E-Government Services and Computer and Internet Use in North Dakota

Prepared for:

Legislative Council and the
Information Technology Department

June 27, 2002

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Knowledge to Bring People
and Resources Together

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June 27, 2002

Curtis L. Wolfe, Chief Information Officer
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Dear Mr. Wolfe:

We are pleased to present to you the attached report entitled E-Government Services and Computer and Internet Use in North Dakota. This public opinion research study was conceived as a way to assess a variety of issues related to public access necessary to use e-government services as well as public opinion about the proper form and emphasis of those services among North Dakota residents.

The expanding use of new technologies continues to strengthen our states economy. As these technologies open new economic opportunities for North Dakotans, it is important that all segments of our state are included in this ongoing information revolution. We are encouraged by the study's findings that rural residents are only somewhat less likely to use Internet technologies than are people in metropolitan areas.

In general, North Dakotans believe that the Internet can make government more convenient and allow better access to information, and there is evidence that certain e-government services would be welcome on the Internet. Plans to provide Internet government services to residents has the potential to achieve cost savings and efficiency, and to provide new ways that government can be accessible to North Dakota residents. This study presents a picture of what residents believe and how they interact with computers and Internet technologies, and it should serve to contribute ideas to policy makers in respect to the role of government in information technology services.

We have enjoyed conducting this research for you and look forward to working with you in the future. If you have any questions or comments, please feel free to contact us.

Sincerely,

Cordell Fontaine

Cordell A. Fontaine, Director

We wish to recognize the support of the following people in producing this survey:

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This public opinion research study was conceived as a way to assess a variety of issues related to public access necessary to use e-government services as well as public opinion about the proper form and emphasis of those services among North Dakota residents. The legislative information technology committee was assigned to study the technological capacity and needs of the state because of the passage of house concurrent resolution 3057 during the 2001 legislative session. This survey is a component of that study and outlines the needs of the citizens of the state with respect to Internet access and e-government services.

This study examines who in North Dakota does and does not use the Internet, the types and speeds of Internet connectivity North Dakotans have particularly in rural areas, attitudes toward and behaviors in using computers and the Internet for various services, and how residents might use e-government services, the perceived barriers to Internet use such as cost or availability, how much they might be willing to pay for these services, and what related issues concern them.

Methodology

The results of this study are based on 801 random telephone interviews conducted April 23 to May 8, 2002 with North Dakota residents age 18 or older. Of those, 400 comprise a random sample survey of urban residents in the state, while an additional 401 households represent a random sample of residents exclusively from non-urban or rural areas.

Key Findings

- 74% of the sample currently uses computers.
  Of the residents who use computers 92% use them at home, 62% at work and 39% at school.
- 70% of the sample uses the Internet.
  Places residents access the Internet include at home (78%) and at work (53%).

Who does not have access?

- The main reasons residents give for not using the Internet include: not having an interest, don't have the time, that the cost is prohibitive or they do not use computers.
- Residents who do not use the Internet are more likely to be older and poorer.
- 60% of the population age 66 or older do not use the Internet and frequently do not use computers.
- Lower education and income levels are associated with not using the Internet.
- Residents below the $35-$45,000 income levels are less likely to use the Internet.

Who does not have access?

- 25% of those who do not have access to the Internet would likely consider using various public places for access.

What are residents' attitudes toward the Internet?

- About 60% of all residents are concerned about privacy on the Internet.
- Over 70% agree they have easy access to the Internet - with younger, urban and higher income and education groups most in agreement.
- Almost 25% of residents believe the Internet is too expensive.
- Over 70% report having concerns about children using the Internet.

What types of Internet connectivity options are available and used by residents?

- Nearly 90% report using dial-up modems to connect to the Internet.
- By nearly a two to one margin urban residents report having more DSL and cable modem Internet service options compared to rural residents.
- The majority of Internet users (78%) are satisfied with their connection speed.
- Nine out of ten residents are satisfied with their Internet provider services.

What do residents think about the idea of putting e-government services on the Internet?

- Most residents agree having government services on the Internet would be convenient and allow better access to information. Yet contradictory to these opinions, residents also agree that most would prefer to see someone in person when using a government service and that they are concerned about the quality of services they would receive on the Internet.

What e-government services would residents consider using?

- The most likely Internet services residents would consider using included driver license renewals, communicating with state legislatures or government officials, accessing educational programs, using directories of government services, filing taxes, obtaining parking or camping reservations, voting and checking credentials of a regulated business.

What concerns do residents have about e-government services on the Internet?

- Residents are evenly divided whether online services should be a state government priority.
- Residents believe private industry and the federal government should carry the greatest responsibility to guarantee network services are available.

What concerns to residents have about e-government services on the Internet?

- Opinions in regards to financially supporting e-government services were most favorable toward two plans: selling advertising on the computer screen to underwrite the costs of the service or having users of such services pay a convenience fee.
- Nearly two-thirds were concerned about privacy on the Internet.
- Only half of the residents feel confident with the state handling personal, confidential information.
- Less than 40% of residents are comfortable with state government maintaining a master profile containing their public information.

This study brought about several recommendations based upon public opinion:

This study indicates that older and poorer residents show lower use of computers and the Internet. Although e-government will not entirely replace other methods the state currently uses to deliver services, moving services to the Internet does present the chance of disadvantaging these groups. E-government services should be aware of these populations and consider (1) how to educate residents to use and feel comfortable with Internet based services and (2) possibly develop alternative ways to make e-government services accessible.

This study shows that residents are extremely sensitive to the privacy and security concerns related to e-government applications. Residents are concerned about security, whether in relation to providing financial or non-financial information over the Internet. It is imperative that developing strategies that convey and document the safeguarding of residents' personal information be optimized.

Residents prefer using advertising or charging the individuals who use electronic services to financially support e-government services. They are not supportive of paying for e-government through sale of personal data or using revenues from the general funds.

These results highlight some possible directions for state efforts:

- Develop and market strategies that call attention to privacy and security standards that address resident's concerns.

- Development of strategies to target groups using the Internet the least. This might involve various settings, technologies, and/or interfaces that can address these individuals' hesitations and concerns about the Internet and e-government services.

- Continue to measure Internet use in order to assess who does and does not use the Internet and why.

E-Government Services and Computer and Internet Use in North Dakota

Background

Internet commerce has developed significantly in recent years, led by efforts in the private sector. As the public gains more experience with emerging online tools and information resources, people will come to expect a similar level of service from government entities. Many state, county, and municipal governments now view the Internet as a way to bring services to the public in electronic form.

This public opinion research study was conceived as a way to assess a variety of issues related to public access necessary to use e-government services as well as public opinion about the proper form and emphasis of those services among North Dakota residents. The legislative information technology committee was assigned to study the technological capacity and needs of the state because of the passage of house concurrent resolution 3057 during the 2001 legislative session. This survey is a component of that study and outlines the needs of the citizens of the state with respect to Internet access and e-government services.

Overview

How North Dakota residents use computers and the Internet intersects several policy issues now that more social uses, economic transactions, and government programs rely on them. The North Dakota Information Technology Department has been investigating how to deploy what many perceive to be the next generation of government services. This will be dependent on a web-based or computer network-based delivery system. Consequently, how people use computers and the Internet, their attitudes toward both, and how they feel about various privacy and security issues associated with sharing personal information on the Internet, and perceived barriers to usage availability are important considerations.

This study had several basic questions:

- What percentage of the North Dakota population uses computers and the Internet? How do residents use these tools? Are there differences in use associated with income and education levels, race, ethnicity, age or location?
- What types of Internet connectivity options are available and used by residents?
- What are residents' attitudes toward the Internet and the costs of its use?
- Where do residents feel comfortable using computers and the Internet? For what purposes do they use computers or the Internet? Why do they not use the Internet?
- Would residents consider using government services if they were available on the Internet?
- What are the privacy and security concerns of North Dakotans with respect to e-government applications?
- What are residents' opinions with respect to financially supporting e-government services?

Methodology

The results of this study are based on 801 random telephone interviews conducted April 23 to May 8, 2002 with North Dakota residents age 18 or older. Of those, 400 comprise a random sample survey of urban[1] residents in the state, while an additional 401 households represent a random sample of residents exclusively from non-urban, or rural areas. This means that one can be 95 percent confident that the mean response for any question in the citizen survey will not vary any more than 5.0% in either direction from the actual mean for that response if all persons age 18 or older stratified by location (urban or rural) in North Dakota were surveyed. Overall, a sample of 801 adults yields an error margin of 3.5% +/- for the citizen survey.

SSRI interviewed individuals in households over 18 years of age, using the last birthday method of selection in order to randomly sample within the household. The questionnaire was constructed largely of closed ended items (See Appendix A). The telephone interview took approximately 13 minutes to administer. Appendix B provides the rural and urban response rates as well as demographic composition details of the sample.

Our analyses include basic percentage reports on the survey responses as well as tables regarding how the factors of income and education, age, and rural/urban location seem to affect the responses.[2] Because the goal of this study is to get a picture of current North Dakotans' computer and Internet uses, our primary goal is descriptive.

[1] Urban city areas include Fargo, Bismarck, Grand Forks, Minot, Mandan, Dickinson, Jamestown, West Fargo, Williston, Wahpeton, Devils Lake and Valley City.

[2] When we note that there are "differences" by various age, race/ethnic, education, income or location factors, we refer to statistically significant differences. These have been identified through chi square analyses.

Computer and Internet Use

In general terms, a large majority (74%) of the North Dakota adult population currently uses a computer (Figure 1). Most of the computer users also use the Internet. As Figure 2 illustrates, seventy percent of the entire sample use computers as well as the Internet; people who use neither computers nor the Internet represent just seventeen percent of the sample. This means that most of the people who use computers also use the Internet.

Figure 1. Percentage of Residents Using Computers

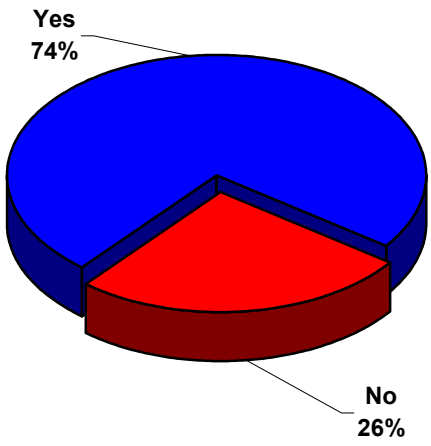
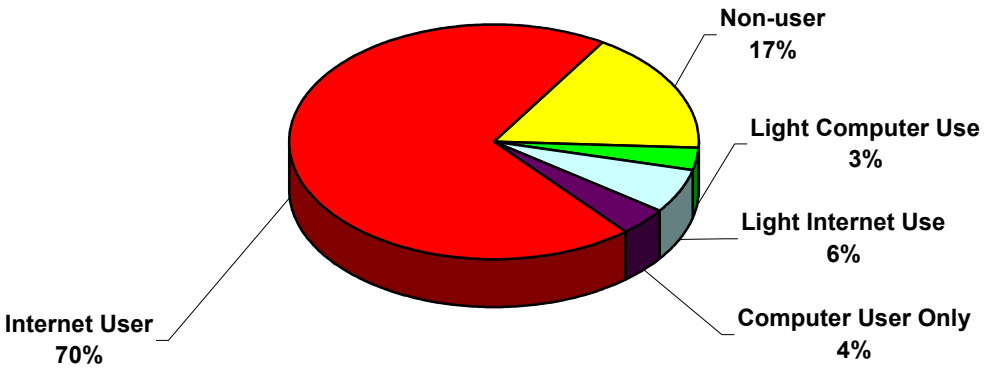


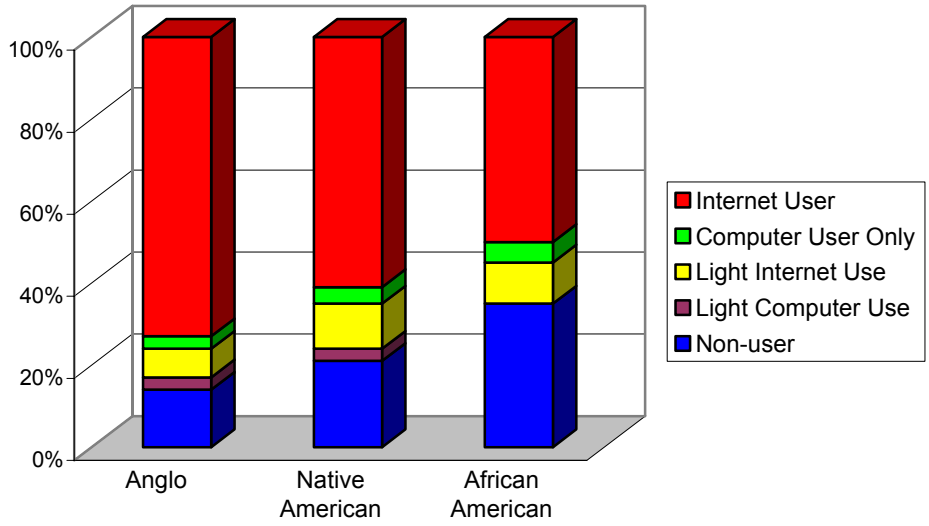
Figure 2. Percentage of Types of Computer and Internet Use



Throughout this report, we differentiate among different types of people by how they use computers and the Internet. The largest group (74%) of the sample consists of those who use computers regularly. Most of those people also use the Internet, seventy percent of the sample. Nearly everyone who uses a computer regularly also uses the Internet. The next largest group, called “nonusers”, includes those who do not use computers or the Internet (17%), called "nonusers". There also is a group of people who do not use computers regularly but report having used them sometimes (3% called “light computer use”). The final groups include people who may occasionally use the Internet (6%, called “light Internet use”), and computer users only (4%).

The ethnic composition of computer and Internet users in the state are shown in Figure 3.

Figure 3. Ethnic/Race by Type of Use

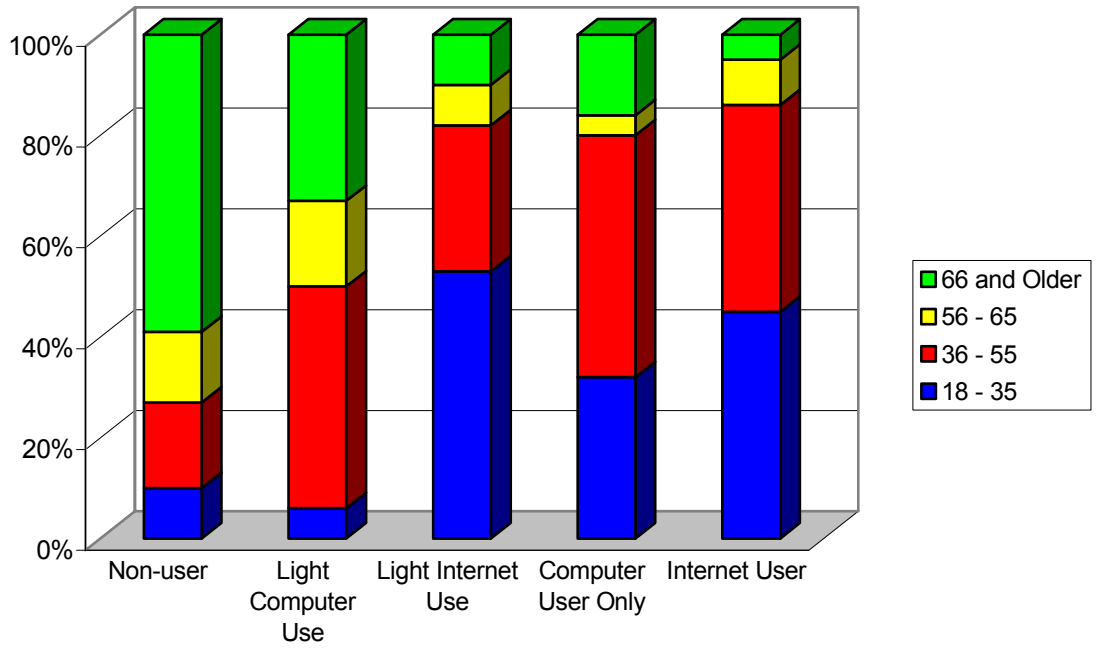


Nearly three-fourths of the Anglos (73%) used the Internet, compared to sixty-one percent of the Native Americans and fifty percent of the African American members of the sample. The reverse pattern holds for nonusers: thirty-five percent of the African Americans fall into that category, compared to twenty-one percent of the Native American members and fourteen percent of the Anglo members of the sample.

Among people who routinely use the Internet (“Internet users”), ethnic differences are negligible in terms of the amount of time groups normally spend on the Internet (9.7 hours per week for Anglos, 11.4 for Native Americans, and 13.0 for African Americans), while the number of commercial transactions they undertake are also similar. Anglos report an average of 5.6 financial transactions over the Internet per year, while Native Americans reported 4.4 and African Americans reported 4.1.

There are predictably higher percentages of people in older age categories who do not use computers or the Internet. About sixty percent of the residents age 66 and older used neither, although nearly thirty-eight percent were in fact computer and Internet users. People in the lower age ranges, age 55 or younger, were far more likely to use the Internet than older people.

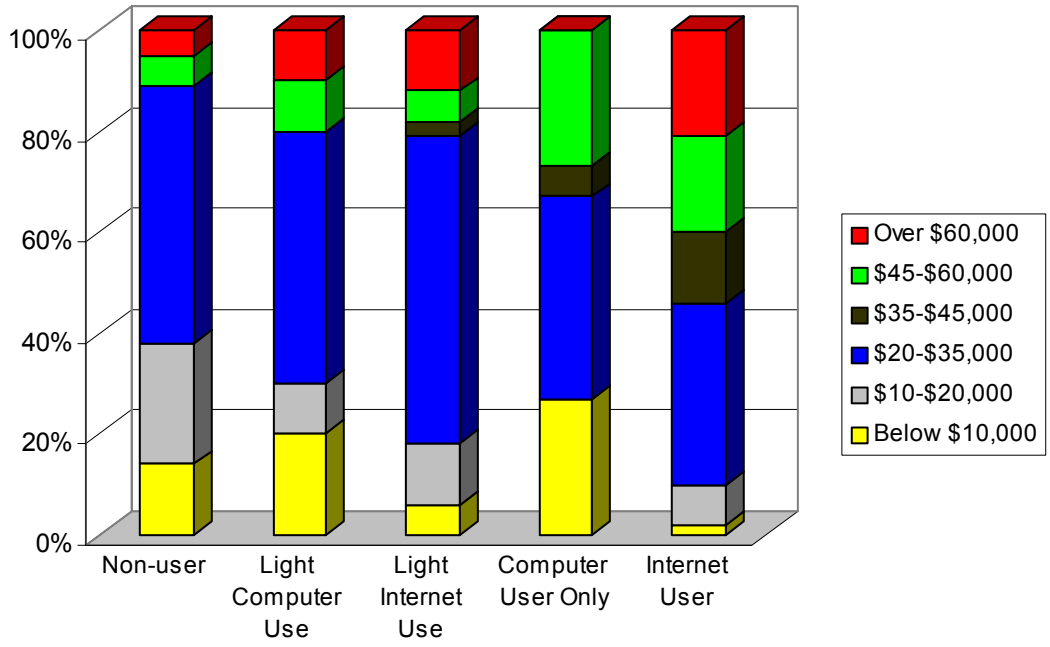
Figure 4. Type of Use by Age



The seventeen percent of the sample who do not use computers or the Internet can generally be characterized as older, poorer, and less educated (Figure 4). Throughout our analyses, the results for income[3] and education were generally very symmetrical: the better educated and wealthier one is, the more one can be expected to use computers and the Internet. As Figure 5 suggests, nonusers fall into lower income categories while most of the Internet users are in households that make over $35,000 annually.

[3] Over forty-three percent of the respondents refused to disclose their 2001 total household income.

Figure 5. Type of Use by Income

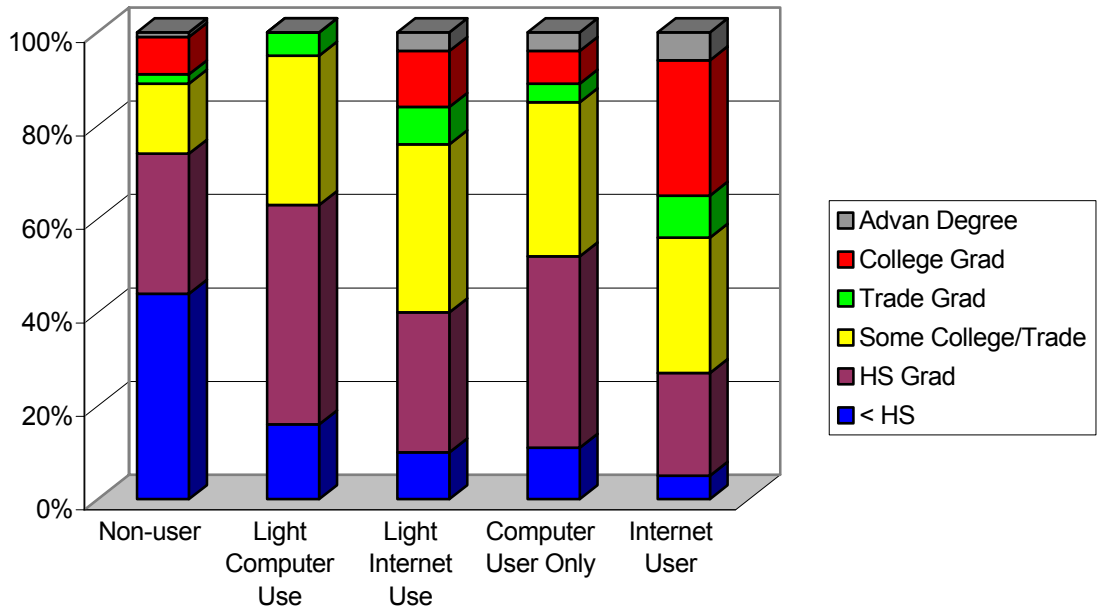


As income and education increase, so do computer and Internet use. Figure 5 indicates that people making less than $20,000 represent the largest cluster of residents who use neither computers nor the Internet, and at incomes over $20,000, Internet use is very common. The results for higher and lower levels of education are similar, with more highly educated people using the Internet more commonly than those less educated. As Figure 6 presents, most Internet users have had some education beyond high school, while the nonusers are disproportionately composed of people who did not complete high school.

The national level data from the U.S. Census Bureau's 2000 study reported that membership in ethnic and racial minority groups, in lower income and education groups, living in a rural location and being a female head of household meant that one was less likely to use computers or the Internet.[4] North Dakota resembles most national trends in all of these respects except in respect to the findings on rural location. Here, our findings suggest that the penetration of computers and Internet use generally is higher than cited in studies undertaken by the U.S. Census Bureau.

[4] Home Computers and Internet Use in the United States, August 2000, U.S. Census Bureau, http://www.census.gov/prod/2001pubs/p23-207.pdf

Figure 6. Type of Use by Education

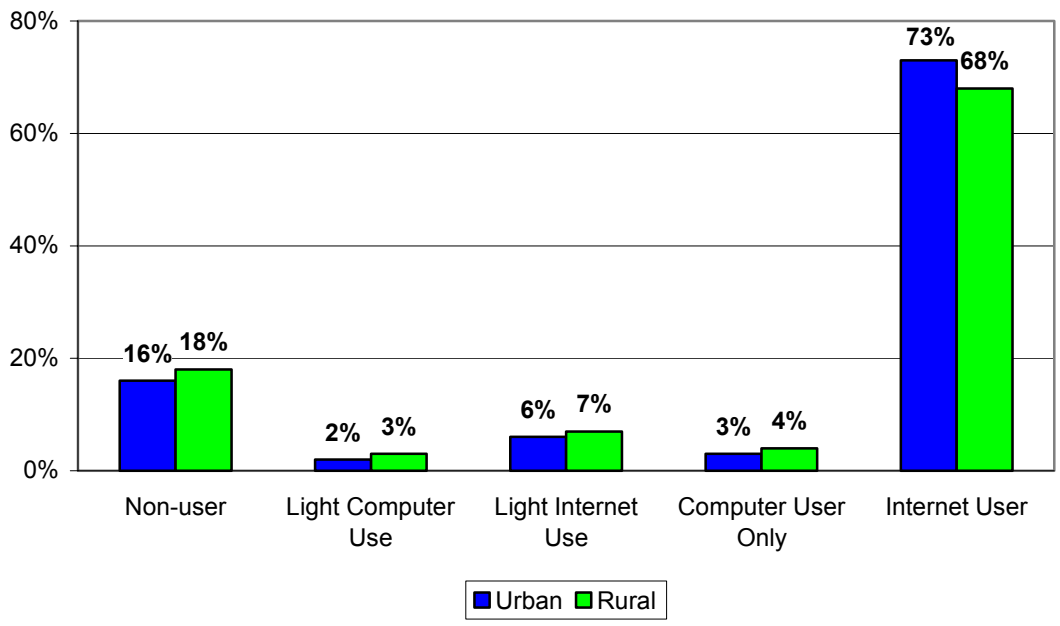


There is concern nationwide about the effects of less well-developed telecommunication infrastructures in rural areas. Poor telecommunication infrastructures means that people often pay more for Internet access and the access they have is of a lower quality than that enjoyed by people in urban regions.

In this sample, urban was defined as the residents living in the cites of Fargo, Bismarck, Grand Forks, Minot, Mandan, Dickinson, Jamestown, West Fargo, Williston, Wahpeton, Devils Lake, and Valley City. Excluding these cities, rural was defined as all other areas in North Dakota. Out of 801 respondents, 401 are from rural areas and 400 are located in urban areas. Various analyses compared the two sets of respondents (Figure 7).

This study's results differ from national studies in the finding that people in rural areas are only somewhat less likely to use the Internet than are people in metropolitan areas: Sixty-eight percent of rural respondents in North Dakota use the Internet compared to seventy-three percent of urban respondents. Other studies have shown a larger gap between those two groups. Nonusers account for eighteen percent of the rural households, compared to sixteen percent of the urban households.

Figure 7. Urban and Rural Computer and Internet Use



Computer and Internet Usage

Most of the people in this sample report using computers at home. Using computers at work, where Internet access often is faster, is less frequent than home use, a finding opposite that reported in some national studies.

Of the people who use computers:

- 92% use them at home
- 62% use them at work
- 39% use them at school
- 31% use someone else's computer
- 27% use them at libraries

As noted earlier, most computer users are also Internet users. Home is the predominant place for connecting to the Internet.

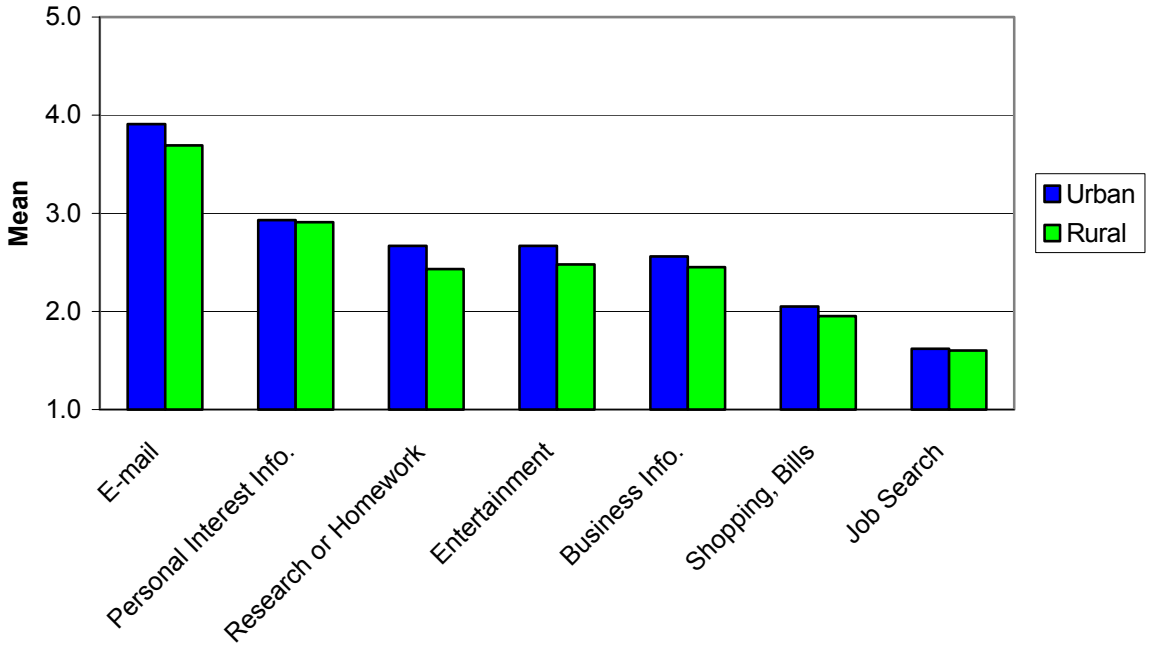
Places residents access the Internet include:

- Home, 78% of Internet users
- Work, 53% of Internet users
- Other places, 31% of Internet users
- Libraries, 26% of Internet users

Internet Uses

People who use the Internet were asked how often they used it for different types of activities. Figure 8 presents the urban and rural average mean Internet activity frequency, where "1" means *never* and "5" means *very frequently*.

Figure 8. Urban and Rural Mean Internet Activity Frequency

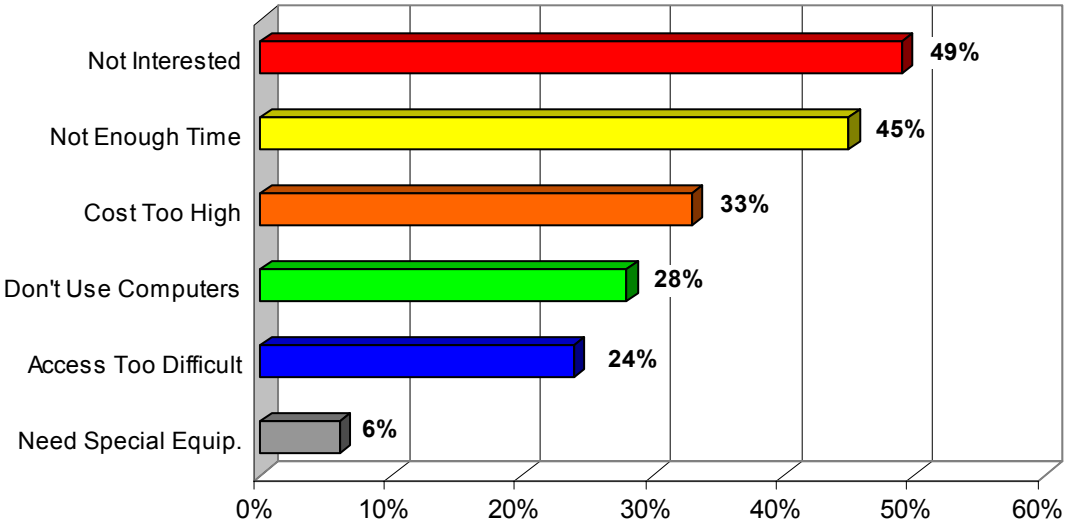


E-mail and using the Internet to access information of personal interest are the two most common activities for users. There were no significant differences between urban and rural users concerning the types of activities and the frequency of Internet use.

Reasons for Not Using the Internet

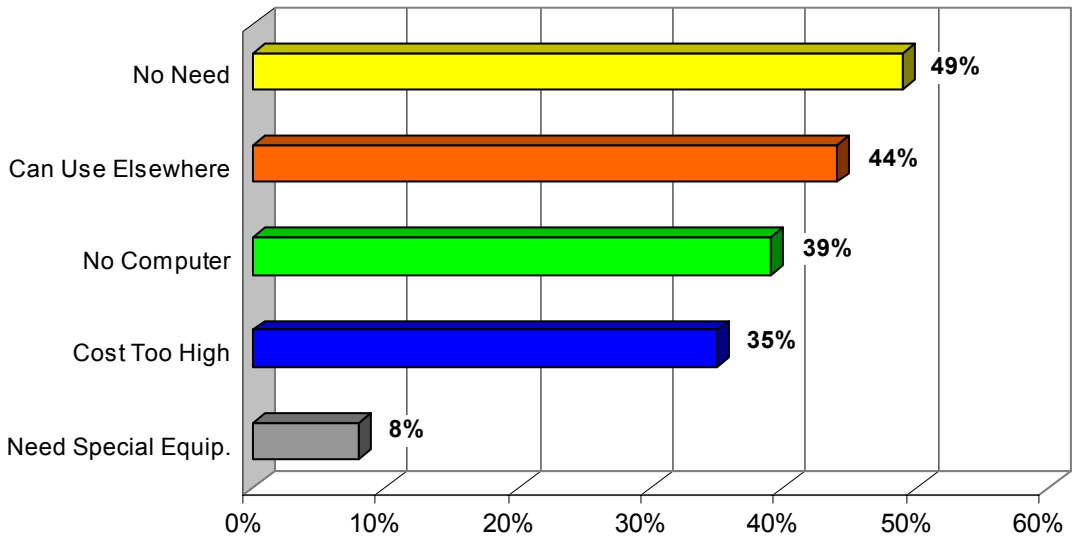
The reasons for not using the Internet are varied. Predictably, the leading reason is associated with not having an interest in the Internet (Figure 9). Beyond that, however, this sample reflects that people have concerns about not having enough time to use the Internet and report that the cost is prohibitive or they do not use computers. Some individuals also reported that the Internet access is too difficult to acquire or they need special equipment because of a physical disability.

Figure 9. Reasons for Not Using the Internet



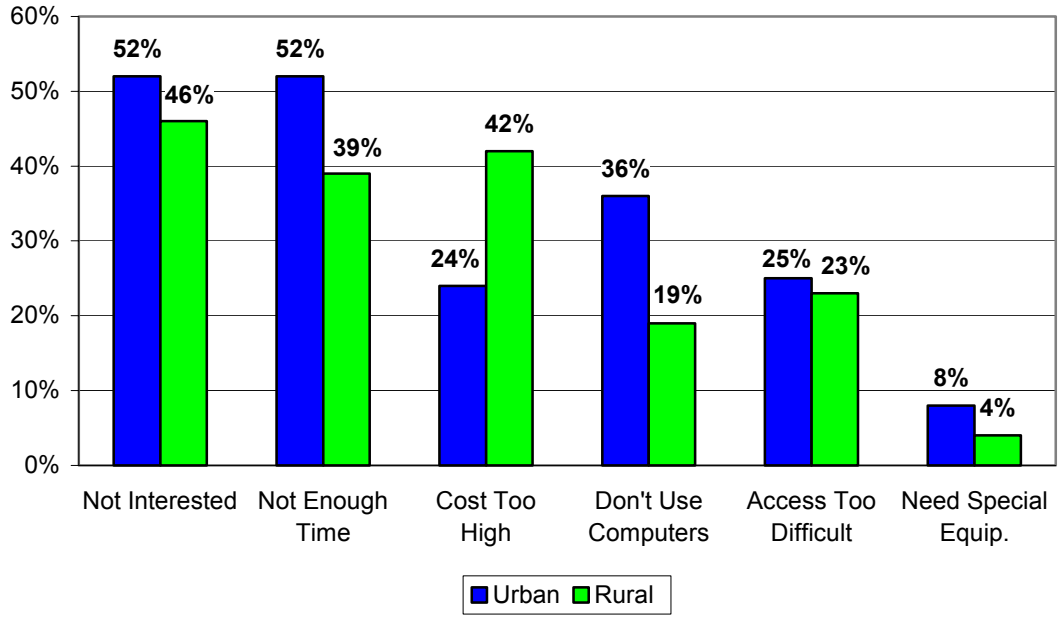
About half (49%) of the people who did not use the Internet at home reported they do not have a need, while forty-four percent report they can use a computer to access the Internet elsewhere (Figure 10). Another leading reason reported by people is not having a computer at home, or that the cost is too expensive. Less than one-tenth indicated the reason was due to needing special equipment because of a physical disability.

Figure 10. Reasons for Not Using Internet at Home



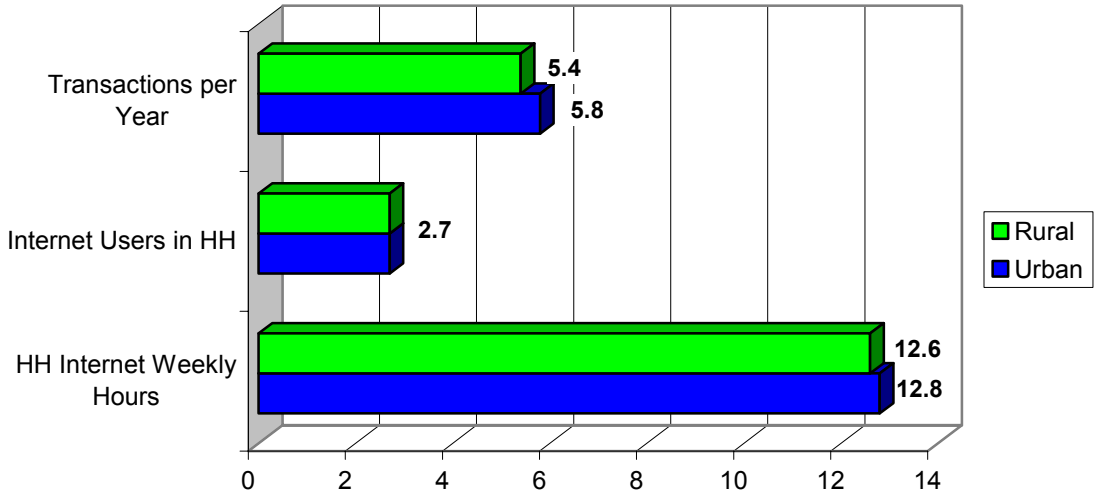
In general, there are no significant differences between urban and rural respondent's reasons for not using the Internet (Figure 11). Rural respondents were more likely to indicate that the monthly Internet costs were high, and urban households were more likely to report they did not use computers.

Figure 11. Urban and Rural Reasons for Not Using the Internet



Another aspect of rural Internet use concerns how much time (average weekly hours) rural residents spend on the Internet. If their Internet connection is slower, one could assume that rural residents might spend less time on the Internet simply because connecting and downloading would take too long. Yet as Figure 12 suggests, rural North Dakotans spend almost exactly the same time on the Internet than their urban counterparts. Furthermore, urban and rural households both average 2.7 Internet users per household and average five Internet business transactions in the past year.

Figure 12. Average Annual Transactions, Household Users, and Weekly Time Spent on the Internet



Likely Access Sites for Using the Internet

One possible solution particularly pertinent to having important public institutions move toward making services available online concerns locating access points in public places. Since residents who are not now using the Internet may begin to do so soon, it is important to measure where they might seek access. This is particularly important for the State as it tries to convince current nonusers to find access so they can use e-government services.

When asked how likely they would be to use Internet sites at various public places, such as in malls, libraries, and/or eating and drinking establishments - relatively few people (33%) said they would consider public access. However, about twenty-five percent of nonusers said they were likely to consider using public places to access the Internet. Table 1 reports the ratings on how likely residents are to use public Internet sites by location and by Internet use.

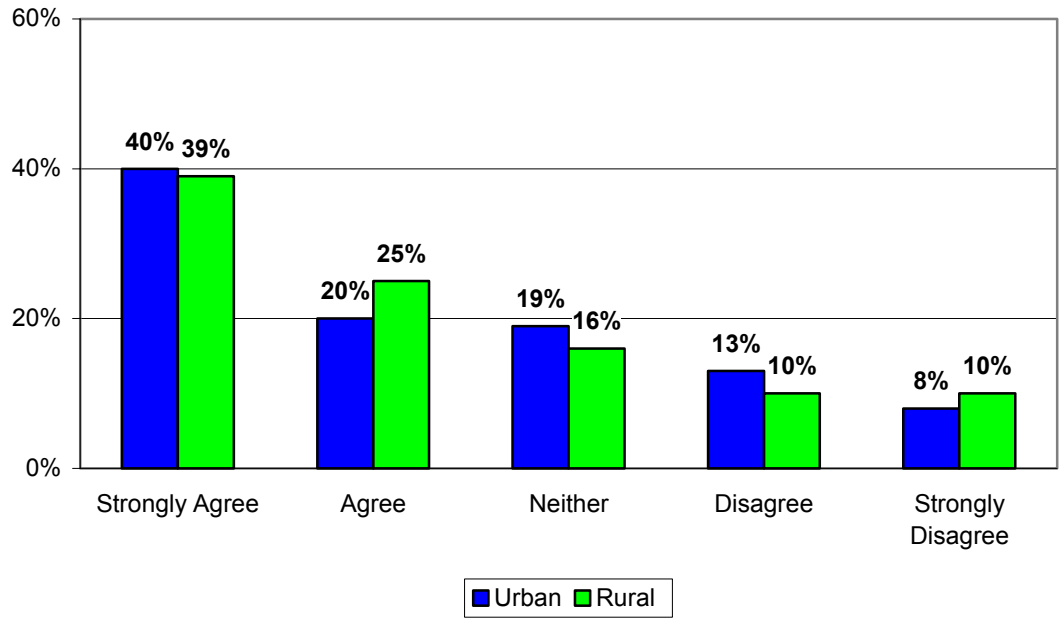
Table 1. Likelihood of Using Public Internet Sites

	Urban	Rural	Internet Users	Nonusers	Total Sample
Very Likely	14%	11%	14%	9%	13%
Likely	10%	9%	11%	7%	10%
Somewhat	11%	12%	12%	9%	10%
Not Very	29%	34%	35%	22%	32%
Not at All	36%	34%	28%	53%	35%
Total	*100%*	*100%*	*100%*	*100%*	*100%*

Internet Attitudes

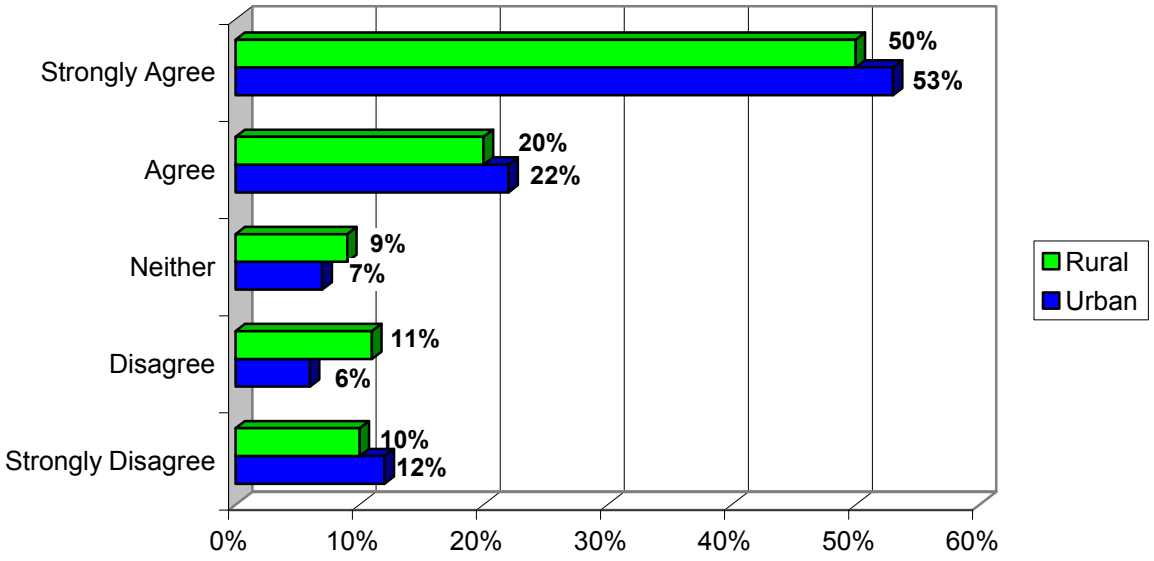
Attitudes and perceptions about the Internet's usefulness, cost, and effectiveness are factors that effect how willing people are to realize the technology's benefits. Several questions measured these considerations by asking about privacy, cost, and ease of access. Sixty-two percent of the entire random sample *agreed* or *strongly agreed* that they were worried about privacy on the Internet. This was true across all age, income and education groups. There are higher percentages of people in older age categories who were concerned about privacy aspects of the Internet: seventy-three percent of the people 56 and older agreed they were worried about privacy compared to fifty-nine percent residents age 18 to 55. Figure 13 presents residents concern about Internet privacy by location.

Figure 13. Concerned about Internet Privacy



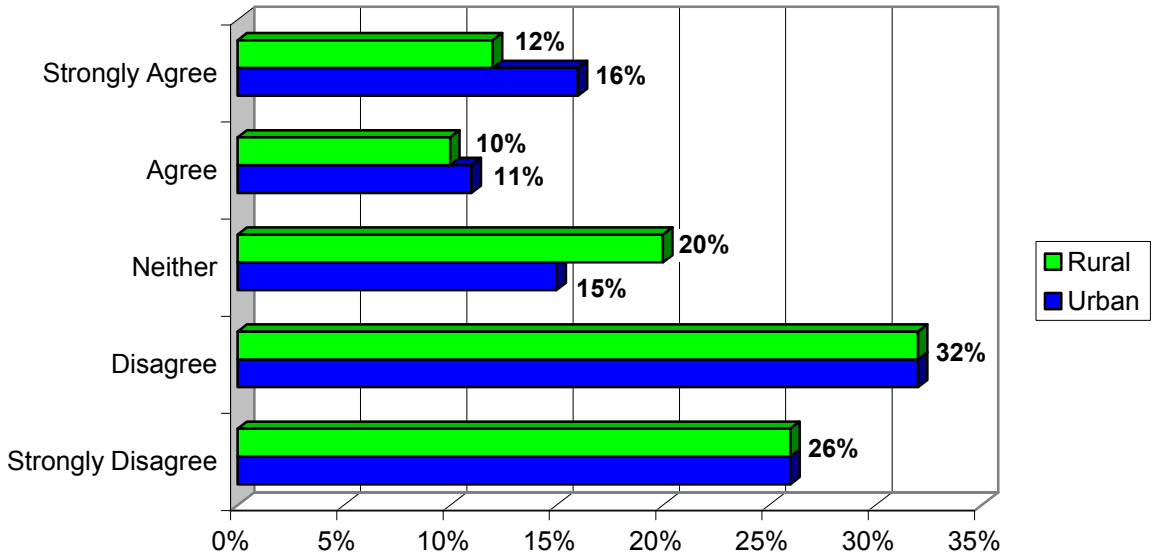
Overall, seventy-two percent of the sample *agreed* or *strongly agreed* that they had easy access to the Internet (Figure 14). Predictably, younger age groups, urban residents and higher income and education groups especially agreed with that statement.

Figure 14. Easy Internet Access



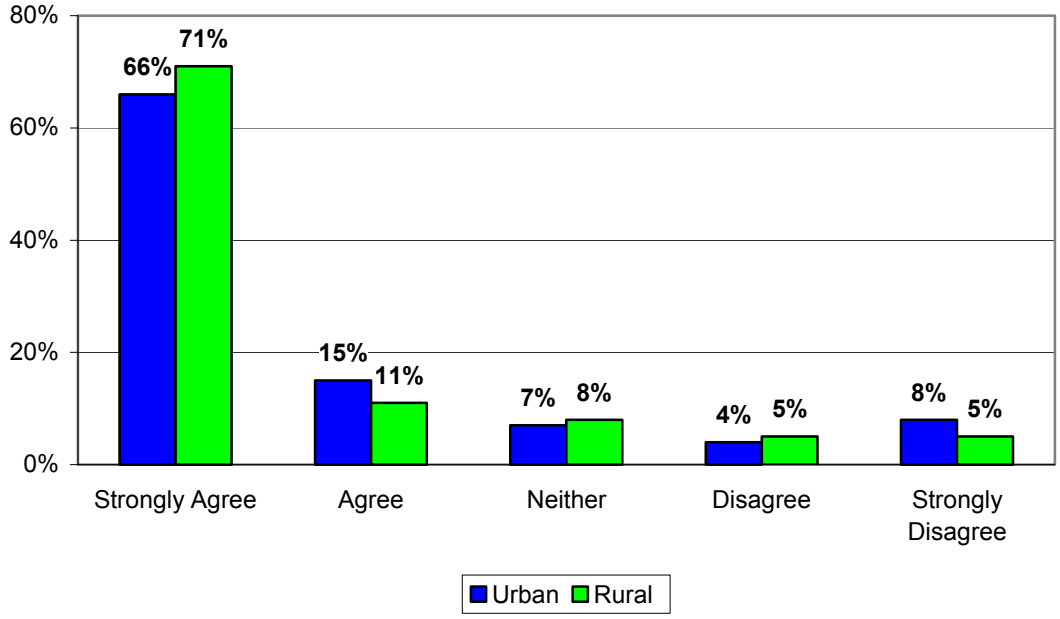
When read the statement, "the Internet is too expensive for people like me," rural and urban residents generally agreed on the matter of expense. Only twenty-five percent *agreed* or *strongly agreed* it was too expensive versus fifty-eight percent who *disagreed* (Figure 15). Overall, younger age groups and higher income and education groups especially disagreed with that statement.

Figure 15. The Internet is too Expensive



The following reflects that people have concerns about children using the Internet. Over seventy percent of the entire random sample *agreed* or *strongly agreed* that protecting children from adult content is a concern (Figure 16). Older age groups especially agreed that protecting children is a concern.

Figure 16. Protecting Children from Adult Content



Internet Connectivity

The common types of Internet connection from the home are shown in Table 3. Not too surprisingly, dial-up modems were the most common way of connecting to the Internet from home. Rural residents were less likely to have a broadband connection to the Internet. While about twelve percent of the urban residents had either cable modems or DSL, only three percent of the rural residents reported the same. [5]

Table 2. Home Internet Connections

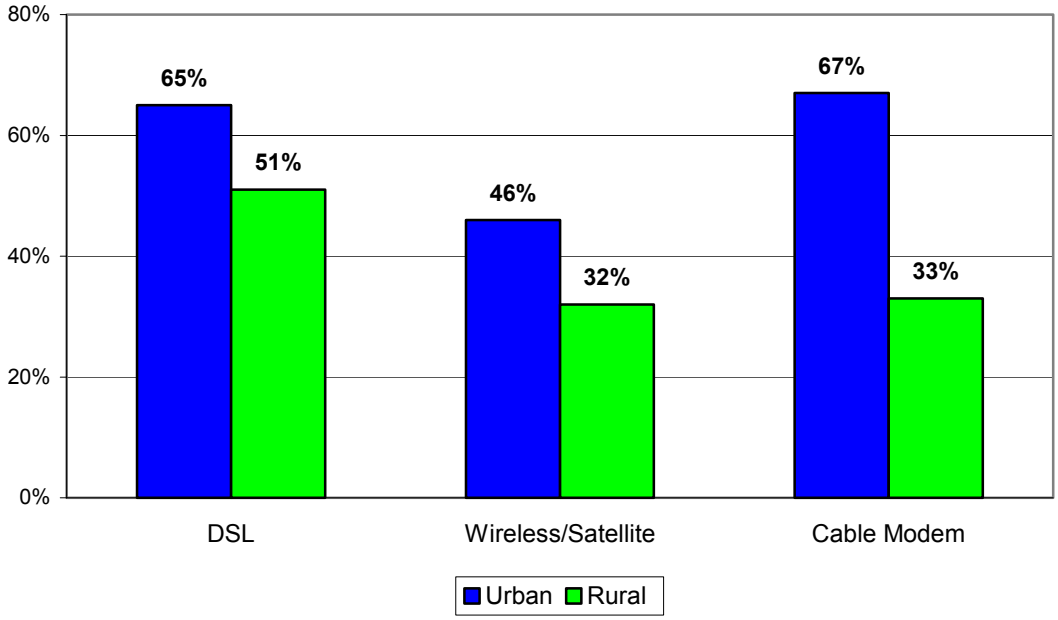
Connection Type	Urban	Rural	Total Sample
Telephone Line	84%	93%	89%
Cable Line	10%	3%	7%
Leased/ Wireless/Satellite	2%	0%	1%
Other	4%	2%	3%
Do Not Know	0%	2%	1%
Total	*100%*	*100%*	*100%*

[5] According to the FCC, DSL, or digital subscriber line, and cable modems, are the two most widely available broadband Internet access technologies in the U.S. (broadband is defined as any connection faster than 200 kbps).

Forty-five percent of the sample stated they did not know the speed in which they access the Internet from home. The types of connections from home included modem at 56K (33%), less than 56K modem (9%), modem (6%), digital subscriber line (3%) and other (3%). There was no difference between rural and urban members of the sample on Internet connectivity.

Available Services. Predictably, there are rural and urban differences in the availability of Internet services. As Figure 17 displays, more urban residents report having DSL, wireless/satellite and cable modem Internet service options compared to rural residents.

Figure 17. Available Internet Services



Most Internet users were satisfied with the speed of their connection: only twenty-two percent of the sample said they were not satisfied (Table 3). Sixty-one percent stated they were *satisfied* and another seventeen percent stated they were *very satisfied*.

Table 3. Satisfaction with Internet Service Speed

Satisfaction	Urban	Rural	Total Sample
Not at All Satisfied	20%	25%	22%
Satisfied	62%	61%	61%
Very Satisfied	18%	14%	17%
Total	*100%*	*100%*	*100%*

Internet users in this sample report paying an average of $22 monthly for service. There was no difference between rural ($21.42) and urban ($23.42) residents in the average monthly amount spent for services (Figure 18).

People who use the Internet were asked if they had a choice of service providers. As one would assume, there are rural and urban differences when it comes to the residents' Internet service provider choices. As Table 4 demonstrates, most urban residents report having more choices in Internet service providers compared to rural residents.

Figure 18. Monthly Internet Service Cost

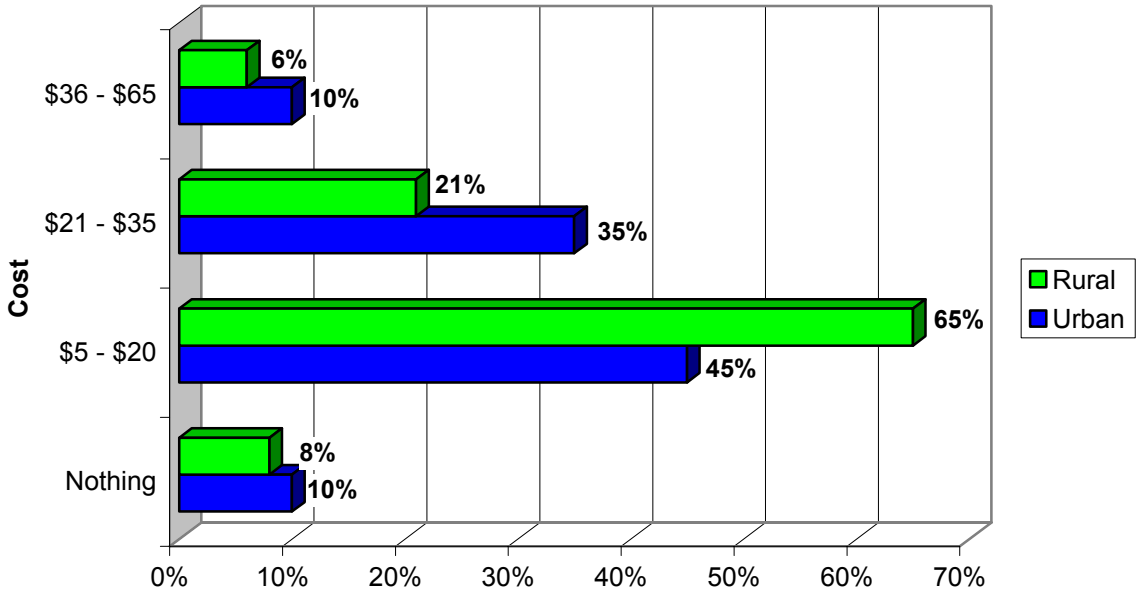
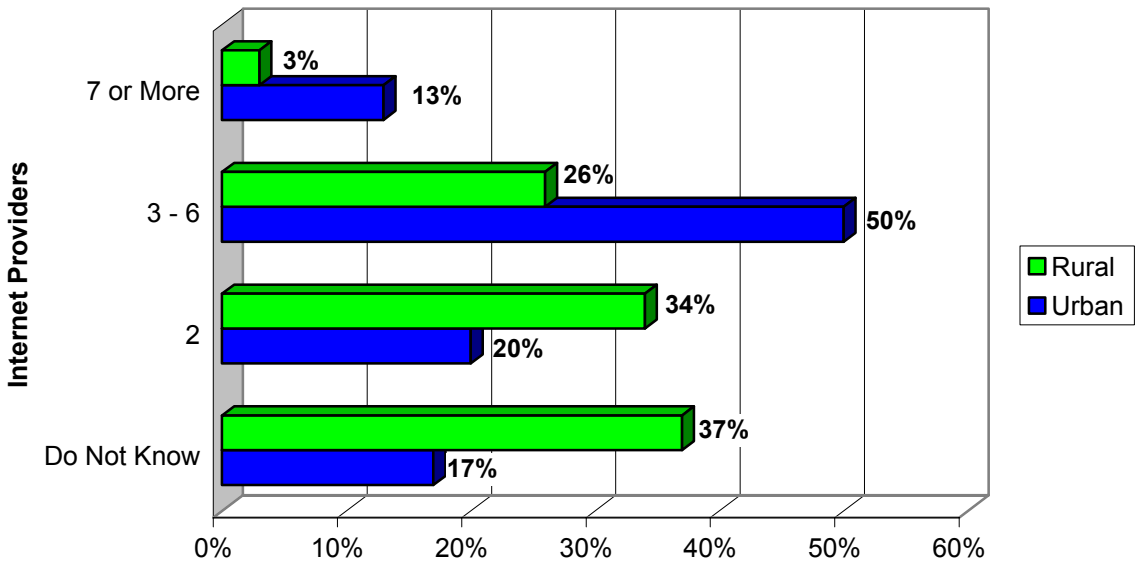


Table 4. Internet Provider Choices

	Urban	Rural	Total Sample
Yes	88%	56%	74%
No	12%	44%	26%
Total	*100%*	*100%*	*100%*

People with choices of Internet service providers were asked the number of providers they had to choose from. Again, as one would assume, there are rural and urban differences in regards to the residents' Internet service provider choices. As Figure 19 presents, most urban residents report having at least three or more providers to choose from while rural residents predominately have two providers, or were not aware of their choices.

Figure 19. Number of Internet Providers



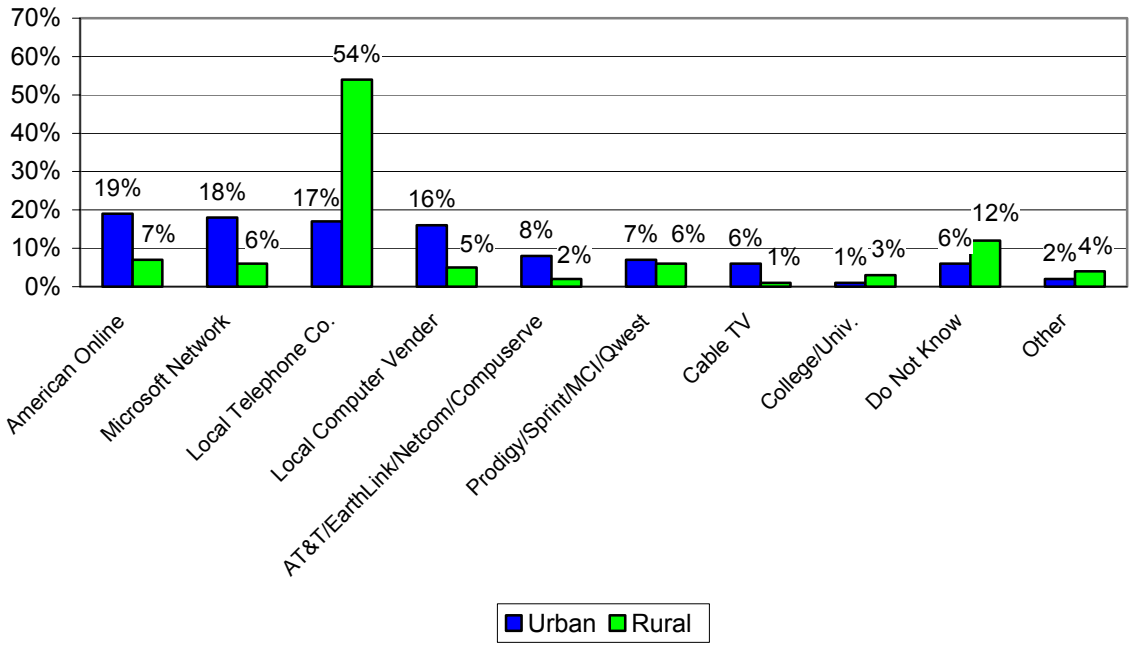
Most Internet users were satisfied with their Internet provider: only ten percent of the sample said they were not satisfied (Table 5). Sixty-four percent stated they were *satisfied* and another twenty-six percent stated they were *very satisfied*.

Table 5. Satisfaction with Internet Provider

Satisfaction	Urban	Rural	Total Sample
Not at All Satisfied	11%	10%	10%
Satisfied	62%	65%	64%
Very Satisfied	27%	25%	26%
Total	*100%*	*100%*	*100%*

Urban Internet users in this sample most often report using America On-line (19%), Microsoft Network (18%) and their local telephone (17%) or computer venders (16%). Among rural Internet users, local telephone companies (54%) were the preferred providers (Figure 20).

Figure 20. Rural and Urban Usage of Internet Providers



Internet Nonusers

The seventeen percent of the sample who do not use the Internet were asked how interested they were in having an Internet connection. Most nonusers (80%) report they are not interested in acquiring an Internet connection. These residents can be characterized as older, poorer, and less educated compared to residents (20%) who report an interest in connecting to the Internet. As Table 6 demonstrates, there were no significant differences between urban and rural residents interest in Internet connectivity.

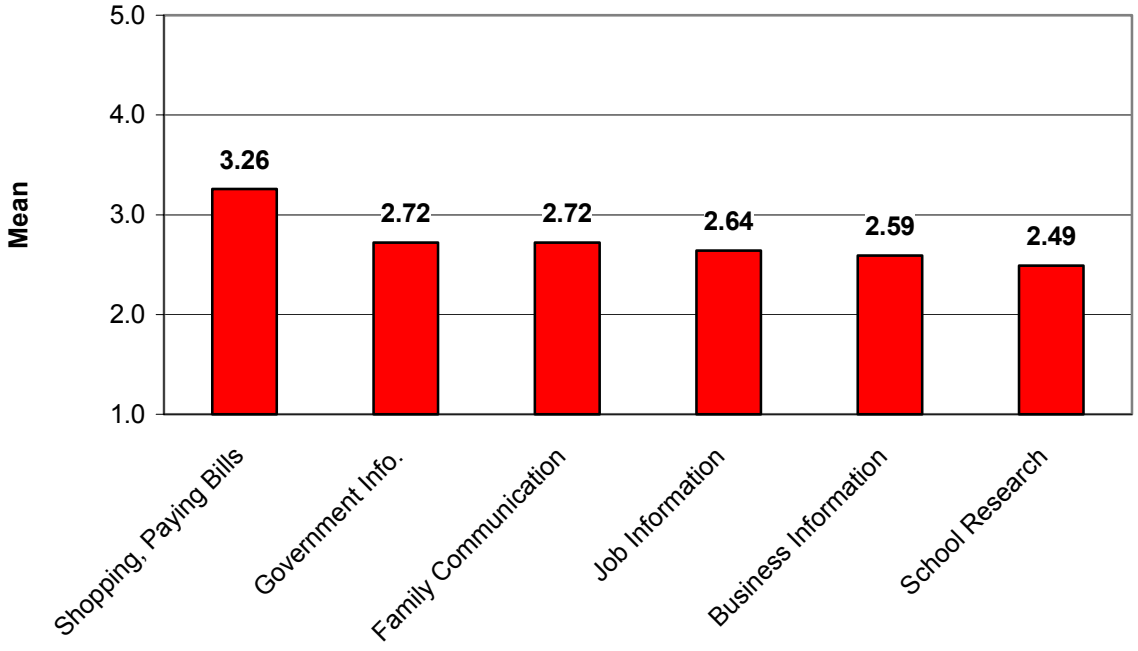
Table 6. Nonusers Internet Connection Interest

Interest	Urban	Rural	Total Sample
Not at all Interested	83%	76%	80%
Interested	8%	18%	13%
Very Interested	9%	6%	7%
Total	*100%*	*100%*	*100%*

Nonusers (20%) interested in an Internet connection would be willing to pay an average of $27 monthly for high-speed access, while email communication (51%) and surfing the web for personal information (49%) were the most likely reasons to use the Internet.

People who did not use the Internet were asked to rate their perceived usefulness of different types of services, "based on what they might have heard about the Internet." This was a way to explore some attitudes and perceptions about the Internet that might influence ideas about using e-government services. Figure 21 reports the average ratings on usefulness, where "1" means *not at all useful* and "5" means *extremely useful*.

Figure 21. Mean Nonuser Ratings on Internet Uses



Consumer activities, like shopping or paying bills, were the most highly rated applications among these nonusers. There were no structural (income, education, location) differences on the former, although younger people were more likely to highly rate the usefulness of shopping or paying bills.

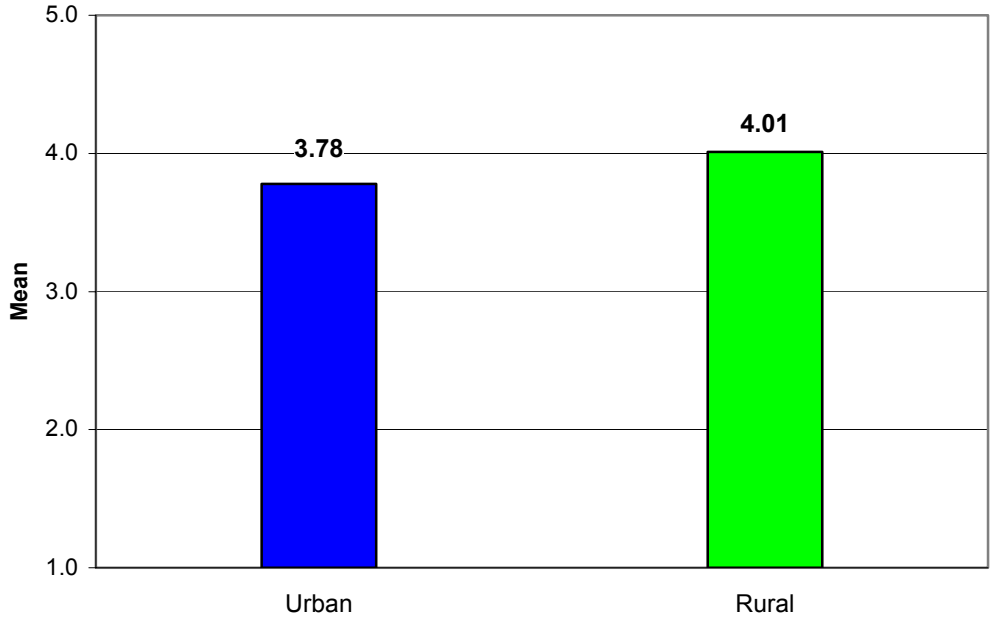
The remaining Internet applications, from obtaining government information to conducting school or homework research were all rated below average as "useful" or "very useful." Older age groups and people less educated were less likely to rate these applications as useful. Overall, these ratings suggest that nonusers do not believe the Internet could be useful for them, and they suggest that there are difficulties regarding perceptions around how using the Internet could be beneficial for various tasks.

Using Internet Government Services

To evaluate how people might feel about using government services on the Internet, we asked a series of questions about peoples' past, current and potential use of various services.

Over one-third of the entire sample (39%) reported having used the Internet to access government services. Of these respondents, urban residents (42%) were slightly more likely to report using online government services compared to rural residents (35%). Figure 22 reports the urban and rural average mean government services customer satisfaction rating, where "1" means *very dissatisfied* and "5" means *very satisfied*.

Figure 22. Mean Online Government Services User Ratings



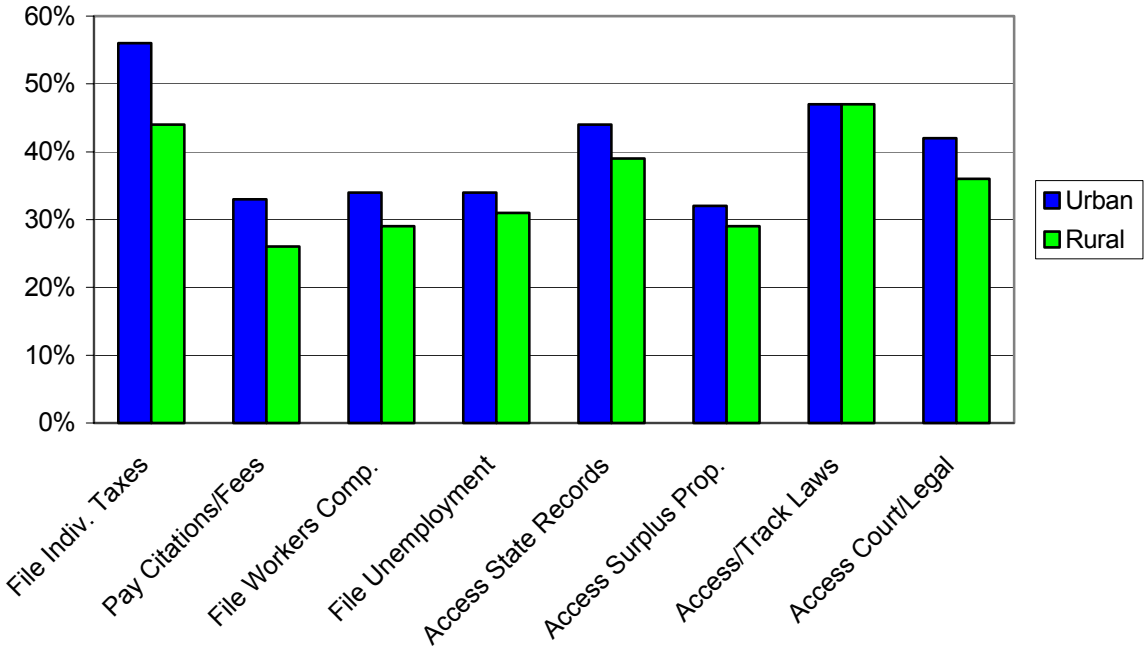
Sixty-five percent of those residents using government services report being *very satisfied* or *somewhat satisfied* with services. Table 7 presents how often these residents access government services in an average month.

Table 7. Frequency of Government Access Monthly

Access Services	Urban	Rural	Total Sample
Every Day	14%	10%	13%
Several Times a Week	9%	9%	9%
Few Times a Month	42%	53%	46%
Not in the last Month	35%	28%	32%
Total	*100%*	*100%*	*100%*

The entire sample was read a list of government services and asked if they would consider using these services if they were available on the Internet. The most likely Internet services residents would consider using included driver's license renewals (55%), communicating with state legislatures or government officials (54%), accessing educational programs (51%), using directories of government services (51%), filing taxes (50%), obtaining parking or camping reservations (50%), voting (50%) and checking credentials of a regulated business (51%). Figure 23a presents the urban and rural percentages of residents who would consider using e-government related filing and/or payments services.

Figure 23a. Government Services would Consider Using over the Internet

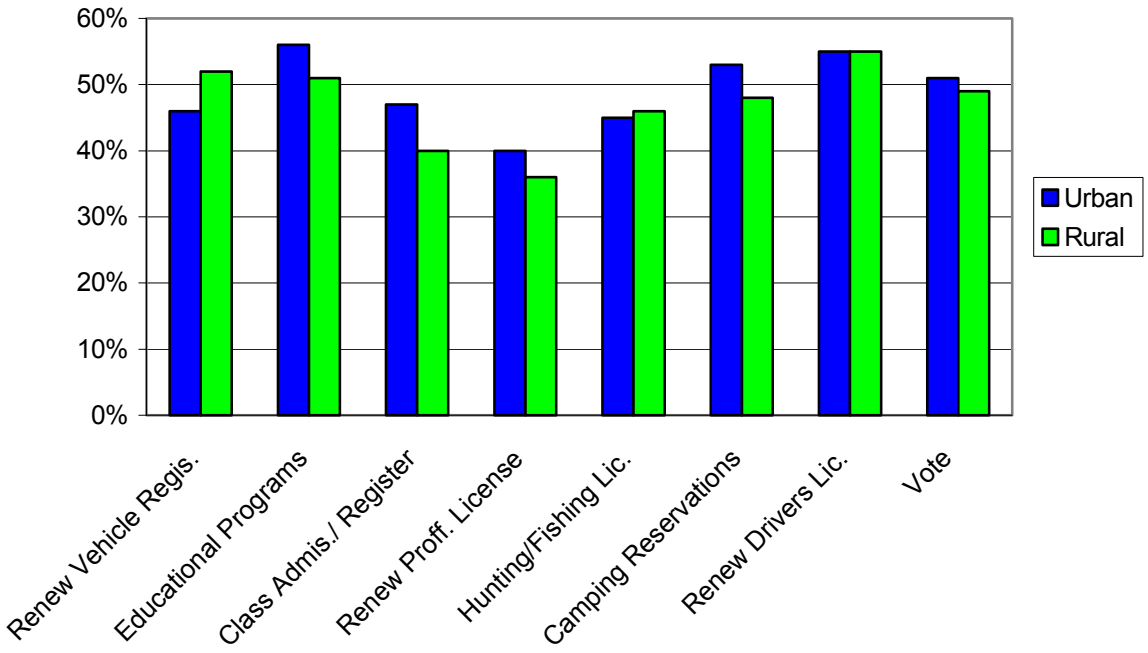


Among the Internet services considered in Figure 23a there were some significant demographic differences between North Dakota residents. These include:

- Interest in using the Internet to file taxes was most favored by younger age groups, urban residents in higher income brackets and education groups.
- Using the Internet to pay traffic citations or court fees was of more interest to urban residents, younger age groups and those more educated.
- Younger and better-educated residents are more likely to use the Internet to file workers compensation or unemployment insurance forms.
- Interest in using the Internet to access state government records, on-line surplus property, track state laws or legislation, or access legal/court records were all most favored by younger age groups, residents in higher income brackets and education groups.

Figure 23b presents the urban and rural percentages of residents who would consider using e-government related personal services.

Figure 23b. Government Services would Consider Using over the Internet

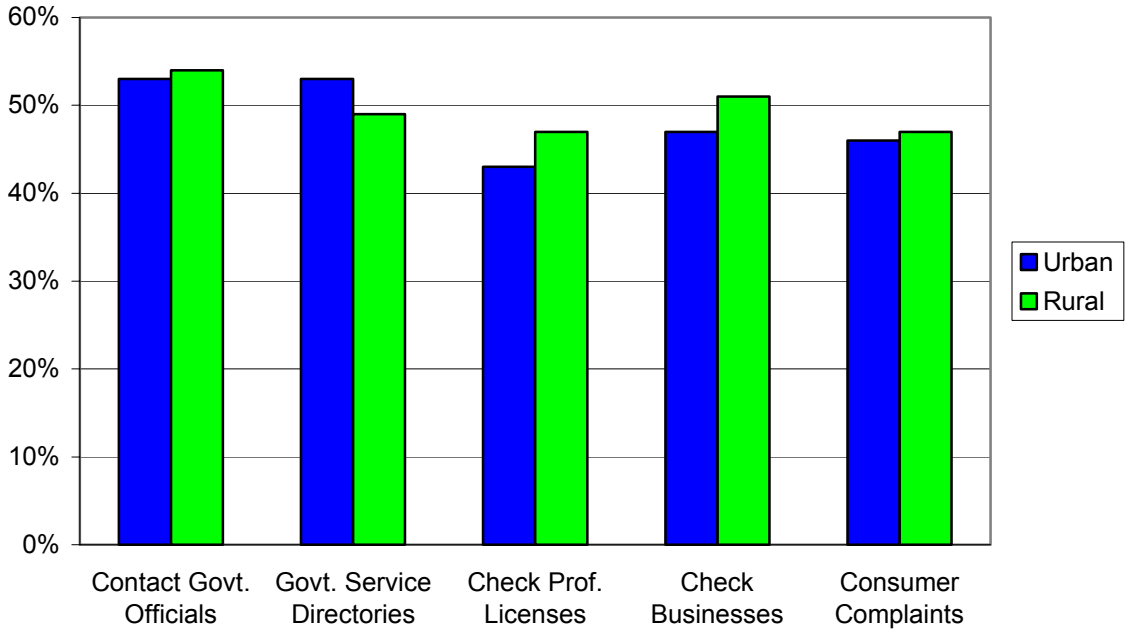


Among the Internet services presented in Figure 23b there were some significant demographic differences between North Dakota residents. These include:

- Interest in using the Internet to renew a vehicle registration, access educational programs, apply for class admissions, renew professional licenses, obtain hunting/fishing licenses and to vote were all preferred by younger age groups, residents in higher income brackets and education groups.
- Using the Internet to obtain park or camping reservations and renew a driver's license was of more interest to younger groups and those residents more educated.

Figure 23c presents the urban and rural percentages of residents who would consider using e-government related business and informational services.

Figure 23c. Government Services would Consider Using over the Internet



Among the Internet services presented in Figure 23c some significant demographic differences between North Dakota residents include:

- Interest in using the Internet to contact state legislatures or government officials by way of e-mail, utilize government service directories, check contractors or professional licenses, check credentials of a regulated business and report consumer or citizen complaints were all preferred by younger age groups, residents in higher income brackets and education groups.

Providing Internet Government Services

In assessing other attitudes toward e-government services, we asked residents some additional questions about their ideas of computer-based delivery of government services. We found there are contradictions in the sample when it comes to evaluating the Internet's usefulness for government services (Table 8). Most residents agree having government services on the Internet would be convenient and allow better access to information. Yet contradictory to those opinions, residents also agree that most would prefer to see someone in person when using a government service, and that they are concerned about the quality of services they would receive on the Internet.

Table 8. Internet Usefulness for E-Government Services

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Prefer to talk to someone in person	45%	23%	15%	11%	6%
Internet would be more convenient and save time	38%	35%	14%	7%	6%
Internet allows better access to government information	41%	35%	12%	7%	5%
Concerned about the quality of Internet services	25%	24%	22%	22%	7%

Figure 24 presents the urban and rural percentage of residents' preferences in regards to speaking with someone in person when using a government service.

Figure 24. Prefer to Talk to Someone in Person

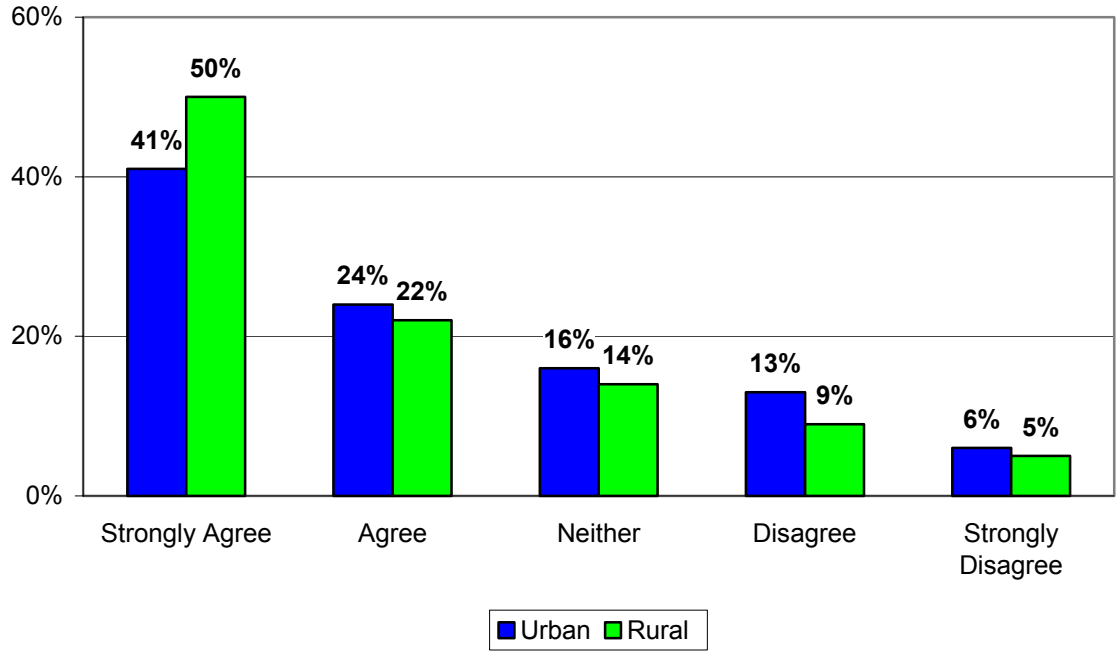


Figure 25 summarizes the differences by age, with older residents more frequently agreeing or strongly agreeing they would prefer to talk to someone in person when using a government service.

Figure 25. Prefer to Talk to Someone in Person by Age

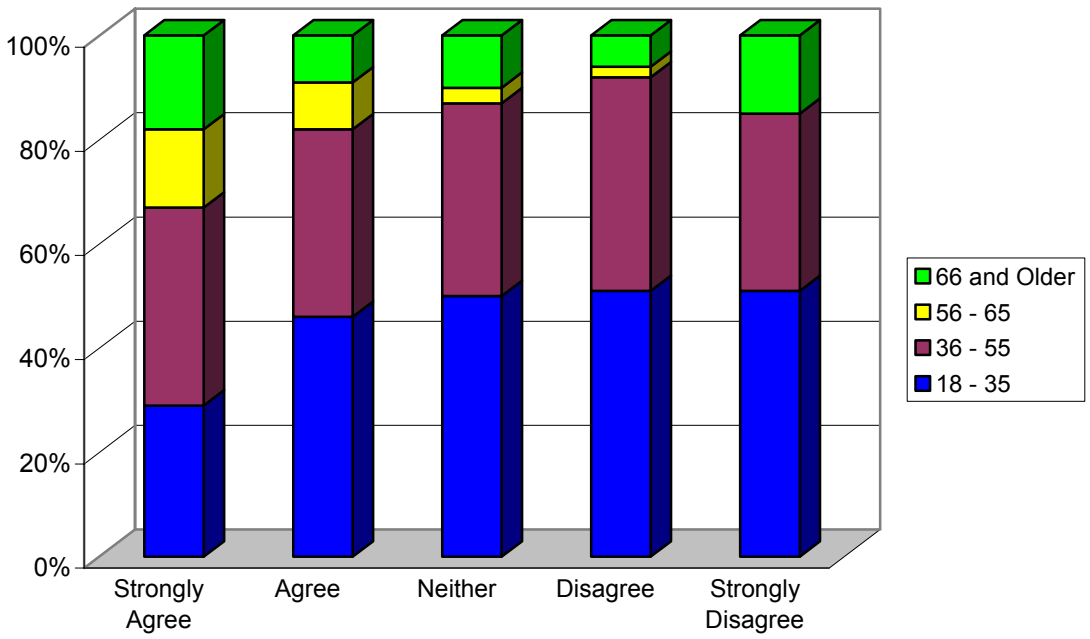
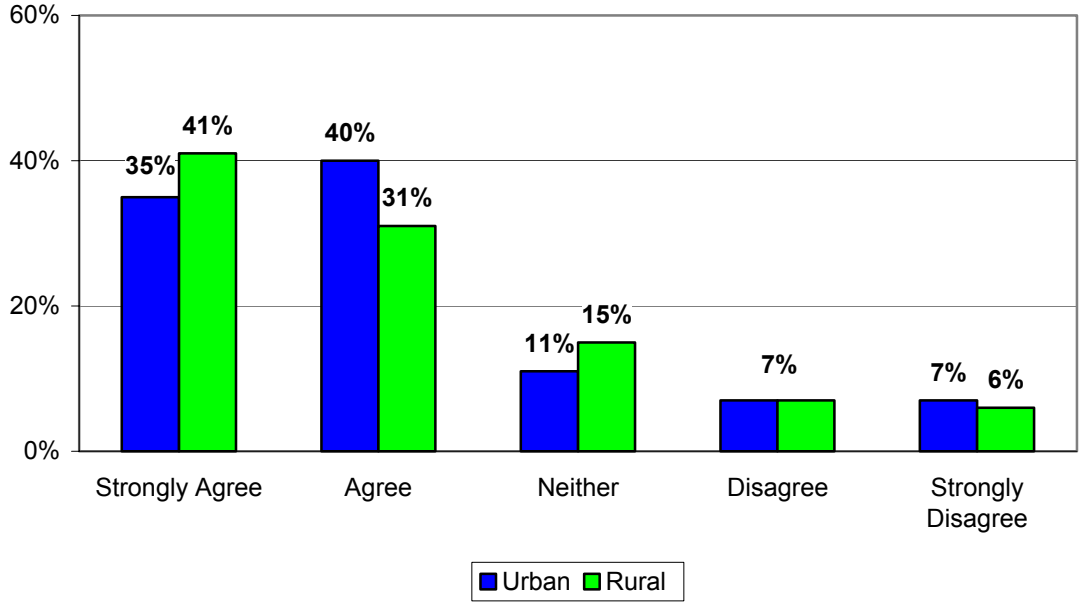


Figure 26 presents the urban and rural percentage of residents' attitudes in regards to government information on the Internet and its convenience.

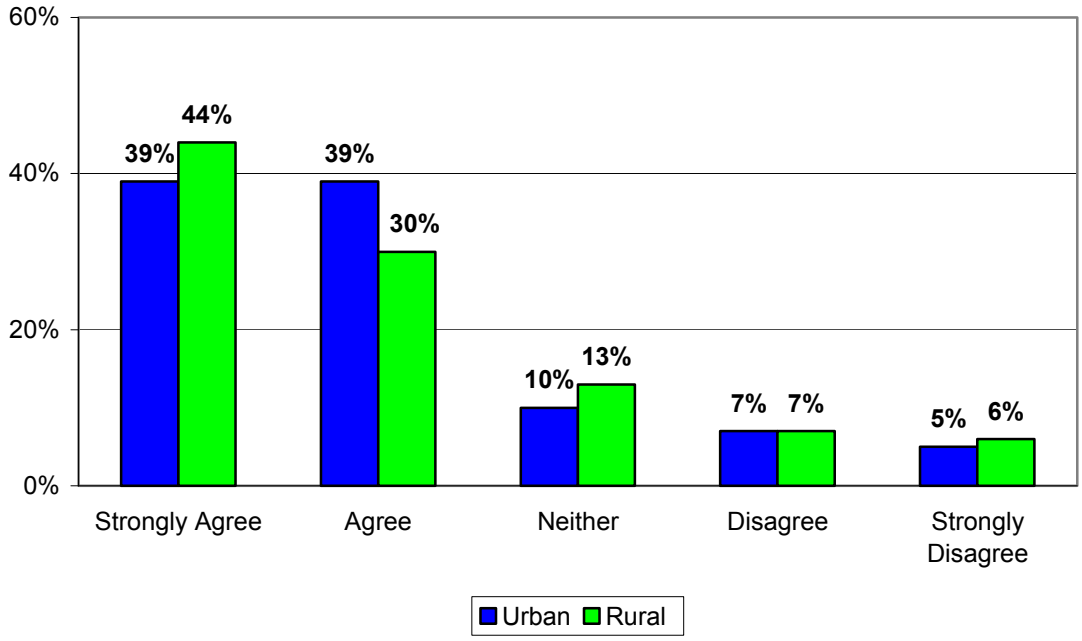
Figure 26. Internet Govt. Information would be Convenient and Save Time



There were different responses regarding the usefulness of the Internet in relation to convenience among age groups and the higher income brackets. Younger residents, and those at higher education levels and income brackets were more likely to report having government information on the Internet would be convenient and save time.

Figure 27 presents the urban and rural percentage of residents' opinions in regards to the Internet and better access to government information.

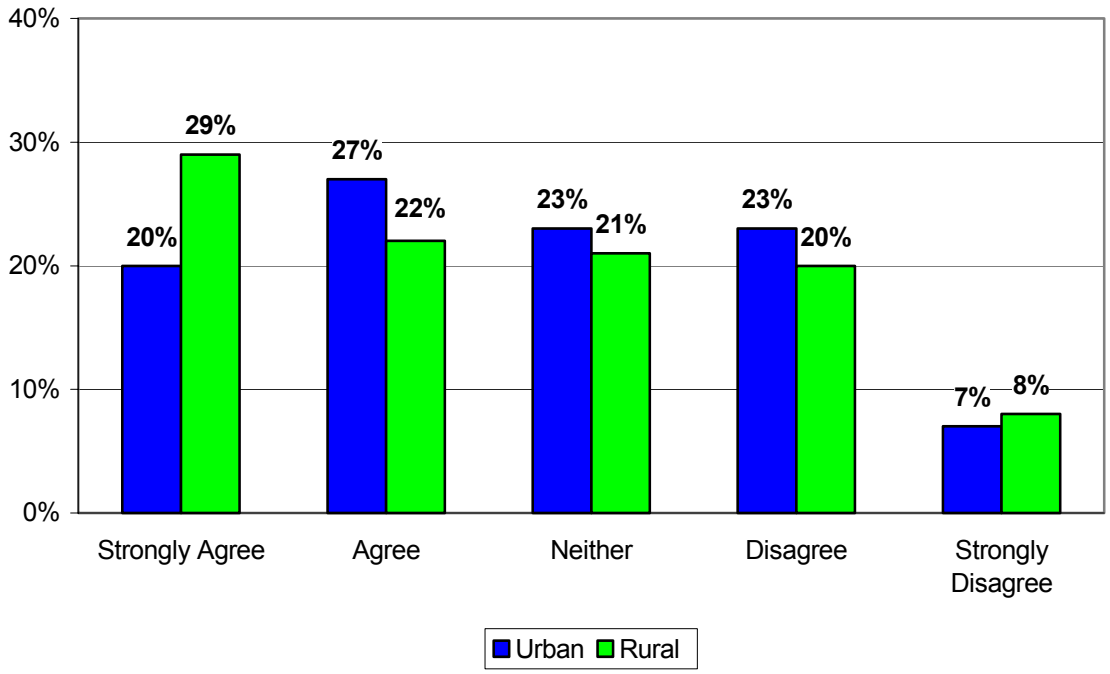
Figure 27. Internet would Allow Better Access to Government Information



There were differences demographically whether the Internet would allow better access to government information. The residents who especially agree about the usefulness of the Internet tend to be younger, at higher income levels and are more likely to be better educated.

Figure 28 presents the urban and rural percentage of residents' opinions in regards to the quality of service the government would provide through the Internet.

Figure 28. Concerned about the Quality of Online Government Service



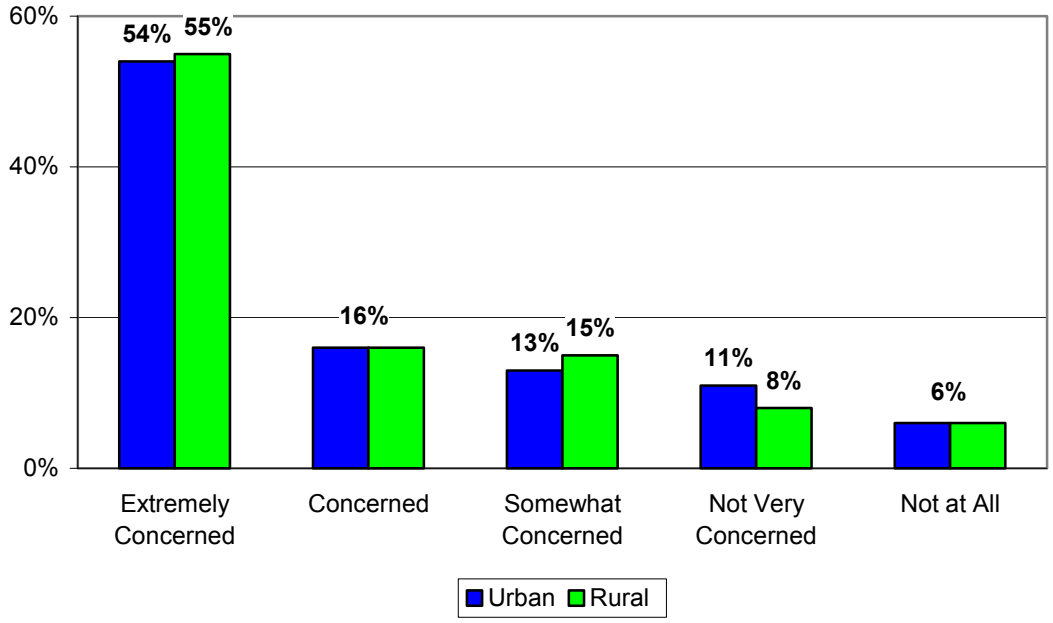
There were differences demographically regarding residents' concerns about the quality of services government would provide through the Internet. Residents who especially express concerns about the quality of government services tend to be younger at higher income levels and are more likely to be better educated.

Internet Privacy and Security

Numerous studies have found that people in the United States are increasingly wary about maintaining the privacy of personal information.[6] In this study, over eighty percent of computer and Internet users agreed that they were concerned about sharing personal information on the Internet. As a rule, people who use the Internet more frequently expressed more concerns than did those who used it less often. We asked people how they felt about the sharing of credit card numbers or financial information on the Internet with government agencies. As shown in Figure 29, urban and rural residents both express concerns about sharing credit card numbers or financial information on the Internet with government agencies.

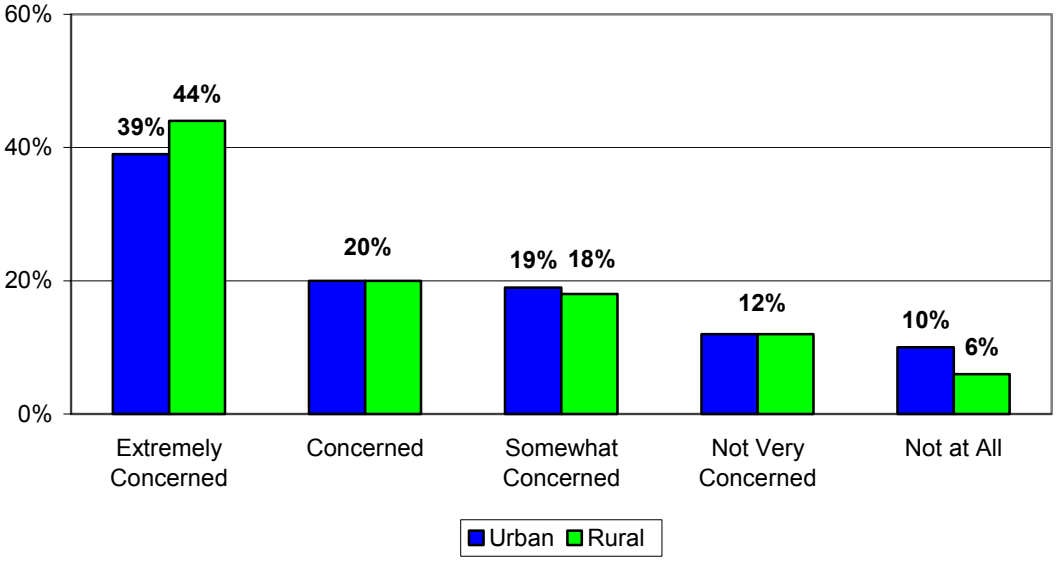
[6] According to Surveying the Digital Future Study, from the UCLA Center for Communications Policy, nationally 64% of Internet users and 75% of nonusers agree or strongly agree that when people go online they put their privacy at risk. Interviews were conducted in November 2001 with 2,096 randomly selected households throughout the 50 states and the District of Columbia. The UCLA Internet report can be found at www.ccp.ucla.edu.

Figure 29. Sharing Financial Information with Government Agencies



We also asked people how they felt about sharing other non-financial personal information on the Internet with government agencies (Figure 30).

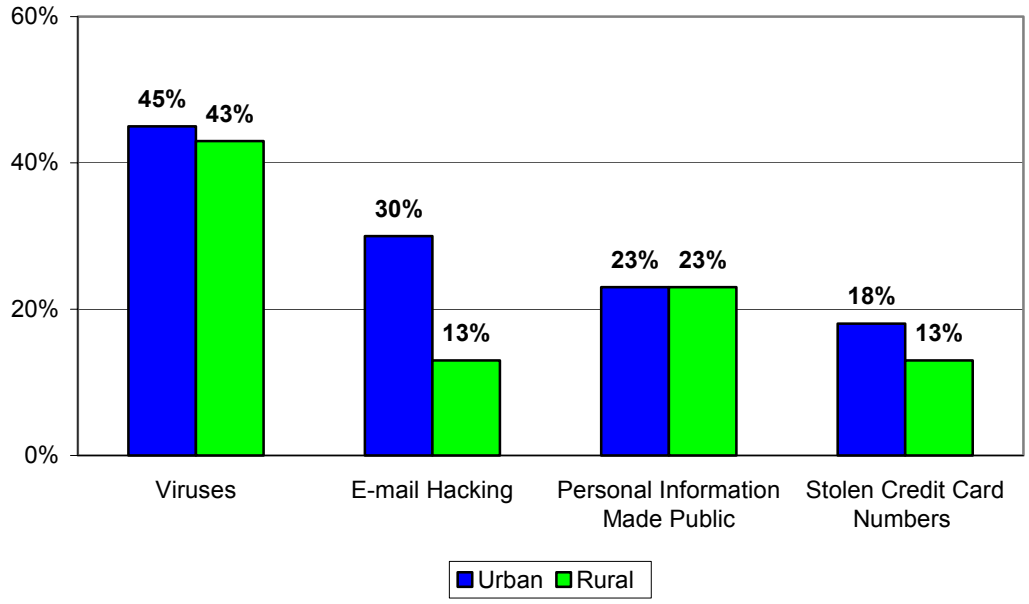
Figure 30. Sharing Non-financial Information with Government Agencies



As shown in Figure 30, urban and rural residents both equally express concerns about the sharing of non-financial personal information on the Internet, although the concern is slightly less compared to sharing financial information.

Even though residents express concerns about sharing personal information on the Internet, only eleven percent of the users report experiencing security problems. Figure 31 presents the types of security problems experienced by location.

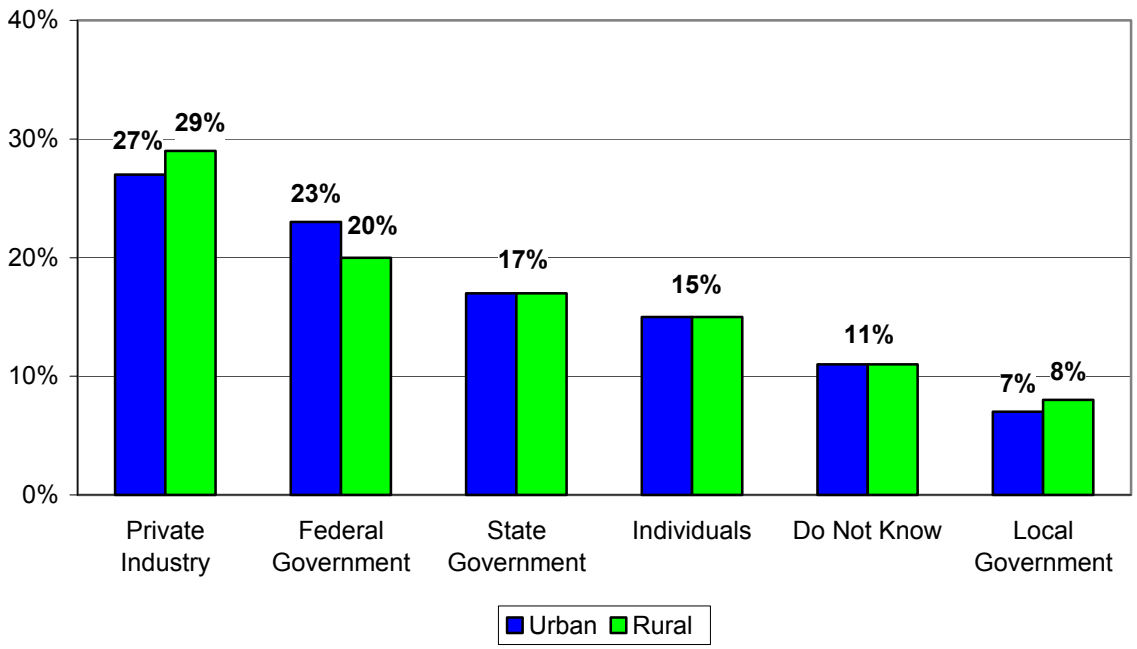
Figure 31. Internet Security Problems Experienced



Ensuring the Availability of Network Services

We suggested five entities and asked which one should take the greatest responsibility to guarantee network services are available. The largest percentage of residents reported that private industry (28%) and the federal government (22%) should carry the largest responsibility. Figure 32 presents the percentages of urban and rural residents in regards to which entity should take the main responsibility to ensure the availability of network services.

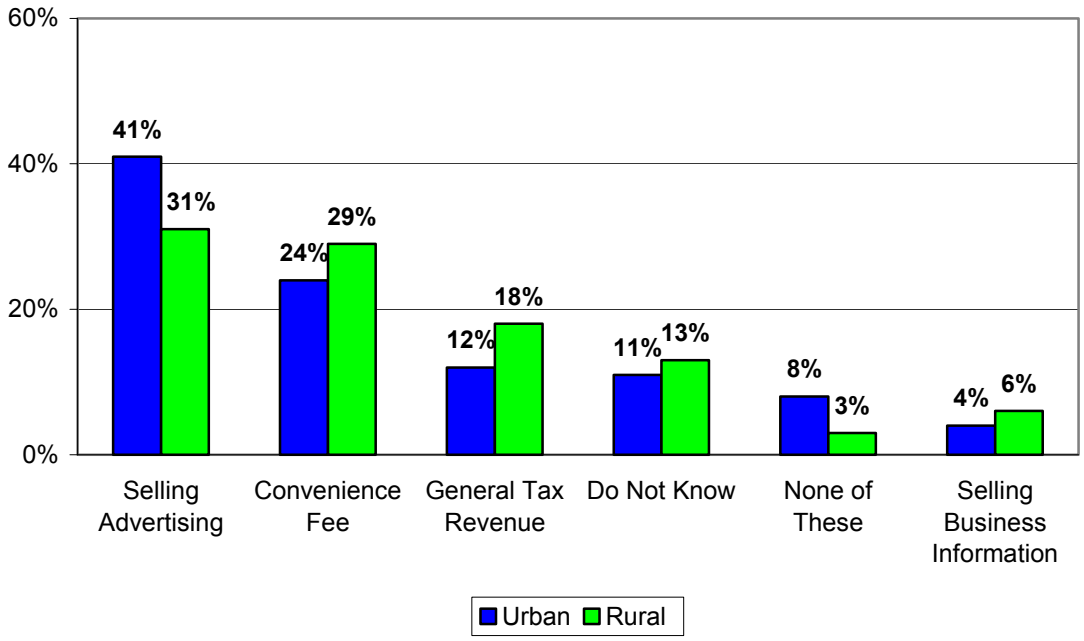
Figure 32. Who Should Ensure the Availability of Network Services



Younger people at higher income and education levels are more likely to report private industry and the federal government should take the main responsibility to ensure the availability of network services.

In addition, we suggested four methods of funding the costs related to providing online government services and asked residents their preference. Opinions in regards to financially supporting e-government services were most favorable toward two plans: (1) selling advertising on the computer screen to underwrite the costs of the service or (2) having users of such services pay a convenience fee. Figure 33 presents the percentages of residents by location who found these funding options acceptable. Younger people at higher income levels prefer the ideas of a fee-for-use and on-screen advertising compared to older people and those at lower incomes levels. Interestingly, Internet users were more likely to find the idea of using advertising on state pages acceptable.

Figure 33. On-line Government Services Funding Preferences



State Governments Role and the Internet

Several questions measured residents' perceptions of state government's priorities, willingness to share information to identify wrongdoing or misrepresentations, develop partnerships and safeguard personal information.

About half of the entire sample agreed that online services should be a state government priority (Table 9). Younger age groups and those with higher levels of education especially agreed with that statement (Figures 34 and 35).

Table 9. Online Services Should be a State Government Priority

	Urban	Rural	Total Sample
Strongly Agree	20%	19%	20%
Agree	27%	26%	27%
Neither	22%	25%	23%
Disagree	15%	13%	14%
Strongly Disagree	10%	12%	11%
Do Not Know	6%	5%	5%
Total	*100%*	*100%*	*100%*

Figure 34. Online Services should be a Priority for State Governemnt by Age

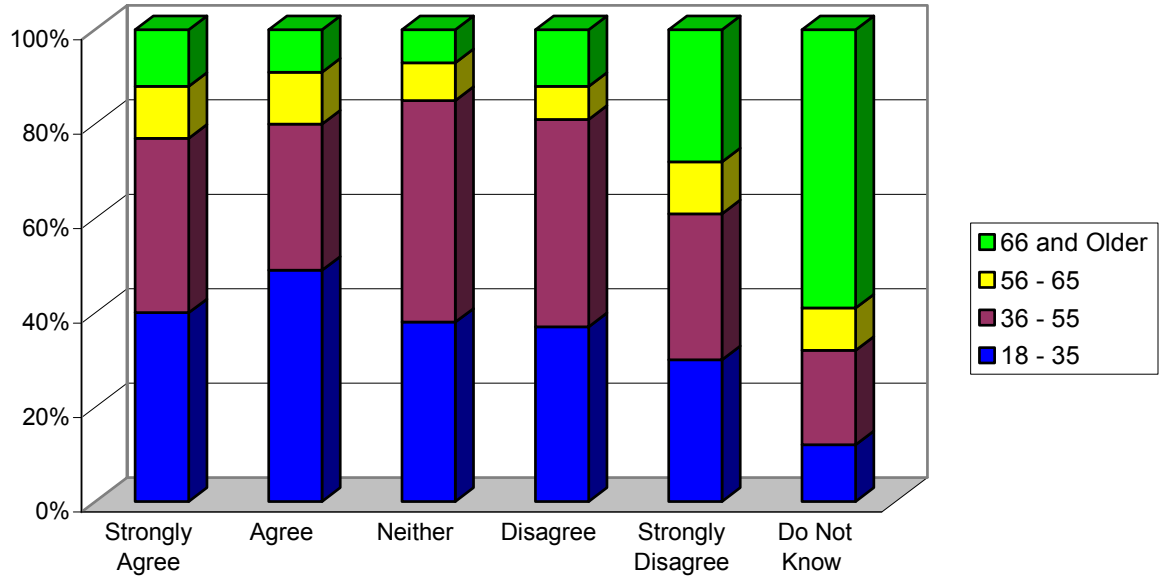
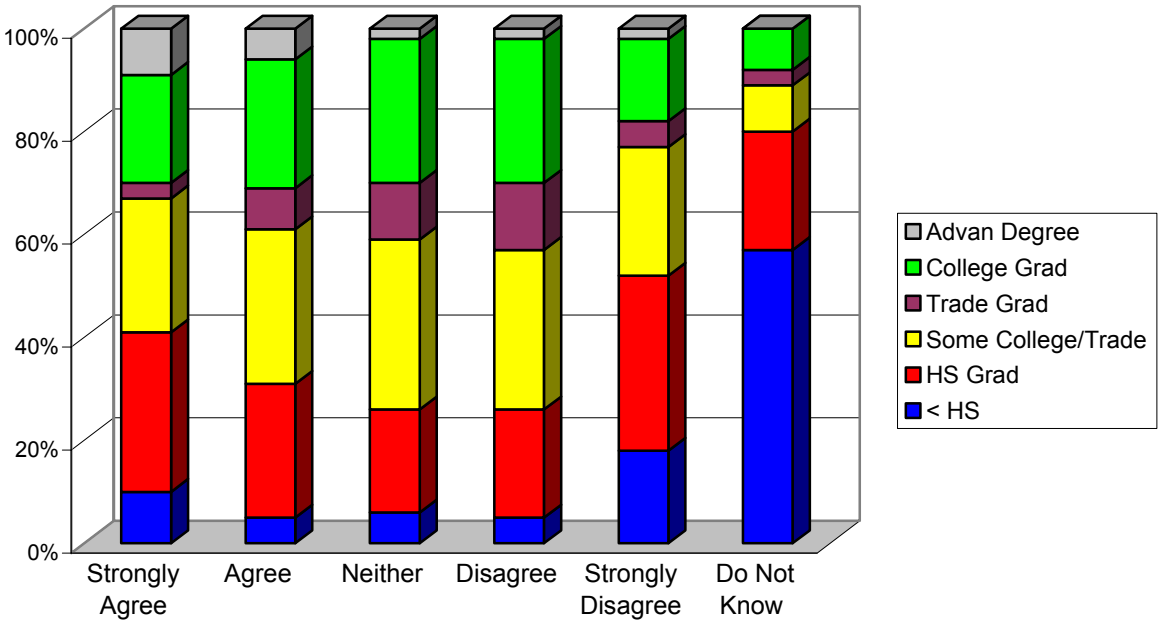


Figure 35. Online Services should be a Priority for State Governemnt by Education



When asked if government agencies should share information with each other in order to identify wrongdoing or misrepresentations, seventy percent of the entire random sample *agreed* or *strongly agreed* with that statement (Table 10). Younger age groups and those with higher levels of education especially agreed with that statement.

Table 10. Government Agencies should Share Information to Identify Wrongdoing

	Urban	Rural	Total Sample
Strongly Agree	38%	37%	38%
Agree	32%	33%	32%
Neither	14%	14%	14%
Disagree	8%	6%	7%
Strongly Disagree	4%	6%	5%
Do Not Know	5%	4%	4%
Total	*100%*	*100%*	*100%*

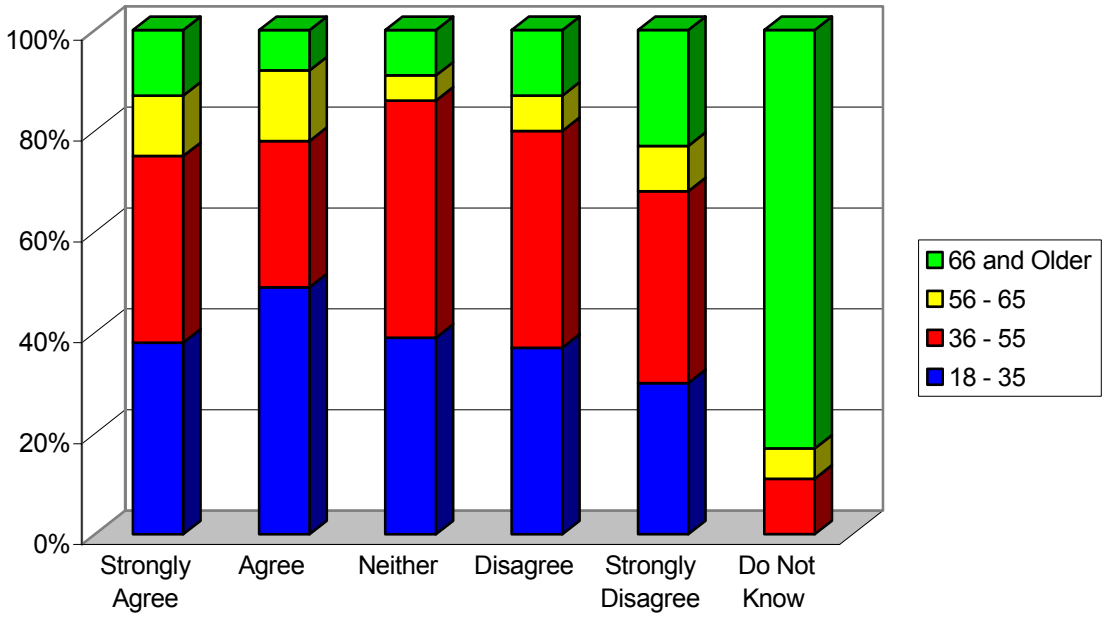
Whether people feel confident that the State will use their personal information appropriately is another area pertinent to e-government services. Whether people trust the State or Federal government to responsibly share personal data may have a dramatic effect on how well people accept e-government services in the future. Table 11 illustrates a mixed level of confidence in state government handling personal, confidential information. Almost half of the residents surveyed expressed confidence in state government safeguarding personal information.

Table 11. State Government can be Trusted to Safeguard Personal Information

	Urban	Rural	Total Sample
Strongly Agree	18%	24%	21%
Agree	27%	25%	26%
Neither	20%	18%	19%
Disagree	18%	18%	18%
Strongly Disagree	13%	14%	13%
Do Not Know	4%	3%	3%
Total	*100%*	*100%*	*100%*

Younger age groups and those with higher levels of education were more likely to express confidence in how state government handles their personal information (Table 35).

Figure 36. State Government can be Trusted to Safeguard Personal Information by Age

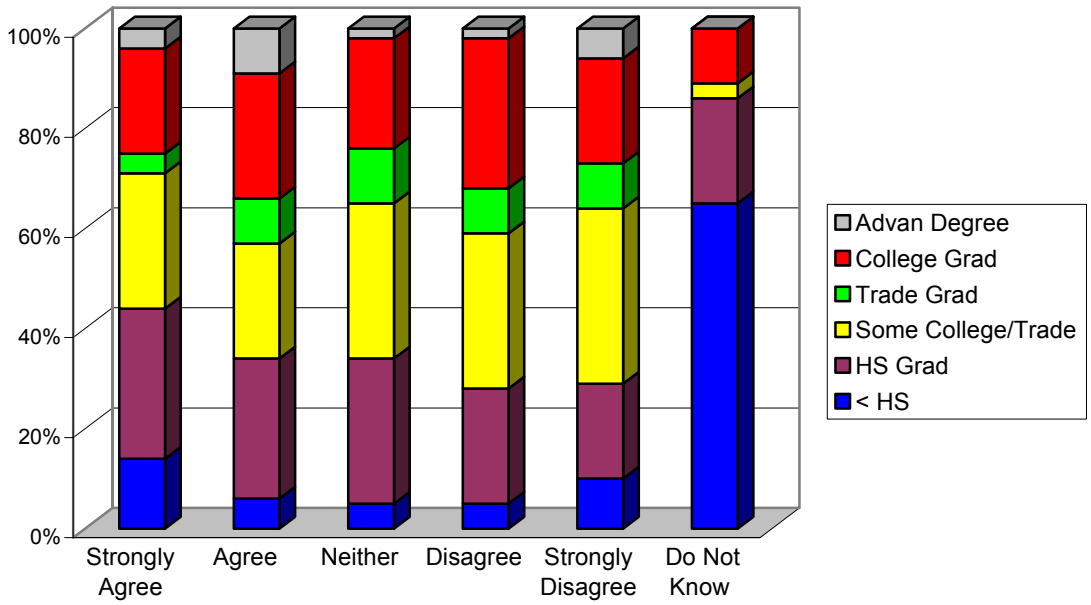


When we asked if people would feel comfortable with state government maintaining a master profile containing their public information to better deliver services, the responses were again mixed. About forty percent of the entire random sample disagreed with the state government maintaining a resident master profile, thirty-nine percent were in agreement, and fifteen percent report they are neither in agreement or disagreement (Table 12). Younger age groups and those with higher levels of education (Figure 37) were least comfortable with the state government maintaining a resident master profile.

Table 12. Comfortable with State Government Maintaining a Resident Master Profile

	Urban	Rural	Total Sample
Strongly Agree	20%	19%	19%
Agree	19%	21%	20%
Neither	14%	15%	15%
Disagree	22%	20%	21%
Strongly Disagree	20%	21%	20%
Do Not Know	5%	5%	5%
Total	*100%*	*100%*	*100%*

Figure 37. Support State Government Master Resident Profile by Education



A strong majority of the entire sample (68%) agreed that private industry and government should partner more on technology issues (Table 13). Younger age groups and those with higher levels of education were more likely to agree with this statement.

Table 13. Private Industry and Government Should Partner More on Technology Issues

	Urban	Rural	Total Sample
Strongly Agree	34%	36%	35%
Agree	34%	32%	33%
Neither	16%	16%	16%
Disagree	5%	7%	6%
Strongly Disagree	6%	4%	5%
Do Not Know	6%	5%	5%
Total	*100%*	*100%*	*100%*

Conclusions

The majority of residents believe that the Internet can make government more convenient and allow better access to information, and there is evidence that residents who currently use certain e-government services would welcome more on the Internet. The services residents appear to be most interested in include: driver's license renewals, communicating with government officials, accessing educational programs, filing taxes, obtaining parking or camping reservations, voting, and determining credentials of a regulated business.

However, this study identifies some difficulties with respect to access to computers and the Internet that need to be addressed. For example, this study indicates that although computer and Internet use among North Dakotan residents is at high overall levels, income, education, and age factors differentiate how or whether one uses these Internet technologies.

Older people and poorer people show lower use of computers and the Internet. These populations are possibly the least able to take advantage of government-provided Internet services. Although e-government will not entirely replace other methods the state currently uses to deliver services, moving services to the Internet does present the chance of disadvantaging these groups.

In this study, there is little difference between rural and urban residents' access to the Internet. Dial-up modems are the predominant Internet connection vehicle and the majority of residents are satisfied with their connection speed. Even so, residents' perceptions regarding government services on the Internet are cautious with respect to trusting the government's handling of personal information and with respect to preferring to interact with a person when using a government service. Overall, Internet interest and usage should be positive factors to compliment e-government services since this study suggests rural residents will not be any less interested generally than are people in urban areas, although the distrust factor will be a barrier that will have to be addressed.

The issue for some residents is access to the Internet and not having a computer. For example, many older people, even at higher income levels, are not Internet users. Factors that should not be overlooked are the cost of computers and beyond access and ownership is the issue of how individuals perceive computers' or the Internet. The question that comes to mind is how these population groups would respond to government services that were delivered on the Internet. A generational or cultural gap exists that makes using computers and the Internet seem too difficult or simply something that does not appear to be interesting for residents who do not have time. Case in point, when retired people do not have to use computers through school or work, or those less educated, it is understandable that the Internet might be seen as irrelevant. Simple lack of interest in the Internet or perceived difficulty with it discourages the prospects for adopting e-government.

In this study, we identified some contradictory beliefs: while Internet users and nonusers alike agree the Internet would allow residents better access and more convenience to government information and services, concerns exist around potential service quality and the presence of a person with whom one could interact. Even though seventy percent of the sample uses the

Internet, seventy-eight percent also agree that they would prefer to see someone in person when using a government service. In addition, residents are also very concerned about protecting children's access from adult content on the Internet, although studies have documented the benefits of developing computer skills in early childhood.

The state will have to be aware of these perceptions and develop a marketing plan to convince people that e-government is a worthwhile investment and capable of improving government. Findings around privacy and security are well defined. People are concerned about privacy and are worried about sharing credit card numbers or financial information on the Internet with government agencies. Older people, especially in rural areas, seem to have the least confidence in government handling their personal, confidential information. Residents are concerned about security, whether in relation to providing financial or non-financial information over the Internet. These privacy and security concerns will have to be addressed to the point that e-government would rely on personally identifiable information.

Opinions in regards to financially supporting e-government services were most favorable toward two plans: selling advertising on the computer screen to underwrite the costs of the service or having users of such services pay a convenience fee. In essence, residents believe that the users and presumed beneficiaries of the service should pay – directly through fees or indirectly by having to view ads – for e-government. In general, it seems as if residents perceive it as a value-added service whose costs should be passed on to its users.

These results highlight some possible directions for state efforts:

- Develop marketing strategies that call attention to privacy and security standards that address residents' concerns.

- Develop marketing strategies to target groups using the Internet the least. This might involve various settings, technologies and/or interfaces that can address these individuals' hesitations and concerns about the Internet and e-government services.

- Continue to measure Internet use in order to assess who does and does not use the Internet and why.

In summary, plans to provide Internet government services to residents has the potential to achieve cost savings and efficiency, and to provide new ways that government can be accessible to North Dakotans. This study presents a picture of what residents believe and how they interact with computers and Internet technologies, and it should serve to contribute ideas to policy makers in respect to the role of government in information technology services.

Appendix A: Survey Instrument

North Dakota Citizen Computer and Internet Use Survey Instrument

1. Hello, my name is ... I'm with the Social Science Research Institute at University of North Dakota. We are conducting a survey about the use of the Internet by members of your household. Its growing use may affect the economy, the way we learn and communicate with each other. You or members of your household may not use the Internet today, however it is important to obtain your opinions and views.

   May I speak to the person who is 18 years of age or older and who has had the most recent birthday in your household?

   While your participation is voluntary, your assistance is essential if the results of the survey are to be accurate. Your answers will be kept confidential and only used for statistical purposes. May I ask you a few questions?

2. First, I need just a little information about your household to begin the interview. Including yourself, how many people live in your household?

   |__|__|

3. Do you currently use a computer?

   (CHECK ONLY ONE ANSWER)

   |__| 1. Yes (GO TO QUESTION 5)
   |__| 2. No
   |__| 3. Do Not Know
   |__| 4. Refused

4. Have you ever used a computer?

   (CHECK ONLY ONE ANSWER)

   |__| 1. Yes (GO TO QUESTION 11)
   |__| 2. No
   |__| 3. Do Not Know
   |__| 4. Refused

   SKIP TO QUESTION 41

   ==========

5. At which of the following places do you use a computer?

   At home?

   (CHECK ONLY ONE ANSWER)

   |__| 1. Yes (GO TO QUESTION 6)
   |__| 2. No
   |__| 3. Do Not Know
   |__| 4. Refused

   SKIP TO QUESTION 7

   ==========

6. How many personal computers are there in your home?

|__|__|

LOWEST VALUE = 1
HIGHEST VALUE = 99

7. Do you use a computer at work?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

8. At school?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

9. At a public library?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

10. Do you use someone else's computer, like at a friend's house?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

11. The next few questions are about the Internet.
First, have you ever used the Internet?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes (GO TO QUESTION 12)
|__| 2. No
|__| 3. DK
|__| 4. Refused

SKIP TO QUESTION 18
==========

12. How often do you use the Internet at any of the following places?

    Home?

    (CHECK ONLY ONE ANSWER)

    |__| 1. Never
    |__| 2. Rarely   (GO TO QUESTION 13)
    |__| 3. Sometimes   (GO TO QUESTION 13)
    |__| 4. Frequently   (GO TO QUESTION 13)
    |__| 5. Very Frequently   (GO TO QUESTION 13)
    |__| 6. DK
    |__| 7. Refused

    SKIP TO QUESTION 15
    ==

13. In an average week, how many hours does your
    household usually spend on the Internet?

    |__|__|

    IF (#2 > 1) GO TO #14

    SKIP TO QUESTION 15
    ==

14. How many people in your household use the Internet?

    |__|__|

    LOWEST VALUE = 1
    HIGHEST VALUE = 99

15. How often do you use the Internet at work?

    (CHECK ONLY ONE ANSWER)

    |__| 1. Never
    |__| 2. Rarely
    |__| 3. Sometimes
    |__| 4. Frequently
    |__| 5. Very Frequently
    |__| 6. DK
    |__| 7. Refused

16. A library?

    (CHECK ONLY ONE ANSWER)

    |__| 1. Never
    |__| 2. Rarely
    |__| 3. Sometimes
    |__| 4. Frequently
    |__| 5. Very Frequently
    |__| 6. DK
    |__| 7. Refused

17. Some other site, like a friend's house or community center?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

IF (#12 = 1) GO TO #41

SKIP TO QUESTION 29
==========

18. What are the main reasons you do not use the Internet? Is it because you... Don't use computers?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

19. Are not interested in the Internet?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

20. The monthly cost is too high?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

21. Need special equipment because of a physical disability?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

22. There's not enough time to use it?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

23. It's too difficult to get Internet access?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

IF (#12 = 1) GO TO #24

SKIP TO QUESTION 41
==========

24. What are the main reasons you do not use the Internet at home? .
Is it because ... you don't have a home computer?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

25. The cost is too high?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

26. Need special equipment because of a physical disability?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

27. Don't need or use it very often?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

28. Can use it elsewhere?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

IF (#11 > 1) GO TO #41

29. Is your Internet connection provided through your telephone line, your cable line or another source?

(CHECK ONLY ONE ANSWER)

|__| 1. Telephone line
|__| 2. Cable line
|__| 3. Leased Service
|__| 4. Wireless or satellite
|__| 5. Other source (GO TO QUESTION 30)
|__| 6. DK
|__| 7. Refused

SKIP TO QUESTION 31
==========

30. Please type the other Internet connection source.

_____

31. What is the maximum speed you access the Internet at your home?

(CHECK ONLY ONE ANSWER)

|__| 1. Does Not Know
|__| 2. Modem less than 56k
|__| 3. Modem at 56k
|__| 4. Modem (not sure)
|__| 5. Asymmetric DSL (share w/phone line) - ADSL,RADSL, G.Lite,VDSL
|__| 6. Symmetric DSL (can't share w/phone line) - HDSL,SDSL,IDSL
|__| 7. Other (GO TO QUESTION 32)
|__| 8. DK
|__| 9. Refused

SKIP TO QUESTION 33
==========

32. What is the speed of your connection?

Please type the other Internet connection source.

_____

33. Is (READ RESPONSE) services available in your area?

(CHECK ALL THAT APPLY)

|__| 1. Digital subscriber line or DSL
|__| 2. Wireless Or Satellite Internet
|__| 3. Cable Modem Internet
|__| 4. DK
|__| 5. Refused

34. How satisfied are you with the speed of your service? Would you say you are ...

(CHECK ONLY ONE ANSWER)

|__| 1. Not At All Satisfied
|__| 2. Satisfied, or
|__| 3. Very Satisfied
|__| 4. DK

35. On average, how much do you pay monthly for your Internet service?

$|__|__|__|

36. Do you have a choice of Internet service providers?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes (GO TO QUESTION 37)
|__| 2. No
|__| 3. DK
|__| 4. Refused

SKIP TO QUESTION 38
==========

37. Generally, how many providers do you have to choose from?

|__|__|

38. Which Internet provider do you use?

DO NOT READ RESPONSES

(CHECK ONLY ONE ANSWER)

|__| 1. America on-line (AOL)
|__| 2. Microsoft network
|__| 3. AT&T / Earthlink / Netcom / Compuserve
|__| 4. Prodigy / Sprint / MCI / Qwest
|__| 5. Local telephone company
|__| 6. Local newspaper
|__| 7. Local computer store/vendor
|__| 8. Long distance phone company
|__| 9. A cable TV system
|__| 10. A wireless company
|__| 11. Other type of Internet service provider (GO TO QUESTION 39)
|__| 12. DK
|__| 13. Refused

SKIP TO QUESTION 40
==========

39. PLEASE TYPE THE NAME OF THE OTHER INTERNET SERVICE PROVIDER.

_____

40. How satisfied are you with your Internet provider?
Would you say you are...

(CHECK ONLY ONE ANSWER)

|__| 1. Not At All Satisfied
|__| 2. Satisfied, or
|__| 3. Very Satisfied
|__| 4. DK
|__| 5. Refused

41. Suppose there were more Internet sites available
at various public places, such as in malls, libraries,
or eating/drinking establishments.

How likely is it that you would use the Internet from
one of these public places?
Would you say (READ RESPONSES)

(CHECK ONLY ONE ANSWER)

|__| 1. Very Likely
|__| 2. Likely
|__| 3. Somewhat Likely
|__| 4. Not Very Likely, or
|__| 5. Not At All Likely
|__| 6. DK
|__| 7. Refused

IF (#4 > 1) GO TO #51
IF (#11 = 1) GO TO #42

SKIP TO QUESTION 51
==========

42. About how many hours per week do you spend using the Internet?

|__|__|

43. Now I would like to ask you how you use the Internet.
On a scale of 1 to 5, where 1 is never and 5
is very frequently, how often do you use the Internet
for E mail or sending messages?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

44. Random Question

|__| 1. Jump to Path A
|__| 2. Jump to Path B (GO TO QUESTION 47)
|__| 3. Jump to Path C (GO TO QUESTION 49)

45. For shopping, paying bills, or to do other
consumer activities?
ex. travel information, purchases on the Internet)

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

46. Doing research or homework for school?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

47. For getting information related to your business, like economic news and information?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

48. Getting information of personal interest like health information, hobbies, or local news?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

49. To search for jobs?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

50. For entertainment like playing games or downloading music?

(CHECK ONLY ONE ANSWER)

|__| 1. Never
|__| 2. Rarely
|__| 3. Sometimes
|__| 4. Frequently
|__| 5. Very Frequently
|__| 6. DK
|__| 7. Refused

IF (#11 = 1) GO TO #55

51. How interested are you in having a connection to the Internet? Would you say you are...

(CHECK ONLY ONE ANSWER)

|__| 1. Not At All Interested
|__| 2. Interested
|__| 3. Very Interested
|__| 4. DK
|__| 5. Refused

IF (#51 > 3) GO TO #55
IF (#51 = 1) GO TO #55
IF (#51 = 2 OR #51 = 3) GO TO #52

52. If you did have Internet access from home, what would you use it for?
DO NOT READ RESPONSES

(CHECK ALL THAT APPLY)

|__| 1. Surfing the Web for information of personal interest
|__| 2. Telecommuting
|__| 3. Entertainment, like games, downloading Video and or Music
|__| 4. Getting information related to my job
|__| 5. To look for a job
|__| 6. Communication and/or e-mail
|__| 7. Shopping or paying bills
|__| 8. News/Research
|__| 9. School Related
|__| 10. Everything
|__| 11. Other (Please Specify) (GO TO QUESTION 53)
|__| 12. DK
|__| 13. Refused

53. Please type other reason you would use Internet access from home for?

_____

54. How much would you be willing to pay per month for high speed access?

$|__|__|

55. The following statements are some things people have said about the Internet. On a scale of 1 to 5, where 1 means strongly agree and 5 means strongly disagree, please tell me how strongly you agree or disagree with each one.

I am worried about privacy on the Internet.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

56. I have easy access to the Internet.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

57. The Internet is too expensive for people like me.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

58. Protecting children from adult content is a concern.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

IF (#3 > 1 AND #4 > 1) GO TO #59
IF (#11 = 1) GO TO #65

59. From what you have heard about the Internet, how useful do you think it would be for communicating with family and friends.

Would you say (READ RESPONSES)

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

60. From what you have heard about the Internet, how useful do you think it would be for:

Research for school or homework.

Would you say (READ RESPONSES)

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

61. Information related to business

Would you say

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

62. IF NECESSARY:
From what you have heard about the Internet, how useful do you think it would be for
---
Information related to government

Would you say

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

63. Gather information about jobs

Would you say

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

64. From what you have heard about the Internet, how useful do you think it would be for

---

Shopping, paying bills, doing other consumer activities

Would you say

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely useful
|__| 2. Very useful
|__| 3. Useful
|__| 4. Not very useful , or
|__| 5. Not at all useful
|__| 6. DK
|__| 7. Refused

IF (#11 > 1) GO TO #68

65. Have you ever used the Internet to access government services?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes (GO TO QUESTION 66)
|__| 2. No
|__| 3. DK
|__| 4. Refused

SKIP TO QUESTION 68

==========

66. In general, how satisfied were you on a scale of 1 to 5, where 1 is very satisfied and 5 is very dissatisfied with on-line government services?

(CHECK ONLY ONE ANSWER)

|__| 1. Very Satisfied
|__| 2. Somewhat
|__| 3. Neutral
|__| 4. Somewhat Dissatisfied
|__| 5. Very Dissatisfied
|__| 6. DK
|__| 7. Refused

67. In the last month, how often did you use the Internet to access government services? Was it ...

(CHECK ONLY ONE ANSWER)

|__| 1. Every day?
|__| 2. Several times a week?
|__| 3. A few times a month, or
|__| 4. Not in the last month?
|__| 5. DK
|__| 6. Refused

68. Next, I am going to read a number of government services we often use. Please tell me whether or not you would consider using these services if they were available on the Internet?

Would you consider using the Internet to (READ AREA)

(CHECK ALL THAT APPLY)

|__| 1. File your taxes
|__| 2. Pay traffic citations or court fees
|__| 3. File workers compensation forms
|__| 4. File unemployment insurance forms
|__| 5. Access state government records
|__| 6. Renew vehicle registrations
|__| 7. Access on-line surplus property auctions
|__| 8. Access educational programs (such as job training, CC or university)
|__| 9. Apply for admission or register for classes
|__| 10. MARK TO MOVE TO NEXT QUESTION
|__| 11. Refused (GO TO QUESTION 70)

69. Would you consider using the Internet to (READ AREA)

(CHECK ALL THAT APPLY)

|__| 1. Access state law or tracking legislation
|__| 2. Contact state legislators or gov't officials via e-mail
|__| 3. Access Legal or Court Records
|__| 4. Renew professional licenses
|__| 5. Use directories of government services
|__| 6. Obtain licenses for hunting and fishing
|__| 7. Obtain park or camping reservations
|__| 8. Renew your driver's license
|__| 9. Vote
|__| 10. Check contractors or professional licenses
|__| 11. Check credentials of a regulated business
|__| 12. Report consumer or citizens complaints
|__| 13. None of these
|__| 14. Refused

70. Some people say that having government information or services available in new ways would be helpful.

To what extent do you agree or disagree with the following statements about providing government information or services through the Internet? Do you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree?

I prefer to talk to someone in person if I need something from a government office.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

71. Having government information on the Internet would be more convenient and save time.

IF NECESSARY
Do you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree?

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

72. Having Internet access would allow better access to government information.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

73. I am concerned about the quality of services the government would provide through the Internet.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

IF (#4 = 2) GO TO #80
IF (#11 = 1) GO TO #74

SKIP TO QUESTION 75
==========

74. During the past year, about how many times did you use the Internet to complete a business transaction, such as to order something like travel tickets, flowers, or books?

|__|__|

75. How concerned are you about giving out
credit card numbers or financial information
about yourself on the Internet to government agencies?

Would you say you're...

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely Concerned
|__| 2. Concerned
|__| 3. Somewhat Concerned
|__| 4. Not Very Concerned, or
|__| 5. Not At All Concerned
|__| 6. DK
|__| 7. Refused

76. How concerned are you about providing
other non-financial, personal information
about yourself on the Internet to government agencies?

Would you say you're...

(CHECK ONLY ONE ANSWER)

|__| 1. Extremely Concerned
|__| 2. Concerned
|__| 3. Somewhat Concerned
|__| 4. Not Very Concerned, or
|__| 5. Not At All Concerned
|__| 6. DK
|__| 7. Refused

77. Have you experienced any problems associated
with security on the Internet?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes (GO TO QUESTION 78)
|__| 2. No
|__| 3. DK
|__| 4. Refused

SKIP TO QUESTION 80
==========

78. What type of problems did you experience
with security on the Internet?

(CHECK ALL THAT APPLY)

|__| 1. Viruses
|__| 2. Threatening e-mail messages
|__| 3. People hacking into e-mail account or computer files
|__| 4. Personal information was made public
|__| 5. Other (Specify) (GO TO QUESTION 79)
|__| 6. DK
|__| 7. Refused

79. Please type the other problems associated
with security on the Internet?

_____

80. Who should take the greatest responsibility
to ensure network services are available.
Should it be the ...
Federal, State, Local Government, Private industry, or Individuals?

(CHECK ONLY ONE ANSWER)

|__| 1. Federal Government
|__| 2. State Government
|__| 3. Local Government
|__| 4. Private industry (such as Internet providers, or market driven)
|__| 5. Individuals
|__| 6. DK
|__| 7. Refused

81. How would you prefer that state government
fund the costs related to providing online government services?
Would you prefer a (READ RESPONSES)

(CHECK ONLY ONE ANSWER)

|__| 1. Convenience fee,
|__| 2. Using general tax revenue,
|__| 3. Selling publicly available information to business, or
|__| 4. Selling advertising on the computer screen
|__| 5. None of these
|__| 6. DK
|__| 7. Refused

82. Next, we would like your opinions about state governments
role and the Internet. On a scale of 1 to 5, where 1 means
strongly agree and 5 means strongly disagree, please tell
me how strongly you agree or disagree with each one.

I believe online services should be a priority for
state government.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

83. Random Question

|__| 1. Jump to Path A
|__| 2. Jump to Path B (GO TO QUESTION 86)
|__| 3. Jump to Path C (GO TO QUESTION 87)

84. I think government agencies should share information with each other in order to identify wrong doing or misrepresentations.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

85. I trust the state government to safeguard personal information.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

86. I would feel comfortable with state government maintaining a master profile containing all my public information to deliver better services to me.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

87. Private industry and government should partner more on technology issues.

(CHECK ONLY ONE ANSWER)

|__| 1. Strongly Agree
|__| 2. Agree
|__| 3. Neither Agree nor Disagree
|__| 4. Disagree
|__| 5. Strongly Disagree
|__| 6. DK
|__| 7. Refused

88. Do you have any general comments about providing government information or services through the Internet?

_____

89. These last few questions are for classification purposes only and are completely confidential. (PAUSE)
If you would prefer not to answer any of the following, please let me know at any time.

Do you have more than one phone line into your home?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes (GO TO QUESTION 90)
|__| 2. No
|__| 3. DK
|__| 4. Refused

IF (#3 > 1 AND #4 > 1) GO TO #91
IF (#11 > 1) GO TO #91

SKIP TO QUESTION 91

==========

90. Are any of the phone lines solely dedicated to Internet access?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. Do Not Know
|__| 4. Refused

91. May I ask, are you currently married, widowed, divorced, or have you never been married?

(CHECK ONLY ONE ANSWER)

|__| 1. Married
|__| 2. Widowed
|__| 3. Divorced
|__| 4. Separated
|__| 5. Never married (including annulments)
|__| 6. DK
|__| 7. Refused

92. May I ask, what was the last grade or level of school you completed.

DO NOT READ LIST -- UNLESS CLARIFICATION IS NEEDED

(CHECK ONLY ONE ANSWER)

|__| 1. Grade school or less
|__| 2. Some high school
|__| 3. Completed high school
|__| 4. Some college or trade school
|__| 5. Completed trade school or other specialized training
|__| 6. Completed college
|__| 7. Some graduate school
|__| 8. Completed graduate school (PH.D., JD, Masters, MD)
|__| 9. Refused

93. Last week, were you working full-time, working part-time, going to school, a homemaker or something else?

(CHECK ONLY ONE ANSWER)

|__| 1. Working full-time
|__| 2. Working part-time
|__| 3. Going to school
|__| 4. Homemaker
|__| 5. Disabled
|__| 6. Retired
|__| 7. Unemployed, laid off
|__| 8. DK
|__| 9. Refused

94. How old were you on the last birthday?

|__|__|

95. Are you one of the following: Hispanic, Latino, or of Spanish origin?

(CHECK ONLY ONE ANSWER)

|__| 1. Yes
|__| 2. No
|__| 3. DK
|__| 4. Refused

96. What best describes you? Are you...

(CHECK ONLY ONE ANSWER)

|__| 1. Native American
|__| 2. Asian or Pacific Islander
|__| 3. Black or African American
|__| 4. White
|__| 5. Other (GO TO QUESTION 97)
|__| 6. Refused

SKIP TO QUESTION 98
==========

97. Please type the OTHER ethnicity.

_____

98. I don't need to know exactly, but was your total household income in 2001 before taxes above $25,000 or below $25,000?

READ: Your answer is confidential. All results are classified in terms of groups. For example, people who are married with children may feel differently than single people. Knowing your closest income category is another important way to classify answers.

(CHECK ONLY ONE ANSWER)

|__| 1. Below $25,000 (GO TO QUESTION 99)
|__| 2. Above $25,000 (GO TO QUESTION 100)
|__| 3. DK
|__| 4. Refused

SKIP TO QUESTION 101

==========

99. Was it . . .
(READ LIST)

(CHECK ONLY ONE ANSWER)

|__| 1. $20,000 to $25,000
|__| 2. $10,000 to $20,000, or
|__| 3. Less than $10,000
|__| 4. Refused

SKIP TO QUESTION 101

==========

100. Was it . . .
(READ LIST)

(CHECK ONLY ONE ANSWER)

|__| 1. $25,000 to $35,000
|__| 2. $35,000 to $45,000
|__| 3. $45,000 to $60,000
|__| 4. $60,000 to $100,000
|__| 5. Or over $100,000
|__| 6. DK
|__| 7. Refused

101. Thank you very much for your cooperation. Your answers have been extremely helpful. Goodbye.

PRESS ENTER TO CONTINUE

102. ---

RECORD GENDER

(CHECK ONLY ONE ANSWER)

|__| 1. Male
|__| 2. Female

Appendix B: Sample Design, Response Rate and Demographics of the Sample

Sample Design and Response Rates

Sample Design. Information about how survey samples are developed is important in assessing the validity and reliability of the results of the survey. While a fully random design is the most desirable approach in developing a representative sample of the population, this approach often results in under-sampling demographic groups with low rates of telephone ownership. These groups most often include young adults, minorities and individuals with low education and income. Increasingly, researchers use stratified random designs to guard against under-sampling. To determine whether a representative sample was obtained, it is helpful to calculate the response rate for the sample as a whole as well as to examine how closely the sample matches the known demographic characteristics of the population. If substantial differences are detected, post-stratification weights can be applied during analysis to ensure that the results of the survey can be generalized to the larger population.

To obtain a representative sample for the citizen survey, random selection of households and random selection of respondents within households were used during the data collection process. The survey of adults, age 18 or older was conducted by telephone. A random sample of 10-digit telephone numbers was generated by SSRI for the rural and urban areas utilizing Genesys Sampling Systems Random Digit Dialing (RDD) in-house software. The list from which the numbers were drawn included only actual North Dakota area codes and telephone banks that had been determined to contain a threshold number of active residential numbers.

Overall, 3,527 numbers were called to determine whether it was a working residential number in contrast to a nonworking number, a commercial/business line, a cell phone, data or fax line, or a non-primary household telephone. Staff classified 1,280 of these contacts as eligible for interview and successfully interviewed 801 of these residents. Table 14 presents the total sample dispositions.

Table 14. Total Sample Dispositions

Sample Disposition	Num	Percent
Completed Interviews	801	22.7
Nonworking Number	2,231	63.3
Nonprimary Household	16	0.5
Language Barrier	8	0.2
Refusals	380	15.6
Terminated Interview	34	0.9
Contacted Not Interviewed	57	1.5
Totals	3,527	100.0

All interviews were conducted at SSRI facilities by trained interviewers with supervision and random monitoring for technique and adherence to established procedures. Interviews were conducted afternoons and evenings on weekdays and weekends. Efforts to complete interviews with selected residents were extensive. The number of callbacks to complete an interview with an eligible company ranged from 1 to 8.

Response Rates. Survey professionals in general have found that response rates for telephone surveys have declined in recent years. These declines are related to the proliferation of fax machines, answering machines, blocking devices and other telecommunications technology that make it more difficult to identify and recruit eligible individuals. These declines are also related to the amount of political polling and market research that is now done by telephone and to the higher likelihood that eligible households will refuse to participate in any surveys.

The consequence has been that response rates for telephone surveys are now calculated in several different ways although all of these approaches involve dividing the number of respondents by the number of contacts believed to be eligible. Differences in response rates result from different ways of calculating the denominator, i.e. the number of individuals eligible to respond. The most liberal approach is called the Upper Bound method and takes into account only those individuals who refuse to participate or who terminate an interview. This approach is used by the federal government because of controversies about the eligibility of numbers that could not be reached.

The most conservative approach is the method adopted by the Council of American Survey Research Organizations (CASRO). The CASRO method uses the known status of portions of the sample that are contacted to impute characteristics of portions of the sample that were not reached. Over-quota eligibles are assumed to qualify as *good numbers*.

Urban Sample of Residents. Urban city areas included Fargo, Bismarck, Grand Forks, Minot, Mandan, Dickinson, Jamestown, West Fargo, Williston, Wahpeton, Devils Lake and Valley City. Overall, 1,332 urban numbers were called to determine whether it was a working residential number in contrast to a nonworking number, a commercial/business line, a cell phone, data or fax line, or a non-primary household telephone. Staff classified 682 of these contacts as eligible for interview and successfully interviewed 400 of these residents. Table 15 presents the random urban sample dispositions.

Table 15. Urban Sample Dispositions

Sample Disposition	Num	Percent
Completed Interviews	400	30.0
Nonworking Number	640	48.0
Nonprimary Household	10	0.8
Language Barrier	7	0.5
Refusals	234	17.6
Terminated Interview	20	1.5
Contacted Not Interviewed	21	1.6
Totals	1,332	100.0

The Upper Bound method of calculating the response rate for the urban survey yields a response rate of 61.2%. The CASRO method of calculating the response rates for the random survey yields a response rate of 59.2% if over-quota eligibles are assumed to qualify as "good numbers."

Rural Sample of Residents. Overall, 2,195 rural numbers were called to determine whether it was a working residential number in contrast to a nonworking number, a commercial/business

line, a cell phone, data or fax line, or a non-primary household telephone. Staff classified 598 of these contacts as eligible for interview and successfully interviewed 401 of these residents. Table 16 presents the rural sample dispositions.

Table 16. Rural Sample Dispositions

Sample Disposition	Num	Percent
Completed Interviews	401	18.3
Nonworking Number	1,591	72.5
Nonprimary Household	6	0.3
Language Barrier	1	0.0
Refusals	146	6.7
Terminated Interview	14	0.6
Contacted Not Interviewed	36	1.5
Totals	2,195	100.0

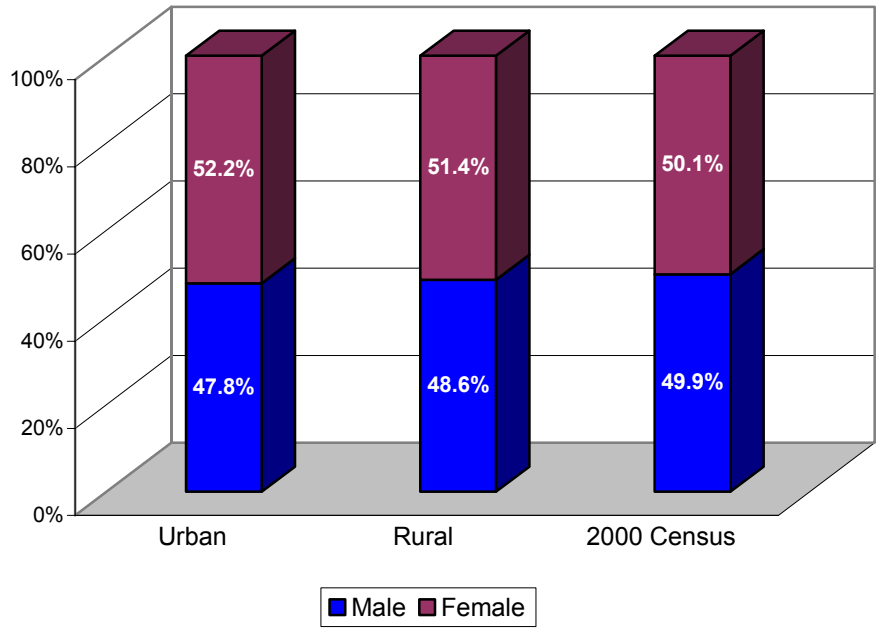
The Upper Bound method of calculating the response rate for the rural survey yields a response rate of 60.6%. The CASRO method of calculating the response rates for the random survey yields a response rate of 57.4% if over-quota eligibles are assumed to qualify as "good numbers.

Demographics of the Sample

The following section adds additional detail about the demographic characteristics of the sample.

Gender. Overall, of the 801 respondents surveyed, 48.2% were male and 51.8% were female. According to the U. S. Census 2000[7] statistics, the population of North Dakota consists of 49.9% males and 50.1% females. Figure 39 shows the U.S. Census gender percentages for North Dakota and the rural and urban sample characteristics.

Figure 38. Gender



Race and Ethnicity. The race of our sample was overwhelmingly Anglo American with a 93.3% representation. The larger segment of the two minorities was Native Americans with 3.9% whereas African Americans represented 2.8% of the sample. In comparison, the Census 2000 reported that 92.4% of North Dakota's population was Anglo American, with American Indians (4.9%) and African Americans (0.6%) clearly in the minority. Figure 39 presents the Census 2000 race and ethnicity percentages for North Dakota and the rural and urban sample characteristics.

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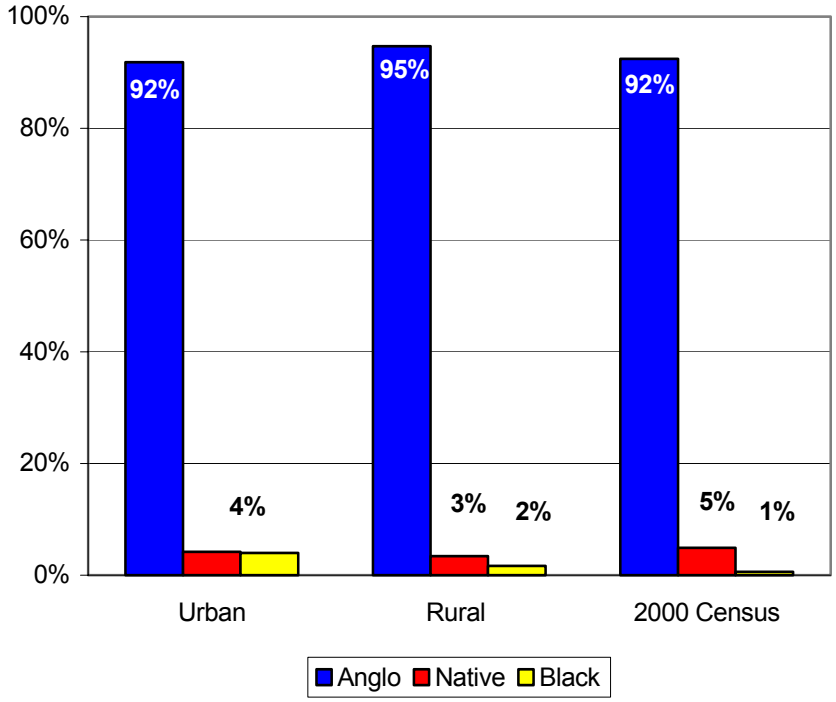
[7] U.S. Census Bureau, Census 2000, Geographic Area: North Dakota, http://factfinder.census.gov/

Figure 39. Race and Ethnicity



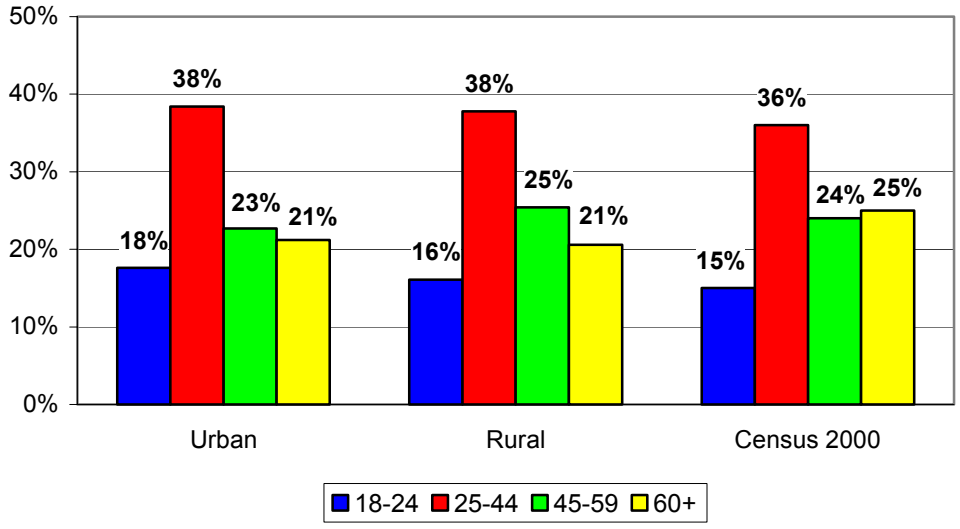
Income. Our sample revealed that nearly 20% of households fell under the $25-$35,000 income level in the urban areas of North Dakota, while the rural areas had 14% below the same level. Income levels for the urban area were almost evenly dispersed between the $10-$20,000 level and the $60-$100,000 categories. A majority of the distribution of the rural area is placed within the $20-$25,000 and the $45-$60,000 levels. However, it is clear that more people in rural areas fall within the $25-$35,000 (17%) than any other income bracket. It should also be noted that the income level for those over $100,000 was equal in both areas. About 40% of both rural and urban residents choose not to disclose their household income. Therefore, the mean income level was not included in the analysis. Table 14 displays the rural and urban sample income characteristics.

Table 17. Urban and Rural Total Household Income

Area	Income Category	Percent	Cumulative Percent
Urban	Under $10,000	4.0%	4.0%
	$10,000-$20,000	7.5%	11.5%
	$20,000-$25,000	8.5%	20.0%
	$25,000-$35,000	10.3%	30.3%
	$35,000-$45,000	7.0%	37.3%
	$45,000-$60,000	9.3%	46.5%
	$60,000-$100,000	9.3%	55.8%
	Over $100,000	3.0%	58.8%
	Don't Know	4.8%	63.5%
	Refused	36.5%	100.0%
	Total	100.0%	
Rural	Under $10,000	2.0%	2.0%
	$10,000-$20,000	3.2%	5.2%
	$20,000-$25,000	9.2%	14.4%
	$25,000-$35,000	17.2%	31.6%
	$35,000-$45,000	5.7%	37.3%
	$45,000-$60,000	9.2%	46.5%
	$60,000-$100,000	4.2%	50.7%
	Over $100,000	3.0%	53.7%
	Don't Know	4.2%	57.9%
	Refused	42.1%	100.0%
	Total	100.0%	

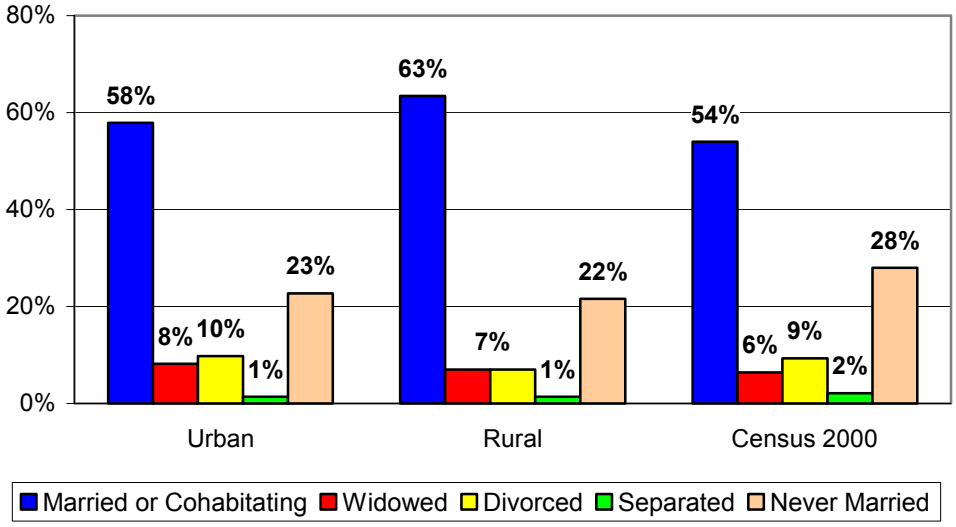
Age. Figure 40 presents the Census 2000 age distribution percentages for North Dakota and the rural and urban sample characteristics.

Figure 40. Age Distribution



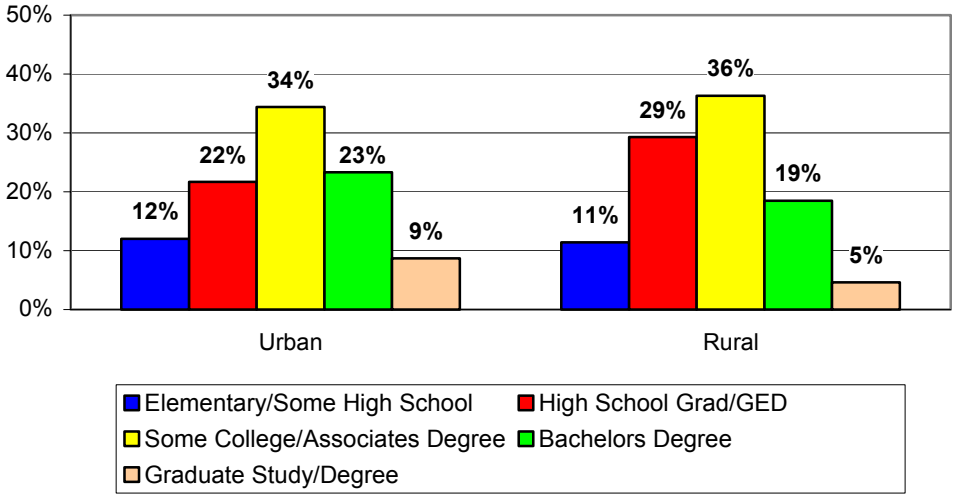
Marital Status. Figure 41 presents the Census 2000 marital status percentages for North Dakota and the rural and urban sample characteristics.

Figure 41. Marital Status



Educational Attainment. Statistics concerning the highest education level for both areas is almost equal in comparison. The majority of respondents have attended some college or have obtained their associates degree while the second highest figure consist of those who have graduated high school or obtained their GED. Census 2000 has not yet released statistics concerning educational attainment. Figure 42 presents educational attainment of the sample.

Figure 42. Educational Attainment



Employment Status. Respondents who reported working full time clearly outweighed any other employment standing in both studies. All other classifications of employment standing remained consistent between both studies. Respondents who reported working part-time went unchanged. Figure 43 presents rural and urban sample characteristics in regards to employment status.

Figure 43. Employment Status