

Information Technology in Michigan: *Findings from the 2001 Cyberstate Survey*

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Information Technology in Michigan:

Findings from the 2001 Cyberstate Survey

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Introduction and Methodology

Cyberstate.org (www.cyber-state.org) is a nonprofit group established in 1998 by Michigan's business, education, health care, government, and philanthropic communities, including the W.K. Kellogg Foundation, the Council of Michigan Foundations, and the Herbert H. and Grace Dow Foundation. Since 1998, Cyberstate.org has been working in partnership with ERIM, the Ann Arbor-based technology innovation institute. Cyberstate.org's vision is to help Michigan become the world leader in developing and using information technology in ways that better the life of every citizen.

Cyberstate.org commissioned a survey of Michigan residents to explore the role that information technology plays in their lives. The 2001 survey is the follow-up to the 1998 and 1999/2000 surveys conducted by Cyberstate.org and its predecessor, the Michigan Information Technology Commission. The survey series was developed and conducted by Public Sector Consultants, Inc. (www.publicsectorconsultants.com) and has two components:

- **A random survey of 800 Michigan residents from across the state, having an overall margin of error of +/- 3.5 percent with 95 percent confidence.**
- **A survey of 200 additional respondents across seven of the eight Michigan regions, conducted to ensure that whenever regional variations are discussed, the margin of error for the results in the different regions is the same (the regional margin of error is +/- 10 percent with 95 percent confidence).**

The telephone survey was conducted February 18–24, 2001. As appropriate, the survey results were weighted to reflect the Michigan population as accurately as possible.

Major Findings

- **Computer ownership is statistically unchanged from the 1999–2000 survey. Over one-half (53 percent) of all respondents in 2001 report having at least one home computer.**
- **The majority of respondents (61 percent) have at least one cellphone. The Northern Lower Peninsula of Michigan has the lowest penetration (39 percent), and the City of Detroit and Metro Detroit have the highest penetrations (approximately two-thirds each). And while whites are more likely than African-Americans to own one cellphone (31 percent compared to 19 percent), more African-American than white respondents report owning two or more cellphones (49 percent compared to 28 percent).**
- **People are accessing the Internet in increasing numbers. In 2001, almost two-thirds of respondents (63 percent) reported that they had used the Internet at some point, an 11 percent increase from 1998. Wide variations in Internet use remain, however, by region of Michigan, age, race, and level of education. For example, 91 percent of those under 25 reported ever having been online, compared to just 22 percent of those 65 and older.**
- **African-Americans, respondents with only a high school degree, women, and seniors are accessing the Internet in increasing numbers. Large shares of “new” Internet users—those who have been online a year or less—are composed of these groups. Two regions—the Thumb and the City of Detroit—also have larger shares of Internet newcomers.**
- **The numbers of people not liking what they see on the Internet has doubled. In 1999, 15 percent of Internet nonusers reported that the reason they did not use the Internet was because what they found was “not worth the time, hassle or expense.” In 2001, 34 percent responded the same way.**
- **Only one in six respondents has a high-speed Internet connection at home. Seventy-one percent of home computers are connected to the Internet via modems and phone lines. Only 2 percent of home computers in Michigan connect to the Internet using an ISDN or DSL high-speed connection, and 14 percent of home computers connect using a cable modem.**
- **E-mail continues to be the most frequently used Internet service. Eighty-six percent of respondents report using the Internet for e-mail in the past month, an increase of 17 percent from the original 1998 survey.**
- **Purchasing over the Internet has increased dramatically. In 1998, just 11 percent of respondents had made at least one purchase on the Internet. That figure has tripled to 35 percent in 2001.**
- **Overall, Michigan residents expressed a positive view of technology in our society. Two-thirds or more of respondents believe computers and the Internet bring people together and help children learn.**
- **Online voting is of interest to Michigan citizens. A plurality of respondents (44 percent) would prefer to vote online in the weeks preceding the election, compared to one-third who prefer voting in a booth, and one-fifth who prefer voting by mail. Of those respondents who would prefer to vote online, 45 percent said they would still support such a system, even if it meant higher taxes; however, a statistically equal share (41 percent) said they would not support online voting if taxes were increased to pay for the system.**

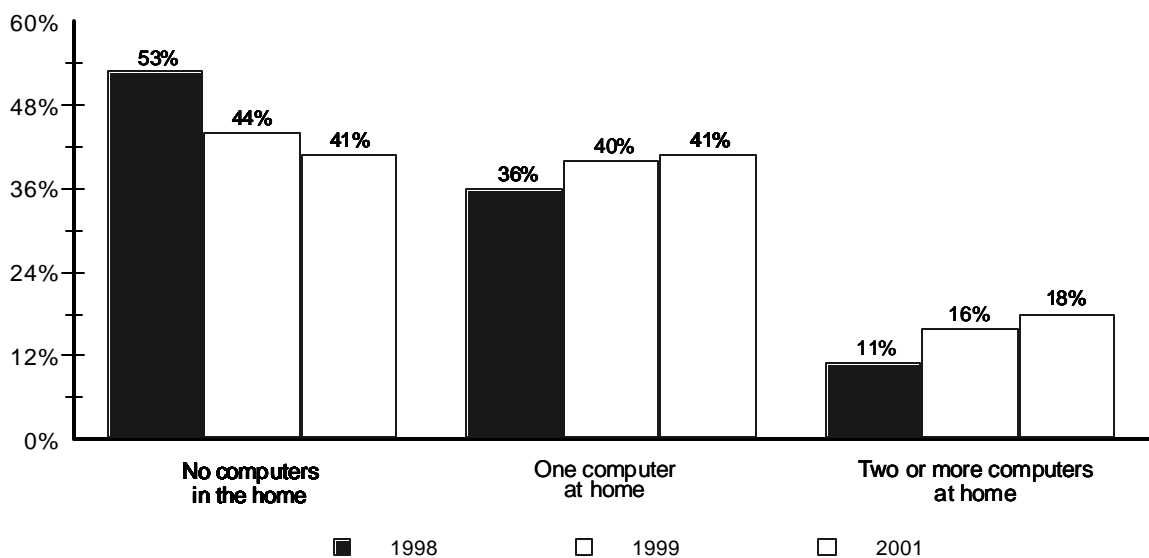
- **Concerns about Internet privacy and security of information remain high. When asked why they had never purchased anything online, 40 percent of respondents said that they had security or privacy concerns. Furthermore, 78 percent reported that they were very to somewhat concerned that the information provided to computer-based services would not be kept confidential.**

Trends in Information Technology in Michigan

OWNERSHIP OF TECHNOLOGICAL DEVICES

Forty-one percent of respondents did not have a computer in the home. The percentage is statistically unchanged from 1999, when 44 percent of respondents did not have a computer in their home. More than half of all respondents had at least one computer in their home in 2001.

EXHIBIT 1
Computer Ownership, by Year



SOURCE: Public Sector Consultants, Inc.

Detroit city and the Thumb area have the lowest rates of computer ownership. Approximately 60 percent of residents in these two regions report no computers in the home. Computer ownership is highest in Southern Michigan, where 70 percent of respondents have at least one computer.

Other variations are apparent in the data as well, but overall they demonstrate the proliferation of home computers in people's lives.

- **Parents of school-age children are more likely than nonparents to have one or more computers in their home. Forty-six percent of parents have one computer, and another 25 percent have two or more home PCs.**
- **There is no statistical difference between men and women with regard to having one computer in the home.**

EXHIBIT 2

Home PC Ownership by Region, 2001

	No computers in the home	One computer in the home	2 or more computers in the home
Detroit City	61%	23%	16%
Metro Detroit	35	48	16
Southern	30	46	24
Western	48	38	14
Central	43	40	16
Thumb	59	26	15
Northern Lower	54	43	3
Upper Peninsula	46	38	16

SOURCE: Public Sector Consultants, Inc.

- **There is little statistical difference by age among owners of one computer. Differences arise when we look at what age groups own two or more devices. Almost one-third of those under 25 own two or more computers, compared to just 10 percent of those aged 55–64.**
- **As education increases, so does PC ownership. Fifty-one percent of those with a college education have at least one computer, compared to 19 percent of respondents with less than a high school education. Again, greater differences emerge when looking at ownership of two or more devices. Respondents with higher levels of education also tend to have more PCs at home.**

While the majority of respondents report having at least one computer, real differences emerge when we look at who owns two or more computers. These individuals may represent the more technologically savvy, i.e. people who are attracted to or need the latest technology, or they may represent people who have an older device (one that is more than two years old) and a newer device. It is hard to discern this from the data, as respondents were not asked about the age of their current home devices.

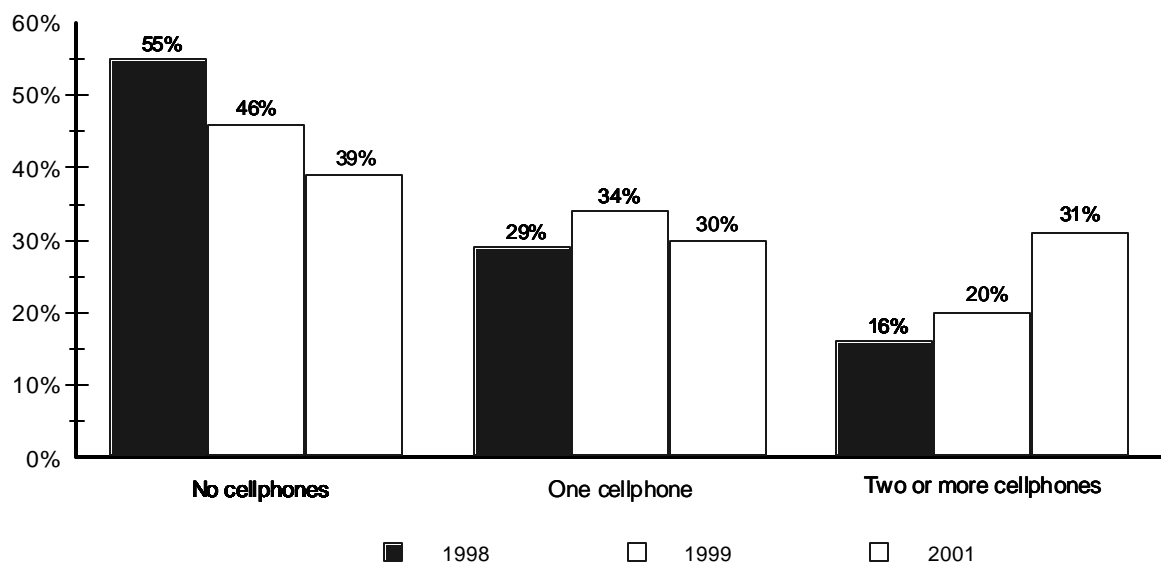
Ownership of cellphones has also increased over the past three years. In 2001, 61 percent of respondents had at least one cellphone, compared to just 45 percent in 1998.

By region of Michigan, important variations also emerge from the data (see Exhibit 4). The Northern Lower Peninsula of Michigan has the lowest saturation, with 61 percent of respondents reporting that they do not have a cellphone. The highest proliferation of cellphones is found in the City of Detroit, Metro Detroit, and Southern Michigan. Approximately two-thirds of respondents in these regions have one or more cellphones.

In addition to regional variations, other demographic variations are evident by parental status, gender, and race/ethnicity.

- **Parents are more likely than nonparents to have at least one cellphone. One-third report owning one cellphone, and 39 percent report owning two or more cellphones.**

EXHIBIT 3
Ownership of Cellphones, by Year



SOURCE: Public Sector Consultants, Inc.

EXHIBIT 4
Cellphone Ownership, by Region 2001¹

	No cellphones	1 cellphone	2 or more cellphones
City of Detroit	33%	23%	43%
Metro Detroit	32	29	39
Southern	36	44	20
Western	50	26	23
Central	50	25	25
Thumb	48	27	25
Northern Lower	61	29	10
Upper Peninsula	48	34	18

SOURCE: Public Sector Consultants, Inc.

- **The majority of both men and women have at least one cellphone. Men are more likely than women to have two or more phones (37 percent and 25 percent, respectively).**
- **By race/ethnicity, African-Americans are more likely to own at least one cellphone. Sixty-eight percent of African-Americans compared to 59 percent of whites reported owning one or more cellphones in 2001.**

¹Due to missing data and rounding error, all numbers reported in this table do not add up to 100 percent.

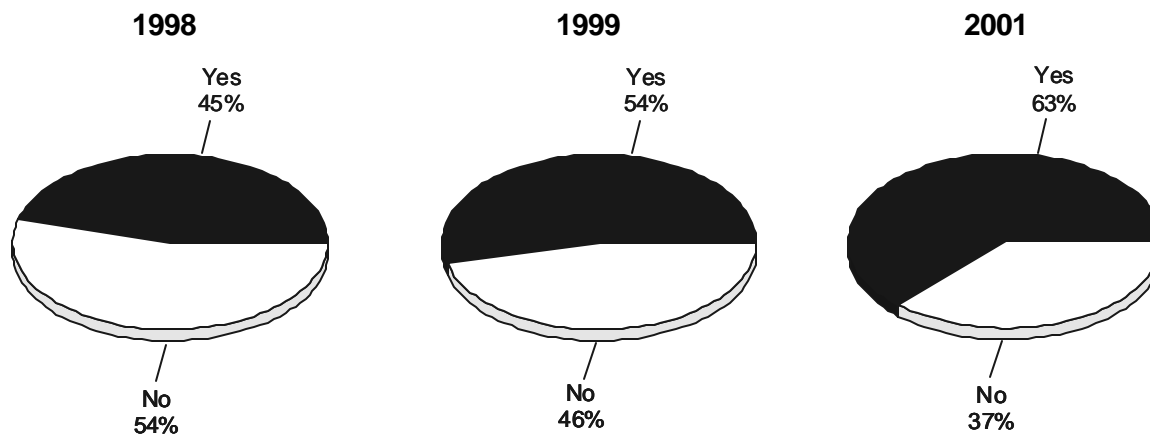
ACCESS TO THE INTERNET

The Cyberstate 2001 survey asked respondents following questions with regard to Internet access:

- Have you ever used the Internet?
- How many computers in your home connect to the Internet? (asked only of those who reported having at least one home computer)
- How do you access the Internet at home? Do you access through a modem, ISDN, DSL or cable modem connection? (asked only of those who reported having a computer that connects to the Internet)

When asked if they had ever accessed the Internet, almost two-thirds of respondents in 2001 reported that they had (63 percent). This percentage represents a steady increase over the past three years (see Exhibit 5).

EXHIBIT 5
Ever Used the Internet, by Year



SOURCE: Public Sector Consultants, Inc.

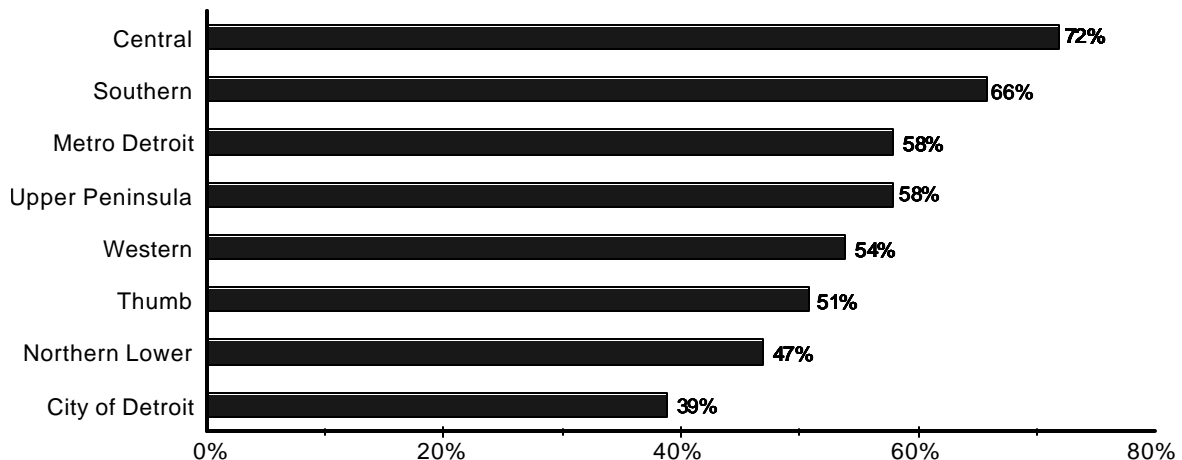
By demographic characteristics:

- Parents of school-age children are much more likely to have accessed the Internet than nonparents (77 percent compared to 54 percent).
- Two-thirds (64 percent) of white and more than one-half (55 percent) of African-American respondents have accessed the Internet.
- Sixty-seven percent of married respondents had accessed the Internet compared to only 60 percent of non-married respondents.
- Men were more likely to have ever gone online than women by about 12 percent (69 percent compared to 57 percent).
- The more education a respondent reported, the more likely they were to have ever gone online. The difference between the lowest and highest educated groups is vast. Only 35 percent of those who did not graduate from high school report ever having been online, whereas 88 percent of those with a college degree, and 90 percent of those respondents with a postgraduate education have ever been online.

- **This divide is becomes vaster still by generation. Ninety-one percent of those under 25 reported ever having been online, compared to just 22 percent of those 65 and older.**

Use of the Internet also varies across the regions of Michigan. In almost all regions, a majority of respondents has accessed the Internet. Central Michigan leads the state in people who have ever used the Internet (72 percent). Detroit city has the lowest percentage of people reporting Internet usage (39 percent).

EXHIBIT 6
Internet Usage, by Region, 2001



SOURCE: Public Sector Consultants, Inc.

The proportion of respondents that has never accessed the Internet has declined throughout all three surveys. In 1998, 54 percent of respondents reported never having accessed the Internet, while in 2001, that number had dropped to just 37 percent. However, the proportion of people who perceive the Internet as not worth the “time, hassle, and expense” has doubled. In 1999, 15 percent of respondents reported that they had not accessed the Internet because it was not worth the “time, hassle, or expense”, whereas in 2001, 34 percent reported this perception. In other words, while Internet usage has increased over the past three years, among nonusers, the perception that it is not worth the effort has doubled.

The percentage of respondents who use the Internet but who do not have a computer was statistically unchanged from 1999 to 2001. In 1999, 10 percent reported having accessed the Internet without benefit of a home computer and in 2001 the number was 12 percent.

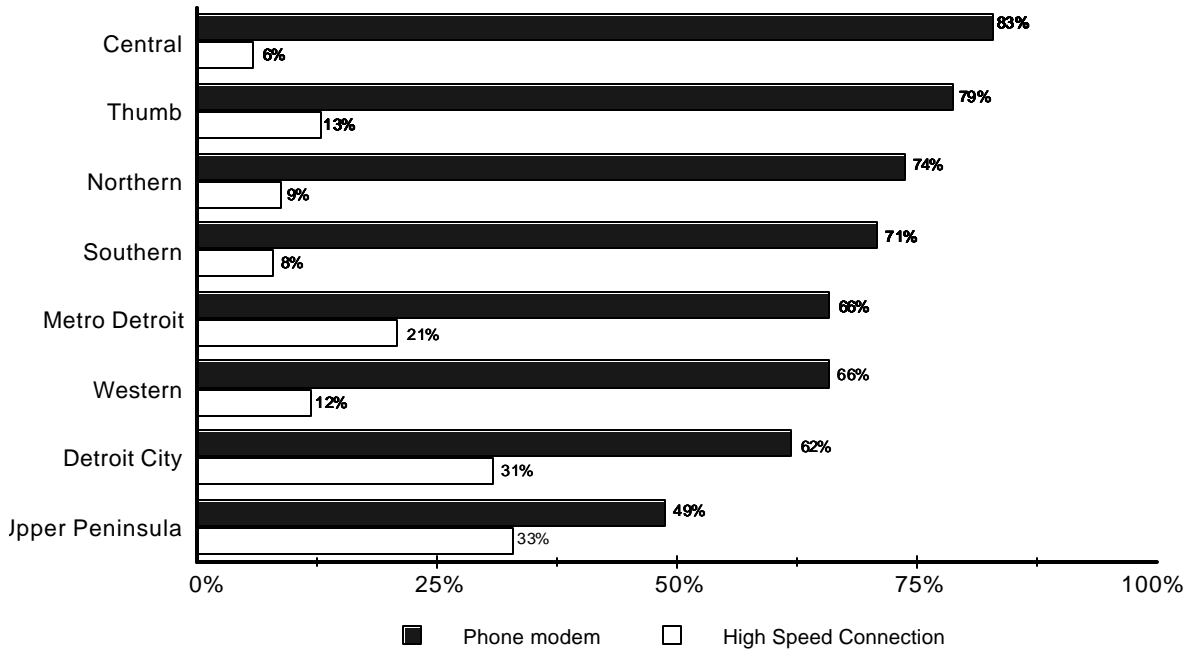
INTERNET CONNECTION

Results of the 2001 survey indicate that most people with home computers are connected to the Internet, and they are still using phone modems to go online. Seventy-one percent of home computers are connected via phone modem lines. Only 2 percent of home computers in Michigan connect to the Internet using an ISDN or DSL high-speed connection, but 14 percent of home computers connect using a cable modem.

Regional data reflect the same pattern. The most common way Internet users connect in all regions of Michigan is through a phone modem, from a high of 83 percent of Net users in Central Michigan to a low of 49 percent in the Upper Peninsula. High-speed connection varies a great deal by region.

Approximately one-third of home connections in Detroit City and the Upper Peninsula are high-speed, compared to only 6 percent in Central Michigan.

EXHIBIT 7
Type of Internet Connection, by Region, 2001²



SOURCE: Public Sector Consultants, Inc.

INTERNET ACTIVITIES

Use has increased for all categories of Internet activity over the three surveys. The percentage of people reporting that they had purchased something over the Internet doubled from 22 percent to 45 percent. Using the Internet for e-mail, the most common activity, increased by 17 percent over the course of the three surveys, as did using the Internet to research a product or service. The newest area of activity, using the Internet to manage finances by paying bills or transferring money, also increased from 1999 to 2001 by 4 percent.

Purchasing over the Internet has increased dramatically. In 1998, just 11 percent of respondents had made at least one purchase on the Internet. By 2001, that figure had tripled to 35 percent. The percentage of people who have never been on the Internet has decreased from 54 percent in 1998 to 37 percent in 2001.

The generation gap in Internet use carries over into purchasing online. The percentage of Internet users who have made a purchase remains steady for all age groups and then begins to drop at ages 55–64. After age 65, the proportion of Internet users who have made purchases drops dramatically. Net users aged 65 and older are one-sixth as likely to have made a purchase as Net users in almost all other age groups. In other words, for every one Internet user 65 or older who makes a purchase, six Internet users in other age groups have made a purchase.

²Percentages in this table do not add up to 100 percent, due to missing data.

EXHIBIT 8

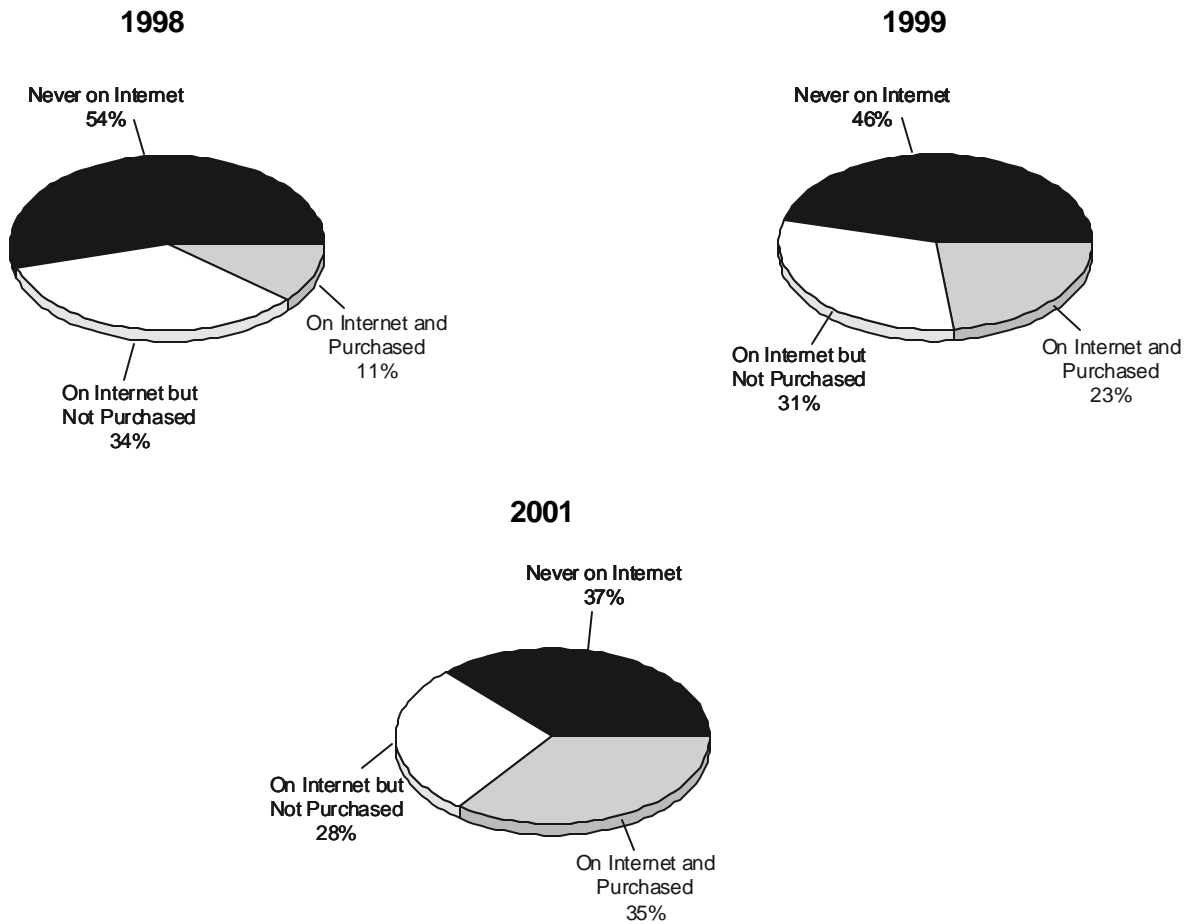
Internet Activities in the Last Month, by Year

	Year			Percentage change from 1998–2001:
	1998	1999	2001	
Send/receive e-mail:	69%	81%	86%	+17
Research a product or service:	57	65	74	+17
Purchase a product or service:	22	37	45	+23
Manage finances:	*	17	21	

SOURCE: Public Sector Consultants, Inc.
 NOTE: * Question not included in survey.

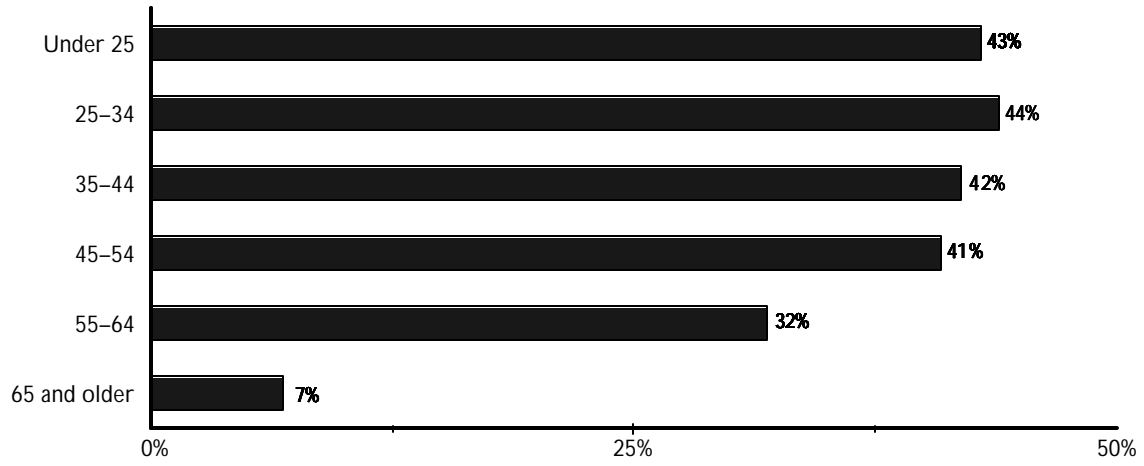
EXHIBIT 9

Commerce Activities on the Internet, by Year



SOURCE: Public Sector Consultants, Inc.

EXHIBIT 10
Internet Purchasing, by Age



SOURCE: Public Sector Consultants, Inc.

Who Are the Newest Internet Users?

Two-thirds of our sample has been online for two or more years. Among the one-third who represent initiates to the online community, we see still more interesting and important variations:

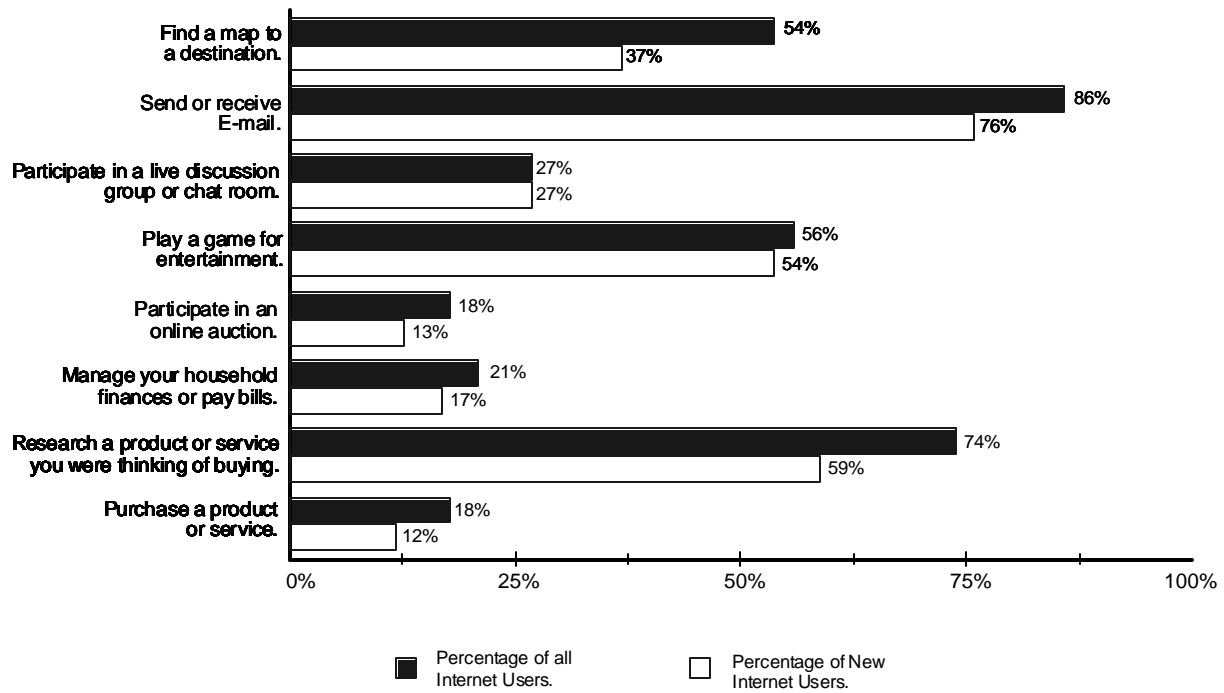
- **Fifty-eight percent of newcomers to the Internet are women.**
- **African-Americans are slightly more likely than whites to have gone online in the last year. Thirty-five percent of African-Americans have been online for one year or less, compared to about 30 percent of white respondents.**
- **Over one-third of the newcomers are high school graduates, and another third are those with some college, including those with vocational, technical and associate's degrees.**
- **Forty-four percent of the newcomers are over age 65, compared to just 17 percent of newcomers under 25.**
- **Across all regions of Michigan, 25 to 40 percent of respondents have gained access to the Internet during the last year. The biggest gains in access were the City of Detroit (41 percent) and the Thumb (42 percent).**

In addition to demographic variation from more established Internet users, the newest members of the online community use the Internet differently from more experienced users. This is most clearly seen by comparing the way newcomers use the Internet compared to the entire sample of Michigan Internet users (see Exhibit 11).

In general, the less time Internet users have been online, the less likely they are to participate in the activities listed. This relationship also holds for the frequency of the activity. In other words, the longer a person has been going online, the more frequently he or she participates in a given activity over the course of a month. Particularly notable differences exist between the entire online sample and those online one year or less in the activities of sending and receiving e-mail, researching products or services, and finding a map to a destination. Newcomers seem to use the Internet more for entertainment, suggesting that these activities are possible gateways for other types of Internet usage.

EXHIBIT 11

Internet Activities for All Users and Newcomers



SOURCE: Public Sector Consultants, Inc.

Attitudes About the Internet

THE ROLE OF TECHNOLOGY IN A CIVIL SOCIETY

All three Cyberstate surveys asked the following questions:

- In general do you think that computers and the Internet tend to isolate people from their communities and others around them, OR bring together people with shared interests, no matter where they live?
- In general do you think that computers and the Internet tend to help children learn and make education more fun OR hurt children's education by distracting them from learning?
- In general do you think that computers and the Internet tend to interfere with family life and relationships between parents and children OR bring families together?

In the 2001 survey, people expressed a positive view of technology in our society. In response to the first two questions, 62 percent and 74 percent, respectively, responded that they felt computers and the Internet bring people together and help children learn. Respondents were more ambivalent in response to the third question. One-third felt that technology can interfere in family relationships between parents and children, and 40 percent believed that technology brings families together. Looking at this data over the three surveys, we see that a clear majority of respondents also held positive views, believing that technology brings people together and helps children learn, though there was a small decrease in the proportion of people who believed that technology helps children learn. Over all three surveys, people were divided about whether or not technology brings families together or interferes with family relationships.

In the 2001 survey, African-Americans were more likely than whites to view computers and the Internet in a favorable light. In response to the question about whether or not computers and the Internet isolate or bring people together, 76 percent of African-Americans surveyed believed that they bring people together, compared to just 61 percent of whites. African-Americans were also more likely than whites to believe that technology helps children learn (85 percent compared to 73 percent, respectively).

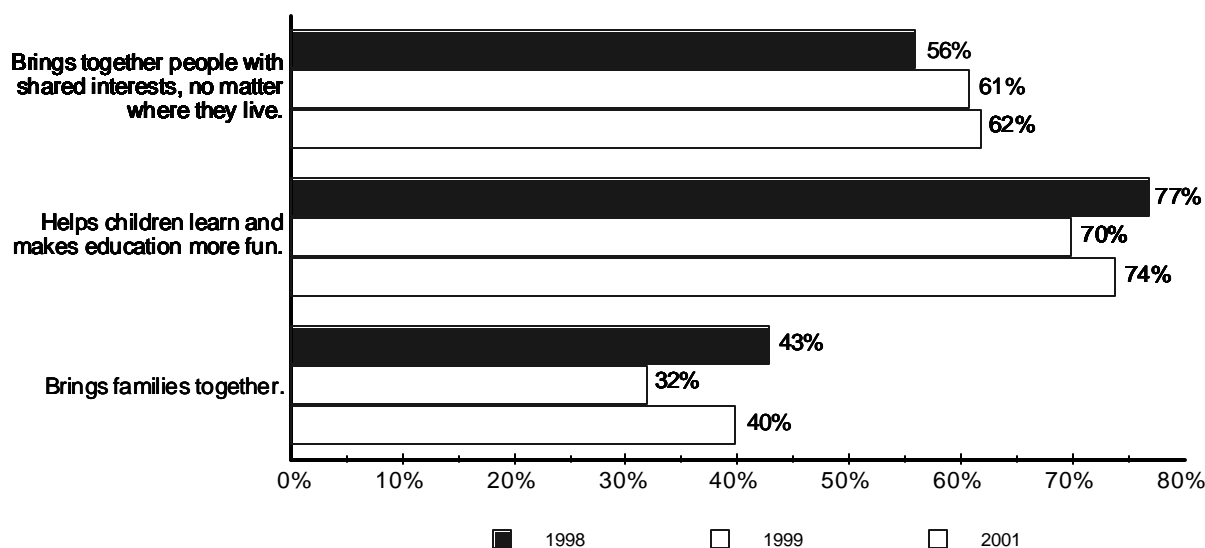
Respondents were more ambivalent when asked if they felt that technology interferes with or brings families together. One-third said they felt that it interferes, while 39 percent said they felt that it brings families together. This ambivalence is reflected in the inordinately large percentage of people volunteering that they "don't know" whether computers interfere with or bring families together. One out of four (25 percent) of respondents gave this answer, which is more than double the proportion volunteering a "don't know" answer for the previous two questions. This may indicate a "jury is still out" attitude.

Despite this seeming ambivalence, there are some definite differences between groups. African-Americans again reflect a more positive view of technology than whites. Forty-nine percent of African-Americans surveyed said they felt that computers and the Internet bring families together, while just 39 percent of whites held the same view.

Men were more likely than women to believe that technology brings families together. Forty-five percent of men held this view, compared to approximately one-third (35 percent) of women.

EXHIBIT 12

Technology's Role in a Civil Society, by Year



SOURCE: Public Sector Consultants, Inc.

Some consistent, albeit expected, trends were also present in the 2001 Cyberstate survey responses regarding the role of technology in society. For all three questions, older respondents were less likely than younger ones to hold a more positive attitude toward technology's role in society. In all cases, as age increased, so did the likelihood of believing that computers and the Internet isolate people from one another, hurt children's education by distracting them, and interfere with family life. The opposite trend was found for level of education. As the education of the respondent increased, the likelihood of holding a more positive attitude and believing that technology brings people together, helps children learn, and brings families together, also increased.

THE INTERNET AS A TIME MANAGEMENT TOOL

The 2001 Cyberstate survey asked respondents how they viewed the Internet as a tool for getting things done and managing the home/office interface. The great majority of respondents (64 percent) reported that they get about the same amount done regardless of the Internet. Eighteen percent said they get more done because of the Internet and 6 percent said they get less done.

- One-fourth of parents of school-age kids felt that they get more done with the Internet, compared to just 15 percent of nonparents.
- One-third of African-Americans surveyed believe they are getting more done, compared to 16 percent of whites.

A majority of respondents (55 percent) believed that remote e-mail and Internet access are positive because they allow them to keep in contact with their office. Eighteen percent believed that e-mail and Internet access are negative, making it more difficult to separate their home and work lives; and 21 percent of respondents were undecided as to whether the ability to interface with work from home or other locations is good or bad.

Respondents who believed that they were getting more done because of the Internet were less likely to believe that technology interferes with family life. Sixty percent of those who believed they were getting more done also believed that technology brings families together, whereas 60 percent of those who felt they were getting less done felt it interferes with family life.

This is something of a “chicken and the egg” relationship, because we cannot establish which attitude came first—a belief that the respondent is getting more, less or the same done or a belief that technology interferes in family life or brings families together. However, we do see in the data a definite association between these two attitudes. One possible interpretation of this pattern is that people believe they are getting more done because the Internet enables greater flexibility in managing family and office demands, making it easier to juggle competing obligations.

THE INTERNET AS A TOOL FOR PARTICIPATION IN GOVERNMENT

Respondents were asked a series of questions to determine their use of the Internet as a tool of participation in government, their willingness to vote online, and whether or not they would be willing to support online voting, even if it meant higher taxes.

- **Nineteen percent of respondents said that they had access to information about politics, campaigns, or candidates during the November 2000 election process.**
- **A plurality of respondents (44 percent) would prefer to vote online in the weeks preceding the election, compared to one-third who prefer voting in a booth, and one-fifth who prefer voting by mail.**
- **Of those respondents who would prefer to vote online, 45 percent said they would still support such a system, even if it meant higher taxes.**

Accessing political information online: **Parents of school-age children, men, younger respondents, and those with a higher educational level were all more likely to have accessed political information online during the November 2000 election cycle.**

Support for an online voting system in Michigan: **There is a preference for an online voting system in Michigan, and this support remains even if it results in higher taxes. By looking at the demographics of those supporters we can draw a portrait of those who support a new way of voting and how strongly they may support the change (as measured by willingness to pay a higher tax bill, if necessary).**

- **Fifty-seven percent of parents with school-age children expressed a preference for online voting, and 49 percent of those respondents said they would still support such a system even if it meant higher taxes.**
- **White respondents would prefer online voting (46 percent), while just one-third (35 percent) of African-Americans report a preference for online voting. The differences in support change dramatically when paying for such a system is considered. Forty-six percent of whites would still support the online system with higher taxes, while only approximately one-fourth of African-Americans would.**
- **One-third of both men and women prefer in-booth voting, but men prefer online voting more than women do (47 percent vs. 40 percent). A majority of men who prefer online voting would still support it if it meant higher taxes. Only 37 percent of women still supported the online system in the face of paying higher taxes.**

EXHIBIT 13

Support for Online Voting by Selected Demographic Characteristics, 2001

<i>Parental Status</i>	
With school-age children	56%
Without school-age children	35
<i>Race/ethnicity</i>	
White	46
African-American	35
<i>Gender</i>	
Male	47
Female	40
<i>Age</i>	
Under 25	60
25–34	62
35–44	51
45–54	39
55–64	32
65 and older	42
<i>Education</i>	
Less than high school	36
High school graduate	41
Some college	47
College graduate	50
Postgraduate degree or study	31

SOURCE: Public Sector Consultants, Inc.

- **As age increases, the willingness to support such a system through higher taxes decreases. Sixty percent of the respondents under 25, and 62 percent of those aged 25 to 34, would prefer an online voting system, compared to 38 percent of those aged 55–64 and only 13 percent of those aged 65 and older.**
- **As educational level increases, respondents are more willing to vote online, but this difference is not great. Forty-one percent of high school graduates, compared to 50 percent of college graduates, expressed preference for online voting. Among those who support the system, there is less support among those with lower educational attainment than among those with higher levels of education.**

Other uses of the Internet for Government Participation

Approximately one-half (50 percent) of respondents indicated that they would be willing to renew their driver's license online. This includes:

- **59 percent of parents of school-age children**
- **57 percent of men**
- **61 percent of those under 25 and 55 percent of those 25–34, 43 percent of respondents aged 55–64 and 29 percent of those 65 and older**

EXHIBIT 14

Willingness to Pay for Online Voting Through Higher Taxes

<i>Parental Status</i>	
With school-age children	49%
Without school-age children	41
<i>Race/ethnicity</i>	
White	46
African-American	27
<i>Gender</i>	
Male	52
Female	37
<i>Age</i>	
Under 25	52
25–34	55
35–44	39
45–54	45
55–64	24
65 and older	40
<i>Education</i>	
Less than high school	38
High school graduate	35
Some college	54
College graduate	41
Postgraduate study or degree	70

SOURCE: Public Sector Consultants, Inc.

THE GOVERNMENT'S ROLE IN TECHNOLOGICAL POLICY

The Cyberstate 2001 survey asked a series of questions about perceptions of privacy, the need for regulation of the Internet, and whether respondents felt that public records should be made available through the Internet. Additionally, respondents were asked why they had not ever purchased anything over the Internet. These questions included concerns about privacy and security.

While respondents have a fairly positive attitude toward computer technology and the Internet and the potential uses of that technology, they are very cautious about potential misuses. Overall, respondents are concerned about the privacy of their personal information. When asked why they had never purchased anything online, 40 percent responded that they had security or privacy concerns with regard to their personal and payment information. Furthermore, 78 percent reported that they were very to somewhat concerned that the information provided to computer-based services will not be kept confidential. Three-fourths (75 percent) of respondents believe that public records should NOT be available over the Internet.

In addition to asking respondents about security and privacy concerns, the Cyberstate 2001 survey asked respondents to choose one of the following statements as being closest to their own view:

- **The federal government needs to regulate what's on the Internet more than what's on television and in newspapers because the Internet can be used to gain easier access to dangerous information; OR**
- **The Internet is a lot like television and newspapers, so regulating the Internet more than television and newspapers would violate the constitutional freedoms of the press and speech.**

Overall, respondents were split regarding attitude toward regulation, with 46 percent choosing the first statement and 43 percent choosing the second.

EXHIBIT 15
Support for Stricter Regulation of the Internet,
by Selected Demographic Characteristics

<i>Parental Status</i>	
With school-age children	50%
Without school-age children	43
<i>Internet Use</i>	
Child uses the Internet	45
Child does not use Internet	58
<i>Race/ethnicity</i>	
White	45
African-American	54
<i>Gender</i>	
Male	37
Female	54
<i>Age</i>	
Under 25	44
25–34	42
35–44	45
45–54	41
55–64	52
64 and over	52
<i>Education</i>	
Less than high school	50
High school graduate	51
Some college	41
College graduate	44
Postgraduate degree or study	33

SOURCE: Public Sector Consultants, Inc.

With such a fairly even split, it is interesting to look at who supports which approach to government regulation.

- **Parents of school-age children favor stricter regulation of the Internet than nonparents by a small margin (50 percent compared to 43 percent). However, when controlling for whether or not their children use the Internet, those parents whose children use the Internet favor regulating the Internet at the same level as television and newspapers (51 percent).**
- **Whites are split between more regulation (45 percent) and regulating at the same level as newspapers and television (45 percent), but African-Americans are clearly in favor of stricter regulation (54 percent) than regulating at the same level as other information media (37 percent).**
- **The majority of women favor stricter regulation of the Internet (54 percent) while the majority of men favor regulating the Internet no more than other information media.**

- **The percentage favoring stricter regulation increases with age, but not by a wide margin. Forty-four percent of respondents under 25 favor stricter regulations, compared to just 41 percent of respondents aged 55-64.**
- **The percentage favoring stricter regulation also decreases as educational level increases. Fifty percent of those respondents with less than a high school education favor stricter regulation, compared to only one-third of those with a postgraduate education.**

Respondents with more experience with the Internet tend to be more concerned about the privacy of information, but less likely to believe that the Internet should be regulated more than television and newspapers. Eighty-three percent of respondents who have used the Internet are very to somewhat concerned, compared to 70 percent of those who have not used the Internet. The greater length of time that a respondent has been going online corresponds to a decrease in concerns, to a limited extent. Thirty-eight percent of the newest users (online one year or less) favor stricter regulation, compared to just one-fourth of those users who have been online three or more years.

FUTURE DIRECTIONS

The data from the three Cyberstate surveys reveal a great deal about information technology in Michigan. As with all research, the data also point to new directions for future inquiry. For example,

- **Does the slowing of the economy, especially in the technology sector, have any noticeable effect on the increase in use and access to technological devices and the use of the Internet?**
- **What is the average age of the technological devices that people own?**
- **Why do people start using the Internet? How do they learn to use the Internet?**
- **Does support for an online voting system last beyond the “afterglow” of the November 2000 election?**

These and other questions will need to be explored as attitudes toward technology and Internet use evolve in Michigan.

Appendices

Notes

- [BRACKETED TEXT] denotes instructions to telephone interviewers.

Introduction

Hello, I'm calling from Public Sector Consultants in Lansing, Michigan. We are conducting a survey about how Michigan residents use information technology in their daily lives. The survey is not being conducted for any candidate, political party, or business.

[RANDOM SELECTION OF RESPONDENT AT HOUSEHOLD LEVEL]

Are you 18 years of age or older and a resident of Michigan?

Yes..... Continue
 No..... Terminate

Before we begin, let me tell you that this interview is completely voluntary. If we come to any question that you don't want to answer, just let me know and we'll go on to the next question. Let me also assure you that all your responses will remain confidential.

Trend Data

1. Please tell me how many of each of the following are found in your home. [RECORD RAW NUMBER. CODE DK/REFUSED/OTHER AS 999.] [FOR EACH ITEM, ASK "How many _____ do you have in your home?"]

	0	1	2	3	4+	N/A
a. Personal computer	41%	41%	12%	4%	2%	1%
b. PalmPilot or other hand-held computer	89%	8%	2%	1%	1%	1%
c. Cellular phone	39%	30%	22%	6%	3%	1%

2. [ASK ONLY IF Q 01a IS 1 OR MORE BUT NOT 999] How many computers in your home can connect to the Internet? [RECORD RAW NUMBER. CODE DK/REF AS 999]

72%	1 computer
14%	2 computers
3%	3 computers
2%	4 or more computers

3. Have you ever used the Internet?

63%	Yes	GO TO Q 04
37%	No	GO TO Q 03A
0%	Don't know/undecided (volunteered)	
0%	Refused/other (volunteered)	

3A. [ASK ONLY IF Q 03 = 2, "No"] Which of the following statements best describes why you have not used the Internet? [CODE BEST RESPONSE AND SKIP AHEAD TO NEXT SECTION, TECHNOLOGY AND CIVIL SOCIETY]

32%	No access to the Internet
14%	Too complicated/Don't understand
32%	Not worth the time, hassle, or expense
18%	Other (volunteered)
4%	Don't know (volunteered)
1%	Refused (volunteered)

4. [ASK ONLY IF Q 03 = 1, "Yes"] When did you first start going online? Was it within the last 6 months, a year ago, two or three years ago, or more than three years ago?

14%	Within the last six months
17%	A year ago
34%	Two or three years ago
34%	More than three years ago
1%	Don't know (volunteered)
1%	Refused/other (volunteered)

5. Have you used the Internet at home, at your workplace, or both?

31%	Home (including home office)
10%	Workplace
48%	Both
4%	Don't know (volunteered)
7%	Refused/other (volunteered)

5A. [ASK ONLY IF Q 05 = 1, "Home" OR 3, "Both"] How do you access the Internet **at your home**? Do you access the Internet at home through a modem, ISDN, DSL, or cable modem connection?

71%	Modem
1%	ISDN line
2%	DSL line (includes xDSL, aDSL, sDSL)
14%	Cable modem connection
11%	Don't know (volunteered)
2%	Refused/other (volunteered)

Next, I'm going to mention several things you might do on the Internet and I'd like you to tell me how often you might do these things.

6A. In a typical month, would you use the Internet to **find a map to a destination** ... [READ 1-4]?

2%	Every day, or almost every day
5%	Every week
47%	Once or twice in all
44%	Not at all
1%	Don't know (volunteered)
1%	Refused (volunteered)

6B. In a typical month, would you use the Internet to **send or receive E-mail** ... [READ 1-4]?

58%	Every day, or almost every day
19%	Every week
9%	Once or twice in all
13%	Not at all
1%	Don't know (volunteered)
1%	Refused (volunteered)

6C. In a typical month, would you use the Internet to **participate in a live discussion group or chat room** ... [READ 1-4]?

5%	Every day, or almost every day
8%	Every week
13%	Once or twice in all
73%	Not at all
0%	Don't know (volunteered)
0%	Refused (volunteered)

6D. In a typical month, would you use the Internet to **play a game or for entertainment** ...
[READ 1-4]?

19%	Every day, or almost every day
17%	Every week
20%	Once or twice in all
44%	Not at all
0%	Don't know (volunteered)
0%	Refused (volunteered)

6E. In a typical month, would you use the Internet to **participate in an online auction** ...
[READ 1-4]?

3%	Every day, or almost every day
3%	Every week
12%	Once or twice in all
81%	Not at all
1%	Don't know (volunteered)
0%	Refused (volunteered)

6F. In a typical month, would you use the Internet **to manage your household finances or pay bills** ... [READ 1-4]?

4%	Every day, or almost every day
6%	Every week
11%	Once or twice in all
79%	Not at all
1%	Don't know (volunteered)
0%	Refused (volunteered)

6G. In a typical month, would you use the Internet to **research a product or service you were thinking of buying** ... [READ 1-4]?

5%	Every day, or almost every day
19%	Every week
49%	Once or twice in all
25%	Not at all
1%	Don't know (volunteered)
0%	Refused (volunteered)

6H. In a typical month, would you use the Internet to **purchase a product or service** ... [READ 1-4]?

- 1% Every day, or almost every day
- 5% Every week
- 38% Once or twice in all
- 54% Not at all
- 1% Don't know (volunteered)
- 0% Refused (volunteered)

7. [ASK ONLY IF 06H = 4, "not at all"] Have you **ever** purchased anything through the Internet?

- 19% Yes
- 81% No
- 0% Don't know (volunteered)
- 0% Refused/other (volunteered)

7A. [ASK ONLY IF Q07 = 2, "No"] Which of the following statements best describes why you have not purchased anything through the Internet? [READ 1-6 AND CODE FOR BEST RESPONSE.]

- 1% I couldn't find the product I was looking for
- 32% I was worried about the security of my payment information
- 8% I was worried about privacy (for example, that someone would have a record of who I am and what I purchased)
- 5% I was unsure of how to place an order, or I tried to place an order but it never went through
- 4% I found a lower price or better service elsewhere
- 37% I like to see or touch an item before I buy it
- 9% Don't know (volunteered)
- 5% Refused (volunteered)

8. Have you ever used the Internet to trade a stock, transfer money to or from a bank account, or pay a bill?

- 18% Yes
- 82% No
- 0% Don't know (volunteered)
- 0% Refused/other (volunteered)

9. Do you have a family or personal website?

17%	Yes
83%	No
1%	Don't know (volunteered)
0%	Refused/other (volunteered)

Technology and Civil Society

10. In general, do you think that computers and the Internet tend to [READ 1 AND 2] ...

- 19% Isolate people from their communities and others around them OR
- 62% Bring together people with shared interests, no matter where they live?
- 18% Don't know (volunteered)
- 2% Refused (volunteered)

11. In general, do you think that computers and the Internet tend to [READ 1 AND 2] ...

- 74% Help children learn and make education more fun OR
- 12% Hurt children's education by distracting them from learning?
- 14% Don't know
- 1% Refused

12. In general, do you think that computers and the Internet tend to [READ 1 AND 2] ...

- 34% Interfere with family life and relationships between parents and children OR
- 40% Bring families together?
- 25% Don't know
- 1% Refused

13. In general, do you get more work done these days because of the Internet, do you get less work done these days because of the Internet, or do you get about the same amount done as ever, regardless of the Internet?

- 18% I get more work done
- 6% I get less work done
- 64% I get about the same amount done as ever
- 10% Don't know (volunteered)
- 2% Refused/other (volunteered)

13A. Some people feel that business Internet access and electronic mail are good, because they allow people to maintain contact with their offices or workplaces even from a distance. Others feel that business Internet and e-mail are bad, because they make it harder for people to separate themselves from work, even when they are at home or on vacation. How do you feel about this— are your business Internet access and electronic mail good, because they allow you to maintain contact with your office or workplace even from a distance, or are your business Internet access and e-mail bad, because they make it harder for you to separate yourself from work, even when you are at home or on vacation?

55%	They're good
18%	They're bad
21%	Don't know (volunteered)
6%	Refused/other (volunteered)

Technology as a Tool for Participating in Government

14. During the November 2000 election process, did you use the Internet to access information about politics, candidates, or political campaigns, or not?

19%	Yes
81%	No
1%	Don't know (volunteered)
0%	Refused/other (volunteered)

15. Have you ever renewed your automobile registration on line, or not?

4%	Yes
96%	No
0%	Don't know (volunteered)
0%	Refused/other (volunteered)

15A. [ASK ONLY IF Q15= 2, "No"] May I ask why not? [CODE BEST RESPONSE]

6%	I didn't trust the online renewal system
7%	It was too difficult/too much hassle
22%	I didn't know I could renew online
59%	Other
6%	Don't know
1%	Refused

16. Would you be willing to renew your drivers license online, or not?

51%	Yes
43%	No
5%	Don't know (volunteered)
1%	Refused/other (volunteered)

17. There are many ways for people to vote, and some prefer one way over another. If you had the choice of voting in a booth at a polling place on election day, voting over the Internet during the weeks leading up to election day, or voting through the mail during the weeks leading up to election day, which would you prefer?

33%	Vote in a booth on election day
44%	Vote online over the Internet during the previous weeks
19%	Vote by the mail during the previous weeks
4%	Don't know (volunteered)
0%	Refused (volunteered)

18. [ASK ONLY IF Q17 = 2, "Vote online over the Internet"] An online voting system would cost money to implement. Would you still support an online voting system for Michigan if you knew that it would mean higher taxes for you, or not?

45%	Yes, still support
41%	No, wouldn't support
13%	Don't know/Not sure/It depends
0%	Refused

19. Have you ever sent an e-mail to an elected official, or not?

10%	Yes
90%	No
0%	Don't know
0%	Refused

20. Have you ever sent a letter through the U.S. mail to an elected official, or called an elected official on the phone, or not?

33%	Yes
67%	No
0%	Don't know
0%	Refused

Government's Role in Technology Policy

21. How concerned are you that personal information you provide to a computer-based service will not be kept confidential? Are you very concerned, somewhat concerned, or not at all concerned?

45%	Very concerned
33%	Somewhat concerned
19%	Not at all concerned
2%	Don't know (volunteered)
0%	Refused/other (volunteered)

22. Which of the following two statements about regulating the Internet comes closest to your own view? The first statement is, the federal government needs to regulate what's on the Internet more than what's on television and in newspapers, because the Internet can be used to gain easier access to dangerous information. The second statement is, the Internet is a lot like television and newspapers, so regulating the Internet more than television and newspapers would violate the constitutional freedoms of the press and speech.

46%	Agree with first statement, Fed. Government needs to regulate Internet more than TV
43%	Agree with second statement, no more regulation needed for Internet than for TV
10%	Don't know
1%	Refused

23. Government agencies keep public records of things like driving records, marriage records, real estate purchases, and court cases. Do you think these records should or should not be publicly available over the Internet, or not?

21%	Should be publicly available over the Internet
75%	Should not be publicly available over the Internet
4%	Don't know (volunteered)
1%	Refused/other (volunteered)

Demographics

24. Do you currently have children of school age (K–12) or younger?

39%	Yes
62%	No
0%	Refused/other

24A. [ASK ONLY IF Q 24 = 1, “Yes”] Do your children use the Internet, or not?

64%	Yes
36%	No
1%	Don’t know
0%	Refused

25. In what year were you born? [FREE RESPONSE, RECORD AS FOUR-DIGIT YEAR, CODE REFUSED/OTHER AS 9999]

15%	<25
18%	25–34
21%	35–44
17%	45–54
11%	55–64
19%	65+

26. What is the highest level of education you have completed?

19%	Less than high school
33%	High school graduate
30%	Some college or technical degree
12%	College graduate
6%	Postgraduate study or degree
1%	Refused

27. Which of the following income groups includes your total family income last year?

21%	Less than \$25,000
28%	\$25,000 to \$49,999
16%	\$50,000 to \$74,999
12%	\$75,000 and over
9%	Retired
14%	Refused

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28. Would you mind telling me if you are white, African-American, Hispanic, Native American, Asian-American, Arab-American, or some other ethnic group?

78%	White
9%	African-American
2%	Hispanic
2%	Native American
1%	Asian-American
1%	Arab-American
4%	Another group
3%	Refused (volunteered)

29. In what type of community do you live—large city, suburban area, small city or town, village, or rural area?

17%	Large city
21%	Suburban area
35%	Small city or town
8%	Village
19%	Rural area
0%	Don't know (volunteered)
1%	Refused/other (volunteered)

30. What county do you live in? [RECORD BY FIPS CODE. IF WAYNE COUNTY ASK, "Do you live in the City of Detroit?" IF YES CODE 55555. IF NO, CODE WITH WAYNE COUNTY FIPS.] _____

31. What is your ZIP Code? [RECORD 5 DIGIT ZIP CODE. IF DON'T KNOW/REFUSED/OTHER CODE AS 99999]

9%	City of Detroit
23%	Metro Detroit
8%	Southern
19%	Western
11%	Central
13%	Thumb
17%	Northern Lower or Upper Peninsula

In the last two weeks, have you done any of the following things?

32A. Have you read a book for pleasure, or not?

53%	Yes
46%	No
0%	Don't know
1%	Refused

32B. Have you attended a movie, a sporting event, a concert, or a theatrical performance, or not?

47%	Yes
52%	No
0%	Don't know
1%	Refused

32C. Have you visited with a neighbor or friend, either in person or on the phone, or not?

92%	Yes
7%	No
0%	Don't know
1%	Refused

32D. Have you attended a religious service, or not?

45%	Yes
54%	No
0%	Don't know
1%	Refused

33. Are you currently married, or not?

48%	Yes
51%	No
0%	Don't know
1%	Refused

34. [BY OBSERVATION ONLY]

50%	Male
50%	Female