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Editorial

My name is Mal Greig and I am the Director of the Transport and Tourism Business Statistics Centre (BSC). The BSC is responsible for a number of transport surveys, including motor vehicle use, motor vehicle census, new motor vehicles sales, freight movement, as well as the survey of tourist accommodation.

Much of my working life has been with the ABS. Outside of work I am a keen participant in sporting activities — I'll try most sports however my best talents lie with table tennis, lawn bowls, cards and eight ball (the latter being signs of a misspent youth) although some may dispute those sporting claims. I have also retired from the karaoke circuit due to popular demand.

I completed my studies, BSc with honours in statistics and numerical analysis, at the University of Queensland with my final year undertaken as a cadetship offered by the ABS. I subsequently began work in the ABS in Canberra in 1976, working in the methodology and time series areas. I returned home to Brisbane 3 years later to work in the Queensland Office of the ABS — I'm still here. My work experience has covered most areas of the ABS however I have predominantly been involved in social and population statistics. My current posting in the economic statistics area has been a challenge in terms of it being a new field of statistics to me and the many changes being implemented to make operations more efficient and effective.

(continued on page 2)



Mal Greig

In addition to my statistical responsibilities I take a strong interest in staff issues and the work environment. I am involved in a number of committees including Innovation and Creativity and Occupational Health and Safety as well as being President of the Social Club. I also undertake a lead role on a committee responsible for the effective utilisation of staff skills across the organisation as well as being very involved in the mentoring of staff in the office.

During my time in the ABS I have seen many changes occur. Structural changes associated with the introduction of National Project Centres (NPCs) began in the early 1980s followed by the Business Statistics Innovation Program (BSIP) beginning mid-2002. The latter is a further evolution of the NPC concept to give more responsibility and accountability to the national Business Statistics Centres. This program was discussed in detail in a previous edition of Statistical Update.

Basically, the mission of the Transport and Tourism BSC is to deliver quality statistical products, i.e. outputs. Is that different from the past? you might ask. In terms of the actual functions performed not a lot has changed but certainly a lot has changed with regards to accountability, the skills required and, probably most importantly, contact with users. The BSC's enhanced role covers:

- increased focus on the quality and delivery, including accessibility, of data that are fit for the purposes of users;
- increased contact with major users to enhance our understanding of their current data needs and their industry and how they are using these data;
- increased vetting of outputs for coherence, comparison of estimates with other sources, associated analytical work and clearance material, product innovation, and preparation of commentary to accompany regular published outputs and
- improved specification of output requirements and proposed collection methodologies.

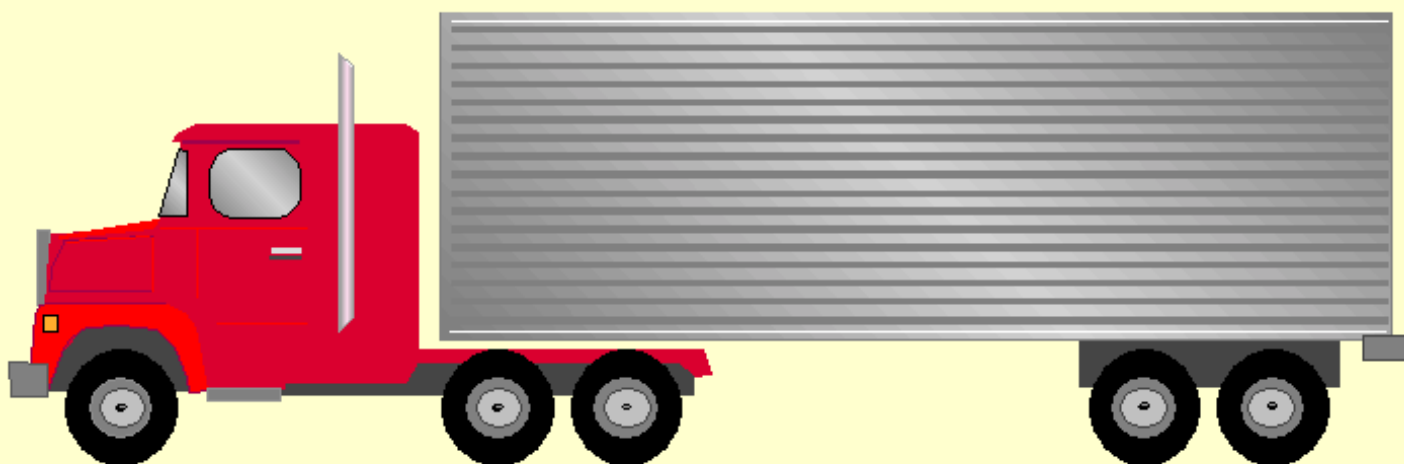
The challenge for the Transport and Tourism BSC is to ensure business continuity whilst implementing the changes mentioned above, i.e. produce current outputs to the current timeliness and quality. Further activities undertaken over the last 6 to 8 months include:

- a methodological review of the survey of motor vehicle use which will continue to be a focus for the next 6 months — this work will result in the release of revised data and, more importantly a very strong and robust survey vehicle in terms of the collection methodology and outputs in which the ABS will have full confidence;
- an increase in the scope of the survey of tourist accommodation to include caravan parks, holiday flats and units and visitor hostels — while this adds a substantial operational and development workload to the area it will provide additional valuable data to users and
- dissemination reviews with the aim of producing more timely and relevant data as well improved electronic access to these data.

I think the Transport and Tourism BSC is well on the way to achieving its vision of producing timely and high quality statistical products and services; and of being innovative and future focussed with a good understanding of why we are collecting the information.

If there are any issues you would like to discuss, please feel free to give me a call on my direct line 07 3222 6310 or email me on <malcolm.greig@abs.gov.au>.

— Malcolm Greig



STATISTICAL DEVELOPMENTS

ABS Web Site Developments

Greetings, let me introduce myself – I am Gary Dunnet, Director Electronic Dissemination. In my role I am responsible for the day-to-day release of material to the ABS web site together with its development. Since joining the ABS two years ago (from Statistics New Zealand and the Central Statistics Office of Ireland) I have been quite busy, firstly coming to terms with the ABS web site and then putting in place some developments. Recent developments have included e-commerce and some 'quick fix' changes to the useability of the web site. I intend to use the *Statistical Update* as a mechanism to keep users up to date with recent or planned web site developments.

Recent changes to the ABS web site, AusStats and ABS@ have included: the ability to support 120,000 Census output files; improved navigation around Census material; improved views within Australia Now and changing 'Companion Data' to 'Data Cubes'. All changes are based on user feedback.

In December 2002, Excel format time series spreadsheets were made available on the ABS web site for customer evaluation and comment. The new format is designed to alleviate many of the problems with the existing AusStats spreadsheets. Key improvements include: time as a rows, rather than columns (this enables greatly extended time series to be made available); Excel format, rather than WKS; relevant metadata, rather than no metadata; visibility of the ABS as source (data branding) and addition of hyperlinks to the ABS web site. The first outputs in the new format were released on the ABS web site on 17 April 2003 (labour force data).

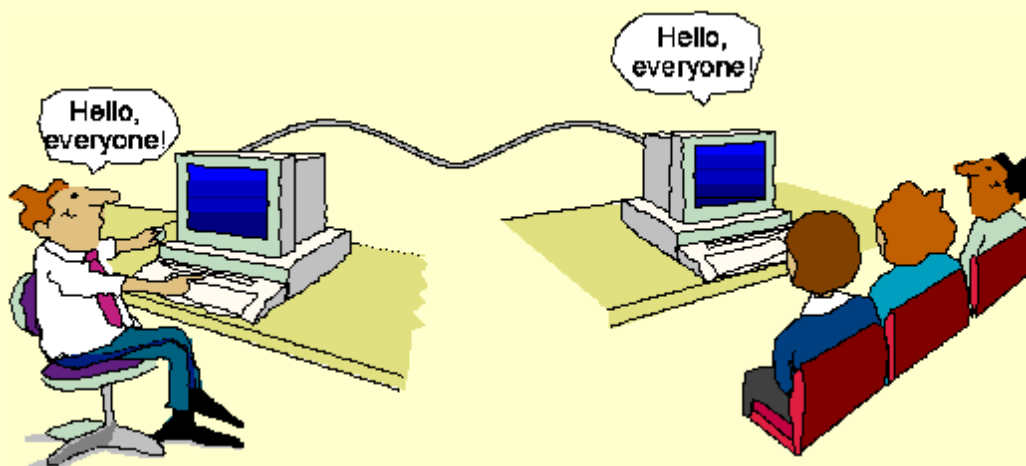
For time series, a new set of series identifiers, automatically generated, is being used. Users of Excel can use named ranges for generating formulae in Excel and a facility exists to deliver data only (free of metadata) for formulae. Explanatory notes are available as links to the appropriate page on the ABS web site. This ensures that the notes are always up to date as any amendments to them are made once at one place. Formerly the notes were duplicated at several sites on the ABS web site.

A new search engine for the ABS web site is being investigated. Results of a pilot test have been very encouraging and an implementation plan is being developed with implementation targeted for June 2003.

On 24 January, *Year Book Australia 2003* was launched. As with previous years, the *Year Book* content is freely available within Australia Now on the ABS web site. In addition it is available in hard copy and on CD-ROM. Since its release on the ABS web site, *Year Book Australia 2002* attracted approximately 3.8 million hits. Another development is that archived copies of previous year books will become progressively available. The current issue will continue to be a live, developing document with the latest information added as it becomes available, until the release of the next issue.

Feature articles from *Year Book* as far back as Federation are available on the ABS web site.

For further information contact Gary Dunnet on <gary.dunnet@abs.gov.au>.



STATISTICAL DEVELOPMENTS

First Estimates of Value of Agricultural Commodities Show Record Year in 2001-02

The publication *Value of Agricultural Commodities Produced, Australia, Preliminary, 2001-02* (cat. no. 7501.0) was released by the ABS on 24 March 2003. The estimated gross value of agricultural production for Australia was a record \$39,030m for the year ended 30 June 2002, an increase of 14% over the previous year. Crop production was valued at \$20,813m, livestock slaughterings and other disposals at \$11,445m and livestock products at \$6,772m.

Figures for Queensland generally reflect the Australian figures, with the value of crop production increasing by 9% to \$3,686m. The value of livestock slaughterings and other disposals rose 10% to \$3,700m whilst the value of livestock products increased by 5% to \$515m.

The value of Queensland wheat production fell by 16% to \$226m; the 5% increase in average prices not enough to offset the 20% fall in production. However, the fall in the value of wheat was more than compensated by strong growth in the value of grain sorghum production (up by 43% to \$241m). Whilst the value of cotton production fell by 16% to \$348m, the value of sugar cane cut for crushing leapt by 54% to \$927m, with production up by 14% and average prices rising by 16%.

The value of livestock slaughterings and other disposals for Queensland rose for all commodities. The value of cattle and calves slaughtered and other disposals rose by 9%, with the 5% fall in number of disposals offset by a 15% increase in average prices.

The value of wool produced in Queensland fell by 3% to \$189m, while the value of whole milk rose by 11% to \$257m due to increased average prices.

Final figures are expected to be released in September 2003 in *Value of Agricultural Commodities Produced, Australia* (cat. no. 7503.0).

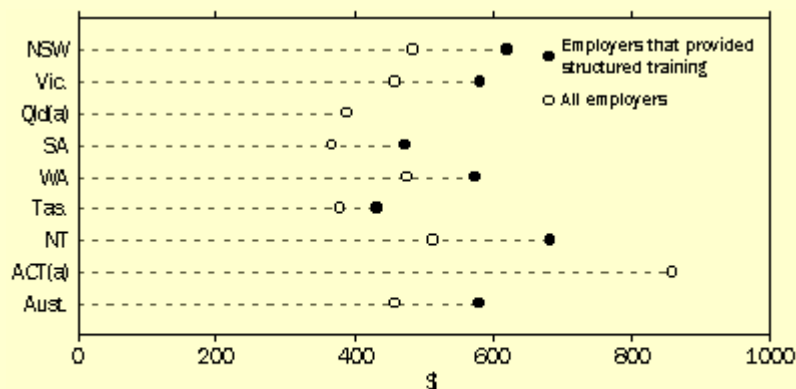
For further information contact Geoff Ellerton on 03 6222 5856 or <geoff.ellerton@abs.gov.au>.

More Employers Providing Employees with Training

On 2 April 2003, the ABS released a new publication, *Employer Training Expenditure and Practices, Australia, 2001-02* (cat. no. 6362.0). The publication contains estimates obtained from a sample survey of employers conducted by mail in July 2002 with full funding from the Australian National Training Authority. The survey was designed to obtain information from employers on structured and unstructured training practices, and expenditure on structured training, in respect of the financial year ended June 2002.

During the year ended June 2002, 81% of all Australian employers provided some training for their employees. Of all employers, 41% provided structured training and 79% provided unstructured training.

NET DIRECT EXPENDITURE ON STRUCTURED TRAINING PER EMPLOYEE



(a) Data for employers that provided structured training is not available for publication, but has been included in Australian total.

STATISTICAL DEVELOPMENTS

More Employers Providing Employees with Training — *continued*

Did you know? (Some Queensland Statistics)

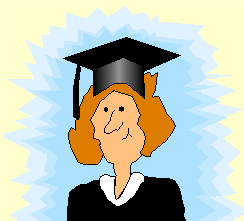
Total gross direct training expenditure was highest in the larger states (\$1,437.1m in New South Wales, \$1,033.3m in Victoria and \$629.6m in Queensland), indicative of the larger number of employers in these states. Across all employers, net expenditure per employee ranged from a high of \$859 in the Australian Capital Territory to a low of \$367 in South Australia.

In Queensland, employers incurred net direct training expenditure of \$551.2m or \$390 per employee (across all employers) in 2001–02. This was equivalent to 1.2% of total gross wages and salaries. There were 48,900 employers that provided structured training and the main reasons for doing so were; 'To maintain professional status and/or meet industry standards' and 'Staff development/advancement'.

The proportion of employers in Queensland that provided training (structured and/or unstructured) to their employees increased from 66.4% in the 12 months ended February 1997 to 81.4% for 2001–02, staying ahead of the national averages of 60.9% and 81.1%, respectively, for the same periods.

Electronic learning arrangements were used for some or all of the training by 48.0% of those that provided structured training in Queensland during 2001–02, the highest rate of usage of any of the states and territories. Of those employers that provided structured training, 20.3% of Queensland employers indicated that they had increased their use of electronic learning arrangements, compared with 15.9% Australia-wide.

For further information contact Valerie Pearson on 08 9360 5374 or <valerie.pearson@abs.gov.au>.



New Labour Market Products

On 29 April 2003, the first issue of *Australian Labour Market Statistics* (cat. no. 6105.0) was released. This publication draws together labour statistics from a range of sources, including household and business surveys, to provide an overall picture of the labour market. A range of articles is also included, which provide further insight into labour market statistics. The first issue contains a technical report, two feature articles and two spotlight articles:

- Labour Force Survey Sample Redesign
- Characteristics of Underemployed Workers
- Job Vacancies and Employment
- Parental Leave
- Methods of Setting Pay.

In March, new electronic products containing Labour Force Survey data were released. Details about these products, which include Excel spreadsheets and SuperTABLE data cubes, can be found in *Information Paper: Changes to Labour Force Survey Products* (cat. no. 6297.0), available from our web site for free.

The product set containing first release data will alter throughout this year. The name of *Labour Force, Australia, Preliminary* (cat. no. 6202.0) was changed to *Labour Force, Australia* from the April 2003 issue, released on 8 May 2003. Changes to the format of *Labour Force, Australia* (cat. no. 6202.0) will be introduced in September 2003.

For more information contact Lorraine Cornehlis on 02 6252 6079 or <lorraine.cornehlis@abs.gov.au>.

STATISTICAL DEVELOPMENTS

Mean Weekly Earnings Increased Moderately

In March 2003, the ABS released *Employee Earnings, Benefits and Trade Union Membership, Australia, 2002* (cat. no. 6310.0). This publication presents information about the weekly earnings and employment benefits received by employees, and their trade union membership.

The mean (average) weekly earnings of employees in all jobs was \$707 in August 2002. This was an increase of 3% (\$20) since August 2001. In August 1992 it was \$475, an increase of almost 50% over the decade. In August 2002, the median weekly earnings was \$625.

In August 2002, 92% of employees were entitled to one or more of the standard benefits in their main job. Those employed in the public sector were more likely to have employment benefits than employees in the private sector (98% and 90% respectively). The most commonly reported employment benefits were superannuation (90% of employees), paid sick leave (72%), paid holiday leave (71%) and long service leave (63%). Entitlement to paid maternity or paternity leave was reported by 24% of employees (30% of female and 19% of male employees).

In August 2002, there were 1,833,700 employees who were members of a trade union in conjunction with their main job. This was a 4% decrease on the number recorded in August 2001. The proportion of employees who were trade union members fell from 24.5% in August 2001 to 23.1% in August 2002. The proportion of full-time employees who were trade union members was higher than for part-time employees (26% and 17%, respectively). A higher proportion of public sector employees (47%) were trade union members than private sector employees (18%).

Did you know? (Some Queensland Statistics)

For Queensland, mean weekly earnings for employees in all jobs was \$664 in August 2002. Full-time workers earned, on average, \$877 a week for males and \$708 for females, while part-time workers earned, on average, \$290 for males and \$311 for females.

In Queensland, there were 333,000 trade union members in conjunction with their main job in August 2002. The proportion of employees who were trade union members was 23.0%. The mean weekly earnings in main job of trade union members in Queensland was higher than non-trade union members. This was reflected for both full-time and part-time employees. For full-time employees in their main job, trade union member males earned, on average, \$929 a week, compared with \$858 for non-union males, while trade union member females earned \$813 compared with \$671 for non-trade union member females.

For further information contact Kate Nielsen on 02 6252 5759 or <kate.nielsen@abs.gov.au>.

New Regional Small Business Data Available Soon

In July 2003, the ABS will add another year's data to the dataset *Experimental Estimates Regional Small Business Statistics, Australia* (cat. no. 5675.0). Prepared from files supplied by the Australian Taxation Office, this regional information includes the number of small businesses, income, expenses and profit for all small businesses in Australia, by statistical division for states and territories. Some tables provide this regional small business information by industry divisions.

Data for the financial year 2000–01 will be added to the time series presently available on the ABS web site <www.abs.gov.au>. To access the data, from the home page click on Statistics, then Data Cubes, open the Finance twistie and select 5675.0. Prices for these tables begin at \$15.

For further information contact Lynne Peterson on 07 3222 6207 or <lynne.peterson@abs.gov.au>.

STATISTICAL DEVELOPMENTS

Australia's Population Growing and Growing Older

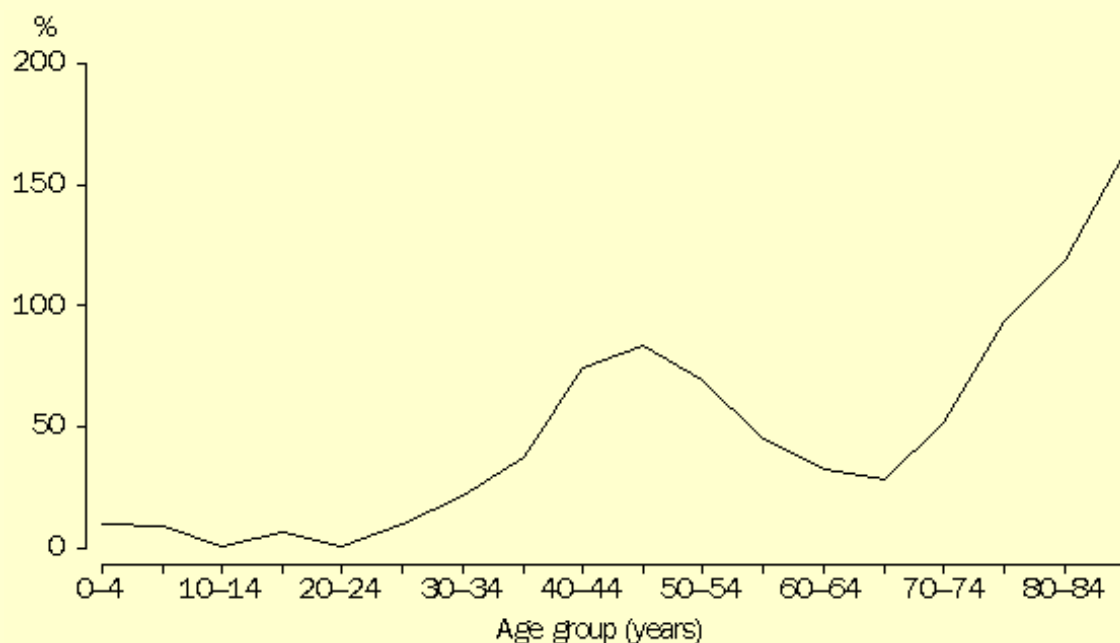
On 27 March 2003, the ABS released the publication *Population by Age and Sex, Australian States and Territories, June 1997 to June 2002* (cat . no. 3201.0). The publication contains final revised estimates of the resident population by age and sex for Australian states and territories as at 30 June 1997 to 2001 and preliminary estimates as at 30 June 2002, based on the 2001 Census of Population and Housing.

In the 12 months to June 2002, the Australian resident population increased by 249,500, reaching 19,662,800 persons in total. The growth rate over this period was 1.3%. The average annual growth rate for the previous 5 years, 1996 to 2001 was 1.2%. Over the 20 years to 2002, the population of Australia has increased by 4,478,500 (29%). The estimated resident population of all states and territories increased in the year to June 2002. Queensland recorded a growth rate of 2.2%, followed by Victoria and Western Australia (each 1.4%).

The median age of the Australian population, the age at which half the population is older and half is younger, increased by 0.2 years to 35.9 years in the year to June 2002. The median age has increased by 6.0 years in the last 20 years, from 29.9 years in June 1982. Australia's population is ageing due to sustained low fertility (resulting in proportionally fewer children in the population) and increased life expectancy.

Since 1982 the number of children (aged 0–14 years) in the population has grown 6%. In contrast, the number of persons aged 15–64 years has increased by 33% and the number of persons aged 65 years and over has increased by 66%. This disparate growth pattern reflects a shift in the age structure of the total population, commensurate with gradual population ageing.

POPULATION CHANGE, Age group — 1982 to 2002p



In the 12 months to June 2002, the number of children aged 0–14 years decreased nationally by 5,200 children (0.1%). An increase in the number of children aged 10–14 years of 1.0% was more than offset by decreases in the number of children in lower age groups, reflecting Australia's declining fertility (from 1.86 babies per woman in 1991 to 1.73 in 2001).

Did you know? (Some Queensland Statistics)

Queensland was the only state to record growth in the number of children aged 0–14 years (0.9%) in the year to June 2002. The number of children in Victoria was virtually unchanged and declined in all other states and territories.

The number of persons aged 15–64 years in Australia grew by 1.5% during the 12 months to June 2002. For this age group, Queensland (2.4%) and Victoria (1.7%) experienced growth rates above the national average.

STATISTICAL DEVELOPMENTS

Australia's Population Growing and Growing Older — *continued*

In the 12 months to June 2002, the number of persons aged 65 years and over increased by 2.2%, to just under 2.5 million in total, or 12.7% of the population of Australia. The proportion of the population aged 65 years and over was 11.8% in Queensland and 11.2% in Western Australia, while the Australian Capital Territory and the Northern Territory recorded 8.8% and 3.9%, respectively.

Proportionally, the greatest population increase in the year to June 2002 occurred among persons aged 85 years and over (5.7%). During this period, the number of people in this age group increased from 265,200 to 280,400. This continues the rapid increase in the elderly population, which has grown by 164% over the last 20 years, compared with a total population growth of 29% over the same period.

In the 12 months to June 2002, the fastest increases in the number of persons aged 85 years and over occurred in the Australian Capital Territory (9.4%), Queensland (6.8%), Tasmania (6.3%) and New South Wales (6.2%). These states and territories experienced faster growth in the number of elderly people than did Australia as a whole.

For further information contact Genevieve Heard on 02 6252 7883 or <genevieve.heard@abs.gov.au>.



Aged Care Facilities Now Separately Identified in Value of Non-residential Building Approvals Data

From 1 July 2000, the Australian Bureau of Statistics commenced coding building approvals using a revised *Functional Classification of Building* (FCB) (cat. no. 1268.0.55.001). The FCB classifies buildings to the stated predominant function or purpose of the building, according to the description as it appears on the approval documentation. The revised FCB takes into account new and emerging trends within the building industry and provides further dissection on types of buildings. The revised FCB has resulted in changes to the classifications within the non-residential sector, including the identification of aged care facilities.

Building approval data are still being published using the previous FCB, but it is planned to publish using the new FCB commencing with the July 2003 issue of *Building Approvals, Australia* (cat. no. 8731.0). In the interim, data using the new FCB have been published in two feature articles in 8731.0. The most recent article, with data for the financial years 2000–01 and 2001–02, can be found on the ABS website <www.abs.gov.au>. From the home page click on Feature Articles / Industry / Construction / Feature Article - Functional Classification of Buildings (cat. no. 8731.0).

The ABS is also identifying residential building approved where the purpose of the building is for 'retirement' purposes. This can include, but is not limited to, buildings described in approval documentation as 'retirement villages'. These data are not currently published, but are available as a consultancy service. Data are available for the current (2002–03) financial year only.

For further information contact Andrea Woods on 08 8237 7350 or <andrea.woods@abs.gov.au>.

STATISTICAL DEVELOPMENTS

Most Defendants Plead Guilty in Higher Courts

On 9 April 2003, the ABS released *Criminal Courts, Australia 2001–02* (cat. no 4513.0) which was formerly titled *Higher Criminal Courts, Australia*. The publication presents statistics relating to the criminal jurisdiction of the higher (Supreme and Intermediate) courts of Australia and experimental data on the characteristics of defendants finalised in the Magistrates Court.

For the first time, the publication includes in its main suite of statistical tables information on the principal offence of adjudicated defendants and principal sentence type of defendants proven guilty. Consequently, the emphasis of the publication is now on describing defendants and their outcomes rather than the criminal workload of the courts, however, information on duration remains an integral part of the output. Information is available by age, sex, plea, principal offence, method of finalisation, median duration and principal sentence type. A number of tables are cross tabulated by state and territory.

Companion tables are available for the first time for this publication. This supplementary information will continue to meet the needs of users for criminal workload data.

Did you know? (Some Queensland Statistics)

In Queensland in 2001–02, there were 6,065 defendants finalised by adjudication in the higher criminal courts: 5,521 pleaded guilty, 266 were found guilty by the court and 278 were acquitted. Of these adjudicated defendants, 43% were males aged between 20–34 years, with males representing 86% of adjudicated defendants. While 5% of Queensland adjudicated defendants were acquitted, this proportion varied across the principal offence categories and was 17% for those with a principal offence related to sexual assault. Of defendants with a principal offence related to sexual assault that went to trial, 65% were acquitted.

The largest number of defendants finalised with a guilty plea in Queensland had a principal offence of acts intended to cause injury (1,533 of 1,712 defendants). Large numbers of defendants finalised with a guilty plea were also recorded for the principal offence of unlawful entry with intent/burglary, break and enter (791 of 816 defendants), deception related offences (656 of 686 defendants) and illicit drug offences (546 of 567 defendants). Guilty pleas accounted for 91% of adjudicated finalisations, while the remaining 9% (544) of adjudicated defendants were subject to a trial outcome. Of all trial outcomes, approximately half (49%) were found guilty.

The median duration from initiation to finalisation for adjudicated defendants in higher courts in Queensland was 19.3 weeks. Defendants finalised with a guilty plea recorded a median duration of 18 weeks, compared with 37.9 weeks for a guilty verdict and 28.9 weeks for an acquittal.

For Queensland, one of the most notable features is the principal sentence type of defendants proven guilty in the higher criminal courts. Of these defendants, 44% received a custodial order to be served in a correctional facility or in the community (in comparison to 54% nationally), 18% received a fully suspended sentence (slightly above the national figure of 17%) and the remaining 37% of Queensland defendants proven guilty received a non-custodial order as their principal sentence type (compared with 28% nationally).

Copies of the publication and companion data can be ordered by contacting the ABS National Information and Referral Service on 1300 135 070 or through the ABS website at <www.abs.gov.au>.

For further information contact Julie Cole on 03 9615 7381 or <julie.cole@abs.gov.au>.



STATISTICAL DEVELOPMENTS

Participation Rates of Students Revised by Census Data

On 2 April 2003, the ABS released revised participation rates for students aged 15 to 19 years for Australian states and territories. Rates have been revised for the years 1989 to 2002. The revisions are the result of new estimates of the resident population, based on the results of the 2001 Census of Population and Housing.

Annual data for the periods 2000 to 2002 are available from the ABS web site <www.abs.gov.au>. Click on Data Cubes and select *Schools Australia*, (cat. no. 4221.0). The table containing revised data is Table 53 *Age Participation Rates of Students Per Cent of Relevant Population*. Annual data for the years 1989 to 1999 (and a time series table covering 1989 to 2002) are available from the publication contact officer – Leo Stinson.

For further information or to obtain earlier data, contact Leo Stinson on 02 6252 7793 or <leo.stinson@abs.gov.au>.

2001 Census Based Estimated Resident Population

The September quarter 2002 issue of *Australian Demographic Statistics* (cat. no. 3101.0), released on 20 March 2003, contains estimates of the resident populations of Australia and the states and territories based on the results of the 2001 Census of Population and Housing.

Quarterly estimates from September 1996 to June 2001 have been revised and are now final. Estimates for September 2001 to June 2002 have been revised to take account of this new information, while estimates at September 2002 are preliminary. The publication includes statistics on: population change, estimated resident population, births and deaths, marriages and divorces, overseas migration, interstate migration, estimated resident households and experimental estimated resident Australian Indigenous population.

The preliminary estimated resident population of Australia at September 2002 was 19,727,500 persons, an increase since June 2002 of 64,700 persons and an increase of 252,000 persons (1.3%) since September 2001.

At September 2002, Queensland had an estimated resident population of 3,729,000 persons, an increase over the year of 82,800 persons or 2.3%, the highest annual growth rate of any state or territory.

During the September quarter 2002, Queensland recorded the highest net interstate migration gain of all states and territories (9,400 persons). For the year ended September 2002, the net interstate migration gain was 33,300. The only other state or territory to record a gain from net interstate migration was Victoria with an increase of 4,700 for the year ended September 2002.

The experimental estimated resident Aboriginal and Torres Strait Islander population of Australia at June 2001 (based on the 2001 Census) was 458,500 persons (227,500 males and 231,000 females).

At June 2001, Queensland had an estimated resident Aboriginal and Torres Strait Islander population of 125,900 persons, 27.5% of the indigenous population of Australia and 3.5% of the total population of Queensland.

Copies of *Australian Demographic Statistics* and other ABS publications in Adobe Acrobat format, spreadsheets and data cubes can now be purchased on-line from the ABS web site. If you wish to purchase an ABS product on-line, see How to Access ABS Statistics on the home page of the ABS web site <www.abs.gov.au>.

For further information, please contact Anne Ward on 02 6252 6296 or <anne.ward@abs.gov.au>.

INDIGENOUS STATISTICS

Indigenous Social Survey Completed

Collection of the first Indigenous Social Survey (ISS) commenced in August 2002 and was completed in April 2003. Information was collected by personal interview from Indigenous people aged 15 years and over throughout Australia, including those living in remote and very remote areas. The ISS will provide a range of information relating to the social, health and economic circumstances and cultural participation of Aboriginal and Torres Strait Islander peoples.

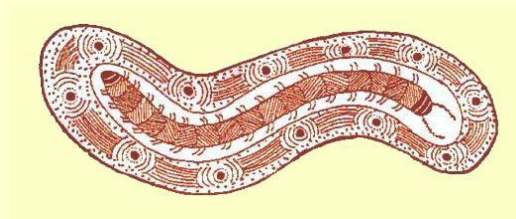
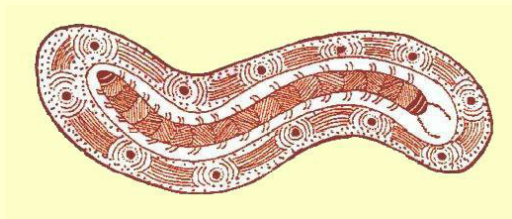
The topics included in the ISS are:

- housing
- education
- employment
- transport and mobility
- health
- sport
- family and community
- information technology
- culture
- crime and justice
- income

At the broader level the ISS will allow the exploration of relationships between various dimensions of social concern such as health, housing, education and employment. The ISS shares many data items with the 2002 General Social Survey (GSS) which will enable comparisons with the broader Australian population. It also has data items in common with the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), making it possible to analyse changes over time.

Initial results from the ISS will be published in a summary publication in November 2003. A summary of key issues will also be available on the ABS website.

For further information contact Grazyna Majchrzak-Hamilton 02 6252 5055 or <graz.hamilton@abs.gov.au>.



STATISTICAL CORNER

Lies, Damn Lies and Simpson's Paradox

Simpson's paradox may well be the reason for the saying 'Lies, Damn Lies and Statistics'. It occurs when combining two or more data sets, each of which separately support a certain hypothesis, results in a summed data set which supports the opposite hypothesis.

This is so counter-intuitive that it merits the name paradox. The problem is do you believe the results of the combination or the results of the individual data sets? The paradox is best demonstrated by an example. Real examples do exist but for simplicity consider the following artificial example.

Lies, Damn Lies and Simpson's Paradox — *continued*

Clinical trials are being held of two methods of treatment of a medical condition. In a first trial, Treatment A cured 60 out of 100 patients (60% cure rate) while Treatment B cured 9 out of 10 patients (90% cure rate). In a second trial Treatment A cured 1 out of 10 (10% cure rate) patients and Treatment B cured 30 out of 100 patients (30% cure rate).

In both trials Treatment B is clearly better than Treatment A.

Adding the two trials together, Treatment A cured 61 out of 110 patients and Treatment B cured only 39 out of 110 patients. Treatment A is therefore better than treatment B. But this is contrary to the conclusion above! Something strange occurred when the results of the two were added. The numbers are right, there has been no slip up in calculation, so how can this paradoxical result be resolved?

The simplest way to do this is to note that for both treatments, the number of patients in the test varied dramatically between the first test and the second and, more importantly, between treatments. The two trials cannot properly be added without distorting the result unless equal numbers of patients are allotted to each treatment in each test. To make them comparable, multiply the results of Treatment B by 10 for the first trial and multiply the results of Treatment A by 10 in the second trial.

The first test would then show Treatment A cured 60 out of 100 patients while Treatment B would have cured 90 out of 100 patients. The second test would then show Treatment A would have cured 10 out of 100 patients while Treatment B cured 30 out of 100 patients. Added this would then show Treatment A would have cured 70 out of 200 patients while Treatment B would have cured 120 out of 200 patients, and our confidence in our original conclusion is restored! Treatment B is better after all!

A divisor can also be used to avoid distorting the results, for example dividing the results of Treatment A by 10 in the first trial and dividing the results of Treatment B by 10 in the second trial gives identical proportions — 7 out of 20 for Treatment A and 12 out of 20 for Treatment B for the sum of the two trials.

If you examine the cure rate for the second trial and compare it with the cure rate for the first trial we find Treatment A cured 60% in the first trial but only 10% in the second. Similarly Treatment B cured 90% in the first trial but only 30% in the second. It is possible that the trials were applied to different population such as moderately ill patients versus those at a later stage of the disease, with poorer prognosis. In this example of Simpson's paradox, the trial of Treatment B was unfairly weighted with this second group, with a consequent poor outcome over both trials when they were simply added.

Why Simpson's Paradox Is Important

Combining results from different sources, populations or surveys can be extremely dangerous and lead to misleading results. Before you attempt to combine different sources you should consider whether:

- you are dealing with the same populations (often the devil is in the detail),
- you understand the populations represented by the sources,
- combining the results is going to improve the insights from your analysis or report.

In practice, there are a range of complex methods to ensure that you are giving appropriate weight to each population. You should seek advice from a qualified statistician before you undertake these methods.

Statistically, the message that Simpson's paradox gives us is this, look at the detail of the data and beware of adding items together to show a group trend or result unless they are carefully weighted to be comparable with each other.

For further information contact Lipan Rahman on 07 3222 6235 or <lipan.rahman@abs.gov.au>.

An Exciting Development in Navigating Census Data on the ABS Web Site ...



A new way to access data from the 2001 Census of Population and Housing is now available on the ABS web site <www.abs.gov.au>. You can now select geographic areas using a drill-down map interface. To access the map interface, from the home page click on **Census** then **2001 Census Products**. Selecting **Main Areas (locations) – By Map** takes you to a map of Australia which enables you to drill down to your area of interest by simply clicking on the map. The area you have selected will be highlighted and will also appear in a 'breadcrumb trail' at the top of the page, which provides a convenient means of returning to earlier areas you selected in the drilling down process.

If your particular area of interest is smaller than the highlighted part of the map, just keep drilling down by clicking to reveal the smaller areas. You can drill down as far as collection districts, the smallest areas for which census data are available.

At each level there is a link to view a Census Snapshot (an easy-to-read analysis of information on the area) or download a Basic Community Profile (a zipped Excel file containing a set of tables) for the area. Basic Community Profiles within the 'By Map' selection are all free of charge except for collection districts (which are \$10 per area). Click on the link to view or download or buy the file. For charged areas there is a warning of the cost and you will be prompted for credit card details.

Areas of interest other than those available in the 'By Map' selection e.g. suburbs, postal areas or local government areas, are available in the 'By Name' view and may incur charges.

Indigenous profiles are available free at ATSI Region and Indigenous Area levels under the Indigenous Geography navigator. The Main Areas (locations) – By Map navigator contains Indigenous Profiles at the statistical local area level. Other than the state/territory totals, these incur charges.

In addition to the current range of free data for the 2001 Census, all data to statistical local area geographic level from the 1996 Census are free of charge on the ABS web site. Data for 1996 collection districts are available as an information consultancy.

Census data are also available electronically through ABS@ and AusStats.

For further information contact Tanya Lucas on 07 3222 6403 or <tanya.lucas@abs.gov.au>.

Community Profile Series Soon to Be Complete



The ABS is pleased to announce that the Working Population Profile, will be released on 17 June 2003. This (along with the Basic Community, Indigenous, Time Series, Usual Residents and Expanded Community Profiles) will complete the 2001 Census Community Profile series and provide users with an excellent source of census specific data on the key characteristics of persons, families and dwellings.

All profiles will be accessible via the ABS web site. For Expanded Community Profiles, the cost is \$75 per area. All other profiles are available for \$10 per area.

All profiles at the Australia level are free.

For further information contact Tanya Lucas on 07 3222 6403 or <tanya.lucas@abs.gov.au>.

Census Publication Gives the Story on Towns and Cities



Selected Characteristics for Urban Centres and Localities (cat. nos 2016.0–7) was released on 26 March 2003. This publication series covers a range of social and housing statistics produced from the 2001 Census. The publications incorporate both first and second release data — a selection of tables for Urban Centre and Locality and Section of State levels. Census population counts and selected census data describing the person, household and dwelling characteristics of each area are included. Commentary is also provided for population and household characteristics, labour force characteristics and occupied private dwellings.

Selected Characteristics for Urban Centres, Australia (cat no. 2016.0) comprises tables which rank the top 200 Urban Centres based on selected person, household and dwelling characteristics.

Selected Characteristics for Urban Centres and Localities, State/Territory (cat. nos 2016.1–7) provides selected person, household and dwelling characteristics as well as a table ranking Urban Centres (more than 1,000 people) and Localities (between 200 and 999 people) according to the following characteristics:

- Total number of persons,
- Rate of increase or decrease in number of persons enumerated,
- Proportions of males and females,
- Proportion of persons aged 0–14 years,
- Proportion of persons aged 65 years and over,
- Proportion of persons who used a personal computer at home,
- Proportion of families with dependent children,
- Proportion of employed persons,
- Unemployment rate,
- Number of occupied private dwellings and
- Median household income.

For further information contact Tanya Lucas on 07 3222 6403 or <tanya.lucas@abs.gov.au>.

Disability and the 2006 Census

The ABS recognises the potential value of obtaining small area disability data from the census and has a strong commitment to the development of a suitable census question for the 2006 Census of Population and Housing.

Previous development and testing of a set of disability questions for both the 1996 and 2001 census rounds was unsuccessful in terms of data quality.

In preparation for the 2006 Census a Census Advisory Group on Disability (CAGD) was convened, with representatives from government, professional, academic, industry and community organisations. A key role of the group is to identify and prioritise the key requirements for disability data for small areas, and for a range of population groups, including relatively small subgroups. The first meeting of the CAGD was held in February 2003, with a key decision being made to focus the development for Census 2006 on the concept of 'need for assistance' rather than the previously tested broader concept of disability. A series of focus group tests are planned for the first half of 2003, to be followed by a large scale test in August 2003 and a further large scale test in 2004.

For further information contact Ken Black on 02 6252 7430 or <ken.black@abs.gov.au>.

STATISTICAL CONSULTANCY SERVICES

Statistical Consultancy — Just What Is It? What Can It Do? and What Does It Cost?

Queensland's Statistical Consultancy Unit are a team of professional statisticians with experience and expertise in survey design, data analysis and statistical training.

We can help you by -

showing you how to get maximum possible benefit from your own surveys; the balance needed between accuracy and budget constraints to achieve your aims
reviewing your existing or proposed surveys, advising on the rigour and appropriateness of the techniques and methodology
assisting with your survey's design and sampling problems
providing statistical training, equipping you with skills such as statistical analysis and survey design
applying complex statistical analytical techniques to your data or ABS data.

If you think the Statistical Consultancy Unit can help you, please ring us on 07 3222 6187. We will talk through your requirements and can provide a written quote detailing how we can address your needs. Standard ABS consultancy fees of \$155 per hour apply.

For further information, contact Leah Hutchinson on 07 3222 6187 or <l.hutchinson@abs.gov.au>.

www.abs.gov.au

ABS QLD CONTACT POINTS



National Information and Referral Service

Telephone: 1300 135 070

TTY: 3222 6325

Consultants will assist with your statistical inquiries



Internet Site

www.abs.gov.au

email: clientservices@abs.gov.au



E-kiosk

Electronic copies of ABS publications as far back as 1998 are available for sale. Hard copy will be produced for those who require it. Visit us on the 18th floor at 313 Adelaide Street and browse. We are open 8.30 a.m. – 4.30 p.m.



Library

The Library is situated alongside our bookshop and provides a complete range of ABS current and historical publications.

Contact for Queensland State Government Departments

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