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TECHNOLOGY IN THE AMERICAN HOUSEHOLD:

Americans Going Online ...

Explosive Growth, Uncertain Destinations

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AMERICANS GOING ONLINE . . .

EXPLOSIVE GROWTH, UNCERTAIN DESTINATIONS

The number of Americans going online to an information service or directly to the Internet has more than doubled in the past year, but most consumers are still feeling their way through cyberspace. Few see online activities as essential to them, and no single online feature, with the exception of E-Mail, is used with any regularity. Consumers have yet to begin purchasing goods and services online, and there is little indication that online news features are changing traditional news consumption patterns.

The broader home computer market continues to expand and appears to be maturing. The PC is a regularly used, indispensable household appliance to one in three adults. On a typical day 24 million Americans use a home computer for some personal or work-related task. Moreover, a "new wave" of demographically distinct consumers are being drawn into the market as home computers become more affordable. Surprisingly, CD-ROM drives are now found on almost half of all home PCs, and are seen by consumers as a more essential feature than online services.

These are the principal findings of the Times Mirror Center's second annual study of the way new information technology is being used by American consumers. The trend survey found the number of Americans subscribing to an online service swelling from 5 million in the winter of 1994 to nearly 12 million by June of this year. This year's survey, conducted among a national sample of 4005 respondents, also found that 2 million Americans connect to the Internet directly without benefit of a commercial service.

More Capacity Than Usage

The capability of Americans to go online from home grew much more quickly over the past 12 months than did subscriptions to online services. Our findings indicate that currently 18 million homes have modem-equipped computers, compared to 1994 when 11 million households had such machines. Owing to the tremendous sales of modem-equipped computers recently, a great deal of online capacity stands unused -- specifically, more than 8 million households containing modem-equipped computers. These consumers represent a clear potential source for the continued rapid expansion of online usage. Most unused modems are on 486 or Pentium machines.

Among those who currently use their modems, the study detected a decided softness in attitudes toward online activities and a fragile pattern of use. Only 32% of those who go online say they would miss it "a lot" if no longer available. This compares to nearly twice as many computer users (63%), newspaper readers (58%) and cable TV subscribers (54%) who would say the same about these services. The frequency of online activity is also modest. Just 20% of online users¹ go online every day.

Users of the three principal commercial services, America Online, Prodigy and CompuServe, were fairly similar in their frequency of usage. However, Prodigy and America Online are used more for pleasure and in the afternoon or evenings. CompuServe and the direct Internet connections are used more for work and more often during the day. Subscribers to each of the commercial services were about equally satisfied with the service delivered. But Americans who access the Internet directly are heavier online users and more satisfied than are those who use commercial services. They also consider online access much more indispensable than do those with commercial services. Fully 18% of commercial subscribers are signed on to more than one service, which is another measure of the unsettled state of the online world.

Typically, users go online a few times a week. But the pattern of specific activities suggest that few online features are compelling to them. A majority (53%) send or receive e-mail at least once a week, and many (41%) perform work-related research or communication online. However, relatively small percentages engage in other activities. Just 30% get the news online once a week or more often. Smaller percentages participate in discussion groups (23%), obtain entertainment related (19%) or financial information (14%).

ONLINE NUMBERS	
	<u>Millions of Households</u>
Has modem-equipped computer	18
But modem unused	8
	<u>Millions of Americans</u>
<i>Ever Go:</i>	
Online from home	14
Online from work or school, not home	11
Online to commercial service or Internet	12
Subscribes to more than one service	3
Regular* E-MAIL user	12
Regular* Online news reader	7
Connects to office or school	5
Navigates World Wide Web	5
*Regular refers to respondents who said they engage in the activity either "daily", "3-5 times a week," or "1-2 days per week."	

¹ Based on those who subscribe to a commercial information service or access the Internet directly.

Few Navigate the WWW

The two year old World Wide Web (WWW), which offers a whole new dimension of the Internet is still uncharted waters to most users. Only one in five of all online users (3% of Americans) have ever signed onto the Web. But among online users who have higher speed modems (14,400 baud or higher), use of the Web is far more common (53%). The most common ways that Americans get on to the WWW are through work connections (34%) or online services (33%), and "surfing" is the most popular way of discovering new sites (49%).

There are few signs in the study that use of online services or the Internet is changing traditional consumption patterns for news or goods and other services. Only 4% of all Americans are getting the news online at least once a week, and the overwhelming proportion of them (87%) said this activity has not affected their reliance on traditional news sources. As found in past Times Mirror Center surveys, users of advanced information technology continue to be heavier news consumers than are demographically-comparable samples of non-users. Similarly, commerce online is relatively modest. Only 8% of users have purchased anything via online capabilities within the month prior to the survey.

E-Mail Delivers

In contrast, e-mail appears to be making a real impact on users. Most e-mail users check their e-mail either once a day (29%), or more than once a day (22%). In a typical day, the average e-mail user sends three messages and receives five. One in four e-mail users are members of "listservs" (or electronic mailing lists), and a majority of those participate in more than one listserv. E-mail is sent or received as often for personal reasons (68%) as for work-related reasons (69%).

More than two-thirds of those who use e-mail at work (69%) said it fosters greater communication between upper and lower echelons in an organization. Over one-third (36%) believed it also results in franker communications between bosses and their workers. As many as six in ten who use e-mail for personal reasons said they communicate more often with family and friends because of e-mail (59%). Women reported increased exchanges of this kind more often than men (65% to 56%). In that regard, e-mail is the only regular computer activity in which women engage as frequently as men.

Online activities are closely associated with the substantial proportion of Americans who work at home. Most employed online users (53%) had worked at home at least one day of the week preceding the survey, and fully 20% had worked at home at least one day of the prior week *instead of "going in"* to work. In comparison, 33% of all employed respondents in the

survey had worked at home at least one day of the pre-survey week, and 13% had worked at home at least one day rather than at their regular workplace.

A New Wave of Technology Users

In 1994, the Times Mirror Center estimated that 31% of all American households contained a computer and that 26% of all adults used a home computer at least once in a while. The current poll finds computers in 36% of all households and 32% using a PC. Although more Americans are telecommuting, growth in PC ownership is being fueled by consumers using PCs for personal reasons, not work related ones. Specifically, the frequency of PC use at home for personal reasons rose from 21% to 29%, while use for work or school-related purposes was little changed in the past year.

More than one in three of the computers used in American households has been acquired within the past two years and as many as 15% were bought within the past twelve months. Although computers remain appliances of the well educated and the affluent, "new wave" owners (acquired PC within the last two years) are more likely to be middle income, not as highly educated, and younger than those who purchased them more than two years earlier. These new owners are as likely to use their PCs for financial record-keeping as are long-time owners. But they perform less word processing and play games more often. Fewer "new wave" owners use online services, but a greater percentage have CD-ROM drives.

CD-ROMs Catch On

CD-ROMs have achieved significant penetration among home users. The survey found that nearly half of all computer users surveyed (48%) had a CD-ROM drive. Patterns of usage and attitudes toward this feature indicate that CD-ROMs have been better received than online

HOME BASED COMPUTERS*	
	Millions of Households
Has one or more	32
Has one only	24
Has more than one	9
Acquired in past 24 months	11
Acquired earlier	22
Has one or more desktops	31
Has one or more laptops	6
<i>Primary Computer:</i>	
Mac	5
IBM	24
Other	3
<i>Computer Chip:</i>	
Pentium	1
486	9
386	6
Less than 386	2
Has CD-ROM	15
*The questions for this table were only asked of those who ever use their home PC (4% of PC owners do not use their PC.) However, for the purposes of this table, we made projections based on all PC owners.	

services. Most CD-ROM users (46%) said they were using their drive at least as often as they expected. And compared to online services, a somewhat greater percentage said they would miss their CD-ROM drives "a lot" if no longer available (40% vs 32%). Fully 52% said they use their drive at least once a week, and more than one in four (28%) reported using it more often. This new technology is used as much as word processing programs, and more often than financial record-keeping programs.

Few Burdened By Technology

On broader questions, the polling found that Americans continue to have positive feelings about high-tech in general. As in last years's survey, two out of three respondents said they like computers and technology. Very few voiced dislike (4%), although almost one in four (24%) had mixed feelings, and a similar number said they felt "overloaded with information" (23%). Most (64%) said they liked having all of the television news shows, magazines, newspapers, and computer information services that are available these days.

Privacy concerns also continue, however. Half of the public worries either a lot (20%) or some (30%) that computers are being used to invade their privacy. But those Americans who have the most experience with high-tech today, the online users, are less worried about computers invading their privacy than are non-users (44% vs. 51%).

Online Politics

In their social attitudes, online users differ from average Americans and they also are unlike people of similar demographic backgrounds who do not go online. Online users are more tolerant people. They are more accepting of homosexuality. They are more in favor of free expression with regard to the kinds of books that should be allowed in public libraries and also to the presence of pornography on the Internet.

On other political dimensions, online users are much the same as non-users. For example, their views about government regulation of business and federal welfare for the needy were not much different from that of the public at large. They are more supportive of government regulation of business, but they hold the same views as non-users about social welfare. Users and non-users were essentially indistinguishable in terms of political party identification.

However, the survey did find one element of the online population that differed from the norm. Those who access the Internet directly are somewhat more likely than commercial

service users and the public at large to "understand the frustrations and anger" that may have led to the Oklahoma City bombing of a federal building (20% vs. 14%). Greater "understanding" about the motives was also found among those who participate in online discussions about politics.

Other Findings

- ✧ Most Americans (54%) now use a computer either at home, at work or at school.
- ✧ The public favors laws to bar pornography from the Internet, 52% to 41%.
- ✧ Nine percent of American households have given up on computers. They no longer own one.
- ✧ Eighteen percent of PC users own a laptop. Among online users who own a laptop, 29% sometimes go online while traveling.
- ✧ Nearly one-half of modem owners (47%) don't know the baud rate of their units.
- ✧ Eleven percent of home computer owners go online from a "computer room" within their home. But the most popular rooms for cyberspace departure are home office or study (32%) and living room or den (25%).
- ✧ More than one in four (28%) have had online sessions that lasted as long as three hours or more.
- ✧ Almost one in four online users (23%) have an "online buddy" they have never met in person.
- ✧ More than one-third (35%) of online users have received an electronic news clipping or story from a friend.
- ✧ Six percent of Americans have a satellite dish, up from 4% last year. Nearly one-in-three (2% of all) has a small disk satellite dish.

The Use of Household Information Technologies By Major Demographic Groups
Based on Total Respondents

	-----At Home----- Computer <u>User</u> %	Has <u>CD-ROM</u> %	Subscribes To any Online <u>Info. Service</u> %	Regular E-Mail <u>User</u> %	Used <u>WWW</u> %
<i>Total</i>	32	15	6	7	3
<i>Sex:</i>					
Male	38	18	9	9	4
Female	28	13	4	6	2
<i>Race:</i>					
White	33	16	7	7	3
Black	20	8	3	5	1
Hispanic	29	12	8	8	1
<i>Age:</i>					
18-29	38	18	9	12	6
30-49	41	20	9	9	3
50-64	26	12	4	6	1
65+	9	4	1	*	*
<i>Age By Gender:</i>					
18-29					
Male	41	20	14	14	8
Female	36	16	5	8	4
30-49					
Male	44	22	10	9	5
Female	38	18	7	7	2
50+					
Male	25	10	5	5	2
Female	13	6	1	2	0
<i>Education:</i>					
College+	57	28	15	16	8
Some College	44	19	8	9	3
H.S. Grad	23	10	3	4	1
Less than H.S.	11	6	2	1	*

CONTINUED . . .

	-----At Home-----		Subscribes	Regular	Used
	Computer	Has	To any Online	E-Mail	WWW
	<u>User</u>	<u>CD-ROM</u>	<u>Info. Service</u>	<u>User</u>	<u>WWW</u>
	%	%	%	%	%
<i>Total</i>	32	15	6	7	3
<i>Family Income:</i>					
\$50K+	57	29	14	13	5
\$30-49K	37	18	6	7	4
\$20-29K	23	9	4	5	2
Less than \$20K	12	4	1	2	1
<i>Children</i>					
Kids in Home	42	21	7	8	3
No Kids	26	12	6	7	3
<i>Employment:</i>					
Employed	38	18	9	10	4
Unemployed	19	10	2	2	1
In School	53	24	13	17	7
Worked at home*	53	26	14	15	5
Home based business	53	25	12	9	3
<i>Region:</i>					
East	32	17	7	8	2
Midwest	28	15	5	6	2
South	28	12	6	7	3
West	42	19	9	9	5
<i>City Size</i>					
City	32	16	7	8	4
Small town	26	12	5	5	1
Suburbs	47	22	10	11	4
Rural	28	14	5	6	2
<i>Other Technology:</i>					
Has satellite dish	30	16	7	8	5
Has cellular phone	52	28	12	11	4
Subscribes cable TV	35	17	7	8	3

*Respondent worked at home at least one day last week.

PART ONE: COMPUTER USE

Americans and Computers

Growth in the prevalence of computers in everyday life has reached a point where most Americans, fully 54% of them, now use a computer at home, at their job or in connection with school.

In just over one year, the number of households with personal computers increased from 31% (February, 1994) to 36% (June, 1995), and the number of Americans *using* their home PC has increased from 26% to 32%. One-quarter of Americans report using a computer at home at least 1 or 2 days per week. Computers are even more a fixture in the working lives of Americans. Some 62% of those employed -- representing 41% of the adult population -- use a computer in their workplace. And three-quarters of students 18 years of age or older, representing 10% of the adult public, use a computer at school.

Since Times Mirror's 1994 technology study², the number of Americans who report using their home PC for personal reasons has increased from 21% to 29%, while the number of Americans saying they use their PC for work or school remains unchanged. As detailed below in this report, the significant increase in personal use is related to a "new wave" of PC owners (those who have bought a PC within the last two years) and the way in which they use their PCs.

TREND IN PC OWNERSHIP AND USE

Based on all Respondents

	<u>1994</u>	<u>1995</u>
	%	%
Household has a PC	31	36
Ever use home PC	26	32
Use home PC daily	6	7
<i>Use Home PC for:</i>		
Personal Use		21
29		
Work	17	18
School	12	12
Use a PC at Work	NA	41
Use a PC at School	NA	10
Number of Interviews	(3667)	(3603)

² Technology in the American Home, Times Mirror Center for The People & The Press, May, 1994, Washington DC.

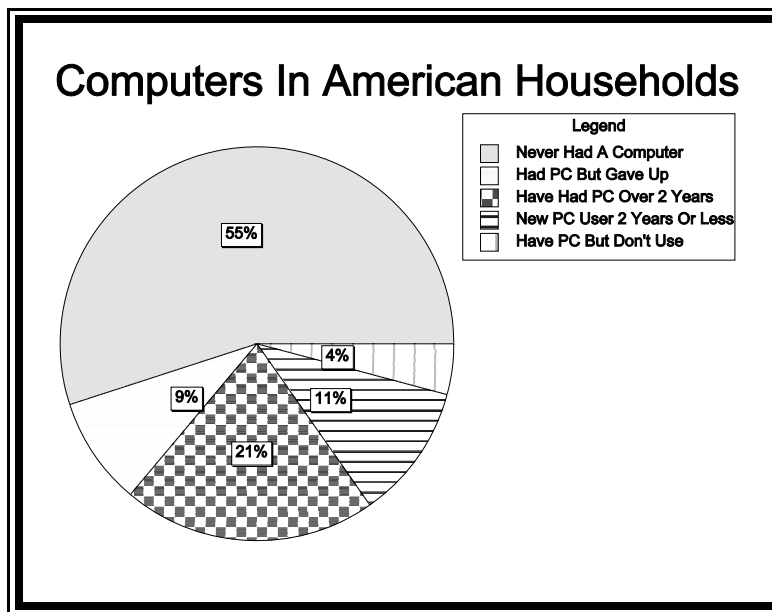
Overall, about one-in-three Americans (32%) rely on computers to a considerable extent. They either use a computer in more than one location, or have one at home and use it at least once every few weeks. Another 22% of users are “task oriented,” employing computers solely in connection with their job or for school, not for use at home.

COMPUTER USE	
<u>%</u>	<u>Places Used</u>
46	No Computer Usage
30	Use in Only One Place
--19	--At Work
-- 8	--At Home
-- 3	--At School
21	Use in Two Places
--16	--At Work and At Home
-- 2	--At Work and At School
-- 3	--At Home and At School
3	Use in All Three Places
100%	Total
(3603)	Number of Interviews

Computers in the Home

For a significant number of Americans, the personal computer is a relatively new addition to the household. Fifteen percent of PC owners acquired their machine within the last year and another 20% one to two years ago. The remaining 65% (which represents 21% of the public) have had their PCs for more than two years.

At the same time, 4% of households with a computer do not use it. Another 9% of households reported that they owned a computer at one time but no longer have one. And 55% have never had one.



Computer Ownership: Still Mostly Upscale

Income and education continue to correlate most strongly with computer ownership. At one extreme, among those with a high school education and with a family income under \$30,000, only 14% have a home computer. At the opposite end of the spectrum, 73% of college graduates with an annual household income over \$50,000 have computers.

PERCENTAGE OF HOUSEHOLDS WITH A PERSONAL COMPUTER			
	<u>High School or Less</u>	<u>Some College</u>	<u>College Graduate</u>
Under \$30,000	14	32	43
\$30,000 to \$49,999	29	47	55
\$50,000+	50	62	73

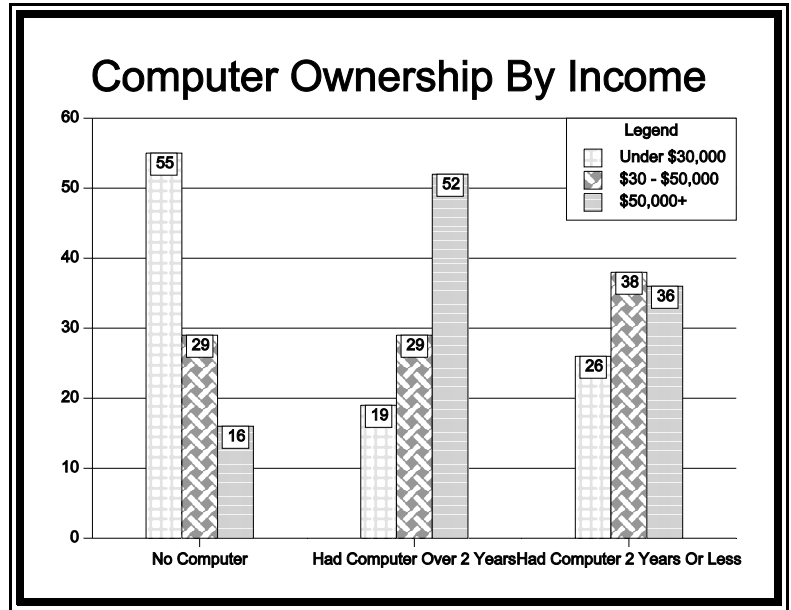
Similar to the findings from the 1994 technology study, respondents under 50 years of age are more likely than those over 50 to own a PC (44% vs. 23%). There is also a considerable gender gap in computer ownership (41% male vs. 32% female), but that gap is significantly larger for people over 50. In addition, a greater proportion of whites compared to blacks have a machine in their home (38% vs. 23%).

One-half of respondents living in the suburbs own a PC (51%), compared to roughly one-third of those living in either a city (35%), a small town (31%), or a rural locale (33%). Life cycle effects are also evident, as households with kids in the home are more likely to own a PC than households without kids (45% vs. 30%).

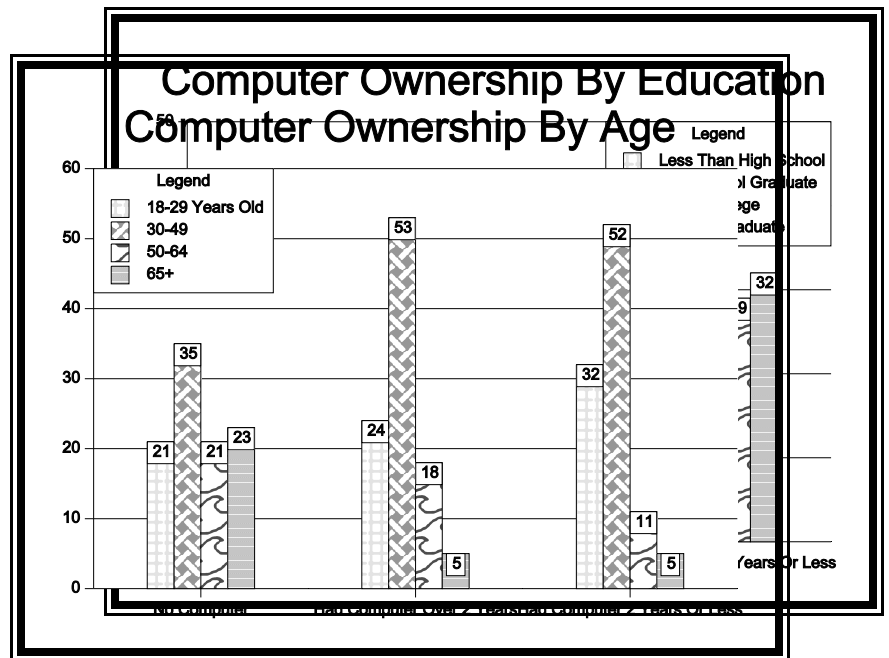
The New Wave of Users³

Those who more recently acquired computers are different in significant ways from those who have longer acquaintance with them. Although still more upscale than the population as a whole, the newer computer owners are relatively less affluent and educated than those who have had computers for over two years. They are also younger and are not as male-dominated as early home PC users.

Upper income families previously dominated home computer ownership statistics, but ownership has now filtered down to the middle class to a greater degree. Those having a computer in their house for more than two years are decidedly upscale: 52% earn over \$50,000 annually, while 29% make between \$30,000 and \$50,000, and only 19% earn less than \$30,000. Of those who have acquired a computer less than two years ago, only 36% earn over \$50,000, another 38% earn between \$30,000 and \$50,000, and 26% earn less than \$30,000 annually.



The same pattern is found for educational status. Of those with computers for more than two years, 42% have graduated from college, another 29% have attended college, and 29% have a high school education or less. Of those who acquired a home computer within the last two years, 32% have graduated from college, 29% have attended college, and 39% have a high school education or less.



³The analysis for this section is based on respondents who use their home PC.

The "new wave" of computer owners is also younger, perhaps because computers have become more affordable to those without large financial reserves. The 18 to 29 year olds make up one-third of those who have acquired computers in the last two years, compared to one-quarter of those who have had a computer in their homes for over two years.

Finally, there is some leveling off by gender. Those having acquired a computer in the last two years tilt insignificantly towards males, 51% to 49% women. But those owning computers for more than two years are made up of considerably more males, 56% to 44% women.

The type of computer activities engaged in varies considerably, according to how long respondents have had their PC. Respondents who have owned their PC for more than 2 years are most likely to use their home PC for word processing (88%), followed by playing games (70%), and keeping financial records (57%). Among the "new wave" of PC owners, however, the activity that ranked first is playing games (78%), followed by word processing (76%) and record keeping (53%). Indeed, nearly half of new owners play games at least weekly (46%), compared to only 38% of those owning a PC for more than 2 years.

With respect to computer equipment, new owners are significantly more likely than long-term owners to have a machine equipped with a CD-ROM drive (57% vs. 42%); however, they do not use their CD-ROM as frequently. Fifty-three percent of those owning a PC for more than two years use their CD-ROM at least weekly, compared to 47% of new owners. In addition, new owners are less likely than long-term owners to have either a laptop (12% vs. 20%) or a modem (55% vs. 60%), and they are significantly less likely to go online (28% vs. 38%).

NEW WAVE OF PC OWNERS		
Based on PC users		
	---OWNED PC---	
	<u>2 Years</u>	<u>More than</u>
	<u>or Less</u>	<u>than 2 yrs</u>
	%	%
<i>Activities:</i>		
Word Processing		
Yes	76	88
At least Weekly	44	57
No	24	12
Keep Financial Records		
Yes	53	57
At least Weekly	31	35
No	47	43
Play games		
Yes	78	70
At least Weekly	46	38
No	22	30
<i>Computer Equipment:</i>		
Mac	15	14
IBM	71	76
486 or Pentium	47	44
386 CPU or lower	29	34
Laptop	12	20
Desktop	93	95
Has CD-ROM	57	42
Uses CD-ROM Weekly	47	53
Less Often	34	32
Never	18	15
Has Modem	55	60
Goes Online	28	38
Number of Interviews	(440)	(841)

Use: Frequency and Activities

In the 36% of homes with computers, survey respondents can be divided into four groups based upon how often they use their machines. Just under half (46%) reported using their computer most days, that is either every day (19%) or three-to-five days per week (27%). Another quarter of home users (24%) use them one or two days a week, and 13% use them occasionally, or about once a month. Finally, almost one-fifth (17%) said they use the computer rarely, if ever: 6% less than monthly, and 11% not at all. It should be noted, however, that the machine may be in use in the household by someone other than the survey respondent.

Much as there are differences in what types of households own computers, there are differences in usage according to education, income, age and gender. Specifically:

- ▶ 51% of men compared to 41% of women say they use them either every day or three-to-five days a week (most days). This gender gap is particularly evident among young respondents (58% male vs. 48% female, aged 18 to 29) and those in middle age (50% male vs. 40% female, aged 30 to 49).
- ▶ Just over half of those who have a college background said they make use of their home computer most days, compared to 39% of high school graduates.
- ▶ While those under 30 years old are less likely than those between 30 and 50 to have a computer in the home, they are more likely to use it. Over half of the youngest cohort (54%) reported using a computer most days (three to five days a week or daily), compared to 46% of those between 30 and 49 years of age. Those over 50 -- the least likely to have a computer in their homes -- are also the least likely to make use of one if they do have it: 40% reported usage most days.

Other computer usage patterns include:

- ▶ Whites are more likely than blacks to use their computer at least weekly (71% vs. 60%).
- ▶ One-half of residents in the West (51%) use their PC most days (every day or 3-5 days per week), compared to somewhat smaller proportions of respondents living in the East (47%), the Midwest (42%) and the South (44%).
- ▶ Of those who use their computers weekly, about three-quarters live in the city (75%) or the suburbs (73%), compared to two-thirds who live in small towns (66%) and rural areas (63%).
- ▶ In contrast to the findings for computer ownership, there are no life cycle effects with respect to computer usage. Households without kids are just as likely to use their computers as households with kids.

- ▶ Respondents who own a Pentium or 486 chip machine are significantly more likely to use their machine most days than are owners of a 386 or smaller chip machine (71% vs. 50%). In addition, laptop owners are more likely than desktop owners to use their machine every day (34% vs. 22%).

FREQUENCY OF COMPUTER USE AMONG COMPUTER HOUSEHOLDS					
	<u>Most Days*</u>	<u>1-2 Days</u>	<u>Monthly</u>	<u>Less Often</u>	<u>(N)</u>
	%	%	%	%	
<i>Total</i>	46	24	13	17=100	(1431)
<i>Sex</i>					
Male	51	24	11	14=100	(767)
Female	41	24	14	21=100	(664)
<i>Age</i>					
Under 30	54	23	10	13=100	(357)
30-49	46	25	14	15=100	(717)
50+	40	21	13	26=100	(325)
<i>Education</i>					
College Grad.	51	27	10	12=100	(660)
Some College	53	22	12	13=100	(363)
High School Grad.	39	24	14	23=100	(356)
<i>Family Income</i>					
\$50,000+	50	24	11	15=100	(577)
\$30,000-\$50,000	47	24	14	15=100	(382)
< \$30,000	41	23	13	23=100	(265)
*Most days refers to "everyday" or "3-5 days per week."					

While home computers are put to multiple uses, the name “personal computer” is indeed accurate. Fully nine-in-ten of those who use their home computers on at least an occasional basis (at least once every few weeks) said they do so for “personal use.” A large number, 58%, also use their PC in connection with their job, and 39% use it in connection with their school work.

A majority of PC users (use their home PC at least occasionally) do some word processing at least once a week (56%), with one-quarter (25%) doing so either daily or three to five days a week. Computers are used less often for keeping household or financial records: 15% of users do so daily or three to five days a week and another 21% one or two days a week.

Home computers also have a significant entertainment role. One-in-five who use their computer at least occasionally (20%) reported playing a game daily or three to five days a week, with slightly more (23%) doing so 1 or 2 days a week. Another fifth (20%) use their PC for entertainment every few weeks or so. One-quarter of users said they never play a game on their home computer, but about one in ten uses the computer exclusively to play games.

COMPUTER ACTIVITIES			
Based on those who use their home PC at least occasionally			
	<u>Word Processing</u>	<u>Financial Records</u>	<u>Playing Games</u>
	%	%	%
<i>Computer Use:</i>			
Every Day	6	5	7
3-5 Days/Week	19	10	13
1-2 Days/Week	31	21	23
Every Few Weeks	23	18	20
Less Often	7	4	11
Never	14	42	26
Total: Most Days*	25	15	20
Total: Weekly*	56	36	43
* "Most days" refers to "everyday" and "3-5 days per week". "Weekly" refers to "everyday", "3-5 days per week" and "1-2 days per week."			

Other results on use and non-use:

* One-fifth (22%) of computer users are inactive, not using their computer for word processing, record keeping or finances, or playing games.

* One-third are specialists, using their computer for only one of those three task categories.

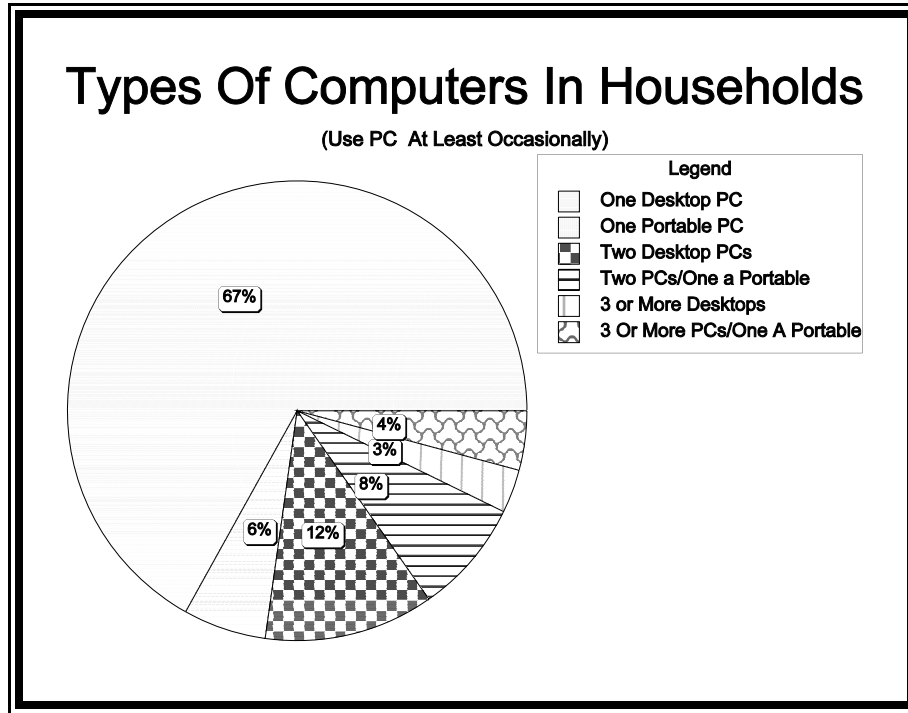
* 67% use their computer for at least one of the two serious applications--word processing or record keeping.

* Mixing business and pleasure, 32% use one or both of the serious applications as well as game playing.

COMPUTER APPLICATIONS PERFORMED AT LEAST WEEKLY	
Based on those who use their home PC at least occasionally	
<u>%</u>	<u>Applications Used</u>
22	None of the Three
34	Specialists: One Application
--17	--Word Processing only
--11	--Games only
-- 6	--Records only
32	Use Two Applications
--12	--Word Processing and Records
--14	--Word Processing and Games
-- 6	--Records and Games
12	Use All Three Applications
100%	Total

Equipment For The Home Computer

One computer is enough for most homes, but a surprising number have two or more. Nearly three-quarters of those who use a home computer at least occasionally report having one (72%), 20% have two, and 7% have three or more. Multiple-computer households often own laptops or notebooks -- portable computers that can be taken places or easily moved from room to room. Overall, 18% of those who use a home computer at least occasionally have a portable computer, either their only machine or an additional machine.



IBM and IBM-compatible machines dominate the home computer market. Three-quarters of those who use their home PC at least occasionally employ them exclusively or most frequently. Another 15% do their work on a Macintosh. Ten percent did not know the type of machine they work on, but most of them presumably work on IBM or IBM-compatible machines.

A PC “generation” -- defined by the chips, clock speed and other hardware features in the machine -- lasts only about three years. The survey found the newer 486 and Pentium chip machines in about half of home computers. A similar number contained CD-ROM drives. Among those who use their home PC at least occasionally, 7% said they had Pentium chips (including 15% who acquired a computer in the last year), 40% had 486 chips, 24% had 386 machines, and 8% were running old 286 or earlier models. About one in five respondents were unable to identify the chip in their machine, and 3% mentioned some other type of machine.

Most respondents who use their PC at least occasionally have a modem (61%) -- a device that allows them to send and receive information through the telephone lines. And the number of all Americans reporting that their PCs are equipped with a modem has increased from 12% last year to 20% this year.

Moreover, CD-ROM drives have also proliferated over the last couple of years. At the time of the survey, just under half (48%) of home computers had this feature, including 44% of computers owned for longer than two years, 53% of those bought one to two years ago, and 62% of those acquired in the last year.

Twenty-seven percent of those using their home computer at least occasionally said their machine stands alone, with neither a modem or CD-ROM drive. Another quarter have a modem but not a CD-ROM, while 12% have the reverse configuration -- a CD-ROM but no modem. Thirty-six percent contain both a modem and CD-ROM.

PROFILE OF EQUIPMENT				
Based on those who use their home PC at least occasionally				
	<u>Total</u>	<u>Had Computer</u>	<u>Had Computer</u>	<u>Had Computer</u>
	%	<u>1 Year or Less</u>	<u>1-2 Years</u>	<u>2 Years or More</u>
		%	%	%
Has Neither Modem or CD-ROM	27	24	25	28
Has CD-ROM Only	12	18	18	10
Has Modem Only		25	14	22
Has Both Modem & CD-ROM	36	44	35	34
				28

The CD-ROM Explosion

The 48% of respondents who use a home computer at least occasionally have a machine with a CD-ROM drive. These households represent 15% of the adult population of the country. While relatively new, CD-ROM usage is significant. One in ten computer users with this capability reported using it every day, another two-in-ten (19%) use it three-to-five days a week, and nearly one-quarter use it one or two days per week. Thus more than one-half of those with a CD-ROM use it on at least a weekly basis. Although fewer computers are fitted with a CD-ROM than with other basic applications, this feature enjoys roughly as much usage as word processing programs, and more usage than financial and record-keeping programs. Interestingly, those who use their CD-ROM at least occasionally are significantly more likely than PC users in general to play games on their home PC (58% vs. 43% at least weekly). They

are also somewhat more likely to do word processing (62% vs. 56%) and to keep financial records (43% vs. 36%).

CD-ROMs are performing about as promised when purchased. About half (46%) of owners said they use them about as much as anticipated, 23% said more than anticipated, and 29% said less than anticipated. Gender differences are evident here as they are with basic computer use and with use of specific applications. Women are far less likely to use a CD-ROM drive, and 24% said they never use the CD-ROM drive, three times more than men.

CD-ROM ACTIVITIES			
Based on Those Who Use Their Home Computers at Least Occasionally and Who Have CD-ROM Drives.			
	All CD-ROM		
	<u>Owners</u>	<u>Men</u>	<u>Women</u>
	%	%	%
<i>CD-ROM Use:</i>			
Every Day	9	9	10
3-5 Days/Week		19	24
1-2 Times/Week	24	27	19
Every Few Weeks	20	20	21
Less Often	12	12	11
Never	15	8	24
Don't Know	1	*	1
Total: Most Days	28	33	24
Total: Weekly	52	60	43

CD-ROM owners are having little difficulty finding new programs to buy where they live. Almost half (48%) said it is “very easy” to find new titles, and another 30% said it is “somewhat easy.” Only one-in-seven reports difficulty in this regard. There is, however, no single dominant source of information about new CD-ROM titles. Asked how they get such information, 30% said magazines and newspaper articles, 27% said friends and relatives, and 23% said browsing in stores. Only 7% said advertisements and 2% said catalogues were their main source of information.

The rapid adoption and extensive usage of CD-ROMs appears attributable to their ease of installation, ease of use and the high visual quality of the product:

- ▶ Fully 61% had little or no difficulty installing programs, 22% reported "some" difficulty with installation, and one-in-ten reported "a lot" of difficulty with installation.
- ▶ The last CD-ROM program purchased was "very easy" to learn or move around in for 35% of respondents, while 44% said it was "somewhat easy," and about one in six had difficulty.
- ▶ The graphic quality of the last CD-ROM program purchased was rated "excellent" by 39% and good by 45%. Only 13% were unsatisfied, giving ratings of "fair" or "poor."

CD-ROMs are not only a growing and much-used technology. They are also fast becoming an integrated and endeared feature for those computer users who have it. Fully 40% said they would miss CD-ROMs "a lot" if they no longer had the drive, which compares to 63% of home computer users who said they would miss their PC "a lot" if they no longer had it, 58% who would miss their daily newspaper "a lot", 54% who would miss cable television "a lot," and 32% who would miss going online "a lot."

PART TWO: THE ONLINE PHENOMENON

As recently as 1992, the American Heritage Dictionary of the English Language had no entry for "internet." Three short years later, most Americans have at least a general idea of what the Internet is, and one-in-ten goes online from home, work, or school at least once a week. The online age has arrived.⁴

Frequency of Online Activity

Online activity can take many forms, and the Times Mirror survey attempted to capture the variety of different activities that fall under this rubric. These include using a home computer and modem to connect to information services, bulletin boards, or computers at work or school. They also include using a computer at work or school to connect to other computers over the Internet, or with information services or bulletin boards. Any respondent who said that he or she ever went online, using these definitions, was considered an online user. To measure frequency of online use, a variety of online activities were inventoried, including such tasks as doing research for work or school, communicating with other people over the Internet or in forums and chat groups, playing online games, or getting the news.

FREQUENCY OF ONLINE USE	
	<u>%</u>
All Online Users	14
Online yesterday	4
Online daily	3.5
Online at least 3 times a week	7
Online at least weekly	10
Number of interviews	(3603)

Using these definitions, 14% of the survey's respondents could be classified as online users. Ten percent engage in one or more online activities at least once a week. Four percent went online the day before the interview, and over 3% said they go online every day. Seven percent go online at least three times per week. While those who go online remain a relatively small proportion of the population, they constitute a large and growing bloc of citizens in absolute numbers: almost 6 million who go online daily, nearly 18 million at least once a week, and as many as 25 million who ever go online.

⁴ As a measure of public fluency with computers, fully 42% of the public knew that the phrase "Windows 95" referred to the new software package being introduced in August, 1995, according to our News Interest Index poll. See "Support for Independent Candidate in '96 Up Again," Times Mirror Center for The People & The Press, Aug. 24, 1995, Washington DC.

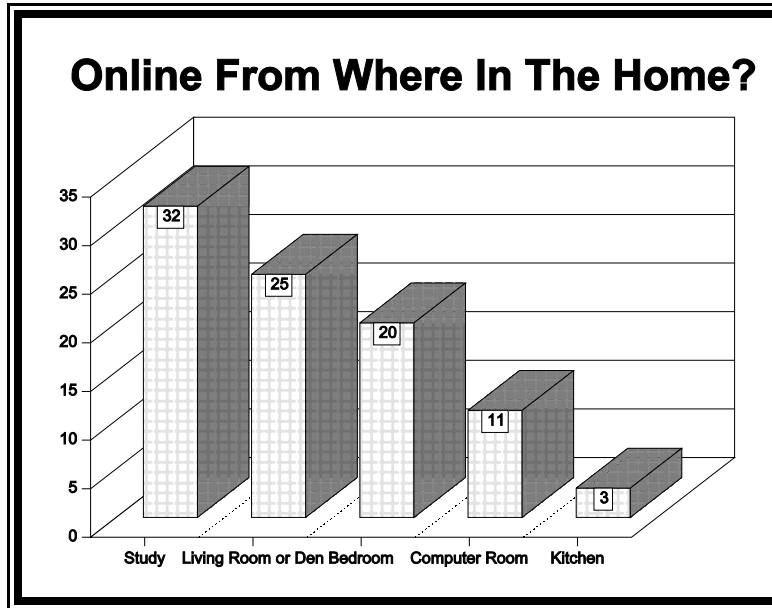
More Modems but Not Much More Usage

One-in-five U.S. households now has a personal computer with a modem -- nearly twice the percentage found in last year's Times Mirror technology survey. Use of modems has increased as well, though the increase in use has not kept pace with the growth in numbers. Owing to the tremendous sales of modem-equipped computers recently, a great deal of online capacity stands unused.

In 1994, about 8% of households reported that someone used a modem to go online from home. This year, 11% did so. Similarly, in 1994, 6.6% of the survey's respondents said they personally went online from home while this year, 8% did so. In contrast, modem ownership rose from 12% to 20% of U.S. households in little more than a year. And the percentage of Americans subscribing to a commercial online service has doubled since last year's study, from 3% to 6%, and 1% currently report that they access the Internet directly. Interestingly, there is little change since 1994 in the proportion of Americans connecting to the office or school from home, presumably reflecting the relatively small increase in the number of Americans going online from the home.

	<u>1994</u>	<u>1995</u>
	%	%
Home PC has a modem	12	20
Someone in household goes online from home	8	11
<u>Percent of Americans who:</u>		
Go online from home	6.6	8
Subscribe to commercial online service	3	6
Use Internet directly	NA	1
Connect to office or school from home	3.6	3
Number of Interviews	(3667)	(3603)

Among survey respondents who go online from the home, no single room in the house is predominant as an online location. A little under one-third (32%) say they usually go online from a home office or study. One-fourth (25%) go online from the living room or den, and 20% do so from a bedroom. Eleven percent described their online chamber as "the computer room." Three percent even go online from their kitchen.



Americans are also going online from locations other than home. Six percent of respondents said they went online from work or school only, while 3% go online from home as well as work or school.

Yet another online venue is "the road." Among online users who report owning a portable computer, 29% said they sometimes go online while travelling. As a proportion of the entire adult population, this group is tiny (less than one percent) but in raw numbers it represents more than one million individuals.

ONLINE LOCATIONS	
	<u>%</u>
Went Online From:	
Work/School or Home	14
Home only	5
Work/School only	6
Home and Work/School	3
Not online	<u>86</u>
	100%
Number of Interviews	(3603)

The likelihood of being an online user appears correlated in part with the number of computer locations to which the user has access. Among respondents who use a PC only at work or school, 13% go online. Among those who use a PC only at home, 14% do so. But among those who use a PC both at home and at work or school, nearly half (45%) do so.

What Destinations?

Nearly one-half of online users (45%) subscribe to a commercial information service, and another one-in-ten said they use a service that provides a direct connection to the Internet (9%). About one-in-ten online users (11%) belong to more than one information service. The three services used most often are America Online (20%), Prodigy (15%) and CompuServe (14%).

Online users who belong to any of the information services make frequent use of them. One-fifth call up a service every day, and another quarter (26%) do so three to five days per week. Fully three-quarters connect to one of these services at least weekly. Those who use an online service most days are more likely to use a Direct Internet provider than are less frequent users. In addition, the more frequent online service users are also more likely to subscribe to multiple information services (29% vs. 17%).

A significant proportion of online users also connect to work or school. Nearly four-in-ten (39%) online users who are employed or in school, and 21% of all online users, use their home PC to dial up a computer located at work or school. Those who use an online service most days are more likely than less frequent online users to connect to school or work (34% vs. 26%).

ONLINE DESTINATIONS

<i>Destination</i>	<u>All Respondents</u> %	<u>Online Users</u> %	<u>Use Online Service Most Days</u> %	<u>Use Online Service Weekly or Less</u> %
Any Online Service	6.5	51	100	100
More than One Online Connection	1.5	11	29	17
AOL	3	20	39	43
CompuServe	2	14	27	28
Prodigy	2	15	33	27
Direct Internet Provider	1	9	26	12
Work/School	3	21	34	26
Number of Interviews	(3603)	(997)	(238)	(262)

Why Do Americans Go Online?

As with the use of computers, there is a great deal of overlap between work and play in online activity. Eight-in-ten online users said that at least some of their online activity is work-related. Nearly 7-in-10 (68%) said that at least some is for pleasure. And nearly half (49%) go online for both work and pleasure.

Broken down, almost one-third (31%) said their online activity is strictly work-related, while another 16% said it's mostly work. At the other end of the spectrum, about one-fifth (19%) said all of their online activity is strictly for pleasure, and 14% said it's mostly pleasure. In between, 19% reported that their online activity was evenly divided between work and pleasure. Women were more likely than men (by 40% to 26%) to say their online activity was confined to work-related tasks only.

The type of online service that survey respondents use is related to their reasons for going online. Among those who use either a Direct Internet Provider or CompuServe, roughly four-in-ten say their reasons for going online are either all or mostly work-related. By contrast, less than a quarter of America Online (24%) and Prodigy (22%) users reported going online for work. More than one-half of Prodigy users said they go online either all or mostly for pleasure (55%), as did a similar proportion of America Online users (50%).

WORK OR PLEASURE?

	All Online Users %	AOL %	CompuServe %	Prodigy %	Direct Internet Provider %
All Work	31	8	19	11	14
Mostly Work	16	16	19	11	26
Half and Half	19	26	23	21	24
Mostly Pleasure	14	23	17	25	19
All Pleasure	19	27	20	30	16
DK/Refused	$\frac{1}{100}$	*	$\frac{2}{100}$	$\frac{2}{100}$	$\frac{1}{100}$
Number of Interviews	(977)	(205)	(145)	(145)	(96)

While the purpose of online activity is related to the locale at which it occurs, it is not uncommon for online activity at work or school to be done for pleasure, and even less rare that online activity at home is solely for pleasure. Among respondents who said they went online only from work or school, 57% characterized their online activity as "all work," but this also means that about 4-in-10 were going online for pleasure at least some of the time. Similarly, although most of those who go online only from home are doing so for pleasure (27% all pleasure, 19% mostly pleasure), 72% said they do at least a little work when they go online from home.

Who Goes Online?

Better educated and more affluent individuals are much more likely than others to be regular online users (go online at least weekly). This is a function both of their ability to afford the technology for going online from home, and their greater likelihood of working in jobs that entail online activity. Over one fifth (22%) of college graduates go online at least weekly, and 11% reported going online the day before the survey. In contrast, only 1% of people without a high school diploma are regular online users.

Income and education operate independently to promote online activity, but education appears to be the more important factor. Being a college graduate increases the likelihood of being an online user more so than making \$50,000 a year.

At the highest levels of income and education, over one-third reported going online. Among those in the highest income category in the survey (\$100,000 or above), 38% go online. So do 34% of those who have had at least some post-graduate education.

THE EFFECTS OF EDUCATION AND INCOME ON ONLINE USE			
PERCENT WHO EVER GO ONLINE			
	High School or less	Some College	College Graduate
Under \$30,000	4	15	24
\$30,000-\$49,999	8	17	26
\$50,000 and over	17	26	35

Online activity is still largely the province of younger Americans, however. Fifteen percent of those aged 18-29 go online at least once a week, as do 13% of those aged 30-49. But among persons older than 50, online activity is much rarer: only 6% of those aged 50-64 and only 2% of those aged 65 and older go online at least once a week. (Among the latter group, only 2% reported *ever* going online.)

As with many other aspects of computer use, there is a pronounced gender gap in online activity. Men are twice as likely as women to be weekly or daily online users, and nearly twice as likely (18% to 10%) to ever go online. If it were not for online activity at work or school, where men and women are about equally likely to go online, the gender gap would be even larger. Men are almost three times more likely than women (12% to 4%) to say that they go online from home.

The gender gap persists across all age groups, except among those over 65 years of age (a group which rarely goes online). Even among younger adults, men are more likely than women to go online (26% vs. 17%). One-fifth of young men go online at least weekly, compared to only one-in-ten young women (21% vs. 10%). However, the gender gap is narrower for younger people. Among those under 50, men are one and half times more likely to go online, whereas among older segments of the population, men are three times as likely to go online.

Residents of the western region of the U.S. are a little more likely than those in other parts of the country to be online users. Eighteen percent of westerners reported ever going online, compared with 14% in the east, 13% in the south, and 12% in the midwest. Part, but not all of the explanation for this is the slightly higher level of education of citizens living in the west. In particular, college-educated westerners and southerners are more likely than college-educated Americans living elsewhere to go online.

The Mountain and Pacific states rank first with respect to the percentage of residents who go online (18% in each region), followed by the mid-Atlantic states (16%). Among the regions where online users are least likely to be found are West North Central (8%), East South Central (10%), and New England (10%).

ONLINE USE BY CENSUS REGION*	
	<u>Goes Online</u> %
New England	10
Mid Atlantic	16
East North Central	14
West North Central	8
South Atlantic	14
East South Central	10
West South Central	14
Mountain	18
Pacific	18

*This table displays standard Census Region breakdowns

Small-town and rural dwellers are less likely than suburban or urban Americans to go online, but, again, some of this pattern is explained by the educational level of people in different places. Overall, 20% of suburbanites go online, compared with 16% of city residents, 13% of those who live in rural areas, and 10% of small town dwellers. But among the college-educated, residents of rural areas are just as likely as city and suburban residents to go online (32% versus 31% and 30% respectively). Even among the college-educated, however, small town residents are less likely to be online users (23%).

The type of computer equipment in the home is also related to online use. Respondents owning two or more home PCs are significantly more likely than those owning one PC to go online (49% vs. 29%), and a greater proportion of those who have a portable PC go online compared to desktop owners (48% vs. 35%). In addition, more than one-half of respondents owning a 486 or Pentium chip computer (52%) go online, compared to less than one-third of those whose machine has a 386 CPU or lower (30%). Modem speed matters, too. Respondents whose machines are equipped with higher speed modems are more likely than their counterparts to go online (77% vs. 64%).

WHO GOES ONLINE?				
(Based on Total Respondents)				
<i>Frequency of Going Online</i>				
	<u>Ever</u>	<u>Yesterday</u>	<u>At least Weekly</u>	<u>Number of Interviews</u>
	%	%	%	
Total	14	4	10	(3603)
Sex				
Male	18	6	14	(1721)
Female	10	3	7	(1882)
Race				
White	14	4	10	(2970)
Black	11	3	8	(330)
Hispanic	21	4	15	(227)
Age				
Under 30	21	6	15	(848)
30-49	18	5	13	(1480)
50-64	9	3	6	(639)
65+	2	1	2	(555)
Age by Gender				
18-29 Men	26	7	21	(440)
18-29 Women	17	4	10	(408)
30-49 Men	21	6	15	(266)
30-49 Women	14	5	10	(373)
50-64 Men	14	6	9	(266)
50-64 Women	5	1	4	(373)
65+ Men	1	3	(222)	
65+ Women	1	*	1	(333)

CONTINUED, NEXT PAGE

WHO GOES ONLINE, CONTINUED

(Based on Total Respondents)

Frequency of Going Online

	<u>Ever</u> %	<u>Yesterday</u> %	<u>At least Weekly</u> %	<u>Number of Interviews</u>
Total	14	4	10	(3603)
<i>Education</i>				
College Grad. +	29	11	22	(1079)
Some College	20	5	14	(806)
High School Grad.	8	2	6	(1339)
Less than High School	2	1	1	(353)
<i>Family Income</i>				
\$50,000+	27	10	20	(898)
\$30,000-\$49,999	15	4	11	(917)
\$20,000-\$29,999	11	2	7	(558)
Less than \$20,000	6	2	3	(615)
<i>Employment and School</i>				
Employed	19	6	14	(2465)
Not employed	5	1	3	(1128)
In School (523)		32	7	21 (
<i>Region</i>				
East	14	4	9	(703)
Midwest	12	3	8	(933)
South	13	4	10	(1303)
West	18	6	14	(664)
<i>Community</i>				
City	16	5	12	(1306)
Small town	10	3	7	(944)
Suburb	20	5	14	(669)
Rural area	13	3	9	(654)
<i>Computer Equipment</i>				
2 or more PCs	49	18	38	(348)
1 PC	29	9	20	(922)
Mac	34	14	27	(192)
IBM	37	12	27	(955)
486 CPU or Pentium	52	19	38	(444)
386 or lower CPU	30	8	23	(306)
14400 or 28800 modem speed	77	38	66	(187)
9600 or lower modem speed	64	15	45	(228)
Has Portable PC	48	17	36	(234)
Desktop (1047)		35	11	23
<i>Length of Time Owned PC</i>				
Less than one year	30	11	21	(187)
1-2 years	27	6	19	(253)

When Do People Go Online?

Despite the popular image of the netsurfer zooming across cyberspace in the middle of the night, most online activity occurs during normal waking hours, spread relatively evenly among morning, afternoon, and evening. Twenty-two percent of online users said they usually go online in the morning, 23% said afternoon, and 29% said evening. Only 4% said their most common time was during the overnight hours.

The time of day of online activity varies by the type of online service used. Compared to users of other online services, respondents who rely on America Online or Prodigy are more likely to go online in the evening (51% and 41%, respectively). Users of these two services reported going online mostly for pleasure. One-fifth of those who access the Internet directly (21%), as well as CompuServe users (19%), go online in the morning, compared to only one-in-ten of Prodigy (12%) or America Online (10%) users. The heaviest daytime users, not surprisingly, are those who go online from work or school. Nearly one-third (31%) of this group go online in the morning, and an additional quarter (26%) reported going online in the afternoon.

WHEN PEOPLE GO ONLINE						
	<u>All Online</u> <u>Users</u> %	<u>AOL</u> %	<u>CompuServe</u> %	<u>Prodigy</u> %	<u>Direct</u> <u>Internet</u> <u>Provider</u> %	<u>Work or</u> <u>School</u> %
Morning	22	10	19	12	21	31
Afternoon	23	20	20	21	18	26
Evening	29	51	37	41	25	16
Overnight	4	2	3	4	8	4
Various Times	20	15	19	20	26	21
DK/Refused	<u>2</u> 100%	<u>2</u> 100%	<u>2</u> 100%	<u>2</u> 100%	<u>2</u> 100%	<u>2</u> 100%
Number of Interviews	(997)	(205)	(145)	(145)	(96)	(665)

How Much Is Enough?

One-third of online users said they went online "yesterday" (32%). Among this group, one-half (50%) spent an hour or more online, and nearly one-fifth (17%) spent three or more hours online.

Most online users (61%) said they are currently spending about as much time online as they want to spend. But a sizeable minority (30%) would like to spend more. Only 7% said they spend too much time online. One-fifth (21%) of those who go online daily said they would like to go online more often. Those who go online only for work, or who go online as often as every day, are only a little more likely than the average online user to complain that they go online too much.

THE RIGHT AMOUNT OF TIME ONLINE?				
	<u>Online</u> <u>Ever</u> %	<u>Online</u> <u>Daily</u> %	<u>Online</u> <u>at least</u> <u>Weekly</u> %	<u>Online</u> <u>Less</u> <u>Than</u> <u>Weekly</u> %
Time Spent Online				
Too much	7	12	8	4
About right	61	64	63	55
Less time than want	30	21	27	37
DK/ Refused	<u>2</u>	<u>3</u>	<u>2</u>	<u>4</u>
Total	100%	100%	100%	100%
Number of Interviews	(997)	(259)	(741)	(236)

Online aficionados have observed that certain kinds of online activity can be addicting. While one-half said the longest time they spent online was either an hour (28%) or less (23%), some online users in the survey reported having engaged in marathon online sessions: 19% said they had spent four hours or more online in one stretch, and 9% had spent eight hours or more. Although women are less likely than men to be online users, female online users were just as likely as men to report having ever spent eight or more hours online in a single session.

Online Activity: Popular But Not Yet Indispensable

Commercial online information services are not yet playing to standing ovations, but at the same time, few subscribers said they are dissatisfied. Nearly four-in-ten (38%) of those who subscribe to an online service said they are "very satisfied" with it. Fifty-four percent were "fairly satisfied." Only 5% were "not too satisfied." Roughly one percent of subscribers were "not at all satisfied."

	<u>All Online Service Users</u> %	<u>AOL</u> %	<u>CompuServe</u> %	<u>Prodigy</u> %	<u>Direct Internet Provider</u> %
Very Satisfied	38	35	28	36	53
Fairly Satisfied	54	58	64	55	42
Not too Satisfied	5	5	4	5	1
Not at all Satisfied	1	1	2	0	2
DK/Refused	<u>2</u> 100%	<u>1</u> 100%	<u>2</u> 100%	<u>4</u> 100%	<u>2</u> 100%
Number of Interviews	(510)	(170)	(106)	(112)	(72)

One barrier to greater penetration of online services is undoubtedly the perception that they are hard to use. But among those who have taken the plunge, the vast majority described the services as at least easy to use. Over one-third (36%) said the services are "very easy" to use; 53% rated them as "fairly easy." Only 8% found them "fairly difficult" and only 2% "very difficult." However, there is room for improvement. Even among the most regular of online users -- those going online for some type of activity daily, and those who went online "yesterday" -- less than a majority described the online services as "very easy" to use.

EASE OF USING ONLINE SERVICES

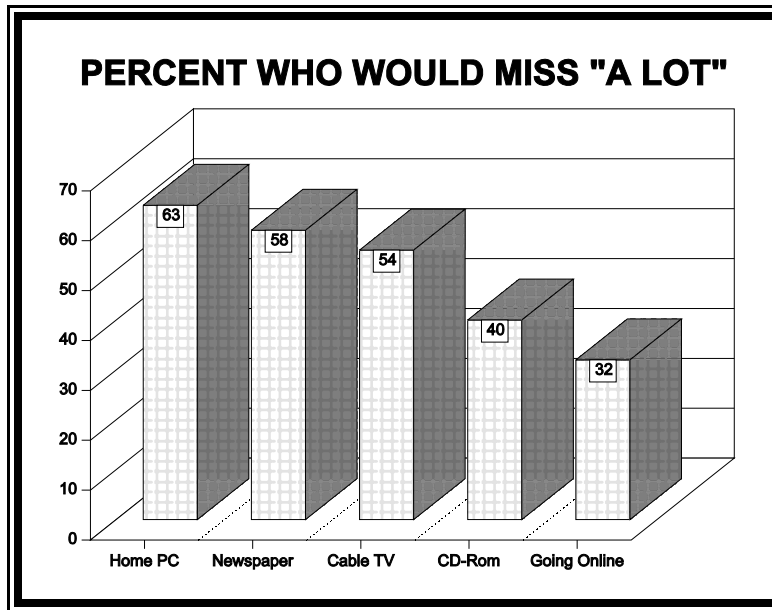
	<u>All Online Service Users</u> %	<u>AOL</u> %	<u>CompuServe</u> %	<u>Prodigy</u> %	<u>Direct Internet Provider</u> %
Very Easy	36	35	29	41	32
Fairly Easy	53	56	58	53	51
Fairly Difficult	8	7	9	4	13
Very Difficult	1	0	3	*	4
DK/Refused	<u>2</u> 100%	<u>2</u> 100%	<u>1</u> 100%	<u>2</u> 100%	<u>0</u> 100%
Number of Interviews	(510)	(170)	(106)	(112)	(72)

Seventy-one percent of those who use online services could name at least one specific aspect of their service that they liked: 21% said ease of usage; 15% mentioned the variety of information and activities; 17% cited e-mail or the World Wide Web; 25% mentioned a specific service or location. Dislikes were less frequent: 11% said their service was hard to use or confusing; 9% complained that the service was slow or that they had difficulty getting connected; 10% complained about the cost of the service; 19% had an idiosyncratic or specific complaint that could not be categorized. Over half (54%) had no specific complaints.

Among the three major online information services -- America Online, CompuServe, and Prodigy -- there were relatively minor differences in levels of satisfaction, perceptions of ease of use, and specific kudos and complaints. However, respondents who access the Internet directly were somewhat more likely to be very satisfied (53%).

Although online services are growing, most Americans who use them are paying less per month for the services than the average cable TV bill. Forty-six percent of online service subscribers said they pay less than \$15.00 monthly (including 12% who said their service is free), while another 21% pay between \$15.00 and \$25.00. Only 19% pay more than \$25.

Despite general satisfaction with online information services, online activity has not yet become an essential part of life for most Americans. Compared with using a personal computer at home or watching cable television, a smaller proportion of online users said they would miss going online if they no longer had access. Only 32% said they would miss this activity "a lot," 34% would miss it "some," 19% said "not much," and 14% said "not at all."



Among users of the commercial information services, the possibility of not being able to go online is less than upsetting. Four-in-ten Prodigy users would miss going online a lot, compared to roughly one-third of CompuServe and America Online users (37% and 34%, respectively). A somewhat greater proportion of those who use a Direct Internet Provider, however, said they would miss going online "a lot" (49%).

MISS GOING ONLINE

<u>Percent Miss</u>	<u>All Online Users</u>	<u>AOL</u>	<u>CompuServe</u>	<u>Prodigy</u>	<u>Direct Internet Provider</u>
A lot	32	34	37	40	49
Some	34	38	32	40	31
Not Much	19	19	24	11	11
Not at All	14	9	7	9	9
DK/Refused	1	0	*	0	0
Number of Interviews	(997)	(205)	(145)	(145)	(96)

Online activity is, of course, more important to those who engage in it regularly. Among individuals who use online services most days, a majority (53%) said they would miss online activity "a lot." But these users only constitute 3% of the American public.

Why users go online is not as strongly related to how much they would miss it as might be expected. Those whose online activity is either all work or all pleasure were only a bit more likely than other users to say they would miss going online "not much" or "not at all." In particular, those who go online only for pleasure were nearly half as likely as those who go online for work (all or mostly) to say they would miss it "a lot."

What Are Americans Doing Online?

The Times Mirror survey asked respondents about a wide range of online activities and tasks, measuring whether or not, and with what frequency, each is being done. Most of those who go online can be classified as regularly engaging in at least one activity, and many engage in several activities on a regular basis. Overall, three-fourths (75%) of respondents who ever go online said they perform at least one of the online activities at least once a week, and 52% do one or more activities at least three days a week.

ONLINE ACTIVITIES PERFORMED AT LEAST ONE DAY PER WEEK (among people who ever go online)

<u>ACTIVITY</u>	<u>%</u>
Send or receive e-mail	53
Conduct research or communicate with colleagues	41
Get news	30
Participate in discussions, forums, chat groups, etc.	23
Get entertainment information	19
Get financial information	14
Play games	7

The most common type of online activity is exchanging electronic mail (discussed in greater detail below). Over half (53%) of those who go online send or receive e-mail at least once a week. The next most frequent online activity is conducting research for school or work, or communicating with colleagues; 41% do so at least weekly, and 8% do it daily. Obtaining news online ranks third: 6% daily and 30% at least once a week. Communicating with other people through online forums, chat groups, electronic mail lists, and the like, is fourth: 4% daily, 23% weekly.

Nearly one-fifth (19%) go online weekly to gather information for hobbies, entertainment, and the like. Fourteen percent go online weekly to gather financial data or engage in online transactions such as stock purchases. Other online activities that were inventoried -- playing games, obtaining travel information, and engaging in political discussion -- are done regularly by fewer than 10% of online users. Fifteen percent of online users, incidentally, reported that they have ever expressed an opinion about a political or social issue online, and 4% had done so within the past week.

"Multitasking" Behavior

A substantial minority of online users (38%) say they engage in other activities while they are online, including:

- listen to music (10%)
- run other computer applications (9%)
- do paperwork (5%)
- watch TV (5%)
- talk on the phone (4%)
- read (3%)

People who say their online activity is either all work or all pleasure are less likely than other online users to report this type of multitasking behavior.

With respect to users of the three commercial services -- America Online, CompuServe, and Prodigy -- there were only minor differences in the frequency of engaging in online activities. Prodigy and America Online users are somewhat more likely than CompuServe users to participate in discussions, forums or chat groups (33% and 29% vs. 20% weekly) and to obtain entertainment-related information (32% and 30% vs. 24% weekly). Compared to users of the commercial services, however, respondents relying on a Direct Internet Provider are significantly more likely to report sending e-mail, as well as conducting research or communicating with colleagues.

FREQUENCY OF ONLINE ACTIVITIES

(Based on Online Users)

	All Online Users %	AOL %	CompuServe %	Prodigy %	Direct Internet Provider %
Send or Receive e-mail					
Daily	23	19	22	18	40
At Least Weekly	53	52	52	50	77
Conduct research for work/school or communicate with colleagues					
Daily	8	4	8	3	12
At Least Weekly	41	42	41	36	59
Get news on-line					
Daily	6	5	6	5	11
At Least Weekly	30	40	40	37	38
Participate in discussions, forums, chat groups					
Daily	4	3	6	5	11
At Least Weekly	23	29	20	33	39
Obtain entertainment-related information					
Daily	1	1	2	2	1
At Least Weekly	19	30	24	32	38
Obtain financial information					
Daily	3	4	8	5	0
At Least Weekly	14	21	29	26	19
Obtain travel information/services					
Daily	1	0	1	0	0
At Least Weekly	4	3	4	4	4
Play games					
Daily	1	0	1	2	1
At Least Weekly	7	10	6	11	13
Discuss politics/political activity					
Daily	*	0	0	0	1
At Least Weekly	4	6	4	5	10
Number of Interviews	(997)	(205)	(145)	(145)	(96)

Age and education are the two demographic factors that best distinguish who is doing what activities online. Compared to respondents over 30, younger people are more likely to participate in discussion lists, forums or chat groups (28% weekly), obtain entertainment-related information (25% weekly), and play games (28% ever). Those under 50 are also more likely than their counterparts to conduct research for work or school (44% vs. 30% weekly). By contrast, when the purpose is to obtain financial or travel information, respondents over 50 years are more active online.

For five online activities, education is strongly related to online activity. A higher proportion of college graduates than high school graduates go online to send or receive e-mail (29% vs. 22% daily), conduct research (46% vs. 35% weekly), obtain news (34% vs. 24% weekly), obtain travel information (29% vs. 21% ever), and discuss politics or engage in political activity (12% vs. 5% ever).

For the two most common online activities -- e-mail and conducting research for work or school -- there is no gender gap. However, men are more likely than women to go online for news (33% vs. 24% weekly), entertainment-related information (23% vs 12% weekly), and to discuss politics (12% vs. 6% ever). With respect to income, a greater number of the more affluent go online for e-mail (28% vs. 18% daily) and travel information (30% vs. 17% weekly), but this group is less likely to go online to play games (16% vs. 23% ever).

WHO DOES WHAT ONLINE?

Goes Online For . . .

	<u>E-mail Daily</u> %	<u>Research Weekly*</u> %	<u>News Weekly</u> %	<u>Forums, Chat Grps Weekly</u> %	<u>Enter- tainment Weekly</u> %	<u>Financial Info. Weekly</u> %	<u>Travel Info. Ever</u> %	<u>Games Ever</u> %	<u>Political Discussions Ever</u> %
Total	23	41	30	23	19	14	27	19	10
Sex									
Male	23	43	33	25	23	16	27	20	12
Female	24	38	24	20	12	11	26	18	6
Age									
Under 30	21	44	30	28	25	12	19	28	12
30-49	24	44	31	21	18	13	31	17	9
50+	26	30	26	16	10	22	29	7	8
Education									
College Grad+	29	46	34	20	17	18	29	12	12
Some College	18	41	27	22	22	8	29	22	11
High School Grad	22	35	24	27	21	12	21	29	5
Family Income									
\$50,000+	28	44	29	20	17	15	30	16	10
\$30,000-\$49,999	22	42	34	24	20	11	28	23	8
Under \$30,000	18	41	27	24	19	12	17	23	13
Region									
East	22	40	27	27	15	15	29	18	9
Midwest	18	40	22	19	17	10	21	19	11
South	26	42	32	22	19	15	28	20	9
West	26	42	33	23	23	14	26	20	10

*Weekly refers to respondents who said they engage in the activity either "daily," "3-5 days per week," or "1-2 days per week."

Whether or not people go online in search of companionship, new friendships are often made online. Nearly one-fourth (23%) of online users reported making a new online friend or buddy whom they have never met in person (six percent did so in the previous week). Younger respondents were more likely than others to report making friends online, but 14% of those 50 and older had also done so.

Working at Home

Technology makes working at home or having a home-based business more feasible and effective than ever before. Among all Americans, 18% said they do job-related work at home at least 1-2 days per week. Among the subset of people who go online from home, however, 40% work at home at least 1-2 days per week. And of all Americans, 29% said they never work at home; among home online users, only 14% never work at home.

This far greater tendency of online users to work at home seems largely a function of their higher levels of education and income, however, than of their capability to go online. Among the demographically equivalent group of non-online respondents, 34% work at home at least once a week.⁵ On the other hand, fully 43% said they never do so.

Online activity facilitates entrepreneurial activity. Among all respondents, 7% said they operate a home-based business (instead of or in addition to other jobs). But among home online users, twice this number (14%) have a home-based business.

One-third of employed respondents (33%) said they had worked at home at least one day during the week prior to the survey. Among home online users, however, over half (53%) had done so. Among all employed respondents, 13% had worked at home at least one day of the previous week instead of going to their regular work place; among home online users, 20% had done so.

⁵ As shown in this report, there are substantial demographic differences between online users and non-users. In an effort to distinguish between the impact of technology usage and demographics, a comparison group or "control sample" of demographic equivalents was created for the group of online users. The "control sample," which consists of respondents who do not go online, was statistically adjusted to match the profile of the user group on the important demographic characteristics of income, education, age, sex, race and region.

WORKING AT HOME

	---All Respondents---		---Employed Respondents---	
	<u>All</u> %	Online from <u>home</u> %	<u>All</u> %	Online from <u>home</u> %
Worked at home at least one day in past week INSTEAD of going to regular work place	9	18	13	20
Has home-based business	7	14	11	16
Did not work at home in past week	12	23	19	26
Never work at home	29	14	45	17
Worked at home at least one day in previous week	21	46	33	53
Typically works at home at least 1-2 days per week	18	40	28	47

Online News: Still Only a Supplement to the Mainstream News Media

Less than 1% of American adults get their news online daily, and 4% do so at least weekly. But among online users, 6% get it this way daily and 30% at least weekly. Even among those who go online for news daily, only 18% said that online sources have supplanted traditional media as their main source of news. Among those who go online for news at least weekly, 87% said they still obtain more of their news by traditional print or broadcast.

The online services are obviously an important conduit for obtaining online news: among users of these services, 36% said they obtain news online at least once a week, compared to 23% of non-users.

Despite its potential for changing the way news is delivered, the vast majority (76%) of those who go online for news at least weekly said that online news reading has not yet affected their use of traditional news outlets. Among the rest, 12% said they are using other outlets less, but 4% are using other outlets *more*.

Most of those who go online at least weekly to get news said they take advantage of a powerful feature: the capacity to clip and save articles easily. Seventy-one percent said they find it easy to do this; only 8% said it's hard (18% have never done it). The ease of clipping online news may be promoting sharing of information and discussion about things in the news. Over one-third of all online users (35%) said they have received an electronic news clipping or story from a friend or associate online, and 8% said this has happened within the previous week.

	All Respondents %	Online Users %
Every day	1	6
At least weekly	4	30
Once every few weeks or less	5	41
Never	4	29
Don't know, refused	*	*
No PC or does not go online	86	-
Number of interviews	(3603)	(997)

<i>Obtain More of News:</i>	<u> </u> %
Online	8
Traditional print or broadcast	87
Equal	4
Don't know/Refused	<u> </u> 100%
<i>Since Started Going Online for News, Use Other Sources of News...</i>	
More often	4
Less often	12
Some more/some less	8
About the same	76
Don't know/Refused	<u> </u> 100%
Number of interviews	(297)

Online users are heavier consumers of print journalism and other news media than are those who don't go online. Sixty-two percent of people who go online said they read a daily newspaper the day before the survey, compared with only 50% of the rest of the sample. Similarly, 42% of online users reported reading a magazine yesterday, compared to 29% of non-users. Online users are 11 percentage points more likely than non-users to say they are regular listeners to radio news, but are slightly less likely to be regular viewers of television news. Some of the difference in media habits between online users and non-users is due to demographic differences between the two groups (e.g., education and income), but much of it is not. Those who go online are more likely to use a variety of media to keep up with the world around them, compared to their non-user demographic equivalent who are similar to them in education, age, income, sex, race, and place of residence.

	Online user %	Non- user %	Non-user demographic equivalent %
Read newspaper regularly	74	65	68
Read newspaper yesterday	62	50	53
Listen to radio news regularly	59	48	54
Listened to radio news yesterday	51	42	49
Read magazine yesterday	42	29	33

Electronic Mail

Very few online activities are engaged in every day by more than a scattering of users, but electronic mail is the exception. Almost one-fourth of online users (23%) said they send or receive e-mail daily, 15% do so 3-5 days per week, and 15% do so 1-2 days per week. In all, over half of all online users (53%) use e-mail at least weekly. Only 28% said they never use e-mail.⁶ Among e-mail users, over half (51%) said they check their e-mail every day (22% check several times a day).

⁶ E-mail use nationwide is probably more extensive than the survey indicates in that only those respondents who qualified as "online users" (by saying that they connected with online services, bulletin boards, or computers at other locations) were asked about the use of e-mail. Many other respondents may have used e-mail at work but engaged in none of the other online activities required to be considered online users in this study.

Regular e-mail users constitute about 7% of the adult population in the U.S. Daily users are about 3% of the population, though 5% of the survey's respondents said they check their e-mail daily. Another 2% said they use e-mail infrequently.

About one-fourth of online users (27%) said they had sent or received e-mail the day before the survey. The vast majority of these individuals (72%) had both sent and received e-mail; of the rest, 17% had *only received* and 11% had *only sent* e-mail. About half of those who sent e-mail the day before the survey sent three or fewer messages (55%). Thirty-seven percent sent five or more messages, and about 10% sent 20 or more messages. Respondents reported receiving more e-mail than they sent. Among those who had gotten any e-mail, 43% had received three or fewer messages. One-third had gotten 10 or more messages, and about 12% had received 30 or more.

Consistent with most other aspects of online activity, the boundaries between work and play for e-mail are indistinct. About one-third of those who use e-mail (31%) said it's strictly for work, 30% said only for personal matters, and 38% said for both. Over half of all e-mail users -- about 5% of all Americans -- said they use it to communicate with family or friends.

Among those who use it only for business, 40% said they sent or received e-mail "yesterday." Among those for whom it is only for personal communications, 19% had used it "yesterday." And among those who use it for both business and personal reasons, nearly half (49%) had sent or received e-mail "yesterday."

Fully two-thirds (67%) of those who go online from both home and work or school use e-mail at least weekly, compared to 54% who go online from work or school only and 41% who go online from home only. Respondents who work at home also tend to rely more heavily on e-mail. One-third (32%) of those who usually work at home at least 1 or 2 days per week use e-mail daily, compared to only 19% of those who never work at home.

HAVE YOU CHECKED YOUR E-MAIL TODAY?

- 7% of Americans use e-mail at least once a week, and 5% say they check their e-mail every day.
- 3% sent or received e-mail yesterday.
- 5% say they use e-mail to communicate with family and friends.

E-mail is not simply a more convenient or efficient way to communicate. Many experts feel it has the potential to affect the culture of a work place, and perhaps to increase or improve communication among families and friends. E-mail users in the survey tended to agree with these notions. Among respondents who used e-mail for work-related communication, 69% felt that "people in upper or lower levels of organizations communicate with one another" more often because of the availability of e-mail. Only 25% felt that e-mail had made no difference in this respect, and almost no one (2%) thought e-mail reduced the amount of communication between levels. Furthermore, more than one-third (36%) of e-mail users felt this medium made exchanges between levels more candid, 51% said it made no difference, and 8% said less frank. Women (41%) were more likely than men (33%) to feel that e-mail made exchanges more frank (as well more frequent within an organization). Not surprising in view of these attitudes, there is no noticeable gender gap in e-mail use.

E-MAIL IS CHANGING WORK PLACE AND PERSONAL COMMUNICATION				
Effect of e-mail on communication between upper and lower levels of organizations (among those who use e-mail at their work place):				
	All Online			
	<u>Users</u>	<u>Men</u>	<u>Women</u>	
	%	%	%	
<i>Communicate:</i>				
More often	69	65	76	
Less often		2	2	2
No difference	25	29	17	
Don't know/Refused	4	4	4	
Number of interviews	(505)	(321)	(184)	
Effect of e-mail on respondent's frequency of communication with family and friends (among those who use e-mail for this purpose)				
	All Online			
	<u>Users</u>	<u>Men</u>	<u>Women</u>	
	%	%	%	
<i>Communicate:</i>				
More often	59	56	65	
Less often		1	1	1
No difference	40	43	34	
Don't know/Refused	*	*	0	
Number of interviews	(411)	(267)	(144)	

E-mail users who said they communicate with family and friends also find a benefit. Fifty-nine percent said they communicate more often with e-mail than they did without it, and hardly anyone said e-mail has reduced their frequency of communication. As with communication in the work place, women were somewhat more likely than men (by a margin of 65% to 56%) to say that the use of e-mail had increased their frequency of communication with friends and relatives.

E-Mail Lists: Communicating One-to-Many and Many-to-One

Online discussions take many forms, from the real-time chat rooms featured by the commercial online services to the USENET news groups, which are the Internet equivalent of the grocery store corkboard where people can post notices, questions, and comments. Another means of online discussion is the "listserv list," an electronic list of individuals which allows members to send an e-mail message to everyone on the list by simply mailing it to the computer that keeps the list. Listserv lists are very popular among professionals and academics, who use them to quickly disseminate information of mutual interest, but the topics of listservs are by no means limited to scholarly or business matters. The survey found that 17% of online users subscribe to at least one listserv list. Forty percent of those who subscribe are on three or more lists.

A SAMPLING OF LISTSERV LISTS REPORTED BY RESPONDENTS

David Letterman's daily Top Ten List
Entrepreneurism in Eastern Europe
"Word of the Day" (inspirational)
Flower arranging in the home
The American Vacuum Society
Water and sewer maintenance
Alumni of a high school
German science fiction
Unitarian universalism
British sports cars
Horseback riding
Indian artifacts
Rollerblading
Rare books
Graveyards
Firearms
Jokes
Dogs

Survey respondents reported an amazing range of lists to which they subscribed -- graveyards, guns, daily scriptures, sewing, the David Letterman Top Ten List (e-mailed daily to thousands of subscribers).

The Electronic Bazaar: No Threat Yet to the Local Mall

One of the visions driving the growth of online services is the prospect that purchasing goods and services online may be easier, more convenient, and perhaps more enticing than going to a store, using a catalog, or even using the home shopping channels on television. Thus far, only a tiny percentage of all Americans has purchased anything online (just 1% reported doing so within the past month), although as with other findings of the survey, even small percentages can translate into millions of people. Among online users, 3% said they made a purchase through online services within the previous week, and an additional 5% had done so within the previous month.

Most online purchases (90%) were made with credit cards, but little concern was found regarding card number security. Forty-two percent said they were "not at all" concerned, 40% were concerned "a little" and 17% said they worried "a lot" about the risk inherent in this procedure.

The World Wide Web: A Coming Attraction, Not Yet Arrived

While not all online activity involves the Internet, much of it does, and most of the news coverage about going online highlights the Internet. Consequently, it is not surprising that public awareness of the Internet has grown dramatically. One-third of all respondents (34%) described the Internet as "the information superhighway" or as a computer network. Another 21% knew the Internet involved computers. Among online users, 71% were generally correct in describing the Internet while only 9% said they had never heard of the Internet or could not describe it.

But while most Americans were at least vaguely aware of the Internet, only a small fraction -- 8% in the survey -- had ever heard of the World Wide Web and only 3% has actually used it. Awareness of the Web is, of course, higher among online users, with 60% reporting that they had heard of it. But only a fifth (21%) of online users said they had ever used the Web. Six percent of online users said they had used the Web "yesterday," and another 6% had done so during the past week. Among online users, men are twice as likely as women to use the Web (26% versus 13%). In addition, those who are white (22%), under 50 years of age (23%), and college educated (28%) are more likely than their counterparts to use the Web. As one might expect, the type of equipment in the home is related to familiarity with and use of the Web. For example, more than one-half of survey respondents whose machines are equipped with a higher speed modem use the Web (53%), compared to only one-quarter of those with lower speed modems (27%).

USE OF THE WORLD WIDE WEB

	<u>Ever Heard of the Web</u> %	<u>Ever Use the Web</u> %	<u>Used the Web Yesterday</u> %	<u>Number of Interviews</u>
Total Respondents	8	3	1	(3603)
Online Users	60	21	6	(997)
<i>Sex</i>				
Men	67	26	9	(616)
Women	49	13	1	(381)
<i>Race</i>				
White	62	22	6	(824)
Black	36	9	2	(59)
Hispanic	40	6	2	(79)
<i>Age</i>				
Under 30	58	25	6	(342)
30-49	61	21	7	(497)
50+	63	13	4	(141)
<i>Education</i>				
College Grad. +	71	28	8	(531)
Some College	57	19	3	(277)
High School Grad. (170)		45	11	5
<i>Income</i>				
\$50,000+	63	21	7	(429)
\$30,000 - \$49,999	59	23	8	(255)
\$20,000 - \$29,999	49	17	3	(108)
Less than \$20,000	57	24	2	(74)
<i>Type of Equipment in the Home</i>				
Mac	69	29	9	(129)
IBM	66	24	7	(638)
486 CPU or Pentium	71	29	10	(418)
386 or lower CPU	64	18	4	(165)
14400 or 28800 modem speed	87	53	22	(249)
9600 or lower modem speed	66	27	4	(273)

Web users find several different ways to gain access to the Web. About one-third each cited a connection at work (34%) or through an online service (33%), and nearly one-fourth each cited a school connection (24%) or a direct dialup connection (23%).

Web sites are proliferating rapidly, with dozens of new ones appearing daily. How do Web users keep up with the changing landscape? Nearly half said they find new sites using the Web as it's designed: using the embedded references to surf from site to site (49%).⁷ Thirty-six percent said they get tips on new sites from friends and relatives, while about one-fourth each rely on magazines and newspapers (24%) or directories of the Internet (23%). With such a rapidly moving phenomenon as the Web, it is no surprise that books were cited as sources of Web sites by only 6% of those who had used it.

Web users understandably prefer old sites to new sites. Fully 40% said they tend to go back to old favorites, compared to 17% who usually go to new sites. A large minority visit both old and new sites (38%).

USENET News Groups: Bulletin Boards to the World

An old but very functional corner of the Internet is the collection of "USENET news groups" -- a vast array of special interest bulletin boards accessible through virtually any connection to the Internet. "News groups" deal with almost every conceivable topic, from cats to catamarans. Half of online users say they have heard of USENET news groups. Only 15% said they visit a group regularly, but of them, most visit four or fewer groups.

Social Profile of Online Users: Much Like Everyone Else

As described earlier, people who go online are better educated and younger than the public at large, but in most other respects they are quite similar. In terms of social contact they are nearly indistinguishable from non-users. Fifty-seven percent of online users said they called a friend or relative yesterday just to talk; 56% of non-users did so. Similarly, 72% of online users visited with family or friends yesterday, compared with 68% of non-users. Online activities provide a supplement but not a substitute for these traditional social activities.

Online users are also much more likely than non-users to go to the movies. Forty-nine percent report going at least once a month, compared with only 28% of non-users. Some, but not all, of this difference can be attributed to the fact that online users are younger than non-users, and younger people go out to movies more frequently than older ones. However, even among the demographically balanced group of non-users, 40% go out to the movies at least monthly, 9 percentage points below the rate for online users.

⁷ Much as last year's Times Mirror technology survey found women much less likely than men to "channel surf" with the television remote control, female Web users are less likely to "surf" the Web in search of new sites.

Online users are less likely to say they feel overloaded with information. Nearly one-fourth of non-users (24%) said they feel overloaded, compared to 16% of online users. Fully 76% of online users liked having so much information available, compared to 62% of non-users.

	All <u>Respondents</u> %	Online <u>Users</u> %	Non- <u>users</u> %	Non-user <u>Demographic</u> <u>Equivalent</u> %
Feel overloaded with information	23	16	24	20
Like computers and technology	64	89	59	71
Worry a lot or some that computers invade your privacy	50	44	51	50
Visited with family or friends yesterday	69	72	68	70
Called a friend or relative yesterday just to talk	56	57	56	55

Feelings About Technology

Most Americans (64%) like technology and computers, 4% dislike them, and 24% have mixed feelings. Among online users, opinions are even more favorable: 89% like computers and technology, 1% dislike them, and 10% have mixed feelings.

A major fear of Americans about technology is the potential loss of privacy amid the powerful array of interconnected databases holding information about them. Half of all respondents expressed at least some uneasiness about privacy in the computer age: one-fifth (20%) said they worry "a lot" about this, while 30% worry "some." Online users were somewhat less concerned, with 12% expressing "a lot" of worry and 32% saying they worry "some" about it. People who go online from home are, in turn, less concerned than those who do so only at school or work (10% vs.16% worry "a lot").

Political Profile of Online Users

Online users tend to be more liberal than non-users on some types of issues and not much different on others. Despite their generally higher level of affluence they are not more conservative. But on issues where more education usually results in people being more liberal, online users are more liberal than non-users of the same level of education.

In terms of party identification and voting behavior in the 1992 and 1994 elections, online users are nearly indistinguishable from non-users. However, compared with the demographically balanced group of non-users, online users are more likely to have voted for

Bill Clinton in 1992 (44% vs. 39%) and for the Democratic House candidate in 1994 (43% vs. 37%). The "hard core" Internet users (i.e., those with direct connections) are no more likely than online users as a whole to identify with the Democratic party; however, they showed the strongest levels of support for Clinton in 1992 and for the Democratic House candidate in 1994 (53%).

PARTY IDENTIFICATION AND VOTING BEHAVIOR					
	<u>All Respondents</u> %	<u>Online Users</u> %	<u>Direct Internet Users</u> %	<u>Non User</u> %	<u>Non-user Demographic Equivalent</u> %
<i>Party Identification</i>					
Republican	31	32	26	31	34
Independent	40	43	48	40	41
Democrat	29	25	26	29	25
<i>1992 Presidential Vote (among voters)</i>					
Clinton	45	44	53	45	39
Bush	38	37	27	38	41
Perot	17	18	15	17	20
<i>1994 House Vote (among voters)</i>					
Republican	54	55	43	54	60
Democrat	44	43	53	44	37
Other	2	2	4	2	3

On social issues, online users, and particularly "hard core" Internet users, are much more likely than other citizens to express tolerant or liberal attitudes. Only 24% of online users agreed that "books that contain dangerous ideas should be banned from public school libraries." Among non-users, 45% felt this way. This difference was not simply a function of the higher educational level of online users: even among citizens of comparable educational achievement, online users are more willing to let libraries carry any books they chose.

Online users are more tolerant of pornography on the Internet than were non-users, but not nearly so tolerant as the "hard core" Internet users. Only one-quarter of the "hard core" group favor banning pornography from computer networks, compared with 42% of online users and 53% of non-users. Among better educated respondents (those who have attended at least some college), online users are substantially more tolerant than non-users.

Similarly, online users are more accepting of homosexuality as a way of life. Fifty-eight percent said that homosexuality should be accepted by society, while 43% of non-users felt this way. And at each level of education, online users are more likely than non-users to express this liberal opinion.

POLITICAL ATTITUDES					
	<u>All Respondent</u> %	<u>Online Users</u> %	<u>Direct Internet Users</u> %	<u>Non-User</u> %	<u>Non-user Demographic Equivalent</u> %
Books that contain dangerous ideas should be banned from public school libraries OR Public school libraries should be allowed to carry any books they want	42 53	24 73	16 80	45 50	34 62
Homosexuality is a way of life that should be accepted by society OR Homosexuality is a way of life that should be discouraged by society	45 47	58 36	54 40	43 48	50 43
Favor or oppose a law that would make it illegal for a computer network to carry pornographic or adult materials.					
Favor	52	42	27	53	50
Oppose	41	52	70	39	43

But contrary to some other stereotypes, online users do not appear to be significantly more secular or pro-welfare than non-users:

- While they appear to be less religious -- 19% said they have no religious preference compared to 10% of non-users -- the demographically-balanced group of non-users includes 13% who professed no religion.

- Online users are 5 percentage points less likely than non-users to say that the government should do more for the needy even if it means going deeper into debt. But this difference disappears when online users are compared to the demographically-balanced non-user sample.

- But online users favor regulation more than non-users. Half of the online group felt that regulation of business is necessary to protect the public; only 41% of non-users agreed.

POLITICAL ATTITUDES					
	<u>All Respondents</u>	<u>Online User</u>	<u>Direct Internet User</u>	<u>Non-User</u>	<u>Non-User Demographic Equivalent</u>
	%	%	%	%	%
Most elected officials care what people like me think OR Most elected officials DON'T care what people like me think	30 65	34 63	31 68	29 66	33 64
The government should do more to help needy Americans, even if it means going deeper into debt OR The government today can't afford to do much more to help the needy	47 45	43 50	48 47	48 44	43 51
Government regulation of business is necessary to protect the public interest OR Government regulation of business usually does more harm than good	42 48	50 46	47 50	41 48	45 48
There is simply no excuse for the Oklahoma City bombing, period OR There is no excuse for the bombing, but one can understand the frustrations and anger that may have led people to carry it out	84 14	85 14	77 20	83 14	85 13

Overall, the survey finds that online users are no different from other Americans in their unconditional condemnation of the Oklahoma City bombing. Eighty four percent of all respondents said there was "simply no excuse for the bombing, period;" 14% said that, while there was no excuse, "one could understand the frustrations and anger that may have led people to carry it out." Online users are indistinguishable from other respondents on this question.

However, looking at all online users as a whole masks important inter-group differences. Among those who participate in political discussion online, 21% are understanding toward the bombers, compared to 13% of non-participants. And among those who communicate most frequently (i.e., at least weekly) through online forums, discussion lists or chat groups, 19% are understanding compared to 12% of those who never took part in such activities.

OKLAHOMA CITY AND THE INTERNET				
	<u>No Excuse for Bombing</u> %	<u>No Excuse, But Can Understand Frustration</u> %	<u>Don't Know</u> %	<u>Number of Interviews</u> %
All Respondents	84	14	2	(3603)
Online Users	85	14	1	(997)
Online users who participate in online discussions about politics/ political activity				
Yes	79	21	0	(100)
No	86	13	1	(894)
Online users who communicate through online forums, discussion lists, or chat groups				
At Least Weekly	80	19	1	(216)
Once every few weeks	84	14	2	(122)
Less Often	91	8	1	(95)
Never	87	12	1	(558)

Finally, online users are somewhat more likely than non-users to report having voted in 1992 and 1994. In 1992, 71% of online users said they had voted, compared with 65% among non-users. In 1994, 53% said they were "absolutely certain" they had voted, whereas 45% of non-users said this. In part, the greater likelihood of voting by online users is a function of their higher education and income levels, which correlate with higher voter turnout. But another factor -- age -- serves to mask how strongly online use and turnout are related. Older citizens are more likely than younger ones to vote, but are far less likely to be online users. When we compare the turnout of online users and non-users among people of

PERCENT WHO VOTED IN 1994		
	<u>ONLINE USERS</u> %	<u>NON-USERS</u> %
All	52	45
Age 18-29	32	15
30-49	58	46
50-64	80	58
65 and older	*	61
* Too few cases for reliable estimation.		

similar ages, we see that the online users, especially the younger ones, are consistently more likely to have voted.

SURVEY METHODOLOGY

ABOUT THE SURVEY

The Times Mirror Survey of Technology results are based on telephone interviews conducted under the direction of Princeton Survey Research Associates among a nationwide sample of 3,603 adults, 18 years of age or older, and an oversample of 402 adult online users, during May and June of 1995. For results based on the total adult sample (N=3603), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2 percentage points. For results based on online users (N=997), the margin of error is plus or minus 3 percentage points.

SURVEY SAMPLE DESIGN

Questionnaire Design

The survey instruments for this survey were developed by Times Mirror in consultation with a wide range of specialists in emerging technologies, the mass media, and consumer behavior. An extensive review of past surveys on technology was also made. The questionnaire from Times Mirror's 1994 Technology study was used as a benchmark in the design of this questionnaire. Since this 1994 questionnaire had been given an extensive multi-stage pretest with over 100 respondents, the focus of the pretesting in this 1995 study was concentrated on the new sections dealing with the World Wide Web, e-mail and other online topics, and on the screener questions used to determine if the respondent was an online user, for oversampling purposes.

Sample Design

The designed sample is a random digit sample. The random digit aspect of the sample is used to avoid "listing" bias. According to the most recent estimates from the Bureau of the Census, there are approximately 96 million households in the United States, and just over 95% of them contain one or more telephones. Telephone directories only list about 73% of such "telephone households" and numerous studies have shown that households with unlisted telephone numbers are different in several important ways from listed households. Moreover, nearly 15% of listed telephone numbers are "discontinued" due to household mobility and directory publishing lag, and it is reasonable to assume that a roughly equal number are working residential numbers too new to be found in published directories.

In order to avoid these various sources of bias, a random digit procedure designed to provide representation of both listed and unlisted (including not-yet-listed) numbers is used. The design of the sample ensures this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange (the first three digits of a seven digit telephone number), and bank number (the fourth and fifth digits).

The selection procedure produces a sample that is superior to random selection from a frame of listed telephone households, and the superiority is greater to the degree that the assignment of telephone numbers to households is made independently of their publication status in the directory. That is, if unlisted numbers tend to be found in the same telephone banks as listed numbers and if, in general, banks containing relatively few listed numbers also contain relatively few unlisted numbers, then the sample that results from the procedure described below will represent unlisted telephone households fully as well as it represents listed households. Random number selection within banks ensures that all numbers within a particular bank (whether listed or unlisted) have the same likelihood of inclusion in the sample, and that the sample so generated will represent listed and unlisted telephone households in the appropriate proportions.

The first eight digits of the sample telephone numbers (area code, telephone exchange, and bank number) are selected so that they are proportionately stratified by state, county, and telephone exchange within county. That is, the number of telephone numbers randomly sampled from within a given exchange is proportional to that exchange's share of listed telephone households in the set of exchanges from which the sample is drawn.

Only working banks of telephone numbers are selected. A working bank is defined as 100 contiguous telephone numbers containing three or more residential listings. By eliminating non-working banks of numbers from the sample, the likelihood that any sampled telephone number will be associated with a residence increases from only 20% (where all banks of numbers are sampled) to between 60% and 70%.

Survey Procedures

The sample was released for interviewing in replicates. Using replicates to control the release of sample to the field ensures that the complete call procedures are followed for the entire sample and ensures an appropriate number of completed interviews from each strata. Again, this works to increase the representativeness of the final sample.

At least six attempts were made to complete an interview at every sampled telephone number. The calls were staggered over times of day and days of the week to maximize the chances of making a contact with a respondent. In each contacted household in the general population adult sample, interviewers asked to speak with the "youngest male 18 or older who is at home". If there was no eligible man at home, interviewers asked to speak with "the oldest woman 18 or older who lives in the household".

For the online users sample, interviewers used the general adult sample introduction and then took the respondent through a screening interview to determine if the respondent was an online user. Respondents who were qualified were then taken through the same questionnaire as the general population sample.

Weighting

Non-response in telephone interview surveys 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. For example, men are more difficult than women to reach at home by telephone, and people with relatively low educational attainment are less likely than others to agree to participate in telephone surveys. In order to compensate for these known sources of bias, the sample data for this survey are weighted in analysis. Demographic weighting was used to bring the characteristics of each of the samples into alignment with the demographic characteristics of the relevant population.

Adult Sample Weighting

The demographic weighting parameters for this sample are derived from a special analysis of the most recently available Census Bureau Annual Demographic File (from the March 1993 Current Population Survey). This analysis produced population parameters for the demographic characteristics of Continental US telephone households with adults 18 or older, which are then compared with the sample characteristics to construct sample weights. The sample is weighted on the distributions of age by sex, education by sex, age by education, race and region.

The weights are derived using an iterative technique that simultaneously balances the distributions of all weighting parameters.

Online User's Weighting

The demographic weighting parameters used for the online users oversample are the demographics of the **weighted** online users in the general population adult sample. The demographics used were age, sex, race, education, and region.

The weighted oversample of online users was then combined with the weighted online users from the general population adults sample with one final adjustment to ensure that the general population online users and the oversample online users were in their correct proportion relative to one another.

STATISTICAL ANALYSES

Online Users versus Non Users Analysis

Online users and non-users differ on several dimensions such as social involvement, time spent in various activities and political knowledge. However, differences between users and non-users are also evident for numerous demographics - users tend to be higher income, higher education, more likely to be male and more likely to be young. A special analysis was conducted to compare these two groups (users and non-users) while holding constant the effects of demographic differences between them. The analysis was designed to answer this question: if non-users looked, demographically, like users would there still be differences between the two groups on the other dimensions listed above or would these differences disappear when the two groups were demographically balanced?

The analyses involved the calculation of a second stage weight. The non-users (weighted as described above) were additionally weighted to bring their aggregate demographic composition into alignment with the demographics of the online users (also weighted as described above). The variables used in this weighting were age, sex, race, education, income and region.

The effect of this second stage weight was to demographically balance these two groups to remove the effects of certain demographic differences between them.

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THE QUESTIONNAIRE

**TIMES MIRROR CENTER FOR THE PEOPLE AND THE PRESS
TECHNOLOGY AND ON-LINE USE 1995
TOPLINE**

GENERAL POPULATION: N = 3603
OVERSAMPLE OF ONLINE USERS: N=997

GENERAL POPULATION INTERVIEW DATES: May 25 - June 22, 1995
OVERSAMPLE INTERVIEW DATES: May 25 - June 27, 1995

INTRODUCTION: Hello, I am _____ calling for the Princeton Survey Research Associates from Princeton, New Jersey. We are conducting a telephone opinion survey for leading newspapers and tv stations around the country. I'd like to ask a few questions of the youngest male, 18 years of age or older, who is now at home (IF NO MALE, ASK: May I please speak with the oldest female, 18 years of age or older, who is now at home?)

**SECTION I - OLD BEHAVIORS
MY FIRST QUESTION IS...**

Q.1 Do you happen to read any daily newspaper or newspapers regularly, or not?

		<u>March 1995</u>	<u>Oct 1994</u>	<u>July 1994</u>	<u>Feb 1994</u>	<u>Jan 1994</u>	<u>June 1992</u>	<u>July 1991</u>	<u>May 1991</u>	<u>Jan 1991</u>	<u>Nov 1990</u>	<u>Oct 1990</u>	<u>July 1990</u>	<u>May 1990</u>
66	Yes	71	73	74	70	71	75	73	70	72	74	72	71	71
34	No	29	27	26	30	29	25	27	30	27	26	28	29	29
<u>*</u> <u>100</u>	DK	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>0</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>1</u> <u>100</u>	<u>0</u> <u>100</u>	<u>0</u> <u>100</u>	<u>0</u> <u>100</u>	<u>0</u> <u>100</u>

Q.2 Do you happen to watch any TV news programs regularly, or not?

		<u>March 1995</u>	<u>Oct 1994</u>	<u>July 1994</u>	<u>Feb 1994</u>	<u>Jan 1994</u>	<u>June 1992</u>	<u>July 1991</u>	<u>May 1991</u>	<u>Jan 1991</u>	<u>Nov 1990</u>	<u>Oct 1990</u>	<u>July 1990</u>	<u>May 1990</u>
78	Yes	82	81	81	84	85	85	84	84	88	80	81	81	80
22	No	18	19	19	16	15	15	16	16	12	20	19	19	20
<u>*</u> <u>100</u>	DK	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>0</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>*</u> <u>100</u>	<u>0</u> <u>100</u>	<u>0</u> <u>100</u>	<u>0</u> <u>100</u>

Q.3 Do you listen to the news on the radio regularly or not?

		<u>March</u> <u>1995</u>	<u>Oct</u> <u>1994</u>	<u>July</u> <u>1994</u>	<u>Feb</u> <u>1994</u>	<u>Jan</u> <u>1994</u>	<u>June</u> <u>1992</u>	<u>July</u> <u>1991</u>	<u>May</u> <u>1991</u>	<u>Jan</u> <u>1991</u>	<u>Nov</u> <u>1990</u>	<u>Oct</u> <u>1990</u>	<u>July</u> <u>1990</u>	<u>May</u> <u>1990</u>
50	Yes	54	51	52	53	52	54	53	53	55	55	54	55	56
50	No	46	49	48	47	48	46	47	47	45	45	46	45	44
$\frac{*}{100}$	DK	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{0}{100}$	$\frac{0}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{*}{100}$	$\frac{0}{100}$	$\frac{*}{100}$

Q.4 How often if ever do you go out to the movies? **(DO NOT READ CHOICES. PROBE FOR APPROPRIATE CATEGORY.)**

		<u>Feb</u> <u>1994</u>
6	About once a week, or more often	6
10	About once every few weeks	9
15	About once a month	16
15	About once every few months	17
14	Less often	11
40	Hardly ever or never	41
$\frac{*}{100}$	DK/Refused	$\frac{*}{100}$

I'd like to ask you a few questions about how you spent your day yesterday...

INTERVIEWER NOTE: FOR QUESTIONS Q.5 and Q.5a PLEASE DETERMINE WHAT DAY OF THE WEEK IT IS. IF THE DAY OF THE WEEK IS SUNDAY, PLEASE READ "FRIDAY". IF THE DAY IS NOT SUNDAY, READ "YESTERDAY".

Q.5 Did you get a chance to read a daily newspaper yesterday or not?

IF RESPONDENT ANSWERED '1' YES, READ NEWSPAPER IN Q.5 ASK:

Q.5a About how much time did you spend reading a daily newspaper yesterday?
(DO NOT READ)

		March <u>1995</u>	Feb <u>1994</u>	Jan <u>1994</u>	March <u>1991</u>	Gallup <u>1965</u>
52	Read the paper	45	58	49	56	71
	7 Less than 15 min.	9	7	7	n/a	n/a
	15 15-29 min.	14	15	15	n/a	n/a
	18 30-59 min.	16	21	17	n/a	n/a
	11 1 hour or more	6	14	10	n/a	n/a
	1 Don't know	0	1	*	n/a	n/a
48	Didn't read paper	55	42	50	44	29
<u>*</u>	Don't know	<u>*</u>	<u>0</u>	<u>1</u>	<u>*</u>	<u>0</u>
100		100	100	100	100	100

BASED ON RESPONDENTS WHO REGULARLY READ DAILY NEWSPAPER:

Q.5b How much would you miss reading the newspaper, if newspapers were no longer available? (READ CATEGORIES)

		Feb <u>1994</u>
58	A Lot	67
27	Some	21
10	Not much	8
4	Not at all	4
<u>1</u>	Don't know/Refused	<u>*</u>
100		100
(N=2455)		(N=2705)

Q.6 Did you watch the news or a news program on television yesterday or not? **(DO NOT READ)**
IF RESPONDENT ANSWERED '1' YES, WATCHED IN Q.6 ASK:

Q.6a About how much time did you spend watching the news or any news programs on TV yesterday?

		March <u>1995</u>	Feb <u>1994</u>	Jan <u>1994</u>	March <u>1991</u>	Gallup <u>1965</u>
64	Watched TV News	61	74	72	68	55
	3 Less than 15 min.	4	3	3	n/a	n/a
	8 15-29 min.	9	8	8	n/a	n/a
	24 30-59 min.	21	25	25	n/a	n/a
	28 1 hour or more	27	37	36	n/a	n/a
	1 Don't know	*	1	*	n/a	n/a
35	Did not watch	38	26	27	32	45
<u>1</u> 100	Don't know	<u>1</u> 100	<u>0</u> 100	<u>1</u> 100	<u>*</u> 100	<u>0</u> 100

Q.7 Apart from news did you watch anything else on television yesterday or not? **(DO NOT READ)**
IF RESPONDENT ANSWERED '1' YES, WATCHED IN Q.7 ASK:

Q.7a About how much time did you spend watching TV yesterday, not including the news?

		Feb <u>1994</u>
59	Yes	69
	1 A half hour or less	2
	4 Thirty minutes to less than one hour	3
	10 About an hour or more	11
	6 More than one hour but less than two hours	7
	16 Two hours to less than three hours	19
	10 Three hours to less than four hours	12
	11 Four or more hours	14
	1 Don't know how long	1
40	Did not watch	31
<u>1</u> 100	Don't know	<u>0</u> 100

Q.8 About how much time, if any, did you spend listening to any news on the radio yesterday or didn't you happen to listen to the news on the radio yesterday?

		<u>March</u> <u>1995</u>	<u>Feb</u> <u>1994</u>	<u>Jan</u> <u>1994</u>	<u>March</u> <u>1991</u>	<u>Gallup</u> <u>1965</u>
42	Yes, listened	47	47	47	44	58
	13 Less than 15 min.	16	14	15	n/a	n/a
	9 15-29 min.	12	11	10	n/a	n/a
	9 30-59 min.	9	9	10	n/a	n/a
	11 1 hour or more	10	13	12	n/a	n/a
56	Didn't Listen	52	52	52	56	42
<u>2</u> <u>100</u>	Don't know	<u>1</u> <u>100</u>	<u>1</u> <u>100</u>	<u>1</u> <u>100</u>	<u>*</u> <u>100</u>	<u>0</u> <u>100</u>

Q.9 Again thinking about yesterday ... did you spend anytime reading a magazine?

IF RESPONDENT ANSWERED '1' YES, READ Magazine IN Q.9 ASK:

Q.9a About how much time did you spend reading magazines yesterday?
(DO NOT READ)

		<u>Feb</u> <u>1994</u>
31	Yes	33
	4 Less than 15 min.	5
	8 15-29 min.	9
	11 30-59 min	10
	8 1 hour or more	9
	* Don't know	*
69	No	67
<u>*</u> <u>100</u>	Don't know/Refused	<u>0</u> <u>100</u>

Q.10 Not including school or work related books, did you spend anytime reading a book yesterday? [IF YES: Was it a work of fiction or non-fiction?]

IF RESPONDENT ANSWERED 'YES , READ BOOKS' (1, 2, 3, or 4) IN Q.10 ASK:

Q.10a About how much time did you spend reading books yesterday? (**DO NOT READ**)

		<u>Feb</u> <u>1994</u>
30	Yes	31
	<u>Subject</u>	
14	Fiction	14
14	Non-fiction	17
1	Both	*
1	Don't know	0
	<u>Time</u>	
1	Less than 15 min	2
4	15-29 min	3
8	30-59 min	9
17	1 hour or more	17
*	Don't know	*
70	No	69
<u>*</u>	Don't know/Refused	<u>0</u>
100		100

Q.11 And yesterday, did you...

	<u>Yes</u>	<u>No</u>	<u>DK/NA</u>
<u>Yesterday did you:</u>			
a. Visit with family or friends	69	31	*=100
February, 1994	57	43	*=100
b. Call a friend or relative just to talk	56	44	*=100
February, 1994	63	37	*=100

Q.12 Did you happen to use a personal computer at home yesterday?

IF ANSWERED '1' YES IN Q.12, ASK:

Q.12a About how much time did you spend using a personal computer at home yesterday?

		<u>Feb</u> <u>1994</u>
14	Yes	14
3	A half hour or less	-
3	Thirty minutes to less than one hour	-
3	About an hour	-
1	More than one but less than two hours	-
2	Two to less than three hours	-
1	Three to less than four hours	-
1	Four or more hours	-
0	DK	-
86	No (GO TO Q.13)	86
<u>0</u> 100	DK/Refused (GO TO Q.13)	<u>0</u> 100

Q.13 How much do you enjoy reading? (**READ CATEGORIES**)

		<u>Feb</u> <u>1994</u>
53	A lot	53
32	Some	32
10	Not much	10
4	Not at all	4
<u>1</u> 100	DK/Refused	<u>1</u> 100

Q.14 How much do you enjoy keeping up with the news? (**READ CATEGORIES**)

		Feb <u>1994</u>
54	A lot	53
34	Some	35
8	Not much	9
3	Not at all	2
<u>1</u> 100	DK/Refused	<u>1</u> 100

Q.14a How often, if ever, do you listen to radio shows that invite listeners to call in to discuss current events, public issues, and politics... regularly, sometimes, rarely, or never?

15	Regularly
19	Sometimes
27	Rarely
39	Never
<u>*</u> 100	DK

Q.15 Some people say they feel overloaded with information these days, considering all the TV news shows, magazines, newspapers, and computer information services. Others say they like having so much information to choose from. How about you... do you feel overloaded, or do you like having so much information available?

23	Overloaded
64	Like it
11	Other (VOL.)
<u>2</u> 100	DK/Refused

Q.16 How do you feel about computers and technology... do you like them, dislike them, or do you have mixed feelings about them?

		<u>Feb 1994</u>
64	Like	65
4	Dislike	5
24	Mixed feelings	25
<u>8</u> 100	DK/Refused	<u>5</u> 100

Q.17 How much do you worry that computers and technology are being used to invade your privacy? (**READ CATEGORIES**)

		<u>Feb 1994</u>
20	A lot	25
30	Some	30
19	Not much	18
27	Not at all	24
<u>4</u> 100	DK/Refused	<u>3</u> 100

SECTION II POLITICAL KNOWLEDGE

Now I would like to ask you a few questions about some things that have been in the news. Not everyone will have heard about them.

Q.18 Who is the Speaker of the House of Representatives?

		<u>Feb 1995</u>
53	Newt Gingrich; Gingrich	52
3	Any other person	4
<u>44</u> 100	DK/Refused/Not sure	<u>44</u> 100

NO Q.19

Q.20 Do you happen to know which political party has a majority in the U.S. House of Representatives?

73 Republican

5 Democrat

22 Can't say
100

Q.21 Do you happen to know the name of the country where the currency was collapsing and the United States made loan guarantees to help stabilize the situation?

		<u>Feb</u> <u>1995</u>
36	Mexico	56
13	Any other country/Incorrect answer	6
<u>51</u> 100	DK/Refused/Can't say	<u>38</u> 100

Q.22 What is the name of the President of Russia?

		<u>July</u> <u>1994</u>	<u>Feb</u> <u>1994</u>
44	Boris Yeltsin; Yeltsin	46	47
<u>56</u> 100	Anything else/Other/DK/Refused	<u>54</u> 100	<u>53</u> 100

Q.23 Have you ever heard of the Internet? (IF YES: Can you tell me what it is?)

23 Computer network

11 "Information superhighway"/"information highway"

21 Something about computers -- vague

3 Incorrect answer

42 Not sure/Never heard of it
100

SECTION III - ATTITUDES

Q.24 I am going to read you some pairs of statements that will help us understand how you feel about a number of things. As I read each pair, tell me whether the FIRST statement or the SECOND statement comes closer to your own views -- even if neither is exactly right. The first pair is **(READ AND ROTATE)**...

The first/next pair is **(READ)**...

42 Books that contain dangerous ideas should be banned from public school libraries

OR

53 Public school libraries should be allowed to carry any books they want

$\frac{5}{100}$ DK/Refused

Q.25

The first/next pair is **(READ)**...

30 Most elected officials care what people like me think

OR

65 Most elected officials DON'T care what people like me think.

$\frac{5}{100}$ DK/Refused

Q.26

The first/next pair is **(READ)**...

45 Homosexuality is a way of life that should be accepted by society

OR

47 Homosexuality is a way of life that should be discouraged by society.

$\frac{8}{100}$ DK/Refused

Q.27

The first/next pair is **(READ)**...

47 The government should do more to help needy Americans, even if it means going deeper into debt

OR

45 The government today can't afford to do much more to help the needy

$\frac{8}{100}$ DK/Refused

Q.28

The first/next pair is **(READ)**...

42 Government regulation of business is necessary to protect the public interest

OR

48 Government regulation of business usually does more harm than good

$\frac{10}{100}$ DK/Refused

Q.29

The first/next pair is **(READ)**...

LAT

April 1995

84 $\frac{92}{100}$ There is simply no excuse for the Oklahoma City bombing, period

OR

14 $\frac{7}{100}$ There is no excuse for the bombing, but one can understand the frustrations and anger that may have led people to carry it out.

$\frac{2}{100}$ $\frac{1}{100}$ DK/Refused

Q.30 Would you favor or oppose a law that would make it illegal for a computer network to carry pornographic or adult material?

52 Favor

41 Oppose

$\frac{7}{100}$ DK/Refused

NO Q.31-34

SECTION IV -- HOUSEHOLD

Before we go on, I need to know a little about you and your household. First...

Q.35 How many people, including yourself, live in your household?

19	One person household
32	Two person household
18	Three person household
17	Four person household
13	Five to Twelve person household
<u>1</u>	DK/Refused
100	
(N=3603)	

BASED ON RESPONDENT HOUSEHOLDS WITH MORE THAN ONE PERSON:

Q.35a How many of these are under the age of 18?

39	Have kids in home
15	1 kid
15	2 kids
9	3-7 kids
60	No kids in home
<u>1</u>	DK/Refused
100	
(N=2882)	

ASK ALL:

(EMP1)

Q.36 Are you self-employed, do you work for someone else, do you do both, or aren't you employed right now?

	Feb <u>1994</u>	
11	Self-employed	11
47	Work for someone else	47
8	Both	7
34	Not employed	34
<u>*</u>	Don't know/Refused	<u>1</u>
100		100
(N=3603)		

BASED ON RESPONDENTS WHO ARE SELF-EMPLOYED OR BOTH:

(EMP2)

Q.37 What is the principal location of your business - is it in your home or is it elsewhere?

		Feb <u>1994</u>
41	Home	47
57	Elsewhere	52
<u>2</u> 100	Don't know/Refused	<u>1</u> 100
(N=690)		(N=454)

BASED ON RESPONDENTS WHO ARE EMPLOYED:

(PCW)

Q.38 Do you use a computer at your workplace on at least an occasional basis? By computer I mean a PC, mainframe, or minicomputer. This would NOT include items such as checkout scanners or terminals used for routine transactions and the like.

62	Yes
38	No
<u>*</u> 100	DK/Refused
(N=2465)	

ASK ALL:

(EDU)

Q.39 Are you presently enrolled in school or in college classes?

14	Yes
86	No GO TO Q.41
<u>*</u> 100	DK/Refused GO TO Q.41
(N=3603)	

BASED ON RESPONDENTS WHO ARE ENROLLED IN SCHOOL:

(PCC)

Q.40 Do you use a computer at your school on at least an occasional basis?

75	Yes
25	No
<u>*</u> 100	DK/Refused
(N=523)	

SECTION V - COMPUTERS

ASK ALL:

(PC1)

Q.41 Do you have any type of personal computer, including laptops -- such as an IBM PC or a Macintosh in your home? These do not include game machines such as Nintendo or Sega.

		Feb <u>1994</u>
36	Yes	31
64	No	69
<u>*</u> 100	DK/Refused	<u>0</u> 100

(N=3603)

IF ANSWERED "NO" IN Q.41, ASK:

(PC1a)

Q.41a Did you ever have a home computer?

BASED ON TOTAL RESPONDENTS:

9	Yes
55	No
36	Currently has PC
<u>0</u> 100	DK/Refused

(N=3603)

BASED ON THOSE WHO HAVE A HOME PC (IF NO HOME PC SKIP TO Q.61):

(PC2)

Q.42 Do you yourself use the home personal computer on at least an occasional basis? **(IF YES, PROBE: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, or less often?)**

- 19 Everyday
- 27 3-5 days per week
- 24 1-2 days per week
- 13 Once every few weeks
- 6 Less often
- 11 No/never

* DK/Refused

100

(N=1431)

BASED ON THOSE WHO USE THEIR HOME PC (IF NOT USING HOME PC GO TO Q.59):

(PC3)

Q.43 For how long have you had a personal computer in your household... less than a year, one to two years, or longer than two years?

- 15 Less than one year
- 20 1-2 years
- 65 Longer than 2 years

* DK/Refused

100

(N=1282)

TECH INVENTORY

Q'S. 44-45c BASED ON THOSE WHO USE THEIR HOME PC AT LEAST OCCASIONALLY (AT LEAST ONCE EVERY FEW WEEKS):

(PC5)

Q.44 I have a few questions about your home computer. First of all, do you have more than one computer? **IF YES:** How many computers do you have?

- 72 One **GO TO Q.44a**
 - 20 Two **GO TO Q.44b**
 - 5 Three **GO TO Q.44b**
 - 1 Four **GO TO Q.44b**
 - 1 Five or more **GO TO Q.44b**
 - 1 DK/Refused **GO TO Q.44a**
- 100
(N=1199)

(PC5a)

Q.44a Is your computer a portable or a desktop model? **GO TO Q.45a**

(PC5b)

Q.44b Is one of your PCs a portable computer? **GO TO Q.45b**

- 67 Desktop only
 - 6 Portable only
 - 12 2 Desktops, no Portable
 - 8 2 Computers, at least one Portable
 - 3 3+ Computers, no Portable
 - 4 3+ Computers, at least one Portable
 - * DK/Refused
- 100
(N=1199)

(PC6a)

Q.45a Is it a Macintosh, an IBM or IBM compatible, or some other kind? **[INTERVIEWER: PROBE TO DETERMINE TYPE -- IF UNCLEAR, ASK IF COMPUTER USES MICROSOFT WINDOWS, OS2 OPERATING SYSTEM, PC-DOS OR MS-DOS ETC.] GO TO Q.46**

(PC6b)

Q.45b Thinking about the computer you use most often, is it a Macintosh, an IBM or IBM compatible, or some other kind? **[INTERVIEWER: PROBE TO DETERMINE TYPE -- IF UNCLEAR, ASK IF COMPUTER USES MICROSOFT WINDOWS, OS2 OPERATING SYSTEM, PC-DOS OR MS-DOS ETC.]**

15 Mac

75 IBM or compatible (also "DOS" "clone") **GO TO Q.45c**

10 Other/Something else

* DK/Refused

100

(N=1199)

BASED ON IBM USERS:

(PC6c)

Q.45c Do you happen to know if your CPU is a 286, 386, 486, Pentium, or something else? **[THIS REFERS TO PC USED MOST OFTEN]**

8 286 or lower (8086 8088)

24 386

40 486

7 Pentium

3 Something else

18 DK/Refused

100

(N=905)

(PC7)

Q.46 Do you use your home computer in connection with your job, for school, for personal use, or some combination of these? [**ALLOW MULTIPLE RESPONSES. PROBE IF NECESSARY.**]

BASED ON TOTAL RESPONDENTS:

		<u>Feb 1994</u>
18	Uses For Job	17
12	Uses For School	12
29	Uses For Personal	21
68	DK/No Computer Use/No Computer	74

(N=3603)

Q's. 48-51 BASED ON THOSE WHO USE THEIR HOME PC AT LEAST OCCASIONALLY:

(PC8)

Q.47 How much would you miss your home computer, if you no longer had one? (**READ CATEGORIES**)

		<u>Feb 1994</u>
63	A Lot	65
23	Some	23
10	Not much	8
4	Not at all	4
<u>*</u> 100	DK/Refused	<u>*</u> 100

(N=1199)

(PC9)

Q.48 Now I'd like to ask you about some of the kinds of things people do with their home computers. First of all, how often, if ever, do you use your computer at home to do word processing... every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

6 Everyday
19 3-5 days per week
31 1-2 days per week
23 Once every few weeks
7 Less often
14 No/never

* DK
100
(N=1199)

(PC10)

Q.49 And how often, if ever, do you use your computer at home for keeping household or financial records... every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

5 Everyday
10 3-5 days per week
21 1-2 days per week
18 Once every few weeks
4 Less often
42 No/never

* DK
100
(N=1199)

(PC11)

Q.50 How often, if ever, do you use your computer at home to play games... every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

7 Everyday
13 3-5 days per week
23 1-2 days per week
20 Once every few weeks
11 Less often
26 No/never

0 DK

100

(N=1199)

(CD1)

Q.51 Does your home computer have a CD-ROM drive? **(IF R IS NOT SURE: A CD-ROM drive uses a small shiny disk... the disks sometimes contains encyclopedias, elaborate games, and the like.)**

48 Yes

50 No **GO TO Q.59**

1 Not sure **GO TO Q.59**

1 DK/Refused **GO TO Q.59**

100

(N=1199)

(CD2)

Q.52 How often, if ever, do you, yourself, use the CD-rom drive? ...every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

BASED ON THOSE WHO USE THEIR HOME PC AT LEAST OCCASIONALLY AND WHO HAVE CD-ROM:

- 9 Everyday
- 19 3-5 days per week
- 24 1-2 days per week
- 20 Once every few weeks
- 12 Less often
- 15 No/never **GO TO Q.59**

1 DK **GO TO Q.59**

100

(N=582)

Q's. 53-58 BASED ON THOSE WHO USE THEIR HOME PC AT LEAST OCCASIONALLY AND WHO USE THEIR CD-ROM:

(CD3)

Q.53 Have you used the CD-rom drive more often, less often, or about as often as you thought you would when you got it?

- 23 More often
- 29 Less often
- 46 About the same

2 DK/Refused

100

(N=491)

(CD4)

Q.54 How much difficulty have you experienced in installing software or programs for the CD-rom drive and getting them to work properly... a lot, some, a little, or none at all?

9 A lot
22 Some
25 A little
36 None at all
7 Haven't done it (VOL.)

1 DK/Refused
100
(N=491)

(CD5)

Q.55 Thinking about the most recent CD-rom disk you bought, would you say that the quality of the video on it is excellent, good, fair, or poor?

39 Excellent
45 Good
12 Fair
1 Poor
1 Haven't bought one (volunteered)

2 DK/Refused
100
(N=491)

(CD6)

Q.56 And thinking about the most recent CD-rom programs you bought, how easy was it to learn the program and move around within it -- very easy, somewhat easy, somewhat difficult, or very difficult?

35 Very easy
44 Somewhat easy
15 Somewhat difficult
2 Very difficult

4 DK/Refused

100

(N=491)

(CD7)

Q.57 What is the main way in which you find out about CD-rom titles that you'd like to have?

27 Friends and relatives
7 Advertisements
30 Magazine or newspaper articles
23 Stores
2 Catalogs
5 Other

6 DK/Refused

100

(N=491)

(CD7a)

Q.57a How easy is it to find the CD-rom titles you want to buy where you live... very easy, somewhat easy, somewhat difficult, or very difficult?

48	Very easy
30	Somewhat easy
9	Somewhat difficult
5	Very difficult
4	Don't buy where I live/Buy by mail (VOL.)
<u>4</u>	DK/Refused

100
(N=491)

(CD8)

Q.58 How much would you miss your CD-rom drive, if you no longer had one? (**READ CATEGORIES**)

40	A Lot
40	Some
14	Not much
6	Not at all
<u>*</u>	DK/Refused

100
(N=491)

SECTION VI - ON LINE

(OL1)

Q.59 Does your home personal computer have a modem that allows you to connect to other computers through the telephone lines?

BASED ON TOTAL RESPONDENTS:

		<u>Feb 1994</u>
20	Yes	12
15	No	14
<u>65</u> 100	DK/Refused/No Computer	<u>74</u> 100

(N=3603)

BASED ON RESPONDENTS WHO HAVE A HOME PC WITH A MODEM:

(OL1a)

Q.59a Do you happen to know the speed of the modem -- such as 2400 baud, 9600, 14 point 4, or something else?

		<u>Online Users</u>
1	Lower than 2400	1
16	2400	23
10	9600	16
21	14,400	32
2	28,800	5
2	Other	2
47	DK	20
<u>1</u> 100	Refused	<u>1</u> 100
(N=813)		(N=685)

(OL2)

Q.60 Do you or anyone in your household ever use the modem to connect to any computer bulletin boards, information services such as CompuServe or Prodigy, or other computers at other locations? **(IF YES, PROBE: Is that you, someone else, or both?)**

BASED ON TOTAL RESPONDENTS:

		<u>Feb</u> <u>1994</u>
9	No	4
4	Respondent only	4
4	Respondent and other	3
3	Other only	1
80	No Computer/No Modem/DK if computer, modem	88
<u>*</u> 100	DK	<u>*</u> 100
(N=3603)		(N=3667)

(OL2a)

Q.60a From what room in your house do you usually go on-line?

BASED ON ONLINE USERS WHO GO ONLINE FROM HOME:

32	Home office or study
20	Bedroom
25	Living room or den
3	Kitchen
1	Children's room
11	The computer room
1	No particular place
7	Other
<u>*</u> 100	DK/Refused
(N=596)	

ASKED OF ONLINE USERS WHO USE A PC AT WORK OR SCHOOL:

(OL3)

Q.61 Do you, yourself, ever use a computer at [work][school][work or school] to connect with computer bulletin boards, information services such as America Online or Prodigy, or other computers over the Internet?

BASED ON TOTAL RESPONDENTS:

36	No
7	Yes, at work
2	Yes, at school
*	Yes, both
*	DK/Refused

(N=3603)

BASED ON ALL ONLINE USERS (IF R NEVER GOES ON-LINE AT ANY LOCATION, SKIP TO Q.101):

(OL4)

Q.62 Did you happen to go on-line yesterday? [IF YES: From where did you go on-line... from home, work, school, or some combination of these?]

32	Yes (NET)
19	Yes at home
15	Yes at work
2	Yes at school
2	Yes at other locations
67	No - GO TO Q.63
<u>1</u>	DK/Refused - GO TO Q.63

100
(N=997)

BASED ON ONLINE USERS WHO WENT ONLINE YESTERDAY:

(OL4a)

Q.62a Counting all of your on-line sessions, about how much time did you spend on-line yesterday?

- 36 A half hour or less
- 13 Thirty minutes to less than one hour
- 17 About an hour
- 8 More than one but less than two hours
- 8 Two to less than three hours
- 4 Three to less than four hours
- 13 Four or more hours

1 DK/Refused

100

(N=321)

BASED ON ALL ONLINE USERS:

(OL5)

Q.63 Do you belong to any of the commercial information services such as CompuServe, Prodigy, America Online, or to one of the direct internet access providers? [IF YES: Which ones do you belong to?]

[ACCEPT MULTIPLE RESPONSES]

- 20 America Online
- 14 CompuServe
- 15 Prodigy
- * Genie
- * Delphi
- 9 Direct Internet Provider
- 6 Other
- 46 No, Belong to None **Skip to Q.64**

4 DK/No Answer/No More Apply **Skip to Q.64**

100

(N=997)

BASED ON ONLINE USERS WHO BELONG TO AN ONLINE SERVICE:

(OL5a)

Q.63a How often do you dial up one of these services [this service]... every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

20	Everyday
26	3-5 days per week
29	1-2 days per week
16	Once every few weeks
6	Less often
2	No/never

1 DK

100

(N=512)

BASED ON ONLINE USERS WHO BELONG TO AN ONLINE SERVICE:

(OL5b)

Q.63b On average, how much does your household spend per month using on-line services -- by this I mean what you pay to the on-line service, not the cost of things you might buy on-line? **(DO NOT READ)**

34	< \$15.00
21	\$15.00-\$25.00
13	\$25.01-\$50.00
6	More than \$50.00
12	NOTHING -- IT'S FREE

14 DK/Refused

100

(N=512)

BASED ON RESPONDENTS WHO BELONG TO MORE THAN ONE ON-LINE SERVICE:

I'd like to ask you a little about the one on-line service you use most often. Which one is that?

- 38 America Online
 - 18 Compuserve
 - 14 Prodigy
 - 16 Direct Internet Provider
 - 12 Other
 - 2 DK
- 100
(N=112)

(OL5c)

Q.63c How satisfied are you with (NAME OF ONLINE SERVICE)? Would you say you are very satisfied, fairly satisfied, not too satisfied, or not at all satisfied?

	<u>America Online</u>	<u>Compuserve</u>	<u>Prodigy</u>	<u>Direct Internet Provider</u>
Very Satisfied	35	28	36	53
Fairly Satisfied	58	64	55	42
Not Too Satisfied	5	4	5	1
Not At All Satisfied	1	2	0	2
DK/Refused	<u>1</u>	<u>2</u>	<u>4</u>	<u>2</u>
	100	100	100	100
	(N=170)	(N=106)	(N=112)	(N=72)

(OL5d)

Q.63d Is there anything in particular about (NAME OF ONLINE SERVICE) that you like a lot? **[RECORD VERBATIM]**

(OL5e)

Q.63e And is there anything in particular about (NAME OF ONLINE SERVICE) that you do not like?
[RECORD VERBATIM]

(OL5f)

Q.63f And how easy is it to use (NAME OF ONLINE SERVICE) and find what you want ... would you say very easy, fairly easy, fairly difficult, or very difficult?

	<u>America Online</u>	<u>Compuserve</u>	<u>Prodigy</u>	<u>Direct Internet Provider</u>
Very easy	35	29	41	32
Fairly easy	56	58	53	51
Fairly difficult	7	9	4	13
Very difficult	0	3	*	4
DK/Refused	$\frac{2}{100}$	$\frac{1}{100}$	$\frac{2}{100}$	$\frac{0}{100}$
	(N=170)	(N=106)	(N=112)	(N=72)

BASED ON ONLINE USERS WHO ARE EMPLOYED OR GO TO SCHOOL:

(OL7)

Q.65 Do you ever use your modem at home to dial up a computer that's located at work or at school?

<u>ALL RESPONDENTS</u>		
28	Yes, dial up work	2
8	Yes, dial up school	1
3	Yes, dial up both	*
60	No	5
$\frac{1}{100}$	DK/No Answer/Refused	*
(N=549)		(N=3603)

BASED ON ONLINE USERS WHO DIAL UP A COMPUTER AT WORK OR SCHOOL:

(OL7a)

Q.65a How often do you dial up a computer at [work][school][work or school]... every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, or less often?)

- 14 Everyday
- 24 3-5 days per week
- 24 1-2 days per week
- 25 Once every few weeks
- 13 Less often

* DK

100

(N=219)

Q's. 66a-73 BASED ON ALL ONLINE USERS:

(OL8a)

Q.66a I'd like to ask you a few questions about what you do when you go on-line [either from home or at the office/at school]. Do you ever communicate with other people through on-line forums, discussion lists, or "chat groups"? [IF YES: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]

- 4 Everyday
- 7 3-5 days per week
- 12 1-2 days per week
- 12 Once every few weeks
- 9 Less often
- 55 No/never

1 DK

100

(N=997)

(OL9)

Q.67 Do you ever go on-line to get financial information such as stock quotes or corporate information, or to buy stocks or bonds? [IF YES: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]

- 3 Everyday
- 4 3-5 days per week
- 7 1-2 days per week
- 8 Once every few weeks
- 4 Less often
- 74 No/never

* DK
100
(N=997)

(OL10)

Q.68 Do you ever go on-line in order to do research for work or school, or to communicate with someone at work or school? [IF YES: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]

- 8 Everyday
- 12 3-5 days per week
- 21 1-2 days per week
- 19 Once every few weeks
- 9 Less often
- 31 No/never

* DK
100
(N=997)

(OL11)

Q.69 Do you ever go on-line in order to get travel information or services? **[IF YES: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]**

- 1 Everyday
- 1 3-5 days per week
- 2 1-2 days per week
- 10 Once every few weeks
- 13 Less often
- 73 No/never

* DK

100

(N=997)

(OL12)

Q.70 Do you ever go on-line to play games? **[IF YES, ASK: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]**

- 1 Everyday
- 1 3-5 days per week
- 5 1-2 days per week
- 6 Once every few weeks
- 6 Less often
- 81 No/never

* DK

100

(N=997)

(OL13)

Q.71 Do you ever go on-line to get information about hobbies, movies, restaurant reviews, graphics, pictures, or other entertainment-related activities? **[IF YES, ASK: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]**

1	Everyday
6	3-5 days per week
12	1-2 days per week
16	Once every few weeks
9	Less often
56	No/never

 * DK
100

(N=997)

(OL14)

Q.72 Do you ever engage in online discussions about politics or engage in political activity on line? **[IF YES, ASK: Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]**

*	Everyday
1	3-5 days per week
3	1-2 days per week
3	Once every few weeks
3	Less often
90	No/never

 * DK
100

(N=997)

(OL15)

Q.73 When you go on-line, do you also do other things while you are logged on? **[IF YES: What else do you do?]**

- 55 No, nothing else
- 9 Other computer applications
- 5 Watch tv
- 10 Listen to music or radio
- 4 Talk on the phone
- 3 Read
- 5 Other work/Paperwork
- 2 Other
- 7 DK/Refused

100

(N=997)

BASED ON ONLINE USERS WHO HAVE A PORTABLE COMPUTER:

(OL16)

Q.74 Do you ever go on-line using your portable computer while on a trip?

- 29 Yes
- 71 No
- 1 DK/Refused

100

(N=201)

Q's. 75-76a BASED ON ALL ONLINE USERS:

(OL17)

Q.75 What is the longest time you've ever spent on-line on one occasion? **(INTERVIEWER: CODE IN HOURS; USE 0 IF LESS THAN ONE HOUR)**

23 Less than 1 hour

28 1 hour

18 2 hours

9 3 hours

10 4-7 hours

9 8 hours or more

3 DK/Refused

100

(N=997)

(OL17a)

Q.75a And what time of day do you usually go on-line? **[CODE ACTUAL HOUR OF DAY MENTIONED. ROUND UP TO NEAREST HOUR]**

4 Overnight (12:00am to 6:00am)

22 Mornings (7:00am - 11:00am)

23 Afternoon (12:00pm - 6:00pm)

29 Evening (7:00pm - 11:00pm)

20 It varies

2 DK/NA

100

(N=997)

(OL18)

Q.76 Some people go on-line for work-related activities, some do it for pleasure, and for others it's some of each. How about you ... all work, all pleasure, or a mix?

31 All work **GO TO Q.77**

19 All pleasure **GO TO Q.77**

49 Mix **GO TO Q.76a**

1 DK/Refused **GO TO Q.77**
100
(N=997)

(OL18a)

Q.76a How would you describe the mix... mostly work, mostly pleasure, or about half-and-half?

32 Mostly work

29 Mostly pleasure

39 Half and half

* DK/Refused
100
(N=489)

Q's. 77-79 BASED ON ALL ONLINE USERS:

(OL19)

Q.77 Do you feel like you spend too much time on-line, about the right amount of time, or less time than you really want to spend?

7 Too much

61 About right

30 Less time than want

2 DK/Refused
100
(N=997)

(OL20)

Q.78 How much would you miss going on-line if you could no longer do this? (**READ CATEGORIES**)

32 A Lot

34 Some

19 Not much

14 Not at all

1 DK/Refused

100

(N=997)

(EM1)

Q.79 Do you ever send or receive e-mail or electronic mail? [**IF YES, ASK:** Is this every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?]

23 Everyday

15 3-5 days per week

15 1-2 days per week

12 Once every few weeks

7 Less often

28 No/never **GO TO Q.90**

* DK **GO TO Q.90**

100

(N=997)

Q's. 79a-89 BASED ON ONLINE USERS WHO USE E-MAIL:

(EM1a)

Q.79a How often do you check your e-mail?

22 More than once a day

29 Everyday

16 3-5 days per week

19 1-2 days per week

13 Less often

1 DK

100

(N=726)

(EM2)

Q.80 Is your use of e-mail work-related, personal, or both?

31 Work **GO TO Q.81**

30 Personal **GO TO Q.83**

38 Both **GO TO Q.81**

1 DK/Refused **GO TO Q.90**

100

(N=726)

Q's. 81 & 82 BASED ON RESPONDENTS WHO ANSWERED "WORK" OR "BOTH" IN Q.80:

(EM5)

Q.81 From what you have seen in your workplace, do you think people in upper and lower levels of organizations communicate with one another more often now that e-mail is available, do they communicate less often, or hasn't it made any difference?

69 More often

2 Less often

25 No difference

4 DK/Refused

100

(N=505)

(EM6)

Q.82 And do you think e-mail is leading to more frank and honest communication between upper and lower levels of organizations, less frank and honest communication, or does e-mail make no difference?

36	More frank
8	Less frank
51	No difference
<u>5</u>	DK/Refused

100
(N=505)

BASED ON RESPONDENTS WHO ANSWERED "PERSONAL" OR "BOTH" IN Q.80:

(EM7)

Q.83 Do you communicate with any friends or family members by e-mail? [**PROBE FOR WHICH**]

12	Yes, family members
35	Yes, friends
36	Yes, both
17	No SKIP TO Q.85
<u>0</u>	DK/Refused SKIP TO Q.85

100
(N=496)

BASED ON THOSE E-MAIL USERS WHO COMMUNICATE WITH FAMILY/FRIENDS:

(EM8)

Q.84 Thinking about your [family members/friends/family members and friends] who also use e-mail, do you think you communicate with them more often now that e-mail is available, less often, or hasn't it made any difference?

59	More often
1	Less often
40	No difference
<u>*</u>	DK/Refused

100
(N=411)

BASED ON ONLINE USERS WHO USE E-MAIL:

(EM9)

Q.85 Are you on any electronic mail lists, sometimes called "list-servs," where people with a common interest can send messages to everyone on the list?

All Online Users

24	Yes	17
74	No GO TO Q.86	53
<u>2</u> 100 (N=726)	DK/Refused GO TO Q.86	1

BASED ON E-MAIL USERS WHO ARE ON LIST-SERVS:

(EM9a)

Q.85a About how many listserv lists are you on?

30	One list-serv list
22	Two list-serv lists
12	Three list-serv lists
6	Four list-serv lists
22	Five or more list-serv lists
<u>8</u> 100 (N=178)	DK/Refused

(EM9b)

Q.85b May I ask what is/are the topic(s) or subject(s) of the listserv list(s)?

BASED ON ALL ONLINE USERS:

(EM10)

Q.86 Did you send or receive any e-mail yesterday?

3	Yes, sent
5	Yes, received
19	Yes, both
44	No GO TO Q.90
1	DK/Refused GO TO Q.90
<u>28</u>	Do Not Use Email
100	
(N=997)	

BASED ON E-MAIL USERS WHO SENT E-MAIL YESTERDAY:

(EM11)

Q.87 About how many messages did you send yesterday?

*	Zero messages sent
12	One message sent
24	Two messages sent
19	Three messages sent
6	Four messages sent
17	Five to nine messages sent
10	Ten to nineteen messages sent
10	Twenty or more messages sent
<u>2</u>	DK/Refused
100	
(N=228)	

Q's. 88-89 BASED ON E-MAIL USERS WHO RECEIVED E-MAIL YESTERDAY:

IF RESPONDENT IS ON LIST SERVS, ASK:

(EM12)

Q.88 About how many messages did you receive yesterday that were not from a listserv?

IF NOT ON LIST SERVS, ASK:

(EM13)

Q.89 About how many e-mail messages did you receive yesterday?

- 3 Zero messages received
 - 16 One message received
 - 15 Two messages received
 - 9 Three messages received
 - 5 Four messages received
 - 16 Five to nine messages received
 - 15 Ten to nineteen messages received
 - 7 Twenty to twenty-nine messages received
 - 12 Thirty or more messages received
 - 2 DK/Refused
- 100
(N=244)

(INF1)

Q.90 How frequently do you go online to get news ... would you say every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, or less often?

BASED ON ALL ONLINE USERS:

- 6 Everyday
 - 9 3-5 days per week
 - 15 1-2 days per week
 - 13 Once every few weeks **SKIP TO Q.94**
 - 28 Less often **SKIP TO Q.94**
 - 29 No/never **SKIP TO Q.94**
 - * DK **SKIP TO Q.94**
- 100
(N=997)

Q's. 91-93 BASED ON ONLINE USERS WHO GET NEWS ONLINE AT LEAST WEEKLY:

(INF2)

Q.91 Would you say you get more of your news from on-line sources, or from traditional sources such as TV news, newspapers, and magazines?

- 8 More on-line
- 87 More traditional print and broadcast
- 4 Equal (volunteered)
- 1 DK/Refused

100

(N=297)

(INF3)

Q.92 Since you started getting news on-line, are you using other sources of news MORE often, LESS often, or about the same as you used to?

- 4 Yes, more often **GO TO Q.92a**
- 12 Yes, less often **GO TO Q.92b**
- 8 Yes, some more others less **GO TO Q.92a; THEN TO Q.92b**
- 76 No, About the same **GO TO Q.93**

0 DK/Refused **GO TO Q.93**

100

(N=297)

(INF3a)

Q.92a Which sources are you using **more** often? [**ACCEPT MULTIPLE RESPONSES**]

- 60 Newspapers
- 58 Television
- 23 Magazines
- 26 Radio
- 13 Other

0 DK

(N=36)

(INF3b)

Q.92b Which sources are you using **less** often? [**ACCEPT MULTIPLE RESPONSES**]

43 Newspapers

37 Television

14 Magazines

28 Radio

10 Other

3 DK/Refused

(N=55)

BASED ON ONLINE USERS WHO GET NEWS ONLINE AT LEAST WEEKLY:

(INF5)

Q.93 Do you find that it is easy or hard to clip and save news and information you find on-line?

71 Easy

8 Hard

18 Don't do this

3 DK/Refused

100

(N=297)

(OL21)

Q.94 I'm going to ask you about some things people are doing on-line these days. For each one, please tell me if you have ever done this. Have you ever purchased goods or services on-line? (**IF YES, ASK:** Have you done this in the past week?) [**IF YES BUT NOT IN PAST WEEK:** Have you done this in the past month?]

BASED ON ALL ONLINE USERS:

3 Yes, in past week

5 Yes, in past month

91 No **GO TO Q.95**

1 DK/Refused **GO TO Q.95**

100

(N=997)

BASED ON RESPONDENTS WHO HAVE PURCHASED GOODS ONLINE:

(OL22a)

Q.94a How worried were you about the security of your credit card number when you did this ... a lot, a little, or not at all?

15 A lot
36 A little
38 Not at all
10 Did not use credit card

1 DK/Refused
100
(N=78)

Q's. 95-99a BASED ON ALL ONLINE USERS:

(OL23)

Q.95 Have you ever received an electronic news clipping or news story from a friend or associate? **(IF YES, ASK: Have you done this in the past week?)**

27 Yes ever
8 Yes in past week
64 No

1 DK/Refused
100
(N=997)

(OL24)

Q.96 Have you ever made a friend or on-line buddy that you've never met in person? **(IF YES, ASK: Have you communicated with this person like this in the past week?)**

17 Yes ever
6 Yes in past week
76 No

1 DK/Refused
100
(N=997)

(OL25)

Q.97 Have you ever expressed an opinion about a political or social issue to a bulletin board, on-line newsgroup, or e-mail list? **(IF YES, ASK: Have you done this in the past week?)**

11 Yes ever

4 Yes in past week

85 No

* DK/Refused

100

(N=997)

(OL26)

Q.98 Have you ever heard of the "World Wide Web"?

60 Yes

39 No **GO TO Q.100**

1 DK/Refused **GO TO Q.100**

100

(N=997)

(OL27a)

Q.99a Have you ever used the World Wide Web? **[IF YES, ASK: Did you use the web yesterday?]** **[IF NO: Have you done this in the past week?]**

9 Yes, ever

6 Yes, yesterday

6 Yes, in past week

39 No **GO TO Q.100**

40 DK/Never heard of Web

100

(N=997)

Q's. 99b-99d BASED ON THOSE WHO USE THE WEB:

(OL27b)

Q.99b Where do you use the World Wide Web... through an on-line service, a direct dialup connection from home, a school or office connection to the internet, or somewhere else? **[ENTER ALL THAT APPLY.]**

- 33 On-line service
- 23 Direct dialup connection
- 24 School connection
- 34 Work connection
- 8 Other
- 1 DK/Refused/No more apply

(N=224)

(OL27c)

Q.99c How do you find out about new Web sites to visit? **[ENTER ALL THAT APPLY.]**

- 23 From directories
- 36 Friends or relatives
- 24 Magazines and newspapers
- 6 Books
- 49 Exploring or "surfing" the net
- 8 DK/Refused/No more apply

(N=224)

(OL27d)

Q.99d When you use the Web, do you usually go back to sites where you've been before or do you usually go to new sites?

- 40 Old sites
- 17 New sites
- 38 Both
- 5 DK/Refused

100

(N=224)

(OL28)

Q.100 Have you ever heard of USENET newsgroups -- these are on-line forums where you can read messages other people have posted or post your own.

BASED ON ALL ONLINE USERS:

50 Yes

49 No **GO TO Q.101**

1 DK/Refused **GO TO Q.101**
100
(N=997)

IF ANSWERED '1', YES IN Q.100, ASK:

(OL28a)

Q.100a How many newsgroups, if any, do you read on a regular basis?

BASED ON ALL ONLINE USERS:

33 Zero groups

4 One group

4 Two groups

2 Three groups

5 Four or more groups

2 DK/Refused

50 Never heard of/DK
100
(N=997)

BASED ON RESPONDENTS WHOSE HOUSEHOLD SIZE >1 AND WHO HAVE A HOME PC:

(PCNUM)

Q.101 How many other people in your household use the home computer on at least an occasional basis?

		Feb <u>1994</u>
14	Zero	14
38	One	39
21	Two	22
27	Three or more	24
<u>*</u>	DK/No Answer	<u>1</u>
100		100
(N=1276)		

**IF NUMBER > 0 AND IF ANYONE IN HH UNDER 18 (1 IN Q.35A) CONTINUE
 IF Q.101=0, OR Q.35A=2 OR 3, SKIP TO Q.102
 (PCNUMa)**

Q.101a How many of those people are under the age of 18?

BASED ON HOUSEHOLDS WITH KIDS UNDER 18:

		Feb <u>1994</u>
8	None	6
15	One	15
19	Two or more	15
*	None/DK	*
<u>58</u>	No kids/Not computer user	<u>64</u>
100		100
(N=1410)		(N=1432)

BASED ON RESPONDENTS IN HOUSEHOLDS WITH ONE CHILD WHO USES HOME PC AT LEAST OCCASIONALLY:

(PCNUMb)

Q.101b Is that child a boy or girl?

52	Boy
47	Girl
<u>1</u>	No answer
100	
(N=230)	

BASED ON RESPONDENTS IN HOUSEHOLDS WITH MORE THAN ONE CHILD WHO USE HOME PC AT LEAST OCCASIONALLY:

(PCNUMc)

Q.101c Is the child who's the most frequent user of the computer a boy or a girl?

		Feb <u>1994</u>
51	Boy	53
43	Girl	46
<u>6</u>	No answer	<u>1</u>
100		100
(N=293)		(N=528)

BASED ON TOTAL RESPONDENTS:

(TV1)

Q.102 Do you have a satellite dish that is hooked up to your TV? [**READ IF NECESSARY:** "This is different than cable TV. It allows you to get reception directly from satellites."]

		Feb <u>1994</u>
6	Yes	4
94	No	96
<u>*</u>	DK/Refused	<u>*</u>
100		100
(N=3603)		

BASED ON RESPONDENTS WITH A SATELLITE DISH:

(TV1a)

Q.102a Is your system one of the new "Digital Satellite Systems" with the small disk, or is a large disk? These are also called "direct TV" systems. [**IF R IS UNCERTAIN:** Did you buy this system since October of last year? **IF NOT IT'S THE OLD STYLE LARGE DISK**]

28	Small disk
67	Large disk
<u>5</u>	DK/Refused
100	
(N=196)	

BASED ON TOTAL RESPONDENTS:

(CEL1)

Q.103 Do you have a car phone or cellular telephone?

24	Yes
76	No
<u>*</u>	DK/Refused
100	
(N=3603)	

(CAB1)

Q.104 Do you currently subscribe to Cable TV?

		Feb <u>1994</u>
67	Yes	64
33	No/No cable access	36
*	DK/Refused	*
<u>100</u>		<u>100</u>
(N=3603)		

BASED ON RESPONDENTS WHO SUBSCRIBE TO CABLE TV:

(CAB2)

Q.105 How much would you miss cable tv, if you no longer had it? (**READ CATEGORIES**)

		Feb <u>1994</u>
54	A Lot	64
24	Some	18
12	Not much	11
10	Not at all	7
*	DK/Refused	*
<u>100</u>		<u>100</u>
(N=2441)		(N=2485)

BASED ON TOTAL RESPONDENTS:

(BANK1)

Q.106 Are you the person or one of the persons who generally pays the bills for this household?

		Feb <u>1994</u>
83	Yes	83
17	No	17
*	DK/Refused	*
<u>100</u>		<u>100</u>
(N=3603)		

IF ANSWERED YES IN Q.106, ASK:

(BANK2)

Q.107 Do you ever do "electronic banking" from home--that is use a computer or the telephone to pay bills or move money from one account to another?

BASED ON TOTAL RESPONDENTS:

		<u>Feb 1994</u>
13	Yes	9
70	No	74
17	Not responsible for bills	17
<u>*</u> 100	DK/Refused	<u>*</u> 100

(N=3603)

SECTION VII - WORK

BASED ON RESPONDENTS WHOSE BUSINESS IS ELSEWHERE, WORKS FOR SOMEONE ELSE, OR BOTH:

(WORK1)

Q.108 How often, if ever, do you do work for your job at home? Would you say every day, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?

8	Everyday
10	3-5 days per week
12	1-2 days per week
10	Once every few weeks
11	Less often
49	No/never GO TO Q.D2
<u>*</u> 100	DK GO TO Q.D2

(N=2277)

**BASED ON RESPONDENTS WHOSE BUSINESS IS AT HOME OR EVER WORKS AT HOME:
(WORK2)**

Q.109 How many days in the past week did you work at home?

36	None
14	One
13	Two
11	Three
5	Four
9	Five
2	Six
9	Seven
<u>1</u>	DK/No answer
100	
(N=1372)	

**BASED ON RESPONDENTS WHO DID NOT WORK AT HOME LAST WEEK:
(WORK2a)**

Q.109a Do you ever use a computer or fax machine to help you work at home?

27	Yes, use a computer
1	Yes, use a fax machine
8	Yes, use both
64	No
<u>0</u>	DK/Refused
100	
(N=482)	

BASED ON RESPONDENTS WHO WORKED AT HOME 1 DAY LAST WEEK:

(WORK3)

Q.110 Was that a regular workday on which you worked at home INSTEAD of going to your workplace?

22 Yes

78 No

0 DK/Refused

100

(N=196)

(WORK3a)

Q.110a Did you use a personal computer or fax machine to help you work at home that day?

22 Yes, use a computer

2 Yes, use a fax machine

4 Yes, use both

72 No

0 DK/Refused

100

(N=196)

BASED ON RESPONDENTS WHO WORKED AT HOME MORE THAN 1 DAY LAST WEEK:

(WORK4)

Q.111 How many of those [# from Q.109] days were regular workdays on which you worked at home INSTEAD of going to your workplace?

48 Zero days

5 One day

12 Two days

6 Three days

22 Four or more days

7 DK/Refused

100

(N=694)

(WORK4a)

Q.111a Did you use a personal computer or fax machine to help you work at home on any of those days?

28 Yes, use a computer

3 Yes, use a fax machine

13 Yes, use both

55 No

1 DK/Refused

100

(N=694)