

USE OF THE INTERNET BY HOUSEHOLDERS

AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) WED 1 MAR 2000

C O N T E N T S

	<i>page</i>
Notes	2
Main features	3

LIST OF TABLES

1 Access to the Internet	11
2 Households with home Internet access	11
3 Households with home Internet access, by frequency of use	12
4 Households with a home computer, by frequency of use	12
5 Intentions of households to acquire Internet access	12
6 Characteristics of adults accessing the Internet	13
7 Frequency of adult Internet access	14
8 Adults using the Internet to purchase or order goods or services for private use.	15
9 Expenditure on Internet purchases by adults.	16
10 Adults undertaking selected electronic commerce.	16
11 Characteristics of adults undertaking selected electronic commerce	17
12 Adults teleworking	17

ADDITIONAL INFORMATION

Explanatory notes	18
-----------------------------	----

- For further information about these and related statistics, contact John Ovington on Canberra 02 6252 5189, or Client Services in any ABS office as shown on the back cover of this publication.

NOTES

FORTHCOMING ISSUES	<p><i>ISSUE (Quarter)</i></p> <p>February 2000 26 May 2000</p> <p>May 2000 25 Aug 2000</p>	<i>EXPECTED RELEASE DATE</i>
ABOUT THIS PUBLICATION	<p>This publication presents a selection of results from a survey conducted in November 1999 of 3,200 persons randomly selected from private households. It focuses on the use of the Internet both by households and by adults (persons aged 18 years and over) and also presents statistics on the electronic commerce activities of adults.</p>	
ABOUT THE SURVEY	<p>The November 1999 survey was the final survey for 1999. Surveys for February 1999, May 1999 and August 1999 have been conducted and associated data released. In 1996 and 1998, surveys were conducted quarterly for February, May, August and November. The range of information sought in the 1999 surveys has been altered to address Internet usage in more detail than in the 1998 surveys. Questions on the use of the Internet included frequency of household Internet use, frequency of adult Internet use inside and outside of the home and the purchasing of goods or services via the Internet.</p>	
ACCURACY OF ESTIMATES OF MOVEMENT	<p>Users are advised to take care when comparing the data shown in this publication with similar data in other issues of <i>Use of the Internet by Householders</i> (Cat no: 8147.0). The main reason for this is the relatively high standard errors of movement for some of the data items, particularly the cross classifications of Internet users by personal characteristics (age, sex, etc). Users comparing the data in this publication with earlier surveys should refer to paragraphs 3–9 of the Explanatory Notes.</p>	
OTHER PUBLICATIONS	<p><i>Use of the Internet by Householders</i> (Cat. no. 8147.0) is released for each of the February, May, August and November surveys of Household Use of Information Technology. <i>Household Use of Information Technology, Australia</i> (Cat. no. 8146.0) is based on the consolidated results from the four quarterly surveys. This publication brings the data together for 1999 will be released in May 2000. It includes State level estimates.</p>	
SYMBOLS AND OTHER USAGES	<p>ABS Australian Bureau of Statistics</p> <p>ATM Automatic Teller Machine</p> <p>EFTPOS Electronic Funds Transfer at Point of Sale</p> <p>TAFE Tertiary and Further Education</p> <p>* Estimates have a relative standard error between 25% and 50%</p> <p>** Estimates have a relative standard error of 50% or more</p> <p>— nil or round to zero</p> <p>T. J. Skinner Acting Australian Statistician</p>	

MAIN FEATURES

INTERNET ACCESS

By households At November 1999 it was estimated that 25% of all households (1.7 million) had home Internet access, an increase of nearly 37%, or 477,000 households, on the November 1998 estimate where only 19% of households (1.3 million) had home Internet access. However, the proportion of households with a home computer has risen only slightly to nearly 50% of households (3.5 million) in November 1999 from 47% of households (3.2 million) in November 1998.

Adults accessing the Internet An estimated 6.0 million adults, 44% of Australia's adult population, accessed the Internet at some time during the 12 months to November 1999. In comparison, nearly 4.2 million adults, 31% of Australia's adult population, accessed the Internet at some time during the 12 months to November 1998.

PLACE OF INTERNET ACCESS

In the 12 months to November 1999, work and home were the sites of Internet access most likely to be reported by adults (2.8 million adults for both work and home). Other reported sites of Internet access included:

- friend's or neighbour's house, 2.1 million adult Internet users;
- TAFEs or other tertiary institutions, 1.2 million adults;
- public libraries, 0.8 million adults;
- shops, stores or telecafes, 0.3 million adults;
- schools, 0.2 million adults; and
- government agencies or departments, 0.2 million adults.

CHARACTERISTICS OF HOUSEHOLDS WITH HOME INTERNET ACCESS

By family type At November 1999, 38% of households of the family type, 'couple with children' had home Internet access, compared with 27% at November 1998. Households of this type accounted for 52% of Internet households at November 1999 and 54% at November 1998. At November 1999, 23% of households of the type 'couple with no children' had home Internet access and 19% of households of the type 'single parent with children' were connected to the Internet, compared with 15% for 'couple with no children' and 14% for 'single parent with children' at November 1998.

By region Of the 1.7 million households with Internet access at November 1999, 75% (1.3 million households) were located in capital cities. Of the 1.3 million households with Internet access at November 1998, 73% (929,000) were located in capital cities. At November 1999, just under 30% of capital city households had home Internet access compared with 17% of households in other areas of Australia. The comparable details for November 1998 were 22% and 14%.

INTENTIONS TO ACQUIRE HOME INTERNET ACCESS

At November 1999, there were 704,000 households with a computer which intended to acquire home Internet access in the next 12 months. This compares with 562,000 households at November 1998.

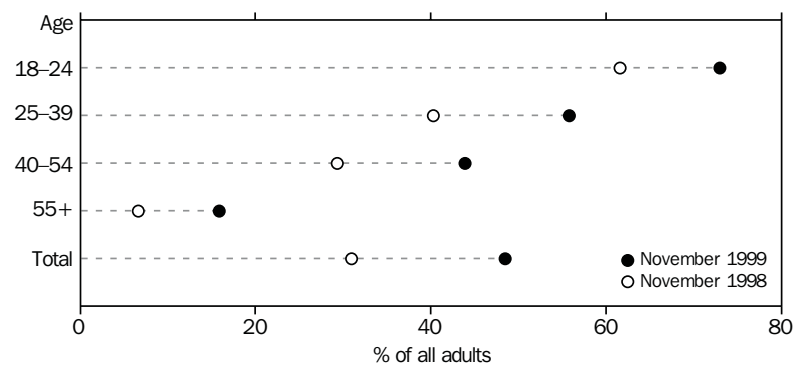
CHARACTERISTICS OF INTERNET USERS

In the 12 months to November 1999, nearly 44% of adults (6.0 million) accessed the Internet. This compares with 31% of adults (4.2 million) in the 12 months to November 1998. Between November 1998 and November 1999 there has been no change in the dominant characteristics of adults accessing the Internet.

By age

Younger age groups had the greatest proportion of Internet users, with 73% (1.3 million) of 18–24 year olds accessing the Internet in the 12 months to November 1999. This compares with 62% (1.1 million) in the 12 months to November 1998. For persons aged 25–39 years the estimate was 56% (2.4 million) to November 1999 compared with 40% (1.7 million) to November 1998. For 40–54 year olds, the estimate was 44% (1.7 million) to November 1999 compared with 29% (1.1 million) to November 1998 and for persons aged 55 years and over the estimate was 16% (0.6 million) to November 1999 compared with only 7% (0.2 million) to November 1998.

ADULTS ACCESSING THE INTERNET BY AGE(a)



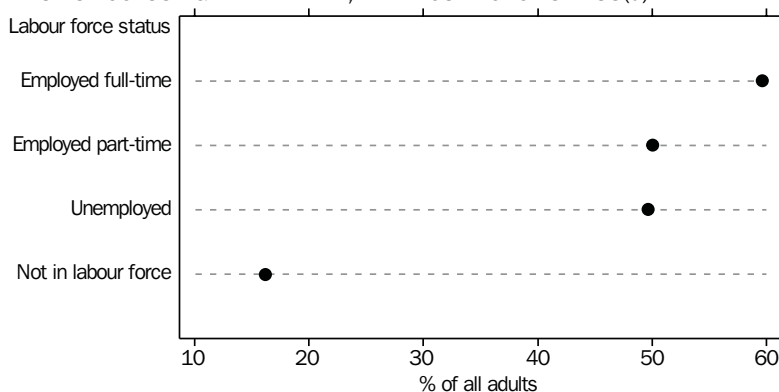
(a) Period of access covers the 12 months to November.

By sex Approximately 48% of adult males (3.3 million) had accessed the Internet in the 12 months to November 1999. The corresponding figure for adult females was 39% (2.7 million). In the 12 months to November 1998, 34% of adult males (2.3 million) accessed the Internet from any site compared with 28% of adult females (1.9 million).

By labour force status Nearly 60% of adults employed full-time (3.7 million) accessed the Internet in the 12 months to November 1999. For other labour force categories:

- 50% of adults employed part-time (1.3 million) accessed the Internet in the 12 months to November 1999;
- 50% of unemployed adults (0.3 million) accessed the Internet in the 12 months to November 1999; and
- 16% of adults not in the labour force (0.7 million) accessed the Internet in the 12 months to November 1999.

ADULTS ACCESSING THE INTERNET, BY LABOUR FORCE STATUS(a)



(a) Period of access covers the 12 months to November 1999.

By region Of the 6.0 million adults who accessed the Internet from any site in the 12 months to November 1999, 72% resided in capital cities compared with 71% in the 12 months to November 1998. In the 12 months to November 1999, 48% of adults in capital cities (4.3 million) accessed the Internet from any site compared with nearly 36% (1.7 million) in other areas. In the 12 months to November 1998, 34% of adults in capital cities (3.0 million) accessed the Internet compared with 25% of adults (1.2 million) in other areas.

FREQUENCY OF INTERNET ACCESS

By households Of the 1.7 million households with home Internet access at November 1999, 42% accessed the Internet daily, 36% accessed it two to six times a week and 12% once a week. The frequency of Internet access between Internet households in capital cities and their counterparts in other areas of Australia varied slightly, with 43% of Internet households in capital cities accessing the Internet daily, compared with 41% of Internet households in other areas. The proportion of Internet households accessing the Internet once a week or more was very similar—91% in capital cities compared with 89% in other areas of Australia.

By adults Of the 2.8 million adults who accessed the Internet from home in the 12 months to November 1999:

- 29% accessed the Internet daily;
- 37% accessed it two to six times a week; and
- 18% once a week (giving a total of 83% of these adults who accessed the Internet once a week or more from home).

Of the 2.8 million adults who accessed the Internet from work in the 12 months to November 1999:

- 42% accessed the Internet daily;
- 22% accessed it two to six times a week; and
- 13% once a week (giving a total of 77% of these adults who accessed the Internet once a week or more from work).

Of the 3.5 million adults who accessed the Internet from any other site in the 12 months to November 1999:

- 4% accessed the Internet daily;
- 13% accessed it two to six times a week; and
- 8% once a week (giving a total of 25% of these adults who accessed the Internet from other sites).

By sex Approximately 88% of adult males who accessed the Internet at home did so once a week or more compared with 78% for adult females.

For other sites of Internet access:

- 78% of adult males who accessed the Internet at work did so once a week or more compared with 76% for adult females; and
- 27% of adult males who accessed the Internet at sites other than home or work did so once a week or more compared with 23% for adult females.

FREQUENCY OF COMPUTER USE

By households There was considerable difference in the frequency of home computer use between households with home Internet access and households with a home computer and no home Internet access.

Of households with home Internet access, 73% used the home computer daily, compared with 35% of households with a home computer and no Internet access. Just over 98% of Internet households used the home computer once a week or more compared with 78% for households with a home computer and no home Internet access.

ELECTRONIC COMMERCE ACTIVITIES

Purchasing/ordering goods or services via the Internet Nearly 6% of Australian adults (803,000) used the Internet to purchase or order goods or services for their own private use in the 12 months to November 1999. By comparison, in the 12 months to November 1998, an estimated 286,000 (2%) adults purchased or ordered goods or services via the Internet. In the 12 months to November 1999, 74% of Internet shoppers paid for their purchases online compared with 83% in the 12 months to November 1998.

Nearly 70% of Internet shoppers (559,000) purchased or ordered via the Internet from home. Nearly 54% of Internet shoppers made their purchases only from Australia, 33% made them only from overseas and 13% from both Australia and overseas.

Number of purchases Of the 803,000 Internet shoppers:

- 36% made one purchase or order via the Internet;
- 14% made two;
- 13% made three;
- 10% made four; and
- 24% made five or more.

Period of Internet purchases Around 49% of adult Internet shoppers ordered or purchased goods or services during the period October to November 1999, 60% during the period June to September 1999, 31% during the period March to May 1999 and 27% during the period December 1998 to February 1999.

Types of goods or services purchased or ordered via the Internet	Of the 803,000 adults undertaking purchases or orders via the Internet in the 12 months to November 1999:
--	---

- 27% reported purchasing books or magazines;
- 19% reported purchasing computer software or equipment;
- 14% reported clothing or shoes;
- 13% reported purchasing music;
- 12% reported purchasing tickets to entertainment events;
- 9% reported purchasing sporting equipment;
- 7% reported purchasing holidays; and
- 7% reported purchasing alcohol.

EXPENDITURE ON GOODS
OR SERVICES PURCHASED
VIA THE INTERNET

Total expenditure	Of the 803,000 adults making purchases or orders via the Internet in the 12 months to November 1999:
-------------------	--

- 19% spent up to \$50 on Internet purchases;
- 14% spent \$51–\$100;
- 23% spent \$101–\$250;
- 9% spent \$251–\$500; and
- 34% spent more than \$500.

Total online expenditure	Of the 595,000 Internet shoppers at November 1999 who paid for their purchases online:
--------------------------	--

- 15% spent up to \$50;
- 13% spent \$51–\$100;
- 30% spent \$101–\$250;
- 11% spent \$251–\$500; and
- 29% spent more than \$500.

PAYING BILLS OR
TRANSFERRING FUNDS

In the three months to November 1999:

- 4% of all adults (530,000) used the Internet to pay bills or transfer funds;
- 2% of all adults (227,000) used an electronic information kiosk to pay bills;
- 41% of all adults (5.6 million) used a telephone to pay bills or transfer funds;
- 62% of all adults (8.5 million) used EFTPOS; and
- 72% of all adults (9.8 million) used an ATM.

By sex A similar proportion of adult males and females undertook the following electronic commerce transactions:

- transferred funds or paid bills via the telephone (40% of males and 41% of females);
- paid bills or withdrew funds via EFTPOS (60% of males and 63% of females); and
- transferred or withdrew funds via an ATM (72% of males and 72% of females).

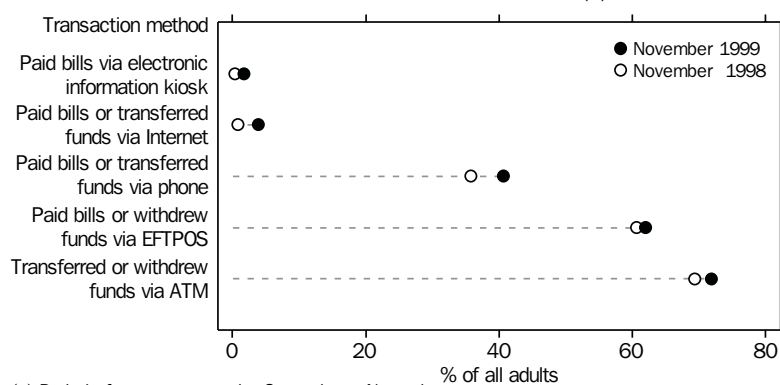
While the use of the Internet for banking or bill payment purposes is still relatively low, a slighter higher proportion of males used these facilities than females (5% for males and nearly 3% for females).

By age The proportion of adults who used EFTPOS or ATMs in the three months to November 1999 varied with age:

- 80% of persons aged 18–24 years used EFTPOS and 90% used an ATM;
- 80% of 25–39 year olds used EFTPOS and 89% used an ATM;
- 64% of 40–54 years olds used EFTPOS and 72% an ATM; and
- only 31% of persons aged 55 years or more used EFTPOS and 44% an ATM.

Use of telephone banking or telephone bill payment was highest amongst 25–39 year olds (52%) and 40–54 year olds (46%). Nearly 34% of 18–24 year olds used telephone banking or bill payment compared with 26% for persons aged 55 years or more.

ADULTS UNDERTAKING SELECTED ELECTRONIC COMMERCE(a)



Teleworking At November 1999, just over 5% of employed adults (468,000) reported that they were able to access their employer's computer system from home via a modem compared with just under 5% (410,000) of employed adults at November 1998. At November 1999, 4% of employed adults (352,000) reported that they had a teleworking agreement with their employer to access their computer via a modem so that they could work from home compared with just under 4% (312,000) of employed adults at November 1998.

1 ACCESS TO THE INTERNET

	November 1999						Change since November 1998
	November 1998	February 1999	May 1999	August 1999			
	'000	'000	'000	'000	'000	%	%
Households with a home computer(a)	3 240	3 167	3 245	3 380	3469	49.9	7.1
Households with home Internet access(a)	1 272	1 277	1 524	1 578	1749	25.1	37.5
Adults accessing the Internet(b)(c)							
from home	1 670	1 681	2 311	2 364	2802	20.5	71.4
from work	1 930	2 499	2 733	2 642	2829	20.7	46.6
from neighbour's/friend's house	1 114	1 491	1 607	1 522	2056	15.0	84.5
from TAFE/tertiary institution	802	1 018	1 014	904	1157	8.4	44.3
from public library	413	692	744	900	752	5.5	82.1
from shops/stores/telecafes	189	221	336	371	287	2.1	51.5
from school	111	273	223	201	210	1.5	89.6
from government agency/department/shopfront	99	197	180	142	202	1.5	104.8
from other sites(d)	116	252	299	365	333	2.4	187.2
from any site	4 192	5 001	5 465	5 553	6003	43.8	43.2

(a) Proportions are of all households.

(b) Proportions are of all adults.

(c) Persons can nominate more than one site.

(d) Includes telecentres and community or voluntary organisations.

2 HOUSEHOLDS WITH HOME INTERNET ACCESS(a)

	November 1998		November 1999	
	'000	%	'000	%
FAMILY TYPE				
Couple with no children	247	14.7	396	22.6
Couple with children	681	27.3	908	38.5
Single parent with children	76	14.5	128	19.4
Single person	126	8.6	140	9.6
Other	142	21.8	177	24.5
REGION				
Capital cities	929	21.7	1318	29.8
Rest of Australia	343	13.5	430	17.0
Australia	1272	18.6	1749	25.1

(a) Proportions are of all households in each category.

3 HOUSEHOLDS WITH HOME INTERNET ACCESS, BY FREQUENCY OF USE(a)

	<i>Capital cities</i>		<i>Rest of Australia</i>		<i>Australia</i>	
<i>Frequency of Internet access</i>	'000	%	'000	%	'000	%
Daily	566	42.9	175	40.7	741	42.4
2-6 times a week	489	37.1	148	34.5	637	36.5
Once a week	148	11.2	59	13.6	206	11.8
Once every 2 weeks or less	100	7.6	48	11.1	148	8.4
Not at all	*16	*1.2	—	—	*16	*0.9
Total	1318	100	430	100	1749	100

(a) Proportions are of all households at November 1999 with Internet access within regions.

4 HOUSEHOLDS WITH A HOME COMPUTER, BY FREQUENCY OF USE

	<i>Households with a home computer and no home Internet access</i>		<i>Households with home Internet access</i>		<i>All households with a home computer(a)(b)</i>	
<i>Frequency of computer use</i>	'000	%	'000	%	'000	%
Daily	598	34.9	1277	73.0	1882	54.2
2-6 times a week	554	32.4	376	21.5	932	26.9
Once a week	181	10.6	63	3.6	244	7.0
Once every 2 weeks	68	4.0	*12	*0.7	80	2.3
Once every month or less	231	13.5	*21	*1.2	252	7.3
Not at all	76	4.4	—	—	76	2.2
Don't know	**3	**0.2	—	—	**4	**0.1
Total	1711	100	1749	100	3469	100

(a) Proportions are of all households at November 1999 with a home computer.

(b) Includes home computer households which did not know if they had Internet access.

5 INTENTIONS OF HOUSEHOLDS TO ACQUIRE INTERNET ACCESS

	<i>Households with home Internet access at November 1998</i>	<i>Households with home Internet access at November 1999</i>	<i>Households intending to acquire home Internet access in the next 12 months from November 1999(a)</i>	
	'000	'000	'000	%
FAMILY TYPE				
Couple with no children	247	396	134	37.5
Couple with children	681	908	383	48.1
Single parent with children	76	128	65	33.9
Single person	126	140	61	34.2
Other	142	177	60	32.4
REGION				
Capital cities	929	1318	413	40.0
Rest of Australia	343	430	290	42.8
Australia	1 272	1749	704	41.1

(a) Proportions are of all households at November 1999 with a home computer and no home Internet access.

	Site of Internet access							
	Home		Work		Other sites		Any site	
	'000	%	'000	%	'000	%	'000	%
NOVEMBER 1999(c)								
Age								
18-24	543	29.9	268	14.8	1131	62.3	1 324	73.0
25-39	1016	24.0	1330	31.4	1331	31.4	2 365	55.8
40-54	915	23.3	1074	27.3	694	17.7	1 725	43.9
55+	328	8.8	156	4.2	303	8.2	589	15.9
Sex								
Males	1476	21.9	1613	23.9	1937	28.7	3 265	48.5
Females	1327	19.1	1216	17.5	1522	21.9	2 737	39.4
Labour force status								
employed full-time	1693	26.9	2403	38.3	1878	29.9	3 742	59.6
employed part-time	701	27.0	357	13.8	851	32.8	1 295	50.0
unemployed	*87	*15.8	**24	**4.4	226	40.9	275	49.6
not in the labour force	322	7.5	*45	*1.0	503	11.8	690	16.2
Region								
Capital cities	2170	24.2	2068	23.0	2445	27.2	4 324	48.1
Rest of Australia	633	13.4	761	16.2	1013	21.5	1 679	35.6
Total	2802	20.5	2829	20.7	3459	25.3	6 003	43.8
NOVEMBER 1998(c)								
Age								
18-24	388	21.5	247	13.7	917	50.8	1 112	61.6
25-39	609	14.3	942	22.1	811	19.0	1 721	40.3
40-54	535	14.0	620	16.2	364	9.5	1 120	29.3
55+	138	3.8	121	3.3	*70	*1.9	240	6.6
Sex								
Males	1 052	15.8	1 088	16.3	1 197	17.9	2 292	34.3
Females	618	9.0	842	12.3	964	14.0	1 900	27.7
Labour force status								
employed full-time	1 033	16.6	1 606	25.8	1 084	17.4	2 598	41.7
employed part-time	402	16.2	228	9.2	532	21.4	873	35.2
unemployed	*49	*8.1	*21	*3.6	217	36.2	230	38.5
not in the labour force	187	4.5	74	1.8	329	7.9	491	11.7
Region								
Capital cities	1 299	14.9	1 414	16.2	1 496	17.2	2 969	34.1
Rest of Australia	371	7.7	515	10.7	665	13.8	1 223	25.3
Total	1 670	12.3	1 903	14.3	2 161	16.0	4 192	31.0

(a) Proportions are of all adults in each category.

(b) Adults can nominate more than one site if applicable.

(c) Internet access occurring in the 12 months to November.

Frequency of Internet access	Site of Internet access					
	At home		At work		Other site	
	'000	%	'000	%	'000	%
MALES						
Daily	537	36.4	712	44.1	127	6.6
2-6 times a week	561	38.0	373	23.1	238	12.3
Once a week	200	13.6	172	10.7	159	8.2
Once every 2 weeks	*49	*3.3	*86	*5.4	*77	*4.0
Once a month or less	123	8.3	267	16.5	1266	65.4
Don't know	**5	**0.3	**2	**0.1	*69	*3.6
Total	1476	100	1613	100	1937	100
FEMALES						
Daily	267	20.1	479	39.4	**23	**1.5
2-6 times a week	464	35.0	253	20.8	204	13.4
Once a week	309	23.3	194	16.0	121	7.9
Once every 2 weeks	*89	*6.7	*49	*4.0	*78	*5.1
Once a month or less	198	14.9	231	19.0	1027	67.5
Don't know	—	—	**10	**0.8	*69	*4.5
Total	1327	100	1216	100	1522	100
ADULTS						
Daily	804	28.7	1191	42.1	151	4.4
2-6 times a week	1025	36.6	627	22.2	442	12.8
Once a week	509	18.2	366	12.9	280	8.1
Once every 2 weeks	137	4.9	135	4.8	155	4.5
Once a month or less	321	11.5	498	17.6	2293	66.3
Don't know	**5	**0.2	**12	**0.4	**138	**4
Total	2802	100	2829	100	3459	100

(a) Internet access occurring in the 12 months to November 1999.

(b) Proportions are of all adults accessing the Internet from each site.

8 ADULTS USING THE INTERNET TO PURCHASE OR ORDER GOODS
OR SERVICES FOR PRIVATE USE(a)

	'000	%
Purchased or ordered goods/services(b)	803	5.9
Location from which order made(c)		
Home	559	69.6
At work	187	23.2
Other	97	12.1
Location of purchase(c)		
Australia only	433	53.9
Overseas only	264	32.9
Both Australia & Overseas	106	13.2
Goods and services purchased and paid for online(c)	595	74.1
Number of purchases(c)		
One	291	36.2
Two	116	14.4
Three	106	13.1
Four	*82	*10.2
Five or more	196	24.4
Don't know	**13	**1.6
Period of purchase(c)		
Oct–Nov 99	394	49.1
Jun–Sept 99	481	59.9
Mar–May 99	246	30.6
Dec 98–Feb 99	214	26.6
Can't remember/don't know	*32	*4
Type of goods purchased by adults(c)		
Music	102	12.7
Books/magazines	217	27.0
Computer software/equipment	152	19.0
Clothing shoes etc.	108	13.5
Sporting equipment	*74	*9.3
Holidays	*55	*6.8
Entertainment/tickets to entertainment events	97	12.0
Alcohol	*52	*6.5
Other	318	39.6

(a) Relates to private purchases undertaken in the 12 months to November 1999.

(b) Proportions are of all adults.

(c) Proportions are of all adults making purchases or orders via the Internet.

9 EXPENDITURE ON INTERNET PURCHASES BY ADULTS(a)

<i>Level of expenditure</i>	<i>Adults making purchases or orders via the Internet(b)</i>		<i>Adults paying for Internet purchases online(c)</i>	
	'000	%	'000	%
\$1-\$50	150	18.6	88	14.8
\$51-\$100	113	14.1	*79	*13.3
\$101-\$250	186	23.2	177	29.8
\$251-\$500	*70	*8.8	*64	*10.8
More than \$500	270	33.6	174	29.3
Don't know	**14	**1.7	**12	**2.1
Total	803	100	595	100

(a) Period covers the 12 months to November 1999.

(b) Proportions are of all adults making purchases or orders via the Internet.

(c) Proportions are of all adults paying for Internet purchases online.

10 ADULTS UNDERTAKING SELECTED ELECTRONIC COMMERCE(a)

<i>Type of electronic transaction</i>	<i>November 1998(b)</i>		<i>November 1999(c)</i>	
	'000	%	'000	%
Paid bills or transferred funds via Internet	112	0.8	530	3.9
Paid bills via an information kiosk	*43	*0.3	227	1.7
Paid bills or transferred funds via phone	4 845	35.8	5569	40.7
Paid bills or withdrew funds via EFTPOS	8 225	60.7	8485	62.0
Transferred or withdrew funds via ATM	9 265	68.4	9849	71.9

(a) Proportions are of all adults.

(b) Period covers the 3 months to November 1998.

(c) Period covers the 3 months to November 1999.

11 CHARACTERISTICS OF ADULTS UNDERTAKING SELECTED ELECTRONIC COMMERCE(a)(b)

	<i>Paid bills or transferred funds via Internet</i>	<i>Paid bills via an information kiosk</i>	<i>Paid bills or transferred funds via phone</i>	<i>Paid bills or withdrew funds via EFTPOS</i>	<i>Transferred or withdrew funds via ATM</i>
ADULTS					
	'000	'000	'000	'000	'000
Males	334	96	2694	4075	4864
Females	195	131	2874	4410	4985
	%	%	%	%	%
Males	5.0	1.4	40.0	60.5	72.2
Females	2.8	1.9	41.3	63.4	71.7
AGE					
	'000	'000	'000	'000	'000
18-24	*27	*30	615	1450	1639
25-39	297	99	2195	3403	3756
40-54	193	*67	1800	2498	2826
55+	**13	*31	958	1135	1627
	%	%	%	%	%
18-24	*1.5	*1.6	33.9	79.9	90.4
25-39	7.0	2.3	51.8	80.3	88.6
40-54	4.9	*1.7	45.8	63.6	71.9
55+	**0.3	*0.8	25.8	30.6	43.8
REGION					
	'000	'000	'000	'000	'000
Capital cities	424	167	4080	5580	6626
Rest of Australia	106	*60	1489	2905	3222
Australia	530	227	5569	8485	9849
	%	%	%	%	%
Capital cities	4.7	1.9	45.4	62.1	73.8
Rest of Australia	2.2	*1.3	31.6	61.7	68.4
Australia	3.9	1.7	40.7	62.0	71.9

(a) Period covers the 3 months to November 1999.

(b) Proportions are of all adults in each category.

12 ADULTS TELEWORKING(a)

	<i>November 1998</i>		<i>November 1999</i>	
	'000	%	'000	%
Able to access employer's computer from home through a modem	410	4.7	468	5.3
Have an agreement with an employer to access their computer via a modem to work from home	312	3.6	352	4.0

(a) Proportions are of all employed adults.

EXPLANATORY NOTES

POPULATION SURVEY MONITOR

1 During November 1999 the ABS Population Survey Monitor collected data on the use of the Internet and on the electronic commerce activities of adults. From this survey, statistics were compiled both for households and for adults. Tables 1–5 in this publication present statistics for households and tables 1, 6–12 present statistics for adults (persons aged 18 years or over).

DATA COLLECTED

2 Data were collected on a number of topics relating to the Internet and electronic commerce. These included:

For households:

- number of households with a computer;
- frequency of computer use;
- number of households connected to the Internet;
- characteristics of households with home Internet access including, family type, income, state and region;
- frequency of Internet use; and
- intentions to connect to the Internet.

For adults:

- number of adults accessing the Internet;
- place where Internet accessed;
- frequency of Internet access;
- personal characteristics of Internet users including age, sex, marital status, income, highest educational qualification and employment status;
- use of the Internet to purchase or order goods or services;
- bill payment and funds transfer via the Internet, information kiosks, or the telephone;
- use of EFTPOS and ATMs; and
- teleworking.

COMPARING DATA OVER TIME

3 Users are advised to take care when comparing the data shown in this publication with similar data shown in the February, May, August and November 1998 and February, May and August 1999 issues of *'Use of the Internet by Householders,'* (Cat no: 8147.0). The main reason is the relatively high standard errors of movement for some of the data items, particularly the cross classifications of Internet users by personal characteristics (age, sex, etc).

ACCURACY OF DATA

4 As the estimates in this publication are based on information obtained from a sample drawn from households in the surveyed population, the estimates are subject to sampling variability. That is, they may differ from the figures that would have been produced if all households in Australia had been included in the survey. One measure of the likely differences is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample of households was included. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all households had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

5 The standard errors for some statistics are relatively high and users are advised to exercise caution in interpreting these statistics. Estimates with standard errors of 25% or more have been marked with an asterisk (*). The following table of standard errors is for data on the number of persons and households accessing the Internet.

<i>Size of estimate</i>	<i>Standard error for persons 18+</i>		<i>Standard error for households</i>	
	<i>November 1998</i>	<i>November 1999</i>	<i>November 1998</i>	<i>November 1999</i>
<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>'000</i>	<i>'000</i>
5	3.6
10	6.6	7.1	4.7	5.1
20	9.4	10.5	6.7	7.3
50	14.5	17.0	9.9	11.3
100	19.7	23.8	13.3	15.5
200	26.5	32.4	17.8	20.9
500	38.5	46.6	25.2	30.2
800	46.1	55.2	29.5	35.0
1 000	50.4	59.5	32.3	39.2
1 500	57.1	67.7	37.1	43.4
2 000	65.0	73.8	41.8	50.1

Example using the standard error table

6 Consider the estimate of the number of households with home Internet accessed at November 1999. The estimate of 1,749,000 households has a standard error of around 46,700. This means there are about two chances in three (67%) that the true value (ie. the value that would have been obtained from a complete census) is within the range 1,702,300 to 1,795,700. There are about 19 chances in 20 (95%) that the true value is in the range 1,655,600 to 1,842,400.

7 Particular care should be taken when comparing figures over time. It is not correct to assume that an apparent difference between figures is actually significant. Such an estimate is subject to sampling error. An approximate standard error (SE) of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

Example using the standard error table *continued*

8 For example, the increase in the number of households with home Internet access from November 1998 is 477,000. The standard error on this movement is about 58,200. Therefore we can say that there are 2 chances in 3 that the true value is within the range 418,800 to 535,200 and 19 chances in 20 that the true value is in the range 360,600 to 593,400.

9 The standard error of the estimate of movement for some IT indicators is shown in the following table.

<i>Indicator</i>	<i>Standard error of the estimate of movement (November 1998 to November 1999)</i>
	'000
Households with home Internet access	58,200
Adults accessing the Internet from neighbours/friends house	90,200

Acknowledgment

10 Australian Bureau of Statistics (ABS) publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

RELATED PUBLICATIONS

11 Other ABS publications on the production and use of information technology and telecommunication goods and services in Australia are:

Business Use of Information Technology, Australia, 1997–98
(Cat. no. 8129.0)

Government Use of Information Technology, 1997–98 (Cat. no. 8119.0)

Household Use of Information Technology, Australia, 1998
(Cat. no. 8146.0)

Information Technology, Australia, 1995–96 (Cat. no. 8126.0)

Telecommunications Services, Australia, 1996–97 (Cat. no. 8145.0)

Use of Information Technology on Farms, 1998–99 (Cat. no. 8150.0)

AVAILABILITY OF UNPUBLISHED STATISTICS

12 In addition to the statistics included in this publication, the ABS has a range of data on the use of selected information technologies in households. Inquiries about these statistics should be made by telephoning John Ovington on Canberra 02 6252 5189 or email john.ovington@abs.gov.au.

SELF-HELP ACCESS TO STATISTICS

<i>CPI INFOLINE</i>	For current and historical Consumer Price Index data, call 1902 981 074 (call cost 75c per minute).
<i>DIAL-A-STATISTIC</i>	For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 75c per minute).
<i>INTERNET</i>	www.abs.gov.au
<i>LIBRARY</i>	A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require.

WHY NOT SUBSCRIBE?

<i>PHONE</i>	+61 1300 366 323
<i>FAX</i>	+61 3 9615 7848

CONSULTANCY SERVICES

ABS offers consultancy services on a user pays basis to help you access published and unpublished data. Data that is already published and can be provided within 5 minutes is free of charge. Statistical methodological services are also available. Please contact:

<i>INQUIRIES</i>	<i>City</i>	<i>By phone</i>	<i>By fax</i>
	Canberra	02 6252 6627	02 6207 0282
	Sydney	02 9268 4611	02 9268 4668
	Melbourne	03 9615 7755	03 9615 7798
	Brisbane	07 3222 6351	07 3222 6283
	Perth	08 9360 5140	08 9360 5955
	Adelaide	08 8237 7400	08 8237 7566
	Hobart	03 6222 5800	03 6222 5995
	Darwin	08 8943 2111	08 8981 1218

POST Client Services, ABS, PO Box 10, Belconnen ACT 2616

EMAIL client.services@abs.gov.au



2814700011994
ISSN 1440-5423

RRP \$16.00