

Americans' perspectives on online connection speeds for home and mobile devices

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Summary of Findings

Four out of five home broadband users (80%) say they do not know the speed of their home internet connection. That is, when asked to specify their home internet connection speed, described as “the download or downstream speed of your connection per second,” the vast majority of home broadband users in the United States cannot identify it. This figure, from the FCC’s April-May 2010 national random digit dial telephone survey, is essentially the same captured by the Pew Internet & American Life Project in 2006, when 81% of broadband users said they did not know their home connection speed.¹

The question on home broadband speed asked respondents to specify their home connection speed, if they knew it. Home broadband users said the following about their download speeds:

- 4% said it is 20 megabits per second (Mbps) or more
- 4% said it is between 10 Mbps and 20 Mbps
- 4% said it is between 3 Mbps and 6 Mbps
- 4% said it is between 768 kilobits per second and 3 Mbps
- 3% said it is between 6 Mbps and 10 Mbps
- 1% said it is less than 768 kilobits per second

In spite of the fact that few broadband users know the specifics of their connection speed, 71% of broadband users believe that their connection speed at home is as fast as the provider promises at least most of the time. Some 24% of broadband users say they “always” receive the promised speed and another 47% say they receive the promised speed “most of the time.” This leaves one quarter (25%) of broadband users who say they receive the promised download speed some of the time or less frequently.

The findings on broadband speed unfold in the context of 91% of home broadband users being at least somewhat satisfied with the speed of their service. Specifically:

- 50% of home broadband users are *very satisfied* with their home connection speed.
- 41% of home broadband users are *somewhat satisfied* with their home connection speed.

The survey also asked questions of cell phone users about their attitudes toward several attributes of their cell phone service. Overall, the survey found that 83% of adults have a cell phone, with 80% having a personal cell phone (i.e., one for which their employer does not pay the bill). Those with a personal cell phone were posed a question on their level of satisfaction with the speed with which they can access the internet on their device. For those with personal cell phones:

- 33% said they were *very satisfied* with the speed of internet access on their cell phone and another 38% reported being *somewhat satisfied* with the connection speed of their device.
- As points of comparison, 59% said they were *very satisfied* with their overall cell phone service and another 33% said they were *somewhat satisfied* with their cell service.

¹ John B. Horrigan, “Home Broadband Adoption 2006” Pew Internet & American Life Project, <http://www.pewinternet.org/Reports/2006/Home-Broadband-Adoption-2006.aspx>

Demographic analysis

The following discussion and exhibits provide detail on how the responses to key findings reported above vary around demographic segments.

Broadband performance

For the question about whether people know their home broadband speed, there is some variation in response to this question around demographic groups:

- 71% of men say they do not know their home broadband download speed.
- 90% of women say they do not know their home broadband download speed.

With respect to age, younger broadband users have high awareness of their connection speed, but the strong majority – across all age groups – does not know their download speed for their home high-speed connection. Specifically:

- 73% of those between the ages of 18 and 29 do not know their home broadband download speed.
- 78% of those between the ages of 30 and 49 do not know their connection speed.
- 87% of those between the ages of 50 and 64 do not know their connection speed.
- 88% of senior citizens (ages 65 and over) do know their home connection speed.

Across race/ethnicity categories:

- 79% of whites do not know their home connection speed.
- 87% of African Americans do not know their home connections speed.
- 88% of Hispanics do know their home connection speed.

Finally, lower income broadband users (those living in households with annual incomes under \$30,000 per year) are more likely than middle-to-upper income Americans (those in households with annual income over \$75,000) to say they do not know their home connection speed – by a 83% to 77% margin.

With respect to home broadband users' satisfaction with their home connection speed, here is how results break out for those saying they are very satisfied across different groups (against the 50% average):

- 56% of young adults (between the ages of 18 and 24) are very satisfied with their home connection speed.
- 53% of those living in households with income over \$100,000 are very satisfied with their home broadband speed.
- 52% of women are very satisfied with their home broadband speed compared with 48% of men.
- 55% of suburban residents are very satisfied with their home broadband speeds, compared with 48% of rural broadband users and 45% of urban broadband users.

Exhibit 1:

Home Internet speed qualities by selected demographics (based on broadband adopters)			
	Do not know ADVERTISED speed of home connection	Percent who think speed is ALWAYS as fast as promised	Percent who think provider should ALWAYS make sure connection is as fast as promised
Total	80%	24%	67%
Male	71	22	64
Female	90	27	71
18-29	73	22	68
30-49	78	25	68
50-64	87	25	70
65+	88	29	55
White, non-Hispanic	79	24	66
Black, non-Hispanic	87	29	73
Hispanic	88	30	71
Less than \$30,000	83	26	66
\$30,000-\$49,999	80	26	67
\$50,000-\$74,999	83	25	71
\$75,000 or more	77	23	67

Source: Federal Communications Commission, Wired and Wireless Internet Survey of 3,005 adults, April-May 2010. Number of respondents who are broadband adopters=1,742.

There are only modest differences across demographic or socio economic groups in those who say they *always* receive the promised download speed. Some 22% of men say they always receive the advertised speed with 27% of women who say this. Interestingly, lower-income broadband users (those in homes with annual incomes below \$30,000) were slightly more likely than middle-to-upper income broadband users (those with household incomes above \$75,000) to say they get the carriers' advertised speed at least most of the time by a 26% to 23% margin.

Broadband users were asked not just about how often they *believe* they receive their advertised download speed, but also how often they think they *should* receive the download speed their carrier promises. Two-thirds (67%) of broadband users say they think their home download speeds should matched promised one *always* and another 24% say this should be the case *most of the time*.

The contrast between what broadband users believe to be what they do receive and should receive in terms of download speed is clear. One quarter (24%) of broadband users say they think they *always* get the promised download speed, but 67% say they think they *always* should get this speed. Among the 24% who say they always get their promised speed, 80% believe an ISP should always provide the promised speed – above the 67% average. The expectations are somewhat different for those who say they do not always received the speed promised by their ISP; within this group, 63% think an ISP should always provide the speed it promises.

Internet performance on a mobile device

As noted at the outset, one third (33%) of those with personal cell phones are *very* satisfied with the speed of internet access on their cell phone. Across demographic categories, women were more likely than men to say they are very satisfied with this aspect of their service, by a 38% to 29% margin. African Americans and Hispanics – who use the internet on their handheld at a higher level than white Americans – are more likely to say they are satisfied with their access speed.² Some 46% of Hispanics say they are *very* satisfied with their connection speed on their cell phone, while 36% of African Americans say this. For white Americans, the figure is 30%.

These findings are within a context of a majority of cell phone users who say they are *very satisfied* with their cell phone and their cell phone service. Nearly two-thirds (62%) of those with personal cell phones report that they are very satisfied with the cell phone itself, with another 28% saying they are somewhat satisfied. Overall, this means 90% of personal cell phone users are somewhat or very satisfied with their cell phones. With respect to service, 59% of cell phone users are *very satisfied* with their service and another 33% are somewhat satisfied, meaning 92% of all personal cell phone are at least somewhat satisfied with their cell phone service.

The following table presents responses to all the questions asked of personal cell phone users on their attitudes about various attributes of their service.

Exhibit 2

Consumer satisfaction with various aspects of cell phone service (based on those who have a personal cell phone)				
	Very satisfied	Somewhat	Not too	Not at all
With the performance of your cell phone itself	62%	28%	5%	3%
Overall with your current cell phone service	59	33	5	2
With how many places you can get a good signals	58	29	8	4
With customer service from the cell phone company	53	30	6	4
With the cost of your current cell phone service	38	37	14	7
With the speed of internet access of your cell phone*	33	38	8	5
Source: Federal Communications Commission, Wired and Wireless Internet Survey of 3,005 U.S. adults, April-May 2010. Based on those who have a personal cell phone (n=2,463). * denotes results for 888 respondents with smart phones.				

² John B. Horrigan, *Broadband Adoption and Use in America*, OBI Working Paper No. 1, 2010, page 22.

The following exhibit presents demographic detail on a selection of the attributes listed above.

Exhibit 3

Consumer satisfaction with cell phone service by selected demographics (% who are very satisfied)				
	Overall Service	Coverage	Performance	Speed*
Total	59%	58%	62%	33%
Male	54	53	60	29
Female	64	62	64	38
18-29	52	52	55	32
30-49	59	58	63	34
50-64	61	60	65	33
65+	69	62	71	27
White, non-Hispanic	61	59	64	30
Black, non-Hispanic	58	57	52	36
Hispanic	57	57	66	46
Less than \$30,000	58	58	61	34
\$30,000-\$49,999	59	55	62	29
\$50,000-\$74,999	65	63	67	35
\$75,000 or more	59	57	63	35
Urban	57	56	60	33
Suburban	61	61	65	35
Rural	58	52	58	32
Northeast	58	57	61	31
Midwest	61	60	62	30
South	60	56	63	37
West	56	59	62	30

Source: Federal Communications Commission, Wired and Wireless Internet Survey of 3,005 U.S. adults, April-May 2010. Columns without asterisk based on those who have a personal cell phone (n=2,463). "Speed" percentages based on 888 respondents with "smart phones".

About the survey

The FCC's survey of consumers, conducted by Abt/SRBI and Princeton Survey Research Associates, International from April 19 to May 2, 2010, interviewed 3,005 American adults. The national random digit dial survey was conducted in English and Spanish and the sample included both landline and cell phones. For responses based on those with personal cell phones (2,463 respondents) the margin of error is plus or minus two percentage points. For responses based on home broadband users (1,742 respondents), the margin of error is plus or minus 2.6 percentage points. What follows are the topline results to the survey questions analyzed in this report.

Topline results from questions analyzed in this report

Q10. Do you happen to know what the speed of your Internet service at home is according to the company that provides your service? This is sometimes referred to as the download or downstream speed of your connection per second. **[DO NOT READ CATEGORIES; PRECODED OPEN-END]**

Based on broadband adopters (n=1742)

- 1 Less than 768 kilobits per second
- 4 768 kilobits to less than 3 Megabits per second
- 4 3 Megabits to less than 6 Megabits per second
- 3 6 Megabits to less than 10 Megabits per second
- 4 10 Megabits to less than 20 Megabits per second
- 4 20 Megabits or more per second
- 1 Other (**SPECIFY**)
- 80 **(DO NOT READ)** Don't know
- * **(DO NOT READ)** Refused

Q11a. How often do you think the speed of your internet connection at home is as fast as promised by the internet provider....always, most of the time, some of the time, rarely or never?

Based on broadband adopters (n=1742)

- 24 Always
- 47 Most of the time
- 17 Some of the time
- 5 Rarely
- 3 Never
- 4 **(DO NOT READ)** Don't know
- * **(DO NOT READ)** Refused

Q11b. How often do you think the internet provider SHOULD make sure your connection at home is as fast as promised ...always, most of the time, some of the time, rarely or never?

Based on broadband adopters (n=1742)

- 67 Always
- 24 Most of the time
- 5 Some of the time
- 1 Rarely
- 1 Never
- 2 **(DO NOT READ)** Don't know
- * **(DO NOT READ)** Refused

Q13. Now I would like to talk about how satisfied you are with various aspects of your internet service AT HOME. (First/Next,) how satisfied are you **[INSERT IN ORDER]** your current internet service at home **[READ FOR FIRST ITEM, THEN AS NECESSARY: ...very satisfied, somewhat satisfied, not too satisfied or not at all satisfied]**?

Based on those who have broadband internet access at home (n=1970)

	<u>Very</u>	<u>Some</u>	<u>Not too</u>	<u>Not at all</u>	<u>DK</u>	<u>Ref.</u>
b. With the speed of	50	41	6	3	*	*

Q46. Now I would like to talk about how satisfied you are with various aspects of your cell phone service. (First/Next,) how satisfied are you **[INSERT IN ORDER]** ...

[READ FOR FIRST ITEM, THEN AS NECESSARY: very satisfied, somewhat satisfied, not too satisfied or not at all satisfied]?

Based on those who have a personal cell phone (n=2463)

	<u>Very</u>	<u>Some</u>	<u>Not too</u>	<u>Not at all</u>	<u>Doesn't apply</u>	<u>DK</u>	<u>Ref.</u>
a. Overall with your current cell phone service	59	33	5	2	*	1	*
b. With the cost of your current cell phone service	38	37	14	7	2	2	*
c. With customer service from the cell phone company	53	30	6	4	5	3	*
d. With the performance of your cell phone itself	62	28	5	3	*	1	*
e. With how many places you can get a good signals	58	29	8	4	1	1	*
f. With the speed of internet access of your cell phone	33	38	8	5	14	1	*