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## Gates Library Services Survey

Data for October 15 – November 10, 2012

Final Topline

11/14/2012

Princeton Survey Research Associates International for  
the Pew Research Center's Internet & American Life Project and  
the Gates Foundation

Sample: n=2,252 people **age 16 or older** nationwide, including 1,125 cell phone interviews  
Interviewing dates: 10.15.2012 – 11.10.2012

Margin of error is plus or minus 2.3 percentage points for results based on Total [n=2,252]  
Margin of error is plus or minus 2.5 percentage points for results based on internet users [n=1,945]  
Margin of error is plus or minus 3.3 percentage points for results based on Form A [n=1,119]  
Margin of error is plus or minus 3.3 percentage points for results based on Form B [n=1,133]

Margin of error is plus or minus 2.5 percentage points for results based on those who have ever used a public library [n=1,981]  
Margin of error is plus or minus 2.5 percentage points for results based on those who have ever visited a public library [n=1,920]  
Margin of error is plus or minus 3.6 percentage points for results based on those who have ever gone on a public library website [n=895]  
Margin of error is plus or minus 4.4 percentage points for results based on parents of children under age 18 [n=584]

Margin of error is plus or minus 3.1 percentage points for results based on those who visited a public library in person in the past 12 months [n=1,238]  
Margin of error is plus or minus 4.4 percentage points for results based on Form A who visited a public library in person in the past 12 months [n=616]  
Margin of error is plus or minus 4.4 percentage points for results based on Form B who visited a public library in person in the past 12 months [n=622]

Margin of error is plus or minus 4.5 percentage points for results based on those who have gone on a public library website in the past 12 months [n=587]  
Margin of error is plus or minus 6.3 percentage points for results based on Form A who have gone on a public library website in the past 12 months [n=299]  
Margin of error is plus or minus 6.4 percentage points for results based on Form B who have gone on a public library website in the past 12 months [n=288]

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**Q1** Overall, how would you rate your community as a place to live? Would you say it is excellent, good, only fair or poor?

		<u>CURRENT</u>	
%	40		Excellent
	44		Good
	11		Only fair
	3		Poor
	1		Don't know <sup>1</sup>
	1		Refused

*There is no Question Q2.*

**INTUSE** Do you use the internet, at least occasionally?

**EMLOCC** Do you send or receive email, at least occasionally?

**INTMOB** Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?

		<u>USES INTERNET</u>	<u>DOES NOT USE INTERNET</u>
Current		85	15

**HOME3NW** Do you ever use the internet or email at HOME?

Based on all internet users [N=1,945]

		<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	<u>REFUSED</u>
Current		90	10	0	*

<sup>1</sup> For this question and many others throughout the topline, results for "Don't know" often reflect combined "Don't know" and "Refused" percentages. Beginning November 2008, DK and REF are reported separately where available.

**MODEM3B** At home, do you connect to the internet through 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, a fiber optic connection such as FIOS or a T-1?

Based on those who use the internet at home

	DIAL-UP	TOTAL HIGH SPEED	----- DSL	----- CABLE MODEM	----- WIRELESS	----- FIBER OPTIC	----- T-1	----- (VOL.) OTHER BROAD- BAND	----- (VOL.) BROAD- BAND COMBO	(VOL.) NO HOME NET ACCESS	(VOL.) ACCESS NET ON CELL ONLY	(VOL.) NONE OF THE ABOVE	DK	REF.
Current [N=1,770]	4	88	18	34	28	6	1	2	0	*	2	*	4	*

**FREELOC** As far as you know, is there anywhere in your community other than home, work or school where you can access the internet or use a computer for FREE?

	<u>CURRENT</u>	
%	73	Yes
	21	No
	6	Don't know
	*	Refused

**FREEINT** In the past 12 months, have you accessed the internet or used a computer for FREE someplace other than home, work or school?

	<u>CURRENT</u>	
%	35	Yes
	65	No
	*	Don't know
	0	Refused

**QL1** Do you have a cell phone, Blackberry, iPhone or other device that is also a cell phone?<sup>2</sup>

	<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	<u>REFUSED</u>
Current	85	15	0	*
December 2011	87	13	0	*

**SMPH** Some cell phones are called "smartphones" because of certain features they have. Is your cell phone a smartphone, such as an iPhone, Android, Blackberry or Windows phone, or are you not sure?<sup>3</sup>

Based on cell phone owners

	<u>CURRENT</u>	
%	55	Yes, smartphone
	38	No, not a smartphone
	6	Not sure/Don't know
	*	Refused

[n=1,992]

<sup>2</sup> Question was asked of landline sample only. Results shown here have been recalculated to include cell phone sample in the "Yes" percentage. In past polls, question was sometimes asked as an independent question and sometimes as an item in a series. Beginning December 2007, question/item was not asked of the cell phone sample, but results shown here reflect Total combined Landline and cell phone sample.

<sup>3</sup> Prior to the current survey, question wording was slightly different: "Some cell phones are called 'smartphones' because of certain features they have. Is your cell phone a smartphone or not, or are you not sure?"

**Q3** Please tell me if you happen to have each of the following items, or not. Do you have...  
[INSERT ITEMS IN ORDER]?

	YES	NO	DON'T KNOW	REFUSED
a. A desktop or laptop computer <sup>4</sup>				
Current	78	22	*	*
December 2011	75	25	*	*
b. A handheld device made primarily for e-book reading, such as a Nook or Kindle e-reader <sup>5</sup>				
Current	19	80	*	0
December 2011	10	89	1	*
c. A tablet computer like an iPad, Samsung Galaxy, Motorola Xoom, or Kindle Fire				
Current	25	75	*	*
December 2011	10	89	1	*

**Q4** Next I have some questions about reading... During the past 12 months, about how many BOOKS did you read either all or part of the way through? Please include any print, electronic, or audiobooks you may have read or listened to.

	CURRENT		DEC 2011
%	23	None	18
	7	1 book	6
	14	2-3 books	13
	12	4-5 books	12
	15	6-10 books	15
	13	11-20 books	14
	14	More than 20 books	17
	1	Don't know	3
	1	Refused	1

<sup>4</sup> In past polls, "A desktop computer" and "A laptop computer or netbook" were asked as separate items in the list. Results shown here have been recalculated to combine responses for trend purposes.

<sup>5</sup> In 2011, item wording was "An electronic Book device or e-Book reader, such as a Kindle or Nook." Through November 2010, item wording was "An electronic book device or e-Book reader, such as a Kindle or Sony Digital Book".

**Q5** Thinking about all of the books you have read in the past 12 months, were any of those... [INSERT ITEMS IN ORDER]? Were any of those... [INSERT NEXT ITEM]?

Based on those who read any books in the past 12 months

	YES	NO	DON'T KNOW	REFUSED
a. Printed books				
Current [N=1,754]	89	10	1	*
December 2011 [N=2,474]	93	7	*	*
b. Audiobooks				
Current	17	83	*	0
December 2011	14	86	*	0
c. Electronic books, also called e-books				
Current	30	69	*	*
December 2011	21	78	*	*

[READ TO ALL:] Next, I have some questions about public libraries. In answering these questions, please think only about public libraries, NOT school or university libraries.

**Q6** First, overall, would you say public libraries are VERY important to... [INSERT FIRST ITEM], SOMEWHAT important, NOT TOO important, or NOT important AT ALL? Next, are public libraries VERY important to [INSERT NEXT ITEM IN ORDER], SOMEWHAT important, NOT TOO important, or NOT important AT ALL?

	VERY IMPT.	SOME- WHAT IMPT.	NOT TOO IMPT.	NOT IMPT. AT ALL	(VOL.) COMMUNITY DOESN'T HAVE PUBLIC LIBRARY	DON'T KNOW	REF.
a. You and your family							
Current	46	30	11	12	*	1	*
December 2011 <sup>6</sup>	38	31	17	13	*	1	1
b. Your community as a whole							
Current	63	28	4	3	*	2	*

<sup>6</sup> In December 2011, question was a standalone question.

**Q7** Have you, personally, EVER...[INSERT ITEMS IN ORDER], or is this something you've never done?

	YES, HAVE DONE THIS	NO, HAVE NEVER DONE THIS	DON'T KNOW	REFUSED
a. Visited a public library or used a public library bookmobile IN PERSON	84	16	*	0
b. Gone on a public library WEBSITE	39	61	*	*

**Q8** Do you recall anyone else in your family using public libraries as you were growing up, or is that something no one in your family did?

	CURRENT	
%	77	Yes, a family member used library
	20	No one in family used library
	3	Don't know
	*	Refused

**Q9** Overall, would you say your experiences using public libraries have been very positive, mostly positive, mostly negative or very negative?

Based on those who have ever used a public library [N=1,981]

	CURRENT	
%	57	Very positive
	41	Mostly positive
	1	Mostly negative
	*	Very negative
	*	Don't know
	*	Refused

- Q10** I'm going to read you a list of services that public libraries often provide to the public. Please tell me how important, if at all, you think it is for public libraries to provide each to the community. (First/Next) How about... [INSERT ITEM; RANDOMIZE]?

[READ FOR FIRST ITEM, THEN AS NECESSARY: Is it very, somewhat, not too, or not at all important that public libraries offer this service to their communities?]

	VERY IMPT.	SOMEWHAT IMPT.	NOT TOO IMPT.	NOT IMPT. AT ALL	DON'T KNOW	REF.
<i>Item A: Based on Total</i>						
a. Borrowing books	80	15	2	2	1	*
<i>Items B thru E: Based on Form A [N=1,119]</i>						
b. Free access to computers and the internet	77	18	2	2	1	*
c. Programs and classes for children and teens	74	21	2	2	1	*
d. Quiet study spaces for adults and children	76	19	2	2	1	*
e. Free public meeting spaces	49	36	9	4	1	1
<i>Items F thru I: Based on Form B [N=1,133]</i>						
f. Job, employment and career resources	67	22	5	2	4	1
g. Free events and activities, such as classes and cultural events, for people of all ages	63	30	4	2	1	*
h. Research resources such as free databases	73	20	2	2	3	*
i. Librarians to help people find information they need	80	16	2	1	1	*

- Q11** Now thinking just about the past 12 months... In the past 12 months, have you VISITED a public library or bookmobile IN PERSON?

Based on those who have ever visited a public library [N=1,920]

	CURRENT	
%	64	Yes
	36	No
	*	Don't know
	0	Refused



**Q12** How often do you visit public libraries or bookmobiles in person? Would you say everyday or almost everyday, at least once a week, several times a month, at least once a month or less often?

Based on those who visited a public library in person in the past 12 months [N=1,238]

	<u>CURRENT</u>	
%	3	Everyday or almost everyday
	12	At least once a week
	19	Several times a month
	28	At least once a month
	38	Less often
	*	Don't know
	*	Refused

**Q13** People visit public libraries for different reasons. In the past 12 months have you visited a public library IN PERSON to...[INSERT FIRST TWO RANDOMIZED ITEMS]?

How about to [REMAINING ITEMS]? [READ IF NECESSARY: Have you visited a public library IN PERSON for this reason in the past 12 months?]

	<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	<u>REFUSED</u>
<i>Items A thru C: Based on those who visited a public library in person in the past 12 months [N=1,238]</i>				
a. Borrow print books	73	27	*	0
b. Get help from a librarian	50	50	*	*
c. Just sit and read, study, or watch or listen to media	49	51	*	0
<i>Items D thru H: Based on Form A who visited a public library in person in the past 12 months [N=616]</i>				
d. Use a research database	46	53	*	*
e. Borrow or download an audio book	17	83	0	0
f. Attend a class, program or lecture for adults	21	79	*	0
g. Borrow a music CD	16	84	*	0
h. Attend a meeting of a group you belong to	23	77	*	0
<i>Items I thru M: Based on Form B who visited a public library in person in the past 12 months [N=622]</i>				
i. Research a topic that interests you	54	45	1	*
j. Borrow a DVD or videotape, such as a movie or TV show	40	60	0	*
k. Read or check out print magazines or newspapers	31	68	1	*
l. Attend yourself or bring a younger person to a class, program or event designed for children or teens	41	58	*	*
m. Browse the shelves for books or media	73	27	*	*

- Q14** When you visit the public library, how often do you get help from staff, such as help finding something or answering a research question? Would you say you get help from library staff frequently, sometimes, hardly ever or never?

Based on those who visited a public library in person in the past 12 months [N=1,238]

	<u>CURRENT</u>	
%	31	Frequently
	39	Sometimes
	23	Hardly ever
	7	Never
	*	Don't know
	*	Refused

- Q15** In general, would you say public library staff are very helpful, somewhat helpful, not too helpful or not at all helpful?

Based on those who visited a public library in person in the past 12 months [N=1,238]

	<u>CURRENT</u>	
%	81	Very helpful
	17	Somewhat helpful
	1	Not too helpful
	1	Not at all helpful
	1	Don't know
	*	Refused

- Q16** In the PAST 12 MONTHS, have you used a public library's WEBSITE, for any reason?

Based on those who have ever gone on a public library website [N=895]

	<u>CURRENT</u>	
%	64	Yes
	36	No
	*	Don't know
	*	Refused

- Q17** How often do you use a public library website, for any service? Would you say everyday or almost everyday, at least once a week, several times a month, at least once a month or less often?

Based on those who have gone on a public library website in the past 12 months [N=587]

	<u>CURRENT</u>	
%	3	Everyday or almost everyday
	9	At least once a week
	15	Several times a month
	27	At least once a month
	46	Less often
	*	Don't know
	*	Refused

- Q18** In the past 12 months, have you used a public library WEBSITE to do any of the following? (First,/Next,) in the past 12 months, have you use a public library website to [INSERT FIRST TWO ITEMS; RANDOMIZE]? Next, how about to... [INSERT ITEMS; RANDOMIZE REMAINING ITEMS]?

	YES	YES	(VOL.) CAN'T DO THIS ON WEBSITE	DON'T KNOW	REFUSED
<i>Items A thru F: Based on Form A who have gone on a public library website in the past 12 months [N=299]</i>					
a. Search the library catalog for print books, audiobooks, e-books, CDs or DVDs	82	18	0	0	0
b. Reserve or place holds on print books, audiobooks, e-books, CDs or DVDs	62	38	0	0	0
c. Check for or pay overdue fines	30	70	0	0	0
d. Renew a book, DVD or CD	51	48	1	0	0
e. Get basic library information such as hours of operation, locations or directions	72	28	0	*	*
f. Read book reviews or get book recommendations	30	70	0	0	0
<i>Items G thru L: Based on Form B who have gone on a public library website in the past 12 months [N=288]</i>					
g. Borrow or download an e-book	22	78	*	0	0
h. Use an online database	51	49	0	1	0
i. Look for information about library programs or events	48	52	0	*	0
j. Get research or homework help	44	56	0	0	0
k. Reserve a meeting room	6	94	0	0	0
l. Sign up for library programs or events	27	73	0	0	0

- Q19** Now thinking about cell phones and other handheld mobile devices... In the past 12 months, have you used a cell phone, e-reader or tablet computer to visit a public library's website or access public library resources?

	CURRENT	
%	13	Yes
	86	No
	*	Don't know
	*	Refused

**Q20** Do you have a library card for a public library?<sup>7</sup>

	<u>CURRENT</u>		<u>DEC 2011</u>
%	63	Yes	58
	36	No	42
	*	Don't know	*
	*	Refused	*

**Q21** Now thinking about the past five years... over the past five years, has your own use of the public library, either in-person or online, [ROTATE: increased, decreased] or stayed about the same?

Based on recent library users [N=1,361]<sup>8</sup>

	<u>CURRENT</u>	
%	26	Increased
	22	Decreased
	52	Stayed about the same
	1	Don't know
	*	Refused

**Q22** What is the MAIN reason your use of the public library has decreased over the past five years? [OPEN-END]

Based on recent library users whose use of the library has decreased over the past 5 years [N=292]

	<u>CURRENT</u>	
%	99	Gave response [RECORD VERBATIM]
	1	Refused

**Q23** What is the MAIN reason your use of the public library has increased over the past five years?

Based on recent library users whose use of the library has increased over the past 5 years [N=351]

	<u>CURRENT</u>	
%	99	Gave response [RECORD VERBATIM]
	1	Refused

<sup>7</sup> December 2011 question wording was: "Next, I have some questions about public libraries ...Do you have a library card?"

<sup>8</sup> For this poll, recent library users are defined as those who visited a public library in person in the past 12 months, OR those who have gone on a public library website in the past 12 months, OR those who have used a cell phone, e-reader or tablet to visit a public library website or access public library resources in the past 12 months.

- Q24** Next I have some questions about using computers and the internet at public libraries. First, in the past 12 months, have you used computers, the internet, or a public WI-FI network at a public library?

Based on those who have ever visited a public library [N=1,920]

	<u>CURRENT</u>	
%	31	Yes
	69	No
	*	Don't know
	*	Refused

- Q25** In the past 12 months, have you used a public library computer, internet or WI-FI connection to... [INSERT ITEMS; RANDOMIZE]?

	<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	<u>REFUSED</u>
<i>Items A thru F: Based on Form A who have used computers or internet at a public library in the past 12 months [N=285]</i>				
a. Check or send email	54	46	*	0
b. Do research for school or work	66	34	0	0
c. Visit a social networking site, such as MySpace or Facebook	35	64	1	0
d. Take an online class or complete an online certification program of some kind	16	84	0	0
e. Get health information online	47	52	*	1
f. Visit a government website or get information about government services	41	59	0	0
<i>Items G thru K: Based on Form B who have used computers or internet at a public library in the past 12 months [N=287]</i>				
g. Buy a product online	16	84	0	0
h. Look for or apply for a job online	36	64	0	0
i. Pay bills or do any banking online	16	84	1	*
j. Browse the Internet for fun or just to pass the time	63	37	0	0
k. Download or watch online video	26	74	0	0

- Q26** Have library staff ever helped you use a computer or the internet at a public library?

Based on those who have ever visited a public library [N=1,920]

	<u>CURRENT</u>	
%	36	Yes
	63	No
	*	No computers/No internet at library (VOL.)
	*	Don't know
	*	Refused

**Q27** Now thinking more broadly...overall, how well-informed do you feel you are about the different services and programs your public library offers? Do you feel like you know...[READ 1-4]?

	<u>CURRENT</u>	
%	22	ALL or MOST of the services and programs your library offers
	46	SOME of what it offers
	20	NOT MUCH of what it offers
	11	Nothing at all
	1	(DO NOT READ) Don't know
	*	(DO NOT READ) Refused

**Q28** As far as you know, does your public library loan out e-books?<sup>9</sup>

	<u>CURRENT</u>	
%	31	Yes
	12	No
	57	Don't know
	*	Refused

**Q29** Have you ever tried to borrow or download an E-BOOK from a public library, or have you not done this?<sup>10</sup>

Based on those who have ever used a public library

	<u>CURRENT</u>	
%	7	Yes, have tried
	93	No, have not tried
	*	Don't know
	0	Refused
	[n=1,981]	

*Demographic questions PAR, D2B1, D2B2, and D2C are not reported in this topline.*

<sup>9</sup> In December 2011, question was asked of those who do not read e-books or e-book readers who do not get e-books at the public library [N=2,874].

<sup>10</sup> In December 2011, question was asked of e-book readers who do not get e-books at the public library [N=681].

**Q37** Now thinking about some different ways public libraries could change the way they serve the public... Please tell me if each of the following is something you, personally, think public libraries should DEFINITELY do, should MAYBE do, or should definitely NOT do. (First/Next) How about... [INSERT ITEMS; RANDOMIZE]?

[READ IF NECESSARY: Is this something you think public libraries should DEFINITELY do, should MAYBE do, or should definitely NOT do?]

	SHOULD DEFINITELY DO	SHOULD MAYBE DO	SHOULD DEFINITELY NOT DO	(VOL.) DOESN'T MATTER TO ME	DON'T KNOW	REFUSED
<i>Items A thru E: Based on Form A [N=1,119]</i>						
a. Make most services automated, so people can find what they need and check out material on their own without help from staff	41	36	20	*	2	1
b. Have more comfortable spaces for reading, working, and relaxing at the library	59	28	9	1	2	1
c. Have completely separate locations or spaces for different services, such as children's services, computer labs, reading spaces, and meeting rooms	61	27	9	*	2	1
d. Move some print books and stacks OUT OF public locations to free up more space for things such as tech centers, reading rooms, meetings rooms, and cultural events	20	39	36	1	4	*
e. Offer more interactive learning experiences similar to museum exhibits	47	38	12	*	3	*
<i>Items F thru J: Based on Form B [N=1,133]</i>						
f. Help users digitize material such as family photos or historical documents	43	39	14	1	3	1
g. Offer a broader selection of e-books	53	30	5	3	9	*
h. Offer free early literacy programs to help young children prepare for school	82	14	3	*	1	1
i. Coordinate more closely with local schools in providing resources to kids	85	11	2	*	1	*
j. Move most library services ONLINE so users can access them without having to visit the library	42	34	19	1	3	1

**Q38** If public libraries offered [INSERT ITEMS; RANDOMIZE] would you be very likely, somewhat likely, not too likely, or not at all likely to use this resource? How about if public libraries offered... [INSERT NEXT ITEM]?

[READ IF NECESSARY: Would you be very, somewhat, not too, or not at all likely to use this resource?]<sup>11</sup>

	VERY LIKELY	SOME- WHAT LIKELY	NOT TOO LIKELY	NOT AT ALL LIKELY	(VOL.) LIBRARY ALREADY OFFERS	DON'T KNOW	REFUSED
<i>Items A thru E: Based on Form A</i>							
a. Classes or instruction on how to use handheld reading devices like e-book readers and tablet computers							
Current [N=1,119]	23	28	17	31	*	1	*
December 2011 [N=2,874]	11	21	19	47	n/a	2	1
b. Library kiosks or redboxes located throughout the community where people can check out books, movies or music without having to go to the library itself							
Current	33	30	14	20	*	1	1
c. E-book readers already loaded with the book you want to read							
Current	26	32	15	24	0	1	1
December 2011	18	28	15	37	n/a	1	*
d. A cell phone application or "app" that allows you to access and use library services from your mobile phone and see what programs the library offers							
Current	35	28	12	22	*	1	1
e. Personalized online accounts that give you customized recommendations for books and services based on your past library activity							
Current	29	35	15	19	*	1	1

**Q38 continued...**

<sup>11</sup> December 2011 question wording was: "If your public library offered [INSERT ITEMS IN ORDER], would you be very likely, somewhat likely, not too likely, or not at all likely to use this resource?" Trend question was asked of those who do not read e-books or e-book readers who do not get e-books at the public library [N=2,874].



**Q38 continued...**

	VERY LIKELY	SOME- WHAT LIKELY	NOT TOO LIKELY	NOT AT ALL LIKELY	(VOL.) LIBRARY ALREADY OFFERS	DON'T KNOW	REFUSED
<i>Items F thru J: Based on Form B</i>							
f. A digital media lab where you could create and upload new digital content like movies or your own e-books Current [N=1,133]	26	32	17	23	0	1	*
g. A program that allowed people to try out the newest tech devices or applications Current	35	34	13	16	0	2	*
h. Classes on how to download library e-books to handheld devices Current	28	29	17	24	*	1	1
December 2011 [N=2,874]	12	20	19	47	n/a	1	1
i. A cell phone application or "app" that helps you locate material easily within the library by guiding you with GPS Current	34	28	14	22	0	1	1
j. An online research service where you could pose questions and get responses from librarians Current	37	36	12	14	0	1	1

## Methodology

### Gates Library Services Survey

Prepared by Princeton Survey Research Associates International for the Pew Research Center's Internet & American Life Project and the Gates Foundation

November 2012

#### SUMMARY

The Gates Library Services Survey, sponsored by the Pew Research Center's Internet & American Life Project and the Gates Foundation, obtained telephone interviews with a nationally representative sample of 2,252 people ages 16 and older living in the United States. Interviews were conducted via landline ( $n_{LL}=1,127$ ) and cell phone ( $n_C=1,125$ , including 543 without a landline phone). The survey was conducted by Princeton Survey Research Associates International. The interviews were administered in English and Spanish by Princeton Data Source from October 15 to November 10, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for results based on the complete set of weighted data is  $\pm 2.3$  percentage points. Results based on the 1,945 internet users<sup>12</sup> have a margin of sampling error of  $\pm 2.5$  percentage points.

Details on the design, execution and analysis of the survey are discussed below.

#### DESIGN AND DATA COLLECTION PROCEDURES

##### Sample Design

A combination of landline and cellular random digit dial (RDD) samples was used to represent all adults in the 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 drawn 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

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<sup>12</sup> Internet user is defined based on those accessing the internet occasionally, sending or receiving email, and/or accessing the internet on a cell phone, tablet, or other mobile handheld device.

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.

### **Contact Procedures**

Interviews were conducted from October 15 to November 10, 2012. As many as 7 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Interviewing was spread as evenly as possible across the days in field. Each telephone number was called at least one time during the day in an attempt to complete an interview.

For the landline sample, interviewers asked to speak with the youngest male or female ages 16 or older currently at home based on a random rotation. If no male/female was available, interviewers asked to speak with the youngest person age 16 or older of the other gender. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender when combined with cell interviewing.

For the cellular sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was age 16 or older and in a safe place before administering the survey. Cellular respondents were offered a post-paid cash reimbursement for their participation.

## WEIGHTING AND ANALYSIS

The first stage of weighting corrected for different probabilities of selection associated with the number of adults in each household and each respondent's telephone usage patterns.<sup>13</sup> This weighting also adjusts for the overlapping landline and cell sample frames and the relative sizes of each frame and each sample.

This first-stage weight for the  $i^{\text{th}}$  case can be expressed as:

$$WT_i = \frac{1}{\left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i}\right)} \text{ if respondent has no cell phone}$$

$$WT_i = \frac{1}{\left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i}\right) + R} \text{ if respondent has both kinds of phones}$$

$$WT_i = \frac{1}{R} \text{ if respondent has no land line phone}$$

Where  $S_{LL}$  = size of the landline sample

$S_{CP}$  = size of the cell phone sample

$AD_i$  = Number of adults in the household

$R$  = Estimated ratio of the land line sample frame to the cell phone sample frame

The equations can be simplified by plugging in the values for  $S_{LL} = 1,127$  and  $S_{CP} = 1,125$ . Additionally, we will estimate of the ratio of the size of landline sample frame to the cell phone sample frame  $R = 0.60$ .

The final stage of weighting balances sample demographics to population parameters. The sample is balanced by form to match national population parameters for sex, age, education, race, Hispanic origin, region (U.S. Census definitions), population density, and telephone usage. The Hispanic origin was split out based on nativity; U.S born and non-U.S. born. The White, non-Hispanic subgroup is also balanced on age, education and region. The basic weighting parameters came from a special analysis of the Census Bureau's 2011 Annual Social and Economic Supplement (ASEC) that included all households in the United States. The population density parameter was derived from Census data. The cell phone usage parameter came from an analysis of the July-December 2011 National Health Interview Survey.<sup>1415</sup>

<sup>13</sup> i.e., whether respondents have only a landline telephone, only a cell phone, or both kinds of telephone.

<sup>14</sup> Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2011. National Center for Health Statistics. June 2012.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 compares weighted and unweighted sample distributions to population parameters.

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<sup>15</sup> The phone use parameter used for this 16+ sample is the same as the parameter we use for all 18+ surveys. In other words, no adjustment was made to account for the fact that the target population for this survey is slightly different than a standard 18+ general population survey.

**Table 1: Sample Demographics**

	Parameter (16+)	Unweighted	Weight
<u>Gender</u>			
	Male	48.7%	48.7%
	Female	51.3%	51.3%
<u>Age</u>			
	16-24	16.0%	16.5%
	25-34	17.3%	16.9%
	35-44	16.6%	15.6%
	45-54	18.3%	18.0%
	55-64	15.4%	15.3%
	65+	16.3%	16.5%
<u>Education</u>			
	Less than HS Graduate	16.4%	16.0%
	HS Graduate	29.4%	29.2%
	Some College/Assoc Degree	27.5%	26.6%
	College Graduate	26.8%	27.6%
<u>Race/Ethnicity</u>			
	White/not Hispanic	67.4%	66.4%
	Black/not Hispanic	11.6%	11.5%
	Hispanic - US born	7.0%	7.1%
	Hispanic - born outside	7.3%	7.0%
	Other/not Hispanic	6.7%	6.5%
<u>Region</u>			
	Northeast	18.3%	18.9%
	Midwest	21.7%	21.6%
	South	36.8%	36.7%
	West	23.2%	22.8%
<u>County Pop. Density</u>			
	1 - Lowest	19.9%	20.2%
	2	20.0%	19.8%
	3	20.1%	20.2%
	4	20.0%	20.2%
	5 - Highest	20.0%	19.6%
<u>Household Phone Use</u>			
	LLO	7.0%	6.8%
	Dual - few, some cell	39.0%	39.5%
	Dual - most cell	18.8%	18.9%
	CPO	35.2%	34.6%

## Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.24.

PSRAI calculates the composite design effect for a sample of size  $n$ , with each case having a weight,  $w_i$  as:

$$deff = \frac{n \sum_{i=1}^n w_i^2}{\left( \sum_{i=1}^n w_i \right)^2} \quad \text{formula 1}$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect ( $\sqrt{deff}$ ). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left( \sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right) \quad \text{formula 2}$$

where  $\hat{p}$  is the sample estimate and  $n$  is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample—the one around 50%. For example, the margin of error for the entire sample is  $\pm 2.3$  percentage points. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 2.3 percentage points away from their true values in the population. The margin of error for estimates based on form 1 or form 2 respondents is  $\pm 3.3$  percentage points. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

## RESPONSE RATE

Table 2 reports the disposition of all 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:<sup>16</sup>

- Contact rate – the proportion of working numbers where a request for interview was made<sup>17</sup>
- 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 11.4 percent. The response rate for the cellular sample was 11 percent.

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<sup>16</sup> PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

<sup>17</sup> PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.



**Table 2: Sample Disposition**

Landline	Cell	
27,813	23,844	Total Numbers Dialed
1,100	404	Non-residential
1,120	45	Computer/Fax
8	----	Cell phone
13,815	9,183	Other not working
1,577	321	Additional projected not working
10,193	13,891	Working numbers
36.6%	58.3%	Working Rate
526	107	No Answer / Busy
3,296	4,073	Voice Mail
27	11	Other Non-Contact
6,344	9,700	Contacted numbers
62.2%	69.8%	Contact Rate
373	1,504	Callback
4,749	6,630	Refusal
1,222	1,566	Cooperating numbers
19.3%	16.1%	Cooperation Rate
40	42	Language Barrier
----	375	Screen out / Child's cell phone
1,182	1,149	Eligible numbers
96.7%	73.4%	Eligibility Rate
55	24	Break-off
1,127	1,125	Completes
95.3%	97.9%	Completion Rate
11.4%	11.0%	Response Rate