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# STATISTICAL TRENDS, NSW

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## CONTENTS

	<i>page</i>
Abbreviations .....	2
Preface .....	3

### COMMENTARY

1. Population Growth .....	4
2. Economic Growth .....	6
3. Education .....	10
4. Health .....	12
5. Crime and Justice .....	14
6. Road Deaths .....	16
7. Greenhouse Gas and Energy Usage .....	18

### ADDITIONAL INFORMATION

Glossary .....	20
Data Sources .....	26

## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Allan McLean on Sydney (02) 9268 4795.

## NOTES

### ABBREVIATIONS

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'000	thousand
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ASCO	Australian Standard Classification of Occupations
Aust.	Australia
b	billion (one thousand million)
cat. no.	Catalogue number
CO <sub>2</sub> -e	carbon dioxide equivalent
GDP	gross domestic product
GSP	gross state product
ICD-10	International Classification of Diseases 10th Revision
mL	millilitre
Mt	megatonne
no.	number
NSW	New South Wales
PJ	petajoule
Qld	Queensland
RTA	Roads and Traffic Authority, New South Wales
SA	South Australia
Tas.	Tasmania
TAFE	Technical and Further Education
TFI	total factor income
Vic.	Victoria
WA	Western Australia

Ian Ewing

Regional Director, New South Wales

## PREFACE

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Welcome to the first edition of *Statistical Trends, NSW*.

*Statistical Trends, NSW* provides an annual overview of New South Wales (NSW). The indicators and data reported here are drawn mainly from the Australian Bureau of Statistics (ABS) publication *New South Wales in Focus, 2007* (cat.no.1338.1).

This publication provides a topical analysis across a broad range of economic, social and environmental domains. It does not attempt to give a complete picture of outcomes for NSW – especially as not all data are updated annually. It is deliberately brief, relying on graphical presentation of the components underlying key measures. Readers that wish to further explore data will find *New South Wales in Focus* a good place to start.

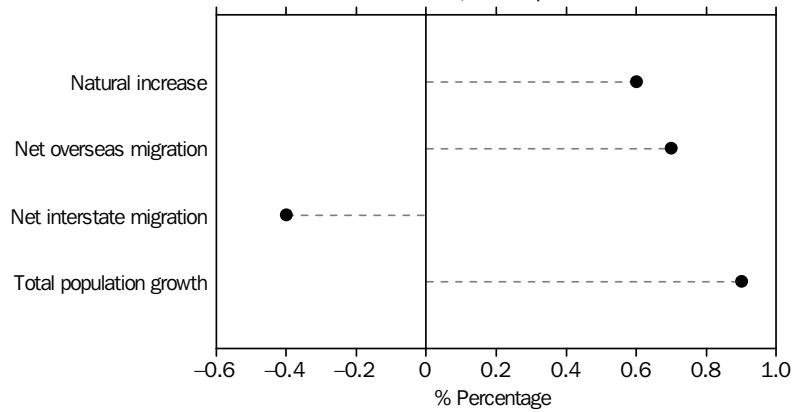
Ian Ewing  
Regional Director, New South Wales

# STATISTICAL TRENDS, NSW

## POPULATION GROWTH

Population growth in Australia's states and territories is drawn from three components – natural increase, overseas migration and interstate migration. In 2006, New South Wales (NSW) population growth (0.9%) was characterised by net gains for natural increase (0.6%) and overseas migration (0.7%), and a net loss (-0.4%) for interstate migration.

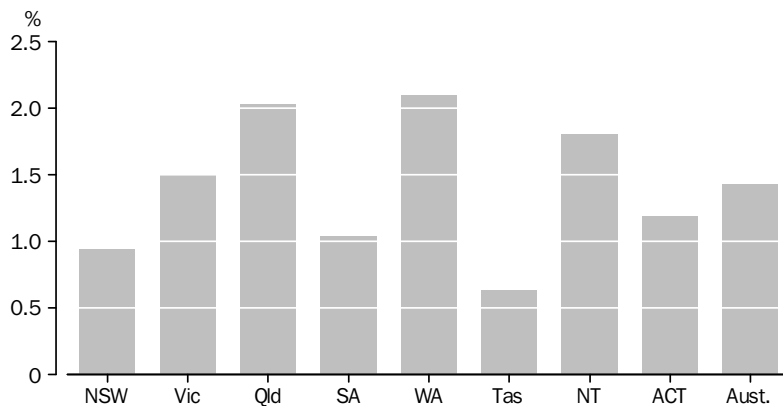
**1** ANNUAL POPULATION CHANGE, Components—2006



Source: Australian Demographic Statistics, December 2006 (ABS cat. no. 3101.0).

Differences in population growth between states and territories are due to differences in these components. For example, in 2006 Victoria (average annual growth of 1.5%) had net gains for natural increase (0.6%) and overseas migration (0.8%), but only recorded a small net loss due to interstate migration (-0.02%). Queensland (annual growth of 2.0%) recorded net gains in all three components.

**2** POPULATION GROWTH, By state/territory—2006

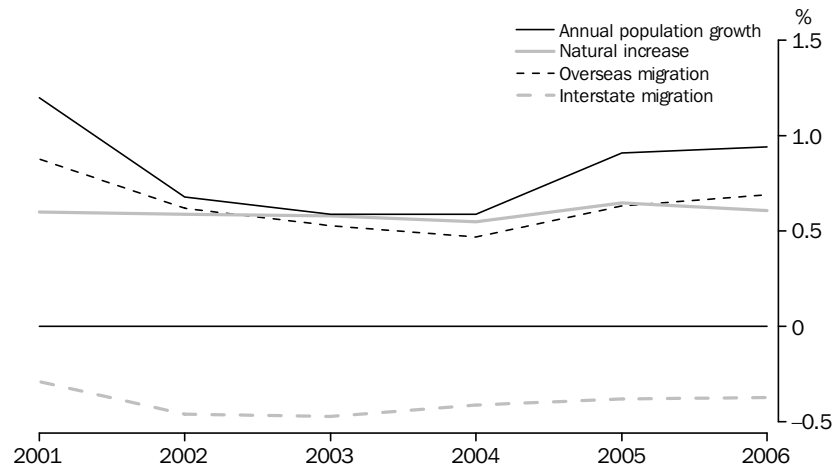


Source: Australian Demographic Statistics, December 2006 (ABS cat. no. 3101.0).

New South Wales annual population growth (1.2% in 2001) declined during the period 2002 to 2004 (0.6% to 0.7%), then rose again in 2005 and 2006, albeit to a lower level than previously (0.9%). The main influences since 2002 have been a combination of lower net overseas migration into NSW and higher net interstate migration from NSW. Natural increase has remained relatively steady throughout this period.

POPULATION GROWTH  
*continued*

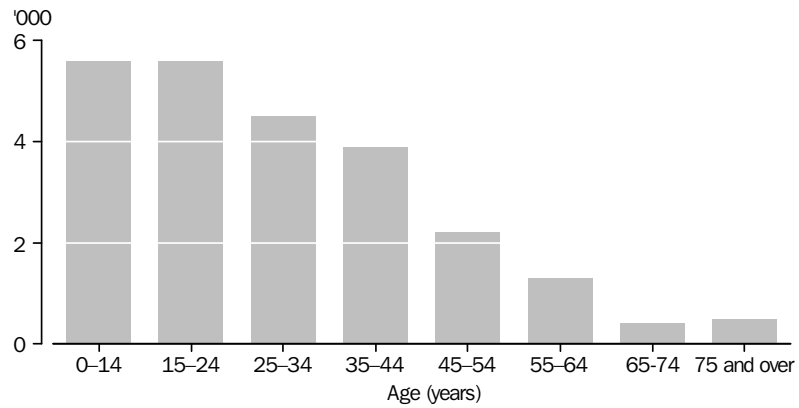
**3** POPULATION GROWTH, Components



Source: Australian Demographic Statistics, December 2006 (ABS cat. no. 3101.0).

The net interstate migration loss in 2005–06 was largely due to a net loss in the younger age groups.

**4** NET INTERSTATE MIGRATION LOSS, By age—2005–06



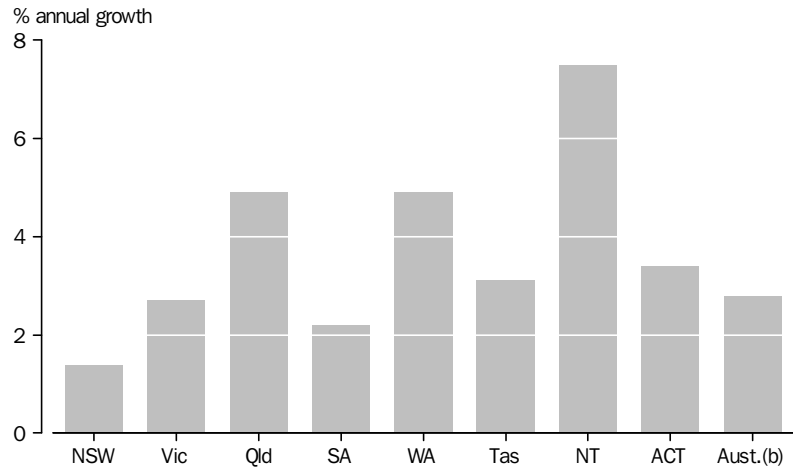
Source: ABS data available on request, Estimated Resident Population Collection.

## STATISTICAL TRENDS, NSW *continued*

### ECONOMIC GROWTH

New South Wales economic growth, as measured by volume estimates of Gross State Product (GSP), was the lowest of all the states and territories in 2004–05 and 2005–06. Over the last five years, NSW economic growth has been lower than Australia's Gross Domestic Product (GDP) by between 0.7 and 2.6 percentage points. New South Wales GSP per capita at \$45,600 is still one of the highest in Australia, however, the gap between Australian GDP per capita and NSW GSP per capita has narrowed over time.

**5** GROSS STATE PRODUCT, Chain volume measures(a)—2005–06

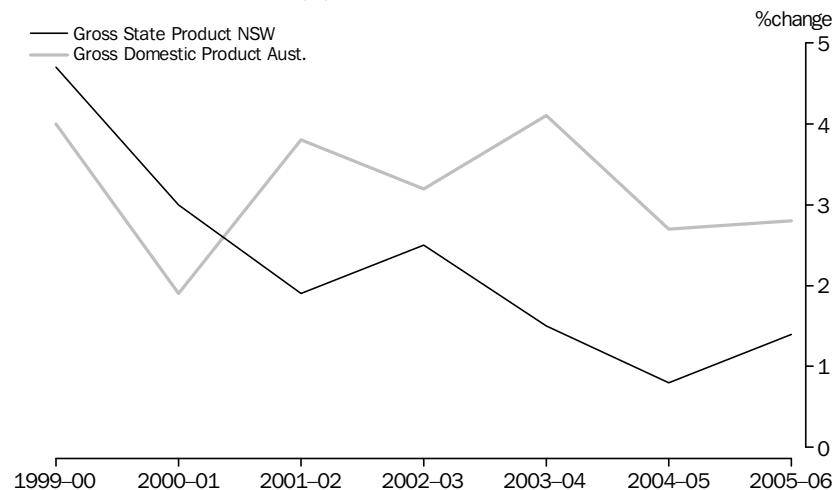


(a) Reference year for chain volume measures is 2004–05.

(b) Gross domestic product.

Source: Australian National Accounts: State Accounts, 2005–06 (ABS cat. no. 5220.0).

**6** GROSS STATE PRODUCT AND GROSS DOMESTIC PRODUCT, Chain volume measures(a)



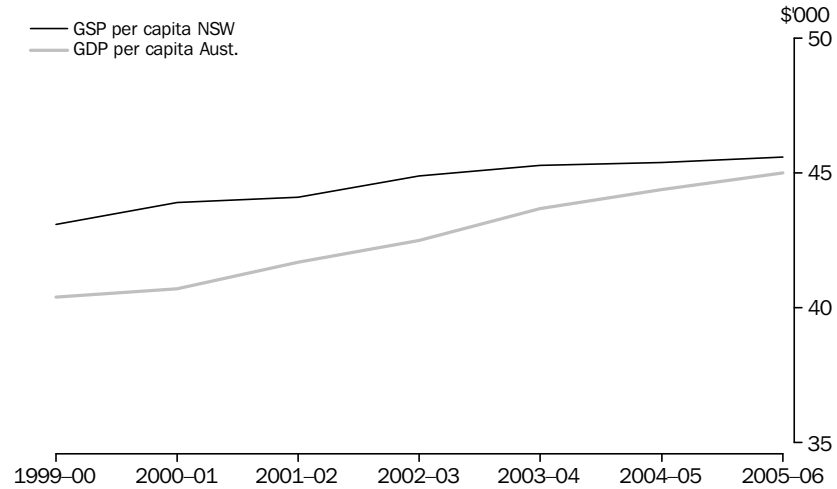
(a) Reference year for chain volume measures is 2004–05.

Source: Australian National Accounts, State Accounts, 2005–06 (ABS cat. no. 5220.0).

# STATISTICAL TRENDS, NSW *continued*

## ECONOMIC GROWTH *continued*

### 7 GROSS STATE PRODUCT, Chain volume measures(a), per capita



(a) Reference year for chain volume measures is 2004-05.

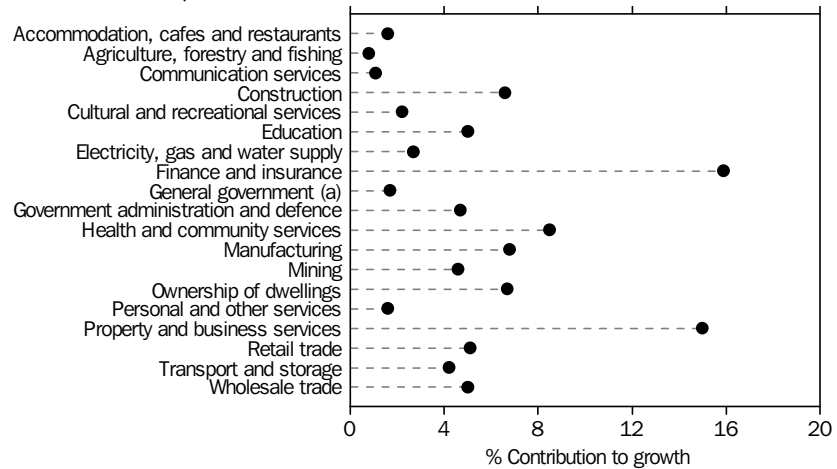
Source: Australian National Accounts, State Accounts, 2005-06 (ABS cat. no. 5220.0).

## Total Factor Income

In understanding economic growth it is useful to look at the contributions of different industries to growth in income. Total Factor Income (TFI) represents the value added by factors of production such as labour and capital. It is equivalent to gross domestic product less taxes plus subsidies on production and imports. In the six years to 2005-06 the TFI of NSW industries grew by \$78.4b (38.5%) to reach \$282b in current price terms.

The Finance and Insurance Services industry (\$12.5b or 15.9%) and Property and Business Services industry (\$11.8b or 15.0%) contributed the most to the total growth in income over the period. Together these industries shared in 31% of NSW TFI growth. Manufacturing, which had a similar level TFI to the Finance and Insurance Services industry in 2005-06, grew by a smaller \$5.3b (6.8%).

### 8 INDUSTRY CONTRIBUTION TO TOTAL FACTOR INCOME GROWTH, Current prices—1999-00 to 2005-06



(a) This item represents the gross operating surplus of all general government operations in all industries for this state.

Source: Australian National Accounts, State Accounts 2005-06 (ABS cat. no. 5220.0).

## STATISTICAL TRENDS, NSW *continued*

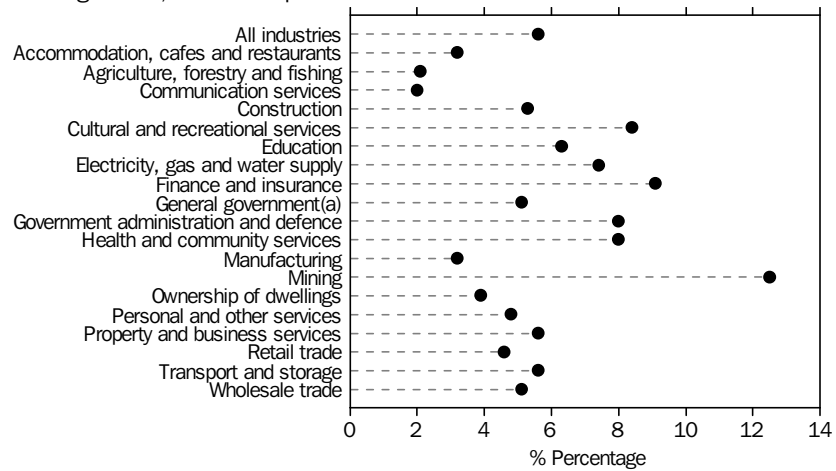
### Total Factor Income *continued*

The growth rates of individual industries, together with their size, underpin the different contributions to overall growth in the NSW economy.

Property and Business Services is the largest industry in NSW and its growth in income matched the industry average of 5.6% annual compound growth in TFI. The Finance and Insurance Services industry grew at a faster rate (9.1% per annum) and because of its size (the third largest industry in NSW) had a significant impact on overall growth in TFI. The Manufacturing industry grew at a slower rate (3.2% per annum) and consequently had a smaller effect on overall TFI growth relative to its size as the second largest industry in NSW.

The Mining industry had the highest average annual growth rate (12.5%) over the period, particularly in the previous two years (31.8% per annum since 2003-04). However, due to its relatively small size in NSW, Mining contributed less significantly to the NSW economy than has been evident in other states such as Western Australia.

**9** TOTAL FACTOR INCOME, By industry, average annual compound growth, current prices—1999-00 to 2005-06



(a) This item represents the gross operating surplus of all general government operations in all industries for this state.

Source: Australian National Accounts, State Accounts, 2005-06 (ABS cat. no. 5220.0).

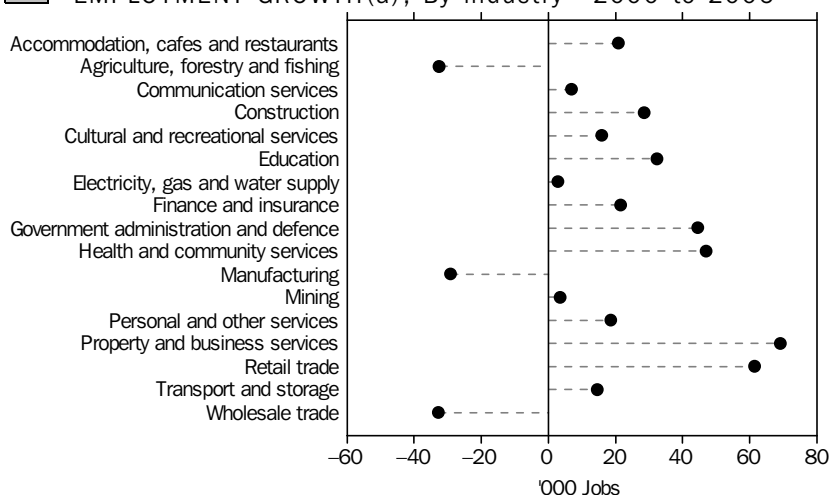


Employment Growth

While the Finance and Insurance sector was a significant contributor to growth in TFI, this was not reflected in employment growth for this sector. The industries that increased employment the most between 2000 and 2006, were Property and Business Services (69,000 jobs) and Retail Trade (61,300).

Wholesale Trade (-32,800 jobs), Agriculture, forestry and fishing (-32,500), and Manufacturing (-29,200) recorded a decline in employment.

**10** EMPLOYMENT GROWTH(a), By industry—2000 to 2006



(a) Year ending May.

Source: Labour Force, Australia, Detailed, Quarterly, May 2007 (ABS cat.no 6291.0.55.003).

Skilled Employment

Between 2000 and 2006 the number of jobs in NSW grew by 262,000 to reach 3.29 million jobs.

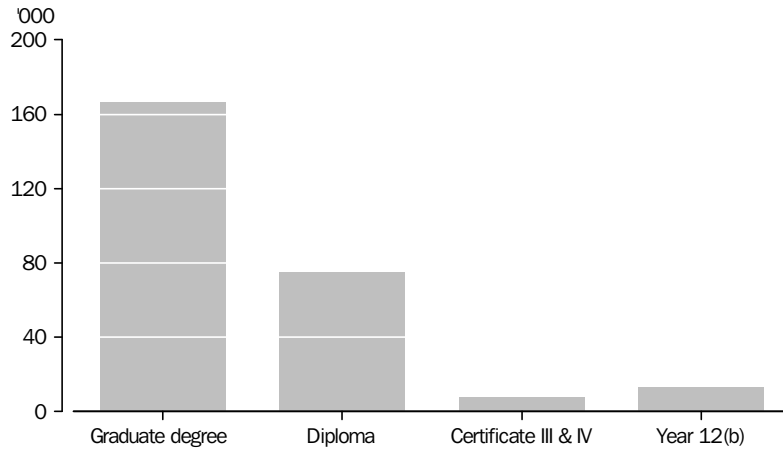
Over 92% of the job growth was for higher skilled occupations (skill levels 1 and 2 of the Australian Standard Classification of Occupations (ASCO)). The skill levels of jobs are determined by a combination of formal qualifications and experience, and relate to the requirement of the position rather than the actual qualifications of the person employed.

During 2000 to 2006, occupations requiring a skill level of ASCO 1 (graduate degree or equivalent experience) showed the largest increase of 166,600 jobs (63% of total jobs growth). Jobs requiring a skill level of ASCO 2 (diploma or equivalent experience) also grew strongly (75,000 jobs or 29% of total jobs growth). The number of jobs requiring skill levels of ASCO levels 3, 4, or 5 (trades qualification equivalent or Certificate III or IV and below) were relatively steady, resulting in a decline in their proportion of the growing job market.

It should be noted that lower jobs growth for particular skill levels does not necessarily reflect a lower demand for these occupations, as some demand may be unmet.

Skilled Employment  
*continued*

**11** GROWTH IN EMPLOYED PERSONS, By occupation skill level(a)—2000 to 2006



(a) Based on the Australian Standard Classification of Occupations. Skill levels are determined by formal qualifications and/or equivalent experience.

(b) Refers to Year 12 or certificate II and below.

Source: *Labour Force Australia, Detailed, Quarterly May 2007* (ABS cat. no. 6291.0.55.003).

EDUCATION

*Schools*

Most of the indicators of school outcomes selected for this report have remained relatively steady since 2000.

The outcomes from student literacy and numeracy tests in Year 5 (students attaining Band level 3 or higher) have remained steady. Of note is the poorer outcome for Indigenous students with results some 13–15% below that of all students. Students with a "non-English speaking background" performed on par with all students.

The attainment of Year 12 or equivalent qualifications by persons aged 20–24 years increased slightly from 81.9% to 83.5% during the period 2000 to 2006.

The proportion of school students in government schools has declined slowly since 2000 to reach 67% in 2006.

## STATISTICAL TRENDS, NSW *continued*

### 12 STUDENT ACHIEVEMENTS AND QUALIFICATIONS

	2000	2001	2002	2003	2004	2005	2006
	%	%	%	%	%	%	%
Year 5 students meeting minimum standard							
Literacy(a)	na	95.5	96.1	95.1	95.4	94.1	na
Numeracy	na	93.6	93.7	94.0	93.6	93.4	na
Indigenous literacy(b)	na	na	na	na	na	79.4	na
Indigenous numeracy(b)	na	na	na	na	na	80.1	na
NESB literacy(c)	na	na	na	na	na	93.9	na
NESB numeracy(c)	na	na	na	na	na	92.9	na
Year 12 qualification and equivalent age 20–24 years(d) (e)	81.9	80.1	81.0	81.5	83.6	82.7	83.5
Students in government schools	69.4	68.7	68.2	67.7	67.2	66.8	66.7

na not available

(a) As tested in the Basic Skills Test (BST). Percentages reflect students achieving the minimum standard of Band 3 or higher. From 2005, the indicator is based on one BST test. Prior to 2005, students were assessed via the BST and the Primary Writing Assessment (PWA). Data for the previous years were created retrospectively by matching students who sat both the BST and the PWA.

(b) Note that the children in these categories are self-identified. Given the age of the children there may be concerns about the accuracy of the identification.

(c) Students from a Non-English Speaking Background (NESB). These are students who answered yes to the question "Does anyone speak a language other than English at home".

(d) This time series is based on the Australian Bureau of Statistics Classification of Qualifications (ABSCQ).

(e) Data as at May.

Source: *Schools, Australia* (ABS cat. no. 4221.0); NSW Department of Education and Training, *Annual Report 2005–06*; ABS data available on request, ABS Survey of Education and Work.

#### Post-School

New South Wales post-school outcomes as measured by the attainment of graduate qualifications have improved since 2000.

The proportion of people aged 25–64 years with a bachelor degree qualification or above increased substantially from 19.8% in 2000 to 25.0% in 2006.

### 13 POST-SCHOOL EDUCATION STUDENTS

		2000	2001	2002	2003	2004	2005	2006
Apprentices and trainees in training(a)	'000	82.9	95.5	110.1	120.8	119.1	119.3	nya
Persons currently enrolled for study								
Aged 20–24 years	%	35.5	38.2	37.5	37.8	39.1	40.4	36.9
Aged 25–64 years	%	7.7	7.9	8.2	8.5	8.3	8.2	7.6
Higher education students - domestic(b)	'000	194.3	197.9	231.7	234.2	229.7	230.7	nya
Overseas higher education students(b)	%	13.0	14.5	20.1	22.0	22.5	22.4	nya
Persons aged 25–64 years with non-school qualifications								
Bachelor degree or above(c)	%	19.8	20.6	21.8	21.8	23.4	24.5	25.0
Advanced diploma, diploma, certificate III and IV	%	na	23.4	25.5	25.5	26.5	24.7	26.4

na not available

nya not yet available

(a) In training as at 30 June.

(b) Data for 2000 and 2001 are first half year data only; data from 2002 are full year data.

(c) Includes Graduate Diploma and Graduate Certificate.

Source: *National Apprentice and Trainee Collection, June 2006*; ABS data available on request, ABS Survey of Education and Work; Department of Education, Science and Training, *Students, 2000–2005: Selected Higher Education Statistics*.

HEALTH

The health sector is well served by statistics and there are many different approaches to judging performance. Looking at the broadest level – life expectancy and death rates – NSW health continued to improve between 2000 and 2005. During the same period, the life expectancy at birth of men improved by 2.1 years to reach 78.5 years, and the death rate for all persons fell from 6.9 to 5.9 per 1000 persons.

**14** LIFE EXPECTANCY AND MORTALITY RATES

		2000	2001	2002	2003	2004	2005
Life expectancy male(a)	years	76.4	76.9	77.3	77.7	78.0	78.5
Life expectancy female(a)	years	81.9	82.4	82.6	82.9	83.3	83.3
Standardised death rate per 1,000 population(b)	rate	6.9	6.6	6.6	6.4	6.3	5.9

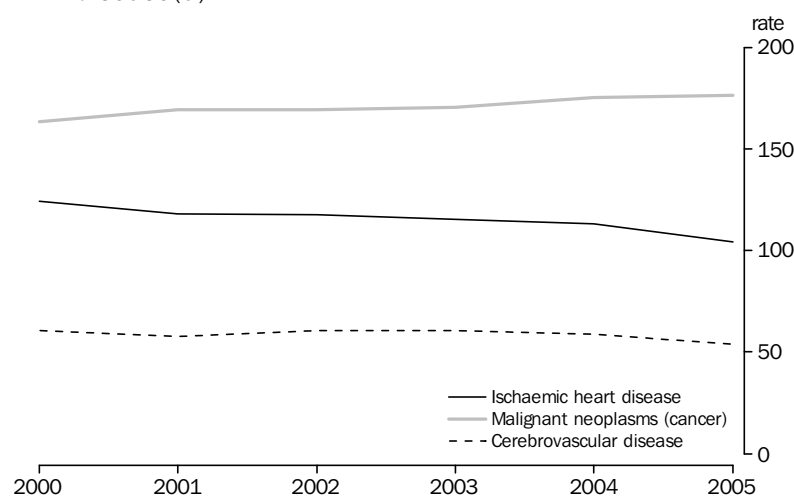
(a) Based on three years of population and deaths data.

(b) Age standardised to the 2001 Australian population.

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

Deaths per 100,000 persons from heart disease and cerebrovascular disease have declined since 2000, however, deaths from cancer have increased from 163 to 177 per 100,000 persons in 2005.

**15** DEATHS PER 100,000, By cancer, heart and cerebrovascular disease(a)



(a) Indirect standardised death rate of the estimated mid-year population.

Source: *ABS data available on request, ABS Causes of Death Collection.*

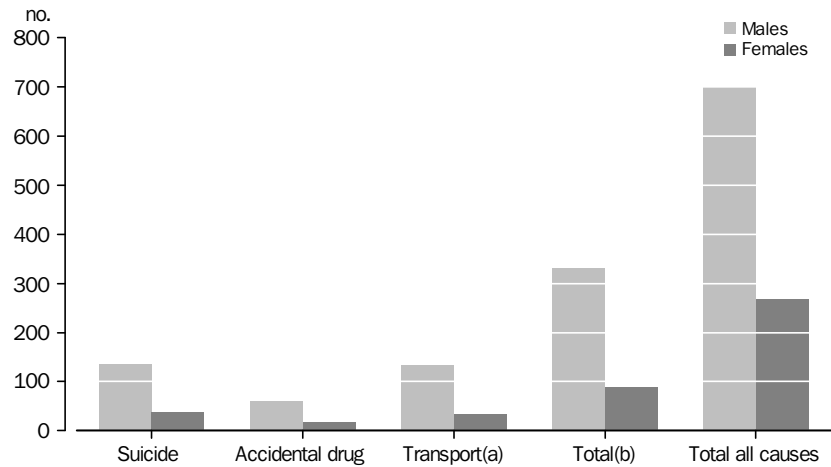
*Deaths of Young People*

One goal of health systems is to reduce preventable deaths – those related to risk behaviours or where earlier medical interventions may have prevented death. In 2005, nearly half of all deaths of young men and a third of young women aged 15–34 years in NSW, were due to suicide, transport accidents or accidental drug overdoses (418 persons).

In 2005, as many young people died from suicide (173 persons) as from transport accidents (167 persons), and four times as many young men (330) died from suicide, transport or drug causes, as young women (88).

Deaths of Young People  
*continued*

**16** SELECTED CAUSES OF DEATH, By persons aged 15–34 years—2005



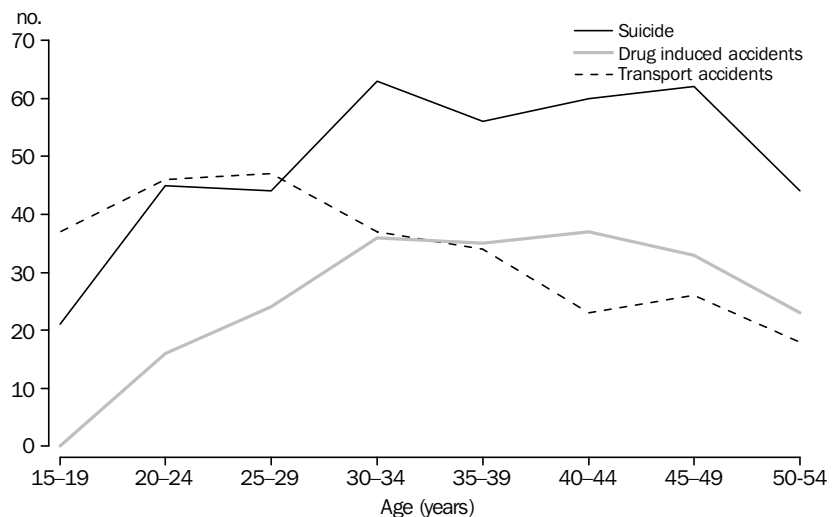
(a) Refers to deaths resulting from transport related accidents.  
(b) Total is made up of all suicide deaths, drug induced deaths and transport related accidents.

Source: ABS data available on request, ABS Causes of Death Collection.

In 2005, the number of deaths from transport accidents were highest between the ages 20 and 29 years.

Deaths from suicide and accidental drug overdose were highest between the ages 30 and 49 years. At these ages more people die from either suicide or accidental drug overdose than from a transport fatality.

**17** SELECTED CAUSES OF DEATH, By persons aged 15-54 years—2005



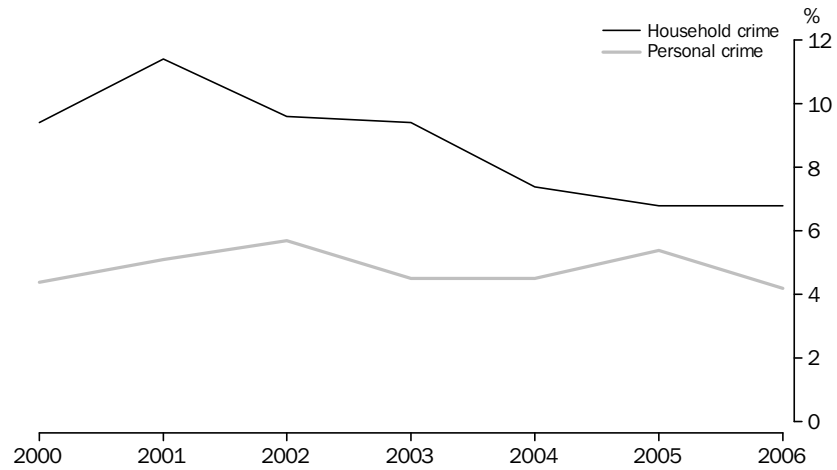
Source: ABS data available on request, ABS Causes of Death Collection.

CRIME AND JUSTICE

Estimates of crime victimisation from the ABS Crime and Safety Survey provide an overall picture of crime experienced in the community. Statistics derived from recorded crime (police records) can provide a more detailed and local picture, with the proviso that not all crime is reported to police and reporting rates differ between crimes.

In general, NSW property crime has declined since 2000, while personal crime has remained relatively steady. Household crime as measured by the ABS Crime and Safety Survey (which includes break and enter, attempted break and enter and motor vehicle theft), declined from a peak of 11.4% of households in 2001 to 6.8% of households in 2006. The trend in personal crime (which includes robbery, assault, and sexual assault) is less clear. Personal crime victimisation rates have moved within a band between 4% and 6% of persons aged 15 years and over throughout the period.

**18** CRIME VICTIMISATION RATE (a)



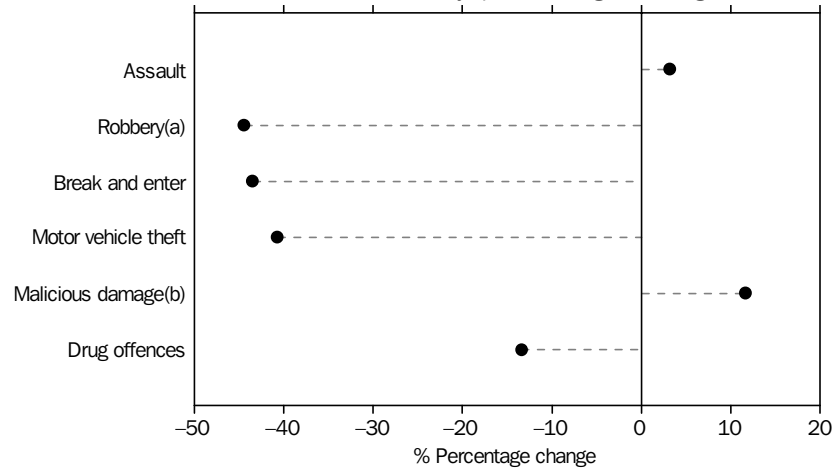
(a) Proportion of total households or persons aged 15 years and above.

Source: *Crime and Safety, New South Wales, 2006* (ABS cat. no. 4509.1).

Trends for crimes recorded by police show a similar pattern. Between 2001 and 2006, robbery, break and enter and motor vehicle theft incidents reported to police declined by over 40%. In the same period, recorded malicious damage incidents increased by 11%, and assault increased by 3%.

CRIME AND JUSTICE  
*continued*

**19** RECORDED CRIME TRENDS, By percentage change—2001–2006



(a) Refers to robbery with and without a weapon.  
(b) Refers to malicious damage to property.

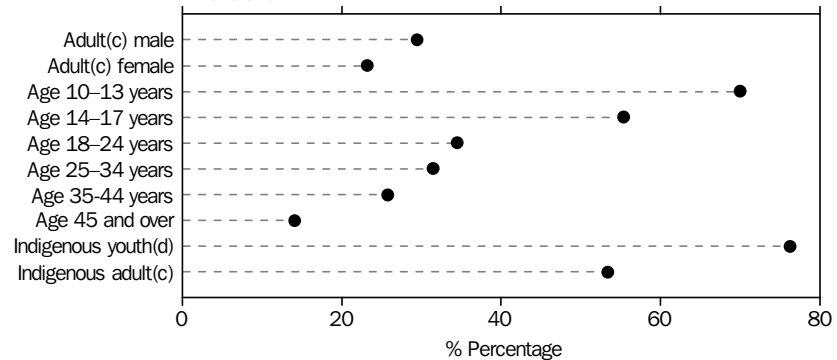
Source: Bureau of Crime Statistics and Research, Recorded Crime Statistics Database.

Reoffending

One focus of crime prevention is to reduce reoffending of those convicted. A broad measure of reoffending adopted in NSW is whether a person convicted of an offence is subsequently reconvicted of another offence within 2 years. Some 28% of adults convicted in 2003 reoffended within 2 years.

There is a strong relationship between reoffending and the age of the offender, with younger people more likely to reoffend. High reoffending rates are found for youth aged 10–13 years (70%) and for persons aged 14–17 years (55%). This trend continues into adulthood with 35% of persons aged 18–24 years reoffending compared to 14% of persons aged 45 years and over. Reoffending was substantially higher for both Indigenous youth (76%) and Indigenous adults (53%) than for all offenders.

**20** REOFFENDERS, Within 24 months of a previous conviction(a)(b)—2003



(a) Offenders who were convicted at a court/conference and who were convicted at a court/conference within 24 months.

(b) The earliest appearance in each calendar year for each person is counted as the reference appearance.

(c) Refers to offenders aged over 18 years at time of reference court appearance.

(d) Refers to offenders aged less than 18 years at time of reference court appearance.

Source: Bureau of Crime Statistics and Research, Reoffending Database.

## STATISTICAL TRENDS, NSW *continued*

### ROAD DEATHS

The rate of road transport related deaths, injuries and accidents per 100,000 persons in NSW has been declining since the 1970s. Between 2000 and 2005, transport fatalities declined from 9.3 per 100,000 persons to 7.5 per 100,000 (-19%). Injury (-16%) and accident (-18%) rates have also declined.

### **21** ROAD TRAFFIC CASUALTIES AND CRASHES—1990, 2000–05

	PERSONS KILLED		PERSONS INJURED		ALL RECORDED CRASHES (a)		CONTRIBUTING FACTOR IN RECORDED CRASHES		
	no.	rate per 100,000 population (b)	no.	rate per 100,000 population (b)	no.	rate per 100,000 population (b)	Alcohol (c)	Fatigue	Speed
							%	%	%
1990	797	13.7	32 153	551.1	59 407	1 018.3	7.1	7.3	13.4
2000	603	9.3	28 812	444.2	52 914	815.8	4.9	7.4	16.2
2001	524	8.0	29 913	454.9	51 814	788.0	4.7	6.6	17.0
2002	561	8.5	28 447	428.8	50 448	760.4	4.7	7.6	17.4
2003	539	8.1	27 208	407.2	49 266	737.3	4.2	7.5	17.0
2004	510	7.6	26 323	391.7	47 310	703.9	3.8	7.5	16.9
2005	508	7.5	25 209	372.4	45 554	673.0	4.0	7.7	17.3

(a) Based on 2005 revised estimated resident population.

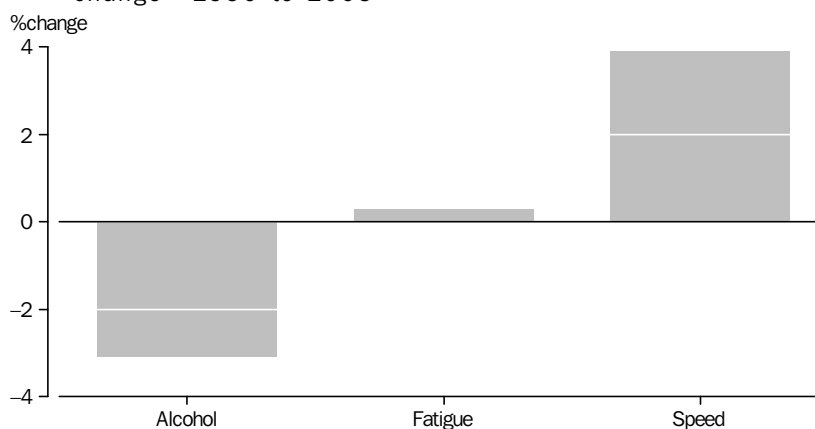
(b) Recorded crashes are reported to the police and involved at least one fatality or injury or at least one vehicle towed away. Crashes of a lesser severity are not included in the RTA crash database.

(c) Data for Alcohol contributing factor involvement in crashes refers to the applicable legal limits at that time.

Source: Roads and Traffic Authority of NSW.

The contributing causes to accidents has also changed. Alcohol as a contributing cause to an accident has declined from 7.1% in 1990 to 4.0% in 2005. Speed as a contributing cause increased over the same period from 13.4% to 17.3%, while fatigue as a contributing cause has remained steady.

### **22** CONTRIBUTING CAUSE TO ACCIDENTS (a), Percentage change—1990 to 2005



(a) Criterion for recording crashes changed from 'casualty or at least \$50 damage' to 'casualty or at least one vehicle towed away' from 1 July 1975. Recorded crashes are reported to the Police and involved at least one fatality or injury or at least one vehicle towed away. Crashes of a lesser severity are not included in the RTA crash database.

Source: Roads and Traffic Authority of NSW.



## STATISTICAL TRENDS, NSW *continued*

### ROAD DEATHS *continued*

Fatality rates and contributing causes to accidents varied considerably between regions during 2005.

Sydney had the lowest fatality rate of the regions at 4.7 per 100,000 persons. The contributing causes of speed, alcohol and fatigue to accidents were lower in Sydney than the rest of the state.

The South Eastern Statistical Division had the highest fatality rate at 20.2 per 100,000 persons and the highest contribution of speed to accidents (36.5% of accidents). Alcohol as a contributing cause was highest on the mid north coast (7.9%).

In all, over 300 of the State's 508 road transport fatalities in 2005 occurred outside of Sydney.

### **23** ROAD TRAFFIC CASUALTIES AND CRASHES—2005

Statistical Division	PERSONS KILLED		PERSONS INJURED		ALL RECORDED CRASHES (a)		CONTRIBUTING FACTOR IN RECORDED CRASHES		
	no.	rate per 100,000 population (b)	no.	rate per 100,000 population (b)	no.	rate per 100,000 population (b)	Alcohol (c)	Fatigue	Speed
							%	%	%
Sydney	198	4.7	15 861	372.8	30 290	711.9	3.1	6.2	12.6
Hunter	62	10.2	2 307	377.9	3 850	630.6	5.6	8.4	20.5
Illawarra	23	5.6	1 387	334.9	2 431	587.0	4.6	7.8	20.6
Richmond-Tweed	28	12.4	952	421.5	1 754	776.5	6.4	11.5	34.9
Mid-North Coast	36	12.2	1 009	341.9	1 562	529.2	7.9	11.1	30.9
Northern	30	16.8	619	345.6	945	527.6	5.9	11.5	28.1
North Western	20	16.8	454	381.9	622	523.2	6.3	15.3	23.5
Central West	28	15.6	667	370.4	1 049	582.6	5.1	11.2	33.3
South Eastern	41	20.2	1 004	495.2	1 585	781.7	4.5	14.1	36.5
Murrumbidgee	22	14.3	489	317.8	757	492.0	5.8	14.5	28.1
Murray	18	15.6	384	332.4	609	527.2	5.7	9.7	20.5
Far West	2	8.5	76	324.4	100	426.8	6.0	9.0	14.0
<b>New South Wales</b>	<b>508</b>	<b>7.5</b>	<b>25 209</b>	<b>372.4</b>	<b>45 554</b>	<b>673.0</b>	<b>4.0</b>	<b>7.7</b>	<b>17.3</b>

(a) Recorded crashes are reported to the police and involved at least one fatality or injury or at least one vehicle towed away. Crashes of a lesser severity are not included in the RTA crash database.

(b) Based on 2005 revised estimated resident population.

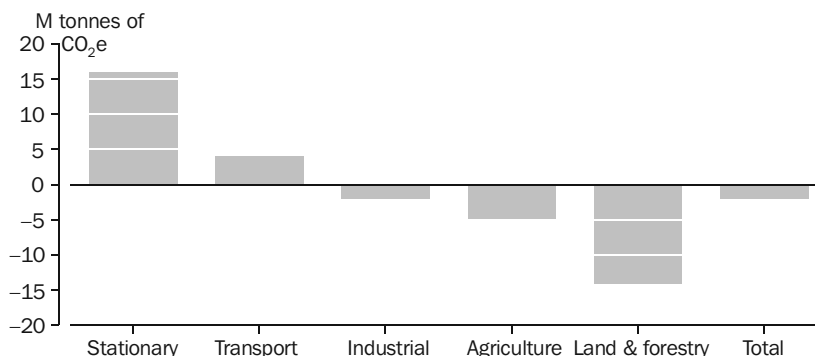
(c) Data for Alcohol contributing factor involvement in crashes refers to the applicable legal limits at that time.

Source: Roads and Traffic Authority of NSW.

GREENHOUSE GAS AND ENERGY USAGE

Between 1990 and 2004, NSW net greenhouse emissions declined slightly (1% as measured by Carbon Dioxide equivalent (CO<sub>2</sub>e)). This resulted from a balance between an increase in CO<sub>2</sub>e from the Stationary and Transport energy sectors and a decline from the Agriculture and Land Use and Forestry sectors.

**24** CHANGE IN CONTRIBUTION TO GREENHOUSE GAS EMISSIONS—1990–2004 (a)(b)(c)(d)(e)



- (a) Estimates are year ending 30 June.
- (b) These emissions estimates are made on a Kyoto accounting basis.
- (c) Includes ACT emissions from the Stationary Energy and Agricultural sectors.
- (d) Excludes Military Transport emissions.
- (e) Data are revised.

Source: Australian Greenhouse Office, Department of the Environment and Heritage, New South Wales Greenhouse Gas Inventory 2004.

Based on past trends, the sustained pressure on greenhouse gas emissions will come mainly from the Stationary energy sector (largely electricity generation), and to a lesser but significant extent from Transport energy. Between 1990 and 2004, Stationary energy emissions increased by a quarter (16Mt of CO<sub>2</sub>e), to account for 48% of net total emissions. Transport energy emissions increased by 4Mt of CO<sub>2</sub>e, to account for 14% of net total emissions.

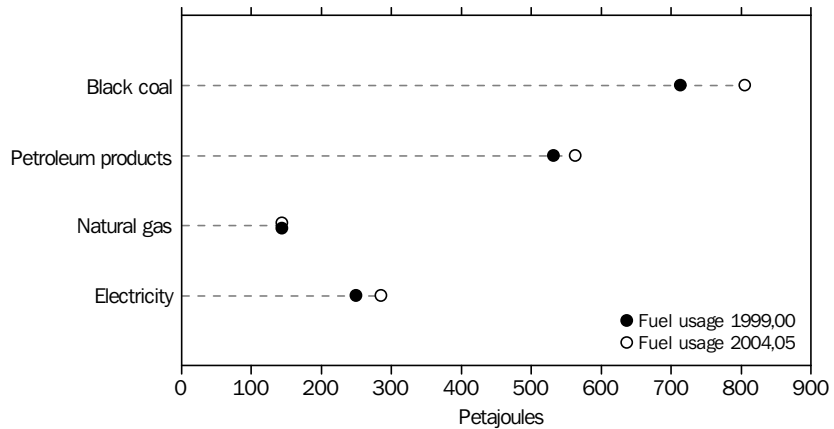
Land use change and forestry have offset these increases in emissions through an increase in the carbon biomass of vegetation and soil, contributing to a 14Mt of CO<sub>2</sub>e (60%) decrease in emissions from this sector. However, in recent years there has been a diminishing contribution from land use changes.

*Energy Usage*

Between 1999–2000 and 2004–05, total energy usage in NSW and ACT increased by 8.2%. Fuels contributing the most to energy usage in 2004–05 were black coal (52%) and petroleum (37%). The largest increase in fuel usage was for black coal (up 92 PJ or 13%). This is consistent with an increase of 36 PJ or 14% in electricity generation during the period. Linking fuel usage back to greenhouse gas emissions – increased electricity usage has been driving increased coal usage, and thereby stationary energy sector emissions, which recorded the largest increase in greenhouse emissions over the period.

Energy Usage *continued*

**25** ENERGY CONSUMPTION, By fuel type, NSW & ACT(a)—1990–00 and 2004–05



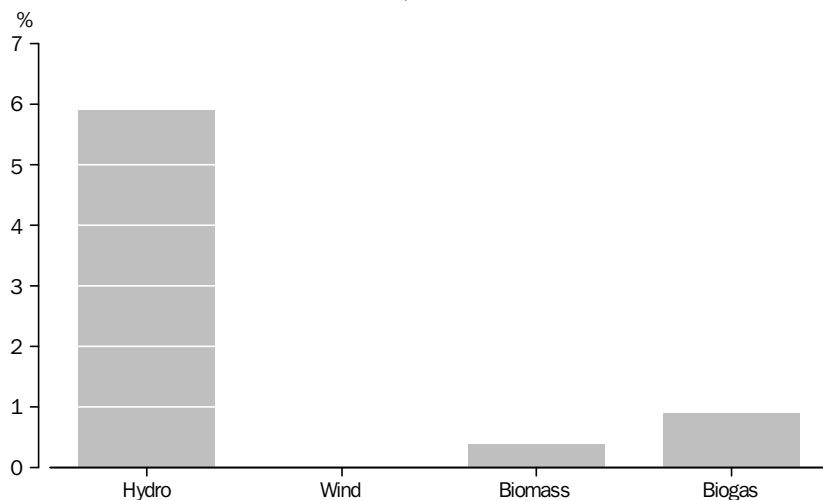
(a) Data concerning refinery input and output, production of petroleum products, and production and consumption of coal byproducts have not been shown for reasons of confidentiality but are included in totals where appropriate.

Source: Australian Bureau of Agricultural and Resource Economics (ABARE), *Australian Energy Consumption and Production, 1974–5 to 2004–05*.

Renewable Sources of Electricity Generation

Electricity generation from renewable sources such as hydro, wind, solar, biomass or biogas provided 7.2% of NSW total electricity generation in 2005–06. Of these sources, the highest contribution was from hydro (5.9%), with the balance from other renewable sources (1.3%). In the future, it is projected that hydro will contribute a fixed amount of NSW energy generation, requiring other renewable sources such as wind, solar, biomass or biogas to increase considerably, if renewable sources are to maintain their share of electricity generation.

**26** ELECTRICITY GENERATION, Renewable sources—2005–06



Source: Australian Bureau of Agricultural and Resource Economics (ABARE) <[http://www.abareconomics.com/interactive/energy\\_dec06/excel/ELECO6\\_au.xls](http://www.abareconomics.com/interactive/energy_dec06/excel/ELECO6_au.xls)>.

## GLOSSARY

<b>Age-specific death rate</b>	The number of deaths (occurred or registered) during the calendar year at a specified age per 1,000 of the estimated resident population of the same age at 30 June. Pro rata adjustment is made in respect of deaths for which the age of the deceased is not given. <i>Reference: Deaths, Australia</i> (ABS cat. no. 3302.0).
<b>Apprentices and trainees</b>	Persons undertaking new apprenticeships and traineeships are covered by formal agreements known as either Training Agreements or Contracts of Training. Under these agreements, the employer is obligated to provide training, help and supervision; and the trainee or apprentice is obligated to work as well as undertake the training. <i>Reference: Australian Vocational Education and Training Management Information Statistical Standard – Standard for new apprenticeships 2005.</i>
<b>Assault</b>	An incident, other than a robbery, where the respondent was physically attacked or threatened with force or violence. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Australian Standard Classification of Occupations (ASCO)</b>	The Australian Standard Classification of Occupations (ASCO), Second Edition is the product of a review program undertaken jointly by a project team from the Australian Bureau of Statistics (ABS) and the Department of Employment, Education, Training and Youth Affairs (DEETYA) for use in the collection, publication and analysis of occupation statistics. <i>Reference: Australian Standard Classification of Occupations (ASCO), 1997</i> (ABS cat. no. 1220.0).
<b>Average annual growth rate</b>	The average annual growth rate, $r$ , is calculated as a percentage using the formula: $\left[\left(\frac{P_n}{P_0}\right)^{\frac{1}{n}} - 1\right] \times 100$ <p>where <math>P_0</math> is the start of the period, <math>P_n</math> is the end of the period and <math>n</math> is the length of the period between <math>P_n</math> and <math>P_0</math> in years. <i>Reference: Australian Demographic Statistics</i> (ABS cat. no. 3101.0).</p>
<b>Biogas</b>	Predominantly methane based gas derived from landfill and sewerage systems. <i>Reference: Detailed Energy Statistics, Australia</i> (ABS cat. no. 4648.0.55.001).
<b>Biomass</b>	The quantity of living plant and animal material or total mass (usually measured as dry weight) of all the living organisms in a given area, population, habitat or trophic level. It represents the amount of organic material accumulated. <i>Reference: ABS Environmental Statistics Glossary.</i>
<b>Birth</b>	The delivery of a child, irrespective of the duration of the pregnancy, who, after being born, breathes or shows any other evidence of life such as heartbeat. <i>Reference: Births, Australia</i> (ABS cat. no. 3301.0).
<b>Black coal</b>	Sometimes called bituminous coal or anthracite, black coal has low levels of impurities. It can be either coking coal (high purity coal used to produce coke), or steaming coal (used to produce heat and electricity). <i>Reference: Detailed Energy Statistics, Australia</i> (ABS cat. no. 4648.0.55.001).
<b>Break and enter/attempted break and enter</b>	An incident where a person's home, garage or shed had been broken into, or where an attempt was made to break into a person's home, garage or shed. Break and enter offences relating to a car or garden are excluded. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Casualty</b>	Any person killed or injured as a result of a crash. <i>Reference: Roads and Traffic Authority of NSW, Road Traffic Crashes in NSW, 2005.</i>
<b>Causes of death</b>	Underlying causes of death are classified to the International Classification of Diseases 10th Revision (ICD-10 for 1997 and onwards). <i>Reference: Causes of Death, Australia</i> (ABS cat. no. 3303.0).
<b>Cerebrovascular disease</b>	Includes deaths where cerebral aneurysm, haemorrhage, infarction, stroke, are identified as the underlying cause (ICD-10 codes I60–I69). <i>Reference: International Classification of Diseases Tenth Revision (ICD-10)</i> , World Health Organisation, Geneva.

## GLOSSARY *continued*

- Chain volume measures** Estimates that exclude the direct effects of changes in prices. Unlike current measure estimates, they take account of changes to price relativities that occur from one year to the next. Annually re-weighted chain volume indexes are referenced to the current price values in a chosen reference year. *Reference: Australian National Accounts: State Accounts* (ABS cat. no. 5220.0).
- Crash** Any apparently unpremeditated event reported to the police and resulting in death, injury or property damage attributable to the movement of a road vehicle on a road. *Reference: Roads and Traffic Authority of NSW, Road Traffic Crashes in NSW, 2005.*
- Death** For the purposes of the Vitals and Causes of Death collections of the ABS, a death refers to any death which occurs in, or enroute to Australia and is registered with a state or territory Registry of Births, Deaths and Marriages. *Reference: Deaths, Australia* (ABS cat. no. 3302.0).
- Drug-induced deaths** Any death where the underlying cause of death was due to:
- an acute episode of poisoning or toxicity to drugs. Included are deaths from accidental overdoses due to misuse of drugs, intentional self-harm, assault and deaths undetermined as to intent; or
  - an acute condition caused by drug use where the deceased person was identified as drug dependent.
- The term 'drug' refers to substances classified as drugs, medicaments or biological substances under ICD-10 guidelines. These drugs may be used for medicinal or therapeutic purposes, or to produce a psychoactive effect. The term excludes 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. 4809.055.001).
- Employed** All 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; 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).
- Fatality** A person who dies within 30 days of a crash as a result of injuries received in that crash. *Reference: Roads and Traffic Authority of NSW, Road Traffic Crashes in NSW, 2005.*
- Fatigue** The identification of fatigue as a contributing factor in road crashes cannot always be determined directly from police reports. Fatigue is considered to have been involved as a contributing factor to a road crash if that crash involved at least one fatigued motor vehicle controller. A motor vehicle controller is assessed as having been fatigued if the following conditions are satisfied together or separately:
- the vehicle's controller was described by police as being asleep, drowsy or fatigued;
  - the vehicle performed a manoeuvre which suggested loss of concentration of the controller due to fatigue.
- Reference: Roads and Traffic Authority of NSW, Road Traffic Crashes in NSW, 2005.*

## GLOSSARY *continued*

<b>Greenhouse gas</b>	Gases that contribute to global warming, including carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF <sub>6</sub> ). In addition, the photochemically important gases—NMVOCs, oxides of nitrogen (NO <sub>x</sub> ) and carbon monoxide (CO)—are also considered. NMVOC, NO <sub>x</sub> and CO are not direct greenhouse gases. However, they contribute indirectly to the greenhouse effect by influencing the rate at which ozone and other greenhouse gases are produced and destroyed in the atmosphere. <i>Reference:</i> NSW Department of Environment and Heritage, <i>Nationals Greenhouse Gas Inventory, 2002</i> .
<b>Gross domestic product (GDP)</b>	The 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. Thus GDP, as here defined, is 'at market prices'. It is equivalent to gross national expenditure plus exports of goods and services less imports of goods and services. <i>Reference:</i> <i>Australian National Accounts, State Accounts</i> (ABS cat. no. 5220.0).
<b>Gross State Product (GSP)</b>	GSP is defined equivalently to gross domestic product (GDP) but refers to production within a state or territory rather than to the nation as a whole. <i>Reference:</i> <i>Australian National Accounts: State Accounts</i> (ABS cat. no. 5220.0).
<b>Higher education student</b>	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. <i>Reference:</i> Department of Education Science and Training, <i>Students 2003: Selected Higher Education Statistics</i> .
<b>Household</b>	A group of two or more related or unrelated people who usually reside in the same dwelling, who regard themselves as a household, and who make common provision for food or other essentials for living; or a person living in a dwelling who makes provision for his/her own food and other essentials for living, without combining with any other person. <i>Reference:</i> <i>Family Characteristics, Australia</i> (ABS cat. no. 4442.0).
<b>Hydro-electricity</b>	Electric power generated using the fall of water. <i>Reference:</i> <i>Detailed Energy Statistics, Australia</i> (ABS cat. no. 4648.0.55.001).
<b>Indigenous</b>	A person is defined to be of Indigenous origin if he or she identifies themselves as of Aboriginal and/or Torres Strait Islander origin. <i>Reference:</i> <i>2001 Census Dictionary</i> (ABS cat. no. 2901.0).
<b>Industry value added (IVA)</b>	Represents the value added by an industry to the intermediate inputs used by the industry. IVA is the measure of the contribution by businesses, in the selected industry, to gross domestic product. <i>Reference:</i> <i>Australian Industry</i> (ABS cat. no. 8155.0).
<b>Injured</b>	A person who is injured as a result of a crash, and who does not die as a result of those injuries within 30 days of the crash. <i>Reference:</i> Roads and Traffic Authority of NSW, <i>Road Traffic Crashes in NSW, 2005</i> .
<b>International Classification of Diseases, Tenth Revision (ICD-10)</b>	The World Health Organization (WHO) International Classification of Diseases (ICD) is used to code illness and death to produce Australia's morbidity and mortality statistics. As a statistical classification, it is designed to encompass the entire range of morbid conditions within a manageable number of categories. Further details of the ICD-10 codes are available from the World Health Organization 1994, International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). <i>Reference:</i> <i>Illicit Drug Use, Sources of Australian Data</i> (ABS cat. no. 4808.0).
<b>Ischaemic heart disease deaths</b>	Deaths where coronary heart diseases, including heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris), are identified as the underlying cause (ICD-10 codes I20–I25 for 1997 onwards). <i>Reference:</i> <i>Causes of Death, Australia</i> (ABS cat. no. 3303.0).
<b>Killed</b>	A person who dies within 30 days of a crash as a result of injuries received in that crash. <i>Reference:</i> Roads and Traffic Authority of NSW, <i>Road Traffic Crashes in NSW, 2005</i> .

## GLOSSARY *continued*

<b>Life expectancy</b>	Life expectancy refers to the average number of additional years a person of a given age and sex might expect to live if the age-specific death rates of the given period continued throughout his or her lifetime. <i>Reference: Deaths, Australia</i> (ABS cat. no. 3302.0).
<b>Motor vehicle theft</b>	An incident where a motor vehicle was stolen from any member of the household. It includes privately owned motor vehicles as well as business/company vehicles used exclusively by any members of the household. A motor vehicle includes cars, motorbikes and trucks; while caravans, trailers and floats were excluded. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Natural increase</b>	Excess of births over deaths. <i>Reference: Australian Demographic Statistics</i> (ABS cat. no. 3101.0).
<b>Net interstate migration</b>	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. This difference can be either positive or negative. <i>Reference: Australian Demographic Statistics</i> (ABS cat. no. 3101.0).
<b>Net overseas migration</b>	Net overseas migration is net permanent and long term overseas migration, adjusted for change in traveller duration, intention and multiple movement error. <i>Reference: Australian Demographic Statistics</i> (ABS cat. no. 3101.0).
<b>Occupation</b>	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. <i>Reference: Australian Standard Classification of Occupations (ASCO), Second edition</i> (ABS cat. no. 1220.0).
<b>Population growth</b>	For Australia, population growth 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. <i>Reference: Australian Demographic Statistics</i> (ABS cat. no. 3101.0).
<b>Qualification</b>	Formal certification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs. Statements of attainment awarded for partial completion of a course of study at a particular level are excluded. <i>Reference: Education and Work, Australia</i> (ABS cat. no. 6227.0).
<b>Recorded criminal incidents</b>	<p>A criminal incident is defined as an activity detected by or reported to police which:</p> <ul style="list-style-type: none"><li>■ involved the same offender(s);</li><li>■ involved the same victim(s);</li><li>■ occurred at the one location;</li><li>■ occurred during one uninterrupted period of time;</li><li>■ falls into one offence category;</li><li>■ falls into one incident type (e.g. 'actual', attempted', 'conspiracy').</li></ul> <p>One incident may involve two offenders assaulting the same victim. This would be recorded as one assault incident. Alternatively, suppose a man reports to police that his neighbour demanded money from him, then assaulted him when he did not comply. For such an event, two criminal incidents are recorded because two distinct offence types are involved, even though the same parties were involved at the same time and in the same place. <i>Reference: Bureau of Crime Statistics and Research, NSW Recorded Crime Statistics.</i></p>

## GLOSSARY *continued*

<b>Recorded victims</b>	For murder and manslaughter only, the counting units used are victims. Under the definition of a criminal incident one murder or manslaughter incident could involve two or more persons being killed. Because of the seriousness of these offences and their relatively small numbers, it was considered to be more appropriate to count the number of victims, rather than the number of criminal incidents. Hence, where one murder incident involves a person killing six people, six murder victims are counted. <i>Reference: Bureau of Crime Statistics and Research, NSW Recorded Crime Statistics.</i>
<b>Renewable energy</b>	Energy resources that can be used indefinitely. Sources include hydro-electricity, solar, wind, geothermal, ocean or tidal, and biomass such as wood, bagasse, manure and crops (to produce fuel such as ethanol). <i>Reference: ABS Environmental Statistics Glossary.</i>
<b>Reported rate</b>	The total number of victims of an offence who reported the most recent incident to police, expressed as a percentage of the total victims of that offence. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Robbery</b>	An incident where individual(s) stole something from a person by threatening or attacking them. It includes incidents of attempted robbery where individual(s) attempted to steal something from the person but nothing was actually stolen. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Secondary education</b>	Secondary education typically commences after completion of primary education, at around age 12 years, and lasts for five or six years. <i>Reference: Schools, Australia</i> (ABS cat. no. 4221.0).
<b>Service industries</b>	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. <i>Reference: Australian and New Zealand Standard Industrial Classification 1993</i> (ABS cat. no. 1292.0).
<b>Sexual assault</b>	An incident which was of a sexual nature involving physical contact: includes rape, attempted rape, indecent assault, and assault with intent to sexually assault. Sexual harassment (that did not lead to an assault) was excluded. Only females aged 18 years and over were asked sexual assault questions. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Skill level</b>	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. <i>Reference: Australian Standard Classification of Occupations (ASCO), Second edition</i> (ABS cat. no. 1220.0).
<b>Solar power</b>	Energy derived from direct conversion of sunlight and heat. <i>Reference: Detailed Energy Statistics, Australia</i> (ABS cat. no. 4648.0.55.001)



## GLOSSARY *continued*

<b>Standardised death rate</b>	Standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The current standard population is all persons in the 2001 Australian population. The indirect method of standardisation is used when the populations under study are small and the age-specific death rates are unreliable or not known. It is an adjustment to the crude death rate of the standard population to account for the variation between the actual number of deaths in the population under study and the number of deaths which would have occurred if the population under study had experienced the age-specific death rates of the standard population. <i>Reference: Deaths, Australia</i> (ABS cat. no. 3302.0).
<b>Student</b>	An individual who was enrolled in a subject or completed a qualification during the reporting period. <i>Reference: National Centre for Vocational Education Research, Australian vocational education and training statistics: Students and courses 2003.</i>
<b>Suicide</b>	Suicide refers to the deliberate taking of one's life. To be classified as a suicide a death must be recognised as due to other than natural causes and established by a coronial inquiry that death results from a deliberate act of the deceased with the intention of taking his or her own life. <i>Reference: Suicides Australia, 2005</i> (ABS cat. no. 3309.0).
<b>Total factor income</b>	That part of the cost of producing the gross domestic product which consists of gross payments to factors of production (labour and capital). It represents the value added by these factors in the process of production and is equivalent to gross domestic product less taxes plus subsidies on production and imports. <i>Reference: Australian National Accounts, State Accounts</i> (ABS cat. no. 5220.0).
<b>Underlying cause of death</b>	The disease or injury which initiated the train of morbid events leading directly to death. Accidental and violent deaths are classified according to the external cause, that is, to the circumstances of the accident or violence which produced the fatal injury rather than to the nature of the injury. <i>Reference: Causes of Death, Australia</i> (ABS cat. no. 3303.0).
<b>Victim (Estimated crime)</b>	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. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).
<b>Victimisation rate</b>	The number of victims of an offence in a given population expressed as a percentage of that population. <i>Reference: Crime and Safety, Australia</i> (ABS cat. no. 4509.0).

## DATA SOURCES

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*Schools, Australia* (ABS cat. no. 4221.0)



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