

Tracking Home Computers and Internet Access in North Carolina 1999 to 2004

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Executive Summary

Digital technology creates new opportunities but it can also reinforce old social divisions. Unequal access to the Internet can hamper economic development and undermine the general quality of life in under-served areas. The mission of e-NC has been to bring the opportunities of digital technology to every part of North Carolina. Three surveys conducted between 1999 and 2004 document the progress that has been made. In 1999, only about half (57%) of the rural households with home computers had Internet access. By 2004, this figure had climbed to 91% (almost equal to telephone penetration). In rural North Carolina, one-third of the people who do not have home Internet access use the Internet somewhere else. Between 2002 and 2004, the proportion of North Carolinians who reported using public access facilities increased from 2.7 percent to 10.4 percent. Over half of them (53%) reported that the public access facility was sponsored by e-NC. This is probably a low estimate since some respondents don't remember the facility's sponsor. Over 175,000 North Carolina citizens remember using an e-NC facility.

Rural access is only one challenge to universal digital literacy. Low income families face special challenges. Less than a third of families with incomes under \$15,000 have a home computer and less than one-fourth have home Internet access. Many of these families make real sacrifices to help their children prepare for the modern world. Almost half of the households making less than \$15,000 a year and having a child living at home have a home computer. This is over twice the rate for poor families without children living at home. Almost 75% of the families with children who do not have a computer and who are not planning on buying a computer cite the cost of the computer as a reason for not having a computer.

There are only two of the interesting themes that emerge from the results of these three surveys. The complete picture is much more complex and has dozens of interesting and important findings.

Since 1999, three citizen surveys have documented the level of home computer ownership and Internet access in North Carolina.

- **STUDY 1:** In 1999, the North Carolina Board of Science and Technology included a set of questions concerning computer and Internet usage in a more general study of public perceptions of the role and importance of science and technology in the North Carolina economy. A general population telephone survey employed random digit dialing. Of the households contacted, 52 percent completed the interview. The complete report is available on the e-NC website.
- **STUDY 2:** After viewing the results of the 1999 survey, many local decision makers wanted to see the results for their counties. In 2001, the Rural Internet Access Authority

decided to collect data for local decision makers in every part of North Carolina. In order to facilitate planning for improved Internet access in all 100 North Carolina Counties, independent random samples were drawn from each North Carolina County. A sample of 12,904 interviews North Carolinians completed in June 2002. So that the results can be generalized to the entire state, the data were weighted by the county's population and the respondent's education.

- **STUDY 3:** The third study continues to track computer and Internet use in North Carolina. Interviewing began on Jan. 14, 2004 and was completed on Feb. 11, 2004. Quotas were used to insure that there was an adequate representation of rural counties. There were 1197 completed interviews. So that the results can be generalized to the entire state, the data were weighted by the county's population and the respondent's education.

Home Computers:

- Home computer ownership in North Carolina has continued to rise with over two-thirds of North Carolina homes in 2004 having a computer.
- While "white" and "other" households are most likely to have home computers, African American households have increased faster during this time.
- Home computers increased faster in urban counties than in rural counties.
- Almost every home with an income of over \$100,000 per year has a home computer but less than one-third of the poverty households have a home computer.
- The greatest increase in home computers occurred in households with children. Almost no change was observed in households without children.
- For the folks planning to buy a computer, their primary reason for not having a home computer is that they can use one somewhere else. For people who are not planning to buy a computer, four reasons (Don't want one; Don't know how to use; Not useful; and Too expensive) that suggest these people don't know how to use a computer and that a computer is still too expensive for them. About sixty percent of the people who are not planning to buy a computer cite the cost as one of the factors.
- Almost half of the households making less than \$15,000 a year and having a child living at home have a home computer. This is over twice the rate for poor families without children living at home. Almost 75% of the families with children who do not have a computer and who are not planning on buying a computer cite the cost of the computer as a reason for not having a computer. Even the poorest families seem to understand the importance of having a home computer for their children.

Home Internet Access:

- Not having a home computer is the biggest barrier to having home Internet access.
- While home Internet access is increasing fastest among younger citizens.
- While home Internet access is most common among Whites and Others (Asian, mixed, etc.), it is rapidly increasing among African Americans.
- The proportion of rural homes with Internet access has almost doubled between 1999 and 2004.
- While the gap between urban and rural counties decreased between 1999 and 2002, it has stabilized since then.

- While better off families continue to increase their home Internet access, the progress made by poorer families has stopped.
- While more educated families have continued to increase their home Internet access, the progress made by less educated households has slowed.
- Families with children continue to increase their home Internet access while the progress made by families without children has slowed.

Internet Access in homes with computers:

- In 1999, a large gap that existed between the urban and rural counties. With the work of the Rural Internet Access Authority (now E-NC Authority) this barrier has been closed. Today rural Internet access has expanded so that every household in North Carolina can connect on to the Internet with a local phone call.
- The interest in home broadband connection increased significantly during the last two years. This may be due to E-NC digital literacy and e-community efforts that make people more aware of the benefits of broadband.
- In middle and high-income households, almost all households with a computer are connected. There has been great progress in lower income families.
- Among respondents who graduated from high school, almost all households with a computer are connected. Among high school dropouts who have a home computer, there has been great progress getting connected to the Internet.

Using the Internet Anywhere:

- Between 2002 and 2004 the proportion of North Carolinians who use the Internet anywhere has increased from 65% to 71%. The network of 140 e-NC public access centers is an important factor underlying this successful NC program.
- Of the people who use a public access facility, over half of them (53%) report that it is an e-NC facility. This is probably a low estimate since some respondents don't remember the facilities sponsor.
- Over 2% of all North Carolina citizens (roughly 175,000 people) remember using an e-NC facility.
- North Carolina's program of providing public access at community colleges and public libraries has been successful.
- 45% of people who have a home computer but no home Internet access use the Internet outside the home.
- Most people who use the Internet outside of the home use it at work or a friend's house.
- Overall, NC is very similar to the national results published by Pew.
- There seems to be more Internet usage in rural North Carolina than in other rural areas around the nation.
- The middle and upper income respondents in NC are very similar to their counterparts nationwide. Lower income respondents report more Internet usage than their national counterparts
- High School dropouts are more likely to use the Internet in North Carolina than in the rest of the nation.

e-Government in North Carolina:

- Between a third and a half of North Carolinians are aware of the websites developed by their counties or towns but only one-third of those who are aware of the websites have actually visited them.
- Rural respondents are less likely to report that their county has a website. Urban and rural respondents who report that their counties have websites are equally likely to visit that website.
- Those who had actually visited the websites characterized them as “very easy” to access, “usually up-to-date” and “somewhat valuable.”
- Only a minority of the Internet users were “Definitely Interested” or “Interested” in using these websites to conduct business with their local governments.

Attitude and Opinions:

- People are concerned about obscene material on the Internet that children can access.
- Almost everyone recognizes that it is important for school aged children to learn to use the computer and that Internet access is essential for a decent standard of living.
- Over half of North Carolinians worry that the new technology invades our privacy and that we rely on it too much.
- Few people live in groups or communities where most people don't use a computer.
- More than half of North Carolinians support programs to bring Internet access to everyone's home who wants it and to bring high speed access to all North Carolina businesses that need it.

Introduction

Since 1999, three citizen surveys have documented the level of home computer ownership and Internet access in North Carolina.

STUDY 1: In 1999, the North Carolina Board of Science and Technology included a set of questions concerning computer and Internet usage in a more general study of public perceptions of the role and importance of science and technology in the North Carolina economy. A general population telephone survey employed random digit dialing. A total of 522 respondents completed the interview. The complete report is available on the E-NC website.

STUDY 2: After viewing the results of the 1999 survey, many local decision makers wanted to see the results for their counties. Unfortunately, the sample size (N=500) made it impossible to provide reliable information at the county level. In 2001, the Rural Internet Access Authority planned to extend the work started by Vision 2030 and to make it more relevant to local decision makers in every part of North Carolina. RIAA wanted results that could provide useful and valid information to the local decision makers in every NC County. In order to facilitate planning for improved Internet access in all 100 North Carolina Counties, independent random samples were drawn from each North Carolina County. A sample of 12,904 interviews North Carolinians completed in June 2002.

STUDY 3: The third study continues to track computer and Internet use in North Carolina. Interviewing began on Jan. 14, 2004 and was completed on Feb. 11, 2004. A total of 20 interviewers were chosen, trained and actually worked on the project. The interviewer corps was predominantly female (4 males). Interviewers ranged in age from 19-72. There were 1197 completed interviews. Quotas were used to insure that there was an adequate representation of rural counties. The sample of telephone numbers was purchased from Survey Sampling, Inc., a Connecticut firm with an excellent reputation that has provided samples for many years to ECU and other universities with very satisfactory results.

A significant number of interviews were conducted in Spanish using a bi-lingual interviewer. Upon encountering a language barrier with a Hispanic respondent, a notation was made of the telephone number and was put aside for re-contact. This is important to remember when the results for Hispanic respondents are compared to other studies that only interview English-speaking Hispanics.

All of these data are available. Dr. Wilson is happy to assist people who are working to improve the quality of life in North Carolina helping organize the statistics into a usable format. People who are interested in the results should contact Kenneth Wilson, Department of Sociology, East Carolina University, Greenville, NC 27858. 252-328-4897

The best way to contact Dr. Wilson is by email: wilsonk@mail.ecu.edu

Changing Levels of Home Computer Ownership

Home Computer ownership is a basic part of entry into the new economy. Over the past five years, the level of home computer ownership has been steady increasing. Table 1 presents the results of the three surveys in a format for easy comparison. Table 1 shows that home computer ownership in North Carolina has increased from 53% in 1999 to 67% in 2004. During this 5-year period, the rate of home computer ownership increased 26% in North Carolina.

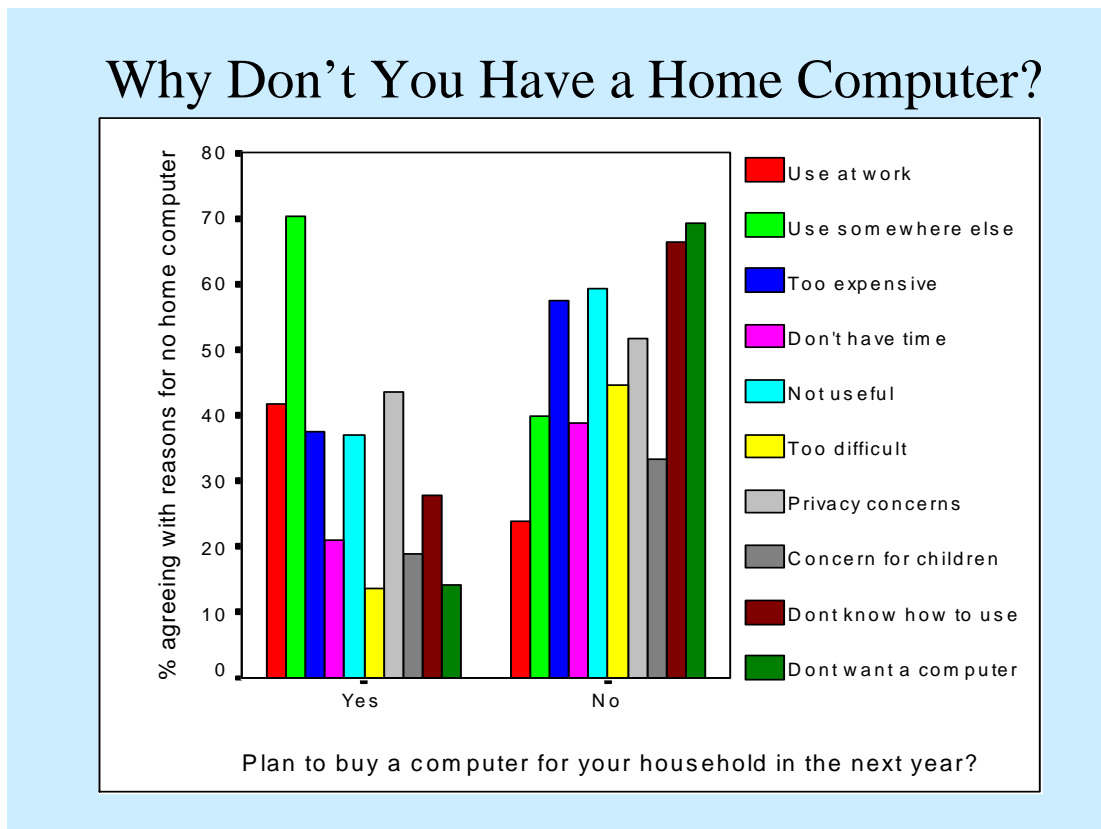
Table 1: Computer Penetration Demographics			
Percentage of North Carolina Households that			
Have A Home Computer			
	1999	2002	2004
Overall	53%	60%	67%
Gender			
Men	59%	65%	68%
Women	53%	57%	63%
Generations			
Gen Y (ages 18 -27)	55%	68%	76%
Gen X (ages 28-39)	60%	71%	79%
Training Boomers (ages 40-49)	60%	72%	70%
Leading Boomers(ages 50-58)	66%	58%	73%
Matures (ages 59-68)	44%	43%	50%
After work (age 69+)	24%	28%	35%
Race and ethnicity			
Whites	61%	65%	68%
Blacks	31%	44%	63%
Native American		50%	39%
Hispanic		37%	31%
Other		65%	74%
County Type			
Urban	58%	64%	71%
Rural	46%	55%	59%
Household Income			
Less than \$15,000	35%	34%	31%
\$15,000 to \$24,999	25%	43%	43%
\$25,000 to \$29,999	37%	60%	64%
\$30,000 to \$49,999	43%	71%	78%
\$50,000 to \$74,999	49%	79%	88%
\$75,000 to \$99,999	50%	86%	92%
\$100,000 and above	66%	91%	97%
Educational Attainment			
Less than High School	20%	33%	36%
High School Graduates	47%	60%	65%
Community College Degree	65%	75%	78%
College Degree	76%	84%	87%
Graduate Degree	78%	87%	93%
Children Living at Home			
No	49%	54%	55%
Yes	64%	69%	81%

When examining Table 1, be sure to notice:

- Home computer ownership has continued to rise.
- In 1999, the leading baby boomers were the most likely to own a computer but that has changed. Both Gen X and Gen Y have increased their computer ownership so rapidly that they have overtaken the Leading Boomers. The elderly are least likely to own a home computer.
- While white households have increased their home computers, African American households have increased even faster. In 1999 the African American rate was about half the White rate, but it increased to over 90% the White rate in 2004.
- Home computers increased faster in urban counties than in rural counties.
- Almost every home with an income of over \$100,000 per year has a home computer but less than one-third of the poverty households have a home computer. The rate of home computer ownership has decreased among North Carolina families making less than \$15,000 a year.
- The greatest increase in home computers occurred in households with children (69% to 81%). Almost no change was observed in households without children (54% to 55%).

Why Don't People Have a Home Computer?

People who reported that their household did not have a home computer were asked if they were planning to buy a home computer within the next year. They were also asked a series of question to identify the reason they did not have a home computer. The results are presented in the following graph. Note that the reasons for not having a home computer given by folks who



were planning to buy a computer in the next year are presented on the left side of the graph while those given by the folks who were not planning to buy a home computer are on the right side. For the folks planning to buy a computer, their primary reason for not having a home computer is that they can use one somewhere else (the light green bar on the graph). For people who are not planning to buy a computer, four reasons (Don't want one; don't know how to use a computer; not very useful and too expensive) that suggest these people don't know how to use a computer and that a computer is too expensive.

These reasons also help us understand the way that the digital divide is transmitted to the younger generations. Almost 75% of the families with children who do not have a computer and who are not planning on buying a computer cite the cost of the computer. Almost half of the households making less than \$15,000 a year and having a child living at home have a home computer. This is over twice the rate for poor families without children living at home. Even the poorest families seem to understand the importance of having a home computer for their children.

Internet Access: Introduction

There are three ways of looking at Internet access. The first two stress home Internet access. Both approaches are important but they produce very different numbers so you need to be careful when you read the following tables. The third approach stresses more general access to resources and assesses the use of the Internet anywhere – at home, work or school.

Proportion of All NC Households: Many people are interested in the proportion of households that have home computers. In these households, people can do private research and children can do their homework with their parents' help. Today about 59% of all NC households have home Internet access.

Proportion of NC Households with a Computer: At the beginning of this century, many NC households could not get home Internet access. That barrier has been eliminated and today every NC household can get home Internet access with a local telephone call. The biggest remaining barrier to home Internet access is that it requires a home computer. This proportion indicates the extent of the barriers remaining after a home computer has been purchased. Today about 89% of the homes with computers have Internet access.

Proportion of North Carolinians Who Use the Internet Anywhere: Some people don't have home Internet access because they can use the Internet at work or somewhere else. This proportion indicates the full extent to which North Carolinians are involved with the Internet. About 73% of North Carolinians use the Internet somewhere.

Home Internet Access: Proportion of All NC Households

In the four and a half years between these studies, the proportion of homes with Internet access has increased from 36 to 59 percent. Today a majority of North Carolina households have home Internet access. While it is far from universal, in five years it has become a common part of our everyday lives.

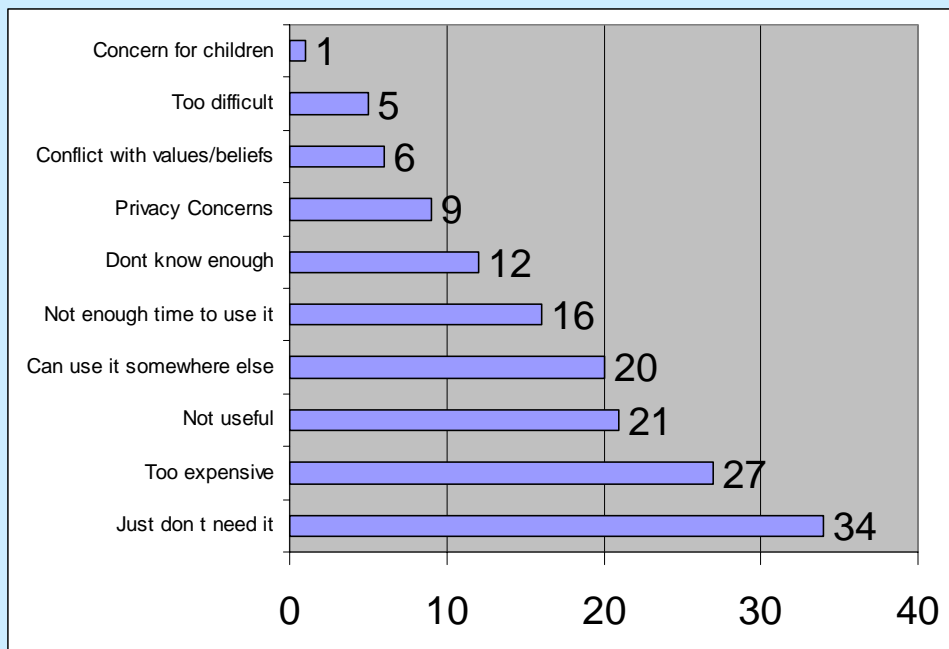
Table 2: Internet Penetration Demographic Percentage of ALL NC Households That Have Home Internet Access			
	1999	2002	2004
Overall	36%	52%	59%
Gender			
Men	41%	58%	61%
Women	35%	49%	55%
Generations			
Gen Y (ages 18 -27)	40%	59%	65%
Gen X (ages 28-39)	40%	63%	72%
Training Boomers (ages 40-49)	42%	64%	67%
Leading Boomers(ages 50-58)	49%	50%	65%
Matures (ages 59-68)	23%	34%	43%
After work (age 69+)	12%	24%	29%
Race and ethnicity			
Whites	43%	57%	62%
Blacks	19%	34%	49%
Native American		37%	38%
Hispanic		35%	22%
Other		57%	67%
County Type			
Urban	43%	57%	62%
Rural	26%	46%	51%
Household Income			
Less than \$15,000	9%	25%	25%
\$15,000 to \$24,999	4%	33%	32%
\$25,000 to \$29,999	27%	52%	55%
\$30,000 to \$49,999	23%	62%	68%
\$50,000 to \$74,999	34%	73%	83%
\$75,000 to \$99,999	31%	81%	87%
\$100,000 and above	43%	85%	94%
Educational Attainment			
Less than High School	2%	26%	28%
High School Graduates	30%	51%	57%
Community College Degree	45%	65%	69%
College Degree	58%	78%	83%
Graduate Degree	64%	83%	88%
Children Living at Home			
Yes	43%	61%	74%
No	34%	46%	48%

When examining Table 2, be sure to notice:

- While home Internet access is increasingly common for both males and females, males are still more likely to report it.
- While home Internet access was most common among the leading edge of the baby boom, it has become more common among younger citizens.
- While home Internet access is most common among Whites and Others (Asian, mixed, etc.), it is rapidly increasing among African Americans.
- The proportion of Hispanics probably decreased because the 2004 survey included families that did not speak English. In the earlier surveys, only English Speaking Hispanics were included.
- The proportion of homes with Internet access has almost doubled between 1999 and 2002.
- While the gap between urban and rural counties decreased between 1999 and 2002, it has stabilized since then.
- While better off families continue to increase their home Internet access, the progress made by poorer families has stopped.
- While more educated families have continued to increase their home Internet access, the progress made by less educated households has slowed.
- Families with children continue to increase their home Internet access while the progress made by families without children has slowed.

Respondents who did not have the home Internet access were asked a series of questions to access why. The following graphic shows that their most common answers were that they did need to use the Internet at home and that it was too expensive.

Why don't you have home Internet access? 2004



Home Internet Access: Proportion of NC Households with a Computer

In the four and a half years between these studies, the proportion of homes with computers that also have home Internet access has increased 31 percent from 68% to 89%. While it has not quite caught up with telephone access (about 95%), Internet access among homes with a computer is almost as common. This is a particularly impressive achievement because it includes an increase from 57% to 91% in rural counties. E-NC should be proud that its work promoting computer and Internet literacy has paid off in this unusually strong growth in rural counties

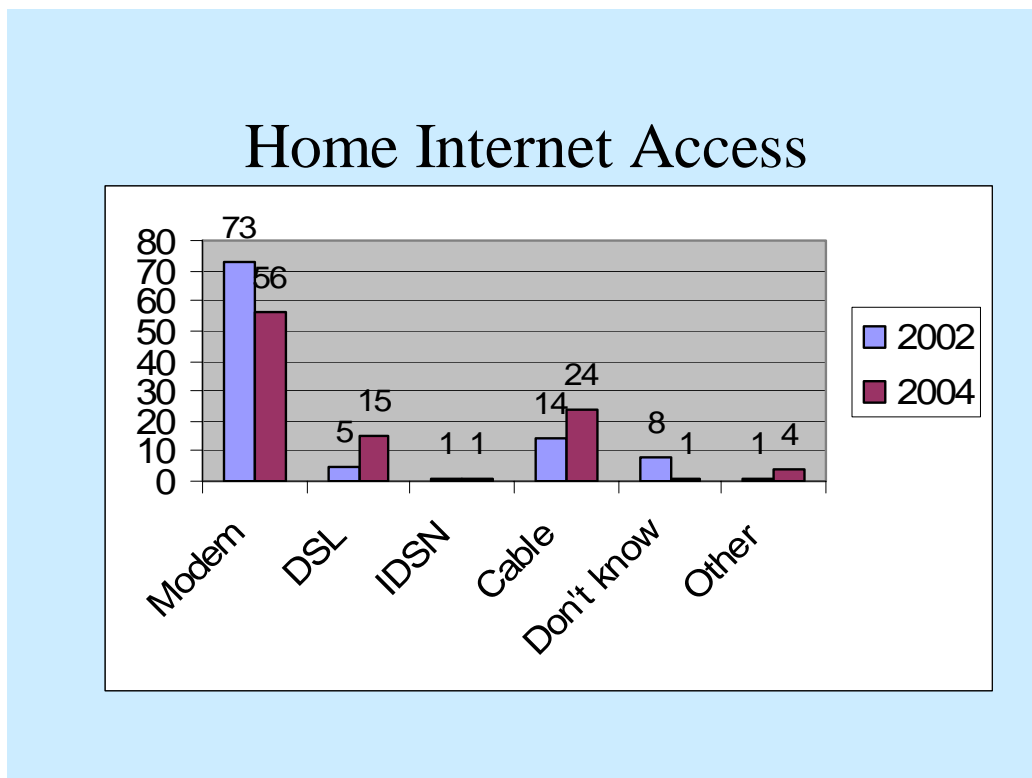
Table 3: Internet Penetration Demographic Percentage of NC Households With Home Computers That Have Home Internet Access			
	1999	2002	2004
Overall	68%	87%	89%
Gender			
Men	68%	88%	90%
Women	67%	86%	89%
Generations			
Gen Y (ages 18 -27)	72%	87%	85%
Gen X (ages 28-39)	69%	89%	91%
Training Boomers (ages 40-49)	70%	88%	96%
Leading Boomers(ages 50-58)	74%	87%	89%
Matures (ages 59-68)	52%	80%	84%
After work (age 69+)	50%	85%	81%
Race and ethnicity			
Whites	69%	88%	91%
Blacks	61%	70%	78%
Native American		75%	100%
Hispanic		95%	74%
Other		89%	90%
County Type			
Urban	73%	84%	89%
Rural	57%	88%	91%
Household Income			
Less than \$15,000	29%	72%	82%
\$15,000 to \$24,999	17%	78%	76%
\$25,000 to \$29,999	73%	87%	87%
\$30,000 to \$49,999	53%	88%	87%
\$50,000 to \$74,999	70%	93%	94%
\$75,000 to \$99,999	62%	94%	95%
\$100,000 and above	64%	94%	98%
Educational Attainment			
Less than High School	8%	79%	78%
High School Graduates	64%	85%	88%
Community College Degree	67%	86%	89%
College Degree	76%	92%	96%
Graduate Degree	82%	95%	95%
Children Living at Home			
Yes	70%	88%	92%
No	66%	85%	87%

When examining Table 3, be sure to notice:

- There is very little difference between men and women in their interest in connecting a home computer to the Internet.
- The trailing boomers are most likely to connect their home computers to the Internet but even most of the elderly respondents who have a computer get it connected to the Internet.
- The large gap that existed between the urban and rural counties in 1999 has been closed. Part of this may be due to the fact that during that time rural Internet access expanded so that a local phone call could connect every household to the Internet. The work done by e-NC to expand the availability of high speed Internet access to 80% of NC households is a factor closing this gap (e-NC website: <http://www.e-nc.org/pdf/hsiaexecsummary.pdf>)
- In middle and high-income households, most households with a computer are connected. There has been great progress in lower income families.
- Among respondents who graduated from high school or achieved a higher level of education, most households with a computer are connected. Among high school drop-outs who have a home computer, there has been great progress getting connected to the Internet.

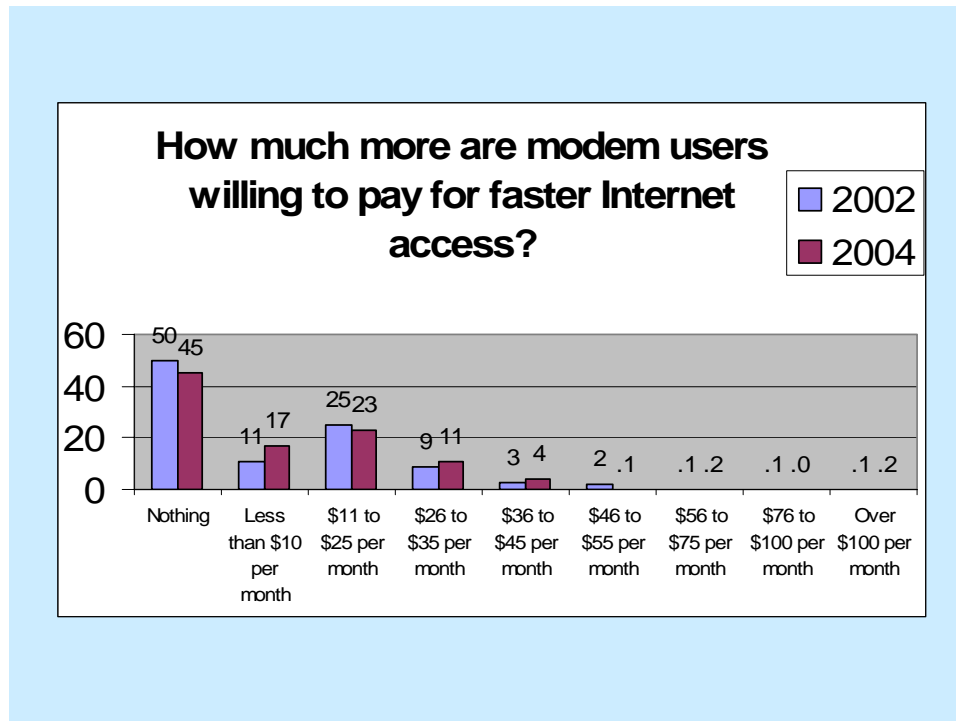
What kind of Internet Connection Do People Have?

While telephone modems are still the most popular way to connect to the Internet in North Carolina, their dominance has dropped from 73 percent to 56 percent in 2 years. DSL and Cable have both increased their share of the home Internet market.



Will people pay more to get higher speed Internet service?

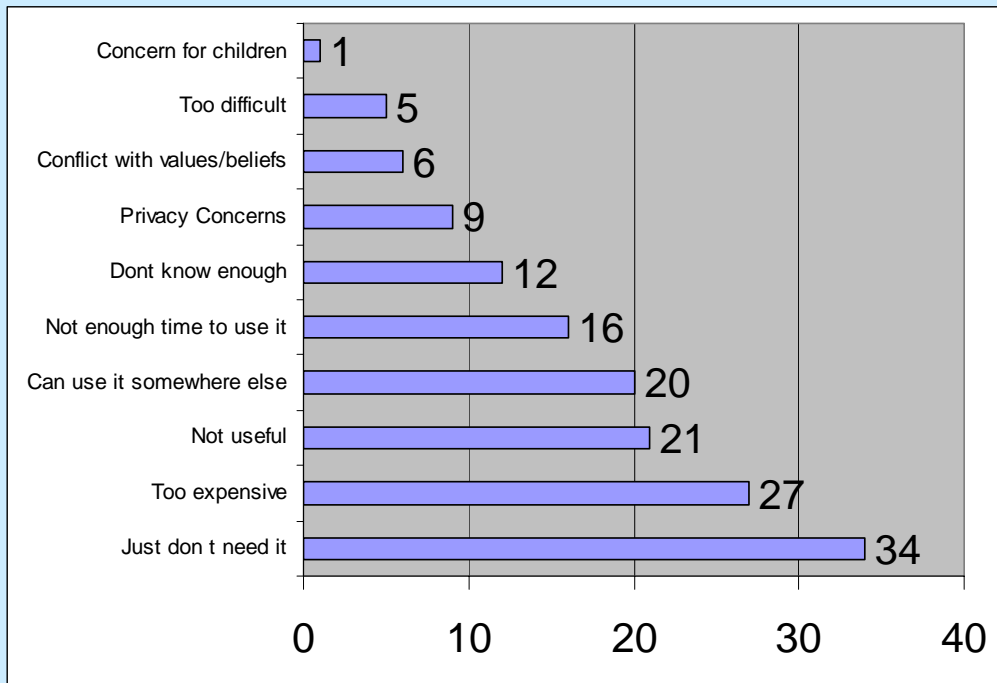
Since over half of the respondents are still using telephone modems, these respondents were asked how much more they would pay for faster Internet service. While 45 percent were satisfied enough with their telephone modems that they would pay nothing extra for faster service and another 17 percent would pay less than \$10 a month extra, the remaining 38 percent would pay more than \$10 a month extra for faster service.



Why Don't You Have Home Internet Access?

Respondents with home computers who did not have home Internet access were asked a series of questions to access their reasons. When examining the following graphic remember that people could report more than one reason.

Why don't you have home Internet access? 2004



A third of the respondents reported that they just didn't need home Internet access. Another fourth reported that it was too expensive. The next two most popular reasons were that it was not useful and they could use it somewhere else.

Internet Access: Proportion of N. Carolinians Who Use the Internet Anywhere

In April, the Pew Internet & American Life Project Pew released a study (Amanda Lenhart, Feb. 2004 Tracking poll, http://www.pewinternet.org/reports/pdfs/PIP_April2004_Data_Memo.pdf). The tracking poll is a national telephone survey similar to the North Carolina surveys. Instead of focusing on home Internet access, Pew focused on overall Internet usage either at home or somewhere else.

A similar measure could be constructed for the 2002 and 2004 studies but not the 1999 study by combining home Internet access with use of the Internet outside the home (See Table 4). The results show a 10 percent increase in NC between 2002 and 2004. The 2004 NC figure and the 2004 Pew figure that within the margin of error for the two studies.

When examining Table 4 remember that Spanish-speaking Interviewers were used to collect the 2004 North Carolina data while the Pew survey only interviewed Hispanics who spoke English. This may be a factor the huge differences between the North Carolina and the Pew results for Hispanics.

Table 4: Internet Penetration Demographic			
Percentage Who Use the Internet			
Anywhere			
	2002	2004	Pew 2004
Overall	65%	71%	73%
Gender			
Men	71%	75%	73%
Women	62%	68%	72%
Generations			
Gen Y (ages 18 -27)	86%	89%	85%
Gen X (ages 28-39)	79%	87%	87%
Training Boomers (ages 40-49)	73%	84%	84%
Leading Boomers (ages 50-58)	59%	75%	76%
Matures (ages 59-68)	39%	53%	57%
After work (age 69+)	26%	31%	24%
Race and ethnicity			
Whites	69%	75%	73%
Blacks	55%	62%	62%
Native American	53%	42%	
Hispanic	57%	46%	75%
Other	66%	82%	
County Type			
Urban	69%	73%	75%
Rural	60%	67%	61%
Household Income			
Less than \$15,000	44%	34%	
\$15,000 to \$24,999	53%	61%	
\$25,000 to \$29,999	66%	77%	55%*
\$30,000 to \$49,999	75%	81%	82%
\$50,000 to \$74,999	84%	90%	92%
\$75,000 to \$99,999	92%	95%	93%**
\$100,000 and above	88%	99%	
Educational Attainment			
Less than High School	36%	43%	39%
High School Graduates	66%	72%	67%
Community College Degree	82%	79%	84%***
College Degree	89%	91%	91%#
Graduate Degree	92%	96%	
* Pew reports less than \$30,000			
** Pew reports \$75,000+			
*** Pew reports some college			
# Pew reports College and Graduate Degree			

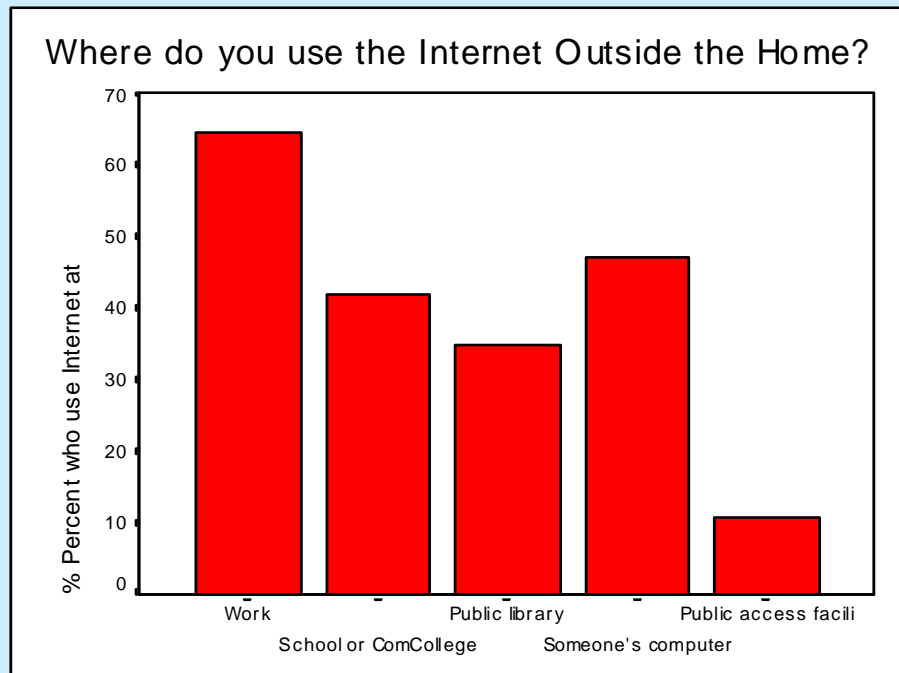
When examining Table 4, be sure to notice:

- Overall, NC is very similar to the national results published by Pew.
- The gap between men and women is slightly larger in NC.
- NC has slightly higher Internet usage among the oldest and the youngest respondents, but lags slightly among the mature respondents (59-68).

- Both White and black Respondents are similar to their counterparts in other states. Hispanic respondents are much lower. This is probably due to the fact that Pew only interviewed English-speaking Hispanics while the 2004 study employed Spanish speaking interviewers.
- There seems to be more Internet usage in Rural North Carolina than in other rural areas around the nation.
- The middle and upper income respondents in NC are very similar to their counterparts nationwide. Lower income respondents seem to report more Internet usage than their national counterparts although these differences are hard to see because Pew uses fewer income categories.
- High School dropouts are more likely to use the Internet in North Carolina than in the rest of the nation.

Where Do People Use The Internet Outside Of The Home?

Use the Internet Outside the Home



This graph shows that:

- 45% of people who have a home computer but no home Internet access use the Internet outside the home.
- Most people who use the Internet outside of the home use it at work.
- Many people go to a friend's house to access the Internet.
- North Carolina's program of providing public access at community colleges and public libraries has been successful. The support given by e-NC has allowed many of the programs to expand to better serve their communities.
- The development of these public access facilities is relatively new but they are already making an impact. Between 2002 and 2004, the proportion of people who reported using public access facilities increased from 2.7 percent to 10.4 percent. In 2004 there was no significant difference between public access usage in urban and rural counties.
- Of the people who use a public access facility, over half of them (53%) report that it is an e-NC facility. This is probably a low estimate since some respondents don't remember the facilities sponsor. Over 2% of all North Carolina citizens (roughly 175,000 people) remember using an e-NC facility.

Using the Internet to Access Government Information and Services

County Government Website:

- All respondents were asked if they their county had a website. Of those, 39% reported that their county government had a website.
- Respondents in urban counties are significantly more likely to report that their county has a website than respondents in rural counties (44% vs. 32%).
- Almost half (48%) of the Internet users reported that their county had a website.
- Of those who knew that a county website existed, roughly one-third had visited the website. Urban and rural respondents are equally likely to visit their county's website.
- Of those who had actually visited the county website,
 - About half of the visitors reported that the county website was
 - "very easy" to access
 - "Usually up-to-date" and
 - "Somewhat valuable."
- Only 18% of the Internet users were "Definitely Interested" or "Interested" in using the county website to conduct business with the county government.

City Government Websites

- Respondents were asked if they lived in a town or city.
- Of those who live in towns or cities, 43% know that their local government had a website.
- Almost half (48%) of the Internet users reported that their local government had a website.
- Of who were aware of the website, roughly one-third have visited their local government's website.
- Of those who actually visited the city or town website.
 - Over half of the visitors reported that it was
 - "very easy" to access,
 - "usually up-to-date" and
 - "Somewhat valuable."
- Only 26% of the Internet users were "Definitely Interested" or "Interested" in using the city or town website to conduct business with their local government.

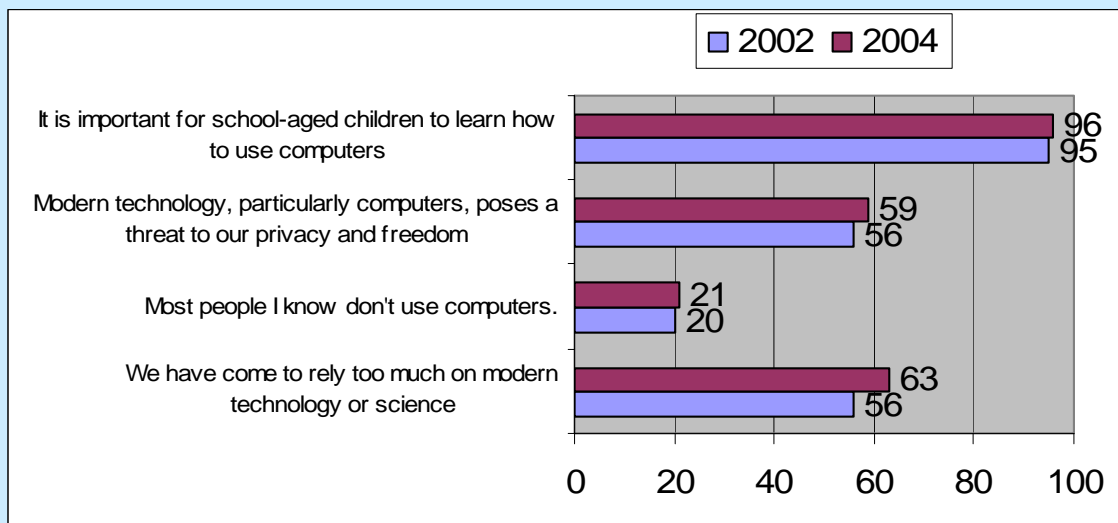
Attitudes, Beliefs and Opinions

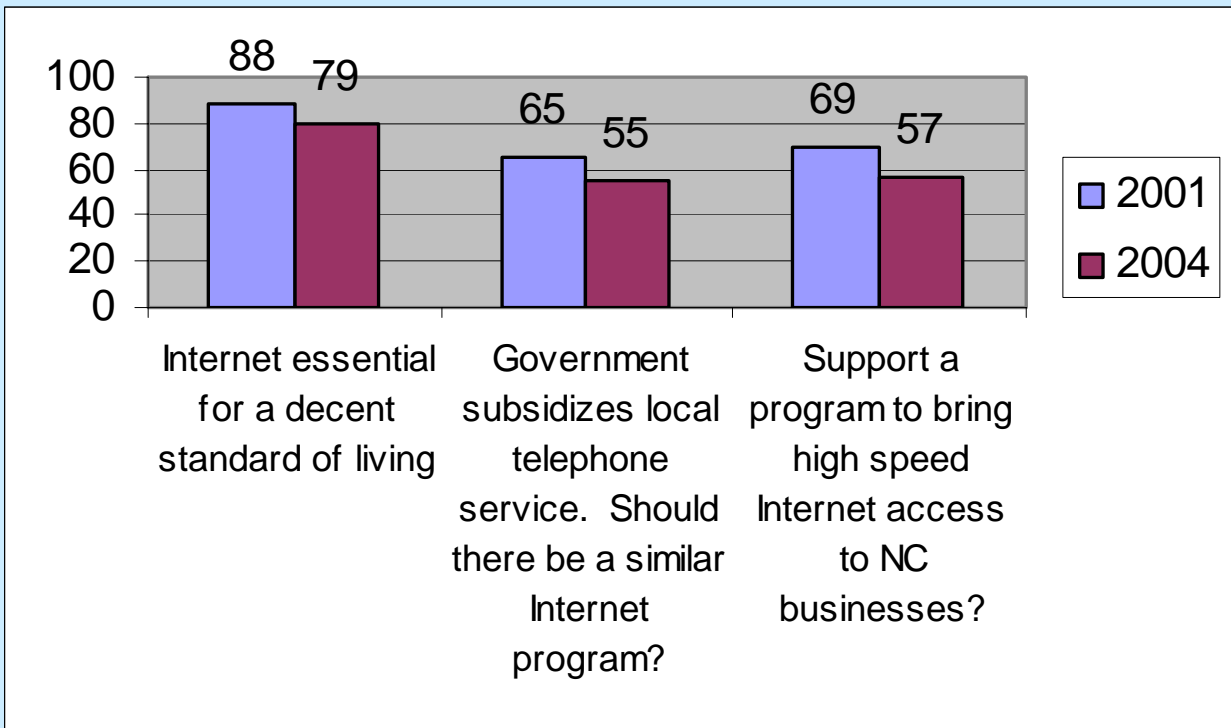
Obscene Material

- Do you support the use of constitutionally valid protective actions to limit the distribution of obscene material to children via the Internet?
 - 88% say of all respondents say “Yes.”
 - 92% of those respondents with children living at home say “Yes.”

- Have you ever had a problem with your children accessing obscene material on the Internet?
 - 14% of all respondents say “Yes.”
 - 24% of those respondents with children living at home say “Yes.”

Attitudes about the Importance of Technology





The attitude questions show that:

- People are concerned about obscene material on the Internet that children can access.
- Almost everyone recognizes that it is important for school aged children to learn to use the computer and that Internet access is essential for a decent standard of living.
- Over half of North Carolinians worry that the new technology invades our privacy and that we rely of it too much.
- Few people live in groups or communities where most people don't use a computer.
- More than half of North Carolinians support programs to bring Internet access to everyone's home who wants it and to bring high speed access to all North Carolina businesses that need it.

Conclusions

Home Computers:

- Home computer ownership in North Carolina has continued to rise.
- Since 1999, the younger North Carolinians have overtaken the Baby Boomers as the most likely to own a computer. The elderly are still least likely to own a home computer but they are increasing their computer ownership.
- While white households have increased their home computers, African American households have increased even faster.
- Home computers increased faster in urban counties than in rural counties.
- Almost every home with an income of over \$100,000 per year has a home computer but less than one-third of the poverty households have a home computer.
- The greatest increase in home computers occurred in households with children. Almost no change was observed in households without children.
- For the folks planning to buy a computer, their primary reason for not having a home computer is that they can use one somewhere else. For people who are not planning to buy a computer, four reasons that suggest these people don't know how to use a computer and that computers are too expensive.
- Almost 75% of the families with children who do not have a computer and who are not planning on buying a computer cite the cost of the computer. Almost half of the households making less than \$15,000 a year and having a child living at home have a home computer. This is over twice the rate for poor families without children living at home. Even the poorest families seem to understand the importance of having a home computer for their children.

Home Internet Access:

- Not having a home computer is the biggest barrier to having home Internet access.
- Home Internet access is increasing fastest among younger citizens.
- While home Internet access is most common among Whites and Others (Asian, mixed, etc.), it is rapidly increasing among African Americans.
- While the gap between urban and rural counties decreased between 1999 and 2002, it has stabilized since then.
- While better off families continue to increase their home Internet access, the progress made by poorer families has stopped.
- While more educated families have continued to increase their home Internet access, the progress made by less educated households has slowed.
- Families with children continue to increase their home Internet access while the progress made by families without children has slowed.

Internet Access in homes with computers:

- The large gap that existed between the urban and rural counties in 1999 has been closed in this area. Part of this may be due to the fact that during that time rural Internet access expanded so that a local phone call could connect every household to the Internet.
- In middle and high income households, almost all households with a computer are connected. There has been great progress in lower income families.
- Among respondents who graduated from high school, almost all households with a computer are connected. Among high school drop-outs who have a home computer, there has been great progress getting connected to the Internet.

Using the Internet Anywhere:

- 45% of people who have a home computer but no home Internet access use the Internet outside the home.
- Most people who use the Internet outside of the home use it at work.
- Many people go to a friend's house to access the Internet.
- North Carolina's program of providing public access at community colleges and public libraries has been successful.
- The development of other public access facilities is relatively new but they are already making an impact.
- Of the people who use a public access facility, over half of them (53%) report that it is an e-NC facility. This is probably a low estimate since some respondents don't remember the facilities sponsor.
- Over 2% of all North Carolina citizens (roughly 175,000 people) remember using an e-NC facility.
- Overall, NC is very similar to the national results published by Pew.
- Both White and black Respondents are similar to their counterparts in other states. Hispanic respondents are much lower. This is probably due to the fact that Pew only interviewed English-speaking Hispanics while the 2004 study employed Spanish speaking interviewers.
- There seems to be more Internet usage in rural North Carolina than in other rural areas around the nation (Pew study).
- The middle and upper income respondents in NC are very similar to their counterparts nationwide. Lower income respondents report more Internet usage than their national counterparts
- High School dropouts are more likely to use the Internet in North Carolina than in the rest of the nation.

e-Government in North Carolina:

- Between a third and a half of North Carolinians are aware of the websites developed by their counties or towns but only one-third of those who are aware of the websites have actually visited them
- Those who had actually visited the websites characterized them as "very easy" to access, "usually up-to-date" and "somewhat valuable."
- Only a minority of the Internet users were "Definitely Interested" or "Interested" in using these websites to conduct business with their local governments.

Attitude and Opinions:

- People are concerned about obscene material on the Internet that children can access.
- Almost everyone recognizes that it is important for school aged children to learn to use the computer and that Internet access is essential for a decent standard of living.
- Over half of North Carolinians worry that the new technology invades our privacy and that we rely of it too much.
- Few people live in groups or communities where most people don't use a computer.
- More than half of North Carolinians support programs to bring Internet access to everyone's home who wants it and to bring high speed access to all North Carolina businesses that need it.