



# **Australian Social Trends**

**2008**

## **Article: Internet access at home**

AUSTRALIAN BUREAU OF STATISTICS

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# Internet access at home

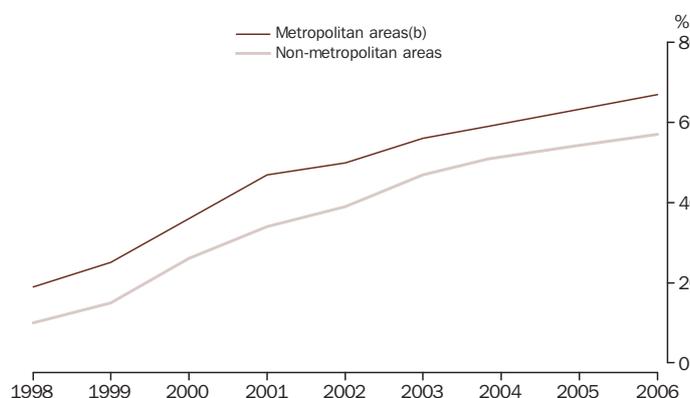
**The rate of household Internet access has quadrupled over the past eight years, from 16% in 1998 to 64% in 2006–07.**

In recent years, the prominence of the Internet as a vehicle for accessing information, communicating and undertaking commerce has continued to increase. Some government services, such as E-tax, child support and a range of Medicare functions, are now available online. News services, Internet shopping, and personal communication such as email, instant messaging and social networking sites are also increasingly a feature of people's daily lives.

Internet access in the home is dependent on a range of factors such as affordability, the reliability of Internet connections and service providers, and the interest and capability of potential users of the Internet. Socioeconomic characteristics, such as family composition, educational attainment and income are also related to rates of household Internet access.

The type of Internet service people have access to is also significant, with Broadband connections considered to have superior performance capabilities compared to dial-up. Successive governments have recognised Broadband rollout across Australia as an important issue.

**Proportion of Australian households that have access to the Internet(a)**



(a) From 1998 to 2003, data are at the point in time when surveys were conducted. Data are not available for 2004. For 2004–05, the reference period is from August 2004 to June 2005, and for 2005–06, the reference period is from July 2005 to June 2006. The data for 2006–07 were collected over a ten month period (July 2006 and October 2006–Jun 2007).

(b) Statistical divisions that contain more than just the urban centre and represent the city in the wider sense.

Source: Household Use of Information Technology, Australia, 2006–07 (ABS cat. no. 8146.0)

## Data sources and definitions

Most of the data presented in this article are sourced from the ABS 2006–07 Household Use of Information Technology survey and the 2006 ABS Census of Population and Housing.

*Internet access* is the availability of lines, points, ports and modems to subscribers to access the Internet at the individual's home, unless otherwise stated.

*Internet use* refers to the use of the Internet in the 12 months prior to interview. It includes access via mobile phones, set-top boxes connected to either an analogue or digital television and games machines.

A *Broadband connection* is an 'always on' Internet connection with an access speed equal to or greater than 256 Kilobits per second (Kbps).

A *dial-up connection* to the Internet is via modem and dial-up software using the public switched telecommunication network (PSTN).

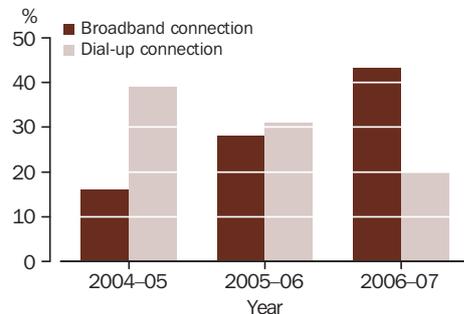
*Other Internet connection* includes dial-up and all other forms of Internet connections that are not Broadband connections.

*Remoteness Area (RA)* is a structure of the Australian Standard Geographical Classification (ASGC), covering the whole of Australia. It is intended to classify areas sharing common characteristics of remoteness into broad geographical regions (Remoteness Areas). The remoteness of a point is measured by its physical distance by road to the nearest urban centre. As remoteness is measured nationally, not all Remoteness Areas are represented in each state or territory. There are six RAs in the structure. These are: Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia and Migratory Australia. The Remoteness Area names used in this article are abbreviated versions of these terms, with 'Australia' omitted. For further information see *Statistical Geography Volume 1 – Australian Standard Geographical Classification (ASGC), 2006* (ABS cat. no. 1216.0).

## Internet access over time

According to the Household Use of Information Technology (HUIT) survey, the rate of household Internet access has increased markedly across Australia in recent years, from 16% of Australian households in 1998 to 64% in 2006–07.

### Proportion of households with dial-up or Broadband Internet connection



Source: Household Use of Information Technology, Australia, 2006-07 (ABS cat. no. 8146.0).

### Dial-up and Broadband

In just two years, the rate of Broadband Internet connections increased from 16% of Australian households in 2004-05 to 43% in 2006-07, becoming more prevalent than dial-up connections (20% of households in 2006-07) for the first time. Broadband now accounts for between one-half and two-thirds of all Internet connections at home across almost all demographic groups and geographic areas. The increased reliability, faster speed and greater capacity to perform tasks compared to dial-up connections are likely to be among the major reasons for the big increase in the take up of Broadband connections.<sup>1</sup> A reduction in the cost of broadband services over time is also likely to be a factor associated with the greater take up of Broadband in recent years.

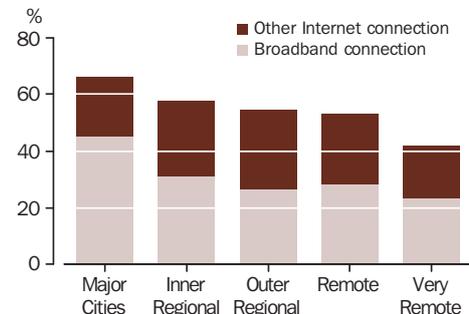
### Geography

Internet access is important to people living in remote areas as it provides increased access to services, resources and information that are physically located far from home. The Internet, and in particular Broadband Internet connections, allows farming households to operate more efficiently as home-based businesses.<sup>1</sup>

The proportion of households with access to the Internet in both Metropolitan and non-Metropolitan areas has followed a similar upward trend over the last decade. The non-Metropolitan household Internet access rate (57%) remained lower than that in Metropolitan areas (67%) in 2006-07.

According to the 2006 Census, rates of household Internet access and Broadband connection decreased with increasing remoteness, with Major Cities having higher rates of Internet access (66%) and Broadband connection (45%), and Very Remote areas

### Household Internet access by Remoteness Areas — 2006



Source: ABS 2006 Census of Population and Housing.

lower rates (42% and 24%). To some extent the lower rates of access in remote areas are associated with socioeconomic factors including lower levels of educational attainment and income.<sup>2</sup>

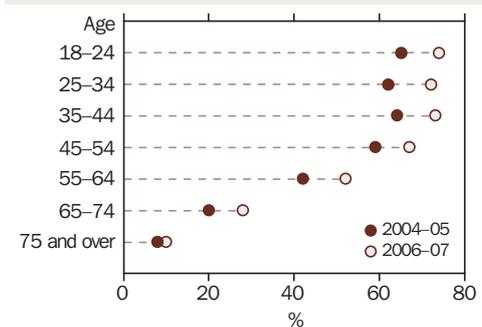
In an effort to improve speed, access rates and reliability of the Internet across Australia, particularly in regional and remote areas, the Australian Government has committed to provide funding and necessary regulatory changes to facilitate the roll-out of a new open access, high-speed, fibre-based broadband network intended to reach 98% of Australian homes and businesses.<sup>3</sup>

### Who uses the Internet?

Internet use refers to the use of the Internet in the home for any purpose.

Between 2004-05 and 2006-07 the rate of household Internet use increased across all age groups. The increase in use of the Internet was greatest for people aged 65-74 years, where 40% more people were using the Internet at home in 2006-07 (28%) compared with 2004-05 (20%). Despite this growth,

### Internet use at home by age



Source: ABS Household Use of Information Technology Survey, 2004-05 and 2006-07.

### Purpose of Internet use at home — 2006–07

	%
Personal/private	98
Education/study	53
Work/business	52
Voluntary/community	12
Other	11

Source: Household Use of Information Technology, Australia, 2006–07 (ABS cat. no. 8146.0).

people aged 55 years and over continued to use the Internet at home less than those in younger age groups.

The lower rate of household Internet use among older people may be related to limited opportunities for introduction to new technologies (for example opportunities afforded in schools and workplaces), a perception that the Internet is not relevant to them, and physical constraints such as arthritis and sight restrictions.<sup>4</sup>

### Purpose of Internet use

While people use the Internet at home for a variety of purposes, personal and private reasons (including sending and receiving emails and online shopping) were the most common in 2006–07. Almost all (98%) of the 9.9 million Australians who used the Internet at home reported using it for this purpose. Just over half (53%) used the Internet for education or study and a similar proportion (52%) used it for work related purposes.

In 2006–07, 61% of the 11.3 million people who used the Internet at any site reported using it in the past 12 months to buy goods

### Internet access and use at home by age — 2006–07

Age group (years)	Internet access	Internet use
	%	%
15–24	79.7	76.5
25–34	75.8	71.8
35–44	80.2	72.6
45–54	78.5	66.5
55–64	64.7	51.7
65–74	42.2	28.1
75 and over	21.8	10.5
<b>Total</b>	<b>69.5</b>	<b>60.9</b>

Source: ABS 2006–07 Household Use of Information Technology Survey.

### International comparison



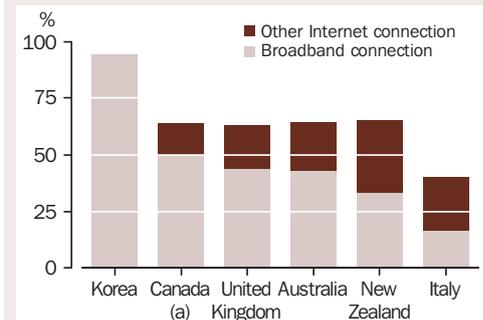
Although household Internet access rates have continued to increase rapidly in almost all OECD countries, the rate of household Internet access varied considerably among member countries in 2006.

In 2006, Korea had the highest proportion of households with a Broadband connection (94%), while Turkey had the lowest (2%).

The rate of Broadband connection in Australia (43%) was similar to that of the UK (44%). In terms of broadband connections, Australia ranked 13th of the 30 OECD countries.

Different levels of response to the survey in different countries may affect the capacity to make comparisons. For example, Canada and the United Kingdom had response rates as low as 67%, while Australia, New Zealand and Korea had response rates of around 90%.

### Households with Internet connections, selected OECD countries — 2006



(a) Broadband data relate to 2005.

Source: Household Use of Information Technology, Australia, 2006–07 (ABS cat. no. 8146.0) and OECD metadata <<http://www.oecd.org/sti/ictmetadata>>.

or services for private use. Among all age groups, people aged 25–34 years were the most likely to have used the Internet for this purpose (71%), compared with 34% of young people aged 15–17 years and 42% of people aged 65 years and over.

### Who has access?

According to regression analysis of 2006 Census data, factors influencing Internet access include age, family composition, educational attainment and income.<sup>5</sup>

### ...Internet access and use by age

Internet access is the availability of lines, points, ports and modems to subscribers to access the Internet at home.

Access differs from Internet use as, although a person may have access to the Internet at home, they may not have used it there.

Household Internet access is not a good indicator of Internet use for all age groups. While people aged 15–34 years had access to and used the Internet at similar rates, from 35 years the rates diverged with age.

While Internet access rates for those aged 35–44 and 45–54 years were high (80% and 79% respectively), rates of Internet use in the 12 months prior to the survey were lower (73% and 67%). This gap continued to widen with older age groups. For example, while 22% of people aged 75 years and over had access to the Internet in their home, only 11% reported using the Internet.

The high access and lower usage rates for people aged 35–54 years may be related to the presence of children in the household. Parents may acquire Internet access for educational and entertainment purposes for their children, but may not use it themselves.<sup>4</sup>

### ...family composition

Couple families with dependent children were more likely to have Internet access at home (86%) than any other family type,

#### Internet access by family type — 2006

Family type	Age of reference person(a)			Total
	34 years and under	35–54 years	55 years and over	
	%	%	%	%
Couple family without children	77.0	76.8	52.2	62.5
Couple family with dependent children	76.6	88.6	87.9	85.9
Couple family with non-dependent children	71.2	81.8	69.8	74.7
One parent family with dependent children	51.1	71.5	71.1	65.2
One parent family with non-dependent children	51.6	62.8	49.0	54.0
Other family(b)	72.2	55.1	33.7	58.7
<b>Total</b>	<b>72.4</b>	<b>82.4</b>	<b>57.1</b>	<b>72.0</b>

(a) Reference person refers to the person who filled out the Census form for the household.

(b) Other family is defined as a group of related individuals residing in the same household, who cannot be categorised as belonging to a couple or one parent family.

Source: ABS 2006 Census of Population and Housing.

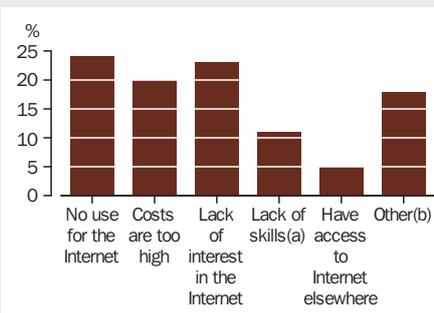
#### Households without Internet access at home

According to the 2005–06 Household Use of Information Technology survey, 40% of Australian households did not have access to the Internet. The main reasons Australian households did not have Internet access at home were that the people within the household had no use for the Internet at home (24%), or had a lack of interest in the Internet (23%).

Around one-fifth (22%) of households in the bottom two equivalised (that is, adjusted to take account of differing household size and composition) income quintiles stated high cost as the main reason for not having Internet access.

Of those living in households that did not have Internet access at home, one-quarter (25%) had used it at another site in the 12 months prior to the survey. The majority of people used it at a neighbour's, friend's or relative's house, or at work (both 14%). Only 4% of those without Internet access at home used it at TAFE or a tertiary institution.

#### Main reason for not having Internet access at home — 2005–06



(a) Includes insufficient capacity/need to update computer.

(b) Includes poor opinion of the Internet and security concerns.

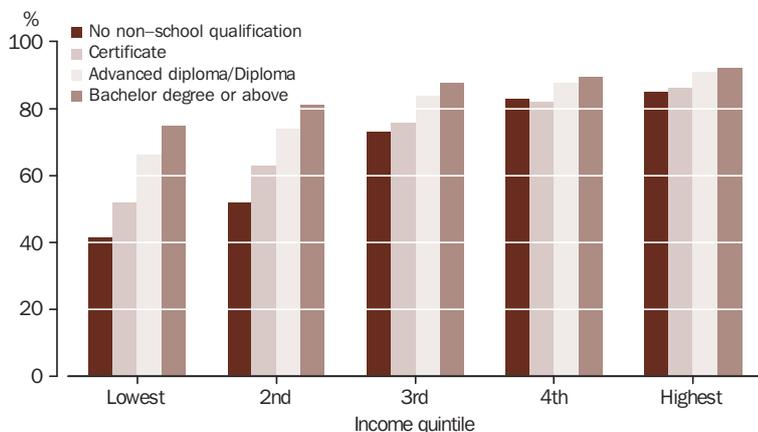
Source: Household Use of Information Technology, Australia, 2005–06 (ABS cat. no. 8146.0).

regardless of the age of the reference person (the person who filled out the census form for the household).

One parent families with non-dependent children had the lowest rate of household Internet access of all family types (54%). Younger one-parent families with dependent children (where the reference person was aged 34 years and under) had particularly low access rates, especially when compared with young couple families with dependent children (51% and 77% respectively).

This difference was also apparent between young couple and one parent families with non-dependent children (71% and 52%).

### Internet access by highest level of educational attainment by household income, aged 15 years and over — 2006



Source: ABS 2006 Census of Population and Housing.

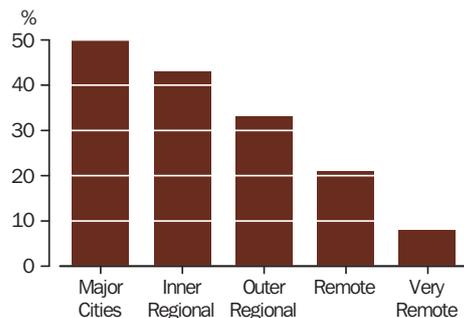
Overall, families in which the reference person was aged 55 years and over had lower rates of household Internet access than those where the reference person was younger.

Around half of couple families without children (52%) and one parent families with non-dependent children (49%), and around one-third of other families (34%) in which the reference person was aged 55 years and over, had Internet access in the home.

### ...educational attainment and income

In 2006, people aged 15 years and over, who had higher levels of educational attainment, had higher rates of household Internet access. People with a Bachelor degree or above had the highest rate of household Internet access (88%), whereas those without a non-school qualification had the lowest access rate (63%).

### Indigenous Internet access by Remoteness Area — 2006



Source: ABS 2006 Census of Population and Housing.

### Children's use of the Internet

According to the 2006 Children's Participation in Cultural and Leisure Activities survey, almost two-thirds (65%) of boys and girls access the Internet.

The most common Internet based activities undertaken at home for children aged 5–8 years were playing online games, and school or educational activities (each 62%), followed by accessing the Internet for leisure (38%).

Nearly nine in ten (86%) children aged 9–11 years used the Internet at home for school or educational activities, while over half used the Internet to play online games (54%). Accessing the Internet for leisure (44%) and emailing or messaging (42%) were also popular activities for children in this age group.

Nine out of ten 12–14 year olds who accessed the Internet used it at home for school or educational activities. Other purposes included emailing or messaging (68%), accessing the Internet for leisure (52%), playing online games (43%) and downloading music from Internet sites (40%).

Higher levels of income were also associated with higher rates of household Internet access. The highest rate of household access was for people in the highest income quintile (89%), while people in households in the lowest income quintile were least likely to have Internet access (47%).

The influence of educational attainment on household Internet access reduces as household income increases. In the bottom two income quintiles, there was a considerable difference in Internet access according to the level of educational attainment. Those with a Bachelor degree or above had higher rates of Internet access than those with lower levels of educational attainment.

In households with relatively higher incomes (top three income quintiles), there were high levels of Internet access regardless of educational attainment. For example, in the top income quintile, those with a Bachelor degree or above (92%) had a similar access rate to those who did not have a non-school qualification (85%).

### Aboriginal and Torres Strait Islander Peoples

According to the 2006 Community Housing and Infrastructure Needs Survey, 51% of people living in discrete Indigenous communities had access to the Internet in public locations.

Around 36% of Aboriginal and Torres Strait Islander people had access to the Internet at home, compared with the national average of approximately 67%.

Remoteness is a factor influencing rates of household Internet access for Indigenous people, given that most (69%) of the Indigenous population lived outside of Major Cities in 2006.<sup>5</sup>

As with the overall population, Internet access rates for Aboriginal and Torres Strait Islander people decreased with increasing remoteness. While half (50%) of Indigenous people living in Major Cities had Internet access in their homes, this dropped to around 8% of those living in Very Remote areas.

### States and territories

There are differences in the rates of household Internet access and Broadband connection across the states and territories.

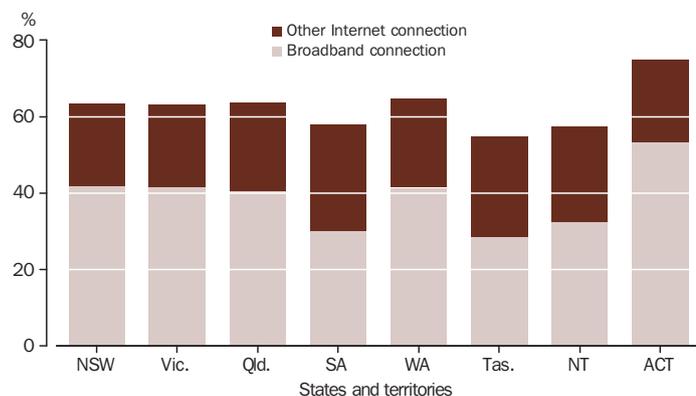
In 2006, the Australian Capital Territory had the highest proportion of households with access to the Internet (75%) and Broadband connection (53%), while Tasmania had the lowest (55% and 29%).

States and territories with similar rates of household Internet access also had comparable rates of Broadband connection in 2006. In New South Wales, Victoria, Queensland and Western Australia, around 64% of households had Internet access, while approximately 40% (or around two-thirds of all households with Internet access) had a Broadband connection. In South Australia, Tasmania and the Northern Territory approximately 57% of households had Internet access in 2006, and around 30% (or around half of all households with Internet access) had a Broadband Internet connection.

### Endnotes

- 1 Department of Communications, Information Technology and the Arts, *Broadband in regional Australia: Making a difference*, viewed 19 February, 2008, <[http://www.dbcde.gov.au/\\_data/assets/pdf\\_file/0009/66870/06020040\\_CC\\_CaseStudies\\_w\\_eb.pdf](http://www.dbcde.gov.au/_data/assets/pdf_file/0009/66870/06020040_CC_CaseStudies_w_eb.pdf)>.
- 2 Curtin, J 2001, *A Digital Divide in Rural and Regional Australia?*, Current Issues Brief 1 2001–02, Australian Parliamentary Library, Canberra.
- 3 Department of Broadband, Communications and the Digital Economy, *National Broadband Network*, viewed 12 March 2008, <[http://www.dbcde.gov.au/communications\\_for\\_business/funding\\_programs\\_and\\_support/clever\\_networks/bdn](http://www.dbcde.gov.au/communications_for_business/funding_programs_and_support/clever_networks/bdn)>.
- 4 Australian Bureau of Statistics 2004, *Australia Online: How Australians are using computers and the Internet 2001*, cat. no. 2056.0, ABS, Canberra.
- 5 Australian Bureau of Statistics 2007, *Patterns of Internet Access in Australia 2006*, cat. no. 8146.0.55.001, ABS, Canberra.

### Internet access by state and territory — 2006



Source: 2006 Census of Population and Housing.



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