Pew Internet & American Life Project

The **Pew Internet & American Life Project** studies the social impact of the internet. The Project examines the way that people's internet use affects their families, communities, health care, education, civic and political life, and workplaces.

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4 Internet

The Mainstreaming of Online Life

On October 13, 1994, Netscape's Mosaic browser was made available for free on a company Web site. If there was a moment that could be considered the dawn of the popular internet, that was it. That day, thousands of people downloaded the browser and began to experience the World Wide Web, itself a little more than three years old, in a completely new way. Browsers were to the Web what paper was to ink. They used a simple format called hypertext markup language (HTML) to display the material stored on other computers in an easy-to-grasp graphical presentation that came to be known as a Web page. The revolution was underway.

A decade later, the internet has reached into — and, in some cases, reshaped — just about every important realm of modern life. It has changed the way we inform ourselves, amuse ourselves, care for ourselves, educate ourselves, work, shop, bank, pray and stay in touch.
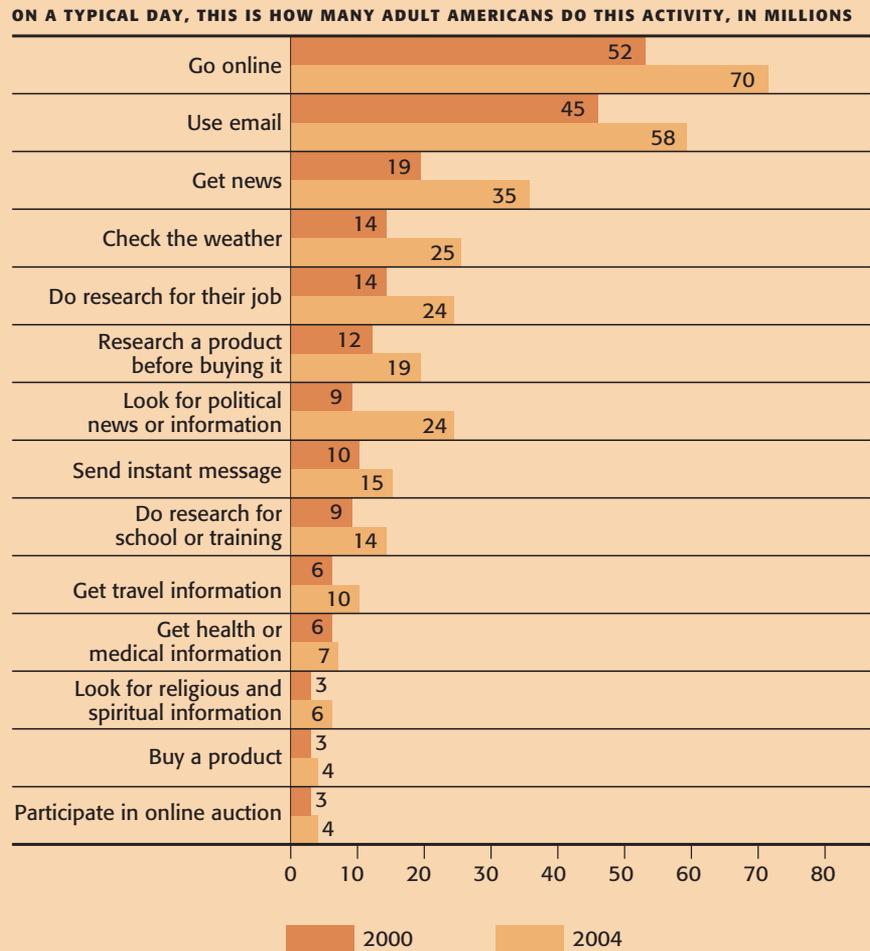
A Snapshot of Today's Internet

The Pew Internet & American Life Project conducts surveys that examine the use and social impact of this transformative new technology. Our most recent snapshot of the online population in America finds that it stands at 63% of the adults in the country, or about 128 million people age 18 or older. We also find that 81% of the nation's teenagers (those 12 to 17) go online — and many of them can scarcely imagine what the world was like way back when people weren't always connected, "always on."

On a typical day at the end of 2004, some 70 million American adults logged onto the internet to use email, get news, access government information, check out health and medical information, participate in auctions, book travel reservations, research their genealogy, gamble, seek out romantic partners and engage in countless other activities. That represents a 37% increase from the 52 million adults who were online on an average day in 2000 when the Pew Internet & American Life Project began its study of online life.

For the most part, the online world mirrors the offline world. People bring to the internet the activities, interests and behaviors that preoccupied them before the Web existed. Still, the internet has also enabled new kinds of activities that no one ever dreamed of doing before — certainly not in the way people are doing them now. For example, on a typical day, 5 million people post or share some kind of material on the Web through their own Web logs (or "blogs") or other content-creating applications; at least 4 million share music files on peer-to-peer networks; and 3 million people use the internet to rate a person, product or service.

EVER UPWARD: HOW USE OF THE INTERNET HAS GROWN

Growth of Activities on the Internet in Recent Years

ON A TYPICAL DAY, THIS IS HOW MANY ADULT AMERICANS DO THIS ACTIVITY, IN MILLIONS

Activity	2000	2004
Go online	52	70
Use email	45	58
Get news	19	35
Check the weather	14	25
Do research for their job	14	24
Research a product before buying it	12	19
Look for political news or information	9	24
Send instant message	10	15
Do research for school or training	9	14
Get travel information	6	10
Get health or medical information	6	7
Look for religious and spiritual information	3	6
Buy a product	3	4
Participate in online auction	3	4

■ 2000   ■ 2004

This is How Many Americans Have Ever Done These Activities

|	
97 million	Internet users have used government Web sites
93 million	have used the internet for health or medical purposes
84 million	got political news and used the internet to participate in the 2004 campaign
83 million	have bought products online
82 million	have used the internet for religious and spiritual purposes
48 million	have used email for spiritual or religious discussion (many were making prayer requests or responding to prayer requests)
38 million	have sent email to government officials to try to influence policy decisions.
36 million	have become members of online support groups

Source: Pew Internet Project. Totals are for Americans age 18 or older.

Percent of Adult Americans Who Use the Internet

	Jun '95	Mar '00	Feb '01	Sep '01	Nov/Dec '01	Oct '02	June '03	Feb '04	May/Jun '04

Source: Pew Internet Project (except for '95 data, from Pew Research Center for The People & The Press)

Number of Adult Americans Online on a Typical Day

Millions

|	May/Jun '00	Dec '00	Aug/Sep '01	Jan '02	Mar/May '03	Jun '03	Nov '03	Feb '04
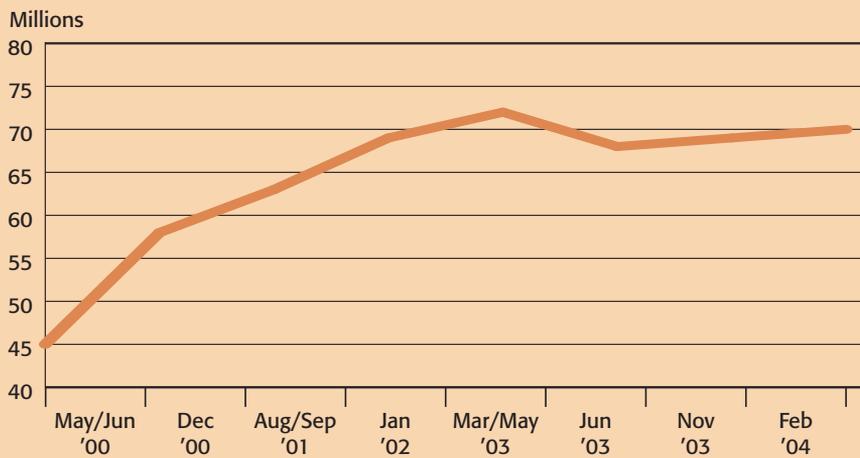
Source: Pew Internet Project

The New Normal

The Web has become the "new normal" in the American way of life; those who don't go online constitute an ever-shrinking minority. And as the online population has grown rapidly, its composition has changed rapidly. At the infant stage, the internet's user population was dominated by young, white men who had high incomes and plenty of education. As it passed into its childhood years in 1999 and 2000, the population went mainstream; women reached parity with men online, lots more minority families joined the party, and more people with modest levels of income and education came online.

This transition altered the internet's social environment. These early adopters loved the liberation they got from being online. They liked the fact that they could get news from nontraditional sources. Back in 1996, 56% of those who got political news online said they preferred the internet because they could get extra information that was not available from traditional news sources. At the same time, just 18% said they preferred the internet because it was convenient. These early adopters wanted to topple all manner of institutions and establish a new order in virtual space. They had a utopian sense of the transformative power of the new technology.

The later adopters are not looking to this technology to overturn the existing order. They like the internet because it can make them more productive and more connected. Theirs is an unsentimental outlook. Like most later adopters of technology, they need to be shown that there is a real, immediate and practical value in embracing the new. They are very fond of email, and when they go to the internet to shop or get information they gravitate to the Web-based versions of traditional retail institutions and news organizations. By 2004, fully 89% of those who went online for political news were getting it from the Web sites of traditional news organizations. About half of those political news consumers (48%) cited convenience as a prime reason for using the internet, while just 33% said they used the internet because they didn't get all the information they needed from traditional sources.

Now we are in the midst of yet another important change in the internet — the rapid switchover from dial-up access to high-speed broadband connections. More than half of Americans who go online now have access to always-on connections at home or work, and they are different kinds of users than those with dial-up connections. They spend more time online. They do more online activities, especially those that exploit bigger information "pipelines," such as accessing streaming video. They are much more likely to create content and share it with the rest of the online population. And they report greater levels of satisfaction with the role of the internet in their lives.
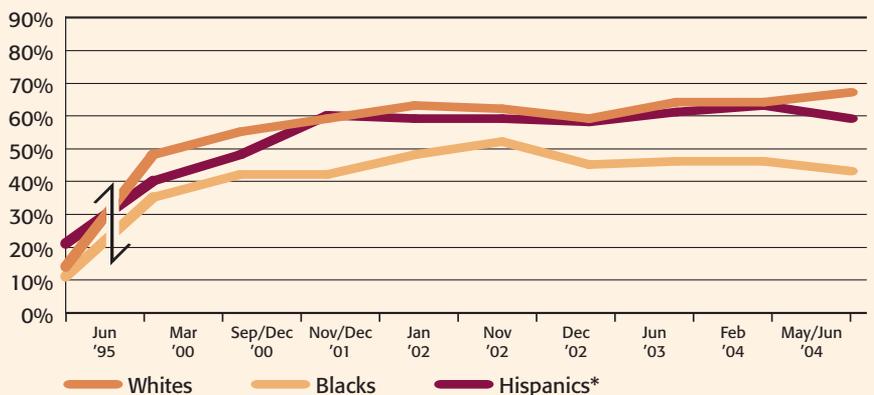
Growth of Internet Usage by Gender

Men — Women
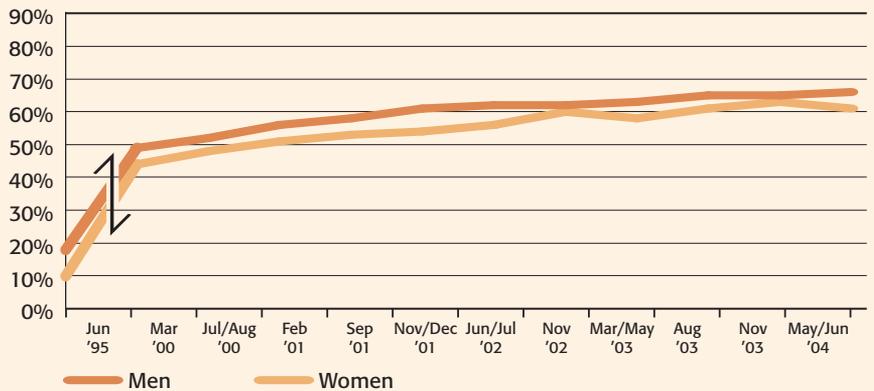
Growth of Internet Usage by Age

18-29 — 30-49 — 50-64 — 65+
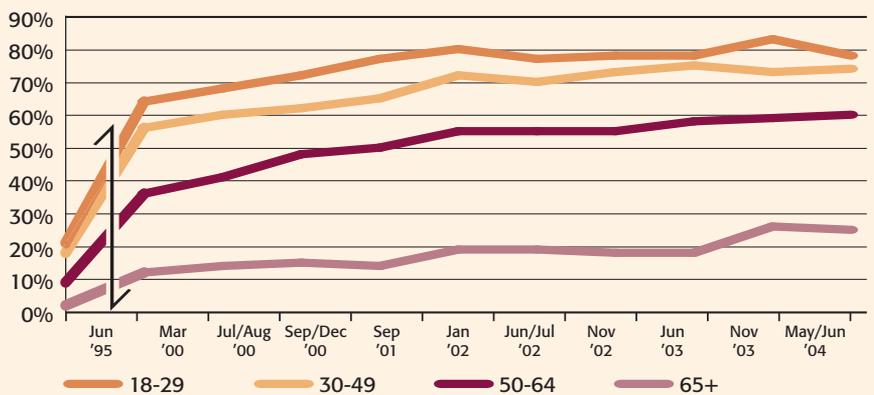
Growth of Internet Usage by Race/Ethnicity

Whites — Blacks — Hispanics*

Source: Pew Internet Project (except for '95 data, from Pew Research Center for The People & The Press)
* The Pew Internet Project conducts phone interviews only in English, so these figures represent English-speaking Hispanics.

Different People Use the Internet in Different Ways

MEN ARE MORE LIKELY THAN WOMEN TO DO THESE ACTIVITIES ONLINE	ONLINE MEN	ONLINE WOMEN
Get news	77%	66%
Buy travel services or make reservation	60%	51%
Check sports scores and information	59%	27%
Get political news	57%	42%
Participate in online auction	28%	18%
Create content for the internet	25%	16%
Download music files	18%	11%
Buy/sell stocks, bonds, mutual funds	16%	9%

WOMEN ARE MORE LIKELY THAN MEN TO DO THESE ACTIVITIES ONLINE	ONLINE WOMEN	ONLINE MEN
Get health information	85%	75%
Get spiritual and religious information	73%	56%
Use support-group Web sites	63%	46%

ONLINE WHITES ARE MORE LIKELY THAN MINORITIES TO DO THESE ACTIVITIES	ONLINE WHITES	ONLINE MINORITIES
Buy a product	63%	53%
Participate in online auction	24%	16%

AFRICAN-AMERICANS ARE MORE LIKELY THAN WHITES TO DO THESE ACTIVITIES ONLINE	ONLINE BLACKS	ONLINE WHITES
Do research for school or job training	71%	58%
Look for information about a new job	61%	38%
Listen to music online	46%	30%
Download music files	25%	13%

HISPANICS ARE MORE LIKELY THAN NON-HISPANIC WHITES TO DO THESE ACTIVITIES ONLINE	ONLINE HISPANICS	ONLINE WHITES
Look for new job information	61%	38%
Listen to music online	46%	30%

YOUNG INTERNET USERS (AGES 18-29) ARE MORE LIKELY THAN OTHERS TO DO THESE ACTIVITIES ONLINE	YOUNG INTERNET USERS	THOSE 30+
Research for school or job training	76%	48%
Look for new job information	65%	31%
Use instant messaging	59%	33%
Listen to music online	53%	27%
Look up sports scores and information	51%	37%
Look for information about a place to live	43%	27%
Download music files	28%	11%
Share files from my computer	27%	17%
Log on using a wireless device	26%	13%
Using dating Web sites	16%	5%

ONLINE SENIORS (65+) ARE MORE LIKELY THAN YOUNG INTERNET USERS TO DO THIS ONLINE	ONLINE SENIORS	THOSE 18-29
Use email	96%	91%

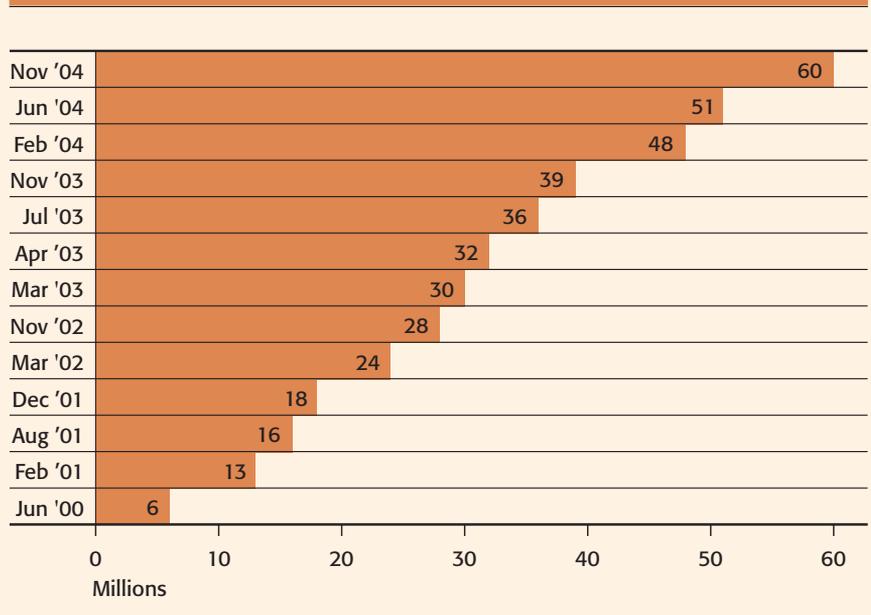| ONLINE MIDDLE-AGED (30-64) ARE MORE LIKELY THAN THE YOUNG OR SENIORS TO DO THIS ONLINE	ONLINE MIDDLE-AGED	YOUNGER AND OLDER INTERNET USERS
Research a product or service	81%	71%
Look for health and medical information	70%	57%
Do work-related research	56%	38%

Source: Pew Internet Project surveys 2004

Who Goes Online — and Why

No matter how fast an online connection they have, different people still use the internet in different ways. For example, online men are more likely than online women to use the internet to get news, check out sports and execute financial transactions. In contrast, online women are more likely to get health information and religious news and to use email to maintain and deepen personal relationships. African-Americans are among the most likely to get religious and spiritual information, while Latinos are among the most likely to access cultural material, such as information about music.
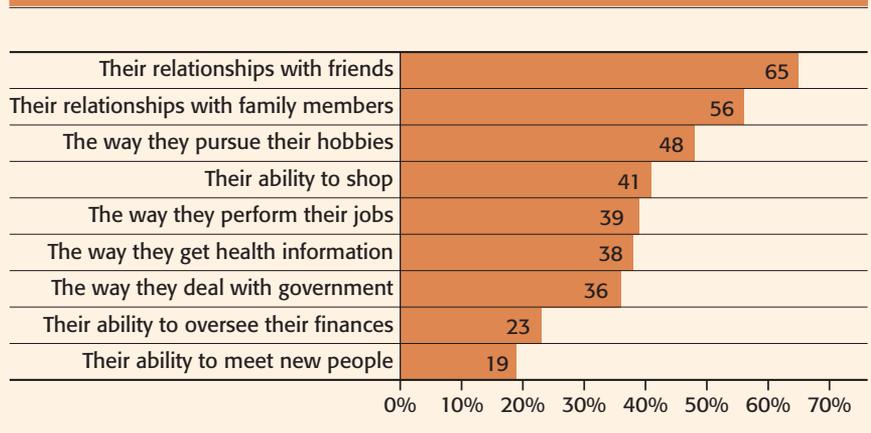
The longer the internet is around, the more people expect of it. Increasingly, it is seen as a utility rather than a novelty. In a survey at the end of 2002, we found that large majorities of internet users and non-users said they expected to find news, medical information, government information and commercial products and services online — to say nothing of friends, family and colleagues. It's no wonder that people report to us that their use of the internet improves their lives in multiple ways. More than half of all internet users told us in earlier surveys that the internet has helped bring significant improvements in communicating with their friends and family; 41% say it has helped them shop, and nearly the same number say it has improved the way they do their jobs. Over a third say their internet use has improved the way they take care of their health and a like number say the internet has improved their dealings with government.

Broadband at Home, in Millions

Date	Millions
Nov '04	60
Jun '04	51
Feb '04	48
Nov '03	39
Jul '03	36
Apr '03	32
Mar '03	30
Nov '02	28
Mar '02	24
Dec '01	18
Aug '01	16
Feb '01	13
Jun '00	6

Source: Pew Internet Project

Percentage of Users Who Say the Internet has Helped …

	Percentage
Their relationships with friends	65
Their relationships with family members	56
The way they pursue their hobbies	48
Their ability to shop	41
The way they perform their jobs	39
The way they get health information	38
The way they deal with government	36
Their ability to oversee their finances	23
Their ability to meet new people	19

Source: Pew Internet Project surveys 2000-2001

Demographics of Internet Users

Sixty-three percent of American adults now use the internet. Here is the percentage of each group that goes online.

Women	61%
Men	66%
AGE	
18-29	78%
30-49	74%
50-64	60%
65+	25%
RACE/ETHNICITY	
White, non-Hispanic	67%
Black, non-Hispanic	43%
Hispanic	59%
COMMUNITY TYPE	
Urban	62%
Suburban	68%
Rural	56%
HOUSEHOLD INCOME	
Less than $30,000/yr.	44%
$30,000-$50,000	69%
$50,000-$75,000	81%
More than $75,000	89%
EDUCATIONAL ATTAINMENT	
Less than high school	32%
High school	52%
Some college	75%
College +	88%

Source: Pew Internet & American Life Project, May-June 2004 Tracking Survey. N=2,200 adults 18 and older. Margin of error is ±2% for results based on the full sample.

Despite the evolution in people's relationship with the internet, a few things haven't changed much as the Web marches into its second decade. First, email is still the killer app. It is the No. 1 activity and time consumer for the vast majority of internet users. Next comes information searching, then entertainment, then e-commerce. So even as internet use has grown exponentially, the hierarchy of metaphors that describe it has remained constant: The internet is most of all a mail pigeon, then a library, then an amusement park, then a shopping center.

In addition, gaps in internet usage still persist along multiple demographic lines. These include age (younger Americans are much more likely to be online than senior citizens), socio-economic status (richer and better educated Americans are more likely to use the internet than those with less income and education), disability status (only 38% of those with disabilities use the internet), community type (rural Americans are less likely to be online than suburban and urban Americans), and race and ethnicity (blacks are less likely to use the internet than whites).

"**E**ven as internet use has grown exponentially, the hierarchy of metaphors that describe it has remained constant: The internet is most of all a mail pigeon, then a library, then an amusement park, then a shopping center."

Social Impact of the Internet

Over the years the Pew Internet & American Life Project has regularly asked people to describe what impact the internet has had on the way they lead their lives. Here is what they have told us:

• *The internet enhances social interaction.* People use email to deepen their connection to the people they like and love and increase the volume of communication they have with them. Email users, especially women, feel they are working on relationships and tending to their social networks as they exchange email.

The internet is more than a bonding agent; it is also a bridging agent for creating and sustaining community. Some 84% of internet users, or close to 100 million people, belong to groups that have an online presence. More than half have joined those groups since getting internet access; those who were group members before getting access say their use of the internet has bound them closer to the group. Members of online groups also say the internet increases the chances that they will interact with people outside their social class, racial group or generational cohort.

• *People become more serious in their online endeavors as they use the internet.* The variety of their online activities expands; their email content becomes more consequential. For instance, over time they are more likely to use email to express worries or seek advice on decisions or problems. They are also more likely to perform more financial transactions online. And in their work lives, 72% of those who use email

About 100 Million Internet Users Say They Belong to Online Communities

PERCENTAGE OF ONLINE COMMUNITY PARTICIPANTS WHO BELONG TO THIS TYPE OF GROUP

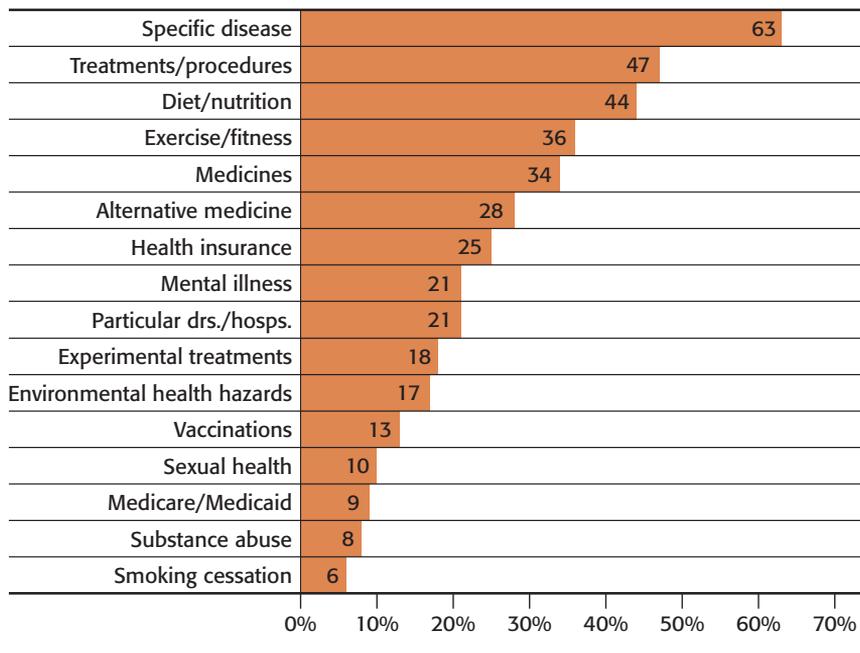| Group	%
Trade association or professional group	50
Group for people who share a hobby or interest	50
Fan group for a particular team	31
Fan group of a TV show or entertainer	29
Local community group or association	29
Group of people who share the same lifestyle	28
Support group for a medical condition or personal problem	28
Group of people who share the same beliefs	24
A political group	22
A religious organization	21
Sports team or league in which they participate	20
Ethnic or cultural group	15
Labor union	6

Source: Pew Internet Project January-February 2001

> "Members of online groups say the internet increase the chances that they will interact with people outside their social class, racial group, or generational cohort."

94 Million Americans Use the Internet for Health-Related Matters

% OF HEALTH SEEKERS WHO LOOK FOR INFORMATION ABOUT …

Specific disease	63
Treatments/procedures	47
Diet/nutrition	44
Exercise/fitness	36
Medicines	34
Alternative medicine	28
Health insurance	25
Mental illness	21
Particular drs./hosps.	21
Experimental treatments	18
Environmental health hazards	17
Vaccinations	13
Sexual health	10
Medicare/Medicaid	9
Substance abuse	8
Smoking cessation	6

0% 10% 20% 30% 40% 50% 60% 70%

Source: Pew Internet Project December 2002 survey

32 Million Americans Say They Read Blogs

BLOG READERS MAKE UP 27% OF ALL INTERNET USERS

- 9% of internet users said they read political blogs "frequently" or "sometimes" during the 2004 campaign
- 7% of users say they have created a blog or web-based diary
- 57% of bloggers are male
- 48% are under age 30
- Blog readership shot up 58% between February 2004 and November 2004 …
- … But 62% of online Americans are not even sure what a blog is

at work say it helps them communicate with more people; 71% say it helps them save time; and 59% say email improves workplace teamwork. At the same time, however, some reported that they felt that office use of email wasted time or made them too accessible to colleagues.

- *The internet changes the way people deal with health issues.* E-patients are creating a new health-care environment in which the traditional medical model — ruled by the all-wise doctor who tells patients what is best for them — is being challenged by a new model in which empowered patients can access large amounts of medical information, advice and support online, and act as partners with their doctors in making health-care decisions for themselves and their loved ones.
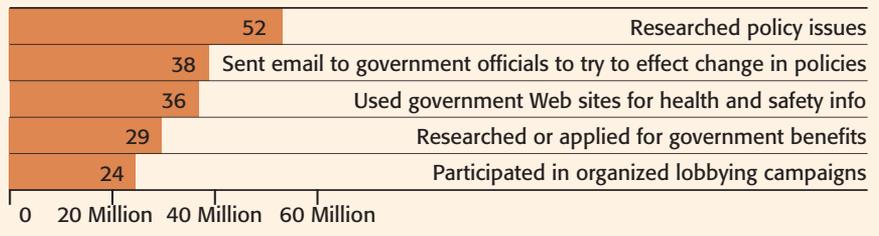
- *The internet creates new online town squares and civic storms.* The widely varying information sources that are available online, combined with the new opportunities that the internet creates for civic participation, have begun to reshape politics and community life. Nowhere was that more evident than in the rapid rise of blogs during the 2004 campaign. Political bloggers serve up a boiling caldron of facts, rumors, commentaries, conspiracy theories, ideological screeds and media criticisms. They had at least one significant impact on the campaign season last fall. It was a blogger who first marshaled evidence to question a story by CBS's *60 Minutes* about President Bush's service in the National Guard. The ensuing civic storm played out in both the blogosphere and the mainstream media simultaneously, and eventually forced anchorman Dan Rather to retract the story and CBS to fire four senior journalists.

The newfound importance of blogs was also illustrated early in 2005 by their use in linking communities in Southeast Asia with the rest of the world after the devastation caused by the year-end tsunami. Yet blogs are not the only online destination for e-citizens. On Web sites, in discussion groups and on listservs — automatic mailing lists for distributing email to groups of internet users — citizen activists are using the tools of online technology to organize, to mobilize and to raise record-setting sums of money.

- *The internet enhances the relationship of citizens to their government.* E-government applications are growing in popularity with online Americans. For instance, 38 million have sent email to government officials to try to influence policy decisions and another 29 million have researched or applied for government benefits on government Web sites. Many report that the convenience and usefulness of these sites have improved their perceptions of how government functions.

97 Million Americans Have Used Government Web Sites

HERE ARE SOME OF THE THINGS THEY HAVE DONE, IN MILLIONS

52	Researched policy issues
38	Sent email to government officials to try to effect change in policies
36	Used government Web sites for health and safety info
29	Researched or applied for government benefits
24	Participated in organized lobbying campaigns

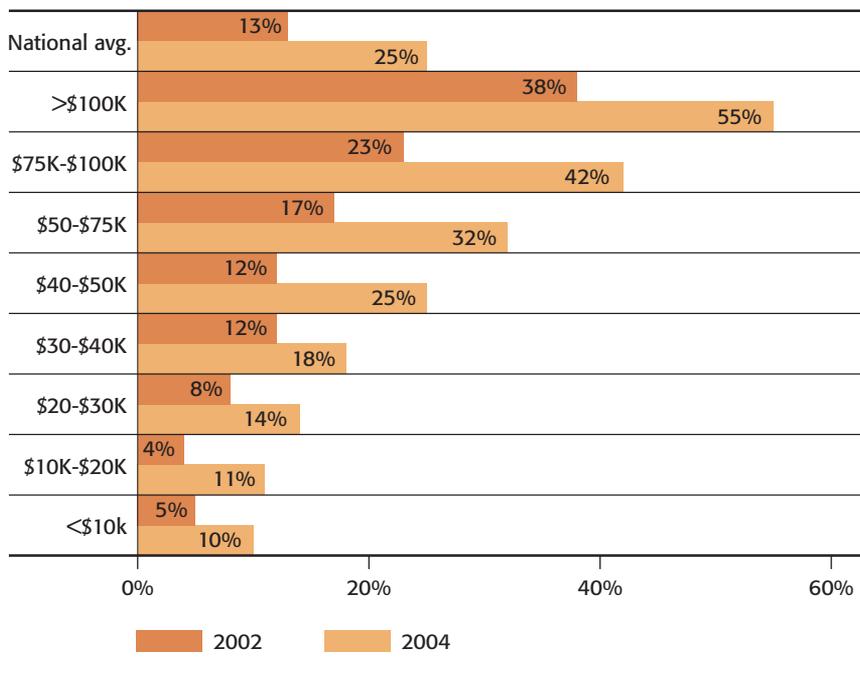0   20 Million   40 Million   60 Million

Source: Pew Internet Project surveys 2002-2003

Still, one constant about the internet is that for all its virtues, the online world can also be an unpleasant and even dangerous place. Spam clots email inboxes to the point where a quarter of internet users said in early 2004 that they were using email less and 70% reported that it made their experiences online annoying. Our early reading is that the federal law passed in 2003 to address the flood of spam has not yet mitigated the problem, though some high-profile lawsuits against allegedly egregious spammers might have some impact if spammers begin to feel vulnerable. In addition, more aggressive filtering services seem to have helped cut off some spam.

By early 2005 there were even more malignant online plagues that were ruining the internet experiences of millions of users. These were caused by malicious software with a variety of names — worms, Trojan horses, spyware and malware — that commandeered computers and turned them into ad-generating machines or spam-generating hosts.

Then there were the problems caused by terrorists, child pornographers, the mob and drug dealers. The internet is a wonderful tool for communicating, gathering information and making transactions. However, it gives no privilege to good guys. The same technology that can help people find and resume relationships with long-lost friends can also bring predators into their lives. And the same tools that help those with rare forms of cancer build communities with fellow sufferers are also being used to support communities of pedophiles and to encourage teenage girls to become anorexic.

Percentage of Americans by Household Income with Broadband at Home

Income	2002	2004
National avg.	13%	25%
>$100K	38%	55%
$75K-$100K	23%	42%
$50-$75K	17%	32%
$40-$50K	12%	25%
$30-$40K	12%	18%
$20-$30K	8%	14%
$10K-$20K	4%	11%
<$10k	5%	10%

Source: Pew Internet Project

And Now, Broadband

The rapid growth of broadband use at home has been perhaps the most striking development in the internet population in the past four years. In 2000, about 5 million Americans — just a small fraction of internet users — said they had high-speed connections at home. By the end of 2004, nearly 60 million Americans with access to the internet at home logged on with a fast connection. When broadband at work is added, 72 million Americans have access to high-speed networks either at home or in the workplace. Those high-speed, always-on connections influence people's behavior online. Those with broadband log on more often and spend more time online. They do more internet activities. They more actively participate in the online commons by creating and sharing content. They change the way they allocate their time and they feel better about the internet's role in their lives.

Broadband Users are More Aggressive Users of the Internet than Dial-Up Users

ON ANY GIVEN DAY, THE PERCENTAGE OF INTERNET USERS WITH EACH CONNECTION WHO ARE DOING THIS ACTIVITY ONLINE

	BROADBAND-AT-HOME USERS	DIAL-UP-AT-HOME USERS	ALL INTERNET USERS	SURVEY DATE
Sending/receiving email	59%	41%	45%	May-June-04
Getting news	41	22	27	May-June-04
Checking weather	29	20	20	Jun-03
Doing job-related research	27	15	19	Feb-04
Looking for political information	21	8	13	May-June-04
Watching video clips or listening to audio clips	21	9	11	Mar-May-03
Banking online	19	6	9	Jun-03
Instant messaging	17	9	12	May-June-04
Playing games	14	8	9	Mar-May-03
Looking up phone numbers or addresses	12	5	7	Feb-04
Getting maps or driving directions	12	5	7	Feb-04
Creating content and sharing it online	11	3	4	Oct-02
Looking for new job information	6	4	4	May-June-04
Looking for a place to live	5	2	3	May-June-04
Participating in auctions	5	2	3	Feb-04
Reading blogs	4	2	3	Feb-04
Buying products	4	3	3	Feb-04
Buying or selling stocks/bonds	2	*	1	Feb-04

* Denotes a value less than 1%
Source: Pew Internet Project surveys 2002-2004

When asked how much time they spend online daily, relatively novice dial-up users (those who have been online for three years or less) say they spend about 83 minutes online per day. Dial-up users who have been online longer (for more than six years) say they spend roughly 94 minutes online per day. Daily time online jumps significantly for those with high-speed connections at home; these users say they spend approximately 107 minutes online on the average day. Broadband users are also much more likely than dial-up users to be online on the average day; 69% of high-speed users log onto the internet on the typical day versus 51% of dial-up users.

The broadband effect is equally vivid when comparing frequency of online activities. For instance, 26% of broadband users do work-related research online on the average day, compared with 14% of dial-up internet users. Similarly, 24% of high-speed users do research on a product on the average day, compared with 11% of dial-up users. Fully 46% of high-speed users turn to a search engine on the average day, compared with 25% of dial-up users.

Even the emerging blogosphere is dominated by broadband users. Among internet users who create or publish blogs, 70% have a high-speed connection at home. Of the readers, 56% have broadband at home.

Campaign News Sources: The Internet Difference in 2004

HOW HAVE YOU BEEN GETTING MOST OF YOUR NEWS ABOUT THE PRESIDENTIAL ELECTION?

	ALL AMERICANS	NON-INTERNET USERS	ALL INTERNET USERS	THOSE WITH BROADBAND AT HOME
Television	78%	84%	74%	70%
Newspapers	39%	40%	38%	36%
Internet	18%	n/a	28%	38%
Radio	17%	15%	18%	17%
Magazines	3%	3%	3%	3%

Source: Pew Internet Project 2004

Broadband and the 2004 Campaign

A look at how internet users gathered information about the 2004 presidential campaign illustrates the emerging impact of broadband. For the typical American, the internet is still a second-tier source for news about politics; television and the daily newspaper continue to lead the way. But for young Americans with high speed at home, the internet has taken on a distinctive role in how they get news about politics. Among this group, television is still the most widely used source, but the internet is now a strong second, while radio, newspapers and magazines lag well behind.

Here's how the numbers look from the survey we did right after the 2004 election: 18% of all Americans cited the internet as a leading source of political news, as did 28% of all internet users. Among those with high-speed connections at home, 38% cited the internet, surpassing the share who said daily newspapers (36%), and more than twice the percentage (16%) of dial-up users who said the internet is a main source for campaign news.

Among people under the age of 35 with high-speed connections at home, 40% said that the internet was their main source of campaign news, twice the number (21%) who cited the newspaper. By contrast, of those over age 35 with broadband at home, 26% said the internet was their main source of campaign news, compared with 45% in this group who said the newspaper is mainly where they turned for news about the campaign.

To be sure, some of this shift to the internet among young people represents a substitution effect; they are reading the daily newspaper online rather than picking up the hard copy. But this cohort of young high-speed users is also the most likely to seek out alternative news sources online, whether that means international news sources, "pure play" internet news sites, magazines or blogs. Young people with fast home connections use the internet to get more detail about what the mainstream media cover, to explore different perspectives on the news, and to fact-check politicians, policy wonks and the mainstream media. How this broadband effect shapes the collective civic intelligence, activism and voting behavior of young people bears close watching in the future.

A final point about broadband users also warrants notice: High-speed users are increasingly taking the internet wherever they go. When asked whether they have ever logged onto the internet with a wireless device, 28% of home broadband users said they had done so, compared with just 9% of dial-up users. Nearly one third of Americans now own devices (e.g. laptop or cell phone) that can access the internet wirelessly, and with wireless networks becoming faster, the internet's status as an all purpose information tool will continue to grow.

Looking Ahead

Despite the rapid growth of home broadband penetration, Americans are laggards in comparison with people in some other parts of the developed world. The most recent data cited by the Federal Communications Commission show that in 2002, South Korea ranked first in the world; 21.3% of its citizens had a broadband connection at home. Hong Kong was second with 14.9%; Canada was third with 11.2%, and the United States was eleventh with 6.9%. Some of this gap has to do with geography. America's large rural expanses make it difficult to provide high-speed connections in many areas of the country. Just 12% of Americans living in rural areas have high-speed at home, compared with 29% of people who live in cities and suburbs.

Addressing the question of how to facilitate faster broadband uptake in the United States is likely to occupy the attention of policymakers in 2005, especially since the U.S. Supreme Court has agreed to hear a case that will determine whether cable television companies and phone companies are required to open their lines into American homes to their competitors.

Our data show that people don't switch to broadband for one thing, but for many things. They aren't looking for a new killer app. Rather, their increasing reliance on the internet for a whole range of activities — accessing everything from medical information to political news to driving directions, or just staying in touch with family and friends — makes dial-up more cumbersome over time. It is the internet's abundance and diversity of information, easily found and conveniently shared, that make it such an integral part of modern life.

This relationship will only deepen over time as information and communication technologies evolve and improve. In the future, wireless connectivity will increase through laptops, cell phones and personal digital devices such as Palm Pilots and Blackberries. Phones themselves will increasingly become powerful computing and gaming devices. More things will become connected to the internet, from cars to home appliances to jewelry. And more meaning will be extracted from the information online as search engines get better and as connections between related bits of data grow.

The internet is constantly reshaping people's informational and social universes, but people are constantly reshaping the internet as well. One day someone gets the bright idea to start posting family pictures online, and, *voilà,* a whole new application takes off. With much of the remaining third of unconnected Americans likely to get internet access in the coming years, and with high-speed and mobile access increasingly the norm, how these trends accelerate and recombine should make internet watching a fascinating and important undertaking for years to come.