Pew Internet & American Life PROJECT

EMBARGOED FOR RELEASE AT 6:00 P.M. (EASTERN), SEPTEMBER 9, 2001

WIRED SENIORS

A fervent few, inspired by family ties

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Summary of Findings

Senior citizens comprise 13% of the U.S. population, but just 4% of the U.S. Internet population. Since their numbers are so small, there has not been much research about what these "wired seniors" are doing online and how they feel about the Internet. It turns out that seniors who have Internet access benefit greatly from the resources available online – communicating with family, researching health information, tracking their investments – all from the comfort of their home or senior center. So why aren't more older Americans going online?

The Pew Internet & American Life Project surveyed 26,094 adults, 18 and older, between March and December 2000. This large sample provided an opportunity to talk to 4,335 people aged 65 and older, of whom 670 were Internet users. This has given us insights into what motivates seniors to go online and what they do when they get Internet access.

A wide "gray gap"

Lots of seniors engage with life by reading news or pursuing a hobby, but very few have followed the lead of younger Americans and shifted those activities online. Most seniors do not use computers and do not think they are missing out on anything by not going online.

- While 56% of all Americans go online, only 15% of Americans over the age of 65 have access to the Internet.

- Fully 81% of people who say they definitely will not go online are over 50. Fifty-six percent of those over age 65 say they definitely will not go online, compared to just 6% who say they definitely plan to go online.

Senior elites are enthusiastic surfers

Wealthy and educated seniors are most likely to go online. Many of these extraordinary seniors have been coaxed online by their children and grandchildren. They have become enthusiastic Internet users who love email and use the Web to gather all kinds of information that helps or entertains them.

- Wired seniors are more likely than their offline peers to be married, highly educated, and enjoying relatively high retirement incomes. More senior men than senior women use the Internet.

- 84% of wired seniors say they first got Internet access for reasons unrelated to work or school. Of those, 48% say they were encouraged to do so by family members – a higher percentage than any other age group.

- Nearly 3 in 5 online senior citizens (56%) say that the Internet has improved their connections with family.

- Wired seniors are devoted Internet users – 69% of wired seniors go online on a typical day, compared to 56% of all Internet users.

- The top Internet activities among seniors who go online: 93% of wired seniors have used email; 58% have gotten hobby information online; 55% have read the news online; 53% have searched for health and medical information online; 53% have browsed the Web "just for fun"; and 53% have checked weather updates. Younger Internet users are more

likely than older users to identify work-related research or shopping as top Internet activities.

Retirement makes all the difference

Work or school motivates almost half of all Internet users to go online, so it is logical that younger Americans are more likely to go online than senior citizens. But it seems that retirement has an effect not just on connectivity, but also on users' enthusiasm for Internet activities.

- An American between 50 and 64 years old is three times more likely to have Internet access than someone over the age of 65 (51% vs. 15%).

- In contrast to wired seniors, "pre-retirement" Internet users (aged 50-64) match the overall Internet population in their use of the Internet for email, getting general and political news, checking weather, and doing research for their jobs.

- While 68% of wired seniors say they would miss the Internet if they could no longer use it, fully 75% of Internet users between 50 and 64 years old feel that way.

While today's senior citizens are the least likely to go online, the cohort behind them is among the most wired. Internet users aged 50-64 are likely to keep their Internet access even after they retire and this "silver tsunami" may be the generation that takes advantage of all the Internet has to offer them as they get older.

Main Report

Wired seniors – a breed apart

Senior citizens are among the least likely people in America to have Internet access. Just 15% of Americans aged 65 and older go online, compared to 51% of their closest peers, those aged 50-64, and 56% of all Americans. Almost half of Internet users were first given the opportunity to go online at work or school, but few Americans over age 65 were in the workforce or attending classes in the 1990s. And while many younger Americans are drawn to the Internet to keep in touch with friends, there is a very small peer group to urge seniors to take the plunge. In addition, many seniors can't afford the luxury of a computer or the monthly fees associated with Internet access.

Who's Online?

Senior citizens are the least likely age group to have Internet access

	Ever go online	*Never go online*
All Americans	56%	44%
18-29	75	25
30-49	65	35
50-64	51	49
65+	15	85

Source: Pew Internet & American Life Project Survey, Nov-Dec 2000. N=3,493. Margin of error is ±2.5%.

The extraordinary four million seniors who do go online have fallen in love with email as much as any other group of Internet users, but their motivation for going online and some of their activities are unique to their age group.

Mostly men, but the balance is shifting

Today's online senior citizen population looks like the early Internet population – about 60% are men and about 40% are women. Wired seniors are more likely than their offline peers to be married, highly educated, and enjoying relatively high retirement incomes. Seventy-four percent of wired seniors are married (or living as married) compared to 47% of all Americans over the age of 65. Eighteen percent of wired seniors are widowed, compared to 39% of all seniors. Seventy-six percent of wired seniors have at least some college education, compared to 36% of all seniors. One in four wired seniors lives in a household with an annual income of over $75,000, compared to just 8% of all seniors.

Seniors with the most online experience are college-educated, wealthy men who are more likely to have been introduced to the Internet at work. For example, 32% of online senior men have three or more years of experience, compared to 14% of online senior women. At the other end of the spectrum, 25% of online senior women have had Internet access for six months or less, compared to 14% of online senior men.

However, Americans over 65 years old, especially older women, are coming online at faster rates than other age groups. Eighteen percent of seniors with Internet access have come online in the past six months, compared with 14% all Internet users who have gotten access in the same period. More than half (55%) of all senior citizens who have gotten Internet access in the past six months are women.

Some seniors who were not introduced to the Internet at work are creative about getting trained to use Internet software programs. A research project related to the Blacksburg Electronic Village in western Virginia found that there was strong demand from senior citizens for computer and

Internet training. Nearly a fifth of those who attended training sessions at regional library branches were 65 years of age or older.[1]

A fervent few, logging on from home

While a smaller share of senior citizens has access to the Internet, on a typical day they are more likely to log on than the average American Internet user and the trend for online seniors is going up. In May-June 2000, 64% of wired seniors went online on a typical day. In November-December 2000, 69% of wired seniors went online on a typical day, compared to 56% of all Internet users.

Senior citizens resemble no other age group when it comes to where they use a computer to go online. Fully 81% of wired seniors only have access to the Internet from home, compared to 45% of all Internet users. By contrast, wired seniors' closest generational peers (Internet users in the 50-64 year-old group) are more likely to have access at work. Just 45% of those pre-retirement Internet users report having access only at home.

Five percent of wired seniors go online from work only, compared to 12% of all Internet users. And only 11% of wired seniors go online from both home and work, compared to 37% of all Internet users. Interestingly, those in the pre-retirement age bracket (50-64 year-olds) are actually more likely to have access at both home and work than 18-29 year-olds – 40% compared to 30%.

Since very few have access elsewhere, it is not surprising that 95% of seniors who are online on a typical day are logging on from home, compared to 76% of all Internet users.

Coaxed online by relatives

Since most senior citizens are not working or in school, it is not surprising that they are motivated to go online for more personal reasons than all other age groups. For them, a prime reason to go online is to connect with their children and grandchildren, not with their friends. Indeed, of the 84% of wired seniors who say they first got Internet access for reasons unrelated to work or school, 48% say they were encouraged to do so by family members – a higher percentage than any other age group. Another 45% say they first got Internet access because it was something they personally wanted to do. Very few wired seniors who first got online for personal reasons say that they were encouraged by friends to get access. By contrast, 52% of all Internet users say they were compelled to go online for personal reasons, not work or school, and friends had a greater influence than family members in urging younger Americans to try going online.

The Reasons to Go Online

Why did you first start using the Internet?	*All Internet users*	*18-29*	*30-49*	*50-64*	*65+*
For work	31%	12%	38%	45%	13%
For school	17	37	12	4	-
For reasons unrelated to work or school	51	50	48	49	84

Source: Pew Internet & American Life Project Survey, Feb. 2001. N=1,198. Margin of error is ±3%.

[1] Kavanaugh, Andrea (2000). The use and impact of telecommunications and information infrastructure assistance upon local public and nonprofit sectors: An assessment of community networks. Available at www.bev.net/project/research/BAAProposalOnline.pdf

Like most Internet users, wired seniors value the Internet as a useful tool to stay in touch with family members. Wired seniors who email a significant family member, often a daughter or son, are likely to say they communicate more often with that person now that they use email. Nearly 3 in 5 online senior citizens (56%) say that the Internet has improved their connections with family. This enthusiasm for family ties is matched in the general Internet population, but younger Internet users are more impressed than online seniors with how well the Internet helps them learn new things. Seventy-nine percent of all Internet users say that, compared to 54% of wired seniors.

Highly engaged with life, but not yet with the Internet

A great majority of senior citizens engage with life by reading newspapers, watching television, and pursuing hobbies. For example, 57% of seniors read a newspaper on a typical day, compared to 40% of all Americans. While many Americans have begun to shift some of those activities online, older Americans remain entrenched in the offline world. Only 21% of Americans over the age of 65 say they use a computer on "at least an occasional basis," compared to 59% of their closest peers (age 50-64) and 64% of all Americans. Seniors are the least likely group to have tapped into the Internet revolution – and those seniors who do have Internet access are less likely than any other age group to have sampled all the Web has to offer. They are enthusiastic about some online activities and relatively indifferent to others. Many wired seniors search for financial news, but few do their banking online. Many wired seniors play online games, but few download music (see "Internet Activities" table on page 9).

Because so many seniors came online only within the past year, some observers might assume that seniors' lack of engagement with most online activities is simply due to their lack of experience. However, Internet users with less than one year of experience online in the general population are more likely than seniors as a whole to have tried many of the activities we research.

Wired seniors track their email, hobbies, and finances online

Email is the #1 draw for seniors. Email is the application that has most engaged senior citizens with the Internet. Ninety-three percent of wired seniors have sent or read email. On a typical day, wired seniors are more likely to send email than the average Internet user. Some 53% of all seniors with Internet access go online to check email on a typical day, compared to 48% of all Internet users. That figure suggests that on any given day about two million seniors are using email. Email is popular with every group of seniors – men, women, those with advanced educations and those with just a high school education.

Equal Enthusiasm

Wired seniors are close to the average on some key activities

	Wired seniors	*All Internet users*
Use email	93%	93%
Search for health info	53%	56%
Get financial info	44%	44%
Read political news	36%	39%
Play a game	32%	34%
Buy/sell stocks	12%	13%

Source: Pew Internet & American Life Project Surveys, March-Dec 2000. N=13,946. Margin of error is ±1%.

Hobbies: As with the general population, the second most popular online activity among seniors is seeking out information on hobbies. However, the gap that pervades most activities between seniors and the general population starts here. Fifty-eight percent of wired seniors have searched the Web for information about their pastime, and 12% do so on a typical day. By comparison, 76% of all Internet users have done this, and 18% do so on a typical day. Interest in online hobby information is roughly equal

between senior men (59%) and senior women (56%). Wired seniors with three or more years of online experience are more likely to seek out hobby information than the newest initiates (69% vs. 41%). Thirty-seven percent of wired seniors say the Internet has improved the way they pursue their hobbies, compared to 51% of all Internet users who say that.

Money. When it comes to finances, wired seniors match the general Internet population's enthusiasm for financial news and trades online. Forty-four percent of wired seniors have looked up stock quotes and other financial information online, compared to 44% of all Internet users. Twelve percent of wired seniors have traded stocks online, compared to 13% of all Internet users. Twenty-three percent of wired seniors say the Internet has improved the way they take care of their personal finances, compared to 27% of Internet users who agree. While seniors appear comfortable managing online portfolios, they are less comfortable dealing with their bank accounts in cyberspace. Only 8% of seniors have tried online banking, compared to 18% of the general Internet population. Within the senior population, as in the general population, online financial transactions are primarily the purview of men, those with incomes over $50,000, and those who have been online for over three years.

Health. Since senior citizens are more likely to suffer health problems[2] it is not surprising that many wired seniors search the Web for medical advice and health information. According to a recent study in the *Proceedings of the National Academy of Sciences*, health education is one of the factors that have decreased the number of senior citizens who are chronically disabled and require nursing-home care.[3] Indeed, wired seniors are as engaged as the general Internet population in pursuing medical advice online. Fifty-three percent of online seniors have sought health information online, compared to 56% of the general online population. On a typical day, 7% of wired seniors seek out health information, compared to 6% of the Internet population at large. Thirty percent of wired seniors say that the Internet has improved the way they get information about health care, compared to 36% of all Internet users who agree. Seeking health information is one of three activities in which online senior women outdo the men (58% vs. 51%). Senior women are also more likely to go online just for fun and to play games.

Neither income level nor educational attainment makes much difference in whether or not seniors seek out health information. However, experience with the Internet does make a difference, one that is more sweeping for seniors than for the population at large (see table at right).

Health Information

Experienced users are more likely to have searched for medical advice online

Length of experience online	*Wired seniors*	*All Internet users*
Less than 6 months online	39%	47%
1 year	46%	54%
2-3 years	59%	56%
3+ years	65%	61%

Source: Pew Internet & American Life Project Surveys, March-Dec 2000. N=13,946. Margin of error is ±1%.

News. Fifty-five percent of wired seniors have gotten news online, and 21% do so on a typical day. By comparison, 61% of all Internet users have followed the news online and 21% do so on a typical day. As is characteristic of all Internet users, this activity is more popular with senior men and seniors with more Internet experience. Fifty-nine percent of wired senior men have read the news online, compared to 48% of wired senior women. Sixty-two percent of wired seniors with

[2] Twenty-seven percent of senior citizens said they are in only "fair" or "poor" health in 1996, compared to 9% of all Americans (U.S. Department of Health and Human Services' Administration on Aging, "A Profile of Older Americans: 2000"). Available at http://research.aarp.org/general/profile_2000.html

[3] USA Today, May 8, 2001, citing a study published by *Proceedings of the National Academy of Sciences*.

three or more years of experience have gotten news online, compared to 46% of wired seniors who just got Internet access in the last six months.

Weather. Fifty-three percent of wired seniors have looked for weather reports and 15% do so on a typical day. By comparison, 62% of all Internet users have checked the weather online and 16% do so on a typical day. Wired senior men do this more than women (57% vs. 51%) and those with more experience do so more than those with less experience. Sixty-three percent of seniors who have been online for three or more years have checked the weather online, compared to 47% of seniors who have come online in the last six months.

Browsing for fun. Fifty-three percent of wired seniors have gone online for no particular reason, just for fun or to pass the time and 17% do so on a typical day. By comparison, 64% of all Internet users have browsed the Web just for fun, and 20% do so on a typical day. Wired senior women do this more than men (58% vs. 51%) and those with less education do so more than those with a college degree. Sixty-three percent of wired seniors with a high school education or less have surfed for fun, compared to 46% of wired seniors with a college degree or more.

Internet Activities

Seniors enjoy gathering information and playing games, but are less likely than younger users to chat, listen to music, or shop online. This is the percent of Internet users who have ever done the following activities:

		Age Groups			
Activity	*All Internet users*	*18-29*	*30-49*	*50-64*	*65+*
Send and read email	92%	90%	92%	94%	93%
Fun					
Get hobby information	76	81	77	72	58
Browse just for fun	64	75	62	53	53
Look for info about music, books, or other leisure activities	63	72	64	55	36
Play a game	34	44	31	25	32
Check sports scores	37	42	37	31	31
Send an instant message	45	57	43	35	30
Use a video or audio clip	48	61	47	35	23
Listen to music	37	51	34	24	18
Chat online	28	46	22	16	12
Play lottery or gamble	5	5	5	5	4
Information Seeking					
Get news	61	59	62	60	55
Get weather reports	62	57	65	62	53
Look for travel info	65	66	66	66	51
Research product info	73	72	77	66	48
Get financial info	44	35	48	50	44
Visit a government Web site	49	40	54	53	40
Get political news or info	39	37	40	39	36
Seek religious info	22	19	25	18	11
Major Life Activities					
Seek health info	56	48	60	60	53
Do work research	50	46	57	50	20
Do school research or job training	54	69	53	39	18
Look for a place to live	27	34	27	18	11
Look for job info	38	51	39	20	5
Transactions					
Buy a product	48	47	51	45	36
Make a travel reservation	36	35	38	37	25
Buy or sell stocks	13	10	14	15	12
Participate in online auction	15	17	16	13	8
Bank online	18	18	19	16	8

Source: Pew Internet & American Life Project Surveys, March-Dec 2000. N=13,946. Margin of error is ±1%.

Evolving from timid to savvy

Since 68% of wired seniors say they would miss the Internet if they could no longer use it, there is a strong likelihood that even the freshest recruits will keep their Internet access and eventually become confident online veterans. There is some evidence that the hesitant seniors who currently just dabble in email will eventually become confident enough to book their next vacation online.

The more experience a wired senior has, the more likely he is to fit the pattern of other online veterans by going online first thing in the morning, spending more time online, and trying more activities.

One characteristic of an online veteran is an early-bird instinct to check email or surf the Web first thing each day. Thirty-three percent of wired seniors with three or more years of experience go online before 9 a.m. on a typical day, compared to 15% of the wired seniors with less than six months of experience. By comparison, 30% of veteran users of all ages go online before 9 a.m., compared to 18% of all newcomers to the Internet.

Internet users with several years' experience spend more time online in a typical session, as a rule, than new users – and seniors are no different. Wired seniors with more experience are over twice as likely as those with less experience to spend over an hour online on any given day. Thirty-nine percent of wired seniors with at least three years of experience spend an hour online on a typical day, compared to 17% of the newest senior users.

A third characteristic of a veteran user is that he has sampled more online activities than a newcomer. Veterans are much more likely to have used the Internet to explore and complete financial transactions online. Wired seniors with three or more years of experience are twice as likely as senior newcomers to have sought out information on a product for purchase (72% vs. 33%). Wired seniors with more experience are also more likely than novices to have sought travel information (66% vs. 35%). Senior Internet veterans are twice as likely as newcomers to have purchased stocks, mutual funds, or bonds online (20% vs. 9%), almost three times as likely to have purchased a product online (55% vs. 20%), and over six times as likely to have made travel arrangements (40% vs. 6%).

Wired seniors with several years of online experience are also much more likely to have sought out information at state, local, or federal government Web sites. Interestingly, there is a sharp increase in this activity after one year of being online. About one in four wired senior newcomers have visited a government Web site, compared to one in two wired seniors with two or more years of experience.

As might be expected, wired seniors do not participate very much in certain online activities no matter how long they have been online. Few wired seniors use the Internet to do research for school or training, participate in chat rooms, or download music.

Wired seniors stand apart from their disinterested peers

Thirteen percent of the U.S. population is over the age of 65, yet only 4% of the Internet population is over 65. Women outnumber men among senior citizens. According to the

Administration on Aging, there are 141 women per 100 men in the over-65 population.[4] Yet senior men outnumber senior women online (60% of wired seniors are men, 40% are women.) And while seniors are coming online at relatively fast rates, there are still many more older Americans who say they will definitely not go online than in any other age group.

According to an April 2000 Pew Internet Project survey, most of the strongest Internet holdouts are older Americans. They are fretful about the online world and often don't believe it can bring them any benefits. In contrast, a substantial majority of those under 30 who are not currently online say they plan to get access, though the expense of going online still looms as a major issue to them.

Fully 81% of people who say they definitely will not go online are over 50. Fifty-six percent of those over age 65 say they definitely will not go online, compared to just 6% who say they definitely plan to go online.

Seniors who say they definitely will not go online are clearly hostile to the Internet. But many resisters could be described as indifferent. They are the most likely to express no opinion about the benefits or problems associated with the Internet, which suggests that many have not concerned themselves with the Internet phenomenon. It doesn't matter whether the question relates to a potentially bad trait of the Internet or a good trait of the Internet. Many senior citizens consistently shy away from taking sides. It is clear that the Internet is a technology that has not engaged them.

Just 15% of those over age 65 have Internet access, compared to 75% of those between 18 and 29 years old. For some, financial concerns are paramount. Some 29% of all non-users are retired and many are on fixed incomes. But the "gray gap" is not something that can be explained entirely by economics. A 65-year-old living in a household with more than $75,000 in income is three times less likely to be online than a 25-year-old at that same economic level. At the other end of the economic ladder, a 25-year-old in a household with $25,000 of income is twice as likely to be online than a 65-year-old at that same economic level.

Senior Citizen Demographics

	All Seniors	*Wired Seniors*
Gender		
Male	43%	60%
Female	57	40
Race/ethnicity		
White	86	92
African-American	8	3
Hispanic	4	3
Marital status		
Married (or living as)	47	74
Divorced/separated	10	9
Widowed	39	18
Never been married	3	1
Income		
Under $30,000	63	24
$30,000–$50,000	21	33
$50,000–$75,000	8	19
$75,000+	8	25
Education		
Less than high school	29	4
High school graduate	34	21
Some college	20	30
College graduate or more	16	46

Source: Pew Internet & American Life Project Surveys, March-Dec 2000. N=4,335. Margin of error is ±2%.

[4] "A Profile of Older Americans: 2000," U.S. Department of Health and Human Services' Administration on Aging, p. 2.

One major factor for older Americans is their lack of contact with computers. Fully 57% of Americans over 50 do not use computers. One third of the entire non-computer population is women over 50. In contrast, computers are woven into the lives of many younger Americans. Some 78% of those under age 30 use computers at home or at work, while just 27% of those 60 and over have the same access. A 30-year-old in a household earning more than $75,000 is twenty percent more likely to use a computer than a 60-year-old in the same income bracket. Ninety-one percent of 30 to 39 year olds who earn $75,000 or more use computers, compared to 76% of those 60 and over who use computers and earn the same amount.

Again, even in the case of older Americans who are highly educated, a technology gap exists. Fully 28% of those over 50 who have college or graduate degrees do not have access or need for computers, while just 6% of those under 30 with college or graduate degrees do not use computers.

As a group, younger Americans who are not now online express more eagerness to get Internet access and more positive views about the Internet than older Americans. Forty-five percent of those under 30 believe they are missing something by not being online, compared to 26% of those 65 and older who hold the same view. Fully 89% of those under 30 believe the Internet would help them find things, while only 48% of those 65 and older say that. For younger Americans, the expense of the Internet is a major problem. About half of those not online and under the age of 30 say the Internet is too expensive. In contrast, the expense of the Internet is much less an explicit concern to older Americans. Just 29% of those 65 and older say they worry about that, and half of those in this age cohort didn't register a view.

While older Americans are more likely to trust their neighbors in general, they are more wary of possible privacy invasions in cyberspace and online tracking of activities. Thirty-seven percent of senior citizens say, "most people can be trusted," compared to 27% of 18-29 year-olds who agree. Fully 61% of those 65 and older say they are "very concerned" about businesses and people they don't know getting personal information about them or their families, compared to 46% of Americans between 18 and 29. Older Americans also believe that Internet companies should ask people for permission to use personal information. Eighty percent of 50-64 year-olds and 67% of those over 65 say that.

Will these non-Internet users ever go online? In the case of older Americans, the chances are not as good as with younger Americans. Almost half of those who are over 50 and not online (46%) say they definitely will not go online, compared to just 12% of those under 50 who are hard-core Internet resisters. In fact, 65% of people who are not online and under 50 say they will probably or definitely go online someday.

A silver tsunami

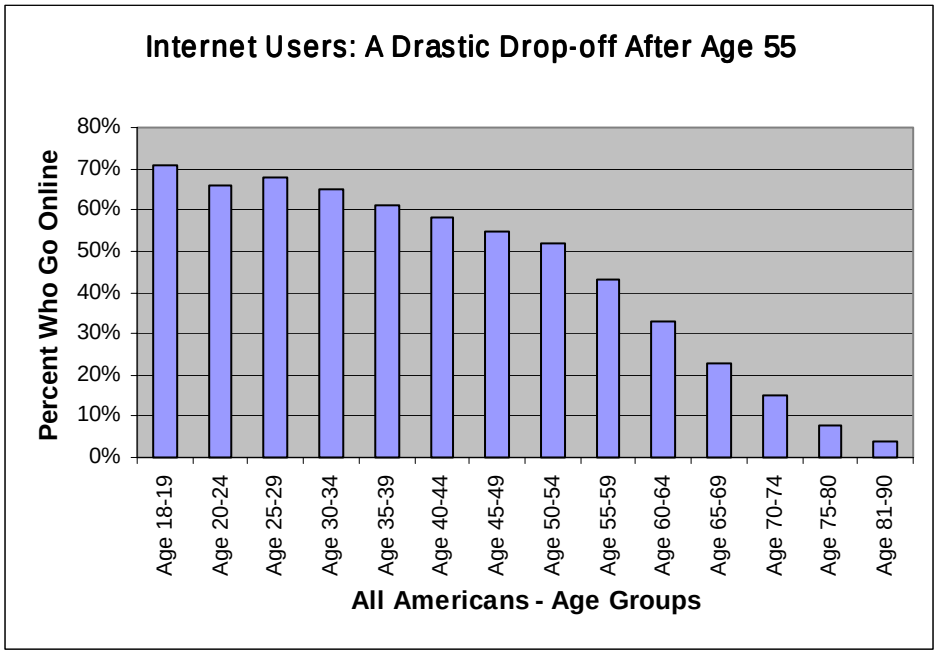
While today's senior citizens are the least likely to go online, the cohort behind them is among the most wired. Those aged 50-64 are likely to keep their Internet access even after they retire. An American between 50 and 64 years old is three times more likely to have Internet access than someone over the age of 65 (51% vs. 15%). And while 68% of wired seniors say they would miss the Internet if they could no longer use it, fully 75% of Internet users between 50- and 64-years-old feel that way.

However, Internet connectivity drops precipitously after the age of 55, suggesting that higher age may have a significant effect on someone's interest in or opportunity to have Internet access – at least for the time being. Fifty-two percent of 50-54 year-olds go online, compared to 43% of 55-

59 year-olds and 34% of 60-64 year-olds. Just 23% of 65-69 year-olds go online and the numbers continue to decline from there (see chart below).

Internet users between 50 and 64 are more like the average user than like wired seniors. These "pre-retirement" Internet users match the general population in their use of the Internet for e-mail, getting general and political news, checking weather, and doing work for their jobs. Pre-retirement surfers are focused on using the Internet for crucial tasks such as looking for job information (20% vs. 5% of wired seniors), job-related research (50% vs. 20% of wired seniors), school research or job training (39% vs. 17% of wired seniors) and online banking (16% vs. 8% of wired seniors). Many of these differences clearly relate to the fact that most 50-64 year-olds still have access at work (62%, compared to 16% of seniors) and have a need to do work-related activities. Even so, in non-work related areas, pre-retirement users are more likely than wired seniors to do almost every online activity except one: play online games. Wired seniors are more likely than the pre-retirement cohort to play games online (32% vs. 25%). Seniors' enthusiasm for games is exceeded only by 18-29 year-old Internet users, 44% of whom play online games.

It is this 50-64 year-old cohort who will most likely take advantage of all that the Internet has to offer them as they get older. Other research suggests that the most popular senior leisure activities are visiting friends and relatives; watching television; reading; gardening; and indoor hobbies. These leisure activities meet the needs most frequently identified by seniors: socializing, self-fulfillment, closeness to nature, exercise, and learning.[5] Not much physical ability is required to use email and surf the Web and, as long as technologies for the visually impaired continue to develop, there is little reason why the Internet cannot fulfill some of those needs.



[5] McAvoy, Leo. (1979). "The Leisure Preferences, Problems, and Needs of the Elderly." Journal of Leisure Research, Vol. 11, No. 1, pp. 40-47.

Methodology

This report is based on the findings of a daily tracking survey on Americans' use of the Internet. The results in this report are primarily based on data from telephone interviews conducted by Princeton Survey Research Associates between March 1, 2000 and December 22, 2000, among a sample of 26,094 adults, 18 and older – of whom 13,946 were Internet users. The 2000 surveys included 4,335 people aged 65 and older – of whom 670 were Internet users. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 1 percentage point. For results based on "wired seniors," the margin of sampling error is plus or minus 5 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

The sample for this survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

A new sample was released daily and was kept in the field for at least five days. This ensures that complete call procedures were followed for the entire sample. Additionally, the sample was released in replicates to make sure that the telephone numbers called are distributed appropriately across regions of the country. At least 10 attempts were made to complete an interview at every household in the sample. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Interview refusals were re-contacted at least once in order to try again to complete an interview. All interviews completed on any given day were considered to be the final sample for that day. The final response rate for this survey is 38%.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey (March 2000). This analysis produces population parameters for the demographic characteristics of adults age 18 or older, living in households that contain a telephone. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

About the Pew Internet & American Life Project

The Pew Internet & American Life Project creates and funds original research that explores the impact of the Internet on children, families, communities, the work place, schools, health care, and civic/political life. The Project is an independent, nonpartisan organization that aims to be an authoritative source for timely information on the Internet's growth and societal impact. The Project is a non-profit initiative affiliated with the Pew Research Center for People and the Press. The project is fully funded by The Pew Charitable Trusts.