

Home Broadband 2010

Broadband adoption slowed dramatically in 2010, but growth among African-Americans jumped well above the national average; 53% of Americans do not think affordable broadband should be a government priority.

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Summary of Findings

Home Broadband 2010

After several years of double digit growth, broadband adoption slowed dramatically in 2010. African-Americans experienced broadband adoption growth in 2010 well above the national average

After several consecutive years of modest but consistent growth, broadband adoption slowed dramatically in 2010. Two-thirds of American adults (66%) currently use a high-speed internet connection at home, a figure that is not statistically different from what The Pew Research Center's Internet & American Life Project found at a similar point in 2009, when 63% of Americans were broadband adopters.

The lack of growth in broadband adoption at the national level was mirrored across a range of demographic groups, with African-Americans being a major exception. Broadband adoption by African-Americans now stands at 56%, up from 46% at a similar point in 2009. That works out to a 22% year-over-year growth rate, well above the national average and by far the highest growth rate of any major demographic group. Over the last year, the broadband adoption gap between blacks and whites has been cut nearly in half:

- In 2009 65% of whites and 46% of African-Americans were broadband users (a 19-point gap)
- In 2010 67% of whites and 56% of African-Americans are broadband users (an 11-point gap)

By a 53%-41% margin, Americans say they do not believe that the spread of affordable broadband should be a major government priority. Contrary to

what some might suspect, non-internet users are <u>less likely than</u> current users to say the government should place a high priority on the spread of high-speed connections.

In this survey, Americans were asked: "Do you think that expanding affordable highspeed internet access to everyone in the country should be a top priority for the federal government, important but a lower priority, not too important, or should it not be done?" The majority chose the last two options:

- 26% of Americans say that expansion of affordable broadband access should not be attempted by government.
- 27% said it was "not too important" a priority
- 30% said it was an important priority.
- 11% said it should be a top priority.

Those who are not currently online are especially resistant to government efforts to expand broadband access. Fully 45% of non-users say government should not attempt to make affordable broadband available to everyone, while just 5% of those who don't use the internet say broadband access should be a top federal government priority. Younger users (those under age 30) and African-Americans were the most likely to favor expanded government efforts towards broadband access, while older Americans were among the least likely to back the expansion of affordable broadband access as a government priority.

Americans have decidedly mixed views about the problems non-broadband users suffer due to their lack of a high-speed connection. There is no major issue on which a majority of Americans think that lack of broadband access is a major disadvantage.

• **Job opportunities and career skills:** 43% of Americans believe that lack of broadband is a "major disadvantage" when it comes to finding out about job

- opportunities or gaining new career skills. Some 23% think lack of access is a "minor disadvantage" and 28% think it is "not a disadvantage."
- **Health information:** 34% of Americans believe that lack of broadband is a "major disadvantage" when it comes to getting health information. Some 28% think lack of access is a "minor disadvantage" and 35% think it is "not a disadvantage."
- Learning new things to improve and enrich life: 31% of Americans believe that lack of broadband is a "major disadvantage" when it comes to learning new things that might enrich or improve their lives. Some 31% think lack of access is a "minor disadvantage" and 32% think it is "not a disadvantage."
- **Government services:** 29% of Americans believe that lack of broadband is a "major disadvantage" when it comes to using government services. Some 27% think lack of access is a "minor disadvantage" and 37% think it is "not a disadvantage."
- **Keeping up with news and information:** 23% of Americans believe that lack of broadband is a "major disadvantage" when it comes to keeping up with news and information. Some 27% think lack of access is a "minor disadvantage" and 47% think it is "not a disadvantage."
- **Keeping up with what is happening in their communities:** 19% of Americans believe that lack of broadband is a "major disadvantage" when it comes to finding out about their local community. Some 32% think lack of access is a "minor disadvantage" and 45% think it is "not a disadvantage."

A fifth of American adults (21%) do not use the internet. Many non-users think online content is not relevant to their lives and they are not confident they could use computers and navigate the web on their own.

In the latest Pew Internet survey, 21% of adults said they did not use the internet. A third of non-users (34%) have some connection to the online world, either because they live in a household with a connection that other family members use or because they have gone online in the past. The remaining two-thirds of non-users are not tied in any obvious way to online life and many express little interest in using the internet.

- They do not find online content relevant to their lives. Half (48%) of nonusers cite issues relating to the relevance of online content as the main reason they do not go online.
- They are largely not interested in going online. Just one in ten non-users say would like to start using the internet in the future.
- They are not comfortable using computers or the internet on their own.

 Six in ten non-users would need assistance getting online. Just one in five know enough about computers and technology to start using the internet on their own.

About the Survey

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 April 29 and May 30, 2010, among a sample of 2,252 adults ages 18 and older, including 744 reached on a cell phone. Interviews were conducted in English. 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 2.4 percentage points. For results based on cell phone owners (n=1,917), 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.

Trends in broadband adoption

Background

Each spring, the Pew Research Center's Internet & American Life Project conducts a survey designed to assess the state of broadband adoption by Americans and, particularly, to probe the attitudes and experiences of those who do not use broadband. Over the last decade, broadband adoption has gone from being the province of the elite to a mainstream behavior by the majority of Americans.

Yet even as broadband use has spread, there has been persistent evidence that some segments of the population are not part of the broadband adoption story. The Obama Administration has devoted considerable time and effort to promoting broadband adoption and expanding government efforts to bring it to non-user populations. Some \$7.2 billion of the \$787 billion federal stimulus program approved in February, 2009 was set aside for grants and mapping efforts designed to target underserved groups. Under a mandate from Congress, the Federal Communications Commission produced a major broadband plan in March 2010. The 360-page plan contained scores of recommendations for how government agencies could encourage expanded broadband access. The recommendations also pressed for changes that could allow the internet to be used to improve Americans' lives in such areas as delivering economic growth, improving health care, facilitating advances in government services, and improving the environment. ¹

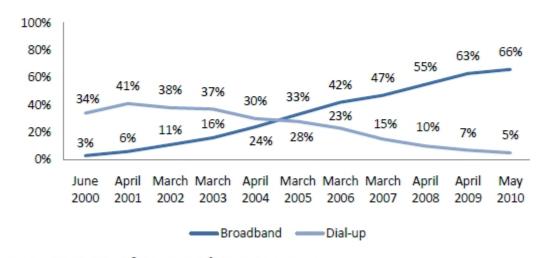
This year's Pew Internet broadband survey was conducted with that dramatically changed policy environment as backdrop. In addition to capturing data as we had in the past about the non-user cohort, we did some things this year that we had not done in the past, such as evaluating Americans' attitudes about the "value" of a broadband connection for key activities. Further, we tried to gauge public sentiment on the key policy question: Should the government make the spread of affordable broadband a

66% of American adults have a home broadband connection in 2010, little changed from the 63% who did so in 2009

As of May 2010, two thirds (66%) of American adults have a high-speed broadband connection at home. This is unchanged from our April 2009 finding that 63% of American adults had a home broadband connection. The remaining 34% of the adult population outside of home broadband users includes those who go online using a dialup connection (5% of adults), those who do not go online from home (26%) and those who go online from home but are unsure what type of connection they have (3%).

Broadband and Dial-up Adoption, 2000-1010

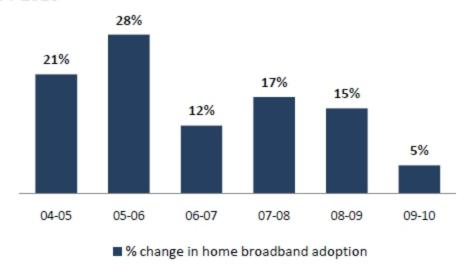
% of American adults who access the internet via dial-up or broadband, over time.



Source: Pew Internet & American Life Project surveys.

This three percentage point difference between our April 2009 and May 2010 surveys (a difference that is not statistically significant) translates into an overall year-to-year change in home broadband adoption of just 5%, the lowest year-to-year change in

Year-to-year percentage change in home broadband adoption, 2004-2010



Source: Pew Internet & American Life Project surveys.

In contrast to the population as a whole, broadband adoption among African-Americans grew significantly between 2009 and 2010

African-Americans are one of the few major demographic groups to experience notable year-to-year growth in home broadband adoption. The percentage of African-Americans adults with a home broadband connection grew from 46% in April 2009 to 56% in May 2010, which works out to a 22% year-over-year increase. No other demographic group saw their overall broadband usage grow by more than ten percent on a year-over-year basis.

Even with this increase, African-Americans continue to trail whites in their use of broadband technologies. However, the gap between whites and blacks has been cut approximately in half over the last year. In 2009, the gap between blacks and whites

was 19 percentage points (65% vs. 46%); in 2010 that gap stands at 11 points (67% vs. 56%).

Broadband adoption trends within demographic groups, 2009-2010

% of all adults with broadband at home, 2009-2010

	2009	2010	Percentage point change, 2009-2010	Percent change, 2009-2010
All adults	63%	66%	3	5%
Gender				
Male	64	66	2	3%
Female	63	65	2	3%
Age				
18-29	77	80	3	4%
30-49	72	75	3	4%
50-64	61	63	2	3%
65+	30	31	1	3%
Race/Ethnicity				
White (non-Hispanic)	65	67	2	3%
Black (non-Hispanic)	46	56	10	22%
Hispanic (English- speaking)	68	66	-2	-3%

Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Broadband adoption trends within demographic groups, 2009-2010

% of all adults with broadband at home, 2009-2010

	2009	2010	Percentage point change, 2009-2010	Percent change, 2009-2010
All adults	63%	66%	3	5%
Education				
Less than high school	30	33	3	10%
High school grad	52	54	2	4%
Some college	71	76	5	7%
College graduate	83	86	3	4%
Household income				
Less than \$30,000	42	45	3	7%
\$30,000-\$49,999	62	67	5	8%
\$50,000-\$74,999	80	79	-1	-1%
\$75,000+	85	87	2	2%
Geography				
Rural	46	50	4	9%
Non-rural	67	70	3	4%

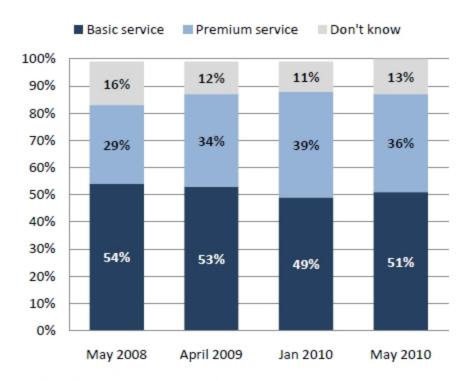
Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

One-third of broadband users subscribe to a premium service, and the average broadband subscriber pays \$41.18 per month for service

In May 2008 we first asked respondents with home broadband service whether or not they paid extra for "premium" broadband service promising higher speeds. Our findings on this question have been fairly consistent over this time—at the moment, 51% of broadband subscribers subscribe to a basic service, one-third (36%) pay extra for a higher-speed premium service, and an additional one in ten (13%) are not sure whether

Tiers of broadband service

% of home broadband users who subscribe to each type of service.



Source: Pew Internet & American Life Project surveys.

Overall there is relatively little variation among broadband users on this question; the biggest differences are associated with household income. Broadband subscribers with an annual household income of \$50,000 or more are evenly split between basic subscribers (46%) and premium subscribers (42%). By contrast, broadband users living in households earning less than \$50,000 per year are much more likely to subscribe to a basic service than to a premium offering (59% of such households have a basic service, while 29% pay extra for a premium service). Additionally, parents are somewhat more likely than non-parents to subscribe to a premium broadband service (40% vs. 33%).

Perhaps due to the proliferation of bundled services that incorporate internet, phone and

television service, many home internet users are unsure of what they pay for their connection. When asked what they pay for internet access, one quarter of home users are unable to provide an answer. Among those who do provide an answer, the average home broadband user pays \$41.18 per month for service. This figure is little changed from what we found in our spring 2009 survey, when the average home broadband user paid \$39.00 per month.

Basic broadband internet subscribers pay an average of \$39.01 per month in 2010, while premium subscribers pay an average of \$45.83. Each of these represents only a modest change from our 2009 survey findings. The average dialup user pays \$29 per month for home service—this is also up only modestly from the average 2009 dialup bill of \$26.60.

Most non-internet users have limited exposure to online life, and half do not go online because they do not see the digital world as relevant to them

One in five American adults (21%) do not use the internet or email from any location, and a majority of these non-users have little exposure to the online world. Some 16% of non-users live in a household where someone else uses the internet (even if they personally do not) and 22% used the internet or email in the past but no longer do so. Taken together, that means that one-third (34%) of non-internet users have some familiarity with the internet, either from past personal experience or from living in a household where someone else goes online. Since we first asked these questions in spring 2002, roughly one in five non-users have consistently answered "yes" to each of these questions.

Not only are most non-users unfamiliar with the internet, they are not especially interested in getting online. Only one in ten non-users (10%) indicate that they would like to start using the internet or email in the future, a figure that is also largely unchanged from the first time we asked this question of non-users in 2002. Older non-

users are especially likely say they are not interested in going online—just 5% of non-internet users ages 50 and older say that they would like to start using the internet or email.

As we have found in previous surveys, roughly half (48%) of non-internet users cite issues of relevance when asked why they do not go online. One in five (21%) point to issues related to price while 18% cite usability issues and 6% point to access or availability as the main reason they do not go online.

Main reasons for not using the internet

21% of adult Americans do not use the internet; these are the factors they cite as their main reason for not doing so

Just not interested	31%
Don't have a computer	12
Too expensive	10
Too difficult/frustrating	9
Think it's a waste of time	7
Don't have access	6
Too busy/don't have the time	6
Don't need/want it	4
Too old to learn	4
Just don't know how	2
Physically unable	2
Worried about viruses/spam/spyware	1
Other	6
Summary of reasons	
Relevance (not interested + waste of time + too busy + don't need/want)	48%
Price (too expensive + don't have computer)	21
Usability (difficult/frustrating + too old + don't know how + physically unable + worried about virus/spam/spyware)	18
Availability / Access	6

Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

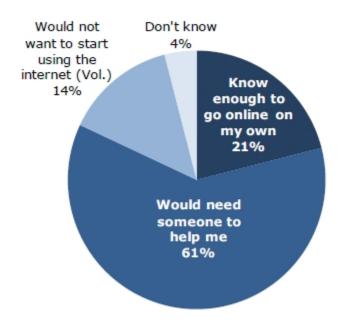
Most non-users would need help in order to feel comfortable going online

Not only are most non-users uninterested in getting online, many say that they do not know enough about computers or technology to use the internet on their own. When asked if they know enough about computers and technology to start using the internet on their own, just one in five non-users (21%) say that they do while six in ten (61%) say

that they would need someone to help them. An additional 14% volunteered that they would not want to start using the internet.

Six in ten non-internet users would need assistance getting online

Based on adult non-internet users



Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older (n=496 for non-internet users).

NOTES

http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296442A1.pdf

¹ See Connecting America: The National Broadband Plan, available at http://www.broadband.gov/plan/. It should be noted that one of the important contributors to the FCC plan was John Horrigan, who formerly was the head of research for the Pew Internet Project.

 $^{^2}$ These figures are comparable to the FCC's 2009 findings that 65% of American adults are broadband adopters. See Broadband Adoption and Use in America, by John Horrigan, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296442A1.pdf

³ This is again similar to the FCC's fall 2009 survey, which found that 59% of African-Americans were home broadband users. See

Attitudes towards broadband and broadband investment

Americans are split in their views of how much a lack of access hurts non-users.

Americans are split in their views of how much a lack of access hurts nonusers. The worst disadvantage they cited related to job opportunities and career-improvement skills.

In order to evaluate the importance that Americans place on a high-speed internet connection, we asked all of our survey respondents (including broadband users, dial-up users and non-internet users) whether individuals who do not have access to high speed internet access at home are at a disadvantage when it comes to different aspects of modern life. In all of the examples we gave, a majority of respondents said they thought lack of broadband access was a "minor disadvantage" or "not a disadvantage" to doing the activities.

Generally, Americans view those without broadband access as being most disadvantaged when it comes to job and career opportunities. Some 43% of Americans feel that individuals who do not have broadband at home are at a major disadvantage when it comes to finding out about job opportunities or learning career skills, with an additional 23% saying that a lack of broadband access is a minor disadvantage in this regard. Other areas where a lack of broadband is seen as a relatively significant disadvantage include:

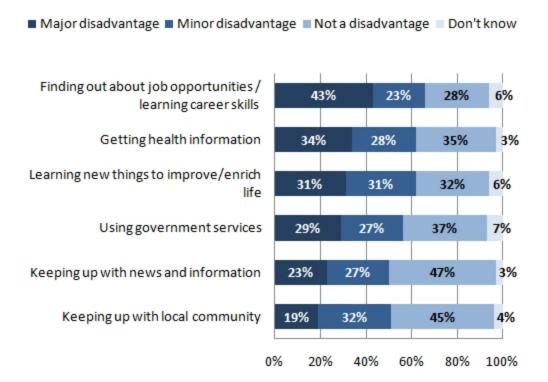
- Getting health information (34% of Americans see a lack of broadband access as a major disadvantage to getting this type of information)
- Learning new things that might improve or enrich one's life (31%)

• Using government services (29%)

In other areas, a lack of broadband access is seen as less of a disadvantage. Nearly half of Americans feel that individuals without broadband access are not at a disadvantage when it comes to keeping up with news and information (47% say this) and keeping up with what is happening in one's local community (45%).



% of all American adults

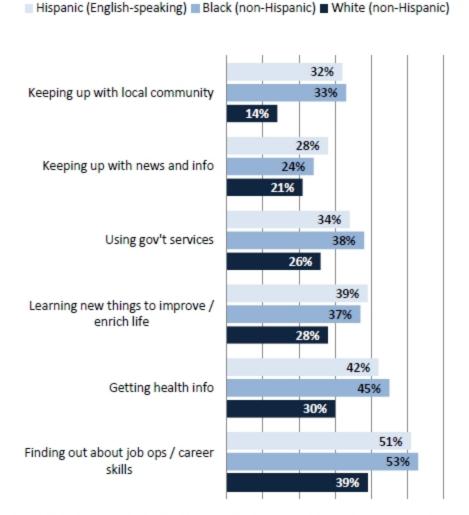


Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Minority Americans see a lack of broadband access as a major hindrance to accomplishing numerous tasks, while seniors are less likely to see the drawbacks of a lack of high-speed access Minority Americans and young adults are among the groups that are most attuned to the need for a home broadband connection. African-Americans and English-speaking Latinos are significantly more likely than whites to say that a lack of broadband access is a "major disadvantage" when it comes to finding out about job opportunities; getting health information; learning new things to improve or enrich one's life; using government services; and keeping up with local community happenings.

African Americans and Latinos are more likely than whites to view a lack of broadband access as a major disadvantage

% of adults within each group who view a lack of broadband as a "major disadvantage" when it comes to…

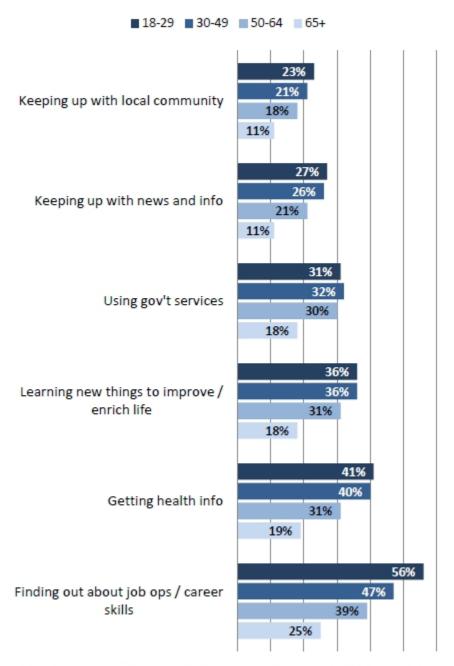


Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

On the other side of the spectrum, attitudes about the importance of broadband service in daily life drop dramatically for those ages 65 and older. Seniors are significantly less likely than other age groups to view a lack of broadband access as a major disadvantage across a range of topics—from finding out about job or career opportunities to using government services.

Seniors tend to not view a lack of broadband access as a major disadvantage

% of adults within each group who view a lack of broadband as a "major disadvantage" when it comes to...



Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Expanding affordable high-speed broadband service is generally seen as a low government priority

When asked whether expanding high speed access to everyone in the country should be a priority of the federal government, one in ten Americans (11%) say that it should be a "top priority" while three in ten (30%) feel that it is "important, but a lower priority". One quarter each say that federal promotion of broadband expansion is "not too important" (27%) or "should not be done" (26%). 4

Opposition to federal promotion of broadband access is concentrated most highly among older Americans and those who do not currently go online. One third of 50-64 year olds (32%) and 43% of those ages 65 and older feel that the federal government should not attempt to expand broadband access—this is significantly higher than the proportion of 18-29 year olds (14%) and 30-49 year olds (21%) who feel this way.

Attitudes towards federal efforts to expand broadband

% who feel that expanding affordable high-speed internet access should be...

	Top / Important priority	Not important / Should not be done	Don't know / refuse
All adults	40%	52%	7%
Gender			
Male	43	50	7
Female	38	54	8
Age			
18-29	48	46	6
30-49	48	48	4
50-64	36	56	8
65+	21	64	15
Race/Ethnicity			
White (non-Hispanic)	39	54	7
Black (non-Hispanic)	48	45	7
Hispanic (English-speaking)	43	51	7

Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Broadband adoption trends within demographic groups, 2009-2010

% of all adults with broadband at home, 2009-2010

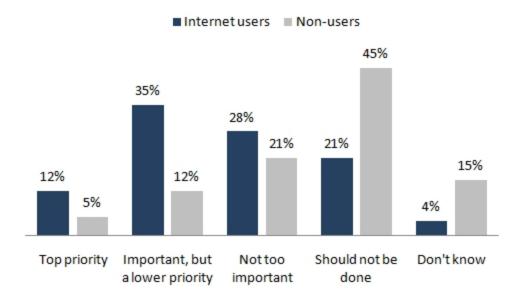
	Top / Important priority	Not important / Should not be done	
All adults	40%	52%	7%
Education			
Less than high school	21	61	18
High school grad	36	56	8
Some college	43	53	4
College graduate	53	45	3
Household income			
Less than \$30,000	36	56	8
\$30,000-\$49,999	44	50	6
\$50,000-\$74,999	47	47	6
\$75,000+	47	48	5
Geography			
Rural	38	54	9
Non-rural	41	52	7

Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

Similarly, among non-internet users just 5% feel that federal government policies to expand broadband access are a "top priority" while nearly half (45%) say that this "should not be done". Interestingly, broadband users do not differ significantly from dialup users on this question—the primary divide is between those that go online and those that do not.

Non-internet users view expansion of broadband access as a low priority

% within each group who say that expanding affordable high-speed internet access is...



Source: Pew Research Center's Internet & American Life Project, April 29-May 30, 2010 Tracking Survey. N=2,252 adults 18 and older.

NOTES

⁴ Note that this question was asked in isolation and not as part of a series of other competing federal government priorities.

Methodology

About this report

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 April 29 and May 30, 2010, among a sample of 2,252 adults, age 18 and older. Interviews were conducted in English. 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 2.4 percentage points. For results based Internet users (n=1,756), 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.

A combination of landline and cellular random digit dial (RDD) samples was used to represent all adults in the continental United States who have access to either a landline or cellular telephone. Both samples were provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. Numbers for the landline sample were selected with probabilities in proportion to their share of listed telephone households from active blocks (area code + exchange + two-digit block number) that contained three or more residential directory listings. The cellular sample was not list-assisted, but was drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 7 attempts were made to complete an interview at a sampled telephone number. The calls were staggered over times of day and days of the week to maximize

the chances of making contact with a potential respondent. Each number received at least one daytime call in an attempt to find someone available. For the landline sample, half of the time interviewers first asked to speak with the youngest adult male currently at home. If no male was at home at the time of the call, interviewers asked to speak with the youngest adult female. For the other half of the contacts interviewers first asked to speak with the youngest adult female currently at home. If no female was available, interviewers asked to speak with the youngest adult male at home. For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was an adult and in a safe place before administering the survey. Cellular sample respondents were offered a post-paid cash incentive for their participation. All interviews completed on any given day were considered to be the final sample for that day.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's March 2009 Annual Social and Economic Supplement. This analysis produces population parameters for the demographic characteristics of adults age 18 or older. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Following is the full disposition of all sampled telephone numbers:

Table 1: Sample	Disposition	
Landline	Cell	
20,895	12,699	Total Numbers Dialed
1,160	251	Non-residential
982	18	Computer/Fax
12		
8,886	4,906	Other not working
1,675	176	Additional projected not working
8,180	7,348	Working numbers
39.1%	57.9%	Working Rate
558	59	No Answer / Busy
870	2,054	Voice Mail
68	13	Other Non-Contact
6,684	5,222	Contacted numbers
81.7%	71.1%	Contact Rate
521	740	Callback
4,305	3016	Refusal
1,858	1,466	Cooperating numbers
27.8%	28.1%	Cooperation Rate
284	235	Language Barrier
	460	Child's cell phone
1,574	771	Eligible numbers
84.7%	52.6%	Eligibility Rate
		-
66	27	Break-off
1,508	744	Completes
95.8%	96.5%	Completion Rate
21.8%	19.3%	Response Rate

The disposition reports all of the sampled telephone numbers ever dialed from the original telephone number samples. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:

• **Contact rate** – the proportion of working numbers where a request for interview was made

- **Cooperation rate** the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused
- **Completion rate** the proportion of initially cooperating and eligible interviews that were completed

Thus the response rate for the landline sample was 21.8 percent. The response rate for the cellular sample was 19.3 percent.