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Public Perceptions of Privacy and Security in the Post-Snowden Era

Few see core communications channels as "very secure" places to share private information

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About this Report

This report is the first in a series of studies that examines Americans' privacy perceptions and behaviors following the revelations about U.S. government surveillance programs by government contractor Edward Snowden that began in June of 2013. To examine this topic in depth and over an extended period of time, the Pew Research Center's Internet Project commissioned a representative online panel of 607 adults who are members of the GfK Knowledge Panel. These panelists have agreed to respond to four surveys over the course of one year. The findings in this report are based on the first survey, which was conducted in English and fielded online January 11-28, 2014. In addition, a total of 26 panelists also participated in one of three online focus groups as part of this study during August 2013 and March 2014.

This report is a collaborative effort based on the input and analysis of the following individuals:

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Other reports from the Pew Research Center Internet Project on the topic of privacy and security online can be found at: <u>http://www.pewinternet.org/topics/privacy-and-safety/pages/2/</u>

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Summary of Findings

Privacy evokes a constellation of concepts for Americans—some of them tied to traditional notions of civil liberties and some of them driven by concerns about the surveillance of digital communications and the coming era of "big data." While Americans' associations with the topic of privacy are varied, the majority of adults in a new survey by the Pew Research Center feel that their privacy is being challenged along such core dimensions as the security of their personal information and their ability to retain confidentiality.



When Americans are asked what comes to mind when they hear the word "privacy," there are patterns to their answers. As the above word cloud illustrates, they give important weight to the idea that privacy applies to personal material—their space, their "stuff," their solitude, and, importantly, their "rights." Beyond the frequency of individual words, when responses are grouped into themes, the largest block of answers ties to concepts of security, safety, and protection. For many others, notions of secrecy and keeping things "hidden" are top of mind when thinking about privacy.

Most are aware of government efforts to monitor communications

More than a year after contractor Edward Snowden leaked documents about widespread government surveillance by the NSA, the cascade of news stories about the revelations continue to register widely among the public. Some 43% of adults have heard "a lot" about "the government collecting information about telephone calls, emails, and other online communications as part of efforts to monitor terrorist activity," and another 44% have heard "a little." Just 5% of adults in our panel said they have heard "nothing at all" about these programs.

Widespread concern about surveillance by government and businesses

Perhaps most striking is Americans' lack of confidence that they have control over their personal information. That pervasive concern applies to everyday communications channels and to the collectors of their information—both in the government and in corporations. For example:

- 91% of adults in the survey "agree" or "strongly agree" that consumers have lost control over how personal information is collected and used by companies.
- 88% of adults "agree" or "strongly agree" that it would be very difficult to remove inaccurate information about them online.
- 80% of those who use social networking sites say they are concerned about third parties like advertisers or businesses accessing the data they share on these sites.
- 70% of social networking site users say that they are at least somewhat concerned about the government accessing some of the information they share on social networking sites without their knowledge.

Yet, even as Americans express concern about government access to their data, they feel as though government could do more to regulate what advertisers do with their personal information:

- 80% of adults "agree" or "strongly agree" that Americans should be concerned about the government's monitoring of phone calls and internet communications. Just 18% "disagree" or "strongly disagree" with that notion.
- 64% believe the government should do more to regulate advertisers, compared with 34% who think the government should not get more involved.
- Only 36% "agree" or "strongly agree" with the statement: "It is a good thing for society if people believe that someone is keeping an eye on the things that they do online."

In the commercial context, consumers are skeptical about some of the benefits of personal data sharing, but are willing to make tradeoffs in certain circumstances when their sharing of information provides access to free services.

- 61% of adults "disagree" or "strongly disagree" with the statement: "I appreciate that online services are more efficient because of the increased access they have to my personal data."
- At the same time, 55% "agree" or "strongly agree" with the statement: "I am willing to share some information about myself with companies in order to use online services for free."

There is little confidence in the security of common communications channels, and those who have heard about government surveillance programs are the least confident

Across the board, there is a universal lack of confidence among adults in the security of everyday communications channels—particularly when it comes to the use of online tools. Across six different methods of mediated communication, there is not one mode through which a majority of the American public feels "very secure" when sharing private information with another trusted person or organization:

- 81% feel "not very" or "not at all secure" using <u>social media sites</u> when they want to share private information with another trusted person or organization.
- 68% feel insecure using <u>chat or instant messages</u> to share private information.
- 58% feel insecure sending private info via <u>text messages</u>.
- 57% feel insecure sending private information via <u>email</u>.
- 46% feel "not very" or "not at all secure" <u>calling</u> <u>on their cell phone</u> when they want to share private information.
- 31% feel "not very" or "not at all secure" using a

The public feels most secure using landline phones, least secure on social media

% of adults who feel varying degrees of security when sharing private info with another trusted person or organization



Source: Pew Research Privacy Panel Survey, January 2014. $\ensuremath{\mathsf{N=607}}$ adults, ages 18 and older.

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"not at all secure" using a <u>landline phone</u> when they want to share private information.

Americans' lack of confidence in core communications channels tracks closely with how much they have heard about government surveillance programs. For five out of the six communications channels we asked about, those who have heard "a lot" about government surveillance are significantly more likely than those who have heard just "a little" or "nothing at all" to consider the method to be "not at all secure" for sharing private information with another trusted person or organization.

Most say they want to do more to protect their privacy, but many believe it is not possible to be anonymous online

When it comes to their own role in managing the personal information they feel is sensitive, most adults express a desire to take additional steps to protect their data online: When asked if they feel as though their own efforts to protect the privacy of their personal information online are sufficient, 61% say they feel they "would like to do more," while 37% say they "already do enough."

When they want to have anonymity online, few feel that is easy to achieve. Just 24% of adults "agree" or "strongly agree" with the statement: "It is easy for me to be anonymous when I am online."

Not everyone monitors their online reputation very vigilantly, even though many assume others will check up on their digital footprints

Some people are more anxious than others to keep track of their online reputation. Adults under the age of 50 are far more likely to be "self-searchers" than those ages 50 and older, and adults with higher levels of household income and education stand out as especially likely to check up on their own digital footprints.

- 62% adults have ever used a search engine to look up their own name or see what information about them is on the internet.
- 47% say they generally assume that people they meet will search for information about them on the internet, while 50% do not.
- However, just 6% of adults have set up some sort of automatic alert to notify them when their name is mentioned in a news story, blog, or elsewhere online.

Context matters as people decide whether to disclose information or not

One of the ways that people cope with the challenges to their privacy online is to employ multiple strategies for managing identity and reputation across different networks and transactions. As <u>previous findings</u> from the Pew Research Center have suggested, users bounce back and forth between different levels of disclosure depending on the context. This survey also finds that when people post comments, questions or other information, they do so using a range of identifiers—using a screen name, their actual name, or posting anonymously.

Among all adults:

- 59% have posted comments, questions or other information online using a user name or screen name that people associate with them.
- 55% have done so using their real name.
- 42% have done so anonymously.

In some cases, the choices people make about disclosure may be tied to work-related policies. Among employed adults:

- 24% of employed adults say that their employer has rules or guidelines about how they are allowed to present themselves online.
- 11% say that their job requires them to promote themselves through social media or other online tools.

Different types of information elicit different levels of sensitivity among Americans

Social security numbers are universally considered to be the most sensitive piece of personal information, while media tastes and purchasing habits are among the least sensitive categories of data.

Social security numbers, health info and phone conversations among the most sensitive data

% of adults who report varying levels of sensitivity about the following kinds of info



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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At the same time that Americans express these broad sensitivities toward various kinds of information, they are actively engaged in negotiating the benefits and risks of sharing this data in their daily interactions with friends, family, co-workers, businesses and government. And even as they feel concerned about the possibility of misinformation circulating online, relatively few report negative experiences tied to their digital footprints.

- 11% of adults say they have had any bad experiences because embarrassing or inaccurate information was posted about them online.
- 16% say they have asked someone to remove or correct information about them that was posted online.

About this survey

The analysis in this report is based on a survey conducted January 10-27, 2014 among a sample of 607 adults, 18 years of age or older. The survey was conducted by the GfK Group using KnowledgePanel, its nationally representative online research panel. GfK selected a representative sample of 1,537 English-speaking panelists to invite to join the subpanel and take the first survey. Of the 935 panelists who responded to the invitation (60.8%), 607 agreed to join the subpanel and subsequently completed the first survey (64.9%). This group has agreed to take four online surveys about "current issues, some of which relate to technology" over the course of a year and possibly participate in one or more 45-60-minute online focus group chat sessions. A random subset of the subpanel receive occasional invitations to participate in these online focus groups. For this report, a total of 26 panelists participated in one of three online focus groups conducted during August 2013 and March 2014. Sampling error for the total sample of 607 respondents is plus or minus 4.6 percentage points at the 95% level of confidence.¹

For more information on the GfK Privacy Panel, please see the Methods section at the end of this report.

¹ The original margin of error provided by the vendor and published here (3.98) used a less conservative design effect. However, the analysis in the report was based on the more conservative design effect and the significance of the findings is not affected by this change.

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While we greatly appreciate all of these contributions, the authors alone bear responsibility for the presentation of these findings, as well as any omissions or errors.

Introduction

In the wake of Edward Snowden's 2013 revelations of widespread government surveillance of Americans' phone and email records, various news organizations have explored the idea that "privacy is dead." At the same time, others have suggested that renewed public attention to the topic has meant that privacy is, in fact, "thriving online," or at the very least, "not dead yet." Some of this disconnect is attributable to the longstanding tendency of privacy debates to frame the issue in binary terms; either people have privacy or they don't. But in practice, some scholars and analysts have <u>argued</u> that privacy is not something that one simply has, but "something that one seeks to achieve," through ongoing negotiation of new contexts and changes in the way information flows.

What is perhaps a less disputed notion is that privacy is being discussed with new urgency in recent years in America. Between June 2013 and June 2014, there were nearly 1,000 English language news articles that included the word "privacy,"² and 395 current pieces of legislation in the 113th Congress mentioned the term.³ Internet users also took to social media to talk about the topic; during the same one-year period, the word "privacy" was included in 3,783,091 tweets.⁴

The privacy-focused media coverage, policy debates and the social media discussion has been wide-ranging. While the revelations by Edward Snowden about the National Security Agency (NSA) surveillance programs have drawn considerable attention, there have also been multiple large-scale consumer data <u>breaches</u>, White House-commissioned <u>reports</u> on "big data and privacy," and an ongoing <u>controversy</u> about the privacy of students' educational data to drive public interest in and discussion of privacy.

The urgency of these privacy-related discussions has increased as policymakers have proposed a number of measures to address <u>government surveillance</u> and <u>commercial data collection</u>. Previous research by the Pew Research Center's Internet Project has found that public concern about the amount of personal information available online is <u>growing</u> and the majority of internet users think that current privacy laws "are not good enough" in protecting people's privacy online.

At the same time, however, what exactly "protecting privacy online" means in practice may differ quite substantially from person to person, in different online contexts and transactions, and in response to current events. For instance, in the specific context of national security, Americans' views about the government's collection of telephone and internet data as part of anti-terrorism

³ Search conducted via <u>www.congress.gov</u> on June 27, 2014. A separate search of Westlaw archives conducted in October 2014 indicated that 6,932 federal cases had mentioned the word "privacy" in their decisions since June 2013.

² Search conducted via the "English language news" filter on LexisNexis for the period of January 1-June 18, 2014.

⁴ Analysis conducted using Crimson Hexagon (date range from January 1, 2014-June 18, 2014).

efforts are divided. Yet there is a clear trend, confirmed in this survey, that Americans' opinions have shifted from relatively clear support at the time the Snowden revelations came to light to relative disapproval.⁵

Americans' associations with the topic of privacy are also complicated and changing, particularly as younger adults approach networked environments with a different social calculus for assessing the perceived benefits and risks of these spaces.⁶ And for older adults, the widespread integration of digital communications technology into nearly every facet of daily life has meant that even those who are not connected to these networks are still affected by the data that is collected and courses through the internet.

In an effort to explore a range of questions about Americans' privacy behaviors and attitudes, the Pew Research Center's Internet Project created a custom online panel of adults who agreed to respond to four surveys and participate in occasional focus groups over the course of a year. Using a random subsample of the full GfK Knowledge Panel allows researchers to draw connections between survey responses and focus group discussions as well as the ability to track changes in key privacy measures over time.

The first set of findings from this research panel suggests that Americans' perceptions of privacy and their sensitivities about different kinds of personal information are varied, but their lack of confidence in the security of digital communications channels is universal. Among the general public, there is not a high level confidence in the security of everyday communications channels particularly when it comes to the use of online tools. Across six different methods of mediated communication, there is not one mode through which a majority of the American public feels "very secure" sharing private information with another trusted person or organization.

When they have to make a choice, the public feels most secure communicating private information via calls placed on a landline telephone or cell phone. But text messages and email are not as widely trusted. And social media sites, chat and instant messenger applications are rarely considered "very secure" means of communicating sensitive information to another trusted person or organization.

Few members of our online panel expressed high levels of trust in the government or advertisers, and most panelists are at least somewhat concerned about those entities accessing their information on social networking sites—particularly advertisers. Most adults have heard about the

⁵ See: http://www.people-press.org/2014/01/20/obamas-nsa-speech-has-little-impact-on-skeptical-public/

⁶ See: danah boyd, *It's Complicated* and Madden et al., "Teens, Social Media and Privacy": <u>http://www.pewinternet.org/2013/05/21/teens-social-media-and-privacy/</u>

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disclosures of government surveillance of communications, and a majority believes that online surveillance is not good for society. Those who have heard the most about the government disclosures and those who have checked up on their own digital footprints online are more privacy sensitive across an array of measures in the survey.

Americans' Perceptions of Privacy are Varied

The term "privacy" evokes a constellation of concepts in the minds of the American public

To better understand how the public thinks about privacy, a representative sample of 607 adults were asked an open-ended question in an online survey: "When you hear the word "privacy," what comes to mind for you?"⁷ The responses that followed were striking in their variance, ranging from one-word entries to lengthier descriptions that touched on multiple concepts.



Once the responses were coded, a set of key words and themes emerged as the most frequently referenced and top-of-mind for the general public. Each of the top ten themes was referenced in at least 5% of the total responses. However, a full 22% of the responses referenced some other theme that was mentioned only a handful of times or was entirely unique.

 $^{^{7}}$ A full discussion of the sample is available at the end of this report.

"Privacy" in the words of the public

% that referenced each theme in response to open-ended question: "When you hear the word "privacy," what comes to mind for you? Tell us the first few words that pop into your head..."

Security/safety/protection	14%
Personal	12%
Secret/hidden	11%
Rights/Let Alone/4th Amendment	10%
My business/stay out	9%
Don't have/doesn't exist	9%
Information	8%
Internet/technology	7%
Keep to self/no one else	7%
NSA/Snowden	5%
Private/Privacy of something	5%
Confidential	4%
Surveillance, spying, tracking	4%
Freedom/liberty	3%
Home/own space	3%
Not sharing	3%
Invasion/violation/intrusion	3%
Controlling/limiting	2%
Not for public	2%
Government	2%
Trust	2%
Other*	22%

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. Table displays responses to the question: "When you hear the word, 'privacy,' what comes to mind for you?" A portion of the sample did not respond, leaving 589 responses that were coded by themes. Results do not add up to 100% because many responses referenced multiple themes.

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A large segment of the responses associated privacy with concepts of security, safety and protection

For many Americans, privacy is closely associated with references to security.⁸ Even as "privacy" and "security" signal distinct sectors of technological development and legal protections, these concepts are often blurred and overlapping for the general public. Among all of the themes referenced in the open-ended responses to the online survey, <u>security</u>, <u>safety and protection</u> was the most frequently-referenced category; 14% of the responses used these phrases in some form. Respondents associated privacy with the "security of personal information" or as something that "must be protected." And among the most common one-word responses were simply the words "secure" and "security."

In online focus groups, smaller groups of respondents from the survey were asked specifically about the way they think about privacy versus security online. In many cases, respondents viewed the terms as interchangeable:

Q: Is there any difference in the way you think about privacy and security online?

"I think it's pretty much the same."

"I see them as the same."

"Not to me, that is pretty much the same thing."

"Pretty much go hand [in] hand."

However, some participants viewed the concepts as more distinct, with security signaling issues around personal safety, financial matters and protection from external threats online:

"Privacy is keeping something from someone, security is having the confidence that things or you [are] going to be ok."

"In my mind, privacy deals more on the side of personal issues while security deals with financial issues."

⁸ This association is often communicated in various privacy <u>policies</u> directed at consumers with regard to data security. However, it is also worth noting here that a different concept of security may be evoked by the language of the Fourth Amendment, which emphasizes the "right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures." Specific references to the Fourth Amendment were coded separately, but some references to being "secure" could be overlapping in some cases.

"Security to me means a firewall, a secure sight and a good filter on your computer. Privacy is more like photos, and personal info."

Privacy also signals a range of things that are considered to be personal

As with the focus group discussions, a slightly smaller portion of the survey responses (12%) used some variation of the word, "<u>personal</u>." While online survey respondents most often used the term in the context of "personal information," they also described privacy as personal in many other combinations, such as: "my personal business," "personal life," personal space," "personal stuff" "my personal solitude," and a "personal right."

Many respondents associated privacy with the ability to keep some things secret or hidden

About one in ten (11%) responses included the word "<u>secret</u>" or some variation of things that are hidden. Respondents described privacy as: "keeping secret," "secret, private, for your eyes only type of thing," or as things that are "protected, secret, concealed." Other responses suggested privacy as connected to having a "Hidden agenda" or things that are "secret, undercover."

Other common themes that emerged from the open-ended responses were clustered around privacy as:

- A set of **rights**, such as the "right to be let alone" (10%).
- Others "staying out of my business" (9%).
- Something people "don't have" or "doesn't exist" (9%).
- Associated with **information** and the ability to control and limit access to it (8%).
- Tied to the **internet and technology** (7%).
- Things people want to **keep to themselves and no one else** (7%).
- Associated with references to the **National Security Agency (NSA) and Edward Snowden** (5%).

Most have heard at least a little about government surveillance

Beyond specific references to government surveillance programs in the adults' associations with the word "privacy," almost all of the participants in our online panel said that they have heard at least something about "the government collecting information about telephone calls, emails, and other online communications as part of efforts to monitor terrorist activity." And those who have heard the most about the government disclosures are more privacy sensitive across an array of measures in the survey.⁹

Some 43% of adults have heard "a lot" about this government surveillance, and another 44% had heard "a little." Just 5% of adults in our panel said they had heard "nothing at all" about these programs.

Most have heard at least a little about government surveillance

Among all adults, the % who say they have heard "a lot," "a little" or "nothing at all" about gov't collecting info



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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⁹ Other recent surveys have found correlations between privacy-related awareness and concern. See, Chris Jay Hoofnagle and Jennifer M. Urban's discussion in "Alan Westin's Privacy Homo Economicus," available at: http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=3399&context=facpubs

Looking at demographics, we find that men were much more likely than women to say they have heard a lot about the NSA revelations (50% vs. 36%), and those ages 65 and older were more likely than younger age groups to have heard a lot (57% vs. 37% of those under age 50).¹⁰ Adults with higher levels of education and household income were also more likely to report hearing a lot compared with those who have lower levels of education.

Older adults among most likely to have heard "a lot" about gov't surveillance



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

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¹⁰ Adults ages 65 and older are also more likely to keep up with news in general: <u>http://www.people-press.org/2012/09/27/section-1-watching-reading-and-listening-to-the-news-3/</u>

Those who have heard "a lot" about government surveillance programs are also more aware of their own digital footprints

A majority of adults say that they keep track of their digital footprints, but those who have a high level of awareness about government surveillance are more likely to say they search for information about themselves online. Overall, six in ten (62%) of those who participated in our online panel have ever used a search engine to look up their own name or see what information about them is on the internet.¹¹ Those who have heard a lot about

Surveillance awareness and self-searching

% of adults who use online search engines to look up their own name



Source: Pew Research Privacy Panel Survey, January 2014. $\ensuremath{\mathsf{N}}\xspace=607$ adults, ages 18 and older.

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government surveillance of communications are more likely to be self-searchers than those who have heard a little or nothing about it (71% vs 57%).¹²

¹¹ In May 2013, an RDD telephone survey of adults found that 56% of internet users had used a search engine to look up their own name and see what information is available about them online: <u>http://www.pewresearch.org/fact-tank/2013/09/27/majority-of-online-americans-google-themselves/</u>

¹² While self-searching activity is associated with several measures of increased privacy-related sensitivity throughout the survey, it is also worth noting that self-searching can be one way to link IP addresses to individual users.

Self-searching activity varies greatly across different groups, particularly by age, income, and household education. Adults under the age of 50 are far more likely to be "self-searchers" than those ages 50 and older, and adults with higher levels of household income and education stand out as especially likely to check up on their own digital footprints.

Few feel it's a "good thing" for society if people believe they are being watched online

A majority of adults (62%) disagree with the statement "It is a good thing for society if people believe that someone is keeping an eye on the things that they do online," including 20% who "strongly disagree." Another 36% do agree that online surveillance is good for society, including the 7% who say they "strongly agree."

A majority of adults have searched for information about themselves online

Total	62%
Age	
18-29	69
30-49	71
50-64	54
65+	49
Education	
No college	44
Some college	70
College graduate	79
Household income	
Less than \$30,000/year	44
\$30,000-\$49,999	60
\$50,000-\$74,999	61
At least \$75,000	73

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

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Attitudes about online surveillance vary greatly among different groups, particularly by age and education. For instance, adults ages 50 and older are generally less likely than younger adults to see online surveillance as beneficial. Those with lower levels of education are also more likely to be in favor of online surveillance, with 45% of those who have not attended college agreeing overall—compared with 33% of those with some college experience and 26% of college graduates.

Finally, adults who have heard more about government surveillance are more likely to think such oversight could have drawbacks: Just 23% of adults who have heard "a lot" about the NSA revelations think online surveillance is

Most do not think it's a good thing for society if people believe they are being watched online

Among all adults, the % who agree it is a good thing for society if people believe that someone is keeping an eye on the things that they do online



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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good for society, compared with 46% of those who have heard less about the NSA revelations.

Most Americans agree that citizens "should be concerned" about the government's monitoring programs

Close to eight in ten (80%) American adults "agree" or "strongly agree" that Americans should be concerned about the government's monitoring of phone calls and internet communications. Just 18% "disagree" or "strongly disagree" with that notion.

Overall, 40% "strongly agree" that American citizens should be concerned, while 39% "agree." Men are more likely than women to "strongly agree" that the monitoring programs are cause for concern (46% vs. 35%). However, there are no significant variations by age, income or education levels.

Those who have heard "a lot" about government surveillance programs are considerably more likely to hold strong views; 53% "strongly agree" that citizens should be concerned, compared with 33% of those who have heard only a little or nothing about the programs.

Public Confidence in the Security of Core Communications Channels is Low

Across the board, there is a universal lack of confidence in the security of everyday communications channels—particularly when it comes to the use of online tools. Across six different methods of mediated communication, there is not one mode through which a majority of the American public feels "very secure" sharing private information with another trusted person or organization.

Americans' lack of confidence in core communications channels tracks closely with how much they have heard about government surveillance programs. For five out of the six communications channels we asked about, those who have heard "a lot" about government surveillance are significantly more likely than those who have heard just "a little" or "nothing at all" to consider the method to be "not at all secure" for sharing private information with another trusted person or organization.

Landline phones

While the use of landline phones has generally been declining and the number of cell-only households has been <u>increasing</u>. Americans express the greatest sense of security using landline phones when sharing private information with another trusted entity. More than any other device or communications tool, landline phones inspire the most confidence for these kinds of exchanges.

However, the level of confidence is still quite low. Just 16% of adults say they feel "very secure" sharing private information via the landline phone, while 51% say they feel "somewhat secure." About one in five (19%) say they feel "not very secure," while 12% say they feel "not at all secure" calling on a landline phone.

Women and men express the same low level of confidence in the security of landline phones. Those in the highest income group—adults living in households earning \$75,000 or more per year—are more likely to report that they feel "very secure" using a landline phone when compared with those living in households earning less than \$30,000 annually (20% vs. 11%).

Yet, there are no significant differences by age—people across all generations are equally likely to report low levels of confidence in using their landline when they want to share private information with another trusted person or organization.

Those who have heard a lot about government surveillance programs are twice as likely as those who have heard a little or nothing to say that landlines are "not at all secure" (16% vs. 8%).

Cell phone calls

Calling on a cell phone ranks below landline calls, but considerably higher than online communications. Among all adults, less than one in ten (9%) say they feel "very secure" making a call on their mobile phone when they have private information to share with another trusted person or organization. Another 43% say they feel "somewhat secure," while 29% say they feel "not very secure." Just over one in ten (17%) say they feel "not at all secure."

The public feels most secure using landline phones, least secure on social media

% of adults who feel varying degrees of security when sharing private info with another trusted person or organization



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Those with lower levels of education are among the least confident in the security of cell phone communications. Among those who have not attended college, 21% consider calling on their cell phone to be "not at all secure," compared with 12% of those with college degrees.

Cell phone users across all age groups and both genders report similar levels of confidence in the security of calls placed on their mobile phones.

Among adults who have heard a lot about government surveillance programs, 24% feel as though cell phones are "not at all secure" when there's a need to share private information with another trusted person or organization. Half as many (12%) who have heard just a little or nothing about government surveillance programs feel this strongly.

Text messages

Relative to calls placed on a cell phone, text messages are viewed with more uncertainty; 7% of adults say they feel "very secure" sharing private information with another trusted person or organization via text message, while 32% feel "somewhat secure." Another 37% feel as though text messages are "not very secure," while another (22%) feel as though texting is "not at all secure."

Women and men express the same lack of confidence in the security of text messages to share private information.

Adults ages 50 and older are significantly more likely than young adults 18-29 to rate text messages as "not at all secure." One in four (26%) adults over age 50 say this compared with 13% of those ages 18-29. While there are some minor variations in responses across socioeconomic groups, they are not consistent enough to suggest a clear pattern.

However, those who have heard a lot about government surveillance are twice as likely as those who have heard only a little or nothing at all to say that they feel "not at all secure" sending private information via text messages (30% vs. 15%).

Email

The public's confidence in the security of email is on par with the way they feel about texting; only 5% of adults say they feel "very secure" sending private information via email, while 35% say they feel "somewhat secure." Another 36% feel that email is "not very secure" when they have private information to share, and 21% say they feel "not at all secure" when using email.

Men and women report similar views of email, and adults of all ages generally express the same levels of confidence in the security of email. While there are no notable variations by education levels, adults living in the lowest income households are among the most wary of email security. A full 30% of those living in households earning less than \$30,000 annually say that email is "not at all secure," while 18% of those in households earning \$75,000 or more per year reported the same.

Among adults who have heard a lot about government surveillance programs, 26% feel as though email is "not at all secure" when they want to share private information with another trusted person or organization, while 16% who have heard a little or nothing about government surveillance programs feel this way.

Those who are more aware of gov't surveillance more likely to see communications channels as "not at all secure"

Among those who have heard "a lot" vs. "a little or nothing" about government surveillance programs, the % who feel "not at all secure" sharing private info with another trusted person or organization via the following methods...



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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Chat or Instant Messenger

Few Americans view chat or instant messenger as a secure means to share private information; only 4% feel "very secure" using chat and IM, and 25% feel these channels are "somewhat secure." Another 36% feel "not very secure" and 32% say they feel "not at all secure" using chat or instant messenger to share private information.

The most notable variations across various demographic groups for this question are by age; internet users over the age of 50 (38%) are more likely to see chat and IM as "not at all secure" when compared with young adults ages 18-29 (28%).

Unlike other communications channels, the proportion of Americans who view chat and instant messenger as insecure places to share private information does not vary according to their level of awareness of government surveillance programs.

Social Media

American adults view social media sites as the least secure channel to communicate private information to another trusted person or organization; just 2% view them as "very secure," while 14% feel "somewhat secure" sharing sensitive information on social media. Just over one in four (28%) feel "not very secure" sharing private information on social media and 53% say they feel "not at all secure."

Men and women are equally wary of using social media sites to share private information, but those over the age of 30 are more likely than young adults to feel as though the sites are "not at all secure." Over half of adults ages 30 and older (57%) report this lack of confidence, compared with 37% of those ages 18-29.

In terms of education-related differences, college grads are generally less confident in the use of social media for sharing private information; 64% of adults who have a college degree feel "not at all secure" sharing sensitive information over social media channels, compared with 47% of those who have not attended college.

Those who have heard a lot about government surveillance are more likely to view social media sites as "not at all secure" when compared with those who have lower levels of awareness (61% vs. 50%).

Few Feel that the Government or Advertisers can be Trusted

Americans' lack of confidence in communications security is accompanied by low levels of trust in government and advertisers

The backdrop for this lack of confidence in communications security is low levels of trust in key sectors that Americans associate with data collection and monitoring. While the surveillance practices of government agencies have been the focus of many public discussions and debates post-Snowden, previous <u>research</u> from the Pew Research Center's Internet Project has suggested that Americans are also concerned about data collection by advertisers. Additionally, public concern over the amount of personal information businesses are collecting has been growing.

Since around 2010, levels of trust in the federal government have been at historic lows. Previous Pew Research data shows that trust in the government has been declining since the early 2000s (immediately after 9-11) to its current post-recession level; trust in government has not been this low <u>since the summer of 1994</u>.¹³

Currently, just 18% of adults believe that the government in Washington can be trusted to do what is right either all (2%) or most (16%) of the time, while another 67% say that the government can be trusted only some of the time and 14% say it can never be trusted. As has been the case in <u>other</u> <u>surveys</u>, there are significant differences by education level, as adults who did not attend college are more likely to say the government can "never" be trusted (21%) compared with those with at least some college experience (9%).

¹³ For more information, see "Trust in Government Nears Record Low, But Most Federal Agencies Are Viewed Favorably" <u>http://www.people-press.org/2013/10/18/trust-in-government-nears-record-low-but-most-federal-agencies-are-viewed-favorably/</u> and its accompanying interactive chart: <u>http://www.people-press.org/2013/10/18/trust-in-government-interactive/</u>

However, Americans do not trust advertisers any more than they do the federal government. Few respondents believe that advertisers can be trusted to do what is right just about all (1%) or most (11%) of the time; 71% say that advertisers can be trusted only some of the time, and 16% say they can never be trusted. There are few differences in adults' trust levels toward advertisers by demographic group, with the exception of household income: 27% of those living in lower-income households (earning less than \$30,000 per year) say that advertisers can "never" be trusted, making them more likely to say this than those living in higher income households.

Among the 64% of adults who use social networking sites, we find that seven in ten say (70%) say that they are at least somewhat concerned about the government accessing some of the information they share on those sites without their knowledge; this includes 37% who say they are "very concerned," and 34% say they are "somewhat concerned." Another 25% say they are "not too concerned" about the government accessing their information, and just 4% say they are "not at all concerned."

Similarly, 80% of social networking site users on the panel say that they are at least somewhat concerned about third parties such as advertisers or businesses accessing some of the information they share on those sites without their knowledge; this includes 35% who say they are

Low levels of trust in government and advertisers

Among adults ages 18 and older

How often do you trust ____ to do the right thing?

	Government	Advertisers
Just about always	2%	1%
Most of the time	16	11
Only some of the time	67	71
Never	14	16

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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Broad concern about government and third-party access to info on social networking sites

% Among adults ages 18 and older who use social networking sites

How concerned are you that some of the info you share on social networking sites might be accessed by ____ without your knowledge?

	The government	Third parties like advertisers or businesses
Very concerned	37	35
Somewhat concerned	34	45
Not too concerned	25	17
Not at all concerned	4	2

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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"very concerned" and 45% who say they are "somewhat concerned." Another 17% say they are "not too concerned," and just 2% say they are "not at all concerned." In contrast to many other questions in the survey, there were only minor variations by age, education, or household income.

An overwhelming majority of the American public senses a loss of control over how their personal information is collected and used by companies

Beyond social networking sites, Americans express a broader loss of control over the way their personal data is managed by companies. Fully 91% of adults "agree" or "strongly agree" that "consumers have lost control over how personal information is collected and used by companies." This includes 45% who "strongly agree" and 46% who "agree" that consumers have lost control. Another 6% "disagree," while only 1% "strongly disagree" with this sentiment.

Those with a college education are more likely than those who have not attended college to "strongly agree" that consumers have lost control, 51% vs. 40%.

Respondents who are more aware of government surveillance programs also express a greater loss of control over how their personal information is collected and used by companies. Those who said they had heard a lot were more likely to "strongly agree" with a loss of control over their personal information compared with those who had heard "a little" or "nothing" about surveillance programs (58% vs. 37%).

Most Americans support greater regulation of advertisers and the way they handle personal information

Even as Americans express concern about government access to their data, they feel as though government could do more to regulate what advertisers do with their personal information; 64% believe the government should do more to regulate advertisers, compared with 34% who think the government should not get more involved.

Support for more regulation of advertisers is consistent across an array of demographic groups. However, those who have a college education are more likely than those who have not attended college to support more government intervention (69% vs. 58%).

Americans Consider Certain Kinds of Data to be More Sensitive than Others

Different kinds of information evoke varying levels of sensitivity among Americans. Social security numbers are universally considered to be the most sensitive piece of personal information, while media tastes and purchasing habits are among the least sensitive categories of data. In general, about half of respondents view the content of phone conversations, email messages and text messages as "very sensitive," and one in four see that data as "somewhat sensitive."

There are various demographic patterns that are echoed across many of the responses:

- Those who have higher levels of income and education report greater sensitivity for nearly every kind of data included in the survey.
- Those who have heard a lot about government surveillance programs and those who have searched for information connected to their names online report higher sensitivity levels for most categories of information. These differences are especially notable when looking at the sensitivity of phone conversations and email messages.

Social security numbers are considered to be the most sensitive piece of personal information—by far

A full 90% of adults feel as though their social security number is a "very sensitive" piece of information, and this view is broadly held across all demographic groups. Another 5% consider their social security number to be "somewhat sensitive," while 2% say it is "not too sensitive." Only 1% of respondents say their social security number is "not at all sensitive."

Those who have some college education are somewhat more likely than those who have not attended college to say that their social security number is "very sensitive" (94% vs. 85%). Similarly, those living in the highest income households also report higher sensitivity levels; for instance, 95% of those living in households earning \$75,000 or more per year view their social security number as "very sensitive," compared with 83% of those living in households earning less than \$50,000 annually.

Among those who have heard a lot about government surveillance programs, 95% see their social security number as very sensitive, compared with 89% of those who have heard only a little or nothing at all about the programs. Those who have searched for information about themselves online also express greater sensitivity about their social security number relative to those who haven't checked up on their own digital footprints (94% vs. 85%).

Social security numbers, health info and phone conversations among the most sensitive data

% of adults who report varying levels of sensitivity about the following kinds of info



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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A majority also consider health information to be very sensitive

More than half (55%) of adults consider the state of their health and the medicines they take to be "very sensitive" information while 26% view that kind of information to be "somewhat sensitive." Another 12% say that health information is "not too sensitive," and 5% say it is "not at all sensitive."

Men and women rank the sensitivity of health information equally. And adults of all ages are just as likely to say that their health data is "very sensitive." In general, those who have higher levels of education and income report a greater level of sensitivity with regard to the details of their health information. Those who have heard a lot about government surveillance programs are especially likely to say their health information is "very sensitive" (65%), along with those who check up on their digital footprints online (61%)

The content of phone conversations is just as sensitive as health info

Americans generally consider the content of their phone conversations to be just as sensitive as information about the state of their health and the medicines they take. More than half (54%) say that phone conversations are "very sensitive," while 27% consider them to be "somewhat sensitive." Another 13% see that content as "not too sensitive" and just 4% consider phone conversations to be "not at all sensitive."¹⁴

However, unlike the consistent findings among men and women for health information, men are more likely than women to say that the content of their phone conversations is "very sensitive" (59% vs. 50%).

As with many other kinds of information, differences by income, government surveillance awareness and self-searching activity are significant. Yet, there were no consistent variations by education or age.

Men and young adults are more concerned about the content of their email messages

Americans' sensitivities about the content of their email messages rival their feelings about health information and the content of phone conversations. Among all adults, 52% consider the content of their email messages to be "very sensitive," while 25% consider that information to be somewhat sensitive. Another 13% say they consider their email content to be "not too sensitive," and 7% say their messages are "not at all sensitive."¹⁵

However, men express a higher level of sensitivity about their email messages when compared with women; 57% of men say their email content is "very sensitive," while 47% of women report this.

Young adults are more likely than seniors ages 65 and older to consider the content of their email to be "very sensitive" information (59% vs. 42%). Those with a college education express greater sensitivities relative to those who have not attended college (60% vs. 45%), and those in the

¹⁴ As noted in the previous chapter, just 16% say they feel "very secure" using a landline phone to share private information with another trusted person or organization and 51% say they feel "somewhat secure" doing this.

¹⁵ By comparison, only 5% say they feel "very secure" and 35% feel "somewhat secure" sending email when they have private information to share with another trusted person or organization.

highest-income households are also more likely to consider their email content to be "very sensitive" when compared with those in the lowest income group (61% vs. 43%).

Those who have heard a lot about government surveillance programs (62%), are especially likely to say the content of their email messages is "very sensitive" information along with those who have checked up on their digital footprints online (58%).

Physical location data is seen as more sensitive among the college educated

Half of adults (50%) feel as though the details of their physical location gathered over a period of time from the GPS on a cell phone is "very sensitive" information. Another 32% consider this data to be "somewhat sensitive." Just 11% say that data is "not too sensitive," and 5% consider location data to be "not at all sensitive."

There are no consistent variations by gender or age for this question. However, those with a college degree are considerably more likely than those who have not attended college to say that this data is "very sensitive" (55% vs. 44%). Similarly, those in higher income households consider location data to be more sensitive.

Variations by the respondents' level of government surveillance awareness and self-searching activity are also significant. However, the 63% of adults in the sample who are mobile internet users who access the internet on a cell phone, tablet or other handheld device at least occasionally are no more likely than non-mobile internet users to consider location data to be "very sensitive."

Men and women are equally likely to consider text messages as sensitive

Just under half (49%) of adults said they consider the content of their text messages to be "very sensitive." About one in four (26%) consider this data to be "somewhat sensitive," while 13% feel as though text messages are "not too sensitive." Only 8% consider the content of their text messages to be "not at all sensitive."¹⁶

When men report increased sensitivity with regard to the content of their email messages, men and women have similar sensitivities about the content of their text messages.

However, young adults, who are among the most likely to be fervent users of text messaging, express higher levels of sensitivity regarding text messages when compared with seniors; 55% of

¹⁶ As noted above, 7% say they feel "very secure" and 32% feel "somewhat secure" sending text messages when they have private information to share with another trusted person or organization.

those ages 18-29 say they consider the content of their text messages to be "very sensitive," compared with 38% of those ages 65 and older.

Those who have a college education and those who live in households earning at least \$75,000 per year consider text messages to be more sensitive when compared with lower education and income groups.

Variations by the respondents' level of government surveillance awareness and self-searching activity are also significant. Mobile internet users are more likely than non-users to say the content of their text messages is "very sensitive."

Records of numbers called or texted are viewed as most sensitive by younger adults

Slightly less than half (45%) of adults said they feel as though the numbers they have called or texted from their phone is "very sensitive" information. About one in three (30%) consider this data to be "somewhat sensitive," while 16% consider the numbers called or texted to be "not too sensitive." Only 6% consider a record of these numbers to be "not at all sensitive."

Young adults express higher levels of sensitivity regarding this data when compared with seniors; 53% of those ages 18-29 say they view the record of who they have called or texted to be "very sensitive," data compared with 36% of those ages 65 and older.

Men and women express the same levels of sensitivity about these numbers. Variations by education are not significant, but those who live in households earning at least \$75,000 per year consider text messages to be more sensitive when compared with those living in households earning less than \$30,000 per year.

Views on the sensitivity of these numbers vary by the respondents' level of government surveillance awareness and self-searching activity. Mobile internet users are more likely than nonusers to say these numbers are is "very sensitive."

About four in ten see their birth date as very sensitive, with little demographic variation

Adults' views on the sensitivity of their birth date as a piece of information are most striking in their consistency across various demographic groups when looking at those who view this piece of data as "very sensitive." Overall 41% see their birth date as very sensitive data, a share which doesn't vary much across demographic groups.
The one variation that does stand out most notably is the respondent's level of awareness about government surveillance; 47% of those who have heard about surveillance say that their birth date is a very sensitive piece of information, compared with 37% who have heard only a little or nothing at all.

People's sensitivities about this information do differ by age, income and education when we look at the other extreme—responses among those who view this information as "not at all sensitive." Most notably, 25% of seniors ages 65 and older see their birth date as "not at all sensitive," compared with 12% of those ages 50-64 and 11% of those under age 50.

Those with higher levels of income and education are more concerned about details of their relationship history

Four in ten adults holds the view that their relationship history is "very sensitive" information. (The survey did not specify the kind of relationship—whether friends, romantic or professional.) About one in three (31%) consider this information to be "somewhat sensitive," while 14% consider relationship history to be "not too sensitive." Another 12% consider information about their relationship history to be "not at all sensitive."

There is little consistent variation across core demographic groups. However, those with higher levels of education and income are generally more likely than other groups to rank their relationship history as "very sensitive" information. For instance, 52% of college grads consider this to be highly sensitive data compared with just 29% of those who have not attended college. Similarly, 48% of those in households earning \$75,000 or more per year consider relationship history to be "very sensitive" data, compared with only 32% of those living in households earning less than \$30,000 per year.

Views on the sensitivity of these numbers also vary by the respondents' level of government surveillance awareness and self-searching activity.

Media tastes and purchasing habits are among the least sensitive categories of information

Seven of the items we asked about registered as considerably less sensitive when compared with the range of information discussed in the preceding section. For each of these categories of information, less than one-third of respondents said they considered the material to be "very sensitive." However, there were no items for which a majority registered the material to be "not at all sensitive."

- 27% consider the <u>websites they have visited</u> to be "very sensitive," while 43% see that information as "somewhat sensitive."
- 24% consider the <u>searches they have made</u> using online search engines to be "very sensitive," while 41% see that data as "somewhat sensitive."
- 22% consider their <u>religious and spiritual views</u> to be "very sensitive," while 23% view that information as "somewhat sensitive."
- 22% consider information about <u>who your friends are and what they are like</u> to be "very sensitive," while 46% see that data as "somewhat sensitive."
- 20% consider their <u>political views and the candidates they support</u> to be "very sensitive," while 31% feel it is "somewhat sensitive."
- 9% consider information about their <u>media tastes</u> to be "very sensitive," while 22% see that information as "somewhat sensitive."
- 8% consider data about their <u>basic purchasing habits</u> to be "very sensitive," while 33% view it as "somewhat sensitive."

The responses for these questions generally follow a familiar pattern; for most items, those who have higher education and income levels express greater sensitivity when compared with those who have lower levels of education or income. Respondents' concerns also differed significantly according to their level of awareness of government surveillance.

About one in three adults say they value the greater efficiency of online services because of the increased access they have to personal data

Some companies rely on collecting certain data to provide a more personalized experience for each individual by customizing advertisements and other features, while others rely on access to data to support a wide range of security features and product improvements. About a third (36%) of adults "agree" or "strongly agree" with the statement: "I appreciate that online services are more efficient because of the increased access they have to my personal data." However, only 4% "strongly agree" with that statement. By comparison, almost two-thirds (61%) say they disagree, including 15% who "strongly disagree."

Men and women are equally likely to disagree with this statement, but younger adults are somewhat more likely to value the increased efficiency of online services when compared with those ages 50-64.

Those who access the internet on a mobile device like a smartphone or tablet were significantly more likely than non-mobile users to "agree" or "strongly agree" that they appreciate the greater efficiency of online services due to personal data collection.

Those who have heard a lot about recent government surveillance are significantly more likely to "disagree" or "strongly disagree" that online services are more efficient due to increased access to personal data. Some 72% of those who have heard a lot reported this, compared with 56% of those who have heard a little or nothing.

Many are willing to share some information about themselves with companies to use online services for free

Even as Americans indicate widespread concern about the loss of control over their personal information and little enthusiasm for the ways that access to their data may make

Mobile internet users more likely to value efficiency of services that rely on personal data

Among mobile internet users vs. non-mobile internet users, the % who agree vs. disagree that online services are more efficient b/c of increased access to personal data



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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certain online services more efficient, a majority of respondents agree that they are willing to share some personal data in exchange for access to free online services.¹⁷ Some 55% "agree" or "strongly agree" that that they are willing to share some information about themselves with companies in order to use online services for free. Another 43% "disagree" or "strongly disagree" with this statement.

Adults who access the internet on a mobile device like a smartphone or tablet were particularly willing to trade some of their personal data for free services; 62% mobile internet users "agree" or "strongly agree," compared with 45% of non-mobile internet users.

¹⁷ These kinds of tensions between concerns and behaviors are common in privacy-related surveys, and are often referred to as the "privacy paradox." While some suggest that this is evidence that consumers' concerns are invalid, other scholars have argued that this tension may due to a knowledge gap among consumers and the high social costs of "exiting" various platforms. For a lengthier discussion, see: https://medium.com/@hoofnagle/exit-voice-and-the-privacy-paradox-662a922ff7c8

Social media users were also particularly likely to "agree" or "strongly agree" that they are willing to exchange some of their personal data for free online services. Some 60% said so, compared with 46% of those who do not use social media.

Adults who have searched for themselves online were also more willing to exchange information for services; 61% "agree" or "strongly agree" that they would be willing to share some personal data for free online services, compared with 45% of those who have not searched for themselves.

Social media users more comfortable sharing personal info in exchange for free services

Among social media users vs. non-social media users, the % who agree vs. disagree that they are willing to share some info about themselves in exchange for free online services





Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

Most Would Like to Do More to Protect their Personal Information Online

Six in ten adults feel as though they "would like to do more" to protect the privacy of their personal information online

When asked if they feel as though their own efforts to protect the privacy of their personal information online are sufficient, 61% say they feel as though they "would like to do more," while 37% say they "already do enough."

Men and women and adults of all ages are equally likely to say they would like to do more to protect the privacy of their personal information online. However, those with the lowest levels of education are more likely to express confidence in their efforts while those who are college educated feel as though they could do more.

Mobile internet users are significantly more likely than non-mobile internet users to say that they feel as though they "would like to do more" to protect the privacy of their personal information online (67% vs. 52%).

Among those who have used a search engine to check up on their own digital footprints, 66% say that they would like to do more, compared with just 53% of those who have not searched for results connected to their name online.

Similarly, social media users express a greater desire to take additional steps when compared with non-users (66% vs. 55%).

Content creators employ multiple strategies for managing their identity when posting online

One of the ways that people cope with the challenges of managing their privacy online is to employ multiple strategies for managing identity and reputation across different networks and transactions online. As previous <u>findings</u> from the Pew Research Internet Project have suggested, users bounce back and forth between different levels of disclosure depending on the context. This survey also finds that when people post comments, questions or other information, they do so using a range of identifiers—using a screen name, using their actual name, as well as doing so anonymously.

Among all adults:

- 59% have posted comments, questions or other information online *using a user name or screen name that people associate with them*
- 55% have done so *using their real name*
- 42% have done so *anonymously*

Younger adults are generally more likely to post content online when compared with older adults, and these younger users also tend to post under a wide range of identifiers. This is especially true when it comes to screen names or user names—some 82% of 18-29 year olds have posted content online using some type of screen name that people associate with them.

Along with younger adults, college graduates are more likely to post content online using a dedicated screen name or user name (69% have done so) than are those who have attended but not graduated from college (57%) or those who have not attended college (54%). And those with at least some college experience, or an annual household income of \$50,000 and up, are more likely to post anonymously online than are those with lower levels of income or education.

Strategies for self-presentation online vary by age

% of adults who post comments, queries or information on the internet using the following...





In addition, social networking site users are more likely than non-SNS users to post content using each of these identifiers—using their real names (70% vs. 30%), a screen name that people associate with them (74% vs. 34%), as well as anonymously (48% vs. 31%).

Few adults think it is "easy" for them to be anonymous online

Just 24% of adults "agree" (20%) or "strongly agree" (3%) with the statement: "It is easy for me to be anonymous when I am online." By contrast, 74% "disagree" (52%) or "strongly disagree" (22%) that it is easy for them to be anonymous.

Those who have heard a lot about government collection of personal information were more likely than those less aware to "strongly disagree" that it is easy for them to be anonymous online (30% vs. 16%). Likewise, those who have searched for themselves online are less confident about the ease with which one can be anonymous. A quarter "strongly disagree" that it is easy, compared with 16% of those who have not searched for themselves online.

Nearly nine in ten adults agree that if inaccurate information was posted about them online, it would be very difficult to remove

Fully 88% of adults "agree" (49%) or "strongly agree" (39%) that it would be very difficult to

Those who are aware of their own digital footprints more pessimistic about ease of anonymity online

Among those who have searched for themselves online vs. those who have not, the % who "strongly disagree" that it is easy to be anonymous online



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

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remove inaccurate information about them online. Just 9% "disagree" and 1% "strongly disagree" that it would be very difficult to remove.

Even those that think their privacy is well-protected fear the possibility that they would not be able to correct inaccurate information. A third (31%) of those who say they do enough to protect their privacy "strongly agree" that it would be difficult to remove inaccurate information, and another 53% "agree." Perhaps unsurprisingly, those who feel as though they could do more to protect their privacy are more likely to "strongly agree" that removing inaccurate information would be difficult. But overall, these two groups show relatively similar levels of concern.

Yet, relatively few say they have had any bad experiences because embarrassing or inaccurate information was posted about them online

About one in ten (11%) of adults say they have had bad experiences due to embarrassing or inaccurate information that was posted about them on the internet, while 87% say this has never happened to them. Adults ages 65 and older are less likely to have had a negative experience like this; for instance, just 2% report having a bad experience due to embarrassing or inaccurate information, while 16% of young adults ages 18-29 report this.

There are no notable variations between men and women or adults across income groups.¹⁸ Variations by education are not consistent enough to suggest a clear pattern.

Mobile internet users (13%) are more likely than non-mobile internet users (7%) to report bad experiences. Similarly, social media users (14%) have a greater tendency to report bad experiences than non-users (6%). Those who have searched for results connected to their name online, are also considerably more likely to say they have had bad experiences (16% vs. 2%).

16% of adults say they have asked someone to remove or correct information about them that was posted online

One in six adults have asked someone to remove or correct some kind of information—including things like photos or videos—that was posted about them on the internet. While men and women are equally likely to say they have asked someone to remove information, experiences vary considerably by age. Nearly one in three (32%) of young adults say they have asked someone to remove or correct information about them that was posted online, compared with just 17% of those 30-49, 12% of those 50-64 and 2% of those ages 65 and older.

Among social media users, 21% have asked for something to be taken down or corrected, compared with 9% of adults who do not use social media. Mobile internet users, who also tend to be younger, are more likely than nonmobile users to say they have asked for something to be removed (22% vs. 7%).

Young adults most likely to have asked someone to correct or remove info about them online

Total	16%
Age	
18-29	32
30-49	17
50-64	12
65+	2
Social media	
Uses social media	21
Does not use social media	9
Mobile internet use	
Uses internet on a mobile device	22
Does not use internet on mobile device	7
Self-searching activity	
Used search engine to search for name	23
Has not self-searched	6
Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.	

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Those who have searched for information about

themselves online were almost four times as likely to say they have requested a correction or takedown of information when compared those who have not checked up on their digital footprints (23% vs. 6%).

¹⁸ There were not enough cases in this sample to analyze variations among young women and young men. However, a separate report from the Pew Research Center's Internet Project found that young women, ages 18-24, experience certain severe types of online harassment at disproportionately high levels when compared with men of the same age: http://www.pewinternet.org/2014/10/22/online-harassment/

Photos and videos are the most common types of information that people request to be removed or corrected

There is a wide range of material that people request to have changed or taken down, but the most common requests involve images and informal written material, rather than official records or statements. Among adults who have asked someone to remove or correct material about them online:

- 65% have asked that a *photo or video* be removed or corrected.
- 39% have asked that *written material like a comment or blog posting* be removed or corrected.
- 13% have asked that *something else, such as a court record or financial statement* be removed or corrected.

24% of employed adults say their employer has rules or guidelines about how they present themselves online

One in four (24%) employed Americans say that their employer has rules or guidelines about how they are allowed to present themselves online (such as what they can post or what information they are allowed to share about themselves). One in ten employed Americans (11%) say that their job requires them to promote themselves through social media or other online tools.

Employees with at least some college experience are more likely than those who have not attended college to say that they need to promote themselves professionally online, and that their employer has policies about how they are allowed to present themselves digitally.

However, few have set up automatic alerts to monitor results connected to their name online

Work-related self-presentation online by education

% of adults in each education group who promote themselves online or whose employers have rules about self-presentation online



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.



Just 6% of adults have set up some sort of automatic alert to notify them when their name is mentioned in a news story, blog, or elsewhere online. Young adults are somewhat more likely than

older adults to have done this—11% of 18-29 year olds have set up alerts—but just 1% of those 65 and older have done so. Perhaps unsurprisingly, "self-searchers" (people who have used a search engine to look up what is available about them online) are more likely than non-self-searchers to have done this. But even among this group the practice of setting up automatic alerts is far from universal—some 9% of self-searchers have set up automatic alerts, compared with 2% of non-self-searchers.

Many still do not assume that people they meet will search for information about them online

Almost half of respondents (47%) say that they generally assume that people they meet will search for information about them on the internet, while 50% do not. Younger adults under age 50 are more likely to say they assume new acquaintances will search for information about them (53%) than older adults (40%). College graduates (53%) are also more likely to assume people will search for information about them online compared with those who have not attended college (40%). Overall, 54% of adults who have searched for information about themselves online expect others will look for information about them, compared with 36% of those who are not self-searchers.

Do you assume new acquaintances will search for you online?

Among all adults, the % who agree that new people they meet might search for information about them on the internet



Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older.

Appendix—Detailed Demographic Tables

The tables below include detailed demographic data for the nine most sensitive categories of information. For each of these kinds of data, at least 40% of adults considered the information to be "very sensitive."

Those who view their social security

number as "very sensitive"	
Total	90
Gender	
Men	90
Women	89
Age	
18-29	93
30-49	85
50-64	92
65+	92
Education	
HS grad or less	85
Some college	92
College graduate	94
Household income	
Less than \$30,000/year	81
\$30,000-\$49,999	86
\$50,000-\$74,999	91
At least \$75,000	95
Gov't surveillance awareness	
Heard "a lot"	95
Heard "a little" or "nothing at all"	89
Self-searching activity	
Used search engine to search for name	94
Has not self-searched	85

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view health information a	S
"very sensitive"	

Total	55%
Gender	
Men	55
Women	55
Age	
18-29	56
30-49	55
50-64	59
65+	47
Education	
No college	49
Some college	57
College graduate	61
Household income	
Less than \$30,000/year	49
\$30,000-\$49,999	43
\$50,000-\$74,999	61
At least \$75,000	60
Gov't surveillance awareness	
Heard "a lot"	65
Heard "a little" or "nothing at all"	49
Self-searching activity	
Used search engine to search for name	61
Has not self-searched	45

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view the content of *phone conversations* as "very sensitive"

Total	54%
Gender	
Men	59
Women	50
Age	
18-29	56
30-49	52
50-64	56
65+	51
Education	
No college	50
Some college	55
College graduate	59
Household income	
Less than \$30,000/year	49
\$30,000-\$49,999	42
\$50,000-\$74,999	56
At least \$75,000	62
Gov't surveillance awareness	
Heard "a lot"	66
Heard "a little" or "nothing at all"	48
Self-searching activity	
Used search engine to search for name	59
Has not self-searched	48

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view the content of *email* as "very sensitive"

Total	52
Gender	
Men	57
Women	47
Age	
18-29	59
30-49	54
50-64	51
65+	42
Education	
HS grad or less	45
Some college	55
College graduate	60
Household income	
Less than \$30,000/year	43
\$30,000-\$49,999	38
\$50,000-\$74,999	56
At least \$75,000	61
Gov't surveillance awareness	
Heard "a lot"	62
Heard "a little" or "nothing at all"	45
Self-searching activity	
Used search engine to search for name	58
Has not self-searched	44

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view the details of their *physical location* over a period of time as "very sensitive"

Total	50%
Gender	
Men	46
Women	53
Age	
18-29	58
30-49	50
50-64	47
65+	43
Education	
HS grad or less	44
Some college	53
College graduate	55
Household income	
Less than \$30,000/year	44
\$30,000-\$49,999	40
\$50,000-\$74,999	53
At least \$75,000	56
Gov't surveillance awareness	
Heard "a lot"	58
Heard "a little" or "nothing at all"	45
Self-searching activity	
Used search engine to search for name	56
Has not self-searched	40

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view the *numbers called or texted from their phone* as "very sensitive"

Total	45%
Gender	
Men	47
Women	43
Age	
18-29	53
30-49	43
50-64	48
65+	36
Education	
HS grad or less	40
Some college	50
College graduate	47
Household income	
Less than \$30,000/year	36
\$30,000-\$49,999	45
\$50,000-\$74,999	45
At least \$75,000	50
Gov't surveillance awareness	
Heard "a lot"	57
Heard "a little" or "nothing at all"	37
Self-searching activity	
Used search engine to search for name	51
Has not self-searched	35
Mobile internet use	
Accesses internet on mobile device	50
Does not access internet on mobile device	39

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view the content of text
messages as "very sensitive"

Total	49%
Gender	
Men	50
Women	47
Age	
18-29	55
30-49	48
50-64	50
65+	38
Education	
HS grad or less	41
Some college	52
College graduate	57
Household income	
Less than \$30,000/year	39
\$30,000-\$49,999	38
\$50,000-\$74,999	50
At least \$75,000	58
Gov't surveillance awareness	
Heard "a lot"	56
Heard "a little" or "nothing at all"	45
Self-searching activity	
Used search engine to search for name	54
Has not self-searched	41
Mobile internet use	
Accesses internet on mobile device	55
Does not access internet on mobile device	40

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Those who view their <i>birth date</i> as "very sensitive"		
Total	41%	
Gender		
Men	43	
Women	39	
Age		
18-29	40	
30-49	40	
50-64	44	
65+	39	
Education		
HS grad or less	38	
Some college	41	
College graduate	45	
Household income		
Less than \$30,000/year	39	
\$30,000-\$49,999	30	
\$50,000-\$74,999	50	
At least \$75,000	43	
Education		
HS grad or less	38	
Some college	41	
College graduate	45	

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

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Those who view	relationship	history as
"very sensitive"	-	-

Total	40%
Gender	
Men	44
Women	37
Age	
18-29	40
30-49	37
50-64	44
65+	41
Education	
HS grad or less	29
Some college	45
College graduate	52
Household income	
Less than \$30,000/year	32
\$30,000-\$49,999	35
\$50,000-\$74,999	41
At least \$75,000	48
Gov't surveillance awareness	
Heard "a lot"	52
Heard "a little" or "nothing at all"	33
Self-searching activity	
Used search engine to search for name	47
Has not self-searched	29

Source: Pew Research Privacy Panel Survey, January 2014. N=607 adults, ages 18 and older. For adults living in households earning \$30,000-\$49,000 per year, n=97.

Methods

About this survey

The analysis in this report is based on a survey conducted January 10-27, 2014 among a sample of 607 adults, 18 years of age or older. The survey was conducted by the GfK Group using KnowledgePanel, its nationally representative online research panel. GfK selected a representative sample of 1,537 English-speaking panelists to invite to join the subpanel and take the first survey. Of the 935 panelists who responded to the invitation (60.8%), 607 agreed to join the subpanel and subsequently completed the first survey (64.9%). This group has agreed to take four online surveys about "current issues, some of which relate to technology" over the course of a year and possibly participate in one or more 45-60-minute online focus group chat sessions. A random subset of the subpanel receive occasional invitations to participate in these online focus groups. For this report, a total of 26 panelists participated in one of three online focus groups conducted during August 2013 and March 2014.

KnowledgePanel members are recruited through probability sampling methods and include both those with internet access and those without. KnowledgePanel provides internet access for those who do not have it and, if needed, a device to access the internet when they join the panel. A combination of random digit dialing (RDD) and address-based sampling (ABS) methodologies have been used to recruit panel members (in 2009 KnowledgePanel switched its sampling methodology for recruiting panel members from RDD to ABS). The panel comprises households with landlines and cellular phones, including those only with cell phones, and those without a phone. Both the RDD and ABS samples were provided by Marketing Systems Group (MSG).

KnowledgePanel continually recruits new panel members throughout the year to offset panel attrition as people leave the panel. Respondents were selected randomly from eligible adult household members of the panel.¹⁹ All sampled members received an initial email on January 10, 2014 to notify them of the survey and included a link to the survey questionnaire. One standard follow-up reminder was sent three days later to those who had not yet responded.

The final sample for this survey was weighted using an iterative technique that matches gender, age, education, race, Hispanic origin, household income, metropolitan area or not, and region to parameters from the March 2013 Census Bureau's Current Population Survey (CPS). In addition, the sample is weighted to match current patterns of internet access from the October 2012 CPS survey. This weight is multiplied by an initial base or sampling weight that corrects for differences

¹⁹ When a household is selected to be invited to KnowledgePanel, GfK attempts to enroll the entire household (age 14+). Subsequent samples from the full KnowledgePanel are then selected using a "one member per household" criterion to avoid clustering affects.

in the probability of selection of various segments of the sample and by a panel weight that adjusts for any biases due to nonresponse and noncoverage at the panel recruitment stage (using all of the parameters mentioned above as well home ownership status).

Sampling errors and statistical tests of significance take into account the effect of weighting at each of these stages. Sampling error for the total sample of 607 respondents is plus or minus 4.6 percentage points at the 95% level of confidence.²⁰ Sample sizes and sampling errors for other subgroups are available upon request. The margins of error reported and statistical tests of significance are adjusted to account for the survey's design effect, a measure of how much efficiency is lost from the weighting procedures.

In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

²⁰ The original margin of error provided by the vendor and published here (3.98) used a less conservative design effect. However, the analysis in the report was based on the more conservative design effect and the significance of the findings is not affected by this change.