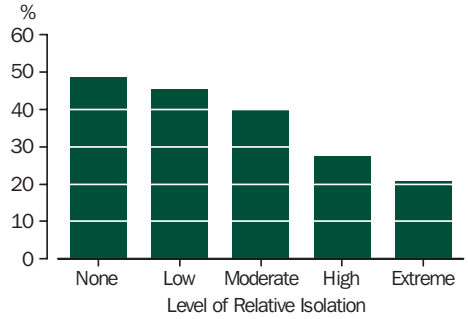
Students(a) rated at average or above average academic performance(b), Western Australia



(a) Students aged 4–16 years.
(b) Teacher rated academic performance.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey[1], ICHR and ABS 1993 Western Australian Child Health Survey.[2]

Indigenous students(a) rated at average or above average academic performance(b) by Level of Relative Isolation, Western Australia — 2002



(a) Students aged 4–17 years.
(b) Teacher rated academic performance.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey.[1]

...Level of Relative Isolation

The academic performance of Indigenous students in Western Australia varied across Levels of Relative Isolation, with the proportion of Indigenous students rated by their teachers at average or above average academic performance decreasing as isolation increased. A little under half (49%) of Indigenous students were found to be at average or above average academic performance in the Perth metropolitan area (i.e. No relative isolation) compared with 21% of Indigenous students in areas of Extreme isolation.

Factors significantly associated with academic performance

In the WAACHS a wide range of factors associated with the academic performance of Indigenous students were analysed. These included factors related to the students own physical health and social and emotional wellbeing as well as factors relating to their primary carer, family and household and school environment.

Level of Relative Isolation

Level of Relative Isolation is based on an extension of the Accessibility/Remoteness Index of Australia (ARIA) known as ARIA++. Based on the ARIA++ scores, five categories of isolation have been defined specifically for use in WAACHS that reflect differences in access to services for Indigenous children. These five categories are referred to as Levels of Relative Isolation and range from none (Perth metropolitan area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).[1]

As factors can be interrelated, multivariate analysis techniques were used to determine which factors had a significant effect on academic performance, independent of their effects on other factors.

Three key factors were found to be the predominant drivers associated with low academic performance. While these were not the only factors associated with academic performance they represent those which had the most impact. They were selected as the most powerful due to both the strength of their association with low academic performance and the high proportion of Indigenous students affected by them. The three factors were: emotional or behavioural difficulties, school attendance and the educational attainment of the carers of Indigenous students.

...emotional/behavioural difficulties

The extent to which Indigenous children and young people experience emotional or behavioural difficulties affects their ability to grow up to be emotionally resilient young people.[6] Western Australian Indigenous students assessed by their teachers at high risk of clinically significant emotional or behavioural difficulties were almost three times more likely than students at low risk to have low academic performance.

In 2002, around one in six (17%) Indigenous students aged 4–17 years in Western Australia were rated at high risk of clinically significant emotional or behavioural difficulties by their teachers. Four in five (80%) of these students were also rated as having low academic performance by their teachers. In contrast, less than half (48%) of Indigenous students at low risk of clinically significant emotional or behavioural difficulties were also rated as having low academic performance.

The most common specific emotional or behavioural difficulty experienced by Indigenous students (as assessed by their teachers) was hyperactivity followed by conduct problems and problems with social behaviour, such as sharing.

In 2002, a little over one-fifth (22%) of Indigenous students in Western Australia were assessed as being at high risk of clinically significant hyperactivity. Children with hyperactivity have significant problems with restlessness and fidgeting and are easily distracted and often unable to stop and think things through or finish what they have started.[6] Just under one in five (18%) Indigenous students at high risk of clinically significant hyperactivity were rated as having average or above average academic performance. In contrast over half (52%) of Indigenous students at low risk of clinically significant hyperactivity were rated as having average or above average academic performance.

WAACHS analysis of factors associated with academic performance

A range of factors associated with academic performance were collected in the WAACHS. These included factors related to the health and personal characteristics of the students, the education and socioeconomic background of carers, as well as a range of factors relating to the family, household and school environment.

To assist with analysis these factors were grouped into four broad categories and logistic regression modelling was used to determine the relative strength of factor associations with academic performance in each of these groups.

A final model was then used to assess the joint impact of factors found to be significantly associated with low academic performance across each of the four broad analysis categories – student, carer, family and household and school environment. This model highlighted factors which had the most impact on academic outcomes for Indigenous students.

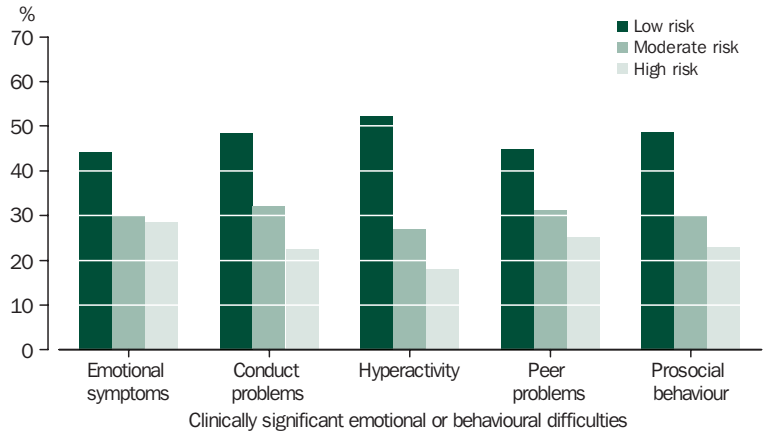
Surprisingly some factors were not highly significant. For example, of the physical health factors tested, only two were found to be significantly associated with academic performance – speech difficulties and functional limitations.

Independent of a student's sex, age, level of relative isolation and school type the following factors were identified as significant predictors of low academic performance.[1]

- Student factors – speech difficulties, functional limitations, risk of clinically significant emotional or behavioural difficulties, language other than English mainly spoken in the classroom, whether student usually does homework or study in a homework class, and whether the carer has seen the class teacher in the past six months about a problem the student was having at school.
- Carer factors – primary carer's education, labour force status and attendance at an Aboriginal funeral in the last 12 months.
- Family and household factors – number of homes lived in, and whether gambling causes problems in the household.
- School environment factors – student to teacher ratio, days absent from school, unexplained absence from school, school suspension and repeating a year at school.

Source: Zubrick, S and Silburn, S et al 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

Proportion of Indigenous students(a) at average or above average academic performance(b) by risk of clinically significant specific difficulties(b), Western Australia — 2002



(a) Students aged 4–17 years.
(b) Teacher rated.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey.[1]

Measuring emotional and behavioural difficulties in Indigenous children

The WAACHS used a version of the Strengths and Difficulties Questionnaire (SDQ) to determine risk of clinically significant emotional or behavioural difficulties in Indigenous children. The SDQ is used throughout the world to measure emotional and behavioural problems in young people and was specifically modified for Indigenous children and young people in the WAACHS.[6]

The SDQ comprises a series of questions which look into five areas of emotional and behavioural difficulties: emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour. A score is derived based on the responses to questions relating to the first four of these areas which is then used to indicate the risk of clinically significant emotional or behavioural difficulties.[7, 8, 9]

While the WAACHS collected information about the emotional and behavioural difficulties of Indigenous children from several sources this article is based on teacher reported SDQ.

Almost one in five (19%) Indigenous students were assessed as being at high risk of conduct problems. Children with conduct problems display a range of behaviours including lying, stealing and fighting, along with temper tantrums and disobedience.[6] Just over one in five (23%) Indigenous students at high risk of clinically significant conduct problems were rated as having average or above average academic performance. In contrast, 48% of Indigenous students at low risk of clinically significant conduct problems were rated as having average or above average academic performance.

Around one in six (17%) Indigenous students were at high risk of problems with prosocial behaviour (i.e. had poor social skills). Social skills that entail being considerate, sharing, helpful and kind are abilities that are important at school as well as at home, work and in recreation.[6] Just over one in five (23%) Indigenous students with a high risk of clinically significant problems with prosocial behaviour, and 48% of Indigenous students at low risk were rated as having average or above average academic performance.

Less than one in ten students were assessed as being at high risk of peer problems (9%) or emotional symptoms (7%). Children with peer problems may not have friends, be liked, be picked on by other children, play alone or prefer adult company to the company of peers.[6] Children with emotional problems may be overly sad, fearful, worried or nervous. They may also complain of physical symptoms even when these are shown to have no physical cause.[6]

Similar proportions of Indigenous students at high risk of clinically significant emotional symptoms (29%) and peer problems (25%) were assessed as having average or above average academic performance. In contrast, much higher proportions of Indigenous students at low risk of clinically significant emotional symptoms (44%) and peer problems (45%) were assessed as having average or above average academic performance.

... absence from school

School attendance was significantly associated with academic performance – missing even a few days of schooling has a negative relationship with academic performance regardless of a student's Indigenous status.

In 2002, median days absent from school among Indigenous students was 26 days. This was considerably higher than median days absent for non-Indigenous students, 8 days in 1993. In 2002, Indigenous students who were absent from school for 26 days or more were one and a half times more likely to be rated at low academic performance than Indigenous students who were absent for less than 26 days in a school year.

A range of factors were associated with Indigenous students' attendance at school including their carer's education, risk of clinically significant emotional or behavioural difficulties, students in families with multiple life stress events, whether a language other than English was main language spoken at

home (Aboriginal English or an Aboriginal language), difficulties sleeping, and whether the student attended day care.

Academic performance and school attendance are both also associated with Level of Relative Isolation. The decline in average academic performance associated with absence from school varies with Level of Relative Isolation, declining the most in more isolated areas. For example, in 2002 academic performance for Indigenous students living in or close to major centres was rated at average or above average for 61% of students with zero days absent and 54% of students with 20 days absent.

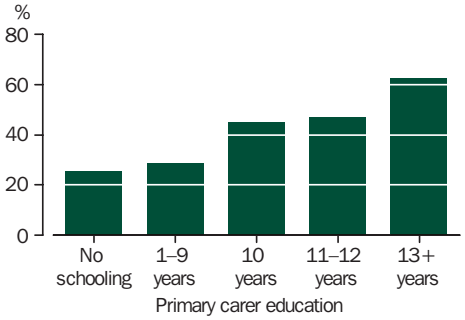
In comparison, in areas of Extreme isolation, 47% of students with zero days absent were rated at average or above average academic performance in comparison to 19% of students with 20 days absent and 10% of students with 100 days absent. This suggests that students in or near larger population centres are more able to catch up when they miss a few days of school compared with students in more isolated areas.

... primary carer's education

Indigenous students in the primary care of a person who had completed 13 or more years of education were over two times less likely to have low academic performance than students whose primary carer had completed between one and nine years of education.

Around six in ten (62%) Indigenous students whose carers had 13 or more years of education were rated by their teachers at average or above average academic performance. As the number of years of education for carers declined so too did the proportion of Indigenous students with average or above average academic performance. Indigenous students whose carers had not attended school were the least likely to have average or above average academic performance (25%).

Indigenous students(a) at average or above average academic performance(b) by primary carer education(c), Western Australia — 2002



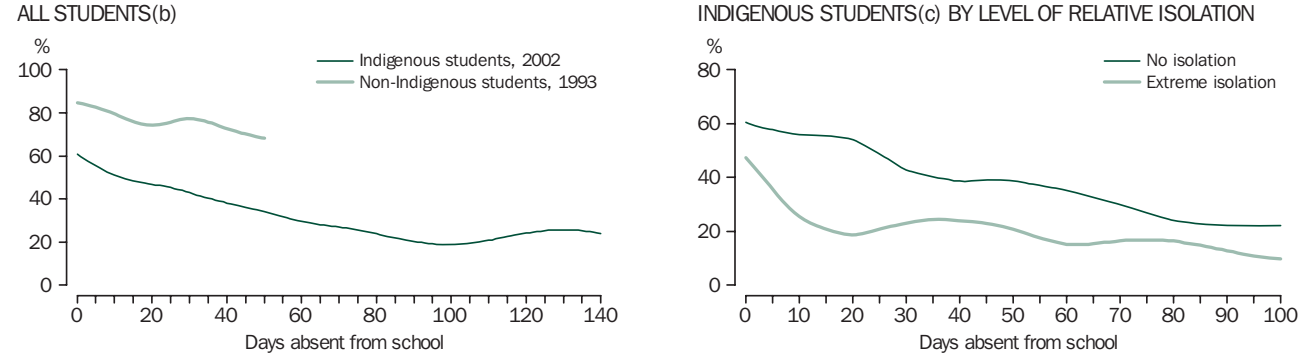
(a) Students aged 4–17 years
(b) Teacher rated academic performance
(c) Carers who completed a diploma, bachelor degree, post-graduate diploma or higher degree were classified as having 13 or more years of education. Otherwise educational attainment was classified by highest grade finished at school.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey.[1]

Improving academic performance

Despite gains in some areas in recent years, such as improvements in literacy skills, the data presented in this article suggest that there is still enormous potential for positive improvement in one of the key areas of human development – education – for the majority of Indigenous children and young people.

Students with average or above average academic performance(a): days absent from school, Western Australia



(a) Teacher rated academic performance.
(b) Students aged 4–16 years.
(c) Students aged 4–17 years.

Source: ICHR 2002 Western Australian Aboriginal Child Health Survey[1], ICHR and ABS 1993 Western Australian Child Health Survey.[2]

Historical perspective

Findings from a 1965–66 Western Australian survey showed considerable disparity between the academic achievement of part-Aboriginal children and European children.[10] The survey examined the academic performance of part-Aboriginal children attending schools in the south-west region of Western Australia with European children attending Belmont High School, with teachers rating children on a three-point scale – above average, average or below average.

Results from the 1965–66 survey show that between 40% and 55% of part-Aboriginal children were rated by their teachers as below average in reading, English, spelling, arithmetic and general knowledge. For the European children, the corresponding proportions were much lower, ranging between 17% and 24%.

In Western Australia, widespread exclusion of Indigenous children from education was practiced until the 1950s. In the 1940s, one estimate put the proportion of Indigenous children throughout Australia attending state schools at 7%, with only a further 25% receiving any education at all (most of these in missions).[11] Much has changed since the 1960s in terms of Indigenous children's participation in education, with almost all Indigenous children of school age enrolled in school. Educational curricula and delivery have also changed markedly for all children.

While results from the 1965–66 survey are not directly comparable with findings from the WAACHS, the results incidate that the proportion of Indigenous students rated at below average by their teachers has changed little between the mid 1960s and the present day.

Issues around the lower academic performance of Indigenous students are complex, with many factors involved. This article has focused on three key factors associated with low academic performance – risk of emotional or behavioural difficulties, school attendance and primary carer's education.

While the analysis presented suggests that there is potential for improvement in each of these areas, it also suggests that improvement in any one of these areas will not in itself solve the problem of low academic performance. For example, improving Indigenous students school attendance should lead to improvements in academic performance. However the gap of over 20 percentage points between Indigenous and non-Indigenous students with average or above average academic performance who have no days absent from school, points to the presence of other factors that are contributing to Indigenous students' lower rates of academic performance.

Endnotes

1 Zubrick, S and Silburn, S et al 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

2 Zubrick, S and Silburn, S et al 1997, *Western Australian Child Health Survey: Education, health, and competence*, Australian Bureau of Statistics and the TVW Telethon Institute for Child Health Research, Perth.

3 House of Representatives Standing Committee on Education and Training *2002, Boys: Getting it right - Report on the inquiry into the education of boys*. Australian House of Representatives, Canberra.

4 Juel, C 1988,'Learning to read and write: A longitudinal study of 54 children from first to fourth grades,' *Journal of Educational Psychology,* vol. 80, no. 4, pp. 437–47.

5 Francis, D et al 1996, 'Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis', *Journal of Educational Psychology*, vol. 88, pp. 3–17.

6 Zubrick, S and Silburn, S et al 2005, *The Western Australian Aboriginal Child Health Survey: The social and emotional wellbeing of Aboriginal children and young people*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

7 Goodman, R and Simmons, H et al 2000, 'Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample', *British Journal of Psychiatry,* vol. 177, pp. 534–9.

8 Goodman, R, *SDQ: Scoring the SDQ*, viewed 8 June 2006, <http://www.sdqinfo.com/ba3.html>.

9 Zubrick, S and Lawrence, D et al 2006, *Testing the Reliability of Aboriginal Children's Mental Health – An Analysis Based on the Western Australian Aboriginal Child Health Survey*, Telethon Institute for Child Health Research, Australian Bureau of Statistics, cat. no. 1351.0.55.011, ABS, Canberra.

10 McKeich, R 1971, *Problems of part-Aboriginal Education with Special Reference to the South-west Region of Western Australia,* PhD Thesis, The University of Western Australia, Perth.

11 Beresford, Q and Partington, G 2003, *Reform and Resistance in Aboriginal Education: The Australian Experience,* The University of Western Australia, Perth.

Government and non-government schooling

The proportion of school students attending government schools fell from 71% in 1995 to 67% in 2005.

Government and non-government schools have both existed in Australia since 1848. In 1964 Australian Parliament passed legislation that allowed for Commonwealth provision of financial assistance to non-government schools.[1] Recommendations from the Karmel Report on Australian schools in 1973 formed the basis of the Commonwealth's policy for funding government and non-government schools based on the principle of need.[2]

Government schools have experienced a decline in the proportion of student enrolments since the late 1970s. Concerns have been raised by some analysts about the weakening of the government school system as resources follow students to non-government schools.[3] Ongoing debate about the capacity of government schools to deliver high quality education could also affect public confidence in these schools.

This article examines trends in government and non-government student enrolments. It also focuses on government funding of schools, household expenditure on school fees and the characteristics of families with children in government and non-government schools.

Schools and school students

In 2005 there were a total of 9,623 schools in Australia. Of these schools, almost three-quarters (72%) were government schools, 18% were Catholic schools and 10% were Independent schools. The total number of schools decreased by 25 schools between 1995 and 2005, mainly due to amalgamations and school closures, although the number of Independent schools increased by almost 20% over this period.

Schools

Data for this article are drawn from several sources. Data on students and schools are from the ABS National Schools Statistics Collection. Data on household expenditure on education and characteristics of households are from the ABS 1993–94 and 2003–04 Household Expenditure Surveys. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) and the Report on Government Services (ROGS) provide data on government expenditure on school students. Data on school completion are from the ABS 1996 and 2005 Surveys of Education and Work.

Government schools operate under the direct responsibility of the relevant state/territory Minister, while *non-government schools* are established and operate under conditions set by state/territory government registration authorities. Non-government schools are either Catholic or Independent schools. *Catholic schools* are generally administered by Catholic education offices while *Independent schools* comprise other non-Catholic, non-government schools.[4]

Teaching staff are staff with teaching duties who spend the majority of their time with students. It includes principals, deputy principals and senior teachers mainly involved in administration but excludes teacher aides and assistants and specialist support staff.

The *full-time equivalent (FTE) student/teaching staff ratio* presents a measure of the number of students relative to the number of teachers. It is calculated by dividing the number of FTE students by the number of FTE teaching staff. This ratio can broadly reflect the workload and availability of a teacher. In theory, the lower the student/teacher ratio the higher the availability of teacher services to students. These ratios are not intended to provide a measure of class size.[5]

Government and non-government full-time school students

	Primary		Secondary		Total	
	1995	2005	1995	2005	1995	2005
	%	%	%	%	%	%
Government	74.2	70.9	66.4	61.8	71.0	67.1
Non-government	25.8	29.1	33.6	38.2	29.0	32.9
Catholic	18.9	19.1	20.4	21.5	19.6	20.1
Independent	6.8	10.0	13.2	16.7	9.5	12.8
	'000	'000	'000	'000	'000	'000
Total students	**1 833.7**	**1 932.2**	**1 275.7**	**1 416.0**	**3 109.3**	**3 348.1**

Source: Schools, Australia, 2005 (ABS cat. no. 4221.0).

Government schools continue to educate the majority of students in Australia, although the proportion of students in the government school system has been declining. In 2005, 67% of full-time school students in Australia were enrolled in government schools, down from 71% in 1995. This decline has occurred in the proportion of both government primary school students (down by three percentage points) and secondary school students (down by almost five percentage points) between 1995 and 2005.

In comparison, the proportion of students enrolled in non-government schools had increased by almost four percentage points over the period 1995–2005. In 2005, non-government schools educated one-third (33%) of all school students, including 29% of all primary school students and 38% of all secondary school students. Catholic schools have traditionally educated the largest proportion of non-government school students, although this proportion has fallen from 67% in 1995 to 61% in 2005. Approximately one-fifth of all school students were enrolled in Catholic schools in 2005: 19% of all primary school students and 21% of all secondary school students.

Although Independent schools have the smallest number and proportion of all school students, they have had the largest proportional growth in student numbers over the past ten years. Between 1995 and 2005 the number of students enrolled in Independent schools has increased by 46% (or 135,300 students) compared with Catholic schools (11% or 65,200 students) and government schools (2% or 38,200 students).

Full-time equivalent student/teaching staff ratios(a)

	1995 ratio	*2005* ratio
Primary		
Government	17.9	16.1
Catholic	20.1	17.9
Independent	16.1	14.6
Secondary		
Government	12.5	12.4
Catholic	13.6	13.1
Independent	11.6	10.7

(a) Student/teacher ratios were calculated using full-time students only in 1995, and using full-time equivalent students in 2005.

Source: ABS National Schools Statistics Collection.

Special needs students

Government and non-government schools provide education for students with special needs. Two of the special needs groups are Indigenous students and students with a disability.

In 2004 the 130,500 Indigenous full-time students accounted for 4% of all full-time school students. Most Indigenous students (114,000 or 87%) attended government schools in 2004, while 8% attended Catholic schools and 4% attended Independent schools.[6]

Students with disabilities are those students who satisfy the criteria of enrolment in special education services or programs provided in the state or territory in which they are enrolled. These criteria vary across jurisdictions.[7] In 2004, 4% (or 129,200) of all full-time equivalent students had a disability. Most students with a disability (81%) attended government schools.

Special needs groups by school sector — 2004

	Indigenous students(a)	*Students with a disability(b)*
	%	%
Government schools	87.4	81.2
Non-government schools	12.6	18.8
All schools	100.0	100.0
	'000	'000
All schools	130.5	129.2

(a) Full-time students.
(b) Full-time equivalent students.

Source: SCRGSP, Report on Government Services, 2006.

School teachers

As student numbers have increased in schools, so have the number of teachers. In 2005 there were 235,800 full-time equivalent (FTE) teaching staff in Australian schools. This was an overall increase of 16% on teacher numbers in 1995 (202,400) and twice the rate of increase of student numbers (8%) over the same time period.

Reflecting student enrolment patterns, two-thirds of all teachers (66%) worked in government schools in 2005. The growth in proportion of FTE teachers in the non-government school sector was much greater than in the government sector over the 1995–2005 period. The number of FTE teaching staff in government schools grew by 9% between 1995 and 2005 compared with 35% in non-government schools.[5]

Between 1995 and 2005, student/teacher ratios have decreased across all school sectors and all levels of education. In 2005 Independent secondary schools had the lowest student/teacher ratio (10.7), followed by government secondary schools (12.4) and Catholic secondary schools (13.1). Student/teacher ratios between 1995 and 2005 have been consistently lower for secondary schools than for primary schools.

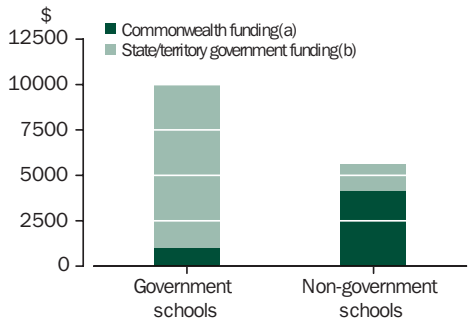
Funding for schools

Education is seen as a common good that benefits both individuals and the nation. Under the Constitution, state and territory governments have the responsibility for providing schooling to all children. School education in Australia has both public and private funding components. The Australian Government provides funding to state and territory governments for schools as well as providing funding directly to schools. State and territory governments have responsibility for providing, regulating and administering government schools.[7]

Education is free in government primary and secondary schools in all states and territories, although fees may be charged for the hire of text books and other school equipment.[5] Voluntary contributions may also be sought from parents of students in government schools.

Non-government schools receive funds from parents in the form of fees and charges and other private income in addition to government funding. In 2004 Independent schools received more than half of their funding (53%) from fees and charges while Catholic schools received 22% of their funding from fees and charges.[8]

Government funding per full-time equivalent student — 2003–04



(a) Commonwealth specific purpose payments for schools.
(b) State and territory government recurring expenditure.

Source: SCRGSP, *Report on Government Services, 2006.*

Funding schools

All schools receive both Commonwealth and state/territory funding, with the proportion of funds received varying by school sector.

The average costs of educating a child in the government school system are known as the *Average Government School Recurrent Costs (AGSRC)*. Commonwealth funds are provided to all schools as a percentage of the AGSRC.[8]

Government schools

Government schools receive the majority of their funds from public sources, mainly state and territory governments. In 2003–04, 91% of total recurrent expenditure on government schools was provided by state and territory governments.[8]

The Australian Government provides supplementary funding to government schools at a fixed rate. Government primary school students are funded at 8.9% of AGSRC while secondary students are funded at 10%. Voluntary parent contributions also add to government school funding. In 2003–04 estimates from the ABS Household Expenditure Survey indicate that parents contributed over $400 million in school fees and donations to government schools.

Non-government schools

Non-government schools receive the majority of their government funding from the Australian Government. Funding is based on the socioeconomic status (SES) of a school's community and is calculated as a percentage of the AGSRC.[8] In 2004 the maximum funding rate for a non-government school was equal to 70% of the AGSRC and the minimum rate was 13.7%. Catholic schools had their funding set at a flat rate of 56.2% of the AGSRC (51.2% for ACT Catholic schools).

In 2004, non-government schools received over half (57%) of their total funds from government grants and 43% from private income. The majority of government grants (73%) came from Commonwealth funds with the remainder provided by the states and territories. All state and territory governments provide funds to non-government schools, although the method of allocating funds differs from state to state.[8]

Comparing school funding

At first glance it appears that students in government schools are funded at a higher level than are non-government school students. However, taking into account the expenditure on non-government school students arising from private income, e.g. school fees, etc., total expenditure per non-government school student in 2004 ($9,800 on average)[8] is close to the average total spending per government school student ($10,000[6] plus a relatively small parent contribution). Expenditure per student in the non-government school sector can vary greatly between schools due to the diversity in school funding. For example, in 2004 total expenditure per student averaged $8,300 in Catholic schools compared with $12,100 in Independent schools.[8]

Government expenditure per student

Government expenditure on school education has been increasing over the past ten years. Real government recurring expenditure on primary and secondary education was $28.6 billion in 2003–04, a funding increase of 26% from 1999–2000 ($22.7 billion).[7] Government funding (per full-time equivalent student) of government schools increased by an average of 2% per year between 1999–2000 and 2003–04, while government funding of non-government schools increased by an average of 6% per year over the same period. However, in 2003–04 governments still contributed almost twice the amount of money to educating a student in the government school system ($10,000 on average) compared with educating a student in the non-government school system ($5,600 on average).

Government expenditure on education of secondary school students was greater on average than spending on primary school students. Secondary schools received more per student than primary schools mainly due to increased teacher numbers which account for smaller student-teacher ratios in Years 11 and 12 and the greater range of subjects on offer in secondary school.[8]

Household expenditure on school education

In 2003–04, expenditure on school fees for households with children at school averaged $2,038 per household over the year. However, costs to households for school fees vary widely depending on the type of school sector and level. Expenditure on secondary school fees was between 2.0 and 2.6 times more than expenditure on primary school fees (within each sector), and household expenditure on non-government school fees around 14 times more than government school fees.

The greatest expenditure differences between the school sectors was for secondary education fees. In 2003–04 the average annual household expenditure on secondary Catholic school fees ($3,600) was 9 times higher than expenditure on secondary government school fees ($390) and Independent secondary school fees ($8,690) were 22 times higher than the government secondary school fees.

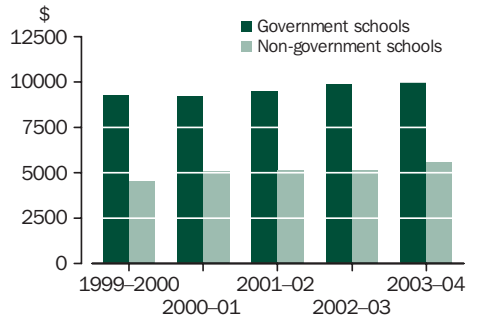
Average annual household expenditure on education fees by sector and level of schooling(a) — 2003–04

School sector	*Primary* $	*Secondary* $	*Total* $
Government	190	390	330
Non-government	2 490	5 680	4 720
Catholic	1 400	3 600	2 870
Independent	4 380	8 690	7 260
Total	**1 020**	**2 490**	**2 040**

(a) Includes only those households that had expenditure on school education and persons attending school.

Source: ABS 1993–94 and 2003–04 Household Expenditure Surveys.

Real government(a) recurrent expenditure on schools per full-time equivalent (FTE) student(b)



(a) Total Australian and State and Territory government expenditure.
(b) In 2003–04 dollars.

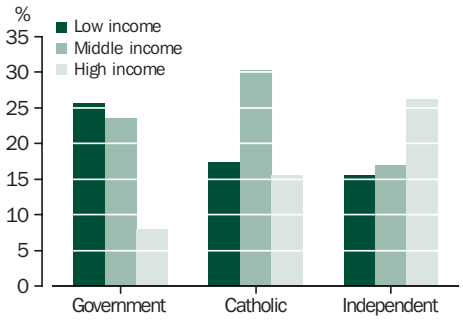
Source: SCRGSP, *Report on Government Services, 2006*.

Household characteristics ...income

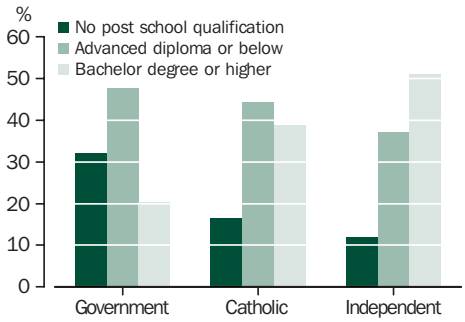
Given the differences in the cost of fees among the types of schools, it is not surprising that household income is a major influence in parents' choice of school. That said, parents' aspirations and attitudes are also important in determining the type of school best suited to their child. Thus for some households, school choice may be relatively independent of their level of income.

In 2003–04, over one-quarter (26%) of students at government schools were from low income households, compared with Catholic and Independent schools which had 17% and 16% of their students respectively from low income households. In contrast, 26% of students at Independent schools were from high income households compared with 16% at Catholic schools and 8% of students at government schools being from high income households.

Students: household income(a) by school sector attended — 2003–04



Students: highest qualification in household(b) by school sector attended — 2003–04



(a) Equivalised disposable household income. Low income includes households in the second and third deciles of income distribution. Middle income includes households in the fifth and sixth deciles, while the highest income contains households in the ninth and tenth income deciles.
(b) Highest level of non-school education in the household.

Source: 2003–04 Household Income and Expenditure Survey.

...household composition

The majority (77%) of households with children at school in 2003–04 were couple households, with one parent families making up around one-fifth (20%) of households. One parent families made up 23% of the households with children at government schools, compared with 16% at Catholic schools and 11% at Independent schools.

...education

Research has shown that the level of parents' education has an effect on student achievement, and may influence school choice.[9] Among children attending government schools in 2003–04, the highest non-school qualification held by anyone in their household was most commonly an advanced diploma or lower (48%), followed by no post-school qualification (32%) while 20% of children in government schools had a household member with a bachelor degree or higher.

In comparison, 39% of children attending Catholic schools and around half (51%) of children at Independent schools had a household member with a bachelor degree or higher.

Completing Year 12

Secondary school education is important in providing young people with increased opportunities for further study and employment. Formal education for children has traditionally taken place in schools, but in recent years there has been an increase in alternative pathways to education outside of formal schooling.[4] In 1996, almost two-thirds (65%) of people aged 20–24 had completed Year 12 and this proportion rose to almost three-quarters (74%) in 2005. The proportion of students who had completed Year 12 differed between the school sectors. People who had attended non-government schools had a greater proportion of Year 12 completion compared with government schools. In 2005, 91% of people who attended Independent schools completed Year 12, compared with Catholic schools (83%) and government schools (69%).

Endnotes

1 National Office of Overseas Skills Recognition 2000, *Country Education Profile, Australia*, viewed 18 May 2006, <http://aei.dest.gov.au/AEI/QualificationsRecognition/CountryEducationProfiles/CEP_Aus.htm>.

2 Marginson, S 1997, *Educating Australia: government, economy and citizen since 1960*, Cambridge University Press, Cambridge.

3 Buckingham, J 2001, 'The case for school choice and how to fund it', *Policy*, vol. 17, no. 3, pp. 18–24.

4 Australian Bureau of Statistics 2002, *Education and training indicators, Australia, 2002*, cat. no. 4230.0, ABS, Canberra.

5 Australian Bureau of Statistics, *Schools, Australia, 2005*, cat. no. 4221.0, ABS, Canberra.

6 Australian Bureau of Statistics 2006, *Year book Australia 2006*, cat. no. 1301.0, ABS, Canberra.

7 Steering Committee for the Review of Government Service Provision 2006, *Report on Government Services 2006*, SCRGSP, Melbourne.

8 Ministerial Council on Education, Employment, Training and Youth Affairs 2005, *National Report on Schooling 2004*, Curriculum Corporation for MCEETYA, Melbourne.

9 Evans, M D R, 2004, 'Choice between Government, Catholic and Independent schools: culture and community, rather than class', *Australian Social Monitor*, vol.7, no. 2, pp. 31–42.

Boys' schooling

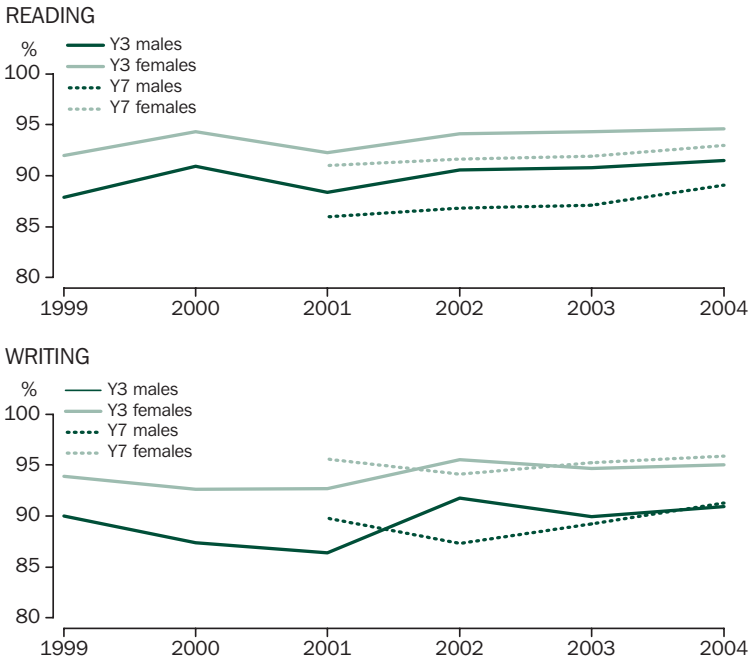
While girls generally outperform boys in reading and writing, there is very little or no difference in the proportions of boys and girls achieving numeracy benchmarks.

Education and training are important means by which individuals can improve their level of wellbeing. Education choices may have long-term implications not only for young people, but also for industry and governments, with significant health, welfare and national productivity implications.

For some time, there has been concern in Australia over gender patterns in educational performance.[1] While many boys perform well at school, on average boys do not achieve as well as girls across a range of educational measures. This is a pattern which is reflected in almost all other OECD countries.[2] In addition, boys are less likely than girls to complete high school (Year 12) education, and less likely to go on to university.[3]

Over 2006 and 2007 the Australian Government's $19.4m initiative *Success for Boys* will provide funding to schools to help them improve boys' learning outcomes and engagement with school. The initiative focuses on three key intervention areas: positive male role models, literacy, and information and communication technology.[6]

Proportion of school children(a) achieving benchmarks



(a) In Years 3 and 7.

Source: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia 2004: National Benchmark Results, Reading, Writing and Numeracy in Years 3, 5 and 7.*

Data sources

This article uses data from a number of different sources in order to compare educational outcomes of boys and girls, including:

National Report on Schooling in Australia reports on progress towards the achievement of national goals for schooling. It reports on the proportion of school children achieving *Australian National Benchmarks* for literacy and numeracy in Years 3, 5 and 7. Other areas covered in the report include participation and attainment and Indigenous education.[4]

The *Programme for International Student Assessment* (PISA) which was developed by the Organisation for Economic Co-operation and Development (OECD) and measures reading, scientific literacy and mathematical literacy of 15 year olds internationally. A scaling method assigns scores so that 500 is the OECD average in each domain. In 2003, PISA measured the outcomes in 41 countries including Australia.[5]

Survey of Education and Work (ABS cat. no. 6227.0) which presents information about the educational experience and labour force status of persons aged 15–64 years.

Literacy skills

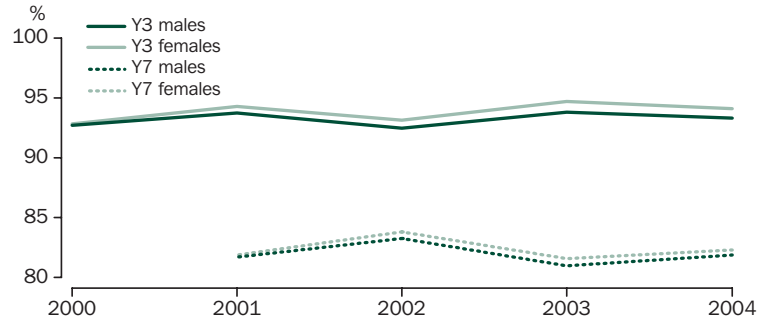
Literacy skills include reading, writing and numeracy tasks, and it is important that students develop these skills from an early age. These skills are an important predictor of longer term educational outcomes and personal and economic wellbeing.[2] While most students are successful in developing their literacy skills, research suggests that those who do not are at increased risk of leaving school early, and of poor educational, work and social outcomes.[7]

...Years 3 and 7

People develop literacy skills at different rates and Australian children's literacy skills are assessed regularly during their schooling. In 2004, most students in Year 7 were achieving benchmark levels in reading, writing and numeracy.

In 2004, fewer boys achieved benchmark levels in reading and writing tasks in both Years 3 and 7. For example, in reading 89% of boys and 93% of girls in Year 7 achieved benchmark levels, while for writing tasks, 91% of boys and 96% of girls in Year 7 achieved benchmarks.

Proportion of school children(a) achieving numeracy benchmarks



(a) In Years 3 and 7.

Source: Ministerial Council on Education, Employment, Training and Youth Affairs, *National Report on Schooling in Australia 2004: National Benchmark Results, Reading, Writing and Numeracy in Years 3, 5 and 7.*

The gaps between girls and boys performance in reading and writing tasks have remained similar to that in the preceding three years.

While girls generally outperform boys in reading and writing, there is very little or no difference in the proportions of boys and girls achieving numeracy benchmarks. In 2004, 82% of boys and girls in Year 7 reached numeracy benchmarks. The proportions of boys and girls achieving numeracy benchmarks in Year 7 have remained around the same since 2001 (82%).

In 2004, higher proportions of school students in Year 3 were achieving reading and numeracy benchmarks than in Year 7. For example, 92% of boys and 95% of girls in Year 3 achieved reading benchmarks compared with 89% of boys and 93% of girls in Year 7. Patterns of achievement for writing benchmarks were similar in Years 3 and 7.

Australian National Benchmarks

In 1997, all State, Territory and Commonwealth Education Ministers agreed on a national goal which stated that every child leaving primary school should be numerate and should be able to read, write, and spell at an appropriate level. This lead to the implementation of the National Literacy and Numeracy Plan, the essential features of which are: early assessment and intervention for students at risk of not achieving minimum numeracy and literacy goals; development of national benchmarks for each of Years 3, 5 and 7 and assessment of student progress against these benchmarks. The benchmarks describe nationally agreed minimum acceptable standards for aspects of literacy and numeracy at particular year levels.[4]

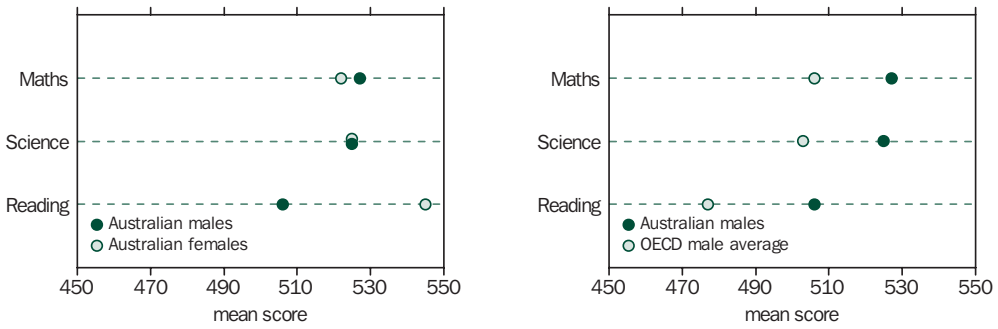
...15 year old students

In most Australian states and territories students complete their compulsory schooling at age 15, and at age 16 in some others. For most students this corresponds with Year 10. The Programme for International Student Assessment (PISA) is an international comparison of how well 15 year olds approaching the end of their compulsory schooling are prepared to meet the challenges they will face in their lives beyond school.[5]

According to the latest PISA results, 12,600 15 year old Australian school students participated in the 2003 survey. Overall, Australian students performed well, with both male and female students scoring above their respective OECD averages in mathematical, scientific and reading literacy.

There was little or no difference in the mean scores attained by Australian male and female students for mathematical literacy (mean score 527 for males and 522 for females) and scientific literacy (525 for both males and females). For more information see *Australian Social Trends 2005,* School students' mathematical and scientific literacy, pp. 102–106.

Students'(a) mathematics, science and reading mean scores on PISA — 2003



(a) 15 years old.

Source: OECD 2004 *Learning for Tomorrow's World - First results from PISA 2003.*

While Australian female students outperformed male students in reading literacy (mean score 545 for females and 506 for males), male students still performed well when compared with OECD and other countries. For example, male students in only four countries had a higher mean score than Australian male students in reading literacy (Canada, Finland, Korea and Liechtenstein) while male students in New Zealand had similar results. Overall, Australian male students' mean scores in mathematical, scientific and reading literacy placed them in the top 25% of male students' mean scores in participating countries.

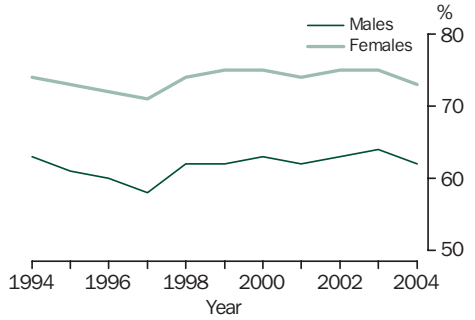
Year 12

An increasing proportion of students are continuing beyond compulsory schooling and completing Year 12, which in turn enhances their employment and earning opportunities in later life. According to the 2004 National Report on Schooling, 62% of male students and 73% of female students completed Year 12 in 2004. Completion rates for males have fluctuated between 60% and 64% in the 10 years to 2004. Similarly, completion rates for females have fluctuated between 71% and 75% over the same period.

Students, and in particular boys, living outside metropolitan areas are less likely to complete Year 12 than their urban counterparts. In 2004, the completion rates for male and female students in remote areas were 47% and 63% respectively. In comparison, the completion rates were considerably higher for male (65%) and female students (75%) living in metropolitan areas.

On average, Year 12 male students achieve lower marks than female students, although male and female high achievers are performing about equally. For example, in the 2000 Queensland Overall Position university entrance scores, while boys comprised 41% of the top half of performers they represented just over half (51%) of the highest achievers.[7] Similarly, aggregate results for all the subjects studied by more than 100 students for the 1999 NSW Higher School Certificate (Year 12) show that the average mark achieved by girls exceeded boys' average in 36 out of 40 subjects by up to 11%.[8]

Year 12 completion rates(a)



(a) Number receiving a Year 12 certificate as a proportion of those eligible to finish Year 12 in that calendar year.

Source: Ministerial Council on Employment, Education Training and Youth Affairs, *National Report on Schooling, Australia*, various.

Teaching staff

Teachers have an important role in preparing students to cope with work and life experiences once they have completed their schooling. In recent years there has been a steady decrease in the number of male teachers. In 2005, there were 236,000 Full-time Equivalent (FTE) teachers across Australia, up from 196,000 teachers in 1985. Over this period, the proportion of male teachers declined from 42% to 32%. The largest decline was among primary school teachers, where the proportion of male teachers declined from 30% to 20% between 1985 and 2005.

While men and women can be equally good teachers of both boys and girls, the balance of male and female teachers is also of interest. The recent House of Representatives Inquiry into the education of boys determined that more male teachers are needed because male teachers, as role models, matter.[8]

Male teachers — 2005

	Proportion male	
	%	%
	1985	2005
Primary school	29.7	20.3
Government	31.9	20.3
Non-government	21.8	20.4
Secondary school	53.1	44.0
Government	54.8	44.0
Non-government	48.4	44.1
Total	**41.6**	**32.0**

Source: *Schools, Australia, 2005* (ABS cat.no. 4442.0).

Patterns of subject choice

Choices that are made in the subjects studied in senior secondary school influence access to higher education, vocational education and training, and to labour market outcomes.[7] There are differences in subject enrolment patterns between male and female students in senior secondary school. For example, a smaller proportion of male students (93%) than female students (100%) enrolled in English[1], but a slightly higher proportion of

School leavers: engagement in education and the labour force — 2005

	15–19 year old school leavers	
	Males	*Females*
	%	%
In full-time education	34.7	42.9
Not in full-time education	65.3	57.1
Employed full-time	35.3	19.0
Employed part-time and part-time study	3.1	4.1
Employed part-time and no study	9.8	17.3
Unemployed and part-time study	0.7	0.9
Unemployed and no study	9.8	8.6
NILF(a) and part-time study	*0.3	1.9
NILF(a) and no study	7.3	6.3
	('000)	('000)
Total	**153.2**	**152.9**

(a) NILF - Not In Labour Force.

Source: ABS 2005 Survey of Education and Work.

males enrolled in the area of mathematics, particularly at the higher level.[9] Male students were more likely than female students to be enrolled in the areas of Physical Sciences, Technical Studies and Computer Studies, and Physical education. Female students were more likely than male students to be enrolled in Home Sciences, Humanities, Arts and Languages other than English.[9]

There is some concern in parts of the community that male students' participation in a narrow and vocationally-oriented range of subjects may mean they miss out on opportunities to acquire knowledge and skills such as interpersonal and civic skills, and to foster their social and cultural capacities. However, it does not mean they are disadvantaged with regard to employment.[1]

Pathways after schooling

Following compulsory secondary education, young people can choose from an increasing array of work, education and training pathways. Participation in formal training programs, higher education, or employment is important in order to avoid the risk of becoming long term unemployed, underemployed or marginally attached to the labour force.

Most young people aged 15–19 years were either in full-time education or were working full-time in 2005. While the proportion of females aged 15–19 years in full-time education (71%) was higher than for males aged 15-19 years (65%), there was a higher proportion of young males (23%) working full-time than young females (11%).

In 2005, 22% of young people aged 15–19 years were school leavers, that is, left school in the previous year. While most people aged 15–19 years were in full-time education or full-time work, most school leavers were no longer studying full-time, and a higher proportion were working full-time than for 15–19 year olds generally. Among male school leavers, there were similar proportions in full-time education and full-time work (both 35%). In contrast, among female school leavers there was a higher proportion in full-time education (43%) than full-time work (19%).

Young people may be at risk in the immediate transition from school to work if they are not in full-time education or in full-time work, or are not combining part-time education with part-time work. They may lack the skills to assist them over the long-term in the labour market. For more information see *Australian Social Trends 2005,* Young people at risk in the transition from education to work, pp. 93–98. In 2005, among school leavers, lower proportions of males (28%) than females (33%) were considered to be at risk in the immediate transition from education to work.[10]

Endnotes

1 Collins, C, Kenway, J and McLeod J 2000. *Factors Influencing the Educational Performance of Males and Females in School and their Initial Destinations after Leaving School.* Department of Education, Training & Youth Affairs, Canberra.

2 House of Representatives Standing Committee on Education and Training 2002, *Boys: Getting it right – Report on the inquiry into the education of boys*, viewed 21 April 2006, <http://www.aph.gov.au/house/committee/edt/eofb/report.htm>.

3 Department of Education Science and Training, *Boys' education*, viewed 21 April 2006, <http://www.dest.gov.au/sectors/school_education/policy_initiatives_reviews/key_issues/boys_education/default.htm>.

4 Ministerial Council on Education, Employment, Training and Youth Affairs 2005, *National Report on Schooling in Australia 2004*, Curriculum Corporation for MCEETYA, Melbourne.

5 Thomson, S, Cresswell, J and De Bortolli, L 2005, *Facing the Future: A focus on mathematical literacy among Australian 15 year old Students in PISA 2003,* ACER.

6 *Success for Boys*, viewed 11 April 2006, <http://www.successforboys.edu.au>.

7 Department of Education and the Arts, *Boys gender and schooling*, viewed 21 March 2006, <http://education.qld.gov.au/students/advocacy/equity/gender-sch/>.

8 Department of Education, Science and Training, *Educating Boys Issues and Information*, viewed 21 April 2006, <http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/educating_boys.htm>.

9 Fullarton S and Ainley J 2000, *Subject Choice by Students in Year 12 in Australian Secondary Schools*, Australian Council for Educational Research, Melbourne.

10 Dusseldorp Skills Forum 2005, *How young people are faring: Key indicators 2005*, Monash University – ACER, Centre for the Economics of Education and Training.

Work

Work: national summary

LABOUR FORCE	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1 Total labour force	%	8 881	9 061	9 169	9 256	9 379	9 495	9 676	r9 831	10 019	r10 145	10 390
2 Females – of total labour force	%	42.7	43.0	43.1	43.2	43.3	43.8	44.2	44.2	44.7	44.6	44.8
3 Participation rate	%	63.3	63.6	63.4	63.1	63.1	63.1	63.4	63.4	63.7	63.5	64.0
4 Males	%	73.7	73.8	73.4	72.9	72.7	72.3	72.1	72.1	71.7	71.6	71.8
5 Females	%	53.2	53.8	53.8	53.6	53.8	54.3	54.9	55.1	55.9	55.6	56.5
6 Females with children aged 0–4(a)	%	49.3	47.4	r47.8	48.2	47.1	r49.1	50.0	49.3	50.0	47.5	51.7
7 Persons aged 15–19	%	58.7	59.1	58.9	57.6	58.2	59.1	59.8	59.5	59.4	60.1	60.5
8 Persons aged 20–24	%	82.7	83.0	82.5	81.9	82.1	82.1	82.2	81.8	81.5	81.1	81.1
9 Median age of male labour force	years	36	37	37	37	38	38	38	38	39	38	39
10 Median age of female labour force	years	35	36	36	36	36	37	37	37	38	38	38

EMPLOYED PEOPLE	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
11 Total employed	'000	8 113	8 324	8 404	8 519	8 689	8 869	9 057	9 168	9 395	r9 559	9 845
12 Proportion of the total population in employment	%	44.9	45.5	45.4	45.5	45.9	46.3	46.7	46.7	47.3	r47.6	48.4
Part-time work												
13 Persons employed part-time – of total employed	%	24.5	24.7	25.3	25.7	26.1	26.3	26.8	28.1	28.7	28.4	28.5
14 Males employed part-time – of total males employed	%	11.0	11.1	11.8	12.1	12.6	12.6	13.4	14.4	14.8	14.7	14.9
15 Females employed part-time – of total females employed	%	42.6	42.6	43.1	43.5	43.6	43.8	43.6	45.3	45.8	45.6	45.3
16 Females employed part-time – of total part-time employed	%	74.5	74.5	73.6	73.3	72.7	73.2	72.2	71.5	71.5	71.3	71.2
17 Average hours worked per week by persons employed part-time	hours	15.3	15.2	15.4	15.4	15.4	15.6	15.6	15.8	16.0	15.9	16.2
18 Persons employed part-time who prefer more hours – of all part-time employed	%	26.4	26.1	26.5	26.1	25.8	23.9	24.2	27.1	26.2	26.3	25.8
19 Persons employed part-time who worked 15 hours or less per week – of all part-time employed	%	51.8	52.1	51.1	51.1	51.1	50.2	49.9	49.2	48.3	48.9	47.4
Full-time work												
20 Average hours worked per week by persons employed full-time	hours	40.9	40.5	41.0	41.1	41.1	41.4	40.7	40.8	41.2	40.4	40.7
21 Persons employed full-time working 50 hours or more per week – of all full-time employed	%	24.3	23.7	24.4	24.9	24.9	25.6	24.1	24.5	24.8	23.4	24.1
Employment arrangements												
22 Employees without leave entitlements – of all employees	%	24.0	26.1	25.8	26.9	26.4	27.3	27.2	27.3	27.6	27.7	26.8
23 Males employed without leave entitlements – of all male employees	%	18.5	21.2	20.9	22.6	22.0	23.0	23.6	23.5	24.0	24.7	23.1
24 Females employed without leave entitlements – of all female employees	%	30.8	32.0	31.7	32.0	31.8	32.3	31.5	31.6	31.9	31.2	31.0
25 Employers and own account workers - of total employed	%	14.6	14.6	13.9	14.3	13.6	13.5	13.3	13.4	13.3	12.9	12.8
Industry												
26 Employed in service industries – of total employed	%	71.7	72.3	72.6	72.9	73.6	73.2	73.8	74.1	74.7	74.9	74.8
27 Employed in manufacturing industry – of total employed	%	13.8	13.4	13.5	13.2	12.5	12.4	12.3	11.8	11.9	11.2	11.1
Occupation(b)												
28 Employed in highest skill (ASCO Skill Level 1) occupations– of total employed	%	24.7	24.8	24.5	25.0	25.2	25.2	25.7	26.5	26.0	26.4	27.1
29 Employed in lowest skill (ASCO Skill Level 5) occupations– of total employed	%	22.0	21.8	20.4	20.4	20.3	19.7	19.5	19.0	19.4	19.3	19.0
30 Females – of all employed in highest skill (ASCO Skill Level 1) occupations	%	35.0	35.5	41.4	41.2	40.9	42.1	42.7	42.5	43.3	44.0	44.7

Work: national summary continued

	WORKPLACE RELATIONS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
31	Trade union members – of all employees	%	32.7	31.1	30.3	28.1	25.7	24.7	24.5	23.1	23.0	22.7	22.4
32	Working days lost due to industrial disputes (per 1,000 employees)	days	85.0	114.1	90.0	82.1	55.8	105.3	45.1	41.9	30.2	66.9	28.8
33	Pay set by award only - of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	23.2	n.a.	20.5	n.a.	20.0	n.a.
34	Pay set by collective agreements – of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	36.8	n.a.	38.2	n.a.	40.9	n.a.
35	Pay set by individual agreements – of all employees	%	n.a.	n.a.	n.a.	n.a.	n.a.	40.0	n.a.	41.3	n.a.	39.1	n.a.
	UNEMPLOYMENT	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
36	Total unemployed	'000	768.6	736.5	764.9	737.8	689.6	626.3	619.5	663.3	624.4	586.0	545.6
37	Long-term unemployed – of total unemployed	%	32.3	27.5	27.0	29.3	29.8	26.9	23.4	22.1	21.6	21.0	19.0
38	Long-term unemployed – of total labour force	%	2.8	2.2	2.3	2.3	2.2	1.8	1.5	1.5	1.3	1.2	1.0
39	Unemployment rate	%	8.7	8.1	8.3	8.0	7.4	6.6	6.4	6.7	r6.2	5.8	5.3
40	Males	%	8.9	8.5	8.6	8.2	7.6	6.7	6.7	7.0	6.3	5.6	5.1
41	Females	%	8.3	7.6	8.0	7.6	7.0	6.4	6.1	6.5	6.1	6.0	5.4
42	Capital cities	%	8.8	8.2	8.2	7.4	6.8	6.0	5.9	6.4	5.9	5.6	5.0
43	Balance of states and territories	%	9.2	8.9	9.4	9.1	8.3	7.6	7.2	7.4	6.8	6.1	5.8
	Unemployed looking for full-time work												
44	Of all persons aged 15–19	%	7.3	7.1	6.9	6.5	5.7	5.0	5.0	5.3	4.7	4.6	4.4
45	Of all persons aged 20–24	%	8.7	8.5	8.9	8.6	7.6	6.3	6.4	6.7	6.3	5.7	5.2
46	Median duration of unemployment – males	weeks	26	r24	r26	26	26	24	18	20	19	r16	14
47	Median duration of unemployment – females	weeks	21	r18	r21	22	19	15	16	14	14	13	10
48	Retrenchment rate	%	n.a.	4.6	n.a.	4.4	n.a.	4.0	n.a.	3.9	n.a.	2.7	n.a.
49	Persons previously retrenched and currently employed – of all retrenched	%	n.a.	44.7	n.a.	42.4	n.a.	46.4	n.a.	52.7	n.a.	51.2	n.a.
	Labour force underutilisation												
50	Labour force underutilisation rate	%	13.8	13.8	13.6	13.0	11.8	10.9	12.6	12.1	11.5	11.1	10.5
51	Extended labour force underutilisation rate	%	15.1	15.2	15.0	14.3	13.2	12.2	13.7	13.1	12.5	12.2	11.4
	NOT IN THE LABOUR FORCE(c)	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
52	Marginally attached	'000	862.8	879.6	890.5	922.6	883.2	823.9	816.5	808.1	834.6	855.3	831.1
53	Discouraged jobseekers	'000	111.9	118.9	118.4	110.9	105.8	106.5	81.7	78.0	79.8	82.0	59.3
	TRANSITION TO RETIREMENT	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
	Persons aged 55–64 years												
54	Participation rate – males	%	61.4	60.8	60.5	60.4	60.8	60.7	60.9	61.7	63.0	64.2	65.3
55	Participation rate – females	%	27.9	30.1	31.1	31.6	32.0	34.5	36.1	38.4	40.2	41.4	43.8
56	Males employed part-time – of all employed males aged 55–64	%	13.5	13.1	13.8	14.8	14.9	13.9	15.8	16.3	17.3	15.7	16.4
57	Females employed part-time – of all employed females aged 55–64	%	50.8	49.8	51.2	49.7	51.0	51.3	51.4	52.3	51.6	49.7	50.1

(a) From 2001, data include females in both opposite-sex and same-sex couple families, and lone parents with children aged 0–4 years .

(b) Australian Standard Classification of Occupation (ASCO) second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

(c) Data include persons aged 15–69 years.

Reference periods: All data are annual averages for the year ending 30 June except:
Data for indicators 6, 9–10 and 46–47 are at June.
Data for indicators 22–24 and 31 are at August.
Data for indicators 33–35 are at May.
Data for indicators 48–49 are at February.
Data for indicators 50–53 are at September.

Work: state summary

LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1 Total labour force	'000	2004–05	3 389	2 599	2 049	773	1 064	230	101	186	10 390
2 Females – of total labour force	%	2004–05	44.6	45.0	45.1	44.8	44.2	45.2	45.6	48.1	44.8
3 Participation rate	%	2004–05	62.5	64.2	65.8	61.7	66.5	59.3	69.3	72.0	64.0
4 Males	%	2004–05	70.3	72.4	73.1	69.4	74.8	66.6	73.1	76.9	71.8
5 Females	%	2004–05	54.8	56.4	58.7	54.3	58.4	52.4	65.3	67.4	56.5
6 Females with children aged 0–4	%	2005	52.9	50.4	54.1	54.7	42.0	45.5	59.9	65.3	51.7
7 Persons aged 15–19	%	2004–05	56.6	57.4	68.1	61.5	65.7	56.5	53.2	63.1	60.5
8 Persons aged 20–24	%	2004–05	79.9	79.8	84.3	83.6	80.5	79.2	69.7	86.3	81.1
9 Median age of male labour force	years	2005	39	39	38	39	39	40	38	37	39
10 Median age of female labour force	years	2005	38	37	38	39	39	40	36	37	38

EMPLOYED PEOPLE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
11 Total employed	'000	2004–05	3 211	2 452	1 948	731	1 013	216	94	179	9 845
12 Proportion of the total population in work	%	2004–05	47.4	48.8	49.1	47.4	50.4	44.6	46.5	55.0	48.4
Part-time work											
13 Persons employed part-time – of total employed	%	2004–05	27.5	29.2	27.9	31.0	29.3	31.7	23.0	25.8	28.5
14 Males employed part-time – of total males employed	%	2004–05	14.8	15.2	14.4	15.8	14.4	15.9	15.2	14.8	14.9
15 Females employed part-time – of total females employed	%	2004–05	43.4	46.3	44.5	49.6	48.4	50.6	32.1	37.6	45.3
16 Females employed part-time – of total part-time employed	%	2004–05	70.2	71.3	71.7	71.9	72.4	72.5	64.4	70.4	71.2
17 Average hours worked per week by persons employed part-time	hours	2004–05	16.3	15.8	16.7	16.5	15.9	16.2	17.4	16.1	16.2
18 Persons employed part-time who prefer more hours – of all part-time employed	%	2004–05	26.2	26.2	26.2	28.5	22.4	26.6	18.0	22.0	25.8
19 Persons employed part-time who worked 15 hours or less per week – of all part-time employed	%	2004–05	46.5	49.7	45.4	46.8	49.4	47.9	33.0	47.2	47.4
Full-time work											
20 Average hours worked per week by persons employed full-time	hours	2004–05	40.6	40.4	41.2	40.3	41.5	39.8	41.1	38.9	40.7
21 Persons employed full-time working 50 hours or more per week – of all full-time employed	%	2004–05	24.2	22.8	25.6	22.3	26.4	21.2	24.6	19.4	24.1
Employment arrangements											
22 Employees without leave entitlements – of all employees	%	2005	26.0	26.0	28.1	28.5	27.0	30.7	26.0	24.1	26.8
23 Males employed without leave entitlements – of all male employees	%	2005	21.7	22.9	24.2	24.3	24.0	27.0	25.3	23.2	23.1
24 Females employed without leave entitlements – of all female employees	%	2005	30.9	29.7	32.5	33.3	30.4	34.6	26.8	25.0	31.0
25 Employers and own account workers – of total employed	%	2004–05	12.7	11.1	14.2	13.9	15.3	12.7	8.2	8.5	12.8
Industry											
26 Employed in service industries – of total employed	%	2004–05	76.6	73.9	74.1	72.5	71.5	71.9	82.1	90.1	74.8
27 Employed in manufacturing industries – of total employed	%	2004–05	10.3	13.9	10.2	12.8	9.5	10.9	3.0	2.6	11.1
Occupation											
28 Employed in highest skill (ASCO Skill Level 1) occupations – of total employed	%	2004–05	28.4	28.6	23.4	25.8	25.5	25.7	26.6	36.8	27.1
29 Employed in lowest skill (ASCO Skill Level 5) occupations – of total employed	%	2004–05	18.3	19.3	19.7	20.1	19.0	20.1	19.4	13.7	19.0
30 Females – of all employed in highest skill (ASCO Skill Level 1) occupations	%	2004–05	45.0	44.4	45.5	43.4	43.2	44.0	48.2	46.4	44.7

Work: state summary continued

WORKPLACE RELATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
31 Trade union members – of all employees	%	2005	23.9	21.5	22.8	23.4	18.7	25.8	18.3	20.4	22.4
32 Working days lost due to industrial disputes (per 1,000 employees)	days	2004–05	21.8	36.3	19.2	6.3	75.3	12.3	34.6	0.8	28.8
33 Pay set by award only – of all employees	%	2004	22.5	16.1	23.0	26.2	12.6	20.9	11.9	17.0	20.0
34 Pay set by collective agreements – of all employees	%	2004	37.2	42.3	41.4	44.8	40.8	43.3	52.7	55.6	40.9
35 Pay set by individual agreements – of all employees	%	2004	40.4	41.5	35.6	29.0	46.6	35.9	35.5	27.4	39.1

UNEMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
36 Total unemployed	'000	2004–05	178.3	146.8	100.9	42.3	50.4	13.9	6.3	6.7	545.6
37 Long-term unemployed – of total unemployed	%	2004–05	21.5	20.1	15.6	19.4	13.5	28.3	3.7	13.7	19.0
38 Long-term unemployed – of total labour force	%	2004–05	1.1	1.1	0.8	1.1	0.6	1.7	0.2	0.5	1.0
39 Unemployment rate	%	2004–05	5.3	5.6	4.9	5.5	4.7	6.1	6.3	3.6	5.3
40 Males	%	2004–05	5.1	5.5	4.6	5.7	4.3	6.3	7.0	4.0	5.1
41 Females	%	2004–05	5.4	5.8	5.4	5.2	5.2	5.7	5.4	3.2	5.4
42 Capital cities(a)	%	2004–05	4.5	5.2	4.8	6.0	4.8	5.5	. .	. .	5.0
43 Balance of states and territories(a)	%	2004–05	6.6	6.9	5.0	4.0	4.6	6.5	. .	. .	5.8
Unemployed looking for full-time work											
44 Of all persons aged 15–19	%	2004–05	4.4	4.0	4.6	5.2	4.4	6.2	4.7	3.2	4.4
45 Of all persons aged 20–24	%	2004–05	5.2	5.4	4.9	6.3	4.4	5.9	3.9	3.2	5.2
46 Median duration of unemployment – males	weeks	2005	18	14	11	11	9	14	21	13	14
47 Median duration of unemployment – females	weeks	2005	13	9	11	9	7	18	11	9	10
48 Retrenchment rate	%	2004	2.8	2.5	2.5	2.7	3.2	2.1	1.6	1.6	2.7
49 Persons previously retrenched and currently employed – of all retrenched	%	2004	50.4	51.8	52.7	45.9	55.2	31.7	58.5	58.1	51.2
Labour force underutilisation											
50 Labour force underutilisation rate	%	2005	10.7	11.4	9.9	10.8	8.9	13.4	7.3	6.2	10.5
51 Extended labour force underutilisation rate	%	2005	11.7	12.3	10.9	11.7	9.7	14.9	7.8	6.8	11.4

NOT IN THE LABOUR FORCE(b)	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
52 Marginally attached	'000	2005	277.1	215.7	151.2	63.9	79.4	24.9	4.9	14.0	831.1
53 Discouraged jobseekers	'000	2005	21.6	12.6	12.5	4.6	4.8	2.4	*0.1	*0.7	59.3

TRANSITION TO RETIREMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Persons aged 55–64 years											
54 Participation rate – males	%	2004–05	63.3	68.3	64.4	63.5	70.5	54.6	63.5	68.8	65.3
55 Participation rate – females	%	2004–05	42.1	43.9	43.9	42.0	49.0	38.9	56.3	53.2	43.8
56 Males employed part-time – of all employed males aged 55–64	%	2004–05	16.4	17.1	14.2	17.9	17.0	19.7	14.8	16.8	16.4
57 Females employed part-time – of all employed females aged 55–64	%	2004–05	47.6	54.2	49.2	49.0	53.0	58.0	27.1	40.8	50.1

(a) Capital city and balance of state breakdown are not available for Northern Territory and Australian Capital Territory.

(b) Data include persons aged 15–69 years.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 6, 9–10 and 46–47 are at June.
Data for indicators 22–24 and 31 are at August.
Data for indicators 33–35 are at May.
Data for indicators 48–49 are at February.
Data for indicators 50–53 are at September.

Work: data sources

INDICATORS	DATA SOURCE
1–11, 13–21, 25–30, 36–47, 50–51, 54–57	ABS Labour Force Survey.
12	ABS Labour Force Survey and *Australian Demographics Statistics* (ABS cat. no. 3101.0).
22–24, 31	*Employee Earnings, Benefits and Trade Union Membership, Australia* (ABS cat. no. 6310.0).
32	*Industrial Disputes, Australia* (ABS cat. no. 6321.0.55.001).
33–35	*Employee Earnings and Hours, Australia, May* (ABS cat. no. 6306.0).
48–49	*Labour Mobility, Australia, February* (ABS cat. no. 6209.0).
52–53	*Persons Not in the Labour Force, Australia, September* (ABS cat. no. 6220.0).

Work: definitions

Average hours worked per week

aggregate hours worked by a group divided by the number of persons in that group.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Civilian population aged 15 years and over

all usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated resident population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Discouraged jobseekers

persons who were marginally attached to the labour force, wanted to work and who were available to start work within four weeks but whose main reason for not actively seeking work was that they believed they would not find a job for any of the following reasons:

- considered too old or too young by employers
- lacked necessary schooling, training, skills or experienced difficulties with language or ethnic background
- no jobs in their locality or line of work
- no jobs available at all.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employed

persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
  - were employers or own account workers who had a job, business or farm, but were not at work.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employee

labour force and other household surveys: a person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates or payment in kind, or a person who operates his or her own incorporated enterprise with or without hiring employees.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Employees without leave entitlements

employees who were not entitled to either paid holiday leave or sick leave in their main job.

Reference: *Employee Earnings, Benefits and Trade Union Membership, Australia* (ABS cat. no. 6310.0).

Employer

labour force and other household surveys: a person who operates their own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Extended labour force underutilisation rate

the unemployed, plus the underemployed, plus two groups of persons marginally attached to the labour force:

i. persons actively looking for work, not available to start work in the reference week, but were available to start work within four weeks
ii. discouraged jobseekers

as a percentage of the labour force augmented by (i) and (ii).

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Full-time employed

persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Industrial dispute

a state of disagreement over an issue or group of issues between an employer and its employees, which results in employees ceasing work. Industrial disputes comprise of strikes, which are a withdrawal from work by a group of employees; and lockouts, which are a refusal by an employer or group of employers to permit some or all of their employees to work.

Reference: *Industrial Disputes, Australia* (ABS cat. no. 6321.0.55.001).

Work: definitions continued

Labour force

the labour force is the labour supply available for the production of economic goods and services in a given period, and is the most widely used measure of the economically active population. Persons in the labour force are classified as either employed or unemployed according to their activities during the reference period by using a specific set of priority rules.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Labour force underutilisation rate

the unemployed plus the underemployed, as a percentage of the labour force.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Long-term unemployed

persons unemployed for 12 months or more.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Manufacturing industries

consists of the manufacturing division of the Australian and New Zealand Standard Industrial Classification (ANZSIC).

Reference: *ANZSIC 1993* (ABS cat. no. 1292.0).

Marginally attached

persons aged 15 years and over who were not in the labour force, wanted to work and; were actively looking for work but did not meet the availability criteria to be classified as unemployed; or were not actively looking for work, were available to start work or would have been if child care were available.

Reference: *Persons Not In the Labour Force, Australia* (ABS cat. no. 6220.0).

Median age

the age which divides a group of persons into two equal groups: one comprising persons whose age is above the median; and the other, persons whose age is below it.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Median duration of unemployment

the duration which divides unemployed persons into two equal groups, one comprising persons whose duration of unemployment is above the median and the other, persons whose duration is below it.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Occupation

a collection of jobs which are sufficiently similar in their main tasks to be grouped together for the purposes of classification. The Australian Standard Classification of Occupations (ASCO) Second Edition, which is used for the classification of occupations, applies skill level and skill specialisation as major criteria.

Skill level is measured by: formal education and training, and previous experience usually required for entry into an occupation. ASCO Second Edition assigns each of the nine major groups in the classification to one of five ranked skill levels.

Skill Level 1 — Managers and administrators and Professionals
Skill Level 2 — Associate professionals
Skill Level 3 — Tradespersons and related workers and Advanced clerical and service workers
Skill Level 4 — Intermediate production and transport workers and Intermediate clerical, sales and service workers
Skill Level 5 — Elementary clerical, sales and service workers and Labourers and related workers

Reference: *ASCO — Australian Standard Classification of Occupations, Second edition* (ABS cat. no. 1220.0).

Own account worker

a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees. This category was formerly entitled self-employed.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Participation rate

the labour force participation rate within the population is the labour force component of that group, expressed as a percentage of the population of that group. In this publication the participation rate is the labour force expressed as a percentage of the civilian population aged 15 years and over.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Part-time employed

employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the survey reference week, or were not at work in the reference week.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Pay set by award only

employees who are paid at the rate of pay specified in the award, and who are not paid more than that award rate of pay.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Pay set by collective agreements

employees who had the main part of their pay set by a registered or unregistered collective agreement or enterprise award.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Pay set by individual arrangements

employees who had the main part of their pay set by an individual contract, registered individual agreement (e.g. Australian Workplace Agreement), common law contract, or if they receive over award payments by individual agreement, or are working proprietors of incorporated businesses.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Persons employed part-time who prefer more hours

persons employed part-time who indicated they would prefer to work more hours.

Proportion of the total population in employment

the number of employed persons expressed as a percentage of the total population. Also known as employment to population ratio.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Retrenchment rate

total persons retrenched during the 12 month period before the survey, as a percentage of all people who had been employed at some time over the same period.

Persons retrenched are those who ceased their last job because they were either:

- employees who were laid off, including no work available, retrenched, made redundant, employer went out of business or dismissed; or
- self employed persons whose business closed down for economic reasons, including 'went broke', liquidated, no work, or no supply or demand.

Reference: *Labour Mobility, Australia* (ABS cat. no. 6209.0).

Work: definitions continued

Service industries

the combination of the following divisions of the Australian and New Zealand Standard Industrial Classification (ANZSIC): Wholesale trade; Retail trade; Accommodation, cafes and restaurants; Transport and storage; Communication services; Finance and insurance; Property and business services; Government administration and defence; Education; Health and community services; Cultural and recreational services; and Personal and other services.

Reference: *ANZSIC 1993* (ABS cat. no. 1292.0).

Trade union members

employees with membership in an organisation consisting predominantly of employees, the principal activities of which include the negotiation of rates of pay and conditions of employment for its members, in conjunction with their main job.

Reference: *Employee Earnings, Benefits and Trade Union Membership, Australia* (ABS cat. no. 6310.0).

Underemployed

underemployed workers are employed persons who want, and are available for, more hours of work than they currently have. They comprise:

- Persons employed part-time who want to work more hours and are available to start work with more hours, either in the reference week or in the four weeks subsequent to the survey.
- Persons employed full-time who worked part-time hours in the reference week for economic reasons (such as being stood down or insufficient work being available). It is assumed that these people wanted to work full-time in the reference week and would have been available to do so.

Reference: *Underemployed Workers, Australia* (ABS cat. no. 6265.0).

Unemployed

persons aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time work or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Unemployed looking for full-time work

unemployed persons who:

- actively looked for full-time work; or
- were waiting to start a new full-time job.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Unemployment rate

for any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Reference: *Australian Labour Market Statistics* (ABS cat. no. 6105.0).

Working days lost

working days lost by employees directly or indirectly involved in industrial disputes.

Reference: *Industrial Disputes, Australia* (ABS cat. no. 6321.0.55.001).

Trends in women's employment

PAID WORK

The proportion of women who were employed increased in every age group between 1979 and 2004.

Employment patterns of men and women have changed over the last 25 years. Significantly, the proportion of women who were employed has increased over the period. Changing social attitudes and smaller families have contributed to these changes in women's employment. Greater proportions of women now have higher education qualifications. Education appears to draw women into the workforce by instilling in them more career oriented attitudes and by enhancing their potential wages in the labour market.[1] Paid work may also provide women with opportunities for social interaction and job satisfaction.

However, it is women who continue to carry the greater responsibility for caring and other unpaid work, effectively placing them under increased time pressures.[2] Women's working patterns may impact on their ability to balance work with other responsibilities.

Changes in employment

The proportion of women aged 15 years and over who were employed has steadily increased over the last quarter of a century (from 40% in 1979 to 53% in 2004). Over the same period, the proportion of men who were employed decreased from 74% in 1979 to 68% in 2004. This fall for men may be linked to factors such as fewer jobs available in goods-producing industries, the changing role of men in families and an increasing proportion of men receiving the disability support pension.[3]

As a result of the changes to the proportion of men and women who were employed, women now represent a higher proportion of employed people (36% in 1979 compared with 45% in 2004). In 2004, 4.3 million women and 5.4 million men were employed.

The growth in employment for women has been mainly in part-time employment, which may provide opportunities to combine work and other commitments. The proportion of women who were employed part-time increased from 14% of all women in 1979 to 24% in 2004. The proportion of women who were employed full-time also increased (from 26% in 1979 to 29% in 2004).

Employment

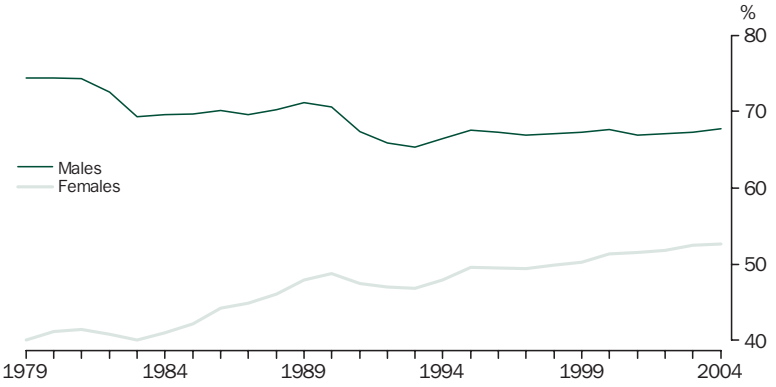
The data in this article are annual averages from the monthly Labour Force Survey.

In this article, *employed* people are those aged 15 years and over who worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

Full-time employed are those employed persons who usually work 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more in the reference week.

Part-time employed are those employed persons who usually work less than 35 hours a week (in all jobs) and who either did so during the reference week, or were not at work during the reference week.

Proportion of men and women who were employed(a)



(a) As a proportion of the civilian population aged 15 years or over for each group.

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001).

Women's employment by age

A range of factors influence a woman's decision to seek employment through life cycle stages as well as the type of job she would consider. These factors include age, educational qualifications, family/caring commitments, financial security and the availability of suitable child care and suitable work.

For example, women with very young children may seek part-time employment, as might some older women as they approach retirement. Women with school-aged children may also curtail their labour force participation, but to a lesser degree. Some women may return to, or take up paid employment following separation or divorce.

Women's labour force status

	1979		2004	
	'000	%	'000	%
Employed				
Full-time	1 428.5	26.2	2 362.5	28.8
Part-time	749.7	13.8	1 951.5	23.8
Total	2 178.3	40.0	4 314.0	52.6
Unemployed	194.3	3.6	258.8	3.2
Not in the labour force	3 071.1	56.4	3 621.7	44.2
Women aged 15 years or over	**5 443.7**	**100.0**	**8 194.5**	**100.0**

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001)

In the 25 years since 1979, the proportion of women who were employed increased for all age groups. However, the pattern across age groups has changed slightly. In 1979, the proportion of women who were employed was highest among women aged 20–24 years (63%) and women aged 40–44 years (57%). There was also a noticeable trough in the proportion of women who were employed at the prime childbearing years of 25–34 years.

In 2004, this trough was much less marked and had shifted to the age groups between 30 and 39 years, reflecting the trend towards women having children at older ages. This was accompanied by the proportion of women employed peaking for women aged 20–24 years (71%) and for women aged 45–49 years (75%).

In addition to the overall changes in employment, there have been changes in patterns of full-time and part-time employment across age groups. There have been increases in the proportion of women aged 25 years and over in full-time employment, whereas the proportion of women in part-time employment increased in all age groups.

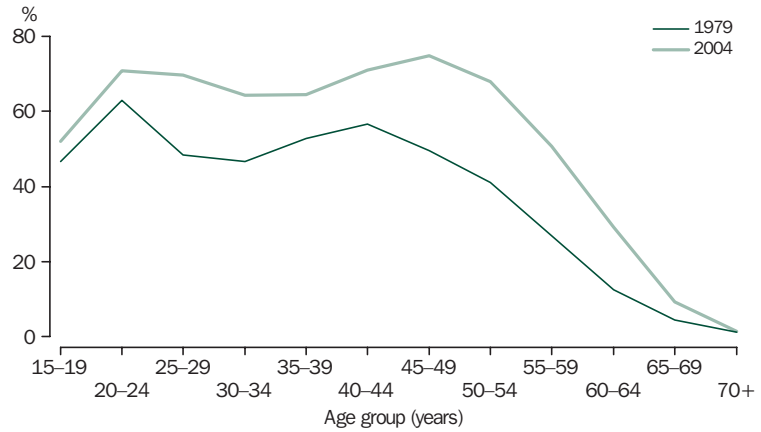
...women aged 15–19 years

Young women's employment has changed from being predominantly full-time to predominantly part-time, and the 15–19 year age group has the highest proportion of women employed part-time compared with all other age groups. In 1979, 35% of women aged 15–19 years were employed full-time, compared with 12% part-time. By 2004, this pattern had been reversed, with just 13% of women employed full-time and 40% part-time. This change accompanies higher participation rates of young women in education, as well as more part-time work opportunities. Part-time employment may be preferred by those who study, and may also be a stepping stone to full-time employment.

...women aged 20–24 years

The proportion of women in this age group who were employed part-time almost tripled from 10% in 1979 to 28% in 2004. Over the same period, the proportion of women who were employed full-time decreased from 54% in 1979 to 43% in 2004. This change in employment patterns in part reflects a higher proportion of women in this age group combining tertiary studies and part-time employment.

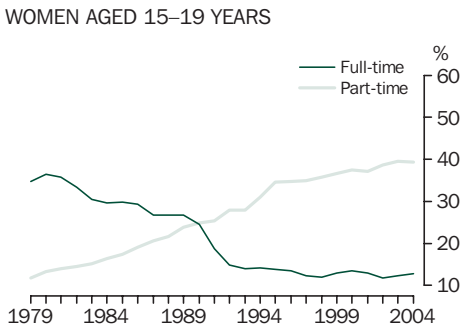
Proportion of women who were employed(a)



(a) As a proportion of the civilian population in each age group.

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001).

Proportion of women who were employed(a)



(a) As a proportion of the civilian population in age group.

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001).

...women aged 25–34 years

Against the general trend of a greater rise in part-time employment compared with full-time employment, women in this age group showed a marked increase in full-time employment from 29% in 1979 to 44% in 2004, (while part-time employment increased more slowly from 18% in 1979 to 23% in 2004). This proportion of women who were employed full-time is the highest of all age groups. This may reflect a trend towards later ages for marriage and the birth of the first child, and more women with tertiary qualifications pursuing careers.

...women aged 35–44 years

The overall proportion of women who were employed in this age group increased from 55% in 1979 to 68% in 2004, with a majority of the increase reflected in part-time employment from 24% in 1979 to 33% in 2004 (while full-time employment increased more slowly, from 30% in 1979 to 35% in 2004). Many women in this age group have children aged under 15 years and are likely to be combining caring duties with part-time employment.

...women aged 45–54 years

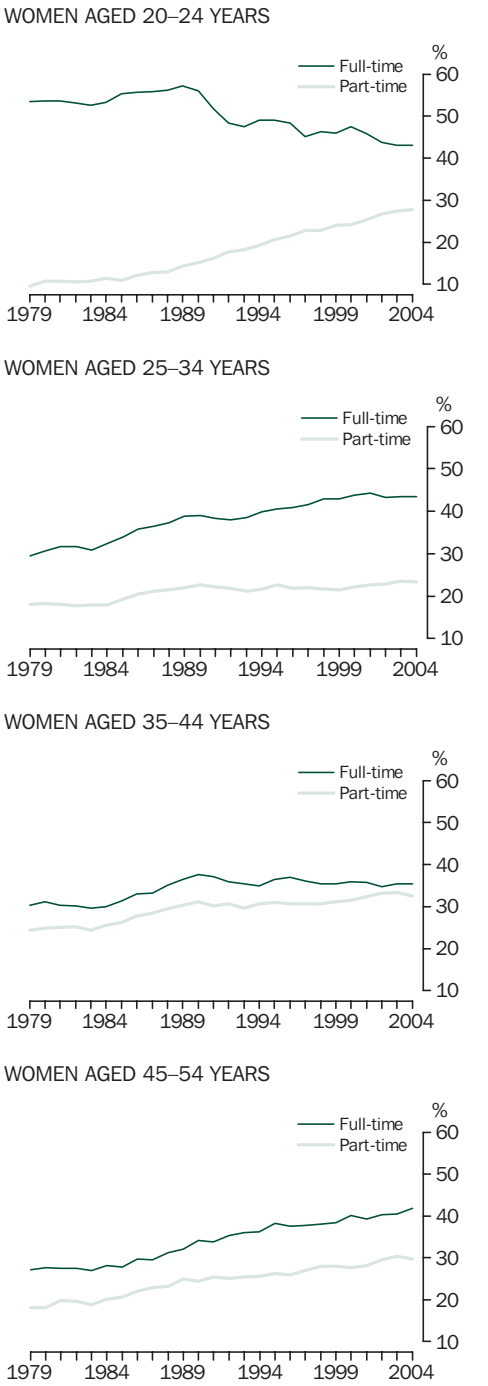
The overall proportion of women aged 45–54 who were employed increased from 45% in 1979 to 72% in 2004. This increase occurred in both part-time employment (from 18% in 1979 to 30% in 2004) and full-time employment (from 27% in 1979 to 42% in 2004). The proportion of women in employment in this age group was higher than all other age groups in 2004. This may be due to women in this age group being likely to have older children and to have returned to work.

...older women

In 2004, the proportion of women who were employed peaked at 45–54 years (72%) and then declined for older women. Of women aged 60–64 years, 29% were employed in 2004, up from 13% in 1979. The eligibility criteria for age pension payments increased from 60 years in 1979 to 62.5 years in 2004. Women may also be concerned about sufficient superannuation available to them and therefore remain in employment to improve financial security.

There was also an increase in the proportion of women aged 65 years and over who were employed, mostly in part-time employment. In 1979, 2% or 19,000 women aged 65 years and over were employed. This compares with 4% or 51,000 women in 2004.

Proportion of women who were employed(a)



(a) As a proportion of the civilian population in each age group

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001).

Women with family responsibilities

While there has been an increase in the proportions of women employed in the last 25 years, there have been many social changes that impact on women's ability to balance work with other responsibilities. During the last 25 years, the nature of families has changed. Women are having fewer children, and at later ages. There has also been a rise in the number of lone parents and people living alone. In addition, older children tend to remain at home longer. With women having children at a later age, they may be still caring for their own children as well as ageing parents.

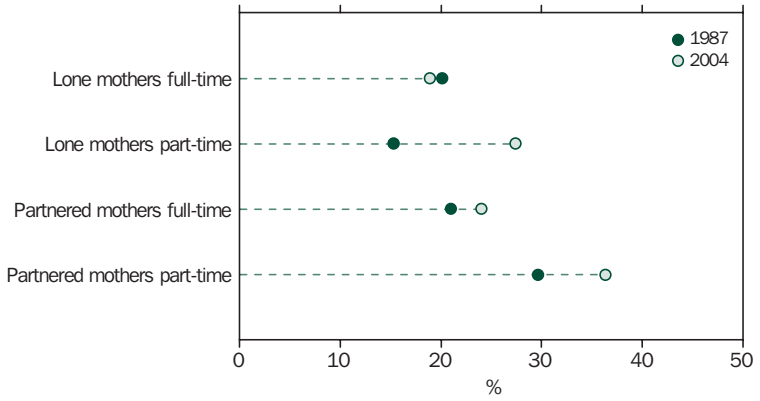
...social marital status

Forming life (or long-term) partnerships and having children continues to be a common path for many women. The proportion of partnered women who were employed increased at a greater rate than for unpartnered women. The proportion of partnered women who were employed increased from 39% in 1979 to 56% in 2004,while the proportion of unpartnered women who were employed increased from 41% in 1979 to 48% in 2004. The lower employment of unpartnered women partly reflects the high proportions of young and elderly women in this group.

...women with children

In 2004, there were 2.1 million women with children aged under 15 years. The proportion of these mothers who were employed increased from 49% in 1987 to 57% in 2004.

Women with children under 15 years: full-time and part-time employed(a)



(a) As a proportion of the civilian population for each group.

Source: Labour Force, Australia, Detailed - Electronic Delivery, Monthly (ABS cat. no. 6291.0.55.001).

Employment of mothers is partly related to the ages of their children. In June 2004, mothers were employed in 45% of families whose youngest child was aged under 5 years. This figure increased to 64% for families whose youngest child was aged 5–9 years and 71% for families whose youngest child was aged 10–14 years. Part-time employment of mothers was more common among families with young children compared with older children. For example, mothers worked full-time in 14% of families with a youngest child under 5 years, and 31% worked part-time. In contrast, mothers worked full-time in 35% of families with a youngest child 10–14 years and 36% worked part-time.

On average in 2004, a higher proportion of partnered mothers with children under 15 years were employed than lone mothers with children under 15 years (60% compared with 46%). This may reflect greater difficulty for lone mothers managing their caring and income earning roles.[4] Growth patterns in full-time and part-time employment have also been different. While the proportion of lone mothers in full-time employment decreased slightly (20% in 1987 compared with 19% in 2004), the proportion of lone mothers in part-time employment almost doubled from 15% in 1987 to 27% in 2004. Partnered mothers on the other hand, increased both full-time and part-time employment. In 2004, the proportion of partnered mothers employed full-time was 24% compared with 21% in 1987, while partnered mothers who were employed part-time increased from 30% in 1987 to 36% in 2004.

Changes in industry

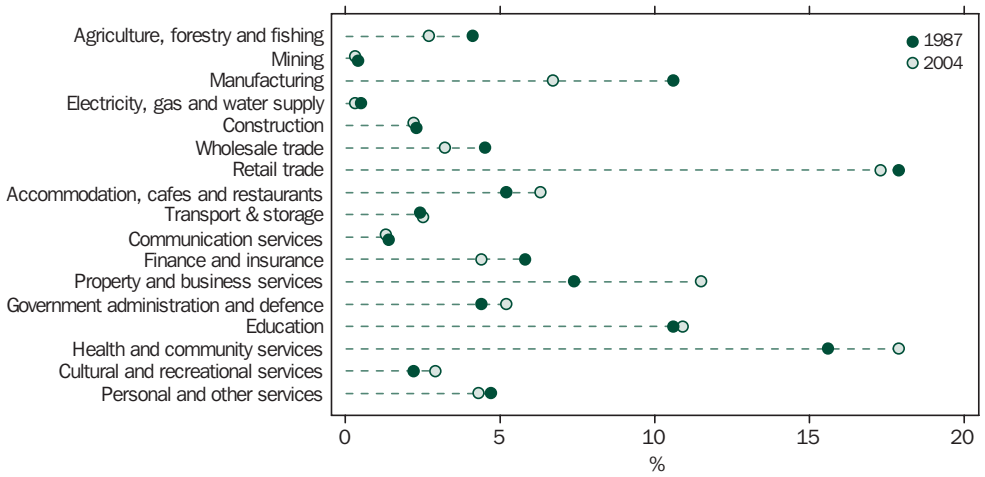
The industry composition of the Australian labour market has changed considerably since the late 1980s. There has been a general decrease in employment in the goods-producing industries and an increase

Industry and occupation

Industry is a group of businesses or organisations that perform similar sets of activities in terms of the production of goods and services. Industry is classified according to the *Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993* (ABS cat. no. 1920.0).

Occupation is a collection of jobs that are sufficiently similar in their main tasks to be grouped together for the purposes of classification. Occupation is classified according to the *ASCO Australian Classification of Occupations, Second Edition* (ABS cat. no. 1220.0). The second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

Employed women(a) by industry 1987 and 2004



(a) As a proportion of all employed women.

Source: Labour Force, Australia, Detailed - Electronic Delivery Monthly (ABS cat. no. 6291.0.55.001)

in service industries. These changes are reflected in the industries where women work. The proportion of employed women by industry decreased for a number of industries, including Manufacturing (11% in 1987 compared with 7% in 2004) and Agriculture, forestry and fishing (4% in 1987 compared with 3% in 2004).

There have been increases in the proportion of employed women in the Property and business services industry (7% in 1987 compared with 12% in 2004), and in the Health and community services industry (16% in 1987 compared with 18% in 2004).

Changes in occupation

In 2004, women employed as Professionals or Associate professionals comprised just over one-third of the female workforce (34% compared with 26% in 1987), while a further 27% worked in Intermediate clerical or sales and service occupations (compared with 26% in 1987). In general, the proportion of women working in more skilled occupations has increased since 1987, while the proportion of women working in less skilled occupations has decreased. In contrast, the proportion of women working in the least skilled occupation of Labourers and related workers, was 7% in 2004 compared with 10% in 1987.

Endnotes

1 Evans, MDR and Kelley, J 2004, *Trends in women's labour force participation in Australia: 1984–2004,* Melbourne Institute of Applied Economic and Social Research, Melbourne.

2 Human Rights and Equal Opportunity Commission 2005, *Striking the balance: Women, men, work and family* – Discussion paper 2005, viewed 12 January 2006, <http://www.hreoc.gov.au/sex_discrimination/strikingbalance>.

3 Australian Bureau of Statistics 2004, 'Labour force participation', in *Australian Labour Market Statistics, January 2005*, (ABS cat. no. 6105.0), ABS, Canberra.

4 Department of Family and Community Services 1999, *Parents the labour force and social security,* Research Policy Paper No. 2, FACS, Canberra.

Trends in hours worked

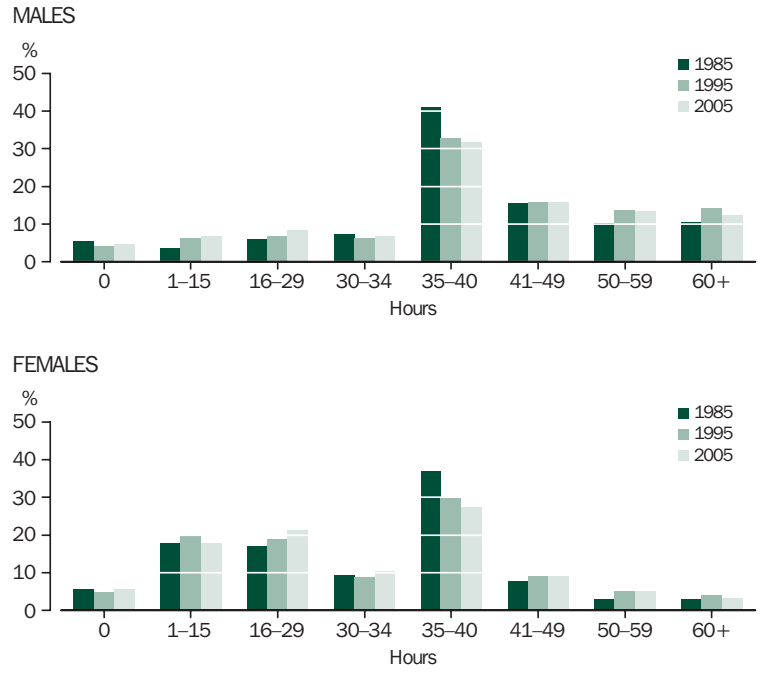
EMPLOYMENT ARRANGEMENTS

Average weekly hours worked for both full-time workers and part-time workers have increased over the last two decades.

There has been a slight decline in the average weekly hours worked by all Australian workers over the last two decades. The decline in average hours is the result of strong growth in part-time employment (compared with full-time employment) and has occurred despite increases in average hours worked by both full-time and part-time workers. Strong growth in part-time employment, for both men and in particular women, has increased the proportion of workers working fewer hours, resulting in a slight decline in the overall average hours worked per week.

The hours that people work relate to their preferences and to the work that is available. The trend towards longer hours among full-time workers, together with increases in women's employment, has led to increases in the working hours of many families. Part-time employment is preferred by some people and is often used to help achieve balance between paid work and personal, social and family lives. However, other part-time workers would prefer more hours of work and the unavailability of extra hours may have financial impacts on some individuals and their families.

Distribution of hours worked per week



Source: Labour Force, Australia, Detailed - Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003).

Hours worked

This article mainly uses data from the monthly ABS Labour Force Survey (LFS). Unless otherwise stated, estimates presented in this article are annual averages derived from quarterly LFS series. Data on preferred working hours are from the ABS November 2003 Survey of Working Arrangements.

Average weekly hours is the total actual hours worked by a group, divided by the total number of people in that group.

Full-time workers are those who usually work 35 hours or more per week (in all jobs) and those who, although usually work less than 35 hours a week, worked 35 hours or more in the reference week.

Part-time workers are those who usually work less than 35 hours per week (in all jobs) and did so in the reference week.

People working a *standard week* are those working 35–40 hours per week.

Average hours worked

Between 1985 and 2005, average weekly hours worked by all Australian workers declined slightly, from 35.8 hours to 34.7 hours. Over the same period average weekly hours worked by men declined from 39.7 hours to 39.3 hours and for women from 29.4 hours to 29.0 hours.

Along with a decline in men's average weekly hours, there has also been a decrease in the proportion of men working a standard week (35–40 hours per week). Between 1985 and 1995, the proportion of employed men working a standard week fell from 41% to 33%. This fall levelled off during the late 1990s and reduced only slightly further, to 32%, by 2005. The decline in men's average hours reflects an increase in the proportion of employed men working part-time hours (from 6% in 1985 to 15% in 2005) and occurred despite an increase in the proportion of employed men working more than a standard week (from 36% in 1985 to 42% in 2005).

The proportion of employed women working a standard week also decreased, from 37% to 27% between 1985 and 2005. The decline in women's average weekly hours also in part reflects the increase in part-time employment for women over the period (see *Australian Social Trends* 2006, Trends in women's employment, pp. 121–125).

Proportion of employed persons working full-time

	1985		1995		2005	
	Males	Females	Males	Females	Males	Females
	%	%	%	%	%	%
Age						
15–19 years	76.0	62.8	51.7	28.3	44.8	22.5
20–24 years	93.3	83.5	84.6	70.6	76.1	60.8
25–34 years	96.5	63.2	94.0	64.1	91.3	65.2
35–44 years	97.2	53.7	94.4	54.3	92.5	52.0
45–54 years	96.6	57.1	94.6	59.3	92.1	56.7
55–64 years	92.3	56.0	85.9	49.7	84.8	49.8
65 years and over	61.4	37.0	58.3	35.1	54.3	30.9
Total 15 years and over	**93.8**	**62.9**	**89.0**	**57.4**	**85.5**	**54.1**

Source: Labour Force, Australia, Detailed – Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003)

Full-time work

The proportion of employed men and women working full-time over the past 20 years has decreased, reflecting the shift towards part-time work. The proportion of employed men working full-time decreased from 94% to 85% between 1985 and 2005, and for women from 63% to 54%. For men, there have been decreases in the proportion working full-time in every age group, while for women there have been decreases in most age groups, with small increases or little change in others. Despite these differences, the proportion of employed women working full-time (54%) remains much lower than for men (85%) across all age groups.

The decline in the proportion of people working full-time has been greatest in younger age groups. This reflects the increasing number of young people (aged 15–24 years) delaying their commencement of full-time work as they continue their education or combine part-time work with study. For example, the proportion of employed men aged 15–24 years working full-time declined from 87% in 1985 to 64% in 2005, and for women in this age group from 75% to 45% over the same period.

Employed men in the age group 25–54 years experienced smaller decreases in the proportions working full-time than men in other age groups, while the proportion of women working full-time in this age group remained relatively stable, increasing or decreasing slightly. In particular, while the proportion of employed men aged 25–34 years working full-time decreased from 97% to 91% between 1985 and 2005, the proportion of women working full-time in this age group increased from 63% to 65% over the same period. There was a slight decrease in the proportion of employed women aged 35–44 years working full-time, from 54% to 52%, while for women aged 45–54 years the proportion employed full-time remained at 57% over the period. For men the proportion employed full-time decreased from 97% to 92% in both these age groups between 1985 and 2005.

There were decreases in the proportions of both employed men and women working full-time in age groups 55 years and over in part reflecting the use of part-time work as a transition to retirement.

...longer hours for full-time workers

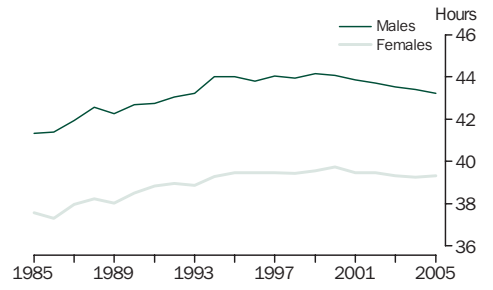
Average weekly hours for full-time workers increased from 40.2 hours to 41.9 hours between 1985 and 2005. This trend has been similar for both male and female full-time workers, with men's hours increasing 1.9 hours per week (to 43.2 hours) over the period, and women's increasing 1.7 hours per week (to 39.3 hours).

The proportion of full-time workers who work a standard week (35–40 hours per week) fell from 48% to 42% between 1985 and 2005. Despite this decrease, 37% of male and 51% of female full-time workers worked a standard week.

Very long hours of work (50 hours or more per week) have become more common for full-time workers in the 20 years since 1985, particularly for men. In 2005, 30% of men working full-time worked 50 hours or more per week, up from 22% in 1985. Fewer women working full-time worked very long hours, with 16% working 50 hours or more per week in 2005, up from 9% in 1985.

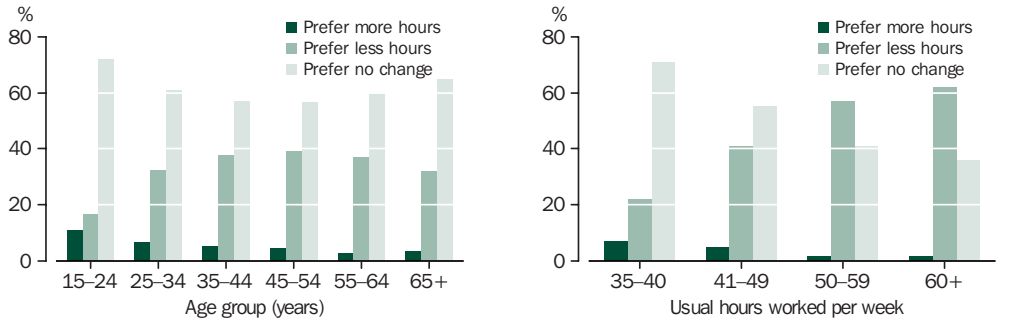
Long hours are more common in the occupations characterised by high levels of

Full-time workers: average weekly hours



Source: Labour Force, Australia, Detailed - Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003).

Full-time employees(a): hours preferences(b)



(a) Full-time employees are those who usually work 35 hours or more per week (in all jobs).
(b) Hours preferences are based on usual hours of work.

Source: ABS November 2003 Survey of Working Arrangements.

self-employment, such as full-time Managers and administrators (on average 48.1 hours per week in 2005). Full-time workers who work long hours tend to be employers (51.4 hours per week in 2005) and own account workers (45.6 hours per week).

...preference for hours

In November 2003, more than half (61%) of all full-time employees were satisfied with the number of hours they usually worked per week, one third (33%) preferred to work fewer hours and a 6% preferred more hours.

The majority of full-time employees in each age group preferred no change in the number of hours they usually worked per week. This ranged from over half (57%) of full-time employees aged 45–54 years, to nearly three quarters (73%) of full-time employees aged 15–19 years.

Full-time employees in younger age groups were most likely to prefer to work more hours per week, 14% of full-time employees aged 15–19 years and 10% of those aged 20–24 years preferred to work more than their usual weekly hours.

Full-time employees who usually worked very long hours (50 hours or more per week) were more likely to prefer to work fewer hours than other full-time employees. Over half (59%) preferred to work fewer hours while a further 39% preferred no change in the current number of hours they work. More than two thirds (71%) of full-time employees who usually worked a standard week were satisfied with the hours they worked per week.

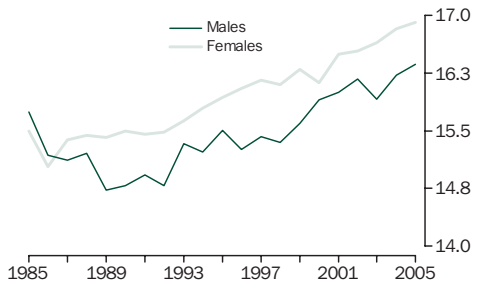
Part-time work

There have been increases in the proportions of employed men and women working part-time between 1985 and 2005. The proportion of employed men working part-time more than doubled from 6% to 15% between 1985 and 2005. The proportion of employed women working part-time increased from 37% to 46% over the same period.

For both employed men and women, the increase in the proportion working part-time has been greatest in younger age groups where part-time employment is frequently used to balance work and study. For example the proportion of employed men aged 15–24 years working part-time increased from 13% to 36% between 1985 and 2005, and for women from 25% to 55% over the same period.

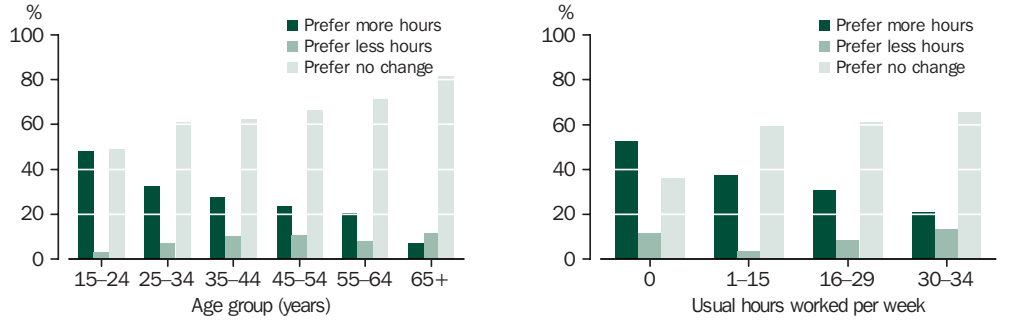
The proportion of employed men and women working part-time in the 25–54 year age groups has remained fairly stable between 1985 and 2005, increasing from 3% to 8% for men and from 41% to 42% for women. There were generally higher proportions of employed men and women working part-time

Part-time workers: average weekly hours



Source: Labour Force, Australia, Detailed - Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003).

Part-time employees(a): hours preferences(b)



(a) Part-time employees are those who usually work less than 35 hours per week (in all jobs).
(b) Hours preferences are based on usual hours of work.

Source: ABS, November 2003, Survey of Working Arrangements.

in the 55 years and over age groups in 2005 than in 1985, reflecting the increased use of part-time work to re-enter the labour force after child caring responsibilities (for women) and in the transition from full-time work to retirement (for both men and women).

Average weekly hours of part-time workers increased slightly over the past two decades for both men and women. In 1985, the average hours of men working part-time was slightly higher (15.7 hours) than for women (15.5 hours). Men's average weekly hours dipped below women's average hours in the late 1980s and while the average hours for both men and women have increased since then, men's part-time hours remained slightly lower than women's part-time hours in 2005 (16.4 hours for men compared to 16.9 hours for women).

Average weekly hours worked in selected occupations

	1997	*2005*		
			Employed part-time	
Occupation	*Hours*	*Hours*	'000	%
Managers and administrators	48.2	44.6	94.1	11.4
Professionals	37.9	36.1	454.4	24.1
Associate professionals	42.8	39.5	220.3	17.5
Tradespersons and related workers	39.6	39.0	130.0	10.3
Advanced clerical and service workers	29.2	27.5	179.3	46.1
Intermediate clerical, sales and service workers	30.5	30.3	653.3	39.8
Intermediate production and transport workers	38.2	38.1	141.0	17.2
Elementary clerical, sales and service workers	25.3	24.2	619.9	61.9
Labourers and related workers	30.0	29.6	357.3	40.6
Total Occupations	**35.7**	**34.7**	**2 849.7**	**28.6**

Source: Labour Force, Australia, Detailed - Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003).

...preference for more hours

In November 2003, 61% of part-time employees were satisfied with the number of hours they worked per week and would prefer no change. Just under a third (31%) preferred to work more hours each week, while a further 8% preferred to work less hours each week.

There were higher proportions of part-time employees in older age groups preferring no change in the number of hours worked per week. For example, 82% of part-time employees aged 65 years and over were satisfied with the number of hours worked per week compared with 49% of those aged 15–24 years. Part-time employees in younger age groups were more likely to prefer more hours of work, with almost half (48%) of part-time employees aged 15–24 years preferring more hours of work.

Part-time employees who work relatively long part-time hours (30–34 hours per week) are more likely to prefer less hours of work per week than other part-time employees. For example, 13% of part-time employees who work 30–34 hours per week would prefer less hours compared to just 3% of part-time employees who work 1–15 hours per week.

Occupation

Average weekly hours for all workers declined in all occupation groups between 1997 and 2005. The largest decline was for Managers and administrators, from 48.2 hours per week to 44.6 hours between 1997 and 2005. This was followed closely by Associate professionals, from 42.8 hours to 39.5 hours over the same period. People working in these two occupations worked the longest average

Average weekly hours worked in selected industries

	1995	2005		
			Employed part-time	
Industry	Hours	Hours	'000	%
Agriculture, forestry and fishing	42.9	40.6	94.7	26.0
Mining	43.2	45.5	4.8	3.9
Manufacturing	38.8	38.4	124.4	11.6
Electricity, gas and water	37.2	38.0	5.3	6.5
Construction	38.1	38.2	125.5	14.6
Wholesale trade	39.5	38.3	71.3	16.4
Retail trade	32.1	30.1	705.5	46.4
Accommodation, cafes and restaurants	32.7	30.8	246.7	49.4
Transport and storage	40.3	38.9	76.7	16.8
Communication services	36.2	37.5	25.8	14.0
Finance and insurance	36.4	36.2	71.6	19.2
Property and business services	37.1	35.8	307.8	26.3
Government administration and defence	34.6	34.0	78.7	17.3
Education	34.4	33.2	245.7	35.4
Health and community services	30.8	30.0	438.2	43.3
Cultural and recreational services	32.7	30.6	114.7	41.7
Personal and other services	33.3	33.5	112.4	28.8
Total Industries	**35.9**	**34.7**	**2 849.7**	**28.6**

Source: Labour Force, Australia, Detailed - Electronic Delivery, quarterly (ABS cat. no. 6291.0.55.003).

weekly hours in 2005, and these were also the only occupations with declines of more than 3.0 hours per week over the period.

Intermediate production and transport workers had the smallest decline in average weekly hours (0.1 hours) to 38.1 hours in 2005, while average weekly hours for Intermediate clerical, sales and service workers declined (0.2 hours) to 30.3 hours. Labourers and related workers and Tradepersons and related workers also had a relatively small decline in average hours. All other occupations had a decline of between 1.1 and 3.6 hours per week between 1997 and 2005.

Industry

Between 1995 and 2005, average weekly hours for all workers decreased from 35.9 hours to 34.7 hours, a decline of 1.2 hours per week. Industries experiencing the largest declines in average hours were Agriculture, forestry and fishing, from 42.9 hours to 40.6 hours (-2.3 hours), and Cultural and recreational services, from 32.7 hours to 30.6 hours (-2.1 hours).

Most industries that experienced an increase in average weekly hours between 1995 and 2005 also had higher average hours than the average across all industries in 2005 (34.7 hours per week). For example, average weekly hours in Mining increased 2.3 hours over the period to 45.5 hours per week, while in Communication services there was a 1.3 hour increase to 37.5 hours per week. Personal and other services was the only industry which had lower than total average hours in 2005 (33.5 hours per week) and which also experienced an increase (0.2 hours) in average hours from 1995.

In 2005, industries with average weekly hours that were higher than total average hours per week tended to have lower levels of part-time employment. Generally, the industries with high average weekly hours have no more than one-fifth (20%) of workers employed part-time. Two exceptions to this were Agriculture, forestry and fishing (with average weekly hours of 40.6 hours) and Property and business services (35.8 hours), where 26% of workers were employed part-time in both of these industry groups.

The proportion of part-time workers in industries with higher than total average weekly hours ranged from 4% of workers in Mining (with average weekly hours of 45.5 hours) to 19% of workers in Finance and insurance (36.2 hours per week), excluding Agriculture, forestry and fishing and Property and business services.

Industries with average weekly hours that were lower than total average hours (34.7 hours) tended to have significant part-time employment, with more than one-quarter of people working in those industries employed part-time. The exception was Government administration and defence with 17% of workers employed part-time and average weekly hours of 34.0 hours. The two industry groups with the lowest average weekly hours each had more than 40% of workers employed part-time. These were Health and community services (30.0 hours per week) with 43% of workers employed part-time, and Retail trade (30.1 hours) with 46% part-time employment.

The proportion of part-time workers in industries with lower than total average hours ranged from 29% of workers in Personal and other services (with average weekly hours of 33.5 hours) to 49% of workers in Accommodation, cafes and restaurants (30.8 hours per week), excluding Government administration and defence.

Labour force participation of migrants

Migrants who held a job prior to arrival in Australia had a higher age standardised labour force participation rate (71%) than those who didn't (50%).

Migration has been pivotal in shaping Australia's economy and culturally diverse society, through its contribution to the size and composition of the population and labour force. In November 2004, more than one-quarter (28%) of the Australian civilian population aged 15 years and over was born overseas.

Finding secure employment can be crucial for migrants in their transition to life in Australia as it provides income to support themselves and their families. In addition to the length of time since arrival, the labour market success of migrants is in part dependent on a range of personal attributes including proficiency in English, age, educational qualifications and previous work experience.

This article profiles the labour market outcomes of migrants who arrived in Australia over the past two decades. For the purposes of this article, migrants are defined as those who were born overseas, arrived in Australia between 1985 and 2004, were aged 15 years and over on arrival, and were permanent Australian residents at the time of interview.

Labour market outcomes

In November 2004, the civilian population of Australia aged 15 years and over was 15.7 million people and almost three-quarters (72% or 11.4 million people) were born in Australia. The remaining 28% were born overseas (4.3 million people). Migrants accounted for 9% (1.4 million people) of the Australian population aged 15 years and over.

Data source and definitions

Data presented in this article are mainly from the ABS November 2004 Labour Force Status and Other Characteristics of Migrants Survey. This survey relates to the civilian population aged 15 years and over, excluding institutionalised people, boarding school pupils and people in very remote areas of Australia.

In this article, *migrants* are defined as those who were born overseas, arrived between 1985 and 2004, were aged 15 years and over on arrival, and were permanent Australian residents.

Other overseas born are people born overseas excluding migrants as defined above.

Persons in the *labour force* are either employed or unemployed. The *labour force participation rate* for any group in the population is the labour force component of that group, expressed as a percentage of the population of that group.

The *unemployment rate* for any group is the number of unemployed people expressed as a percentage of the labour force in the same group.

Age standardised rates for labour force participation and unemployment are the rates that would have prevailed if the migrant and other overseas born populations had had the same age structure as the Australian-born population. Age-standardising enables comparison of rates between populations with different age structures.

The age structure of both migrants and other overseas born differs from the age structure of those born in Australia. When adjusted to remove the effects of these different age structures, migrants had a lower labour force participation rate (62%) than people born in Australia (67%). The labour force participation rate for other overseas born (61%) was also lower than for Australian-born.

The age standardised unemployment rate was much higher for migrants (6.2%) than for people born in Australia (4.9%). Migrants tend to fare better in the labour market the longer they are in Australia. Other overseas born had a lower unemployment rate (4.3%) than people born in Australia (4.9%). Other overseas born are a diverse group including migrants who arrived in Australia before 1985, as well as migrants who have arrived since 1985 and were less than 15 years old on arrival. This group might be expected to have similar characteristics to the Australian born population, given their length of time in Australia or involvement in the Australian education system.

Selected labour force indicators of people aged 15 years and over — November 2004

	Persons	*Labour force participation rate(a)*	*Unemployment rate(a)*
	'000	%	%
Born in Australia	11 402.6	67.3	4.9
Migrants	1 362.6	62.3	6.2
Other overseas born	2 980.0	61.3	4.3
Total aged 15 years and over	**15 745.2**	**64.8**	**4.8**

(a) Data for the migrant and other overseas born populations has been age standardised to the Australian born population.

Source: Labour Force Status and Other Characteristics of Migrants, November 2004 (ABS cat. no. 6250.0).

Migrant characteristics and labour market outcomes

...sex

Just under half of migrants were men (46%) as at November 2004, which was similar to the sex composition of people born in Australia, 49% of whom are men.

Migrant men had a similar age standardised labour force participation rate (74%) to Australian-born men (75%). Migrant women's age standardised labour force participation (52%) was lower than Australian-born women (60%), and much lower than migrant men. The comparatively low levels of labour force participation among migrant women may in part reflect their lower levels of English proficiency and labour market experience prior to arrival in Australia.

Age standardised unemployment rates were lower for migrant men (5.8%) than migrant women (6.6%). Both of these rates were higher than for Australian-born men and women (4.9% for both populations).

...age

The following discussion compares the age profile of migrants and people born in Australia, and examines migrants' labour force participation patterns by age group. For this reason, labour force participation rates have not been age standardised in the age discussion below.

The migrant population has a younger age structure compared with people born in Australia, with a higher proportion of migrants in the age group 25–54 years. The younger age structure of migrants in part reflects the definition of migrants used in this article, which focuses on those arriving in Australia between 1985 and 2004 thereby limiting numbers in older age groups. In addition, migrants applying to come to Australia under the Skill Stream are required to be under 45 years at the time they apply.

In November 2004, 80% of migrants were aged 25–54 years, compared with 54% of Australian-born. The labour force participation rate for migrants aged 25–54 years was 77%, lower than that for Australian-born in the same age group (83%).

Migrants' labour force participation by age group is similar to the pattern for people born in Australia. Young migrant men and women had relatively low participation rates compared with older migrants.

Migration programs in Australia

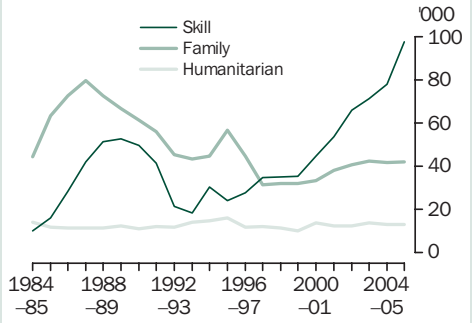
Planned permanent migration to Australia is administered through the Migration Program and the Humanitarian Program. These two programs regulate the flow of people seeking permanent residence in Australia. While New Zealand citizens may apply for permanent residency through either of these two programs, the 1973 Trans-Tasman Travel Arrangement allows them to enter Australia to visit, live and work without seeking a visa.[1]

The Migration Program has two streams: a Skill Stream and a Family Stream. Information from the Department of Immigration and Multicultural Affairs indicates that the Migration Program for 2005–06 will be in the range of 130,000 to 140,000 people, of which 97,500 are expected to be under the Skill Stream. The Skill Stream is specifically designed to target migrants who have skills or outstanding abilities that will contribute to the Australian economy. Migrants who come to Australia under the Skill Stream generally have previous work experience, non-school education qualifications and are proficient in English. The 2005-06 intake will be the largest ever under the Skill Stream and will account for approximately 70% of migrants to Australia in 2005–06.[1]

The Humanitarian Program is designed to ensure that visas are granted to those with strong humanitarian claims and in compelling need of resettlement. They are not selected on the basis of attributes (e.g. English proficiency and educational qualifications) that prepare them to become fully engaged in the Australian labour market in the short term. In addition, they may not have social and family support networks in Australia.[1]

There has been a significant shift in the focus of the Migration Program over the last ten years. Of particular interest is the increasing intake of Skill Stream migrants since 1997–98. In comparison, the number of Family Stream migrants has remained relatively stable during this period. This reflects the need for skilled labour in Australia. The number of humanitarian entrants has remained relatively constant over the last 20 years.[1]

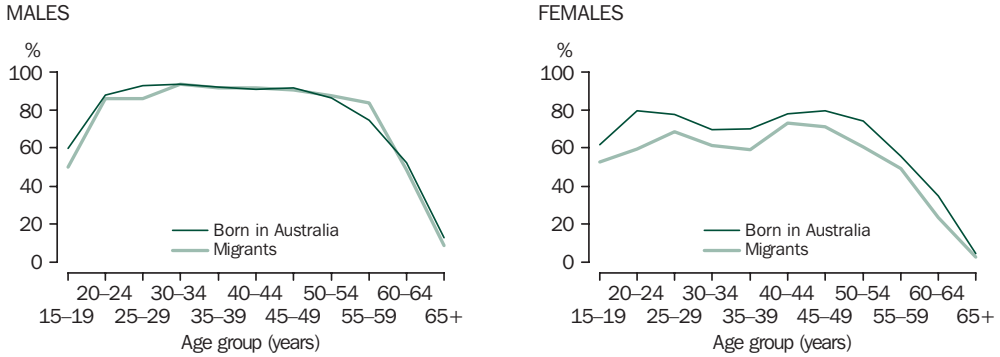
Migration program outcomes(a)



(a) Data for 2005–06 reflects migration targets.

Source: Department of Immigration and Multicultural Affairs.

Labour force participation rates — November 2004



Source: ABS November 2004 Labour Force Status and Other Characteristics of Migrants Survey.

Men's participation increased when they reached 20–24 years of age and remained relatively stable through to 55–59 years, after which it declined. Migrant women's participation showed a small peak among women aged 25–29, a trough at the prime child rearing ages of 30–39 years and then another peak between 40–49 years. Migrant women's labour force participation declined from 50–54 years onwards.

...occupation

Migrants and Australian-born people had similar occupation profiles. Professionals, Intermediate clerical, sales and service workers, Associate professionals and Tradepersons and related workers are the four most common occupation categories for both population groups. A higher proportion (24%) of employed migrants were Professionals at November 2004, compared with 18% of people born in Australia. Many of these professionals would have come to Australia under the Skill Stream migration program which targets professionals and skilled migrants.

Occupations of employed persons — November 2004

Source: ABS November 2004 Labour Force Status and Other Characteristics of Migrants Survey.

...labour force involvement prior to arrival

Almost two-thirds (64%) of migrants had held a job in the country they lived in prior to migrating to Australia. A higher proportion of migrant men held a job prior to arrival in Australia than migrant women (74% compared with 56%). Migrants who had held a job had a higher age standardised labour force participation rate (71%) than those who did not have a job before arrival (50%).

Similarly, sub-groups of migrants with high levels of employment prior to migration also had high levels of labour force participation. These include those proficient in English, people aged 35–54 years, men and Skill Stream migrants.

...qualifications prior to arrival

While nearly half (49%) of migrants had obtained a non-school qualification prior to arrival in Australia, more recently arrived migrants and Skill Stream migrants were more likely to hold non-school qualifications. For example, 57% of recently arrived migrants (i.e. those that arrived between 2000 and 2004) and 71% of Skill Stream migrants had non-school qualifications on arrival. Relevant skills (including qualifications) is one of the key criteria for the Migration Program's Skill Stream.

Migrants who had obtained non-school qualifications prior to arrival had better labour market outcomes than migrants without these qualifications. The age standardised labour force participation rate of migrants who had obtained non-school qualifications prior to arrival (71%) was higher than the rate for those without qualifications on arrival (56%).

...visa type and period of arrival in Australia

Migrants' labour force participation rates vary with period of arrival and tend to be higher among those more recently arrived. Migrants arriving between 1995 and 2004 had a higher age standardised labour force participation rate (60%) than those arriving between 1985 and 1994 (51%).

Skill Stream migrants tend to have better labour market outcomes than other migrants. The higher rates of labour force participation among more recent migrants is consistent with the steady increase in the intake of migrants under the Migration Program's Skill Stream since the mid 1990s. Principal applicant migrants in the Skill Stream (i.e. the family member for whom the eligibility to migrate was determined), generally have previous work experience, non-school qualifications and are proficient in English.

At November 2004, the age standardised labour force participation rate for Skill Stream migrants (66%) was slightly below the labour force participation rate for people born in Australia (67%) but was much higher than the participation rate for migrants who arrived in Australia on a family visa (51%). Skill Stream migrants also experienced lower levels of unemployment. The age standardised unemployment rate for Skill Stream migrants (3.0%) was lower than unemployment rates for migrants arriving on family visas (9.2%) as well as Australian-born people (4.9%).

Selected labour force indicators of migrants — November 2004

	Labour force participation rate(a)	*Unemployment rate(a)*
	%	%
Period of arrival		
1985–1989	51.6	3.0
1990–1994	49.4	2.8
1995–1999	62.7	6.4
2000–2004	58.4	9.0
Selected visa type(b)		
Skill	65.5	3.0
Family	50.5	9.2
Total migrants	**62.3**	**6.2**

(a) Age standardised to the Australian-born population.
(b) Reflects the visa of migrants when they arrived to live in Australia, not their visa type at November 2004.

Source: Labour Force Status and Other Characteristics of Migrants, November 2004 (ABS cat. no. 6250.0).

English proficiency

People who are *proficient in English* are those who report that only English is spoken at home, or that they speak English very well or well.

People with *lower English proficiency* are those who report that they speak English not well or not at all.

English proficiency is asked of people born in non-main English speaking countries for whom English is not the main language spoken at home. *Non-main English speaking countries* are all countries except the United Kingdom, Ireland, New Zealand, Canada, the United States of America and South Africa, excluding Australia.

The longer migrants have lived in Australia the less likely they are to be unemployed. Age standardised unemployment rates were highest among migrants arriving between 2000 and 2004 (9.0%). The longer the period since arrival, the more likely migrants have obtained educational qualifications, improved their English proficiency and developed knowledge of the labour market.

...English proficiency

Being able to speak English well is a major factor for migrants in seeking employment. Migrants born in non-main English speaking countries comprised 68% of the total migrant population, or 932,200 migrants, in November 2004. Of these, almost three quarters (73%) were proficient in English, with a higher proportion of migrant men proficient in English than migrant women (77% compared with 73%). Migrants born in main English speaking countries had a higher age standardised labour force participation rate (72%) than migrants who were proficient in English and were born in non-main English speaking countries (66%). Those born in non-main English speaking countries with lower levels of English proficiency also had lower levels of labour force participation (37%).

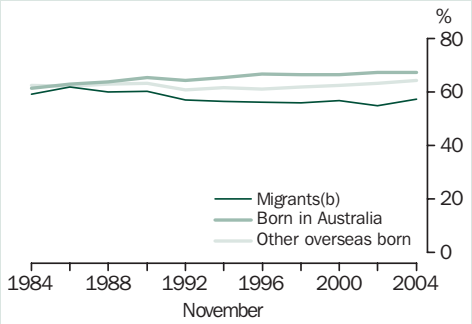
It is a requirement that Skill Stream principal applicants are proficient in English. There is no requirement for migrants who arrive under the Family Stream or Humanitarian Program to be proficient in English. Most (90%) of migrants from non-main English speaking countries who arrived under the Skill Stream reported that they spoke English well. This figure was 62% for those who arrived under the Family Stream and 50% for those who arrived under the Humanitarian Program.

Trends in migrants' labour outcomes

Data in this article are primarily based on the ABS November 2004 Labour Force Status and Other Characteristics of Migrants survey. This survey provides a snapshot of migrant characteristics and their labour force status at November 2004. To look at trends in migrants' labour outcomes over a longer period we need to use a different data source, the ABS Labour Force Survey (LFS).

The November 2004 Labour Force Status and Other Characteristics of Migrants survey defines migrants as people who were born overseas, arrived within 19 years of the survey date, were aged 15 years or over on arrival and were permanent residents of Australia. Estimates of migrants can be derived from the LFS using the same criteria except the permanent resident criterion.

Labour force participation rates(a) for people aged 15 years and over



(a) Age standardised for the migrant and other overseas born populations to the born in Australia population.
(b) Includes permanent and some temporary residents.

Source: ABS Labour Force Survey.

Migrants who are permanent residents at time of interview tend to have higher rates of labour force participation than those who are temporary residents, in part because some temporary residents are prevented by their conditions of entry from seeking employment. For example, in November 2004, according to the Labour Force Status and Other Characteristics of Migrants survey, the age standardised labour force participation rate for migrants who were permanent residents (62%) was higher than for those who were temporary residents (43%). As a result of this difference, participation rates for migrants presented below from the LFS are slightly lower than those presented elsewhere in this article.

The age standardised labour force participation of migrants has remained relatively stable over the past two decades, decreasing slightly between 1984 (59%) and 2004 (57%), while for other overseas born there was a slight increase over the same period, from 62% to 64%. In contrast the labour force participation rate of people born in Australia increased from 61% in 1984 to 67% in 2004.

There were declines in men's age standardised participation rates for migrants and other overseas born, consistent with the decline in men's participation for the Australian population. In contrast, women's participation rates have increased. This increase was greater for women born in Australia (from 46% in November 1984 to 60% in November 2004) than for migrants and other overseas born. Over the same period, women's age standardised labour force participation rates increased for both migrants (from 46% to 48%) and for other overseas born (from 49% to 57%).

Migrants have experienced higher unemployment rates than other overseas born and people born in Australia since 1984. For all three groups, unemployment rates were at a relatively low point in November 2004.

End notes

1 Australian Bureau of Statistics 2006, 'Labour market outcomes of migrants', *Australian Labour Market Statistics*, cat. no. 6105.0, ABS, Canberra.

Economic resources

Economic resources: national summary

	INCOME GROWTH	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	Real net national disposable income per capita(a)	$'000	r26.1	r27.1	r28.1	r29.1	r29.9	r31.1	r31.5	r32.3	r32.9	r34.3	35.1
3	Real GDP per capita(a)	$'000	r33.2	r34.2	r35.1	r36.3	r37.7	r38.8	r39.0	r40.0	r40.8	r41.9	42.4
	Weekly earnings												
4	Average weekly total earnings – all employees	$	551	574	n.a.	610	n.a.	653	n.a.	698	n.a.	757	n.a.
5	Average weekly ordinary time earnings of full-time adult non-managerial employees	$	608	634	n.a.	692	n.a.	737	n.a.	800	n.a.	868	n.a.
6	Total hourly rates of pay excluding bonuses(b)	index no.	n.a.	n.a.	n.a.	82.2	84.8	87.3	90.3	93.3	96.5	100.0	103.8
7	Full weekly benefit received by a single age pensioner	$	189	197	199	202	203	203	207	211	220	232	238
8	Full weekly benefit received by a couple with two children	$	355	370	386	393	397	405	445	465	482	496	531
9	Consumer price index(c)	index no.	113.9	118.7	120.3	120.3	121.8	124.7	132.2	136.0	140.2	143.5	147.0

	INCOME DISTRIBUTION	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
10	Female/male ratio of mean weekly ordinary time earnings of full-time adult non-managerial employees	ratio	0.91	0.89	n.a.	0.89	n.a.	0.90	n.a.	0.89	n.a.	0.90	n.a.
	Disposable household income												
	Mean weekly income of selected households(d)												
11	Lone person aged under 35 years	$	480	r488	r524	r498	n.a.	r555	r552	n.a.	r539	567	n.a.
12	Couple only, reference person aged under 35	$	1 017	r1 006	r1 039	r1 049	n.a.	r1 192	r1 122	n.a.	r1 175	1 231	n.a.
13	Couple with dependent children	$	1 020	r1 003	r1 023	r1 076	n.a.	r1 123	r1 153	n.a.	r1 140	1 257	n.a.
14	One parent with dependent children	$	535	r556	r568	r585	n.a.	r629	r623	n.a.	r618	669	n.a.
15	Couple only, reference person aged 65 and over	$	470	r467	r526	r499	n.a.	r545	r523	n.a.	r555	597	n.a.
16	Lone person aged 65 and over	$	253	r265	r279	r282	n.a.	r318	r297	n.a.	r311	350	n.a.
17	All households	$	787	779	801	820	n.a.	872	859	n.a.	871	914	n.a.
	Mean weekly equivalised household income for selected groups of persons(d)												
18	Low income	$	r246	r246	r255	r258	n.a.	r262	r267	n.a.	r276	300	n.a.
19	Middle income	$	r404	r399	r413	r421	n.a.	r439	r449	n.a.	r460	492	n.a.
20	High income	$	r861	r838	r862	r903	n.a.	r954	r981	n.a.	r999	1 027	n.a.
21	All households	$	455	450	464	477	n.a.	497	510	n.a.	522	549	n.a.
	Weekly equivalised household income of persons at top of selected income percentiles(d)												
22	20th(P20)	$	r245	r243	r253	r255	n.a.	r261	r266	n.a.	r273	299	n.a.
23	50th(P50)	$	r403	r397	r412	r418	n.a.	r439	r449	n.a.	r459	491	n.a.
24	80th(P80)	$	r625	r627	r642	r654	n.a.	r690	r699	n.a.	r719	743	n.a.
	Ratio of equivalised household incomes of persons at top of selected income percentiles												
25	P90/P10	ratio	3.77	3.73	3.66	3.77	n.a.	3.89	3.98	n.a.	4.00	3.70	n.a.
26	P80/P20	ratio	2.56	r2.58	2.53	2.56	n.a.	2.64	2.63	n.a.	2.63	2.49	n.a.
27	P80/P50	ratio	1.55	r1.58	1.56	1.56	n.a.	1.57	1.56	n.a.	1.57	1.52	n.a.
28	P20/P50	ratio	0.61	0.61	0.62	0.61	n.a.	0.59	0.59	n.a.	0.60	0.61	n.a.
	Share of total equivalised income received by persons with:												
29	Low income	%	10.8	11.0	11.0	10.8	n.a.	10.5	10.5	n.a.	10.6	10.9	n.a.
30	High income	%	37.8	37.3	37.1	37.9	n.a.	38.4	38.5	n.a.	38.3	37.4	n.a.
31	Gini coefficient of equivalised income	ratio	0.302	0.296	0.292	0.303	n.a.	0.310	0.311	n.a.	0.309	0.294	n.a.

Economic resources: national summary cont.

	EXPENDITURE	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
32	Real household final consumption expenditure per capita(a)	$'000	r19.4	r19.8	r20.1	r20.8	r21.6	r22.2	r22.7	r23.1	r23.7	r24.7	25.4
	SOURCES OF INCOME	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
	Main source of income – of all households												
33	Wages and salaries	%	57.6	r56.8	56.3	56.8	n.a.	56.7	56.9	n.a.	58.0	57.5	n.a.
34	Own business or partnership	%	6.1	7.3	6.6	6.0	n.a.	6.4	6.4	n.a.	6.2	6.0	n.a.
35	Government pensions and allowances	%	r28.5	r28.0	r28.6	r28.5	n.a.	28.7	28.3	n.a.	26.6	27.7	n.a.
36	Other	%	6.7	7.0	7.6	7.7	n.a.	7.3	7.3	n.a.	8.1	8.2	n.a.
	Income support												
37	Social assistance benefits in cash to residents as a proportion of GDP	%	r8.4	r8.4	r8.4	r8.1	r8.0	r8.1	r8.7	r8.5	r8.2	r8.6	8.4
	Main source of income is government pensions and allowances – proportion of all households in selected groups												
38	Lone person aged under 35 years	%	13.7	14.6	15.6	16.3	n.a.	17.2	13.7	n.a.	10.3	12.9	n.a.
39	Couple only, reference person aged under 35	%	3.6	*1.6	*2.6	*3.6	n.a.	*2.6	*2.8	n.a.	3.4	*2.0	n.a.
40	Couple with dependent children	%	10.4	9.7	10.6	10.3	n.a.	10.7	9.1	n.a.	8.7	7.7	n.a.
41	One parent with dependent children	%	58.1	53.3	58.7	54.3	n.a.	53.1	53.0	n.a.	48.9	54.2	n.a.
42	Couple only, reference person aged 65 and over	%	69.3	71.2	65.2	65.9	n.a.	70.1	71.7	n.a.	66.4	66.9	n.a.
43	Lone person aged 65 and over	%	83.4	79.8	80.0	77.9	n.a.	79.8	79.2	n.a.	79.9	76.5	n.a.
	Recipients of selected government payments												
44	Labour market program allowance(e)	'000	r773.7	r812.4	r798.0	r837.6	r778.7	r697.8	r666.9	r635.9	r599.8	r567.8	533.2
45	Single-parent payment	'000	324.9	342.3	358.9	372.3	r382.3	r391.4	r416.7	r427.8	r437.0	r449.3	450.8
46	Disability support pension(f)	'000	464.4	499.2	527.5	r553.3	r577.7	r602.3	623.9	658.9	673.3	696.7	706.8
47	Age pension	'000	1 579	1 603	1 680	1 683	1 716	1 730	1 786	1 811	1 854	1 870	1 915
48	Age pensioners – of persons of qualifying age	%	63.0	62.7	64.4	65.4	65.5	65.9	65.8	66.2	66.3	67.4	66.3
49	Females – of all age pensioners	%	65.5	64.4	64.4	63.5	63.1	62.1	61.6	59.6	59.4	59.5	59.1

(a) Chain volume measure, reference year 2003–04.

(b) Base of index: 2003–04 = 100.0.

(c) Base of index: 1989–90 = 100.0.

(d) Adjusted for changes in the Consumer Price Index; values are given in 2003–04 dollars.

(e) From 2001 excludes Newstart customers who received a nil rate of payment.

(f) Includes payments to people living overseas.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 4–5 and 10 are at May.
Data for indicators 7–8 and 44–49 are at June.

Economic resources: state summary

INCOME GROWTH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
2 Gross household disposable income per capita	$'000	2004–05	28.6	28.5	24.5	25.5	27.0	23.0	26.7	43.1	27.5
Weekly earnings											
4 Average weekly total earnings – all employees	$	2004	802	759	709	679	757	618	759	856	757
5 Average weekly ordinary time earnings of full-time adult non-managerial employees	$	2004	904	865	819	812	893	797	864	900	868
6 Total hourly rates of pay excluding bonuses(a)	index no.	2005	103.6	103.9	103.8	103.5	104.3	104.1	103.7	104.3	103.8

INCOME DISTRIBUTION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
10 Female/male ratio of mean weekly ordinary time earnings of full-time adult non-managerial employees	ratio	2004	0.91	0.88	0.89	0.92	0.85	0.92	0.95	0.93	0.90
Disposable household income											
Mean weekly income of selected households											
11 Lone person aged under 35 years	$	2003–04	595	550	531	509	606	405	808	642	567
12 Couple only, reference person aged under 35	$	2003–04	1 306	1 266	1 113	1 173	1 249	994	1 380	1 228	1 231
13 Couple with dependent children	$	2003–04	1 308	1 279	1 162	1 220	1 231	1 087	1 269	1 489	1 257
14 One parent with dependent children	$	2003–04	685	700	634	628	639	620	665	833	669
15 Couple only, reference person aged 65 and over	$	2003–04	648	574	545	573	591	534	*998	696	597
16 Lone person aged 65 and over	$	2003–04	336	330	416	312	344	307	305	362	350
17 All households	$	2003–04	971	919	851	846	895	757	1 102	1 086	914
Mean weekly equivalised household income for selected groups of persons											
18 Low income	$	2003–04	298	302	295	301	303	279	366	386	300
19 Middle income	$	2003–04	510	491	471	463	484	425	599	630	492
20 High income	$	2003–04	1 091	1 018	945	997	993	842	1 159	1 175	1 027
21 All households	$	2003–04	571	548	519	529	539	476	643	669	549
Weekly equivalised household income of persons at top of selected income percentiles											
22 20th(P20)	$	2003–04	295	301	295	301	303	280	354	393	299
23 50th(P50)	$	2003–04	514	488	472	461	483	420	591	628	491
24 80th(P80)	$	2003–04	777	747	689	691	727	637	861	899	743
Ratio of equivalised household incomes of persons at top of selected income percentiles											
25 P90/P10	ratio	2003–04	3.93	3.79	3.49	3.50	3.54	3.38	4.09	3.94	3.70
26 P80/P20	ratio	2003–04	2.63	2.48	2.34	2.29	2.40	2.28	2.43	2.29	2.49
27 P80/P50	ratio	2003–04	1.51	1.53	1.46	1.50	1.51	1.52	1.46	1.43	1.52
28 P20/P50	ratio	2003–04	0.58	0.62	0.62	0.65	0.63	0.67	0.60	0.63	0.61
Share of total equivalised household income received by persons with:											
29 Low income	%	2003–04	10.4	11.0	11.4	11.3	11.3	11.7	11.3	11.5	10.9
30 High income	%	2003–04	38.2	37.1	36.3	37.7	36.8	35.6	36.0	35.0	37.4
31 Gini coefficient of equivalised income	ratio	2003–04	0.307	0.291	0.278	0.286	0.285	0.266	0.286	0.268	0.294

Economic resources: state summary continued

	SOURCES OF INCOME	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	Main source of income – of all households											
33	Wages and salaries	%	2003–04	58.4	58.4	56.1	53.6	57.2	52.1	73.8	67.7	57.5
34	Own business or partnership	%	2003–04	5.4	5.2	6.6	6.6	8.1	5.0	5.6	4.5	6.0
35	Government pensions and allowances	%	2003–04	26.6	27.2	29.7	31.2	26.8	36.6	16.3	16.7	27.7
36	Other	%	2003–04	9.2	8.8	6.6	8.2	7.0	5.9	*3.8	11.1	8.2
	Income support											
	Recipients of selected government payments											
44	Labour market program allowance	'000	2005	173.3	127.4	105.6	45.0	45.2	18.8	12.6	5.2	533.2
45	Single-parent payment(b)	'000	2005	145.4	100.3	98.6	36.0	45.4	13.4	5.9	5.1	450.8
46	Disability support pension(c)	'000	2005	227.6	168.9	135.9	67.6	59.7	25.1	5.9	7.0	706.8
47	Age pension(c)	'000	2005	624	486	336	177	164	53	6	18	1915
48	Age pensioners – of persons of qualifying age	%	2005	62.4	66.4	64.2	70.1	63.5	69.9	59.0	51.3	66.3
49	Females – of all age pensioners	%	2005	59.8	59.9	58.6	59.9	59.5	59.2	54.8	62.3	59.1

(a) Base of index: 2003–04 = 100.0.

(b) Components do not add to Australian total because total for Australia includes payments where valid geographic data were not available.

(c) Components do not add to Australian total because total for Australia includes payments to people living overseas and where valid geographic data were not available.

Reference periods: All data are for the financial year ending 30 June except:
Data for indicators 4–5 and 10 are at May.
Data for indicators 44–49 are at June.

Economic resources: data sources

INDICATORS	DATA SOURCE
1, 3, 37	*Australian System of National Accounts* (ABS cat. no. 5204.0).
2	*Australian National Accounts: State Accounts* (ABS cat. no. 5220.0).
4–5, 10	*Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).
6	*Labour Price Index, Australia, September Quarter* (ABS cat. no. 6345.0).
7–8	Guide to Commonwealth Government Payments.
9	*Consumer Price Index, Australia* (ABS cat. no. 6401.0).
11–31, 33–36, 38–43	ABS Surveys of Income and Housing.
32	ABS Australian System of National Accounts and ABS Estimated resident population.
44	Department of Social Security Annual Reports 1995–97, Labour Market and Related Payments (July 2002 edition, which contains revised data for June 1998) and Department of Employment and Workplace Relations administrative data 1999–2005.
45–46	Department of Employment and Workplace Relations administrative data.
47, 49	Department of Families, Community Services and Indigenous Affairs administrative data.
48	Department of Families, Community Services and Indigenous Affairs administrative data and ABS Estimated resident population.

Economic resources: definitions

Adult employees

employees aged 21 years and over, and those under 21 years who are paid at the full adult rate for their occupation.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Age pension recipients

people receiving full or partial Age pension excluding associated Wife's or Carer's pension. The qualifying age for Age pension eligibility for men is 65 years. Between 1 July 1995 and 2012, the qualifying age for women is gradually being raised from 60 to 65 years. At 30 June 2005 the qualifying age for females was 62.5 years.

Reference: Department of Families, Community Services and Indigenous Affairs, *Customers: a statistical overview*.

Age pensioners — of persons of qualifying age

the number of aged pension recipients as a proportion of the estimated resident population (ERP) of persons who meet the age requirements for the age pension. In the years where the age requirement for females was a number of years plus six months the ERP was prorated.

Reference: Department of Families, Community Services and Indigenous Affairs.

Average weekly ordinary time earnings of full-time adult non-managerial employees

refers to one week's earnings for the reference period attributed to award, standard or agreed hours of work. It is calculated before taxation and any other deductions have been made. Included in ordinary time earnings are agreed base rates of pay plus payment by measured result, such as bonuses and commissions. Excluded are non-cash components of salary packages, the value of salary sacrifice, overtime payments, and payments not related to the survey reference period, such as retrospective pay, pay in advance, leave loadings, and severance pay and termination and redundancy payments. Non-managerial employees are those who are not managerial employees as defined below, including non-managerial professionals and some employees with supervisory responsibilities.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Average weekly total earnings

average weekly total earnings of employees is equal to weekly ordinary time earnings plus weekly overtime earnings.

Reference: Employee *Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Chain volume measures

are obtained by linking together (i.e. compounding) movements in volumes, calculated using the average price of the previous financial year, and applying the compounded movements to the current price estimates of the reference year.

Reference: *Australian System of National Accounts: Concepts, Sources and Methods* (ABS cat. no. 5216.0).

Consumer price index

a measure of change over time in the retail price of a constant basket of goods and services which is representative of consumption patterns of all private households in the eight capital cities.

Reference: *Australian Consumer Price Index: Concepts, Sources and Methods* (ABS cat. no. 6461.0).

Couple

two people in a registered or de facto marriage, who usually live in the same household.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Couple only household

a household which contains a couple and no other persons.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Couple with dependent children household

a one-family household comprising a couple with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated persons.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Dependent children

children under 15 years of age; and full-time students, aged 15 to 24 years, who have a parent in the household and do not have a partner or child of their own in the household.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Economic resources: definitions continued

Disability support pension recipients

persons receiving a pension on the basis of an assessed permanent physical, intellectual or psychiatric impairment and on their continuing inability to work or be retrained to work 30 hours or more per week within the next two years.

Reference: Department of Employment and Workplace Relations.

Disposable income

gross income less personal income tax (including the Medicare levy).

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Employees

all wage and salary earners who received pay for any part of the reference period.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Equivalised income

equivalising adjusts actual income to take account of the different needs of households of different size and composition. There are economic advantages associated with living with others, because household resources, especially housing, can be shared. The equivalence scale used to obtain equivalised incomes is that used in studies by the Organisation for Economic Co-operation and Development (OECD) and is referred to as the 'modified OECD scale'. The scale gives a weight of 1.0 to the first adult in the household, a weight of 0.5 for each additional adult (persons aged 15 years and over) and a weight of 0.3 for each child. For each household, the weights for household members are added together to form the household weight. The total household disposable income is then divided by the household weight to give an income that a lone person household would need for a similar standard of living.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Full-time employees

employees who normally work the agreed or award hours for a full-time employee in their occupation. If agreed or award hours do not apply, employees are regarded as full-time if they usually work 35 hours or more per week.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Full weekly benefit received by a single age pensioner

the amount paid to a single age pensioner, who passes the income and asset test for the full basic rate, excluding all allowances, indexed by CPI to the most recent year.

Reference: Department of Families, Community Services and Indigenous Affairs.

Full weekly benefit received by a couple with two children

the maximum weekly social security benefit available to an unemployed couple with two children (one aged under 5 years and one aged 5 years or over but under 13 years). The calculation for 2005 includes unemployment benefits for each partner (currently Newstart), Family Tax Benefit Part A for each child and Family Tax Benefit Part B for the family. This calculation excludes any rent assistance which may be available.

Reference: Department of Families, Community Services and Indigenous Affairs.

GDP (gross domestic product)

total market value of goods and services produced in Australia within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Gini coefficient

a measure for assessing inequality of income distribution. The measure, expressed as a ratio that is always between 0 and 1, is low for populations with relatively equal income distributions and high for populations with relatively unequal income distributions.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Government pensions and allowances

payments from government under social security and related government programs.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Gross household disposable income per capita

where gross household disposable income, as measured in the Australian System of National Accounts, is gross household income less income tax payable, other current taxes on income, wealth etc., consumer debt interest, interest payable by unincorporated enterprises, net non-life insurance premiums and other current transfers payable by households. The population used is the mean resident population for the financial year.

Reference: *Australian National Accounts: State Accounts* (ABS cat. no. 5220.0).

Gross income

cash receipts, that are of a regular and recurring nature, before tax or any other deductions are made.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

High income persons

persons in the 9th and 10th income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Household

a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Labour market program allowance recipients

the number of recipients of Job Search Allowance and Newstart Allowance in 1995 and 1996; Newstart Allowance in 1997 and 1998; and Newstart Allowance and Youth Allowance for jobseekers [referred to as Youth Allowance (other)] from 1999.

Reference: Department of Employment and Workplace Relations.

Lone-person household

a household which consists of a person living alone.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Low income persons

persons in the 2nd and 3rd income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Main source of income

that source from which the most positive income is received. If total income is nil or negative the principal source is undefined.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Managerial employees

employees who are in charge of a significant number of employees and/or have strategic responsibilities in the conduct or operations of the organisation and who usually do not have an entitlement to paid overtime.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Economic resources: definitions continued

Mean weekly income

the sum of the income of all households or persons in a population, divided by the number of households or persons in the population.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Middle income persons

persons in the 5th and 6th income deciles after being ranked by their equivalised disposable household income.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

One parent with dependent children household

a one-family household comprising a lone parent with at least one dependent child. The household may also include non-dependent children, other relatives and unrelated persons.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Ordinary time hours

award, standard or agreed hours of work, paid for at the ordinary time rate, including that part of annual leave, paid sick leave and long service leave taken during the reference period.

Reference: *Employee Earnings and Hours, Australia* (ABS cat. no. 6306.0).

Own business or partnership income

the profit or loss that accrues to people as owners of, or partners in, unincorporated enterprises. Profit/loss consists of the value of the gross output of the enterprise after the deduction of operating expenses (including depreciation). Losses occur when operating expenses are greater than gross receipts.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Percentiles

when persons are ranked from the lowest to the highest on the basis of some characteristic such as their equivalised household income, they can then be divided into equal sized groups. Division into 100 groups gives percentiles. The highest value of the characteristic in the tenth percentile is denoted P10. The Median or the top of the 50th percentile is denoted P50. P20, P80 and P90 denote the highest values in the 20th, 80th and 90th percentiles.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Ratio of incomes

the ratio is calculated by dividing the highest value in a selected percentile by the highest value in a second selected percentile (see percentiles). For example, in 2003–04, the person at the top of the 80th percentile for Australia when ranked by equivalised disposable income had an equivalised disposable household income of $743. If this is divided by the equivalised disposable household weekly income of the person at the top of the 20th percentile ($299), the result is 2.49.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Real GDP (gross domestic product)

an aggregate measure of the value of economic production in a year. The series used are GDP chain volume measures (reference year 2003–04) and GDP at current prices.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Real household final consumption expenditure per capita

net expenditure on goods and services by persons, and expenditure of a current nature by private nonprofit institutions serving households. Includes personal expenditure on motor vehicles and other durable goods, the value of 'backyard' production, the payment of wages and salaries in kind and imputed rent on owner-occupied dwellings. Excludes the purchase and maintenance of dwellings by persons and capital expenditure by unincorporated businesses and nonprofit institutions. The measure is expressed in Australian dollars using chain volume measures, reference year 2003–04, and is based on the mean resident population of each financial year.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Real net national disposable income per capita

where real net national disposable income is a broad measure of economic wellbeing which adjusts the chain volume measure of GDP for the terms of trade effect, real net incomes from overseas (primary and secondary) and consumption of fixed capital. The population estimates are based on data published in the quarterly publication *Australian Demographic Statistics* (ABS cat. no. 3101.0) and ABS projections.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Reference person

the reference person for each household is chosen by applying to all household members aged 15 years and over the selection criteria below in the order listed, until a single appropriate reference person is identified:

- the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure (for periods up to 2003 only),
- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Single-parent payment recipients

the number of lone parents receiving Parenting Payment (Single). Prior to March 1998, this was known as the 'Sole Parent Pension'.

Reference: Department of Employment and Workplace Relations.

Social assistance benefits in cash to residents

includes current transfers to persons from general government in return for which no services are rendered or goods supplied. Principal components include: scholarships; maternity, sickness and unemployment benefits; child endowment and family allowances; and widows', age, invalid and repatriation pensions. Residents refers to Australian residents.

Reference: *Australian System of National Accounts* (ABS cat. no. 5204.0).

Total hourly rates of pay index excluding bonuses

measures quarterly change in combined ordinary time and overtime hourly rates of pay excluding bonuses.
Bonuses are payments made to a job occupant that are in addition to regular wages and salaries and which generally relate to the job occupant's, or the organisation's performance. Base period for index is 2003–04 = 100.0.

Reference: *Labour Price Index, Australia* (ABS cat. no. 6345.0).

Wages and salaries

the gross cash income received as a return to labour from an employer or from a person's own incorporated enterprise.

Reference: *Household Income and Income Distribution, Australia* (ABS cat. no. 6523.0).

Distribution of household wealth

WEALTH

In 2003–04, mean household net worth ranged from $69,000 for the youngest households up to $740,000 for 'pre-retirement' households.

Household wealth is an important factor in determining the economic wellbeing of individuals and families throughout their lives and from generation to generation. Households with a relatively high level of wealth (net worth) may be better able to meet their financial commitments and maintain satisfactory living standards during unplanned periods of reduced income (e.g. unemployment, incapacity) or to raise a substantial sum of money in an emergency (e.g. to fund urgent medical treatment). Such households will also find it easier to access credit and to plan for large expenditures (e.g. car, home extensions, children's education) and prolonged periods of reduced income earning capacity (e.g. while children are young or after retirement). On the other hand, households with low or negative net worth may be vulnerable to financial stress if household income is reduced for even a short period.

Children in high wealth households may have greater access to educational opportunities than those in low wealth households. Consequently, as young adults, they may have better job prospects and income earning capacity. They may also be able to access credit and build wealth using their parents' wealth as security or to benefit directly from low or no interest loans or gifts.

In 2003–04, the mean household net worth of all Australian households was $468,000. The median was substantially lower at $295,000, reflecting the relatively large proportion of households at the low end of the wealth distribution. While 17% of households had net worth of less than $50,000, fewer and fewer households fell into each $100,000 net worth range above this base level. Overall, 71% of households had net worth of less than $500,000 and around 10% of households had net worth of a million dollars or more.

Estimates of household wealth (net worth)

This article presents estimates of the net worth of Australian households derived from data on assets and liabilities collected in the ABS 2003–04 Survey of Income and Housing (SIH). This is the first comprehensive ABS survey of household assets and liabilities that enables detailed analysis of the distribution of wealth across the Australian population and comparison of levels of wealth between various population groups.

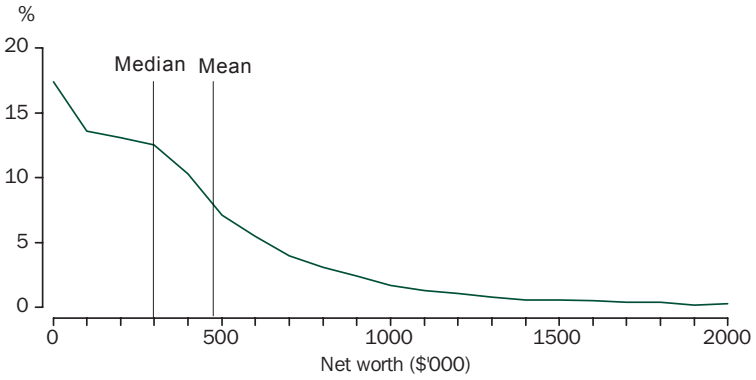
A household's *net worth* at any point in time is the difference between the value of its

- *assets* such as the family home, other property and land, motor vehicles and home contents, money in banks, building societies, etc., amounts accumulated in superannuation funds and other financial assets such as shares, trusts, debentures and bonds, and
- *liabilities* such as principal outstanding on home mortgage and other loans, amount owing on credit cards, and outstanding HECS debt.

Mean net value of own home is the value of the owner occupied dwelling less any outstanding loans on the dwelling.

The value (net of liabilities) of any businesses owned by household members is also included in the calculation of a household's net worth.

Distribution(a) of household net worth — 2003–04



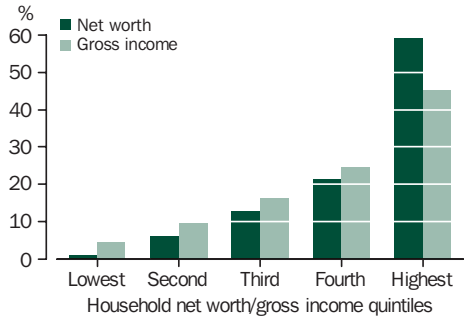
(a) Households with net worth between -$50,000 and $2,050,000 are shown in $100,000 increments. Labels relate to the midpoint of each range.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

Wealth and income

Wealth and income are closely interlinked and are sometimes collectively referred to as the 'means' of living. A household may use its assets to generate income (see *Australian Social Trends 2006,* Components of household wealth pp. 151–155). This could be cash income (e.g. in the form of interest, dividends, rent, superannuation pensions, profits from an unincorporated business) or income in-kind (e.g. the value of housing and amenities derived from the family home and contents). Household income can be used to purchase goods and services for day to day living, to acquire assets and to service debts. The more income a household has left after

Share(a) of household net worth and gross weekly income — 2003–04



(a) Share of household net worth or gross weekly income by quintile is calculated by dividing the total net worth/income of the households in each quintile by the total net worth/income of all households.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

living expenses are met, the greater its capacity for building wealth, and the more wealth a household has, the greater its capacity to generate income.

Notwithstanding the close relationship between wealth and income, wealth is distributed between households somewhat differently to income. In 2003–04, the wealthiest 20% of Australian households had 59% of total household net worth while the least wealthy 20% of households had only 1% of total household net worth. Income shares were less disparate, with the highest quintile receiving 45% of total gross household income and the lowest quintile receiving 5% of total gross household income.

Life cycle

The differences in the distribution of wealth and income partly reflect the common pattern of wealth being gradually accumulated throughout the working lives of household members and then being utilised during retirement. So, for most households, relative wealth and income levels tend to be closely associated with their life cycle stage. For example, many younger households have relatively low wealth and relatively high income while many older households are relatively wealthy but have low income. Also, couple family households tend to have more wealth and income than one parent families or lone person households of a similar age.

In 2003–04, mean household net worth ranged from $69,000 for the youngest households (reference person aged 15–24 years) rising steadily to $740,000 for 'pre-retirement' households (reference person aged 60–64 years) and falling in older households. Unlike wealth, household

Measures of distribution

Various measures are used in this article to describe the distribution of household net worth and gross household income across the whole population, and to compare population subgroups of interest.

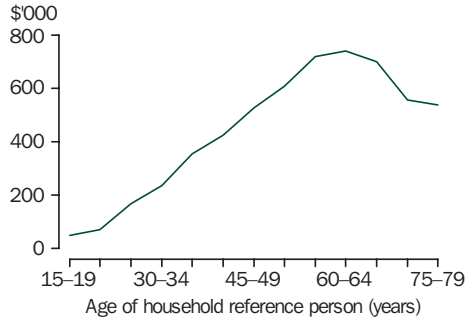
Mean household net worth or income is the combined net worth/income of households in a population divided by the number of households in that population.

Median household net worth or income is the middle value when all households in a population are ranked from lowest to highest on the basis of their net worth/income.

Quintiles are created when a population of units (in this case households) is ranked from lowest to highest on the basis of some characteristic (e.g. household net worth or income) and then divided into five equally sized groups. Thus the lowest quintile of household net worth refers to the 20% of households ranked lowest on the basis of household net worth.

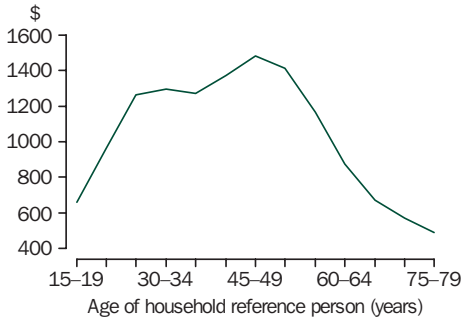
In this article, *low wealth* households are those in the lowest quintile, *middle wealth* households are the third quintile and *high wealth* households are the highest quintile of household net worth.

Mean household net worth — 2003–04



Source: ABS 2003–04 Survey of Income and Housing.

Mean gross weekly household income — 2003–04



Source: ABS 2003–04 Survey of Income and Housing.

Net worth and household charateristics of selected life cycle groups — 2003–04

Selected life cycle groups(a)	Average age of reference person (years)	Average number of employed persons (no.)	Mean gross household income per week ($)	Proportion owning home with a mortgage (%)	Proportion owning home without a mortgage (%)	Mean net value of own home ($'000)	Mean household net worth ($'000)
Lone person aged under 35	28	0.8	730	25.4	*3.0	32.6	94.3
Couple only, reference person aged under 35	28	1.9	1,584	54.2	2.9	86.5	225.8
Couple with dependent children only							
Eldest child aged under 5	33	1.5	1,368	64.8	6.9	158.7	365.8
Eldest child aged 5–14	39	1.6	1,486	62.4	13.2	215.2	469.3
Eldest child aged 15–24	47	2.3	1,738	60.0	27.1	313.5	685.3
One parent with dependent children	39	0.8	760	28.6	10.8	76.4	157.6
Couple with							
Dependent and non-dependent children only	48	3.0	1,947	50.4	32.8	277.5	588.1
Non-dependent children only	57	2.2	1,722	40.1	51.2	356.5	729.3
Couple only, reference person aged 55–64	60	1.0	988	21.3	69.0	339.6	895.0
Couple only, reference person aged 65 and over	73	0.2	644	4.0	85.3	318.2	713.6
Lone person aged 65 and over	75	—	377	2.6	73.8	236.8	437.4
All households(b)	**49**	**1.2**	**1,128.0**	**35.1**	**34.9**	**209.0**	**467.6**

(a) The life cycle groups included here are a selection of single person and single family households.
(b) Includes all households, not just those in selected groups.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

income rose sharply in younger households (reference person aged 15–29 years), reflecting the transition of many young people from full-time education to full-time work and the subsequent formation of young couple households with two incomes. This is a period in which households typically acquire assets such as motor vehicles and household durables and begin saving for a home deposit. By the time they reach their mid thirties many couples and singles have already bought their first home.

In 2003–04, 28% of lone persons aged under 35 years owned their home (most with a mortgage) and their mean household net worth was $94,000. At $226,000, the mean net worth of couple households with a reference person under 35 years was more than twice that of their single counterparts, as was their rate of home ownership (57%), and their mean gross weekly income ($1,584 compared with $730).

Household income levelled off among 'thirty something' households (reference person aged 30–39 years), reflecting the practice of many parents, particularly mothers, taking time out of the workforce or working part-time while their children are young. In 2003–04, the mean gross household income of couples with dependent children was $1,368 (where the eldest child was under 5) and $1,486 where the eldest child was aged 5–14 years. The mean household net worth for these groups was $366,000 and $469,000 respectively. Despite having less income and larger households to support than young couple only households (reference person aged under 35 years) they had accumulated substantially more wealth. This is partly because they had had more time to purchase and furnish a home, to repay their home loans, and to grow other assets such as superannuation. In 2003–04 the average age of the household reference person in young families was 33 years (where the eldest child was under 5) and 39 (where the eldest child was aged 5–14 years) compared with 28 years in young couple only households.

In 2003–04 household income was highest for 'middle age' households (reference person aged 45–54 years), reflecting both the peak in individual earnings in this age group, and the higher labour force participation of parents in families with older children. In some cases older children are also working. For example, in 2003–04, the average age of the reference person in couple family households with dependent and non-dependent children only was 48 years. These households had an

average of 3 employed persons; mean gross weekly income of $1,947; and mean household net worth of $588,000.

Among households with a reference person aged 55–64 years, income declined rapidly, as working children left the family home and early retirees left the labour force. However, wealth continued to grow. In 2003–04, the mean net worth of couple only households with a reference person aged 55–64 years was $895,000 (nearly four times as much as young couple only households); 69% owned their home outright and a further 21% were still paying off a mortgage.

Both income and wealth declined among older households, but not to the same extent. In 2003–04, households with a reference person aged 75–79 years had a mean gross weekly household income of $490 and a mean net worth of $538,000. This suggests that while most retain their own home, older households tend to run down other assets such as superannuation and savings to supplement relatively low post-retirement income. On the other hand, these older cohorts may not have accumulated high levels of wealth, especially superannuation, during their working lives.

Lone person and one parent family households have substantially less wealth than couple family households of a similar age. For younger households (reference person aged under 35 years) the mean net worth of lone persons in 2003–04 was 42% that of couple only households. One parent households with dependent children had a mean net worth of $158,000 which was 43% as much as couples whose eldest child was under 5 years, and 34% as much as couples whose eldest child was aged 5–14 years.

Not all households follow the typical life cycle progression from low to relatively high wealth. Some are interrupted along the way by unemployment, illness, family breakdown, catastrophic loss of property, etc. Some never make a start. For various reasons (e.g. permanent disability, poor job prospects, low earnings, prolonged unemployment) some may never have enough income to enable them to accumulate wealth. On the other hand, some may acquire substantial wealth early in the life cycle (e.g. family inheritance, life insurance, compensation, lottery winnings).

Characteristics of households in selected wealth groups — 2003–04

Selected characteristics	*Low wealth*	*Middle wealth*	*High wealth*	*All households*
	%	%	%	%
Age of reference person(years)				
Under 25	15.3	0.8	0.2	4.3
25–34	29.8	18.5	4.4	18.1
35–44	20.8	25.0	16.0	22.1
45–54	13.1	19.6	29.2	20.6
55–64	7.8	13.6	25.4	14.9
65 and over	13.2	22.5	24.9	19.9
Principal source of income				
Wages and salaries	44.9	60.0	57.0	57.5
Own unincorporated business income	3.0	5.5	8.9	6.0
Government pensions and allowances	48.0	30.0	10.8	27.8
Other income(a)	3.4	3.9	22.6	8.2
Tenure type				
Home owner without a mortgage	1.1	39.7	64.9	34.9
Home owner with a mortgage	3.2	52.4	31.7	35.1
Renter	91.1	6.2	2.4	27.6
Other tenure type	4.6	1.7	1.0	2.4
All households	**100.0**	**100.0**	**100.0**	**100.0**
	no.	no.	no.	no.
Average number of employed persons	0.8	1.3	1.5	1.2
	$'000	$'000	$'000	$'000
Mean household net worth	24.3	295.9	1 379.7	467.6

(a) Income from all other sources including superannuation, interest, dividends, and property.

Source: ABS 2003–04 Survey of Income and Housing.

Low wealth households

The mean net worth of low wealth households (those in the lowest household net worth quintile) in 2003–04 was $24,000. Home ownership rates were very low in this group, with 91% of households living in rental housing (mainly private). Low wealth households whose principal source of income was wages and salaries received $1,023 per week, on average, and had a mean net worth of $30,000. Those households whose principal source of income was government pensions and allowances received an average of $382 per week and had mean net worth of $19,000. Almost half (48%) of low wealth households derived most of their income from government pensions and benefits.

Over half of low wealth households in 2003–04 were single income households; 39% were lone persons and 17% were one parent families with dependent children. The age profile of low wealth households was relatively young, with 45% having a reference person aged under 35. Most of these younger households are likely to accumulate more wealth in coming years. However, a significant proportion of low wealth households were at, or near, the end of the wealth accumulation

Family composition of households in selected wealth groups — 2003–04

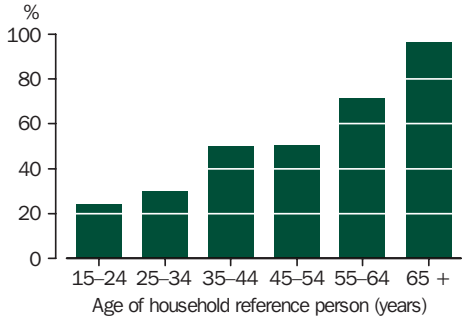
	Low wealth	*Middle wealth*	*High wealth*	*All house-holds*
	%	%	%	%
One family households				
Couple family with dependent children	13.8	31.6	30.6	27.1
One parent family with dep. children	17.0	4.4	1.3	6.8
Couple only	13.8	26.8	37.6	26.1
Other one family households	7.5	9.2	15.0	10.4
Multiple family households	*0.7	*1.2	1.6	1.1
Non-family households				
Lone person	38.6	25.4	13.0	25.4
Group households	8.7	1.6	*0.8	3.2
All households	**100.0**	**100.0**	**100.0**	**100.0**

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

cycle with little prospect of improving their situation. In 2003–04, 13% of low wealth households had a reference person aged 65 years and over and a further 8% had a reference person aged 55–64 years. Both these groups were highly dependent on government pensions and allowances as their principal source of income (96% and 72% respectively).

As the first of the large 'baby boom' cohorts approaches 65 years of age, the focus of much government policy is on improving the ability of Australians to support themselves financially in retirement. Legislation introduced in 1992, which requires employers to provide a minimum level of superannuation contributions for most employees, is an important step towards this end. Even so, many older people already nearing the end of their working lives, will not have accumulated enough superannuation (or other wealth) to enable them to forego the age pension in retirement. Some younger households may also have difficulty accumulating sufficient superannuation to fully fund their retirement, particularly those who experience extended periods without paid employment during their prime working years. In 2003–04, 39% of low wealth households with a reference person aged 35–54 years had no one in paid employment and received most of their income from government pensions and allowances. In all, 50% of low wealth households in this age group reported government pensions and allowances as their principal source of income.

Proportion of low wealth households dependent(a) on government pensions and allowances — 2003–04



(a) Refers to households whose principal source of income was government pensions and allowances.

Source: ABS 2003–04 Survey of Income and Housing.

Middle wealth households

Households in the middle net worth quintile in 2003–04 had a mean net worth of $296,000. They had an older age profile than low wealth households and were mainly couples with dependent children (32%), couple only households (27%) and lone person households (25%).

The principal source of income for the majority (60%) of middle wealth households was wages and salaries. A further 30% were dependent on government pensions and benefits but, unlike the low wealth group, these were almost all older households, and owned their home outright. In all, 40% of (mainly older) middle wealth households owned their home outright and a further 52% of (mainly younger) households owned their home with a mortgage.

High wealth households

With a mean net worth of $1.4 million, high wealth households in 2003–04 were mainly couple only families (38%) and couples with dependent children (31%) and were older, on average, than their counterparts in the middle wealth group. Three in four couple only and lone person households in the high wealth group had a reference person aged 55 years and over.

Like middle wealth households, the principal source of income for most (57%) high wealth households was wages and salaries, but the proportion of self-funded retired households was much higher, reflecting higher ownership of income earning assets (see *Australian Social Trends 2006,* Components of household wealth pp. 151–155). In 2003–04, 23% of high wealth households reported sources such as superannuation, interest,

Mean household net worth, states and territories — 2003–04

	Capital city		Balance of state	
	Mean net value of own home	*Mean household net worth*	*Mean net value of own home*	*Mean household net worth*
State	$'000	$'000	$'000	$'000
NSW	340.8	640.6	189.2	439.1
Vic.	232.8	505.7	136.1	409.7
Qld	173.9	402.3	143.5	371.4
SA	156.0	362.1	121.2	392.7
WA	172.7	394.1	114.7	452.6
Tas.	151.6	374.5	106.9	289.2
NT	109.2	377.0	n.a.	n.a.
ACT	223.7	504.9	n.a.	n.a.
Australia	**241.5**	**503.6**	**152.6**	**405.1**

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

dividends, rents, etc. as their principal source of income. At $1,192 per week, the average gross household income for this group was more than double that of high wealth households whose principal source of income was government pensions and benefits ($482).

Geographic distribution of wealth

There is considerable variation in household wealth between and within Australia's states and territories. In 2003–04, Sydney had the highest mean household net worth ($641,000) followed by Melbourne ($506,000) and Canberra ($505,000). Adelaide was the least wealthy capital city with a mean household net worth of $362,000, 57% as much as Sydney. Outside of the capital cities, there was slightly less variation in wealth between the states. Tasmania's balance had the lowest mean household net worth. At $289,000, this was 63% as much as the mean household net worth of the balance of Western Australia ($453,000).

In most states, capital city households were wealthier on average than those in the rest of the state. However, the situation was reversed for South Australia and Western Australia, mainly due to relatively high mean net values of businesses among balance of state households. While the combined mean net value of incorporated and unincorporated businesses was higher for balance of state households than for capital city households in all states, the ratio was particularly high in South Australia (5:1) and Western Australia (4:1). Also, these were the only two states in which the mean net value of 'other property' was higher for balance of state households than for capital city households.

In all states the mean net value of owner occupied dwellings was higher in the capital city than in the rest of the state. This occurred even though home ownership rates were as high or higher outside of the capital cities, and higher proportions of these homes were owned outright, than in the capital cities. For the most part, differences in the mean net value of owner occupied dwellings between and within states reflected differences in their estimated sale price. New South Wales had the highest mean net value of owner occupied dwellings — $341,000 in Sydney and $189,000 in the rest of the state.

New South Wales also had the largest gap in wealth between capital city and balance of state. In 2003–04, the mean net value of owner occupied dwellings in the NSW balance was 56% as much as in Sydney and the mean net worth of households in the balance of NSW was 69% as much as Sydney households.

Components of household wealth

WEALTH

The mean net value of owner occupied homes accounted for 39% of the net worth of high wealth households, 57% of the net worth of middle wealth households and only 3% of the net worth of low wealth households.

Household wealth is a net concept, and measures the extent to which the value of household assets exceeds the value of household liabilities. A household's wealth changes over time. It may be added to, for example through savings, and it may also be depleted by incurring liabilities or by liquidating assets and spending the proceeds on consumption items. Wealth (net worth) is important because it provides a level of economic security, enables people to borrow money, as well as directly generating income.[1]

The types of assets or liabilities and ultimately the mean net worth of a household is related to the life-cycle stage of the householders. Households who are towards the end of their working life have often accumulated assets and paid off liabilities. Younger people have had less time to accumulate assets and may incur debts not directly associated with acquiring assets, for example, to pay for education (see *Australian Social Trends 2006*, Distribution of household wealth, pp. 145–150).

Net worth

This article focuses on three groups of households: low wealth (lowest quintile), middle wealth (third quintile) and high wealth (highest quintile) households, and examines the net worth of each of these groups. In 2003–04, low wealth households held an average of $35,000 worth of assets, middle wealth households $379,000, and the households with the greatest wealth on average held $1.5 million of assets. In terms of liabilities, low wealth households on average held $11,000 worth of liabilities, middle wealth $84,000 and high wealth households $104,000.

Estimates of household wealth (net worth)

Data in this article relating to *wealth (net worth)* are derived from the value of household assets less their liabilities collected in the ABS 2003–04 Survey of Income and Housing.

This article includes analysis by low, middle and high wealth household groups, based on net worth quintiles. To calculate quintiles, households were ranked in ascending order of net worth. This population was then divided into five equal groups (quintiles), each comprising 20% of the estimated population. *Low wealth* households are the lowest quintile, *middle wealth* households are the third quintile and *high wealth* households are the highest quintile of net worth. Each quintile contains about 1.5 million households.

Assets are owned by the members of the household, and provide economic benefits and include money held in accounts at financial institutions, the family home, other property and land, motor vehicles and home contents, amounts accumulated in superannuation funds, shares, trusts, debentures and bonds.

Liabilities require members of a household to make a payment or a series of payments. *Property loans* are liabilities which relate either to loans outstanding on owner occupied dwellings or on other property. *Other liabilities* include debts outstanding on study loans, amounts owing on credit cards, the principal outstanding on loans for vehicles and investments, and loans for other purposes.

Mean net value of own home is the value of the owner occupied dwelling less any outstanding loans on the dwelling.

The *reference person* for each household is chosen by applying the following selection criteria in the order given until an appropriate person is identified: one of the partners in a marriage or de facto marriage, a lone parent, the person with the highest income or the eldest person.

Mean household net worth — 2003–04

	Low wealth households	*Middle wealth households*	*High wealth households*	*All households*
	$'000	$'000	$'000	$'000
Total assets	35.3	379.4	1 483.6	537.1
Total liabilities	10.9	83.5	103.9	69.4
Mean household net worth	**24.3**	**295.9**	**1 379.7**	**467.6**
Mean net value of own home	**0.8**	**170.1**	**536.5**	**209.0**

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

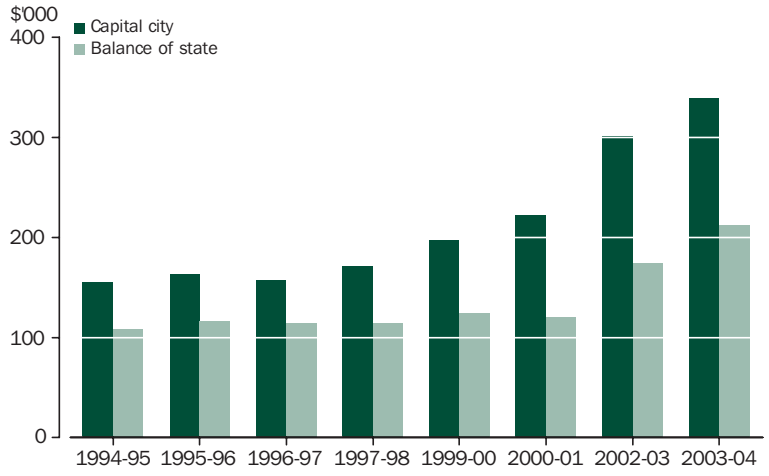
The larger amount of liabilities in the high wealth group are more than outweighed by higher assets with the asset to liability ratio far greater for high wealth households (14:1) than that for middle (5:1) and low wealth (3:1) households. The balance between assets and liabilities resulted in a mean net worth of $24,000 for low wealth households, $296,000 for middle wealth households and $1.4 million for high wealth households.

In 2003–04, over two-thirds (68%) of high wealth households were couple families, compared to 58% of middle wealth and 28% of low wealth households. Lone person and one-parent families with dependent children together accounted for over half (56%) of all low wealth households. The vast majority (91%) of low wealth households rented their home and just under one half (48%) relied on a government pension or allowance as their main source of income (see *Australian Social Trends 2006*, Distribution of household wealth, pp. 145–150).

Net value of own home

The primary residence was a very valuable asset for both high and middle wealth households. The mean net value of their own home accounted for 39% of the net worth of high wealth households and 57% of the net worth of middle wealth households. Low wealth households on average held only 3% of their net worth in their own home and were much more likely to be renting their dwelling than purchasing or owning it outright. The equity households hold in their own home has increased over time both in capital cities and in the balance of the state or territory.

Mean equity in own home for capital city and balance of state — 1994–95 to 2003–04



Source: ABS Survey of Income and Housing.

In 1994–95 households in capital cities on average held equity of $156,000 and in the balance of state $109,000 in their own home. By 2003–04, this had increased to $340,000 and $213,000 respectively. This increase in equity was in part driven by increases in the value of homes with the established house price index (base year is 1989–90 where the index equalled 100) more than doubling from 113 in 1995 to 252 in 2005 (see *Australian Social Trends 2006*, Housing: national summary, p. 168).

Assets

In this article, household assets are divided into financial assets, such as accounts held in financial institutions, value of shares and superannuation, and non-financial assets such as property and household contents. In 2003–04 high wealth households had their assets spread more widely among the asset types compared with middle and low wealth households. Across all households, housing accounted on average for 60% of all assets. Most households (70%) owned or were buying their own home.

...financial assets

In 2003–04, financial assets accounted for 32% (on average $477,000) of the assets of high wealth households, 14% (on average $53,000) of middle wealth and 22% (on average $8,000) of the assets of low wealth households.

Balances in superannuation funds were the largest financial asset held by households. Superannuation has become much more widely held in the last 15 years with accumulating superannuation promoted by government policy. In 2003–04, around three-quarters (75%) of all households had some superannuation assets. The average value was $87,000 for these households; however, half had assets under $35,000.

In 2003–04, low wealth households held 15% of their assets in superannuation, middle wealth households 9%, and high wealth households 13%.

In 2003–04, the value of superannuation, as could be expected, increased with the age of the reference person in the household, peaking in the 55–64 years age group with an average value of $129,000. Households in which the reference person was aged between 65 years and 74 years and those over 75 years had lower superannuation values (average of $67,000 and $17,000 respectively) as they were more likely to be in retirement and instead of contributing to their superannuation were more likely to be

Mean household assets — 2003–04

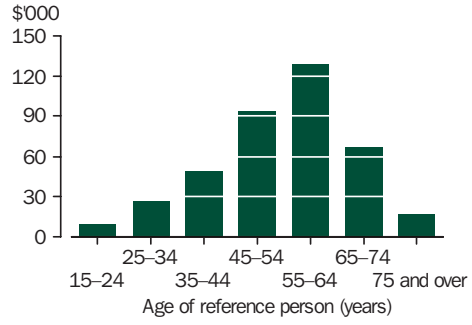
	Low wealth households	Middle wealth households	High wealth households	All households	All households
Asset type	%	%	%	%	$'000
Financial assets (a)					
Value of accounts held with financial institutions	5.7	3.2	4.2	3.9	21.1
Value of shares(b)	0.8	0.9	5.1	3.4	18.2
Value of trusts	*0.3	0.4	2.6	1.7	9.2
Value of own incorporated business(c)	–	0.4	7.2	4.2	22.8
Superannuation	15.0	8.9	12.7	11.8	63.5
Total financial assets	22.1	14.0	32.2	25.4	136.5
Non-financial assets					
Property assets	15.8	68.0	55.9	59.5	319.8
Owner occupied	11.3	61.1	38.6	46.4	249.0
Other property	*4.5	6.9	17.3	13.2	70.8
Value of contents of dwelling	45.9	12.6	5.3	8.8	47.4
Value of vehicles	15.9	4.5	2.0	3.2	17.2
Value of own unincorporated business(c)	*0.3	0.8	4.5	2.9	15.6
Total non-financial assets	77.9	86.0	67.8	74.6	400.6
Total household assets(d)	**100.0**	**100.0**	**100.0**	**100.0**	**537.1**
	$'000	$'000	$'000	. .	$'000
Total household assets	**35.3**	**379.4**	**1 483.6**	**. .**	**537.1**

(a) Includes value of other financial investments, children's assets and loans to persons not in the same household.
(b) Excludes own incorporated business.
(c) Net of liabilities.
(d) Includes value of debentures, bonds and other assets nec.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

drawing down on it.[2] In addition, compared to younger cohorts, older cohorts were less likely to have accumulated wealth through superannuation throughout their working lives (see *Australian Social Trends 2006*, Distribution of household wealth, pp. 145–150).

Mean superannuation value by age of reference person — 2003–04



Source: Household Wealth and Wealth Distribution, Australia, 2003–4 (ABS cat. no. 6554.0).

Households also held other financial assets with low wealth households holding 6% (average of $2,000) of their assets in accounts in financial institutions, middle wealth held 3% (average of $12,000) and high wealth households held 4% (average of $62,000). High wealth households had their financial assets spread more widely than low or middle wealth households and included value in shares (5% of all assets) and their own incorporated business (7% of all assets).

...non-financial assets

The majority of the assets of low, middle and high wealth households were non-financial. Low wealth households had 78% of total assets ($27,000 on average) in non-financial assets, middle wealth households 86% ($326,000 on average) and high wealth households 68% ($1 million on average).

Proportion of assets in own home by capital city and balance of state and territory — 2003–04

(a) Estimates for balance of territory other than Darwin are not considered reliable.
(b) Capital city estimates for the ACT relates to total ACT.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

Across all households, the most valuable non-financial asset was their own home accounting for 46% of all assets. The proportion of assets in the household's own home peaked in middle wealth households (61%) and accounted for 39% of assets for high wealth and only 11% of the assets of low wealth households. High wealth households had a further 17% of their assets in another form of property, for example, holiday homes, vacant land and rental properties.

Across Australia, households in capital cities held more of their assets in their own home (50%) than did households in the balance of state (40%). This is largely due to an urban premium on house prices experienced in cities which affects the composition of the asset portfolios of households in different locations.[2] The share of assets which is concentrated in housing in Australia is related to the large proportion of the population living in urban areas (in 2003–04, 64% of the population lived in a capital city). The differential between the proportion of assets households hold in their own home between the capital city and the rest of state was greatest for Western Australia (17 percentage points), followed by South Australia and Victoria (both 12 percentage points) and New South Wales (10 percentage points). In Tasmania households in the capital city had 4 percentage points more of their assets in property than did households in the rest of the state.

In low wealth households (56% of which are lone person and single parent families), the contents of the dwelling accounted for the largest proportion (46%) of assets. Vehicles accounted for 16% of all assets in low wealth households, and only 4% of middle wealth and 2% of the assets of high wealth households.

Assets, net of liabilities, associated with a business (incorporated and unincorporated) were concentrated in high wealth households (12% of all assets of these households).

Liabilities

In this article, household liabilities are divided into those relating to property, and other liabilities unrelated to property such as amounts outstanding on credit cards. Over all households, property loans accounted for 86% of total liabilities, comprising 58% for loans for owner occupied dwellings and 29% for other property.

...property loans

The balance among the type of liabilities held by households differed for the three levels of wealth. Just as the share of the households own home in total assets was the highest for middle wealth households, so too was the share of loans on this home in total liabilities. Almost three-quarters (74%) of all of the liabilities of middle wealth households related to loans on their own home with a further 16% relating to loans on other properties. By comparison, high wealth households had a smaller proportion of their liabilities relating to their own home (35%) compared to middle wealth households, but

Mean household liabilities — 2003–04

	Low wealth households	*Middle wealth households*	*High wealth households*	*All households*	*All households*
Liability type	%	%	%	%	$'000
Property loans					
Principal outstanding on loans for owner occupied dwellings	29.4	74.0	34.9	57.6	40.0
Principal outstanding on other property loans	*11.9	16.0	51.0	28.7	19.9
Total property loans	40.4	90.1	85.9	86.3	59.9
Other liabilities					
Debt outstanding on study loans	18.3	1.1	1.0	1.7	1.2
Amount owing to credit cards	11.0	2.3	2.4	2.7	1.9
Principal outstanding on loans for vehicle purchases (a)	20.2	3.6	1.7	3.9	2.7
Principal outstanding on investment loans(b)	**2.8	1.0	7.7	3.5	2.4
Principal outstanding on loans for other purposes(c)	7.3	1.9	1.4	2.2	1.5
Total other liabilities	59.6	9.8	14.2	14.0	9.7
Total household liabilities	**100.0**	**100.0**	**100.0**	**100.0**	**69.4**
	$'000	$'000	$'000	. .	$'000
Total household liabilities	**10.9**	**83.5**	**103.9**	**. .**	**69.4**

(a) Excludes business loans.
(b) Excludes business and rental property loans.
(c) Excludes business and investment loans.

Source: Household Wealth and Wealth Distribution, Australia, 2003–04 (ABS cat. no. 6554.0).

more relating to other property (51%). Low wealth households had less than one-third (29%) of their liabilities relating to a home loan and only 12% relating to loans on other property.

...other liabilities

Over two-thirds (69%) of high wealth households had credit card debt compared to 59% of middle wealth and 38% of low wealth households. While fewer low wealth households had credit card debt, those who did on average had a similar amount owing ($3,200) to both middle ($3,400) and high wealth households ($3,700).

In 2003–04, around 15% of low wealth, 10% of middle wealth and 9% of high wealth households had a study loan. The average amount owing was greater in low wealth ($13,300) than in middle ($9,400) and high wealth ($11,000) households. On average, personal debt in study loans and credit cards accounted for around 30% of all liabilities in low wealth households with middle and high wealth households only holding around 3% of their liabilities in personal debt.

Low wealth households held a much larger proportion of their liabilities in loans for vehicles (20%) than did middle (4%) and high (2%) wealth households. High wealth households had a greater proportion of their liabilities relating to investment loans (8%) than did middle wealth households (1%). This is consistent with high wealth households being in a better position to borrow money to invest.

Endnotes

1 Headey, B, Marks, G, and Wooden, M, 2004, *The structure and distribution of household wealth in Australia,* Melbourne Institute Working Paper no. 12/04, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne, viewed 26 June 2006, <http://www.melbourneinstitute.com/labour/inequality/household_wealth.htm>.

2 Kohler, M, and Smith, K, 2005, *Housing and the household wealth portfolio: the role of location*, Research discussion paper 2005–10, Economic Research Department, Reserve Bank of Australia, viewed 26 June 2006, <http://www.rba.gov.au/PublicationsAndResearch/RDP/RDP2005-10. htm>.

Household expenditure patterns

EXPENDITURE

In 2003–04, households spent, on average, just under half (49%) of their total weekly expenditure on food, housing and transport.

People make choices about how to divide up their household budget based on the amount of income they have to spend and their needs. We all need the basic necessities of life such as shelter, food and clothing. But after the basics are covered to some minimum level, expenditure on these and other items is fairly discretionary and so the volume and quality of the goods and services purchased by households is based on economic resources and preferences.

The level and pattern of expenditure differs quite markedly between households, reflecting characteristics such as income, wealth, household composition, household size and location (see *Australian Social Trends, 2006,* Household expenditure patterns by life cycle, pp. 160–165).

This article describes the average expenditure patterns of Australian households in 2003–04. It also examines trends in household spending by examining proportional change in household expenditure over the past 20 years.

Patterns of expenditure

In 2003–04, Australian households spent $893 per week on average on goods and services, an increase from $362 in 1984. While household expenditure increased in absolute dollar terms, spending patterns did not change greatly between 1984 and 2003–04. The three largest broad groups of goods and services expenditure (i.e. food and non-alcoholic beverages, current housing costs and transport) accounted for 49% of total goods and services spending in both 1984 and 2003–04.

Data source and definitions

Most of the data in this article are from ABS Household Expenditure Surveys conducted between 1984 and 2003–04. While there are differences between these surveys which prevent precise measurement of the magnitude of change over time, it is possible to analyse broad changes in expenditure over time.

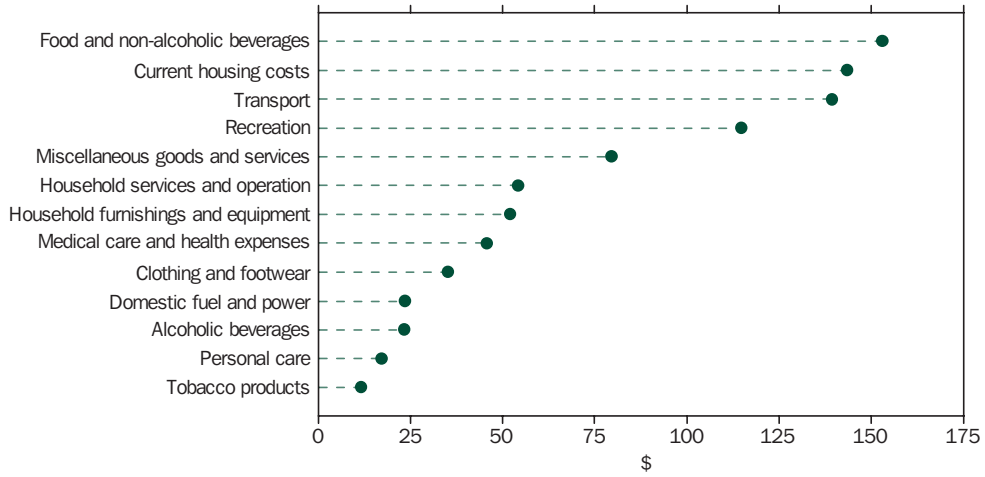
A *household* is one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling.

Expenditure is the cost of goods and services acquired during the survey reference period for private use, whether or not the goods were paid for or consumed. It is reduced by refunds received or expected.

Current housing costs relate only to the dwelling in which the household usually lives, and refer to costs such as rent, mortgage interest, body corporate levies, insurance, repairs and maintenance. The principal component of a mortgage repayment is excluded.

Mean gross household income per week is regular cash receipts before income tax and the Medicare levy have been deducted. It is calculated by dividing the aggregate income of a group of households by the number of households in that group.

Average weekly household expenditure on goods and services — 2003–04



Source: 2003–04 Household Expenditure Survey, Australia: Summary of Results (ABS cat. no. 6530.0 Reissue).

...food and non-alcoholic beverages

In 2003–04, households spent an average of $153 per week on food and non-alcoholic beverages. This represented 17% of total average goods and services expenditure.

Expenditure on meals out and fast food was the highest single component of this broad expenditure group, with households spending on average $42 on such food per week. There was some variation across households with those in the highest income quintile spending $84 per week on meals out and fast foods, or nearly 6.5 times more than the $13 spent by households in the lowest income quintile. Other major items of expenditure on food were meat ($20 per week on average), bakery products, flour and cereals ($16), non-alcoholic beverages ($12), dairy products ($11), fruit and nuts ($10) and vegetables ($11).

Expenditure(a) on food and non-alcoholic beverages — 2003–04

	$
Bakery products, flour and cereals	16.06
Meat (excludes fish and seafood)	20.01
Fish and seafood	3.85
Dairy products	11.27
Fruit and nuts	9.77
Vegetables	10.61
Non-alcoholic beverages	12.53
Meals out and fast foods	42.10
Other	26.67
Average weekly household expenditure on food and non-alcoholic beverages	**152.87**

(a) Average weekly household expenditure.

Source: *2003–04 Household Expenditure Survey, Australia: Detailed Expenditure Items* (ABS cat. no. 6535.0.55.001).

...current housing costs

In 2003–04, average household expenditure on current housing costs was $ 144 per week, or 16% of total expenditure on goods and services per week.

Housing costs and components of these costs are different for households with different types of tenure. Households who own their own home with a mortgage had housing costs in 2003–04 of $208 per week on average. The interest component of their mortgage repayment was the largest component of these costs, at $131 per week, followed by repairs and maintenance of the dwelling ($31 per week) and rate payments ($27).

For renter households, average housing costs were lower than for owners with a mortgage. Households that were renting spent an average of $175 per week on their housing costs, the great majority of which was their rent payment of $169 per week on average.

Expenditure(a) on current housing costs — 2003–04

	Owners with a mortgage	*Renters*
	$	$
Rent	. .	168.55
Mortgage repayments - interest component	131.25	. .
Rate payments	27.01	1.01
House and contents insurance	11.06	2.09
Repairs and maintenance	31.95	3.00
Other	8.01	. .
Average weekly household expenditure on current housing costs(b)	**207.92**	**174.74**

(a) Average weekly household expenditure.
(b) Selected dwelling.

Source: *2003–04 Household Expenditure Survey, Australia: Detailed Expenditure Items* (ABS cat. no. 6535.0.55.001).

...transport

In 2003–04, households spent $139 per week on average on transport, or 16% of household expenditure on goods and services.

There are a range of costs associated with running a car, including purchase of the vehicle, fuel, registration and insurance, and servicing costs. In 2003–04 these costs averaged $133 per week which is most of the

Expenditure(a) on transport costs — 2003–04

	$
Motor vehicle purchase	49.47
Motor vehicle fuel	32.28
Vehicle registration and insurance	24.77
Vehicle charges (includes servicing)	18.56
Public transport fares	3.91
Fare and freight charges (includes taxis)	2.58
Other	7.68
Average weekly household expenditure on transport	**139.25**

(a) Average weekly household expenditure.

Source: *2003–04 Household Expenditure Survey, Australia: Detailed Expenditure Items* (ABS cat. no. 6535.0.55.001).

total weekly expenditure on transport. Public transport fares averaged across all households were $4 per week, while households paid $3 per week on average on other fares such as taxis.

...other broad expenditure groups

In 2003–04, over half (51%) of household expenditure per week went on a wide range of goods and services other than food, housing and transport.

Average weekly spending on recreation by households was $115 in 2003–04. Recreation was the fourth largest broad expenditure group in that year and represented 13% of total household expenditure on goods and services. The main components of recreation expenditure were equipment including audio-visual equipment, newspapers and books ($42 per week on average), holidays ($35, of which $21 was for holidays in Australia) and a range of services such as cinemas, gambling and Internet services ($29).

Households purchase a wide range of household services such as pest control, gardening, private rubbish removal, housekeeping, cleaning, home help, ironing, security and child care. In 2003–04 households spent an average of $54 per week on these types of household services and operations. Averaged over all households, spending on child care services was $5 per week. However, for households using child care, spending on these services was $47 per week on average.

Households also spent an average of $80 per week on miscellaneous goods and services in 2003–04. Most (82%) of the expenditure in this broad group was on services such as interest on credit services ($18), and education fees ($18).

In 2003–04, households spent an average of $52 per week on household furnishings and equipment. The main items of expenditure in this broad group were furniture and floor coverings ($21 per week), household appliances ($12 per week) and blankets, household linen and household furnishings ($7).

Households spent $46 per week on average on medical care and health expenses. These expenses accounted for 2% of average weekly expenditure for households with a reference person aged 15–24 years, and this proportion increased with age to 8% of average weekly expenditure of households with a reference person aged 65 years and older. Accident and health insurance cost households on average $18 per week. Health practitioners' fees cost households $14 per week on average, including $6 per week on dental fees. Average household spending on medicines, pharmaceutical products and therapeutic appliances was $12 per week.

In 2003–04, households spent $35 per week on average on clothing and footwear. Like household spending on food and non-alcoholic beverages, household spending on clothing and footwear is largely determined by the number of people in the household as there are little economies of scale in this area of spending. Spending on clothing and footwear is also related to the age of household members. In 2003–04, on average, people aged 65 years and over who lived alone spent around half as much per week on clothing and footwear as people aged under 35 years who lived alone ($10 compared with $19).

Reported weekly spending on alcoholic beverages and tobacco products averaged $35 per household in 2003–04. However, it is known that expenditure on both alcoholic beverages and tobacco products is under reported in the ABS Household Expenditure Survey. Spending on alcoholic beverages and tobacco products tends to diminish as people grow older. In 2003–04, among people living alone, those aged 65 years or older spent considerably less per week on average on these items ($9 or 2% of total goods and services spending) than those aged under 35 years ($32 or 5%).

Household spending on domestic fuel and power averaged $24 per week in 2003–04. Most of this expenditure was for electricity ($17) and mains gas ($5). For recent trends on household energy use see *Australian Social Trends 2006*, Environmental impact of household energy use, pp. 191–195.

Personal care items are a relatively small component of household spending, with an average of $17 per household per week spent on these items in 2003–04, comprising $10 on toiletries and cosmetics and $7 on personal care services such as haircutting.

Change in proportional spending

Between 1984 and 2003–04, household expenditure increased by 147%, from $362 to $893 per week on average. The proportional increase in household expenditure closely matched the increase in household income as mean gross household income increased by 148% over the same 20 year period.

The All groups Consumer Price Index (CPI) rose by 117% between 1984 and 2003–04. As price inflation averaged across all consumer goods and services purchased by households increased at a much lower rate than both

household expenditure and household income over this period, this suggests that households have generally improved important aspects of their material wellbeing over the past 20 years.

Overall, household spending patterns were fairly similar between 1984 and 2003–04. There was no directionally consistent change in the importance to household budgets of a number of broad groups of goods and services, while proportional spending on other broad groups trended slightly higher or lower.

...increasing share

Proportional spending on current housing costs increased 3 percentage points between 1984 and 2003–04, from 13% of total spending on goods and services in 1984 to 16% in 2003–04. The percentage point increase in housing costs was greater than increases in any other broad expenditure group.

Proportional expenditure analysis

While it is possible to examine changes in spending in conjunction with changes in prices to determine how the volume of goods and services purchased by households has changed over time, this article presents a simple analysis of changes in proportional spending on broad expenditure groups. Change in proportional spending indicates which areas of spending are of growing or declining importance in household budgets and purchasing decisions. Proportional analysis does not measure change in levels of consumption, and proportional change to one broad group impacts every other group.

Contributing to this increase has been the trend towards smaller households (see *Australian Social Trends 1998*, Smaller households, larger dwellings, pp. 157–159). In 2003–04, people living alone accounted for 25% of all households, up from 19% in 1984. Lacking the economy of scale derived from sharing current housing costs with other income recipients, lone person households had relatively high proportional spending on current housing costs in both 1984 (18%) and 2003–04 (23%).

Spending on many services increased between 1984 and 2003–04. Proportional expenditure on household services and operations as well as miscellaneous goods and services increased by almost 2 percentage points over this period. Expenditure on medical care and health expenses increased by 1.2 percentage points, which was the fourth largest increase in percentage point terms over the period.

...decreasing share

The four broad expenditure groups that decreased in their share of total goods and services expenditure by more than one percentage point between 1984 and 2003–04 were predominantly goods rather than services.

Spending on food and non-alcoholic beverages, and clothing and footwear, fell by the greatest number of percentage points compared with all other broad groups, with both groups falling by about 2.5 percentage points over the period. Proportional spending on food decreased from 20% in 1984 to 17% in 2003–04 and clothing and footwear from 6% to 4%. Expenditure on household furnishings and equipment fell by almost 2 percentage points, from 8% in 1984 to 6% in 2003–04.

Household expenditure on broad groups of goods and services

	Average weekly household expenditure in 2003–04		*Change in proportional spending between 1984 and 2003–04*
	$	%	percentage points
Food and non-alcoholic beverages	152.87	17.1	-2.6
Current housing costs(a)	143.50	16.1	3.2
Transport	139.25	15.6	-0.7
Recreation	114.68	12.8	0.9
Miscellaneous goods and services	79.59	8.9	1.7
Household services and operation	54.24	6.1	1.7
Household furnishings and equipment	52.00	5.8	-1.8
Medical care and health expenses	45.78	5.1	1.2
Alcoholic beverages and tobacco products	34.87	3.9	-1.1
Clothing and footwear	35.26	4.0	-2.5
Domestic fuel and power	23.59	2.6	-0.3
Personal care	17.20	1.9	0.1
Total goods and services expenditure	**892.83**	**100.0**	**0.0**

(a) Only for the dwelling selected in the survey (i.e. only for the dwelling in which the household resides).

Source: 2003–04 Household Expenditure Survey, Australia: Summary of Results (ABS cat. no. 6530.0 Reissue).

Household expenditure patterns by life cycle

EXPENDITURE

Proportional spending on housing generally falls over the life cycle, whereas proportional spending on food and non-alcoholic beverages tends to rise.

There are some commonly experienced stages in the progression through Australian adulthood. These include partnering and sometimes separating, raising young children, living with adult children, becoming an empty nest couple, and living alone. The stages are associated with changes in the relative importance of various broad categories of household expenditure. A household's characteristics, such as the number, age and circumstances (e.g. labour force status and income) of its members, largely shape the composition of its budget.

In 2003–04, Australian households spent $893 per week on average on goods and services. Spending varied according to the number of people in the household, and with other factors such as the income of the household and the age and life cycle stage of its members. For example, people aged 65 years or older living alone spent $351 per week on average, whereas households comprising a couple with one or more dependent children and one or more non-dependent children spent an average of $1,537 per week.

Data source and definitions

Data in this article are from the 1984 and 2003–04 ABS Household Expenditure Surveys (HES). While there are differences between these surveys which prevent precise measurement of the magnitude of change over time, it is possible to analyse broad changes in expenditure over time.

The *selected life cycle groups* listed in the table on this page are just some of the types of households that exist in Australian society. In 2003–04, they represented around 73% of all households.

A *couple* is two people who usually live in the same household and who are partners in a registered or de facto marriage.

Non-dependent children are people aged 15 years or older who live with their parent(s), do not live with a spouse or child(ren) of their own, and are not a full-time student if aged under 25 years.

For the operational definition of other technical words and phrases appearing in this article see the 'Data source and definitions' box on p.156 of the companion article Household expenditure patterns.

Spending on goods and services by households — 2003–04

	Average total weekly spending on goods and services	*Four largest broad groups of goods and services spending*			
		Food and non-alcoholic beverages	*Current housing costs(a)*	*Transport*	*Recreation*
Selected life cycle groups	$	%	%	%	%
Lone person aged under 35	598.35	12.9	26.9	14.9	12.7
Couple only, reference person under 35	1 168.79	13.9	22.2	16.3	13.4
Couple with dependent children only, eldest child under 5	1 070.83	16.4	19.8	15.5	10.0
Couple with dependent children only, eldest child 5 to 14	1 149.57	18.1	16.9	14.4	12.2
Couple with dependent children only, eldest child 15 to 24	1 358.67	18.0	13.0	13.9	13.9
Couple with dependent & non-dependent children only	1 537.22	18.4	10.8	19.0	12.6
One parent family with dependent children	702.70	17.7	19.2	13.6	11.7
Couple with non-dependent children only	1 176.07	18.6	9.3	20.2	14.6
Couple only, reference person 55 to 64	880.53	17.4	9.3	18.0	13.3
Couple only, reference person 65 and over	614.65	20.8	9.8	15.1	15.6
Lone person 65 and over	350.78	18.2	21.0	10.5	10.4
All households	**892.83**	**17.1**	**16.1**	**15.6**	**12.8**

(a) For the dwelling selected in the survey only (i.e. only for a household's dwelling of usual residence).

Source: 2003–04 Household Expenditure Survey, Australia: Summary of Results (ABS cat. no. 6530.0 Reissue).

Households representing younger life cycle stages spent proportionately more on current housing costs, while proportional spending on transport was comparatively high by households comprising a couple with one or more non-dependent children. Proportional spending on food and non-alcoholic beverages was highest among older couple only households. Differences in proportional spending between these households representing various stages in the life cycle can be attributed to a range of factors including economy of scale benefits derived by larger households on their housing costs, the lower housing costs of home owners with no mortgage, and the higher income and expenditure of households with a relatively high proportion of household members employed.

This article focuses on four types of households considered representative of particular stages in the life cycle of couple families, and illustrative of how household spending patterns tend to change as a household grows older. The four life cycle stages are represented by households comprising: a couple whose reference person is aged under 35 years, a couple with one or more children whose eldest child is aged under 5 years, a couple with one or more non-dependent children, and a couple whose reference person is aged 65 years or older. The different spending patterns associated with these four life cycle stages provide some insight into the impact on the household budget of changes such as having children, paying off a home mortgage, children growing older then leaving home, and retiring from work. Similar changes often affect the spending patterns of lone person and single parent households.

Household expenditure patterns by the level of household income

As well as changing over the life cycle because of factors such as the effects of the ageing process and increasing home ownership, household spending patterns vary according to a household's level of income. Households at the same stage of the life cycle can have different expenditure patterns if their household income levels differ considerably.

In 2003–04, one family households containing a one parent family with dependent children received mean gross household income of $778 per week. One family households containing a couple family with dependent children were at a similar stage of the life cycle. These households received substantially higher mean gross household income of $1,571 per week.[1]

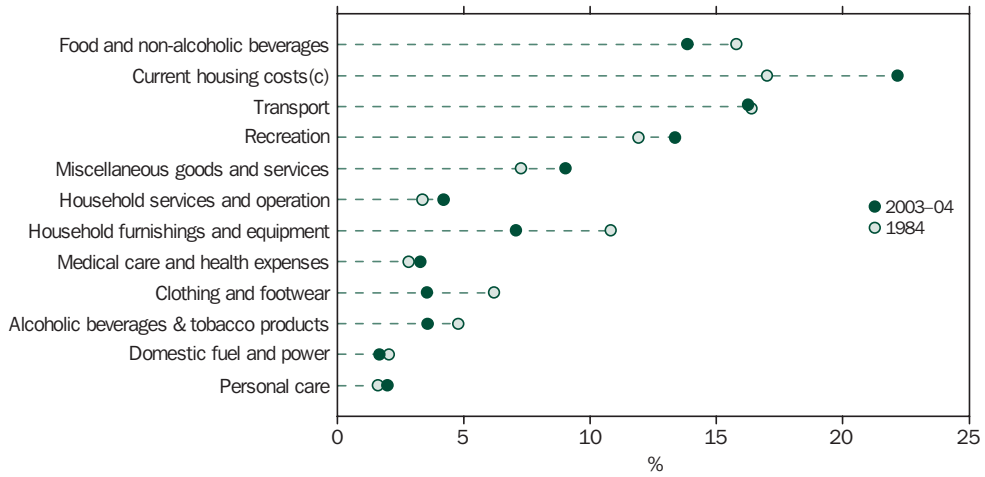
The one parent family households spent proportionately more on current housing costs than the couple family households (19% compared with 16%). Their spending was also proportionately higher on household services and operation (8% compared with 6%) and tobacco products (2% compared with 1%). On the other hand, their proportional spending was lower on miscellaneous goods and services (8% compared with 10%), medical care and health expenses (3% compared with 5%), transport (14% compared with 15%), and household furnishings and equipment (5% compared with 6%).[1]

Selected characteristics of selected single family households — 2003–04

	Couple only, reference person under 35	*Couple with dependent children only, eldest child under 5*	*Couple with non-dependent children only*	*Couple only, reference person 65 and over*
Average age of reference person (years)	28	34	57	73
Average number in household (no.)	2.0	3.4	3.3	2.0
Employed persons (no.)	1.8	1.5	2.1	0.2
Persons aged 18 years and over (no.)	2.0	2.0	3.2	2.0
Owns home without a mortgage (%)	*2.3	8.0	52.8	86.3
Owns home with a mortgage (%)	54.4	62.0	38.4	4.0
Rents home (%)	39.1	27.2	7.8	8.4
Principal source of income - govt. pensions and allowances (%)	*1.6	*5.1	11.8	67.8
Mean gross household income per week ($)	1 589	1 344	1 739	620
Average weekly goods and services expenditure ($)	1 169	1 071	1 176	615
Estimated number of households in population ('000)	**424.9**	**426.8**	**445.9**	**658.2**

Source: 2003–04 Household Expenditure Survey, Australia: Summary of Results (ABS cat. no. 6530.0 Reissue).

Proportional spending(a) by young couple only households(b)



(a) Average household expenditure on each broad expenditure group as a proportion of average household total goods and services expenditure.
(b) Reference person under 35 years of age.
(c) For the dwelling which was the usual residence of the household.

Source: 1984 Household Expenditure Survey, Australia: Household Characteristics (ABS cat. no. 6531.0); *2003–04 Household Expenditure Survey, Australia: Summary of Results* (ABS cat. no. 6530.0 Reissue).

Young couples

In 2003–04, there were 425,000 households comprising a couple whose reference person was aged less than 35 years. These young couple only households had comparatively high mean weekly gross income ($1,589) and goods and services expenditure ($1,169). Their actual ($259) and proportional (22%) average weekly spending on current housing costs was well above the average among all Australian households ($144 or 16%). The increase in their proportional spending on current housing costs (from 17% in 1984) was also greater than the general increase among all households (from 13% in 1984).

Levels of home ownership and public rental strongly influence current housing costs. In 2003–04, young couple only households had relatively low rates of outright home ownership (2% compared with 35% of all households) and of renting their home from a state or territory housing authority (less than 1% compared with 5%). Above average proportions were repaying a mortgage on their home (54% compared with 35% overall) and renting their home from a private landlord (37% compared with 21%).

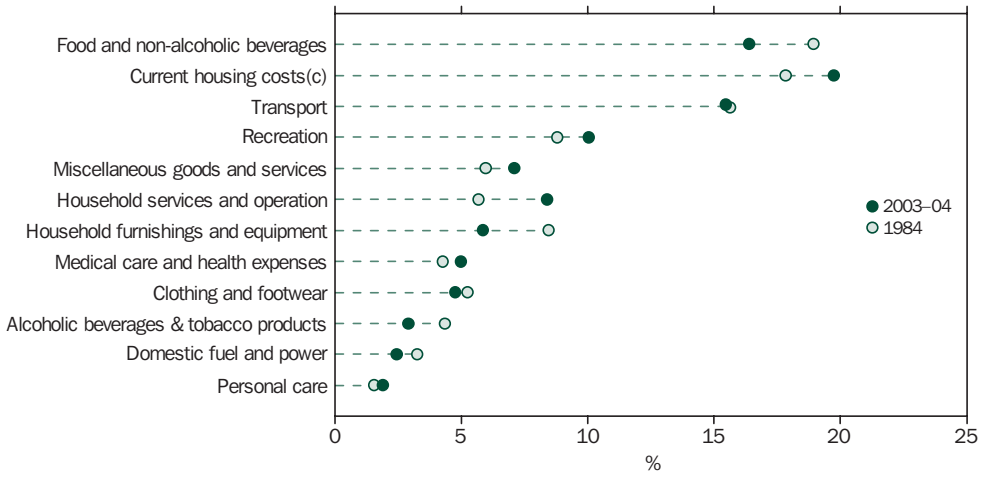
Young couple only households also allocated a greater share of their spending than other households to the acquisition of household furnishings and equipment, which is consistent with this life cycle stage being a time during which couples often give priority to establishing a family home. However, between 1984 and 2003–04, proportional spending on household furnishings and equipment fell by a wider margin among young couple only households (11% to 7%) than among all households (8% to 6%).

Spending on transport and recreation was also relatively high for young couple only households. In 2003–04, average weekly spending per person on transport ($95) and recreation ($78) by young couple only households was higher than for all other selected life cycle groups.

While high spending is enabled by high income, other characteristics could also provide a partial explanation for relatively high spending on transport and recreation by young couple only households. For example, in 2003–04, the average number of employed people per young couple household was 1.8, and the average age of the reference person in these households was 28 years. The relative youthfulness, high probability of being employed, and childlessness of people in young couple only households suggests greater likelihood of participation in activities such as recreation, and greater use of transport to travel to these activities and to work.

The spending patterns of young couple only households tend to change with the arrival of children. While both household income and total household goods and services expenditure decrease on average, spending on some goods and services rises.

Proportional spending(a) by couple with young child(ren)(b) only households



(a) Average household expenditure on each broad expenditure group as a proportion of average household total goods and services expenditure.
(b) Eldest child under 5 years of age.
(c) For the dwelling which was the usual residence of the household.

Source: 1984 Household Expenditure Survey, Australia: Household Characteristics (ABS cat. no. 6531.0); *2003–04 Household Expenditure Survey, Australia: Summary of Results* (ABS cat. no. 6530.0 Reissue).

Couples with young children

In 2003–04, there were 427,000 households comprising a couple and one or more children whose eldest child is aged under 5 years. The average household size for this life cycle group was 3.4 people, and mean gross household income was $1,344 per week, lower than for young couple only households. At $1,071 per week, average goods and services expenditure was also lower than spending by young couple only households. To some extent, lower income and spending can be attributed to the reduced average number of employed persons in couple with young children only households compared with young couple only households (1.5 and 1.8 persons employed respectively).

Although overall goods and services expenditure was lower, the extra people in the household were reflected in higher household spending on food and non-alcoholic beverages, medical care and health expenses, clothing and footwear, and domestic fuel and power.

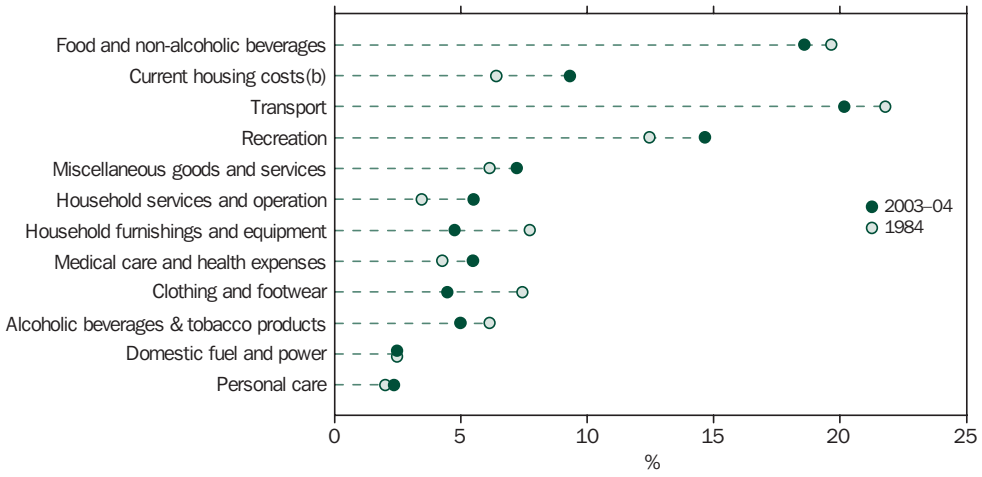
The biggest proportional difference between the two life cycle groups lay in their spending on household services and operation. Included in this broad expenditure group is spending on phone calls, child care, housekeeping, cleaning, gardening, and the repair and maintenance of household durables. Whereas young couple only households spent an average of $49 per week (4% of their total goods and services expenditure) on household services and operation, couple with young children only households spent $90 or 8%. No other life cycle group spent this much on this broad expenditure group in 2003–04.

Compared with young couple only households, there was less spending by couple with young children only households on items of a more discretionary nature such as alcoholic beverages, transport, recreation, and household furnishings and equipment. Current housing costs were also lower. With the average age of the household reference person being older (34 years), a higher proportion owned their home outright (8%). Although a higher proportion also owned their home with a mortgage (62%), average mortgage interest payments were smaller as these households are generally likely to have bought their homes earlier for lower prices, and to have spent longer reducing the loan principal than more recent home buyers from young couple only households.

Couples with older children

All other factors being equal, reducing the amount of mortgage principal on the family home lowers mortgage interest charges which decreases proportional spending on current housing costs. In 2003–04, current housing costs represented just 9% of the total goods and services expenditure of households comprising a couple and one or more non-dependent children. These households

Proportional spending(a) by couple with non-dependent child(ren) only households



(a) Average household expenditure on each broad expenditure group as a proportion of average household total goods and services expenditure.
(b) For the dwelling which was the usual residence of the household.

Source: 1984 Household Expenditure Survey, Australia: Household Characteristics (ABS cat. no. 6531.0); *2003–04 Household Expenditure Survey, Australia: Summary of Results* (ABS cat. no. 6530.0 Reissue).

tend to be considerably older than couple with young children only households, and have a much higher rate of home ownership.

In 2003–04, there were 446,000 couple with non-dependent children only households. The average age of their reference person was 57 years, and the majority (53%) owned their home without a mortgage. A further 38% were repaying a mortgage, while only 8% were renting their home.

Their mean gross household income per week ($1,739) was higher than the average income of couple with young children only households. Higher household income is likely to be related to the different composition (e.g. number of income earners) and characteristics (e.g. age of members) of households representing these two life cycle stages. While average household size (3.3 people) was slightly smaller, the average number of members aged 18–64 years (2.9), and the average number of employed persons per household (2.1) was greater in couple with non-dependent children only households.

In both 1984 and 2003–04, transport was the largest broad group of goods and services expenditure for this life cycle stage. In 2003–04, couple with non-dependent children only households spent an average of $237 per week on transport. This represented 20% of their total spending on goods and services. Increased household spending on transport is likely to be associated with having more pre-retirement age adults, and more employed people, in the household. Independent children living withtheir parents often purchase, operate and maintain a motor vehicle of their own to travel to work, education and social events.

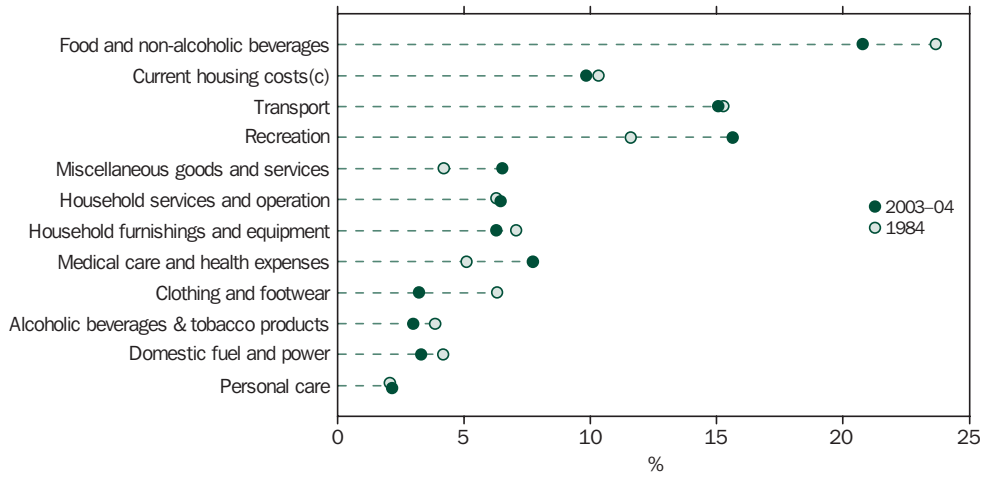
Couple with non-dependent children only households also spent proportionately more on food and non-alcoholic beverages, recreation, tobacco products, personal care, and medical care and health expenses than households representing the younger life cycle stages previously examined in this article. However, average per person spending was not necessarily higher. The only broad groups of goods and services expenditure on which couple with non-dependent children only households spent more per person were medical care and health expenses ($19 per week on average) and tobacco products ($7 per adult per week on average).

Older couples

The share of the household budget allocated to the various broad expenditure groups differs when household income is substantially lower. Relatively low household income is often associated with relatively high proportional spending on more basic, less discretionary items. The age of household members also influences spending requirements and preferences.

In 2003–04, there were 658,000 households comprising a couple whose reference person was aged 65 years or older. These older

Proportional spending(a) by older couple only households(b)



(a) Average household expenditure on each broad expenditure group as a proportion of average household total goods and services expenditure.
(b) Reference person 65 years of age or over.
(c) For the dwelling which was the usual residence of the household.

Source: 1984 Household Expenditure Survey, Australia: Household Characteristics (ABS cat. no. 6531.0); *2003–04 Household Expenditure Survey, Australia: Summary of Results* (ABS cat. no. 6530.0 Reissue).

couple only households had an average of 0.2 employed persons, and 68% of them relied on government pensions and allowances as their principal source of household income. This rate of income support was much higher than prevailed among the three younger life cycle groups examined in this article (all less than 12%). Consequently, older couple only households had comparatively low gross income ($620 per week on average). Their total spending on goods and services was also much lower (at $615 per week on average) than households representing the three younger life cycle stages.

Compared to couple with non-dependent children only households, older couple only households spent a similar share of their goods and services budget on current housing costs. This was despite their considerably higher rate of outright home ownership (86% compared with 53%) and their much lower average weekly spending on current housing costs ($61 compared with $110). Similar proportional spending by older couple only households largely reflects their relatively low income covering the numerous fixed housing costs payable by home owners. Such fixed costs include water and sewerage rates and charges, local government rates, house and contents insurance, repairs and maintenance, and body corporate payments.

Unlike other selected life cycle groups, proportional spending on current housing costs by older couple only households decreased between 1984 and 2003–04. Over the same period, their proportional spending on recreation increased by a greater margin (from 12% in 1984 to 16% in 2003–04) than it did for other selected life cycle groups.

In 2003–04, older couple only households spent proportionately more on food and non-alcoholic beverages (21%) than any other selected life cycle group. However, actual spending per person on food and non-alcoholic beverages was similar in older couple only households to what it was in couple with non-dependent children only households. Older couple only households also spent proportionately more than couple with non-dependent children only households on domestic fuel and power, household furnishings and equipment, household services and operation, medical care and health expenses, and recreation.

Of the four life cycle groups examined in this article, older couple only households were the group that spent proportionately the most on recreation (16%), medical care and health expenses (8%), and domestic fuel and power (3%). They were also the life cycle group that spent proportionately the least on transport (15%), miscellaneous goods and services (7%), clothing and footwear (3%), and tobacco products (less than 1%).

Endnotes

1 Australian Bureau of Statistics 2006, *Household Expenditure Survey, Australia: Summary of Results, 2003–04* (ABS cat. no. 6530.0 Reissue), ABS, Canberra.

Housing

Housing: national summary

	HOUSING STOCK	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	Number of occupied private dwellings	'000	6 668	6 762	6 910	7 015	7 127	7 250	7 367	n.y.a.	n.y.a.	n.y.a.	n.y.a.
2	Public sector dwellings completed	'000	7.8	6.8	6.0	4.4	5.4	4.8	3.8	3.6	3.3	3.6	3.2
3	Private sector dwellings completed	'000	162.4	129.1	113.4	127.2	136.7	150.5	130.1	128.2	149.2	151.2	153.9
	Dwelling structure – selected(a)												
4	Separate house	%	79.9	79.7	80.0	79.4	79.5	79.4	78.1	n.a.	77.7	80.0	n.a.
5	Semidetached	%	7.8	7.9	7.8	8.6	8.9	9.8	9.9	n.a.	10.2	8.3	n.a.
6	Flat	%	11.4	11.7	11.5	11.5	11.1	10.0	11.3	n.a.	11.4	11.2	n.a.
	Housing utilisation												
7	Average persons per household	no.	2.7	2.7	2.7	2.7	2.6	2.6	2.6	n.a.	2.5	2.5	n.a.
8	Average bedrooms per dwelling	no.	2.9	3.0	2.9	3.0	3.0	3.0	3.0	n.a.	3.0	3.0	n.a.
	TENURE AND LANDLORD TYPE(b)	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
11	Owner without a mortgage	%	41.8	42.8	41.3	39.5	38.8	38.6	38.2	n.a.	36.4	34.9	n.a
12	Owner with a mortgage	%	29.6	28.1	28.3	30.9	31.3	32.1	32.1	n.a.	33.1	35.1	n.a
13	Renter – state housing authority	%	5.5	6.0	5.6	5.8	5.1	5.8	5.0	n.a.	4.9	4.9	n.a
14	Renter – private landlord	%	18.4	19.0	20.4	20.0	20.3	19.9	21.0	n.a.	22.0	21.2	n.a
	HOUSING COSTS	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
	Rental												
15	Mean weekly public rent	$	62	62	66	62	68	71	73	n.a.	81	84	n.a
16	Mean weekly private rent	$	140	149	154	157	167	166	173	n.a.	189	198	n.a
17	Rental cost index(c)	index no.	108.9	111.7	115.1	118.5	122.0	125.4	129.3	133.1	r135.7	138.9	142.0
	Construction/purchase												
18	Housing interest rate	%	9.9	10.3	8.3	6.7	6.6	7.0	7.6	6.3	6.5	6.8	7.1
19	First home buyers – average loan(d)(e)	$'000	r90.0	92.2	98.8	106.5	r119.6	r133.1	r124.8	145.1	r162.5	r191.7	209.6
20	Project home price index(c)(f)	index no.	108.1	109.5	109.2	110.3	113.1	120.7	134.9	138.1	144.1	154.8	164.2
21	Established house price index(c)(f)	index no.	112.6	112.7	115.1	122.8	130.4	142.3	152.8	178.0	209.9	245.0	251.5
22	Materials used in house building price index(c)(g)	index no.	115.4	115.7	116.1	118.2	119.5	122.8	124.4	126.0	130.5	134.3	138.8
	Finance commitments(e)												
	Construction/purchase of new dwellings												
23	Number	'000	103.4	83.0	84.8	92.0	87.2	86.5	64.8	88.3	74.0	80.5	77.5
24	Value	$m	9 500	8 076	8 943	10 800	11 554	12 701	9 602	14 137	13 573	16 720	17 294
	Purchase of established dwellings(h)												
25	Number	'000	347.9	366.5	392.5	384.7	394.5	455.6	486.0	541.3	560.8	579.8	559.7
26	Value	$m	32 806	35 414	40 676	43 375	49 342	61 577	64 558	82 613	94 796	110 912	116 371
27	Value for alterations and additions	$m	3 477	3 509	3 039	2 779	2 821	3 321	3 108	4 083	5 350	6 703	5 761
	HOUSING ASSISTANCE	*Units*	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	*2005*
28	Public sector rental dwelling stock	'000	388.6	392.6	400.3	380.8	386.2	363.0	359.3	354.1	348.0	345.3	343.3
29	Applicants on housing waiting lists	'000	234.7	236.2	221.4	217.9	183.8	213.0	221.6	223.3	208.1	204.2	203.9
30	Applicants accommodated	'000	52.5	51.0	46.8	42.1	40.5	41.4	39.7	36.9	33.4	31.0	27.8
31	Income units receiving private rental assistance	'000	n.a.	n.a.	986.6	910.6	963.8	941.3	976.3	943.9	940.7	949.7	948.1
32	Mean fortnightly rental assistance received	$	n.a.	n.a.	n.a.	n.a.	n.a.	62	69	73	75	78	80
33	Mean fortnightly rent paid by rental assistance recipients	$	n.a.	n.a.	n.a.	n.a.	n.a.	225	239	253	264	277	290

(a) Components do not total 100% because other dwellings are not included.
(b) Components do not total 100% because other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), are not included.
(c) Base of each index: 1989–90=100.
(d) Measured at original prices.
(e) Data include owner occupied housing only.
(f) Data refer to the weighted average of the 8 state and territory capital cities.
(g) Data refer to the weighted average of 6 state capital cities, excluding Darwin and Canberra.
(h) Data include refinancing commitments.

Reference periods: All data are for year ended 30 June except:
Data for indicators 1 and 28–29 are at June 30.
Data for indicators 4–12, 15–16 and 31 vary according to the timing of the surveys within each year.
Data for indicators 31–33: for 1998, March data; for other years either May or June data.

Housing: state summary

	HOUSING STOCK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
1	Number of occupied private dwellings	'000	2001	2 455	1 817	1 383	613	724	192	63	120	7 367
2	Public sector dwellings completed	'000	2004–05	0.5	0.7	0.5	0.4	0.8	0.1	0.2	0.1	3.2
3	Private sector dwellings completed	'000	2004–05	41.0	41.5	38.2	9.5	18.4	2.6	0.9	1.9	153.9
	Dwelling structure – selected(b)											
4	Separate house	%	2003–04	76.6	80.3	82.1	81.8	83.5	88.1	74.0	77.7	80.0
5	Semidetached	%	2003–04	7.6	9.2	5.1	12.0	12.5	5.3	*7.5	10.6	8.3
6	Flat	%	2003–04	15.4	10.3	11.8	5.6	3.5	6.2	18.1	11.2	11.2
	Housing utilisation											
7	Average persons per household	no.	2003–04	2.6	2.6	2.5	2.4	2.5	2.4	2.6	2.5	2.5
8	Average bedrooms per dwelling	no.	2003–04	3.0	3.0	3.0	2.9	3.3	2.9	2.9	3.2	3.0
9	Households with two or more bedrooms above requirements	%	2003–04	39.3	39.7	43.4	42.4	51.3	41.1	32.2	49.0	41.8
10	Households with insufficient bedrooms	%	2003–04	3.4	2.8	2.7	2.2	1.5	*1.4	4.2	**0.6	2.7

	TENURE AND LANDLORD TYPE(c)	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
11	Owner without a mortgage	%	2003–04	35.4	38.9	31.6	34.9	31.2	38.4	17.1	31.8	34.9
12	Owner with a mortgage	%	2003–04	33.2	36.4	33.8	37.6	38.1	33.8	42.1	35.8	35.1
13	Renter – state housing authority	%	2003–04	5.1	3.7	4.3	7.8	4.0	7.1	10.6	9.2	4.9
14	Renter – private landlord	%	2003–04	22.4	17.9	25.6	16.2	21.9	16.4	20.9	19.8	21.2

	HOUSING COSTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	Rental											
15	Mean weekly public rent	$	2003–04	91	84	77	79	80	71	95	92	84
16	Mean weekly private rent	$	2003–04	231	187	186	158	167	127	211	257	198
17	Rental cost index(d)(e)	index no.	2004–05	146.8	141.8	131.9	141.8	125.5	134.0	129.3	150.9	142.0
	Construction/purchase											
19	First home buyers – average loan(f)(g)	$'000	2004–05	259.4	205.2	202.3	164.8	169.4	147.8	159.4	223.3	209.6
20	Project home price index(d)(e)	index no.	2004–05	159.1	158.1	170.6	171.9	162.7	191.9	193.0	190.7	164.2
21	Established house price index(d)(e)	index no.	2004–05	264.0	235.3	301.2	242.5	215.7	196.2	275.1	258.0	251.5
22	Materials used in house building price index(d)(e)	index no.	2004–05	146.6	134.6	137.3	143.4	131.1	148.0	n.a.	n.a.	138.8
	Finance commitments(g)											
	Construction/purchase of new dwellings											
23	Number	'000	2004–05	16.5	21.1	15.8	6.1	14.8	1.5	0.7	0.8	77.5
24	Value	$m	2004–05	4 487	4 744	3 675	1 105	2 677	256	134	215	17 294
	Purchase of established dwellings(h)											
25	Number	'000	2004–05	168.4	124.9	121.2	47.9	73.9	11.3	5.9	6.3	559.7
26	Value	$m	2004–05	42 596	25 430	24 585	7 259	12 475	1 593	1 018	1 416	116 371
27	Value for alterations and additions	$m	2004–05	2 072	1 070	1 196	514	598	187	n.a.	n.a.	5 761

	HOUSING ASSISTANCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
28	Public sector rental dwelling stock	'000	2005	124.2	64.7	49.1	45.6	31.5	11.6	5.5	10.8	343.3
29	Applicants on housing waiting lists	'000	2005	73.7	41.3	38.3	28.4	12.7	3.1	2.2	4.1	203.9
30	Applicants accommodated	'000	2004–05	8.8	5.7	4.1	3.2	3.5	1.1	0.8	0.6	27.8
31	Income units receiving private rental assistance	'000	2004–05	317.6	205.5	233.8	67.4	86.0	23.9	5.5	8.2	948.1
32	Mean fortnightly rental assistance received	$	2004–05	81	79	82	78	79	78	81	75	80
33	Mean fortnightly rent paid by rental assistance recipients	$	2004–05	307	278	297	264	267	249	293	318	290

(a) Estimates for dwelling structure, tenure type and mean weekly public and private rent for Northern Territory relate to mainly urban areas only.

(b) Components do not total 100% because other dwellings are not included.

(c) Tenure and landlord types do not total 100% because other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), are not included.

(d) Base of each index: 1989–90=100.

(e) State and territory data refer to capital cities only.

(f) Measured at original prices.

(g) Data include owner occupied housing only.

(h) Data include refinancing commitments.

Reference periods: All data are for year ended 30 June except:
Data for indicators 1 and 28–29 are at June 30.

Housing: data sources

INDICATORS	DATA SOURCE
1	*Australian Demographic Statistics, September Quarter* (ABS cat. no. 3101.0).
2–3	ABS Building Activity Survey, September Quarter; *Building Activity, Australia* (ABS cat. no. 8752.0).
4–16	ABS 1999 Australian Housing Survey; ABS Surveys of Income and Housing.
17	*Consumer Price Index, Australia* (ABS cat. no. 6401.0).
18	Reserve Bank of Australia, *Indicator Lending Rates – F5* <http://www.rba.gov.au/statistics/bulletin/F05hist.xls> accessed 24 March 2006.
19, 23–27	*Housing Finance, Australia* (ABS cat. no. 5609.0).
20–21	*House Price Indexes: Eight Capital Cities* (ABS cat. no. 6416.0).
22	*Producer Price Indexes, Australia* (ABS cat. no. 6427.0).
28–30	Steering Committee for the Review of Government Service Provision, *Report on Government Services 2006* <http://www.pc.gov.au/gsp/reports/rogs/2006/housing/attachment16.xls> accessed 16 March 2006.
31–33	Department of Families, Community Services and Indigenous Affairs administrative data.

Housing: definitions

Alterations and additions

all approved structural and non-structural changes which are integral to the functional and structural design of the dwelling, e.g. garages, carports, pergolas, reroofing, recladding etc., but excluding swimming pools, ongoing repairs, landscaping, and maintenance and home improvements not involving building work.

Reference: *Housing Finance, Australia* (ABS cat. no. 5609.0).

Applicants accommodated

the number of public rental applicants (households) accommodated in a year.

Reference: Australian Institute of Heath and Welfare *Commonwealth-State Housing Agreement national data reports 2002–2005, Public rental housing.*

Applicants on housing waiting lists

the number of applicants (households) waiting for public rental accommodation on 30 June.

Reference: Australian Institute of Heath and Welfare *Commonwealth-State Housing Agreement national data reports 2002–2005, Public rental housing.*

Average number of bedrooms per dwelling

the average number of bedrooms in occupied private dwellings.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Average number of persons per household

the average number of usual residents in occupied private dwellings.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Canadian National Occupancy Standard

for housing appropriateness, measures the bedroom requirements of a household by specifying that: there should be no more than two people per bedroom; children less than five years of age of different sexes may reasonably share a bedroom; children less than 18 years of age and of the same sex may reasonably share a bedroom; and single household members 18 years and over should have a separate bedroom, as should parents or couples.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Established house price index

measures changes in the price of detached residential dwellings on their own block of land, regardless of age (i.e. including new houses sold as a house/land package as well as established houses) expressed as an index, with base year 1989–90=100.0. Price changes therefore relate to changes in the total price of dwelling and land.

Reference: *House Price Indexes: Eight Capital Cities* (ABS cat. no. 6416.0).

Finance commitments

firm offers to provide finance for owner-occupation or alterations and additions which have been, or are normally expected to be, accepted. Commitments to provide housing finance to employees and commitments accepted and cancelled in the same month are included. Owner-occupied dwellings being purchased can be either established (completed for more than 12 months or previously occupied) or new (completed for less than 12 months with the borrower being the first occupant).

Reference: *Housing Finance, Australia* (ABS cat. no. 5609.0).

First home buyers: average loan size

first home buyers are persons entering the home ownership market for the first time. Their average loan is calculated by dividing the total value of lending commitments per month by the total number of dwellings financed per month.

Reference: *Housing Finance, Australia* (ABS cat. no. 5609.0).

Flat, unit or apartment

includes all self-contained dwellings in blocks of flats, units or apartments. These dwellings do not have their own private grounds and usually share a common entrance foyer or stairwell. This category includes houses converted into flats and flats attached to houses such as granny flats. A house with a granny flat attached is regarded as a separate house.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Household

a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Housing: definitions continued

Households with insufficient bedrooms

households living in dwellings that do not have enough bedrooms to meet the requirements of community standards. See Canadian National Occupancy Standard.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Households with two or more bedrooms above requirements

households which have at least two bedrooms above that required to meet Canadian National Occupancy Standard.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Housing interest rate

the financial year annual average of the interest rate applicable on the last working day of each month to standard variable rate loans for owner-occupation extended by large bank housing lenders. It is the predominant or representative rate of major banks, although some banks may quote higher or lower rates.

Reference: *Reserve Bank of Australia, Bulletin.*

Income units receiving private rental assistance

families or individuals who pay rent or similar payments for private accommodation and receive a rental assistance payment from the government. Rental assistance may be payable to pensioners without children, families receiving above the minimum family payment and people already receiving a government allowance or benefit.

Reference: Department of Families, Community Services and Indigenous Affairs.

Materials used in house building price index

measures changes in prices of selected materials used in the construction of dwellings expressed as an index, with base year 1989–90=100.0. Data for national total are a weighted average of the six state capital cities.

Reference: *Producer Price Indexes* (ABS cat. no. 6427.0).

Mean rental assistance received

average rental assistance received fortnightly by eligible social security customers who pay rent in the private rental market.

Reference: Department of Families, Community Services and Indigenous Affairs.

Mean rent paid by rental assistance recipients

the average rent paid fortnightly by social security customers who receive rental assistance.

Reference: Department of Families, Community Services and Indigenous Affairs.

Occupied private dwellings

the premises occupied by a household. For population estimation purposes, the total number of occupied private dwellings is treated as being equal to the total number of households of the usually resident population.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Other dwelling

includes caravans, houseboats, or houses or flats attached to a shop or other commercial premise.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Owner with a mortgage

a household where the reference person or partner owes an amount on a mortgage or loan secured against the dwelling. Includes persons who have an outstanding mortgage amount but who are not making any payments.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Owner without a mortgage

a household where the reference person or partner does not owe any amount on a mortgage or loan secured against the dwelling. Includes persons who have repaid a mortgage or loan but have not formally discharged the associated mortgage.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Private/public sector dwellings completed

when building activity has progressed to the stage where the building can fulfil its intended function. The ABS regards buildings as completed when notified as such by the respondents (builders) to the survey.

Reference: *Building Activity, Australia* (ABS cat. no. 8752.0).

Project home price index

measures changes in the price of dwellings available for construction on a client's block of land expressed as an index, with base year 1989–90=100.0. Price changes therefore relate only to the price of the dwelling (excluding land).

Reference: *House Price Indexes: Eight Capital Cities* (ABS cat. no. 6416.0).

Public sector rental dwelling stock

those rental dwellings held by State and Territory Housing Authorities.

Reference: Department of Family and Community Services, *Housing Assistance Act 1996 Annual Report.*

Rental cost index

measures changes in the average rent paid by private households for privately and government owned rental properties, expressed as an index, with base year 1989–90=100.0.

Reference: *Consumer Price Index, Australia* (ABS cat. no. 6401.0).

Renter: private landlord

a household paying rent to a landlord who is: a real estate agent; a parent or other relative not in the same household; or another person not in the same household.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Renter: State housing authority

a household paying rent to a state or territory housing authority or trust.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Semi-detached, row or terrace house or townhouse

a dwelling with its own private grounds and no dwelling above or below. A key feature is that they are attached in some structural way to one or more dwellings, or separated from neighbouring dwellings by less than half a metre. Examples include semi-detached, row or terrace houses, townhouses and villa units. Multistorey townhouses or units are separately identified from those which are single storey.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Separate house

a dwelling which is self-contained and separated from other houses (or other buildings or structures) by a space to allow access on all sides (of at least one-half metre). This category also includes houses with an attached flat (e.g. granny flat). The attached flat will be included in the flat, unit or apartment category.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Housing for young adult households

HOUSING ARRANGEMENTS

Between 1994–95 and 2003–04, the proportion of young adult households who owned their home fell from 48% to 44%.

Young people typically experience a number of transitions in their living arrangements such as the change from living with parents to independent living and, perhaps, buying their own home. These transitions are related to other major milestones such as starting or finishing education, entering the labour force, partnering and having children.[1]

Since the late 1970s, young Australians have tended to reach some of these milestones in their life cycles at later ages (see *Australian Social Trends 2005*, People in their 20s: then and now, pp. 18–22), and these changes are reflected in their housing arrangements. For example, the median age of first home buyer households has increased over the past nine years, from 30.5 years in 1994–95 to 31.8 years in 2003–04.

Young adults are more mobile than people in other age groups. In the 12 months prior to the 2001 Census, 34% of people aged 18–34 years had moved address, compared with 12% for the population aged over 34 years. Research suggests that young people's housing careers (or housing pathways) will be increasingly varied as they enter different stages in their life cycles.[2]

This article focuses on housing tenure (such as renting from a private landlord or owning a house with a mortgage) of young adult households. It also discusses the characteristics of the households such as their living arrangements, income and housing costs associated with different types of tenure.

Young adults and housing

The majority of this article draws on data from the ABS 1994–95 and 2003–04 Surveys of Income and Housing (SIH).

Young adults in this article are persons aged 18–34 years.

Young adult households refers to households with a reference person aged 18–34 years.

The *reference person* for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single reference person is identified:

- one of the partners in a registered or de facto marriage, with dependent children
- one of the partners in a registered or de facto marriage, without dependent children
- a lone parent with dependent children
- the person with the highest income
- the eldest person.

The nature of a household's legal right to occupy the dwelling in which the household members usually reside is known as *tenure type*. Tenure is based on whether the dwelling is owned outright, is being purchased, is having rent paid to live in the dwelling or has some other occupying arrangement.

In Australia, the concept of the *housing career* has been used to explain the strong connection between a person's housing tenure and their life cycle stage, and the movement between tenure types over a lifetime.[2]

Young adults

In 2003–04, there were 4.7 million young adults (aged 18–34 years) in Australia and 71% (3.3 million) of them lived away from their parent(s). This was similar to the situation in 1994–95 (70%). Of the young adults living away from their parents in 2003–04, the great majority (88% or 2.9 million) were living in young adult households (i.e. households where the reference person was aged 18–34 years).

Housing tenure patterns

In 2003–04, there were 1.7 million young adult households, making up 22% of all households. Between 1994–95 and 2003–04, the proportion of young adult households who owned their home fell from 48% to 44%.

Tenure type of young adult households — 1994–95 and 2003–04

	1994–95		*2003–04*	
Tenure type	'000	%	'000	%
Owner	795.2	47.7	769.7	44.3
Owner without a mortgage	142.9	8.6	77.4	4.5
Owner with mortgage	652.4	39.2	692.2	39.9
Renter(a)	801.8	48.1	904.6	52.1
State/territory housing authority	89.4	5.4	61.2	3.5
Private landlord	667.7	40.1	803.7	46.3
Total(b)	**1 665.5**	**100.0**	**1 735.7**	**100.0**

(a) Includes other landlord type.
(b) Includes other tenure type.

Source: ABS 1994–95 and 2003–04 Surveys of Income and Housing.

The proportion who owned their home with a mortgage remained around 40%, while the proportion that owned their home outright decreased from 9% to 5%.

Home ownership is a widely held aspiration in Australia, and there has been debate over the fall in the rate of home ownership for those aged less than 35 years. Some argue that the fall is due to declining affordability which could mean that a higher proportion of Australians will never purchase a home.[3] Others argue that home purchase is being postponed, and not cancelled outright, due to changes in the timing of certain life cycle events such as partnering and having children.[1]

Tenure and household composition

Tenure patterns are often linked to life cycle stages and can coincide with particular household compositions. In general, home ownership is more prevalent among couple families, either with or without children. Renting, on the other hand, is more common among one parent, lone person and group households.

...home owners

In 2003–04, home ownership among young adult households was highest (63%) among couple families with dependent children.

Living arrangements

A *family* consists of two or more people, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering and who usually live in the same household.

A *household* is a group of related or unrelated people who usually live in the same dwelling.

A *couple* is two people in a registered or de facto marriage who usually live together.

A one family household consisting of a couple with at least one dependent child is a *couple family with dependent children* household.

A *one parent with dependent children household* is a one family household comprising a lone parent with at least one dependent child.

Other family households make up the balance (9% of the young adult households in 2003–04). These included: 5% other one family households (such as sibling households); 2% couples without dependent children, but with non-dependent children or other persons and 2% multi-family households.

*Lone person household*s consist of a person living alone.

A *group household* is a household consisting of two or more unrelated people where all people are aged 15 years and over and there are no couple relationships, parent-child relationships or other blood relationships between household members.

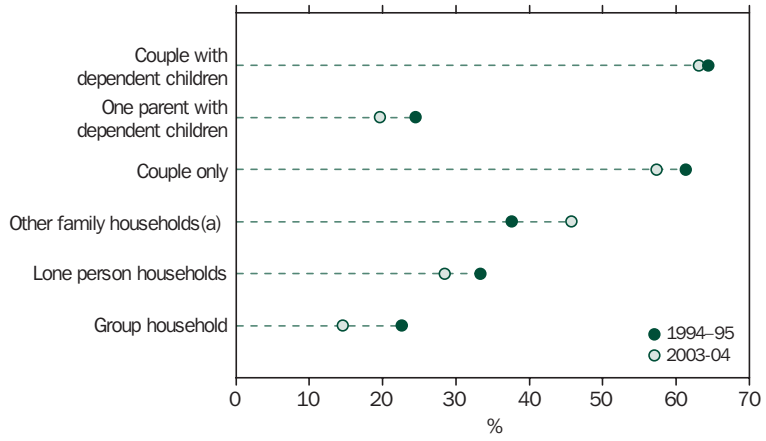
Tenure and living arrangements of young adult households — 2003–04

	Couple family with dependent children	*One parent family with dependent children*	*Couple only*	*Other family households(a)*	*Lone person*	*Group household*	*Total*
	%	%	%	%	%	%	%
Owner	63.1	19.7	57.4	45.7	28.4	14.6	44.3
Owner without a mortgage	4.6	2.1	2.9	18.8	3.0	0.7	4.5
Owner with mortgage	58.6	17.5	54.5	26.9	25.4	13.9	39.9
Renter(b)	34.1	77.8	38.4	50.5	66.6	83.2	52.1
State/territory housing authority	1.8	20.3	0.3	2.7	3.4	0.7	3.5
Private landlord	29.9	53.3	35.7	46.7	61.4	80.6	46.3
Total(c)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000	'000
Total number of households	**493.5**	**170.5**	**410.0**	**148.3**	**336.1**	**177.3**	**1 735.7**

(a) Includes other single family households and multiple family households.
(b) Includes other landlord type.
(c) Includes other tenure type.

Source: ABS 2003–04 Survey of Income and Housing.

Home ownership of young adult households — 1994–95 and 2003–04



(a) Includes other family and multi-family households.

Source: 1994–95 and 2003–04 Surveys of Income and Housing.

Couple only households had the second highest home ownership with 57%, followed by other family households with 46%. Other family households were the household type with the highest level of outright ownership with 19% owning their homes without a mortgage compared with 5% of all young adult households. The other family households (who make up 9% of young adult households) are a diverse group including multi-family households, sibling households and couples living with other adults.

While home ownership rates for most types of family households decreased between 1994–95 and 2003–04, home ownership for other family households moved against this overall trend and increased from 38% to 46% over the period.

...renters

In 2003–04, group households had the highest rate of renting among young adult households at 83%. More than three-quarters (78%) of one parent families with dependent children were renting, as were two-thirds (67%) of lone person households. One parent families had the highest rate of renting public housing with 20% of all one parent families with dependent children renting from state/territory housing authorities.

In contrast with the decline in home ownership from 1994–95 to 2003–04, levels of renting have increased across all household compositions except the other family households.

Housing costs

*Housing cost*s refer to mortgage repayments and general and water rates for owners, and rent for others. Housing costs include mortgage/loan repayment if the purpose of the loan were primarily to buy, build, add to or alter the occupied dwelling. Housing costs are measured on a gross basis i.e. before deducting refunds or subsidies such as rent assistance received as income support from Centrelink. Maintenance and repair costs are not included.

Commonwealth rent assistance (CRA) is a non-taxable supplementary payment paid through Centrelink to help people on low incomes with the cost of private rental housing. It is only available to income support recipients (including those who receive more than the base rate of Family Tax Benefit Part A) who rent in the private market and pay rent that is more than a set minimum.

Housing costs

Housing costs can be a major part of a household's budget and can influence the amount of household income that is available for other living expenses. Housing costs vary according to different tenure type and household composition. Average housing costs are lowest for owners without a mortgage, highest for owners with a mortgage and fall somewhere in between for renters.

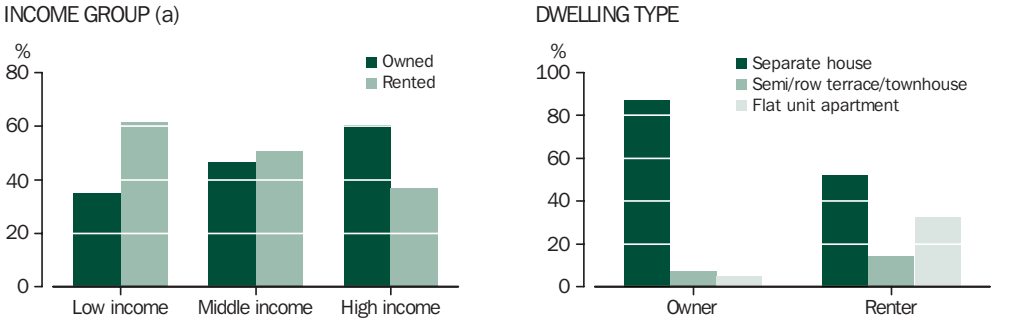
Housing costs for young adult households — 2003–04

	Mean housing costs as a proportion of gross income		*Mean weekly housing costs*
	1994–95	*2003–04*	*2003–04*
Tenure	%	%	$
Owner without mortgage	2.2	1.8	23
Owner with mortgage	23.2	23.7	348
Renter – state/territory housing authority	17.6	19.0	91
Renter – private landlord	(a)	(a)	199

(a) Housing costs as a proportion of gross income for private renters are not published because a proportion of private renters are in receipt of rent assistance and they are generally unable to report CRA separately from other government income support.

Source: ABS 1994–95 and 2003–04 Surveys of Income and Housing.

Tenure of young adult households — 2003–04



(a) Equivalised disposable household income. Low income groups include households in the second and third lowest deciles of income distribution. Middle groups include households in the fifth and sixth deciles, while the high groups contain households in the ninth and tenth income deciles

Source: ABS 2003–04 Survey of Income and Housing.

In 2003–04 the mean weekly cost of housing for young adult owner households with a mortgage was $348, which was equivalent to 24% of their average gross weekly household income. This compares with 23% of gross household income spent on housing costs in 1994–95, indicating that housing costs for young mortgagees have largely kept pace with household income.

Young adult households with mortgages in capital cities spent 24% of their income on housing costs, compared with 22% for those with mortgages in the non-capital city regions in 2003–04.

Income

A majority (60%) of young adult households who had high equivalised disposable income owned their homes in 2003–04. This compares with ownership rates of 47% for middle income households and 35% for low income households. Conversely, 62% of households in the low income group were renters compared with 51% of middle income and 37% of high income households.

This tenure pattern was also reflected in the main source of household income. Around half (51%) of households whose main source was from wage or salary or their own unincorporated business owned their home. In contrast, more than three-quarters (77%) of households whose main source of income was government pensions or allowances were renter households.

In three-quarters (75%) of young adult households the reference person was either employed full-time or self-employed. In these households the rate of home ownership was 52%. Households that had an unemployed person or a full-time student reference person were overwhelmingly renter households (87% and 92% respectively).

Dwelling type

Separate houses were the most common type of dwelling occupied by young adult households in 2003–04. Just over two-thirds (68%) of young adults households lived in separate houses, one-fifth (20%) lived in flats, units and apartments, while 11% lived in semi-detached, row or town houses. Not surprisingly, greater proportions of young adult households living outside the capital cities lived in separate houses (81%) compared with their capital city counterparts (61%).

The type of dwelling lived in was strongly associated with both tenure type and household composition. Among young adult households who owned their home, 87% owned a separate house. In contrast only around half (52%) of households who rented lived in a separate house.

Almost all (95%) of couple families with dependent children who owned their home lived in separate houses. In contrast just 28% of lone person renter households lived in a separate house, residing instead in flats, units and apartments (53%) or semi-detached, row or town houses (18%)

First home buyers

In 2003–04 there were 271,000 (13%) young adult households who had bought their first home within the previous three years. These households made up 69% of all first home buyer households in 2003–04 compared with 73% in 1994–95.

New houses made up almost one-fifth (19%) of all first homes purchased by young adult households. This was around the same proportion of new houses purchased by young adult households who were changing homes (19%). Older first home buyer households (with a reference person aged 35 years and over) had a similar proportion (20%) which purchased a new home as their first home.

The median value of first homes purchased by young adult households in the three years prior to 2003–04 was $250,000 (as valued by the householder) and the median value of their mortgages was $148,000. The median value of mortgages of young adult first home buyers (who purchased in the three years prior to 2003–04) was equivalent to 2.9 times the annual average earnings of a male full-time worker in that financial year, an increase from the ratio of 2.0 in 1994–95. However, over this period there has been a fall in home loan interest rates and an increase in the average number of income earners per household. These factors should also be taken into account in any overall assessment of change in housing affordability.

Endnotes

1 Baxter, J and McDonald, P 2004, *Trends in home ownership rates in Australia: the relative importance of affordability trends and changes in population composition* Australian Housing and Urban Research Institute, ANU Research Centre, Canberra.

2 Beer, A, Faulkner, D and Gabriel, M 2006, *21st Century Housing Careers and Australia's Housing Future: Literature Review*, Sydney, Australian Housing and Urban Research Institute, Southern Research Centre.

3 Yates, J 2002, *Housing implications of social, spatial and structural change*, Australian Housing and Urban Research Institute, Sydney Research Centre, Sydney.

Housing in Sydney – consolidation and spread

HOUSING STOCK

Between 1991 and 2005, the geographical outer ring of Sydney experienced the greatest increase (21%) in population compared to the middle (10%) and inner (12%) rings.

Home ownership remains a feature of the Australian identity and has for generations underpinned prosperity and individual wealth (see *Australian Social Trends 2006*, Components of household wealth, pp. 151–155).[1] Demand for housing is affected by a number of factors including population growth and the ageing population. There has been a move to fewer people in each household with the average size of 2.6 persons per Australian household in 2001 projected to decrease to between 2.2 and 2.3 persons per household by 2026.[2] The decrease in household size is partly driven by the ageing of the population which tends to result in more single and two person households.[3]

Australia is a highly urbanised country with three-quarters of the population living in urban centres in 2004.[4] There has been debate over the balance between consolidating housing within a city's boundaries and new greenfield developments on the fringe of existing cities. Greenfield developments are more likely to provide separate houses (rather than higher density housing such as apartments). On the other hand, consolidation has been promoted as having the potential to address some wider urban problems including reducing the use of cars and increasing access to employment.[5]

In this article, Sydney Statistical Division is used as a case study. Changes in population density and housing at the local government area (LGA) level are examined as Sydney's LGA boundaries have remained fairly stable over time. The sprawling nature of Sydney, the costs associated with this and the question of how long this expansion can continue influence the balance between consolidation of housing and greenfield development.[5] The NSW Government's metropolitan strategy provides a broad framework to facilitate and manage the growth and development of Sydney over the next 25 years.[3] It contains a housing strategy which includes objectives aimed at providing 60–70% of new housing in existing urban areas, with the remaining 30–40% of new housing to be in land release areas.[3]

Population estimates and geography

Data in this article relating to 2005 population estimates and population density are calculated using mathematical modelling (see *Regional Population Growth, Australia, 2004–05*, ABS cat. no. 3218.0 for further details.)

Local Government Areas (LGAs). These areas are the spatial units which represent the geographical areas of incorporated local government councils. To allow comparison over time, this article contains data presented according to the Australian Standard Geographical Classification (ASGC) 2001 Edition, which refers to boundaries for LGAs as defined at 1 July 2001.

In this article, LGAs in Sydney's Statistical Division have been divided among 3 rings: inner, middle and outer.[6]

The *inner ring* includes: Ashfield, Botany, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney City, Waverley and Woollahra.

The *middle ring* includes: Auburn, Bankstown, Burwood, Canterbury, Concord and Drummoyne (now Canada Bay), Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby.

The *outer ring* includes Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Penrith, Pittwater, Sutherland, Warringah, Wollondilly and Wyong.

Population of Sydney

	2004	*2005(a)*	*2051(b)*
	%	%	%
Aged less than 15 years	19.3	n.y.a.	15.2
Aged 15–64 years	68.7	n.y.a.	23.7
Aged 65 years and over	12.1	n.y.a.	61.1
Total	**100.0**	**. .**	**100.0**
	'000	'000	'000
Total	**4 225.1**	**4 254.9**	**5 608.8**

(a) Estimated resident population for 2005 data is preliminary.
(b) Series B projection.

Source: Regional Population Growth, Australia, 2004–05 (ABS cat. no. 3218.0), *Population Projections, Australia, 2004–2101* (ABS cat. no. 3222.0).

Population density

In 2005, Sydney's population was estimated to be 4.3 million which was 63% of the NSW population and around one-fifth (21%) of the Australian population. To aid analysis in this article, Sydney's LGAs have been divided into three geographical rings: outer, middle and inner.[6] In 2005, it was estimated that the

Population density in selected Sydney LGAs — 1991 and 2005(a)

Highest density LGAs	1991	2005(a)	Change 1991 to 2005	Lowest density LGAs	1991	2005(a)	Change 1991 to 2005
	persons/km^2	persons/km^2	%		persons/km^2	persons/km^2	%
Waverley	6 657.4	6 647.1	-0.2	Wollondilly	12.3	16.2	32.2
North Sydney	4 909.1	5 806.0	18.3	Hawkesbury	19.1	23.0	20.6
South Sydney	3 945.2	5 566.2	41.1	Blue Mountains	50.5	53.4	5.7
Leichhardt	4 675.1	5 145.2	10.1	Gosford	143.4	173.7	21.2
Sydney City	1 088.5	5 104.3	368.9	Wyong	141.0	192.5	36.5
Ashfield	5 026.8	4 824.6	-4.0	Camden	116.4	255.2	119.3
Marrickville	4 889.3	4 541.4	-7.1	Hornsby	291.2	340.0	16.7
Burwood	4 125.2	4 356.1	5.6	Baulkham Hills	302.2	402.1	33.1
Drummoyne	3 830.5	4 302.9	12.3	Penrith	382.7	439.7	14.9
Woollahra	4 159.6	4 297.2	3.3	Campbelltown	455.8	481.1	5.6

(a) Preliminary figures.

Source: Regional Population Growth, Australia, 2004–05 (ABS cat. no. 3218.0).

outer ring contained over 2.3 million people (55%), the middle ring over 1.2 million (28%) and the inner ring over 700,000 (17%).

As would be expected, on average in both 1991 and 2005 the LGAs in the inner ring of Sydney had a higher population density (people per square kilometre) than LGAs in the outer ring. This is consistent with the greater proportion of units and apartments in the inner ring which accommodate more people per square kilometre. In 2005, Waverley (inner ring) had the highest population density with 6,647 people per square kilometre and Wollondilly (outer ring) had the lowest density (16 people per square kilometre) compared with all other LGAs. To put the population density of Sydney in perspective, in 2002 inner London had a population density of 8,980 while in outer London there were 3,582 people per square kilometre.[7]

Between 1991 and 2005, Sydney's population grew by over half a million (582,000). The majority (68%) of the growth occurred in the outer ring, which increased by 21% in the fourteen years to 2005. Over the same period, growth in the denser middle and inner rings was more modest with increases of 10% and 12% respectively.

Within the outer ring, Camden and Liverpool experienced the greatest proportional growth in population between 1991 and 2005 (119% and 68% respectively), while Wyong's population increased by over one-third (37%).

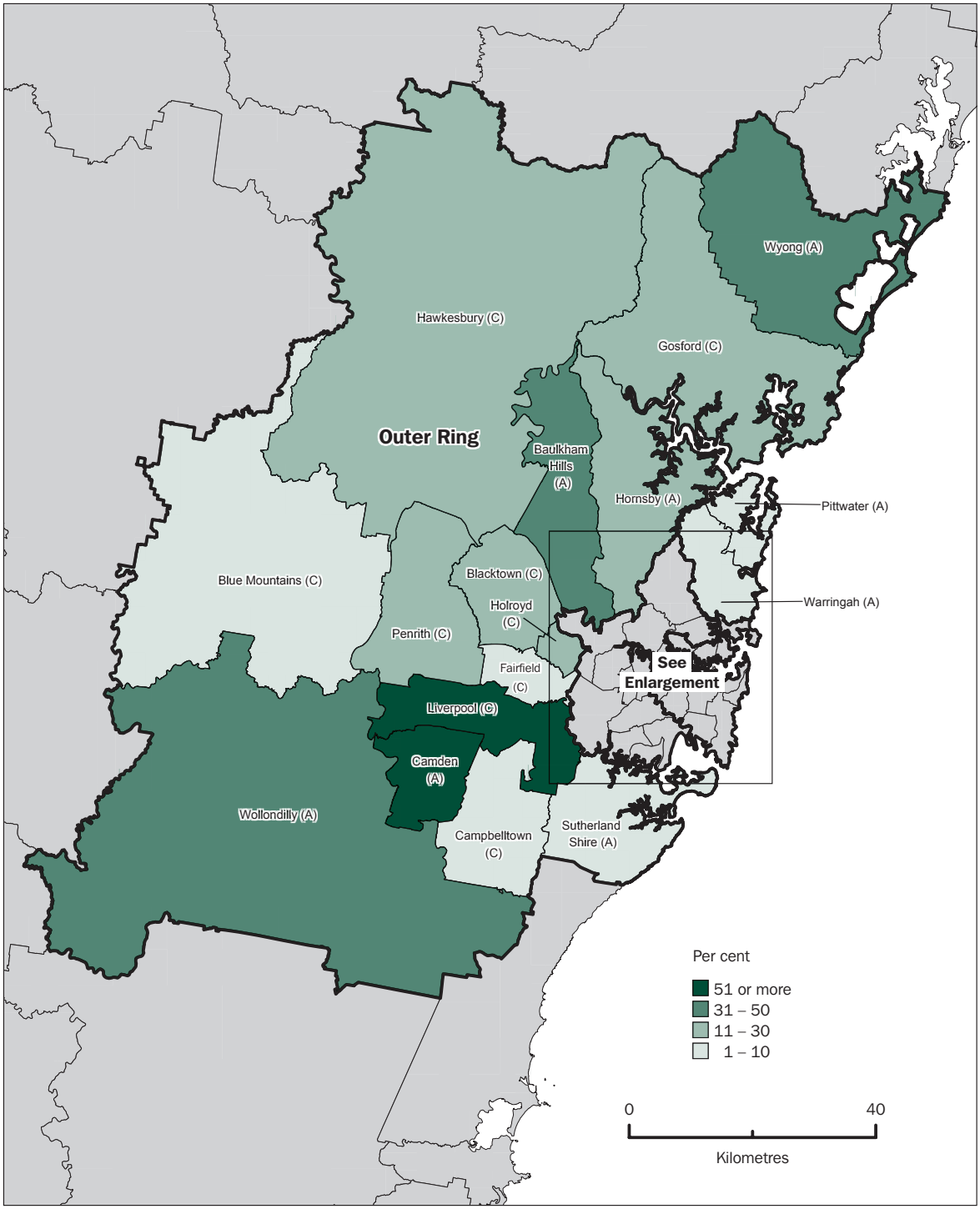
Estimated resident population of Sydney — 1991 and 2005(a)

	ERP 1991	ERP 2005(a)	Change 1991 to 2005(a)	
Rings	'000	'000	% change	% contribution to growth
Outer	1 934.1	2 331.7	20.6	68.3
Middle	1 103.5	1 209.4	9.6	18.2
Inner	635.3	713.7	12.3	13.5
Total for Sydney	**3 672.9**	**4 254.9**	**15.8**	**100.0**

(a) Preliminary figures.

Source: Regional Population Growth, Australia, 2004–05 (ABS cat. no. 3218.0).

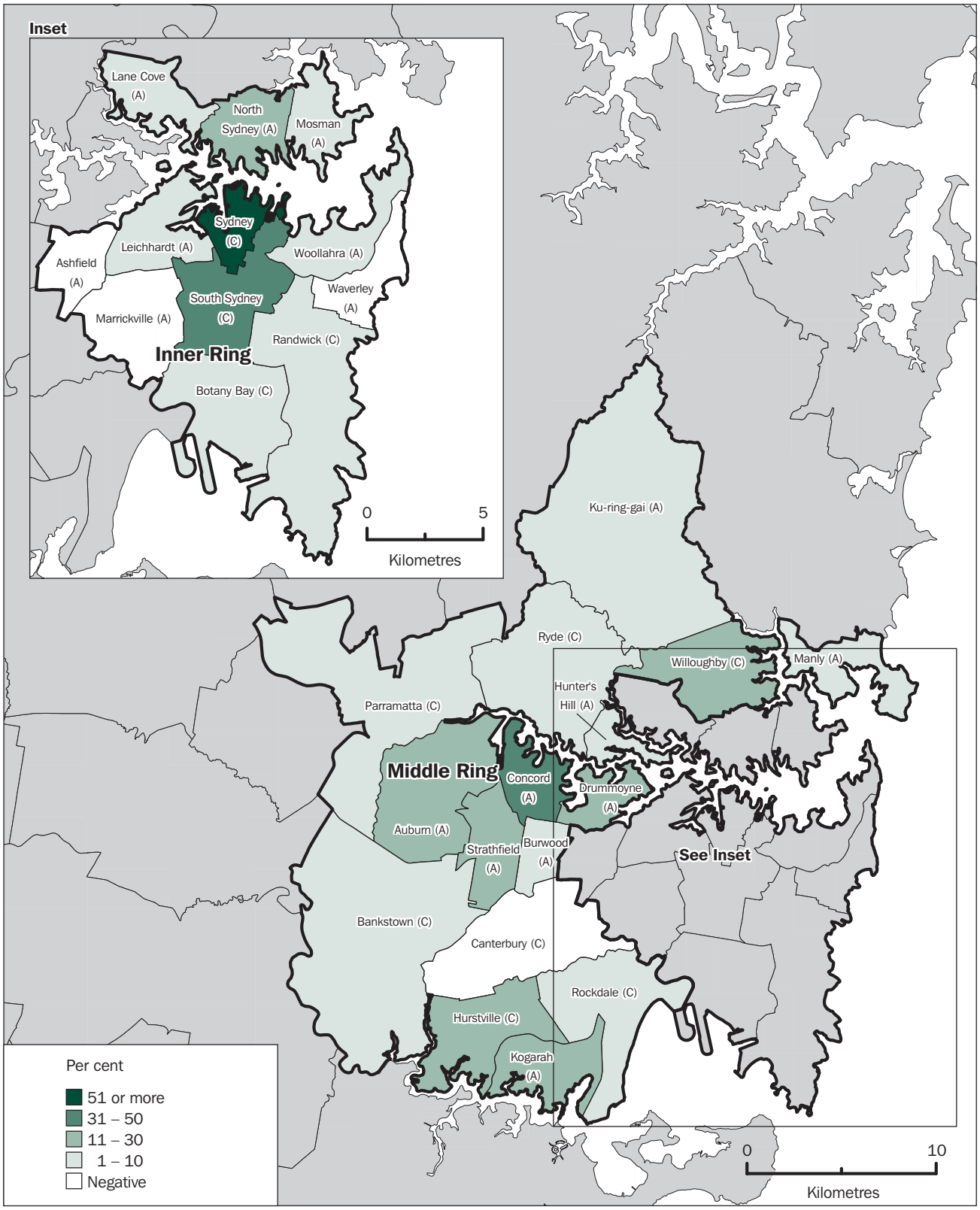
Percentage change in population between 1991 and 2005(a) – outer ring of Sydney



(a) Preliminary figures.

Source: ABS Regional Population Growth, Australia.

Percentage change in population between 1991 and 2005(a) – middle and inner rings of Sydney: Enlargement



(a) Preliminary figures.

Source: ABS Regional Population Growth, Australia.

Age profile of Sydney — 2004

	Outer ring	Middle ring	Inner ring
	%	%	%
Age (years)			
0–14	21.6	18.5	12.8
15–24	14.2	13.8	14.0
25–34	14.3	15.4	22.7
35–44	15.1	15.3	16.2
45–54	13.8	13.1	12.5
55–64	10.0	9.9	9.6
65 and over	11.0	14.1	12.1
Total	**100.0**	**100.0**	**100.0**
	'000	'000	'000
Total number of people	**2 310.5**	**1 201.7**	**713.0**

Source: Population by age and sex, Australia, 2004 (ABS cat. no. 3235.0.55.001).

Around half of the LGAs in the middle ring experienced a growth in population under 10% and the other half between 11% and 30% in the 1991–2005 period. Concord (now part of Canada Bay) grew by one-third (33%). In this same time period, most of the LGAs in the inner ring had increases in population of 10% or less. Three of the LGAs in the inner ring increased by more than 10%: Sydney City by 369%, South Sydney by 41% and North Sydney by 18%. The rapid growth in Sydney City was the result of an increase in the number of higher density dwellings in this LGA.

Who lives in outer, middle and inner Sydney?

...age

In 2004, a greater proportion of the population in the outer (22%) and middle ring (19%) were dependent children (aged 0–14 years) than in the inner ring (13%). By comparison, the inner ring (23%) had a greater proportion of people aged between 25–34 years compared with the middle and outer rings (15% and 14% respectively).

...household composition

Around three-quarters (77%) of households in the outer ring were family households compared with just over two-thirds (70%) in the middle ring and just over one half (52%) in the inner ring. There was a similar proportion of couple family households without children among the three rings (around 22%). However, couple families with children were more common in the outer (41%) and middle (35%) rings than in the inner ring (19%).

A greater proportion of households in the inner ring were lone person households (31%) compared with the middle (22%) and outer (18%) rings. Around one in ten households (9%) in the inner ring were group households.

Household composition in Sydney — 2001

Household type	Outer ring	Middle ring	Inner ring
	%	%	%
One family households	75.5	68.1	51.6
Couple family with no children	22.2	21.1	22.6
Couple family with at least one child under 15 years	27.9	23.1	12.9
Couple family with children 15 years and over only	13.1	12.1	6.5
One parent families with at least one child under 15 years	6.1	4.4	3.2
One parent families with children 15 years and over only	6.2	7.3	6.3
Multiple family households	1.7	2.0	0.8
Total family households	77.2	70.1	52.3
Non-family households	20.3	26.1	39.1
Lone person	17.8	22.2	30.6
Group household	2.5	3.9	9.0
Other households	2.5	3.8	8.1
Total households	**100.0**	**100.0**	**100.0**
	'000	'000	'000
Total number of households	**770.0**	**365.9**	**287.1**

Source: ABS 2001 Census of Population and Housing.

Dwelling type in Sydney — 2001

	Outer ring	Middle ring	Inner ring	Sydney
	%	%	%	%
Separate house	79.6	59.3	23.3	62.8
Semi-detached, row or terrace house, townhouse	8.6	10.3	20.4	11.5
Flat, unit or apartment	10.9	29.7	55.1	24.9
Other	0.8	0.7	1.1	0.9
All dwellings	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
Total number of dwellings	**830.6**	**396.6**	**322.1**	**1 549.4**

Source: ABS 2001 Census of Population and Housing.

...dwelling type

Not surprisingly, in 2001 the vast majority of dwellings in the outer ring were separate houses (80%) compared with the middle (59%) and inner (23%) rings where land was at a premium. Flats, units and apartments were much more common in the inner ring (55%) compared with the middle (30%) and outer (11%) rings.

...tenure type

In 2001, almost three-quarters (73%) of dwellings in the outer ring were either fully owned or being purchased, compared with almost two-thirds (65%) of the dwellings in the middle ring and half (50%) of the dwellings in the inner ring. Renting was the most common tenure type in Sydney's inner ring.

...home and work location

The majority (61%) of people in Sydney in 2001 lived and worked in the same geographical ring. However, a greater proportion of people both lived and worked in the inner ring (83%) where there were concentrations of employment, than lived and worked in either the middle (50%) or outer ring (58%). A considerable number of people (over 320,000) travelled from the outer and middle rings to the inner ring to work.

The 2003 NSW Household Travel Survey found that the distance people travelled was related to the trip's purpose with trips to work being the longest on average. [8]

Building approvals

On average, between 2001 and 2005 there were 27,500 approvals per year for new residential buildings in Sydney. This number was equivalent to 1.8% of the total Sydney housing stock in 2001.

Just over half (51%) of all approvals for new residential buildings in the 2001–2005 period were for those situated in the outer ring, with 28% of all dwelling approvals in the middle ring and 20% of all approvals for dwellings in the inner ring.

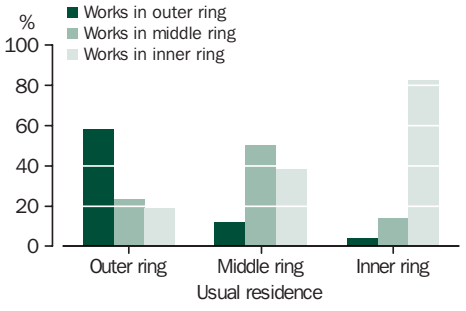
Of all approvals in the outer ring, most (57%) were for houses, with 23% for flats, units or apartments and 20% for semi-detached, row or terrace houses. Conversely, within the inner ring, 86% of residential building

Tenure type in Sydney — 2001

	Outer ring	Middle ring	Inner ring
Tenure type	%	%	%
Fully owned	42.3	45.9	33.3
Being purchased	30.8	19.4	17.1
Rented	24.4	32.1	47.2
Other	2.6	2.6	2.4
All dwellings	**100.0**	**100.0**	**100.0**

Source: ABS 2001 Census of Population and Housing.

Home and work location in Sydney — 2001



Source: ABS 2001 Census of Population and Housing.

Average annual residential building approvals in Sydney — 2001–2005

	Outer ring	Middle ring	Inner ring	Sydney
Type of residential building approved	%	%	%	%
Houses	56.9	20.9	6.6	37.7
Semi-detached, row or terrace houses, townhouses	19.7	22.8	7.3	18.6
Flats, units or apartments	23.3	56.3	86.1	43.7
Average annual approvals	100.0	100.0	100.0	100.0
	no.	no.	no.	no.
Average annual approvals	**14 161**	**7 794**	**5 548**	**27 503**

Source: Building approvals, Australia, 2005 (ABS cat. no. 8731.0).

approvals were for flats, units or apartments. Semi-detached, row or terrace houses accounted for 7% of the approvals in the inner ring as did separate houses.

Between 1991–1995 and 2001–2005 the trend in housing approvals has been toward higher density housing (flats, units and apartments) and away from separate houses. Between 1991–1995, houses contributed almost half (49%) of total residential building approvals, compared with 38% in 2001–05. Similarly, flats, units and apartments made up 28% of approvals in 1991–1995, increasing to 44% of the 2001–2005 building approvals.

Endnotes

1 Housing Industry Association 2005, *Housing Regulation in Victoria - Building Better Outcomes,* HIA, Melbourne.

2 Australian Bureau of Statistics 2004, *Household and Family Projections, Australia, 2001 to 2026,* cat. no. 3236.0, ABS, Canberra.

3 Department of Planning 2005, *City of Cities: A plan for Sydney's Future, Supporting Information,* NSW Department of Planning, Sydney.

4 Australian Bureau of Statistics 2006, *Year Book Australia, 2006,* cat. no. 3101.0, ABS, Canberra.

5 University of Western Sydney 2001, *The local impacts of urban consolidation: The experience of three councils*, *Final Report*, Urban Frontiers Program, Sydney.

6 New South Wales Department of Infrastructure, Planning and Natural Resources, email 12 December 2005, <tpdc@dipnr.nsw.gov.au>.

7 Statbase database, Office for National Statistics, *Population density 2002*, viewed 20 February 2006,<http:www.statistics.gov.uk/Statbase/Expodata/Spreadsheets/D7645.xls>.

8 Transport and Population Data Centre 2004, *2002 Household Travel Survey Summary Report,* NSW Department of Infrastructure, Planning and Natural Resources, Sydney.

Other areas of social concern

Other areas of social concern: national summary

COMMUNICATIONS	Units	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1 Households with a computer	'000	n.a.	n.a.	n.a.	3 083	3 337	3 803	4 311	4 556	5 038	n.a.	5 266
2 Households with a computer	%	n.a.	n.a.	n.a.	44	47	53	58	61	66	n.a.	67
3 Households connected to the Internet	'000	n.a.	n.a.	n.a.	1 098	1 538	2 340	3 114	3 445	4 039	n.a.	4 393
4 Households connected to the Internet	%	n.a.	n.a.	n.a.	16	22	32	42	46	53	n.a.	56
TRANSPORT	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
7 Number of passenger vehicles(a)	'000	8 629	8 989	9 206	9 527	9 686	n.a.	9 836	10 101	10 366	10 629	10 896
8 Passenger vehicles per 1,000 population(a)(b)	no.	477	491	497	509	512	n.a.	507	514	522	529	536
ENVIRONMENT	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
9 Net water consumption(c)(d)	GL	21 142	19 875	22 186	n.a.	n.a.	n.a.	24 909	n.a.	n.a.	n.a.	n.a.
10 Net household water consumption(d)	GL	1 800	1 691	1 829	n.a.	n.a.	n.a.	2 181	n.a.	n.a.	n.a.	n.a.
CRIME	*Units*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*
11 Victims of personal crime(e)(f)	%	n.a.	n.a.	n.a.	4.8	n.a.	n.a.	n.a.	5.3	n.a.	n.a.	5.3
12 Victims of household crime(e)(g)	%	n.a.	n.a.	n.a.	9.0	n.a.	n.a.	n.a.	8.9	n.a.	n.a.	6.2

(a) The number of passenger vehicles refers to the total number of passenger vehicles registered at the date of the motor vehicle census.

(b) The ratio of passenger vehicles registered to 1,000 estimated resident population at 30 June.

(c) Net water consumption estimates cannot be compared from 1995–1997 to 2001. This is due to the differences in data sources and the methodologies used to calculate estimates.

(d) One gigalitre (GL) equals 1,000 megalitres (ML). One ML equals 1 million litres.

(e) Data refer to the victimisation prevalence rate.

(f) Assault and robbery among people aged 15 years and over. Sexual assault among people aged 18 years and over.

(g) Actual or attempted break-ins and motor vehicle theft.

Reference periods: Until 2003, data for indicators 1–4 are at the point in time when the surveys were conducted. For 2004–05, the reference period is from August 2004 to June 2005.
Data for indicators 7–8 are at 31 May in 1995; 31 October in 1996–1999; 31 March in 2001–2005; 30 June ERP.
Data for indicators 9–10 are for year ending 30 June.
Data for indicators 11–12 are for the 12 months prior to the survey.

Other areas of social concern: state summary

COMMUNICATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1 Households with a computer	'000	2004–05	1 723	1 306	1 026	409	545	119	38	99	5 266
2 Households with a computer	%	2004–05	67	68	67	64	69	61	71	79	67
3 Households connected to the Internet	'000	2004–05	1 455	1 085	861	323	456	94	34	84	4 393
4 Households connected to the Internet	%	2004–05	56	57	56	50	58	48	61	67	56
5 Households with broadband Internet connection	'000	2004–05	449	332	232	63	118	15	8	28	1 244
6 Households with broadband Internet connection	%	2004–05	31	31	27	19	26	16	23	33	28

TRANSPORT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
7 Number of passenger vehicles(a)	'000	2005	3 327	2 934	2 058	897	1 157	263	71	189	10 896
8 Passenger vehicles (per 1000 population)(a)(b)	no.	2005	491	584	519	582	576	543	352	580	536

ENVIRONMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT(c)	Aust.
9 Net water consumption(d)	GL	2000–01	9 425	7 140	4 711	1 647	1 409	417	160	n.a.	24 909
10 Net household water consumption(d)	GL	2000–01	679.2	472.3	500.9	180.6	r244.6	59.3	44.6	n.a.	2 181

CRIME	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(e)	ACT	Aust.
11 Victims of personal crime(f)(g)	%	2005	5.4	4.5	6.1	5.0	5.6	4.7	6.6	5.8	5.3
12 Victims of household crime(f)(h)	%	2005	6.8	4.6	6.1	6.6	7.8	4.5	13.0	7.6	6.2

(a) The number of passenger vehicles refers to the total number of passenger vehicles registered at the date of the motor vehicle census.

(b) The ratio of passenger vehicles registered to 1,000 estimated resident population at 30 June.

(c) Data for ACT are included in NSW data.

(d) One gigalitre (GL) equals 1 000 megalitres (ML). One ML equals 1 million litres.

(e) Data for NT refers mainly to urban areas.

(f) Data refer to the victimisation prevalence rate.

(g) Assault and robbery among people aged 15 years and over. Sexual assault among people aged 18 years and over.

(h) Actual or attempted break-ins and motor vehicle theft.

Reference periods: Until 2003, data for indicators 1–6 are at the point in time when the surveys were conducted. For 2004–05, the reference period is from August 2004 to June 2005.
Data for indicators 7–8 are at 31 May in 1995; 31 October in 1996–1999; 31 March in 2001–2005; 30 June ERP.
Data for indicators 9–10 are for year ending 30 June.
Data for indicators 11–12 are for the 12 months prior to the survey.

Other areas of social concern: data sources

INDICATORS	DATA SOURCE
1–6	ABS Population Survey Monitor 1998, 1999, 2000; ABS Survey of Education, Training and Information Technology 2001; ABS General Social Survey 2002; ABS Survey of Disability, Ageing and Carers 2003; ABS Mulit-purpose Household Survey 2004–05.
7–8	ABS Motor Vehicle Census, Australia (ABS cat. no. 9309.0); *Australian Demographic Statistics* (ABS cat. no. 3101.0).
9–10	*Water Account for Australia, Australia,* 1993–94 to 1996–97, 2000–01 (ABS cat. no. 4610.0).
11–12	*Crime and Safety, Australia* (ABS cat. no. 4509.0).

Other areas of social concern: definitions

Broadband

defined by the ABS as an "always on" Internet connection with an access speed equal to or greater than 256 Kilobits per second.

Reference: *Household Use of Information Technology* (ABS cat. no. 8146.0).

Estimated resident population (ERP)

the official measure of the population of Australia based on the concept of residence. It refers to all people, regardless of nationality or citizenship, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months. It excludes overseas residents who are in Australia for less than 12 months.

Reference: *Australian Demographic Statistics* (ABS cat. no. 3101.0).

Household

a group of related or unrelated people who usually live in the same private dwelling or a lone person living in a private dwelling.

Reference: *Housing Occupancy and Costs, Australia* (ABS cat. no. 4130.0.55.001).

Household crime

includes break-in, attempted break-in and motor vehicle theft.

Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Internet

a world-wide public computer network. Organisations and individuals can connect their computers to this network and exchange information across a country and/or across the world. The Internet provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files.

Reference: *Household Use of Information Technology* (ABS cat. no. 8146.0).

Passenger vehicles

motor vehicles constructed primarily for the carriage of persons and containing up to nine seats (including the driver's seat). Included are cars, station wagons, four-wheel drive passenger vehicles and forward-control passenger vehicles. Excluded are campervans.

Reference: *Motor Vehicle Census, Australia* (ABS cat. no. 9309.0).

Personal crime

includes robbery, assault and sexual assault.

Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Victim

a household or person reporting at least one of the offences surveyed. Victims were counted once only for each type of offence, regardless of the number of incidents of that type.

Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Victims of personal crime

data refers to the victimisation prevalence rate which is the number of victims of an offence in a given population expressed as a percentage of that population.

Reference: *Crime and Safety, Australia* (ABS cat. no. 4509.0).

Water consumption

water consumption is equal to mains water use plus self-extracted water use plus reuse water use minus mains water supplied to other users minus in-stream use (where applicable).

Reference: *Water Account Australia* (ABS cat. no. 4610.0).

Environmental impact of household energy use

ENVIRONMENT

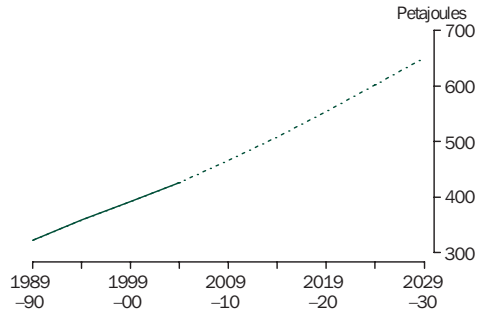
Between 1983–84 and 2003–04, household energy consumption increased by 3 gigajoules per person to an average of 21 gigajoules per person.

Most Australian households take for granted the energy delivered to their homes and used in their daily lives. In normal circumstances, its provision is convenient and reliable across urban and rural regions of Australia and the most common sources of household energy such as electricity and gas are inexpensive relative to energy prices in other developed countries.[1]

Australians are becoming increasingly aware of the impact that the production and use of energy can have on the environment. Energy production and use contributed over two-thirds (69%) of Australia's greenhouse gas emissions in 2004. Australia's energy emissions are relatively high on a per capita basis, mainly due to our use of coal as the major source of electricity generation.[2]

In 2003, Australia's net greenhouse gas emissions across all sectors totalled 550 million tonnes of carbon dioxide equivalent (Mt CO_2-e), or 1.4% of global emissions.[2, 3] Australia has agreed to, but not ratified the Kyoto Protocol, and is committed to meeting the Kyoto target of 108% of 1990 greenhouse gas emissions by the period 2008–12. The government committed $1.8 billion from 1997 to a number of initiatives in order to address climate change by the Kyoto period. With these initiatives in place, Australia is projected to reach the Kyoto target by 2010. Without these initiatives, 2010 emissions were expected to have reached 123% of 1990 levels by 2010.[4]

Final energy consumption in the residential sector(a)



(a) Data for all years following 2003–04 is projected.

Source: ABARE 2005, *Australian Energy, national and state projections to 2029–30* ; *ABARE electronic datasets*.

Energy use and units

The data presented in this article are mainly drawn from the March 2004 and March 2005 ABS publications *Environmental Issues: People's Views and Practices* (ABS cat. no. 6402.0). Estimates on final energy consumption are from the Australian Bureau of Agricultural and Resource Economics (ABARE) publication *Australian Energy: national and state projections to 2029–30*, October 2005, and ABARE data sets.

Residential energy consumption is based on total final energy consumption data, which is the amount measured by, for example, the gas and electricity meter for each home.

The basic unit of energy is the *joule (J)*. The joule is a small unit. Heating 1 gram of water by 1 degree Celsius requires 4.18 joules. For this reason, energy is often measured in:

- *kilojoules* (KJ): one thousand joules
- *gigajoules* (GJ): one thousand million joules
- *petajoules* (PJ): one thousand million million joules.

Megatonnes (Mt): one million tonnes. Mt is the unit of measurement used for greenhouse gas emissions. Technically, a tonne of emissions is one tonne of carbon dioxide equivalent (CO_2-e), which measures all the greenhouse gases. Saving 1 Mt of greenhouse gas emissions is equivalent to taking 200,000 vehicles off the road per year.[5]

In 2003–04, Australian households used 420 petajoules (PJ) of energy or 13% of the final energy consumed in Australia, with the vast majority of final energy used by transport and manufacturing.[6] On average, Australians used 21 gigajoules (GJ) of energy per person – an increase of 3 GJ per person over 20 years from 1983–84. The average household's energy use produces about eight tonnes of carbon dioxide (CO_2) per year, the main greenhouse gas.[7]

Trends in energy use

Between 1983–84 and 2003–04, energy use in the residential sector grew by 52% or an average of 2.2% per year. Increased household energy use is predominantly the result of population growth, and an associated increase in the number of dwellings needing energy for power and heating. It is also related to an increase in average use per person, influenced by the increasing size of dwellings and the decreasing number of people per dwelling

(see *Australian Social Trends, 2003*, Changes in Australian housing, pp.175–179). Changes in population and in average energy use are expected to continue to increase residential energy consumption in the future. Between 2003–04 and 2029–30, energy in the residential sector is projected to increase at 1.7% a year to around 650 PJ.[6]

Types of energy used

Electricity was the most widely used source of energy in Australian households in 2005. Almost every household (99%) used electricity for some purpose. Just less than half (49%) of the energy consumed by households in 2003–04 was from electricity.

Fossil fuels (coal, natural gas, oil) are used to generate approximately 92% of electricity in Australia. Most electricity (78%) in Australia is generated by coal (both black and brown), and burning coal is the most emissions-intensive form of electricity.[6] Some electricity is available from renewable sources (8%) such as wind-generated and hydro-electricity plants. Consumers can purchase electricity from renewable sources through the Green Power Scheme.[7]

Gas was the second most important source of energy used in Australian households in 2005. Natural gas is considered to be environmentally preferable to electricity, producing about one-third the greenhouse gas emissions compared with conventional electricity.[7] Fifty-eight percent of households in 2005 used gas for some purpose. In 2003–04, gas accounted for 31% of total household energy consumption.

Despite being one of the cleanest sources of energy, solar energy was used in less than 5% of Australian households in 2005. Solar energy is renewable and produces very few greenhouse gas emissions when operating.[7]

Residential energy consumption

	1983–84	*1993–94*	*2003–04*	*2029–30(a)*
Energy source	%	%	%	%
Electricity	42.6	42.4	48.7	50.8
Natural gas	23.9	28.3	31.2	33.7
Wood(b)	25.1	23.7	15.9	10.4
Heating oil	2.5	1.1	0.0	0.0
Solar energy	0.7	0.7	0.6	0.7
LPG	2.1	2.6	2.7	3.2
Other(c)	3.0	1.1	1.0	1.2
Total	**100.0**	**100.0**	**100.0**	**100.0**
	PJ	PJ	PJ	PJ
Total	**276.0**	**344.4**	**420.8**	**650.8**
	GJ/person	GJ/person	GJ/person	GJ/person
Total	**17.7**	**19.3**	**20.9**	**26.3**

(a) Projected consumption.
(b) Includes bagasse[5] and woodwaste.
(c) Mainly coal and petroleum products.

Source: ABARE, Australian Energy, national and state projections to 2029–30, 2005; ABARE electronic datasets.

Green Power

Households can choose to source a proportion of their energy from renewable energy sources like wind, solar and hydro-power. This option is called Green Power, and consumers pay a premium for electricity generated from these sources. The more energy that households use from these sources, the less greenhouse gases will be emitted. Currently, Green Power products are available in all states and territories except Tasmania and the Northern Territory. However, electricity generated in Tasmania is mainly sourced from hydro-electricity.

Awareness of Green Power schemes varies across states, with the highest level (49%) recorded in the Australian Capital Territory and lowest (19%) in Western Australia. Overall awareness of the scheme increased in Victoria and South Australia between 1999 and 2005 – in Victoria, tripling from 12% to 38%. However, just under a quarter (23%) of households in all states, except Tasmania and the Northern Territory, not already attached to a scheme were willing to support Green Power by paying extra in their energy bill, a slight decrease from 2002 (26%).

Making life comfortable

Energy is essential for household comfort. However, the source of that energy is important in assessing greenhouse efficiency. Despite new homes becoming more energy efficient, Australians are using more energy per person in the home. This may be partly due to an increase in the number, type and use of electrical appliances in households. Some household items, such as dishwashers and airconditioners, which may have once been seen as luxuries, have become more common in Australian homes.

...white goods and electrical appliances

White goods and electrical appliances account for 30% of total energy consumption and the greatest proportion of household greenhouse gas emissions (53%).[9] Most white goods and household appliances use electricity.

Use of energy in the household by purpose and related greenhouse gas emissions — 2005

	Energy use	*Emissions*
	%	%
Appliances(a)	30.0	53.0
Heating water	27.0	28.0
Cooking	4.0	6.0
Heating and cooling	39.0	14.0
Total	**100.0**	**100.0**

(a) Includes lighting.

Source: Australian Greenhouse Office 2005, *Your Home Technical Manual*.

Consequently, the number, type, frequency ofuse and energy efficiency of white goods and appliances in the home impacts significantly on the energy consumed and emissions produced.

In 2005, almost every household owned at least one fridge, television and vacuum cleaner. The number of households with two or more fridges in use increased from 24% to 33% between 1994 and 2005. In 2005, 42% of households had a dishwasher, an increase from 25% in 1994. The proportion of households with computers increased from 45% in 1999 to 68% in 2005.

As white goods and other appliances account for most household greenhouse gas emissions, people's decisions about purchase and use of these items is important. The introduction of energy ratings and labelling has helped consumers in their decisions. However, the reason people buy certain brands and sizes of appliances usually relates to the initial capital cost of the item and the long term decrease in cost of energy bills, rather than the reduction in environmental cost.[10]

Households with selected white goods and appliances(a)

	1994(b)	*1999*	*2002*	*2005*
Household item	%	%	%	%
Refrigerator	99.7	99.7	99.9	99.9
Washing machine	94.2	94.7	95.2	96.4
Clothes dryer	51.7	53.0	55.4	55.1
Separate freezer	44.9	40.1	38.0	36.9
Dishwasher	25.1	30.1	34.7	41.5
Television(c)	n.a.	98.9	99.2	98.5
Vacuum cleaner(c)	n.a.	95.2	95.5	95.2
Microwave(c)	n.a.	82.9	87.3	90.6
Computer(c)	n.a.	44.8	59.8	67.8

(a) As a proportion of all households.
(b) Data for 1994 is June 1994. All other periods are March of that year.
(c) No data available for 1994.

Source: Environmental Issues: People's Views and Practices, March 2005 (ABS cat. no. 4602.0).

Indirect energy consumption

In 2003–04, direct, or final consumption of energy by households was 420 petajoules (13%) of total final energy consumption.[6] In addition to this direct consumption, household demand for products and services contributes indirectly to energy consumption, as energy is used in their manufacture and supply.

When fossil fuels like coal are burned, as part of the combustion process to convert fuel to electricity, the chemical reaction forms carbon dioxide. Carbon dioxide is the main greenhouse gas responsible for the enhanced greenhouse effect. Therefore this 'combusted' energy is a good measure for greenhouse gas emissions and is used to look at how much different sectors of the economy contribute to greenhouse gas emissions.

In 1994–95, 53% of energy combusted in Australia was due to household consumption. This comprised both energy used within the household (direct from the meter) and energy used via the household consumption and manufacturing of domestically produced goods and services (indirect).[11]

...water heating and cooking

Water heating accounts for 27% of household energy consumption, and is the second largest source of household greenhouse gas emissions (28%) after the use of white goods and appliances (53%) in the household sector. Solar energy is by far the cleanest source of energy for this purpose, with the capacity to provide up to 90% of a household's hot water requirements, depending on climatic conditions.[7] In 2005, 51% of households used electricity for water heating. In the same year, gas was used in 39% of households and solar in less than 5% of households.

In 2005, over half (54%) of households used electricity for cooking and 39% used gas. Cooking uses a relatively small amount of energy (4% of total household energy consumption), producing less greenhouse gas emissions (6% of total) than most other energy uses in the home. Gas cooktops and ovens produce less than half the emissions than comparable electric units.[7]

...heating and cooling space

In 2005, the proportions of homes using gas and electricity for heating space were similar (33% and 32% respectively). While the proportion of homes using gas for heating has remained constant since 1999, electricity use increased from 28% in the same time period. The amount of pollution produced by

heating a home is dependent on the energy source. Electric systems may produce up to six times more greenhouse emissions than an efficient gas central heating system.[7]

The number of homes with airconditioners increased substantially between 1994 and 2005 from 33% to 60%. Most cooling systems and appliances use electricity, with the type of airconditioner being an important determinant of the amount of electricity needed to cool a home. At their best, in conditions of low humidity, evaporative cooling systems can use one-quarter of the electricity required by a refrigerated system; reducing both household energy costs and greenhouse gas emissions.[12] In 2005, 57% of households had a reverse cycle/heat pump as their main cooler, 22% had an evaporative cooler and 19% had a full refrigerated system.

Building energy efficient homes

Energy used by households varies with climate and lifestyle. One important factor impacting on household energy use is home design and insulation. The material used in the construction of the outside walls of a dwelling greatly influences its thermal properties. For example, brick dwellings can be more energy efficient than fibrocement or timber dwellings in cool temperate environments because of the way brick responds to outside temperature changes.[7]

In 2005, 71% of dwellings across Australia had their walls constructed with double brick or brick veneer, 13% from timber and 6% from fibrocement. Between 1999 and 2005, the proportion of brick dwellings increased from 68% to 71%, whereas the proportion of timber and fibrocement dwellings decreased from 15% to 13% for timber and from 8% to 6% for fibrocement.

Many new homes are now built to maximise the passive use of solar energy. For example, large windows on the north side of the house let the sunshine in during winter, but can be shaded from the summer sun.[7] The effect of the orientation of a dwelling is often reflected in the household energy bill.

Adequately insulated ceilings, walls and even floors can greatly reduce energy consumption, and therefore greenhouse gas emissions. The number of dwellings with insulation increased from 52% in 1994 to 61% in 2005.

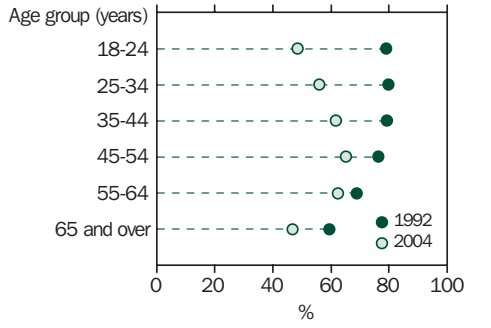
In 1999, the Ministerial Council on Greenhouse and the building sector agreed upon a comprehensive strategy to make Australia's buildings more energy efficient.[13] Energy provisions were introduced into the Building Code of Australia to reduce greenhouse gas emissions. They aimed to reduce residential energy consumption and increase thermal comfort by encouraging improved building design. The strategy defined an acceptable minimum level of energy efficiency for new buildings and the House Energy Rating Scheme, which in many areas are a mandatory part of the development approval process.[7,13]

Environmental attitudes

In a range of surveys and past research conducted as part of The National Greenhouse Strategy, the environment has emerged as an issue of concern for large numbers of Australians. However, although people agree more can be done to help protect the environment, evidence suggests that adoption of environmentally friendly behaviours is greatest where it is convenient and where it does not require large investments of time or money. Also, it is possible that people may become complacent, feeling that they are "doing their bit" if they recycle, use unleaded petrol and buy the occasional energy efficient appliance. This complacency may be a barrier to further modifications of behaviour.[10]

Households were surveyed on their attitudes to environmental issues and concern every 2–3 years between 1992 and 2004. In 2004, of all Australians aged 18 years and over, 57% stated they were concerned about environmental problems. The level of concern had decreased considerably since 1992, when three-quarters (75%) of Australians stated they had environmental concerns. The greatest falls in concern were in the younger age groups, such as the 18–24 years group where concern fell from 79% in 1992 to 49% in 2004. Of the 57% of people concerned about environmental problems, only 13% formally registered concern (through writing a letter, telephoning, participating in demonstrations,

Environmental concern by age(a)



(a) As a proportion of people in each age group.

Source: Environmental Issues: People's Views and Practices, March 2004 (ABS cat. no. 4602.0).

signing a petition or by some other means) and 29% donated time or money to help protect the environment.

Energy conservation in the home sometimes requires significant changes in behaviour. People generally understand that there are personal financial benefits from conserving energy in the home, but these benefits are sometimes outweighed by a desire to maintain quality of life and to save money in the short term. First home buyers, for example, often do not have the resources to invest in more expensive, energy efficient appliances, insulation or quality window coverings. Second and third home-buyers, however, are usually in a better position to consider more options when selecting or replacing major appliances and for house design.[10] In 2005, 43% of households said they considered cost to be the main factor when buying a new white good, 44% nominated the energy star rating as a main consideration, and only 11% of households stated an environmental factor as their main consideration. Many households with insulation said their main reason for installing it was to achieve comfort (83%), rather than to save on energy bills (10%) or use less energy (4%).

Endnotes

1 Department of Prime Minister and Cabinet 2004, *Securing Australia's Energy Future*, viewed 21 February 2006, <http://www.pmc.gov.au/energy_future>.

2 Department of the Environment and Heritage, Australian Greenhouse Office 2006, *National Greenhouse Gas Inventory 2004*, AGO, Canberra.

3 International Energy Agency 2005, *Key World Energy Statistics, 2005 edition,* IEA, France.

4 Department of Environment and Heritage and the Australian Greenhouse Office 2005, *Tracking to the Kyoto Target: Australia's Greenhouse Emissions Trends 1990 to 2008–2012 and 2020,* DEH, Canberra.

5 *State and Territory Greenhouse Gas Emissions – an overview*, viewed 24 March 2006, <http://www.greenhouse.gov.au/inventory/stateinv/pubs/stateoverview.pdf>.

6 Akmal, M, Riwoe, D *2005, Australian Energy, national and state projections to 2029–30*, Australian Bureau of Agricultural and Resource Economics, Canberra.

7 Australian Greenhouse Office 2005, *Your Home Technical Manual,* viewed 13 December 2005, <http://www.greenhouse.gov.au/technical/>.

8 Australian Bureau of Statistics 2005, *Population Projections Australia Series B, 2004–2101*, cat. no. 3222.0, ABS, Canberra.

9 Australian Greenhouse Office, *History of the labelling program in Australia*, viewed 19 December 2005, <http://www.energyrating.gov.au/history.html>.

10 The Department of Environment and Heritage and the Australian Greenhouse Office, *NGS Communications Strategy: Review of past research 26/07/2000*. viewed 19 December 2005, <http://www.greenhouse.gov.au/government/ngs/community-awareness/pubs/literature.pdf>.

11 Australian Bureau of Statistics 2001, *Energy and Greenhouse Gas Emissions Accounts 1992–93 to 1997–98*, cat. no. 4604.0, ABS, Canberra.

12 Government of South Australia, *Take the Heat out of Home Cooling*, viewed 19 December 2005, <http://www.sustainable.energy.sa.gov.au/pages/advisory/residential/energy_use/cooling/pdf/homecooling_web.pdf>.

13 CSIRO Division of Building, Construction and Engineering for the Australian Greenhouse Office, 1999, *Scoping Study of Minimum Energy Performance Requirements for Incorporation into the Building Code of Australia,* viewed 21 February 2005, <http://www.greenhouse.gov.au/buildings/publications/s_study.html.>.

International comparisons

Caution

Statistics presented in this chapter have been reproduced from international statistical compendia. National statistical systems differ from country to country and therefore caution should be exercised when comparing international data. Source publications may differ in their classification of China, specifically in regards to the inclusion or exclusion of Hong Kong, Macau and Taiwan. Details of national differences and country classifications can be found in the country specific notes in the source publications.

Population composition(a)

Country	Reference year	Total population '000	0–14 years %	15–59 years %	60 years and over %
Australia	**2005**	**20 155**	**19.6**	**63.0**	**17.3**
Canada	2005	32 268	17.6	64.5	17.9
China	2005	1 315 844	21.4	67.7	10.9
France	2005	60 496	18.2	60.7	21.1
Greece	2005	11 120	14.3	62.7	23.0
Hong Kong (SAR of China)	2005	7 041	14.5	70.2	15.4
Indonesia	2005	222 781	28.3	63.3	8.4
Italy	2005	58 093	14.0	60.4	25.6
Japan	2005	128 085	14.0	59.7	26.3
Korea (Republic of)	2005	47 817	18.5	67.7	13.7
Malaysia	2005	25 347	32.4	60.6	7.0
New Zealand	2005	4 028	21.3	61.9	16.7
Papua New Guinea	2005	5 887	40.2	55.8	3.9
Singapore	2005	4 326	19.5	68.2	12.2
Sweden	2005	9 041	17.5	59.2	23.4
United Kingdom	2005	59 668	17.9	60.9	21.2
United States of America	2005	298 213	20.7	62.5	16.7
Viet Nam	2005	84 238	29.6	63.0	7.5

(a) Medium variant projection.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision* and *World Urbanization Prospects: The 2003 Revision*, last viewed 16 May 2006, <http://esa.un.org/unpp/>.

Population growth(a)

Country	Reference year	Annual average growth rate(b) %	Crude birth rate(c) rate	Crude death rate(c) rate	Total fertility rate rate
Australia	**2005–2010**	**1.0**	**12.3**	**7.0**	**1.8**
Canada	2005–2010	0.9	9.9	7.4	1.5
China	2005–2010	0.6	13.2	7.1	1.7
France	2005–2010	0.3	12.0	9.6	1.9
Greece	2005–2010	0.2	8.9	10.5	1.3
Hong Kong (SAR of China)	2005–2010	1.0	8.0	5.9	1.0
Indonesia	2005–2010	1.1	19.2	7.1	2.2
Italy	2005–2010	—	8.9	10.6	1.4
Japan	2005–2010	0.1	8.9	8.8	1.4
Korea (Republic of)	2005–2010	0.3	9.3	6.0	1.2
Malaysia	2005–2010	1.7	20.4	4.7	2.6
New Zealand	2005–2010	0.7	13.2	7.4	2.0
Papua New Guinea	2005–2010	1.8	27.8	9.6	3.6
Singapore	2005–2010	1.2	8.4	5.5	1.3
Sweden	2005–2010	0.3	10.7	10.1	1.7
United Kingdom	2005–2010	0.3	10.9	10.2	1.7
United States of America	2005–2010	0.9	13.9	8.4	2.0
Viet Nam	2005–2010	1.3	18.9	5.8	2.1

(a) Medium variant projection.
(b) Data is the average exponential rate of growth.
(c) Per 1,000 population.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision* and *World Urbanization Prospects: The 2003 Revision*, last viewed 17 May 2006, <http://esa.un.org/unpp/>.

Population projections(a)

	Population			Median age			0–14 years			65 years and over		
	2005	2020	2050	2005	2020	2050	2005	2020	2050	2005	2020	2050
Country	million	million	million	years	years	years	%	%	%	%	%	%
Australia(b)	**20.2**	**23.3**	**27.9**	**36.6**	**39.8**	**43.6**	**19.6**	**17.6**	**16.2**	**12.7**	**17.2**	**23.8**
Canada	32.3	36.4	42.8	38.6	42.2	45.2	17.6	15.2	15.7	13.1	18.4	25.6
China	1 315.8	1 423.9	1 392.3	32.6	37.9	44.8	21.4	18.4	15.7	7.6	11.9	23.6
France	60.5	63.0	63.1	39.3	42.5	45.5	18.2	17.0	15.7	16.6	20.8	27.1
Greece	11.1	11.2	10.7	39.7	44.8	49.3	14.3	13.1	13.7	18.2	20.2	30.2
Hong Kong (SAR of China)	7.0	8.1	9.2	38.9	45.0	51.0	14.4	12.4	12.4	12.0	17.4	32.3
Indonesia	222.8	255.9	284.6	26.5	31.8	40.5	28.3	23.1	17.6	5.5	7.3	17.4
Italy	58.1	57.1	50.9	42.3	48.6	52.5	14.0	12.5	13.1	20.0	24.5	35.5
Japan	128.1	126.7	112.2	42.9	48.0	52.3	14.0	12.9	13.4	19.7	28.1	35.9
Korea (Republic of)	47.8	49.4	44.6	35.1	43.3	53.9	18.6	13.2	12.0	9.4	15.6	34.5
Malaysia	25.3	31.5	38.9	24.7	29.3	39.3	32.4	25.2	18.2	4.6	7.4	16.1
New Zealand	4.0	4.4	4.8	35.8	38.6	44.0	21.3	18.3	16.0	12.3	16.8	23.6
Papua New Guinea	5.9	7.6	10.6	19.7	23.8	32.1	40.3	31.8	22.9	2.4	3.1	7.9
Singapore	4.3	5.0	5.2	37.5	45.3	52.1	19.5	12.7	12.6	8.5	17.5	31.3
Sweden	9.0	9.5	10.1	40.1	42.4	43.9	17.5	16.7	16.1	17.2	21.4	24.7
United Kingdom	59.7	62.5	67.1	39.0	41.2	42.9	17.9	16.5	16.4	16.0	18.8	23.2
United States of America	298.2	338.4	395.0	36.1	37.6	41.1	20.8	19.2	17.3	12.3	15.8	20.6
Viet Nam	84.2	99.9	116.7	24.9	31.2	41.3	29.5	23.5	17.4	5.4	6.7	18.6

(a) Medium variant projection.
(b) United Nations projections for Australia may not agree with ABS projections owing to differences in assumptions and methodology.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision* and *World Urbanization Prospects: The 2003 Revision,* last viewed 16 May 2006, <http://esa.un.org/unpp/>.

Life expectancy

Country	Reference year	Infant mortality rate(a)(b)	Life expectancy at birth(b)		Reference year	Healthy life expectancy at birth(c)	
			Males	Females		Males	Females
		rate	years	years		years	years
Australia	**2005–2010**	**5**	**78.5**	**83.4**	**2002**	**70.9**	**74.3**
Canada	2005–2010	5	78.2	83.1	2002	70.1	74.0
China	2005–2010	31	70.8	74.6	2002	63.1	65.2
France	2005–2010	4	76.6	83.5	2002	69.3	74.7
Greece	2005–2010	6	76.1	81.3	2002	69.1	72.9
Hong Kong (SAR of China)	2005–2010	4	79.3	85.1	..	n.a.	n.a.
Indonesia	2005–2010	34	67.0	70.5	2002	57.4	58.9
Italy	2005–2010	5	77.5	83.6	2002	70.7	74.7
Japan	2005–2010	3	79.1	86.4	2002	72.3	77.7
Korea (Republic of)	2005–2010	4	74.5	81.9	2002	64.8	70.8
Malaysia	2005–2010	9	71.9	76.5	2002	61.6	64.8
New Zealand	2005–2010	5	77.7	82.0	2002	69.5	72.2
Papua New Guinea	2005–2010	64	56.6	57.8	2002	51.4	52.4
Singapore	2005–2010	3	77.6	81.3	2002	68.8	71.3
Sweden	2005–2010	3	78.6	83.0	2002	71.9	74.8
United Kingdom	2005–2010	5	76.7	81.2	2002	69.1	72.1
United States of America	2005–2010	7	75.2	80.6	2002	67.2	71.3
Viet Nam	2005–2010	26	69.9	73.9	2002	59.8	62.9

(a) Per 1,000 live births.
(b) Medium variant projection.
(c) Healthy life expectancy is based on life expectancy, but indicates an adjustment for time spent in poor health. This indicator measures the equivalent number of years in full health that a newborn child can expect to live based on current mortality rates and prevalence distribution of health states in the population.

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2004 Revision*, last viewed 17 May 2006, <http://esa.un.org/unpp/>; The World Health Organization, *The World Health Report 2004: Changing History*, last viewed 23 May 2006, <http://www.who.int/whr/2004/annex/topic/annex4.xls>.

Health services and expenditure

Country	Reference year	Health expenditure as % of GDP	Health expenditure per capita(a)	Reference year	Doctors per 1,000 population	Reference year	Acute hospital beds per 1,000 population
		%	$US '000		no.		no.
Australia	**2003**	**9.5**	**2.9**	**2003**	**2.5**	**2003**	**3.6**
Canada	2003	9.9	3.0	2003	2.1	2003	3.2
China	2003	5.6	0.3	..	n.a.	..	n.a.
France	2003	10.1	2.9	2003	3.4	2003	3.8
Greece	2003	9.9	2.0	2003	4.4	..	n.a.
Hong Kong (SAR of China)	..	n.a.	n.a.	..	n.a.	..	n.a.
Indonesia	2003	3.1	0.1	..	n.a.	..	n.a.
Italy	2003	8.4	2.3	2003	4.1	2003	3.9
Japan	2003	7.9	2.2	2003	2.0	2003	8.5
Korea (Republic of)	2003	5.6	1.1	2003	1.6	2003	5.9
Malaysia	2003	3.8	0.4	..	n.a.	..	n.a.
New Zealand	2003	8.1	1.9	2003	2.2	..	n.a.
Papua New Guinea	2003	3.4	0.1	..	n.a.	..	n.a.
Singapore	2003	4.5	1.2	..	n.a.	..	n.a.
Sweden	2003	9.4	2.7	2003	3.3	2003	2.4
United Kingdom	2003	8.0	2.4	2003	2.2	2003	3.7
United States of America	2003	15.2	5.7	2003	2.3	2003	2.8
Viet Nam	2003	5.4	0.2	..	n.a.	..	n.a.

(a) The per capita values are presented in international dollar estimates (using US dollars), derived by dividing each country's health expenditure by an estimate of its purchasing power parity (PPP) compared with US dollars, i.e. a rate or measure that minimises the consequences of differences in price levels existing between countries.

Source: The World Health Organisation 2006, *The World Health Report 2006: Working together for health*, last viewed 17 May 2006, <www.who.int/whr/2006/annex/06_annex2_en.pdf>, <www.who.int/whr/2006/annex/06_annex3_en.pdf>; Organisation for Economic Co-operation and Development 2004, *OECD Health Data 2004: A comparative analysis of 30 countries,* last viewed 23 May 2006, <http://ocde.p4.siteinternet.com/publications/doifiles/012005061T002.xls>.

Distribution of persons aged 25–64 years by level of educational attainment

Country	Reference year	Below upper secondary education(a)	Upper secondary education and post-secondary non-tertiary education(b)	Tertiary type B education(c)	Tertiary type A and advanced research programs(d)	Total(e)
		%	%	%	%	%
Australia	**2003**	**38**	**31**	**11**	**20**	**100**
Canada	2003	17	40	22	22	100
China	..	n.a.	n.a.	n.a.	n.a.	n.a.
France	2003	36	41	9	15	100
Greece	2003	47	36	6	12	100
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	..	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	2003	53	36	(f)	10	100
Japan	2003	16	47	17	21	100
Korea (Republic of)	2003	27	44	8	22	100
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2003	22	46	15	17	100
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	100
Singapore	..	n.a.	n.a.	n.a.	n.a.	100
Sweden	2003	17	49	15	18	100
United Kingdom	2003	16	56	9	19	100
United States of America	2003	13	49	9	29	100
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.

(a) International Standard Classification of Education (ISCED) levels 0, 1 and 2. For Australia this includes Preschool, Primary School and lower Secondary School levels as well as the Basic Vocational level.
(b) International Standard Classification of Education (ISCED) levels 3 and 4. For Australia this includes Year 12 completion as well as the Skilled Vocational level.
(c) International Standard Classification of Education (ISCED) level 5B. For Australia this includes Associate Diplomas and Undergraduate Diplomas.
(d) International Standard Classification of Education (ISCED) levels 5A and 6. For Australia this includes Bachelor degree level or higher.
(e) Component totals when added may not equal 100% due to rounding.
(f) Data included in Tertiary Type A and advanced research programs.

Source: Organisation for Economic Co-operation and Development 2005, *Education at a Glance*: *OECD Indicators, 2005,* OECD, Paris, last viewed 23 May 2006, <http://www.oecd.org/dataoecd/22/35/35282639.xls>.

Educational participation(a) and expenditure

Country	Reference year(b)	Enrolment rates by age group (years) 15–19 %	20–29 %	30–39 %	40 and over %	Reference year(b)	Total public expenditure as a proportion of GDP(c) %	Total public and private expenditure as a proportion of GDP(d) %
Australia	**2003**	**82.1**	**33.4**	**15.1**	**6.8**	**2002**	**4.4**	**6.0**
Canada	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
China	2003	13.7	n.a.	n.a.	n.a.	..	n.a.	n.a.
France	2003	87.2	20.4	2.4	n.a.	2002	5.7	6.1
Greece	2003	82.6	25.8	0.5	—	2002	3.9	4.1
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Indonesia	2003	51.5	3.9	—	—	2002	1.2	1.9
Italy	2003	77.8	19.3	2.7	—	2002	4.6	4.9
Japan	..	n.a.	n.a.	n.a.	n.a.	2002	3.5	4.7
Korea (Republic of)	2003	81.7	27.3	1.9	0.4	2002	4.2	7.1
Malaysia	2003	56.0	8.4	1.2	0.2	2002	8.1	n.a.
New Zealand	2003	67	28.7	11.3	4.5	2002	5.6	6.8
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.
Sweden	2003	86.8	34.5	13.6	3.4	2002	6.7	6.9
United Kingdom	2003	75.9	26.3	15.7	7.8	2002	5.0	5.9
United States of America	2003	75.4	22.2	5.9	1.7	2002	5.3	7.2
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	..	n.a.	n.a.

(a) Participation rates are based on full-time and part-time enrolments.
(b) 1 January of the reference year is considered a good proxy for the midpoint of the school year except for New Zealand, Australia and Korea where 1 July is used as the midpoint of the reference period.
(c) Includes both purchases by the government agency itself on educational resources and also appropriations by the government agency to educational institutions which have been given responsibility to purchase educational resources themselves. Also includes public subsidies to households attributable for educational institutions, and direct expenditure on educational institutions from international sources.
(d) Public expenditure refers to the spending of public authorities at all levels. Private expenditure refers to expenditure funded by private sources i.e. households, private business firms and nonprofit organisations of religious, charitable or business and labour associations.

Source: Organisation for Economic Co-operation and Development 2005, *Education at a Glance: OECD Indicators, 2005,* OECD, Paris, last viewed 23 May 2006, <http://www.oecd.org/dataoecd/1/29/35286589.xls>, <http://www.oecd.org/dataoecd/2/11/35286380.xls>.

Student performance on combined reading, mathematical and scientific literacy scales(a)

		Combined reading literacy		Mathematical literacy		Scientific literacy	
	Reference year	Males	Females	Males	Females	Males	Females
Country		Mean score	Mean score	Mean score	Mean score	Mean score	Mean score
Australia	**2003**	**506**	**545**	**527**	**522**	**525**	**525**
Canada	2003	514	546	541	530	527	516
China	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	2003	476	514	515	507	511	511
Greece	2003	453	490	455	436	487	475
Hong Kong (SAR of China)	2003	494	525	552	548	538	541
Indonesia	2003	369	394	362	358	396	394
Italy	2003	455	495	475	457	490	484
Japan	2003	487	509	539	530	550	546
Korea (Republic of)	2003	525	547	552	528	546	527
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2003	508	535	531	516	529	513
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	2003	496	533	512	506	509	504
United Kingdom	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	2003	479	511	486	480	494	489
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) A scaling method assigns scores so that 500 is the OECD average in each domain.

Source: Organisation for Economic Co-operation and Development 2004, *Learning for tomorrow's world : First results from PISA 2003*, last viewed 23 May 2006, <http://www.pisa.oecd.org/document/5/0,2340,en_32252351_32236173_33917573_1_1_1_1,00.html>.

Unemployment rate(a)(b) by level of educational attainment and gender of 25–64 year olds

		Below upper secondary education		Upper secondary and post-secondary non-tertiary education		Tertiary non-University education		University education		All levels of education	
	Reference year	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Country(c)		%	%	%	%	%	%	%	%	%	%
Australia	**2003**	**7.5**	**6.5**	**3.6**	**5.7**	**3.9**	**3.9**	**2.9**	**2.2**	**4.6**	**4.9**
Canada	2003	10.9	11.5	6.5	6.6	5.1	5.1	5.5	5.2	6.6	6.3
China	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	2003	11.1	13.5	6.0	9.4	4.3	5.0	6.7	7.5	7.5	9.8
Greece	2003	3.9	10.8	5.8	13.7	4.7	7.5	3.7	7.6	4.6	11.2
Hong Kong (SAR of China)	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	2003	6.8	14.2	4.6	8.8	(d)	(d)	3.6	7.2	5.5	10.5
Japan	2003	8.0	4.6	5.5	5.3	4.8	4.5	3.1	3.3	5.1	4.7
Korea (Republic of)	2003	2.7	1.6	3.5	2.6	4.4	3.2	2.7	2.6	3.2	2.3
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2003	5.0	4.8	2.4	3.5	3.2	4.3	3.5	3.1	3.2	3.8
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Sweden	2003	5.7	6.8	5.5	4.8	5.2	3.3	4.7	2.6	5.3	4.3
United Kingdom	2003	8.5	4.8	4.1	3.5	2.7	1.7	2.7	2.0	4.2	3.2
United States of America	2003	9.5	10.6	6.7	5.4	5.2	3.9	3.2	2.8	5.8	4.8
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Unemployment rate is the number of unemployed persons aged 25–64 years as a percentage of people in the labour force.
(b) Derived from unemployment rate and educational attainment by gender.
(c) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on unemployment rates.
(d) Data for tertiary non-university are included in the University education column.

Source: Organisation for Economic Co-operation and Development 2005, *Education at a Glance:* OECD Indicators, 2005, last viewed 23 May 2006, <http://www.oecd.org/dataoecd/22/35/35282639.xls>, <http://www.oecd.org/dataoecd/22/6/35282844.xls>.

Labour force

Country(d)	Reference year	Economically active population aged 15 years and over (a)(b)(c) '000	Reference year	Participation rate of persons aged 15 years and over: Total %	Males %	Females(b) %
Australia	**2004**	**10 206.9**	**2004**	**62.7**	**70.4**	**55.3**
Canada	2004	17 183.5	2004	67.6	73.3	62.1
China	2003	760 800.0	1990	79.2	85.0	73.0
France	2004	27 447.4	2004	55.4	62.0	49.2
Greece	2003	4 506.9	2004	53.2	65.0	42.2
Hong Kong (SAR of China)	2004	3 529.1	2003	61.4	72.0	51.6
Indonesia	1999	95 793.2	1999	67.9	84.6	51.5
Italy	2003	24 229.0	2004	49.4	61.3	38.3
Japan	2004	66 410.0	2004	60.4	73.4	48.2
Korea (Republic of)	2004	23 417.2	2004	62.0	74.8	49.8
Malaysia	2000	9 616.1	2000	65.5	83.3	46.7
New Zealand	2004	2 099.1	2004	67.0	74.5	59.9
Papua New Guinea	2000	2 257.9	2000	72.5	73.5	71.3
Singapore	2003	2 152.0	2000	68.6	81.1	55.5
Sweden	2004	4 459.0	2004	70.6	73.3	67.9
United Kingdom	2004	29 369.4	2004	62.6	70.1	55.7
United States of America	2004	147 401.0	2004	66.0	73.3	59.2
Viet Nam	..	n.a.	..	n.a.	n.a.	n.a.

(a) "Economically active population are all those persons who during the specified reference period are classified either as employed or as unemployed". Reference: International Labour Office, *Year Book of Labour Statistics, 2003,* p.3.

(b) Participation rates for women are frequently not comparable internationally since, in many countries, relatively large numbers of women assist on farms or in other family enterprises without pay. There are differences between countries in the criteria used to count economically active workers.

(c) For most countries the Economically active populations are aged 15 years and over. However, the age range varies for some countries: Malaysia – 15–64 years; Sweden – 16–64 years; China, UK and USA – 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

(d) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on the labour force.

Source: International Labour Office, *Year Book of Labour Statistics LABORITE*, last viewed 23 May 2006,<http://laborsta.ilo.org/>; International Labour Office, *Key Indicators of the Labour Market 2003*; International Labour Market, 2005, *Key Indicators of the Labour Market,* 4th edn, CD-ROM, International Labour Office, Geneva.

Employment and unemployment

Country (b)	Reference year	Employment (a) '000	Unemployment (a) '000	Unemployment rate(a) %
Australia	**2004**	**9 636.3**	**570.6**	**5.6**
Canada	2004	15 949.7	1 233.7	7.2
China	2002	737 400.0(c)	8 270(c)(d)	4.2
France	2004	24 720.2	2 727.2	9.9
Greece	2003	4103.9	403.0	8.9
Hong Kong (SAR of China)	2004	3 287.6	241.4	6.8
Indonesia	2002	91 647.0	9 132.1	9.1
Italy	2003	22 133.0	2 096.0	8.7
Japan	2004	63 290.0	3 310.0	4.7
Korea (Republic of)	2004	22 557.0	860.0	3.7
Malaysia	2004	9 986.6(d)	369.8	3.6
New Zealand	2004	2017.1	82.0	3.9
Papua New Guinea	2000	n.a.	68.6	2.8
Singapore	2003	2 033.7	116.4	5.4
Sweden	2004	4 213.0	246.0	5.5
United Kingdom	2004	28 008.4	1 361.0	4.6
United States of America	2004	139 252.0	8 149.0	5.5
Viet Nam	2004	42 315.6	926.4	2.1

(a) For most countries the employed and unemployed populations are aged 15 years and over. However, the age range varies for some countries: Malaysia – 15–64 years; Sweden – 16–64 years; UK - Males 16 to 64 years and females 16-59 years; USA – 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.
(b) Care should be taken when comparing these data between countries. In any one year, different countries can be at different stages of the economic cycle which is a major influence on employment and unemployment.
(c) Employment relates to total economy; unemployment relates to urban areas only.
(d) Rate applies for the year 2004.

Source: International Labour Office, *Year Book of Labour Statistics LABORITE*, last viewed 23 May 2006, <http://laborsta.ilo.org/>.

Cumulative topic list

Cumulative topic list

Population

Population characteristics

Population composition

Population distribution

Population growth

Population projections

Family and community

Economic resources

Housing

Housing and lifestyle

Housing arrangements

Housing assistance

Housing costs

Housing stock

Other areas of social concern

Crime and justice

Culture and leisure

Environment

Religion

Transport and communication

FOR MORE INFORMATION . . .

INTERNET	**www.abs.gov.au** the ABS web site is the best place for data from our publications and information about the ABS.
LIBRARY	A range of ABS publications are available from public and tertiary libraries Australia wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.

INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our web site, or purchase a hard copy publication. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

PHONE	1300 135 070
EMAIL	client.services@abs.gov.au
FAX	1300 135 211
POST	Client Services, ABS, GPO Box 796, Sydney NSW 2001

FREE ACCESS TO STATISTICS

All ABS statistics can be downloaded free of charge from the ABS web site.

WEB ADDRESS	www.abs.gov.au

Recommended retail price $55.00

Produced by the
Australian Bureau of Statistics