

Data Memo

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**RE: WIRELESS INTERNET ACCESS
February 2007**

34% of internet users have logged on with a wireless internet connection either at home, at work, or someplace else

Some 34% of internet users have logged onto the internet using a wireless connection either around the house, at their workplace, or some place else. In other words, one-third of internet users, either with a laptop computer, a handheld personal digital assistant (PDA), or cell phone, have surfed the internet or checked email using means such as WiFi broadband or cell phone networks.

Facts about wireless use (among internet users)	
Those who have logged on wirelessly from a place <u>other</u> than home or work	27%
Those who have wireless networks in their homes	19
Those with personal digital assistants that are able to connect to the internet wirelessly	13
Source: Pew Internet & American Life Project December 2006 Survey, n=798 for internet users.	

Users of wireless access show deeper engagement with cyberspace – at least when focusing on two basic online activities, email and news. Among the 34% of internet users who have gone online wirelessly:

- 72% of wireless users check email on the typical day, compared to 63% of home broadband users and 54% of all internet users.
- 46% get news online on the typical day, compared to 38% of home broadband users and 31% of all internet users.

The differences between wireless and home broadband users are statistically significant and notable because most wireless users (80%) have broadband connections at home. The findings suggest that the “relentless connectivity” afforded by wireless access

represents a different quality in online behavior.¹ It is possible – even likely – that lifestyle circumstances such as one’s job may require lots of email connectivity and associated wireless access. But the boundaries between checking email on a portable device for work or personal purposes can be very blurry; having such work-driven access may foster greater frequency of personal emailing or other kinds of online activities.

Wireless by place

When asked about the places they connect to the internet by wireless means:

- 27% of adult internet users have logged onto the internet using a wireless device at some place other than their home or place of employment.
- 20% of internet users have gone online at home using a wireless network.
- 17% of internet users have connected wirelessly while at work.

Most wireless surfers log on wirelessly from more than just one of the places asked about. In fact, 25% of internet users have gone online wirelessly from two of the three places; put differently, three-quarters of all those who have logged onto the internet using a wireless network have done this from more than one of the types of places queried.

Wireless by device

Laptop computers: Four in ten (39%) internet users have laptop computers and of these laptop users, 80% say their laptops can connect to the internet on a wireless network. Most of the time, those with wireless enabled laptops connect to a wireless network at home, although most also have logged on from someplace other than work or home. Specifically, among laptop users whose machines are capable of connecting to the internet wirelessly:

- 88% of laptop users have at one time logged on using a home wireless network.
- 57% have used a wireless network someplace other than home or work to connect to the internet.
- 36% have logged using a wireless network at work.

The growth in wireless networks at home has undoubtedly fuelled the use of laptops to connect wirelessly around the house. One in five (19%) of internet users have wireless networks at home, which is twice the number recorded when the Pew Internet Project asked this question in January 2005, when 10% of internet users had home wireless networks.

¹ The notion of “relentless connectivity” enabled by wireless access is discussed by Manuel Castells and colleagues in their study of mobile communication. The phrase is meant to convey that the key feature of mobile communication is connectivity and not mobility. See Manuel Castells, Mireia Fernandez-Ardevol, and Araba Sey, Mobile Communication and Society: A Global Perspective. Cambridge, MA: MIT Press, 2007.

More often than not, those with laptops and home wireless networks take advantage of in-house mobility; three-quarters of these users say they move their laptop around to different parts of the house

Cell phones: One quarter (25%) of internet users say they have a cell phone that connects to the internet with a wireless connection. Among internet users with this capability on their cell phone, half (54%) have used it to get on the internet either at home, work, or someplace other than home or work. Among those with cell phones that can connect to the internet:

- 47% have done this someplace other than home or work.
- 28% have done this at work.
- 27% have done this while at home.

Personal digital assistants (PDAs): One in eight (13%) internet users have a PDA that can connect to the internet using a wireless network. Of these, most (82%) have used it to connect at home, work, or someplace other than home or work. Specifically:

- 56% of those with a web-enabled PDA have used it to access the internet or email away from home or work.
- 49% have done this with their PDA at home.
- 38% have used their PDA to connect to the web or email at work.

Measuring wireless use

This latest measure of wireless connectivity comes from a December 2006 survey that frames wireless access in terms of devices (i.e., a laptop, a cell phone, a wireless-enabled personal digital assistant) and place (i.e., the home, workplace, or someplace other than home or work). Looking at wireless access in this expansive way yields the finding that one-third of all adult American internet users (34%) have logged onto the internet by wireless means using one of the devices listed above.

In the past, the Pew Internet Project has asked the following question to assess the extent of wireless access to cyberspace: “Do you ever log onto the internet using a wireless device?” That straightforward question showed, in March 2006, that 30% of internet users said they had done this. This older question, however, does not capture the different places people take advantage of wireless access, or the devices they use to connect. In February 2004, 22% of internet users said yes to the older question, so there is clearly some growth in wireless connectivity in recent years.

Who are the wireless users?

Users of the wireless internet tend to be younger than internet users in general. For internet users under the age of 30:

- 37% have logged on wirelessly from anywhere.
- 32% have logged on wirelessly from someplace other than home or work.
- 25% log on wirelessly at home.
- 16% have gotten online by wireless means at work.

As to devices for accessing the internet wirelessly, among internet users under 30:

- 40% have laptop computers, of which 88% are wireless-enabled.
 - 26% have wireless networks at home.
- 40% have cell phones that can access the internet
- 17% have PDAs that can connect to the internet.

Still, the 30-to-49 age range also shows a predilection to use wireless access, particularly with respect to devices that are often adjuncts to people's jobs. About one in five (18%) internet users in this age group have gone online using a wireless connection at work, and 15% have a PDA that connects wirelessly. As to other types of wireless use, one third (32%) of internet users in the 30-49 age range have logged on wirelessly from any location and 24% have connected to the internet by wireless means from a place other than home or work.

The table below offers a fuller demographic portrait of internet users who have used a wireless connection to go online compared to online users who have not done this.

Demographic profile of 34% of internet users who have logged on to the internet using a wireless device		
	Wireless users	All other internet users
Gender		
Male	56%	46%
Female	44	54
Age		
18-29	30	19
30-49	49	42
50-64	19	29
65+	3	11
Race/ethnicity		
White (not Hispanic)	67	79
Black (not Hispanic)	12	7
Hispanic (English speaking)	14	8
Education		
Less than high school	6	8
High school grad	22	34
Some college	30	26
College +	42	32
Student (full or part-time)	19	12
Income		
Under \$30K	14	23
\$30K-50K	13	24
\$50K-\$75K	18	13
Over \$75K	34	20
Don't know/refused	21	20
Online access		
Has broadband at home	80	53
Number of cases	243	555
<i>Source: Pew Internet & American Life Project Survey, December 2006, n=798 for internet users.</i>		

About the Pew Internet Project

The Pew Internet & American Life Project is a non-partisan, non-profit initiative of the Pew Research Center that does research on the social impact of the internet. It is funded by the Pew Charitable Trusts. The Projects takes no position on policy issues.

Methodology

This report is based on the findings of a daily tracking survey on Americans' use of the Internet. The results in this report are based on data from telephone interviews conducted

by Princeton Survey Research Associates International between November 30 to December 30, 2006, among a sample of 2,373 adults, 18 and older. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.3 percentage points. For results based on Internet users (n=1623), the margin of sampling error is plus or minus 2.7 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

Approximately half the sample received questions pertaining to wireless internet use, or 798 internet users. For results based on the sample of 798 internet users, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 3.8 percentage points.

The sample for this survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number. The final response rate is 27 percent.

December 2006 Tracking Survey

Final Topline

1/5/07

Data for November 30 – December 30, 2006

Princeton Survey Research Associates International
for the Pew Internet & American Life ProjectSample: $n = 2,373$ adults 18 and older

Interviewing dates: 11.30.06 – 12.30.06

Margin of error is plus or minus 2 percentage points for results based on total sample [$n=2,373$]Margin of error is plus or minus 3 percentage points for results based on total internet users [$n=1,623$]

MODEMB What kind of internet connection do you have at home? Do you use a dial-up telephone line, or do you have some other type of connection, such as a DSL-enabled phone line, a cable TV modem, a wireless connection, or a T-1 or fiber optic connection?

	CURRENT FORM B INTERNET USERS	CURRENT FORM B WHO USE INTERNET AT HOME	
%	27	29	Dial-up telephone line
	62	67	High-speed
	29	31	DSL-enabled phone line
	28	30	Cable modem
	4	5	Wireless connection (either land-based or satellite)
	1	1	T-1 or fiber optic connection
	1	1	Other
	8	n/a	Do not have internet access/computer at home (VOL)
	3	3	Don't know/Refused
	[798]	[742]	

NETH Do you happen to have a computer network that links your computers at home together, whether through a network cable or a wireless network? **(If yes:)** Is it through a network cable or wireless?

Based on Form B internet users [N=798]

	<u>CURRENT</u>		<u>JANUARY 2005²</u>	<u>FEBRUARY 2004³</u>
%	28	Total yes	21	17
	9	Network cable	10	10
	19	Wireless network	10	6
	63	Total no	78	78
	4	Do not have computer at home (VOL)	n/a	n/a
	5	Don't know/Refused	2	5

GAD1 Do you happen to have...?

Based on Form B internet users [N=798]

		<u>YES</u>	<u>NO</u>	<u>DON'T KNOW/ REFUSED</u>
a	A desktop computer			
	Current	82	18	1
	Feb-April 2006 [n=2,822] ⁴	84	15	*
b	A laptop computer			
	Current	39	61	*
	Feb-April 2006	40	60	*

LAP1 Is your laptop computer able to connect to the internet using a WIRELESS network, or not?

Based on Form B internet users who have a laptop [N=309]

	<u>CURRENT</u>	
%	80	Yes
	16	No
	4	Don't know/Refused

² In January 2005 trend, question was based on those who have more than one computer in the household [n=697]. Percentages were recalculated to reflect a base of all internet users [n=1,421]. Internet users who did not have more than one computer were included in the percentage for "Total no".

³ In February 2004 trend, question was based on internet users who go online at home [n=1,241]. Percentages were recalculated to reflect a base of all internet users [n=1,371]. Internet users who do not go online from home were included in the percentage for "Total no".

⁴ In Feb-April 2006 trend, item was asked of total adults. Percentages shown here were recalculated to reflect internet users.

LAP2 Do you ever use your laptop to connect to...?

Based on Form B internet users who have a laptop with a wireless connection [N=242]

		YES	NO	(VOL) DOESN'T APPLY	DON'T KNOW/ REFUSED
Item A based on Form B internet users who have a laptop with a wireless connection & have a wireless home network [N=102]					
a	Your wireless network at home	88	11	1	0
b	A wireless network at work	36	60	3	2
c	A wireless network someplace other than home or work	57	42	0	1

LAP3 When you use your laptop to connect to your wireless network at home, do you generally use it in one place in your home, or do you move it around with you and use it in different parts of your home?

Based on Form B internet users who use a wireless laptop to connect to their home network [N=89]

	CURRENT	
%	25	Generally use it in one place
	75	Move it around and use it in different parts of my home
	0	Don't know/Refused

GAD2 Do you happen to have...?

Based on Form B internet users [N=798]

	YES	NO	DON'T KNOW/ REFUSED
a A cell phone that connects to the internet with a wireless connection	25	73	2
b A personal digital device or PDA that connects to the internet with a wireless connection	13	85	2

CPI Do you ever use your cell phone to access the internet or email...?

Based on Form B internet users who have a cell phone with wireless internet access [N=170]

	YES	NO	DON'T KNOW/ REFUSED
a When you're at home	27	73	0
b When you're at work	28	72	0
c When you're someplace other than home or work	47	53	0

PDA1 Do you ever use your PDA to access the internet or email...?

Based on Form B internet users who have a PDA with wireless internet access [N=82]

	YES	NO	DON'T KNOW/ REFUSED
a When you're at home	49	49	2
b When you're at work	38	60	2
c When you're someplace other than home or work	56	42	2

