

LinkMichigan Survey of Business and Residential Internet Use: *Bay, Midland, and Saginaw Counties*

August 2003

Prepared for
Control Room Technologies

Prepared by
Public Sector Consultants Inc.
www.pscinc.com

Contents

INTRODUCTION AND METHODOLOGY.....	1
BUSINESS SURVEY	1
RESIDENTIAL SURVEY	2
SURVEY RESULTS AND ANALYSIS.....	5
LINKMBS—BUSINESS	5
LINKMBS SURVEY—RESIDENTIAL.....	10
APPENDIX A: BUSINESS SURVEY INSTRUMENT.....	13
APPENDIX B: RESIDENTIAL SURVEY INSTRUMENT.....	25
APPENDIX C: RESIDENTIAL SURVEY INSTRUMENT BAY COUNTY.....	39
APPENDIX D: RESIDENTIAL SURVEY INSTRUMENT MIDLAND COUNTY.....	51
APPENDIX E: RESIDENTIAL SURVEY INSTRUMENT SAGINAW COUNTY.....	63

Introduction and Methodology

Public Sector Consultants Inc. was hired by Control Room Technologies (CRT) to implement a series of surveys as part of the LinkMichigan initiative, a statewide program aimed at assisting local units of government and economic development agencies to conduct research and strategic planning surrounding high-speed and “next generation” communications infrastructure. Two surveys were conducted in Bay, Midland, and Saginaw—a survey of businesses and a survey of residences.

BUSINESS SURVEY

An Internet-based survey of businesses in the three counties was conducted between June 18 and July 22, 2003. To conduct the Internet survey, invitations were mailed to 3,000 randomly selected businesses in the three counties.¹ The invitation—printed on LinkMBS letterhead—included background information about the project, as well as a URL and passcode to take the survey. In the event that a business did not have Internet access, a phone number was given for respondents to request a paper copy of the survey. Paper copies of surveys were mailed with the cover letter, survey instrument, and a postage-paid, business reply envelope addressed to return the completed survey to PSC. In this region, only three surveys were requested by mail.

Ten days after the invitation was mailed, a reminder postcard was mailed to all businesses that did not respond. Approximately three weeks later, when the overall response rate was still below what PSC expected, a second reminder postcard was mailed to all non-responding businesses by PSC itself.

In all, 124 business surveys were returned, or 41 percent of the expected response (see Exhibit 1). Upon closer analysis, while responses were below expectation for employers by county, by number of employees, and by major SIC code, they were below expectation by reasonably equal shares. In other words, the results from 124 businesses were not missing any single group of businesses in comparison to other groups.² PSC used a statistical technique called “weighting” to correct for these over/under-representations.

¹ PSC expected a business response of 10 percent, or 300 completed surveys from a mailing of 3,000 randomly selected businesses. This response rate was based on prior PSC experience with business surveys and surveys of high-tech/Internet issues using the Internet.

² As a concrete example, these 124 responses *underrepresent* by approximately 10 percent the smallest employers (5–9 employees) and *overrepresent* by approximately 10 percent the largest employers (20 or more employees).

EXHIBIT 1
Businesses, by County

County	Total Business with 5 or more Employees ³	Percentage of Regional Total	Expected Responses	Actual Responses
Bay	1,362	26.8%	80	40
Midland	947	18.6%	56	30
Saginaw	2,770	54.5%	164	54
Totals	5,079	100.0% ⁴	300	124

SOURCE: Public Sector Consultants Inc.

The lower than expected response rate, however, did increase the margin of error to ± 8.7 percent with 95 percent confidence, as well as render meaningful comparisons between the businesses in each county extremely difficult.

RESIDENTIAL SURVEY

In addition to the Internet survey of businesses, the residential survey was conducted by telephone between June 5, 2003, and June 8, 2003, with a total of 400 households in these counties. Exhibit 2 shows the population of these counties, along with the total responses by county, is presented below.

EXHIBIT 2
Residential Respondents, by County

Location	Adults (age 18 and older)	Percentage of Region's Population	Survey Respondents	Margin of Error
Bay County	83,278	28.0%	116	9.1%
Midland County	60,580	20.3%	73	11.5%
Saginaw County	153,958	52.0%	211	6.7%
Total	297,816	100.0%	400	4.9%

SOURCE: Public Sector Consultants Inc.

As Exhibit 2 shows, a survey of 400 adults in this region yields a margin of error of ± 4.9 percent with 95 percent confidence. In other words, if the entire population of these three counties were surveyed, the answer would fall within ± 4.9 percent of the answer shown on this survey instrument in 95 of 100 administrations. Readers should also note that margin of error is only one type of error associated with surveys in general and telephone surveys in particular.

³ PSC believes that most business surveys should exclude businesses with fewer than 5 employees. In most cases, these businesses are sole proprietorships or other limited arrangements.

⁴ Percentages may not = 100% due to rounding.

Since 52 percent of the population in this region lives in Saginaw County, just over half of the survey respondents reside in Saginaw County, with the remainder residing in Bay and Midland Counties. Based on this distribution, this survey of 400 adults will also yields cross-tabulations

- in Bay County with a margin of error of ± 9.1 percent,
- in Midland County with a margin of error of ± 11.5 percent, and
- in Saginaw County with a margin of error of ± 6.7 percent.

Where appropriate, the survey results were weighted using information from the 2000 United States Census to reflect the population of these counties as accurately as possible. Survey instruments with answers for each of the three counties are provided in Appendices A–E.

Survey Results and Analysis

LinkMBS—BUSINESS

Usage of the Internet

Annual utilization of the Internet by respondent companies for the activities listed in Exhibit 3 below ranges from 40.0 percent to 100.0 percent. Companies with broadband service show more frequent utilization of most activities.

The four most frequently used Internet activities over a year are e-mail; placing orders for products and services; downloading or sending large documents; and providing information to employees.

The three least common activities (over a year) are using the Internet for internal control and auditing; accepting payments; and inventory tracking and control. Again, broadband respondents typically utilize these activities more frequently than do dial-up users.

EXHIBIT 3
Frequency of Business Internet Use (Q29)

Internet used for...	Once a week or more frequently		Total participating in this activity in a year	
	Dial-up	Broadband	Dial-up	Broadband
...selling or accepting orders products and services	23.8%	50.7%	71.4%	78.7%
...placing orders for products and services	50.0%	69.4%	90.0%	92.9%
...e-mail (internal and external)	100.0%	96.3%	100.0%	98.8%
...providing information to employees	45.0%	75.0%	85.0%	85.0%
...accepting real time payments such as credit card payments	10.0%	30.4%	45.0%	55.1%
...financial transactions with banks	30.0%	52.8%	50.0%	68.1%
...performing billing or bill payments	25.0%	42.5%	40.0%	67.1%
...accounting and internal auditing	5.0%	35.3%	40.0%	55.9%
...inventory tracking and control	22.2%	32.8%	50.0%	50.7%
...shipment tracking and control	31.6%	63.0%	57.9%	76.7%
...downloading or sending large documents	45.5%	77.1%	86.4%	91.6%

SOURCE: Public Sector Consultants Inc.

Cost of Internet Connection

As shown in Exhibit 4, the average monthly cost of Internet connection varies widely, ranging from \$30.89 (Dial-up) to \$727.04 (Broadband T1/T3).

EXHIBIT 4
Average Cost of Internet Connection (Q21)

Variable	Dial-up	Broadband (DSL/Cable/ISDN)	Broadband (T1/T3)
Monthly Cost of Internet Connection			
Mean Cost	\$30.89	\$163.34	\$727.04
N ⁵	21	52	15
Distribution of Monthly Cost of Internet Connection			
\$0.01 through \$14.99	0.0%	0.0%	0.0%
\$15.00 through \$19.99	9.5%	0.0%	0.0%
\$20.00 through \$34.99	57.1%	5.8%	0.0%
\$35.00 through \$49.99	14.3%	11.5%	0.0%
\$50.00 through \$99.99	19.0%	17.3%	0.0%
\$100.00 through \$249.99	0.0%	50.0%	6.7%
\$250.00 through \$499.99	0.0%	7.7%	26.7%
\$500.00+	0.0% ⁶	7.7%	66.7%

SOURCE: Public Sector Consultants Inc.

Demographic Description

Broadband is the most popular type of access. It is also the access of choice for the largest companies. Among companies with more than 20 employees, 82.8 percent use broadband.

Companies using dial-up service have the fewest employees: none had more than 100 employees.

As shown in Exhibit 5, the average number of locations within the tri-county area for dial-up companies is smaller than for broadband users (1.2 compared to 1.7). This pattern is even more pronounced when comparing the average number of total locations, with dial-up companies averaging 1.5 total locations, compared to 2.7 locations for companies using broadband.

⁵ N = Number of respondents.

⁶ Percentages may not = 100 % due to rounding.

EXHIBIT 5
Business Characteristics, by Type of Internet Connection (Q1, 2, 4, 5, 31)

Variable	Dial-up	Broadband
N	23	86
Total Locations		
Mean	1.5	2.7
Tri County Locations		
Mean	1.2	1.7
Total Employees		
Mean	13.9	71.6
Employees in Tri County		
Mean	12.0	39.7
Year Company Founded		
Before 1900	0.0%	3.8%
1901 to 1920	10.4%	4.6%
1921 to 1940	8.1%	4.8%
1941 to 1960	8.0%	19.3%
1961 to 1980	33.8%	33.5%
1981 to 2003	39.7%	34.0%

SOURCE: Public Sector Consultants Inc.

Is An Upgrade Intended?

Only 19.8 percent of companies participating in the survey are planning an upgrade in service. There are distinct differences between companies with dial-up access and those with broadband. More than one-third (36.6 percent) of dial-up companies plan an upgrade within a year, while only 17.0 percent of broadband companies say they are planning an upgrade (see Exhibit 6).

EXHIBIT 6
Plans to Upgrade Internet Connection (Q17)

Is your company planning on upgrading its current Internet connection at this location with a faster level of service ...	Dial-up		Broadband	
	N	%	N	%
...within 3 months?	1	3.3%	6	6.8%
...within 6 months?	0	0.0%	5	5.7%
...within the next year?	10	33.3%	4	4.5%
No upgrade planned	10	33.3%	64	72.7%
Don't know	9	30.0%	9	10.2%
Total	30	100.0%	88	100.0%

SOURCE: Public Sector Consultants Inc.

Would Additional Service Change Your Mind on Upgrading?

Of those who are not planning an upgrade, nearly equal shares of respondents say that additional service and/or providers *would* change their decision about whether to implement an upgrade (45.7 percent), as would not (46.7 percent). Fifty percent of dial-up users *would not* change their decision not to upgrade, regardless of service improvement or different providers, compared to 42.2 percent of companies with broadband access (see Exhibit 7.).

EXHIBIT 7
Factors Influencing Upgrading Connections (Q18)

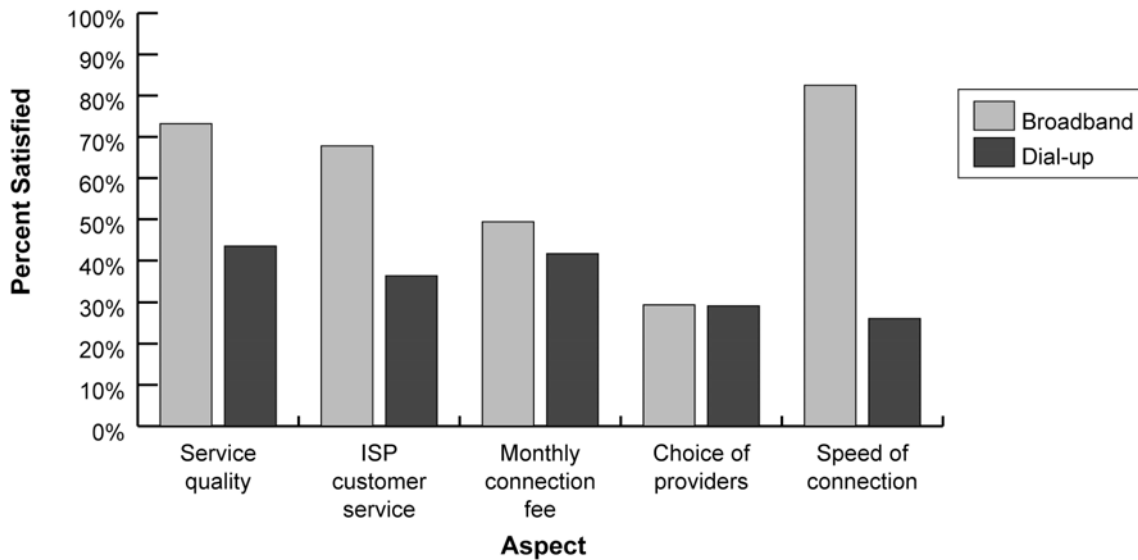
Would additional services make you change your mind about an upgrade?	Dial-up		Broadband	
	N	%	N	%
Yes additional services would change my answer	0	0.0%	6	9.4%
Yes additional providers (competition) would change my answer	0	0.0%	11	17.2%
Both additional services and providers would change my answer	5	50.0%	15	23.4%
Neither additional services and providers would change my answer	5	50.0%	27	42.2%
Don't know	0	0.0%	5	7.8%
Total	10	100.0%	64	100.0%

SOURCE: Public Sector Consultants Inc.

Satisfaction with Internet Service

Overall, broadband business users are much more satisfied with each aspect of their Internet connection than are dial-up users (see Exhibit 8). The exception is choice of providers, where nearly equal shares of both dial-up and broadband users are satisfied (29.2 and 29.4 percent, respectively).

EXHIBIT 8
Satisfaction with Internet Service (Q15)



SOURCE: Public Sector Consultants Inc.

Why Do You Not Use Broadband?

Among dial-up companies not planning to upgrade, the most significant reason (given by 68.2 percent of respondents) is that broadband is not worth the price (see Exhibit 9). Lack of availability and sufficiency were also cited (13.6 percent and 18.2 percent, respectively).

EXHIBIT 9
Reason for Not Using Broadband Connections (Q19)

Why do you not connect via a broadband connection? (Asked of companies with dial-up access)	N	Percent
Broadband access is not available to this location	3	13.6%
Broadband not worth the price	15	68.2%
The broadband that is available is not sufficient	4	18.2%
The company does not need broadband to conduct business	0	0.0%
Total	22	100.0%

SOURCE: Public Sector Consultants Inc.

LinkMBS SURVEY—RESIDENTIAL

Usage of the Internet

As shown in Exhibit 10, daily use of the Internet is the most common use pattern regardless of the type of access.

The most frequently reported activity on the Internet for residential users is purchasing items online. Broadband users generally are more frequent Internet users regardless of type of activity.

Connecting to the Internet without using a personal computer (e.g., cellular phone or PDA) is relatively infrequent for all types of access.

EXHIBIT 10
Usage of the Internet (Q4–8)

Variable	Dial-up	Broad-band
Do you usually use the Internet ...		
At least once a year but less than weekly	17.7%	5.0%
Once a week but less than once a day	17.6%	10.0%
At least once a day	64.7%	85.0%
Do you regularly use the Internet from somewhere other than your home?		
Yes	37.3%	39.0%
No	62.7%	61.0%
Have you ever purchased anything over the Internet?		
Yes	67.8%	75.6%
No	32.2%	24.4%
Have you ever used the Internet to trade a stock, pay a bill, or conduct online banking?		
Yes	42.9%	47.6%
No	57.1%	52.4%
Have you ever connected to the Internet without using a personal computer?		
Yes	7.6%	11.0%
No	92.4%	89.0%

SOURCE: Public Sector Consultants Inc.

Monthly Cost of the Internet

Average monthly costs for broadband service are \$39.15, or more than twice as high as dial-up monthly costs (see Exhibit 11). About one-half of respondents with dial-up service pay less than \$20 per month (47.2 percent). The comparable figure for broadband is only 7.1 percent.

About two-thirds of monthly broadband service fees (63.1 percent) are more than \$35. Only 2.0 percent of dial-up users pay that much.

EXHIBIT 11
Cost of Internet Service (Q20)

Variable	Dial-up	Broadband	Total
Monthly Cost of Internet Connection			
Mean Cost	\$17.39	\$39.15	\$25.06
N	103	56	159
Distribution of Monthly Cost of Internet Connection			
\$0.01 through \$14.99	33.7%	1.8%	23.0%
\$15.00 through \$19.99	13.5%	5.3%	10.3%
\$20.00 through \$34.99	51.0%	29.8%	43.6%
\$35.00 through \$49.99	1.0%	45.6%	16.5%
\$50.00 through highest	1.0%	17.5%	6.5%
	100.0%	100.0%	100.0%

SOURCE: Public Sector Consultants Inc.

Demographic Description

Exhibits 12 and 13 illustrate the demographic characteristics of Internet users.

EXHIBIT 12

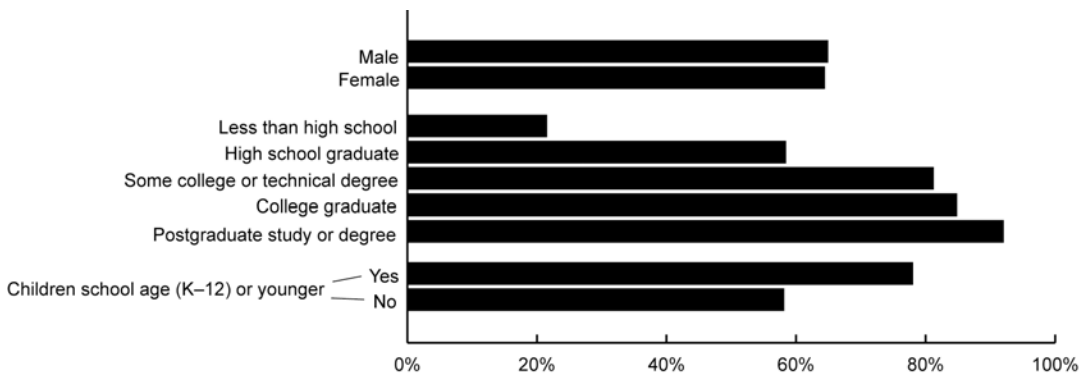
Demographics of Internet Users (Q1, 10, 25, 27, 28)

Variable	Dial-up	Broadband
Gender		
Male	48.4%	51.2%
Female	51.6%	48.8%
Highest level of education completed		
Less than high school	7.1%	2.6%
High school graduate	29.1%	29.9%
Some college or technical degree	37.8%	41.6%
College graduate	18.1%	14.3%
Postgraduate study or degree	7.9%	11.7%
Do you currently have children of school age (K–12) or younger?		
Yes	39.0%	36.0%
No	61.0%	64.0%
Mean number of telephones	1.5	1.8
Mean number of computers currently in use in household	1.4	1.7

SOURCE: Public Sector Consultants Inc.

EXHIBIT 13

Internet Usage by Demographic Characteristic (Q25, 27, 28)



SOURCE: Public Sector Consultants Inc.

Appendix A: Business Survey Instrument

Introduction

Thank you for responding.

Public Sector Consultants, a think-tank located in Lansing, Michigan, is conducting a survey about how businesses in Midland, Bay, and Saginaw Counties (the "tri-county" area) use information technology. Part of the survey includes questions on what your business uses the Internet for, as well as how your business connects to the Internet. The survey is being conducted for the Regional Economic Development Team, a nonprofit organization that promotes economic development in Midland, Bay, and Saginaw Counties.

Completing this survey is completely voluntary. If you come to any question that you do not want to answer, just skip to the next question. Your individual responses will remain confidential. PSC will only release aggregate and anonymous data to LinkMBS.

Background Information

1. How many total locations does your company have in **Michigan**? Please type a **number** below.

	Frequency	Percent ⁷
1	83	68.0%
2	15	12.3%
3	8	6.6%
4	5	4.1%
5	1	0.8%
6	4	3.3%
7	1	0.8%
8+	5	4.1%

2. How many employees does your company have in **Michigan**? Please type a **number** below.

Average = 119.4	Max = 5,000	Std. Dev. = 491.0
Median = 16.0		

⁷ Percentages may not = 100% due to rounding.

Internet Connectivity

3. If your company has more than one location in Michigan, how many of these locations are connected to the Internet? Please type a number below.

	Frequency	Percent
1	6	15.8%
2	14	36.8%
3	6	15.8%
4	5	13.2%
5	2	5.3%
6	1	2.6%
7	0	0.0%
8+	4	10.5%

Background Information

4. How many total locations does your company have in **the tri-county area** (Midland, Bay, and Saginaw Counties)? Please type a **number** below.

	Frequency	Percent
1	94	76.4%
2	12	9.8%
3	9	7.3%
4	2	1.6%
5	2	1.6%
6+	3	2.4%

5. How many of your company's employees are located in **the tri-county area**? Please type a **number** below.

Average = 45.4	Max = 500	Std. Dev. = 87.7
Median = 13.0		

Internet Connectivity

6. If your company has more than one location in **the tri-county area**, how many of these locations are connected to the Internet? Please type a **number** below.

	Frequency	Percent
1	4	14.8%
2	13	48.1%
3	6	22.2%
4	2	7.4%
5	1	3.7%
6+	1	3.7%

Background Information

7. Is your company's **primary** location in the City of Saginaw, City of Midland, or Bay City?

	Frequency	Percent
Yes, primary location is in Saginaw, Midland, or Bay City	102	82.3%
No, primary location is somewhere else	20	16.1%
Don't know	2	1.6%

8. How many computers are currently in use at your location? Please type a **number** below. If you are not sure of the exact number, please use your best estimate to the nearest 10 computers.

Average = 36.6	Max = 1,500	Std. Dev. = 143.9
Median = 10.0		

If there are no computers at your location, skip to the "Internet Usage" section.

9. Does your company have a network that connects your computers?

	Frequency	Percent
Yes	99	83.2%
No	19	16.0%
Don't know	1	0.8%

10. If yes, is any part of your company's computer network a wireless network? (e.g., Wi-Fi, 802.11b, or Bluetooth)

	Frequency	Percent
Yes	21	21.2%
No	77	77.8%
Don't know	1	1.0%

11. Do any of your employees connect to your corporate network while they are outside the office using a PDA (e.g., PalmPilot), cellular telephone, or any other handheld device?

	Frequency	Percent
Yes	23	19.3%
No	95	79.8%
Don't know	1	0.8%

Internet Connectivity

12. How many computers in your company are connected to the Internet?

	Frequency	Percent
All of them	63	52.9%
Most of them (i.e., more than half, less than all)	35	29.4%
Half of them	7	5.9%
A few of them (less than half, more than zero)	14	11.8%
None of them	0	0.0%
Don't know	0	0.0%

13. If "None of them," which of the following reasons best describes why your company's computers are **not** connected to the Internet?

NOTE: Since all companies eligible to answer questions in the "Internet Connectivity" section had Internet-connected computers, no company was eligible to answer this question.⁸

	Frequency	Percent
Our current computers or programs (hardware/software) cannot connect		
Not sure how to use the Internet for the company		
Using the Internet is not worth the price or is too expensive for the company		
Internet access is not available for my company		
The company does not need to use the Internet to do business		
Some other reason		

14. If "Internet access is not available for my company," do you plan on purchasing Internet access for your company when it becomes available?

See previous note.

	Frequency	Percent
Yes		
No		
Don't know		

⁸ Questions 13 and 14 were targeted towards any company where Internet access was provided through a home computer (e.g., owner's home computer).

15. Overall, thinking of all your company's locations in the tri-county area, how satisfied are you with ...

	Very Satisfied		Somewhat Satisfied		Neutral		Somewhat Dissatisfied		Very Dissatisfied		Don't Know/Unsure	
	N	%	N	%	N	%	N	%	N	%	N	%
...the monthly fee for your Internet connection?	19	16.2%	36	30.8%	26	22.2%	24	20.5%	9	7.7%	3	2.6%
...the speed of your Internet connection?	37	31.6%	48	41.0%	6	5.1%	9	7.7%	17	14.5%	0	0.0%
...the service quality of your Internet connection?	37	31.6%	44	37.6%	17	14.5%	14	12.0%	5	4.3%	0	0.0%
...the customer service from your Internet Service Provider?	27	23.1%	45	38.5%	24	20.5%	10	8.5%	8	6.8%	3	2.6%
...the choice of providers (competition)?	17	14.8%	17	14.8%	32	27.8%	25	21.7%	18	15.7%	6	5.2%

Location Information

We would like to ask you a series of questions about how each location is connected to the Internet. If you have more than one location, please answer the next series for the five largest locations in the tri-county area. "Largest" can mean the largest facility, largest number of employees, or the locations you consider to be "most important" to your business.

16. Which method below best describes your company's connection to the Internet at this location?

	Frequency	Percent
Dial-up modem	30	22.7%
T-1 line (or fractional T-1 line)	24	18.2%
T-3 (or faster) line	1	0.8%
DSL	21	15.9%
Cable modem	32	24.2%
Fixed wireless connection	5	3.8%
Satellite connection	3	2.3%
Some other connection	12	9.1%
Don't know	4	3.0%

17. Is your company planning on upgrading its current Internet connection at this location with a faster level of service ...

	Frequency	Percent
...within the next 3 months?	7	5.3%
...within the next 6 months?	5	3.8%
...within the next year?	14	10.7%
No upgrade is planned – current service is appropriate	82	62.6%
Don't know	23	17.6%

18. If "No upgrade is planned – current service is appropriate," would additional services—such as a faster connection available at your location or additional providers (competition)—change your answer?

	Frequency	Percent
Yes, additional services would change my answer	6	7.4%
Yes, additional providers (competition) would change my answer	11	13.6%
It would take both additional services and additional providers to change my answer	20	24.7%
No, neither new services nor new providers would change my answer	38	46.7%
Don't know	6	7.4%

19. If you indicated that your company connects to the Internet with a "Dial-up modem" from this location, which of the following statements best describes why you do not connect via a broadband (i.e., high-speed) connection?

	Frequency	Percent
Broadband Internet access is not available to this location	3	13.6%
Broadband Internet is not worth the price or is too expensive for the company	15	68.2%
The broadband connection that is available is not sufficient for the company	4	18.2%
The company does not need to use broadband Internet to do its business	0	0.0%
Some other reason	0	0.0%

20. If "Broadband Internet access is not available to this location," do you plan on purchasing broadband Internet access for the company when it becomes available?

	Frequency	Percent
Yes	2	66.7%
No	0	0.0%
Don't know	1	33.3%

21. How much does your company pay each month for its Internet connection at this location? (If you are unsure, please make a best estimate, rounded to the near \$10.) Please type a **dollar** amount below.

	N	Average Monthly Cost
Dial-up	21	\$30.89
Broadband (cable/DSL, or ISDN)	52	\$163.34
Broadband (T1/T3)	15	\$727.04
Other (satellite, fixed wireless)	8	\$102.89
Other (multiple types of connections)	2	\$2,770.00

22. When did you have your company's broadband Internet connection installed?

	Frequency	Percent
Within the last 30 days	1	1.2%
Between 30 and 90 days ago	4	4.8%
Between 90 and 180 days ago (3–6 months)	6	7.1%
Between 180 and 365 days ago (6–12 months)	16	19.0%
1–3 years ago	41	48.8%
More than 3 years ago	14	16.7%
Don't know	2	2.4%

23. If your company's Internet broadband connection was installed within the last 180 days, how many days did your Internet Service Provider quote you for installation of your Internet service? Please enter a **number** of days below.

N = 8	Average = 3.3	Max = 14.0	St. Dev. = 4.4
-------	---------------	------------	----------------

24. If your company's Internet broadband connection was installed within the last 180 days, was your high-speed Internet connection installed on time by the provider?

	Frequency	Percent
Yes	8	72.7%
No	1	9.1%
Don't know/don't remember	2	18.2%

Internet Usage

25. Does your company have a website?

	Frequency	Percent
Yes	95	81.2%
No	21	17.9%
Don't know	1	0.9%

26. If "No," does your company plan to have a website in the next 12 months?

	Frequency	Percent
Yes	5	25.0%
No	13	65.0%
Don't know	2	10.0%

27. Has anyone at your company ever participated in or used a videoconference to conduct business?

	Frequency	Percent
Yes	31	26.3%
No	81	68.6%
Don't know	6	5.1%

28. If you said "No" and videoconferencing facilities were *available* for your company's use at your current location, how often would your company use videoconferences?

	Frequency	Percent
About once a year	10	12.7%
At least once a year but less than once a month	14	17.7%
At least once a month but less than once a week	11	13.9%
At least once a week but less than once a day	3	3.8%
At least once a day	1	1.3%
Don't know	40	50.6%

29. How often does your company use the Internet for ...

	About Once a Year	About Once a Month	About Once a Week	About Once a Day	More than Once a Day	Don't Know
...selling or accepting orders for products or services?	N = 24 23.5%	N = 10 9.8%	N = 11 10.8%	N = 6 5.9%	N = 28 27.5%	N = 23 22.5%
...placing orders for products or services?	N = 10 8.8%	N = 24 21.2%	N = 27 23.9%	N = 15 13.3%	N = 29 25.7%	N = 8 7.1%
...e-mail (internal and external)?	N = 1 0.8%	N = 1 0.8%	N = 4 3.5%	N = 12 10.4%	N = 96 83.5%	N = 1 0.8%
...providing information to employees?	N = 15 13.8%	N = 4 3.7%	N = 21 19.3%	N = 7 6.4%	N = 45 41.3%	N = 17 15.6%
...accepting real time payments such as credit card or debit payments?	N = 20 21.1%	N = 6 6.3%	N = 4 4.2%	N = 6 6.3%	N = 13 13.7%	N = 46 48.4%
...financial transactions with banks?	N = 9 9.1%	N = 6 6.1%	N = 17 17.2%	N = 17 17.2%	N = 12 12.1%	N = 38 38.4%
...performing billing or bill payments over the Internet?	N = 7 7.1%	N = 15 15.2%	N = 18 18.2%	N = 3 3.0%	N = 15 15.2%	N = 41 41.4%
...accounting and internal auditing?	N = 12 12.9%	N = 9 9.7%	N = 6 6.5%	N = 4 4.3%	N = 15 16.1%	N = 47 50.5%
...inventory tracking and control?	N = 14 15.6%	N = 4 4.4%	N = 5 5.6%	N = 6 6.7%	N = 15 16.7%	N = 46 51.1%
...shipment tracking and control?	N = 7 7.1%	N = 9 9.2%	N = 18 18.4%	N = 14 14.3%	N = 21 21.4%	N = 29 29.6%
...to download or send large documents?	N = 5 4.4%	N = 19 16.8%	N = 18 15.9%	N = 21 18.6%	N = 38 33.6%	N = 12 10.6%

Demographics

30. Where are you completing this survey?

	Frequency	Percent
On a computer at the company	109	93.2%
On a computer at your home	8	6.8%
On a computer in someone else's home	0	0.0%
On a computer located in some public area (e.g., at a library or school computer laboratory)	0	0.0%

31. When was your company founded? Please type the **year** as a four-digit **number** below.

	Frequency	Percent
1900 and earlier	4	3.6%
1901 to 1920	6	5.4%
1921 to 1940	7	6.3%
1941 to 1960	22	19.8%
1961 to 1980	37	33.3%
1981 to 2000	35	31.5%
2001 to present	0	0.0%

SURVEY COMPLETE

You have completed the survey. Thank you for your participation.



Appendix B: Residential Survey Instrument

[INSTRUCTIONS TO PHONE BANK IN CAPS, BRACKETS]

[INTRODUCTION]

Hello, I'm calling from Public Sector Consultants in Lansing, Michigan. We are conducting a survey in the tri-county area about how residents use information technology in their daily lives, and about the types of Internet connections that people use from their homes. The survey is not being conducted for any candidate, political party, or business.

[IF THE RESPONDENT ASKS FOR MORE INFORMATION ABOUT THE SURVEY SPONSOR: "The survey is being conducted for the LinkMBS Team, an organization that promotes economic development in Midland, Bay, and Saginaw Counties."]

[RANDOM SELECTION OF RESPONDENT AT HOUSEHOLD LEVEL]

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

Yes..... Continue
No Terminate

Are you a resident of Midland, Bay, and Saginaw County?

Yes..... Continue
No Terminate

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

- 1) To begin the survey, would you please tell me how many phone lines you have in your house? Please include all phone, fax, and computer lines, but do *not* include cellular telephones. [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
1	274	69.2%
2	84	21.2%
3	19	4.7%
4	10	2.5%
5	7	1.9%
6+	2	0.3%
	396	100.0%

Don't know [VOLUNTEERED]	1	
Refused/other [VOLUNTEERED]	3	

USE OF THE INTERNET

- 2) Have you yourself **ever** used the Internet?

	N	Valid %
a) Yes	259	64.7%
b) No	141	35.3%
	400	100.0%

c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 3) [ASK ONLY IF Q2 = 2] Which of the following reasons best describes why you have not used the Internet? [ROTATE; SKIP TO QUESTION 10 WHEN COMPLETE]

	N	Valid %
a) No access to the Internet	38	31.2%
b) Too complicated/don't understand the Internet	29	23.8%
c) Not worth the time, hassle, or expense	44	35.9%
d) It's difficult to read information on the Internet	11	9.0%
	122	100.0% ⁹

e) Don't know [VOLUNTEERED]	9	
f) Refused/other [VOLUNTEERED]	11	

⁹ Percentages may not = 100% due to rounding.

- 4) Which of the following statements best describes how often you usually use the Internet? Do you usually use the Internet ...

	N	Valid %
a) About once a year	8	2.9%
b) At least once a year but less than once a month	20	7.8%
c) At least once a month but less than once a week	32	12.4%
d) At least once a week but less than once a day	43	16.9%
e) At least once a day	<u>155</u>	<u>60.1%</u>
	257	100.0%
f) Don't know [VOLUNTEERED]	0	
g) Refused/other [VOLUNTEERED]	2	

- 5) Do regularly use the Internet from somewhere other than your home?

	N	Valid %
a) Yes	116	44.7%
b) No	<u>143</u>	<u>55.3%</u>
	259	100.0%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 6) Have you ever purchased anything over the Internet?

	N	Valid %
a) Yes	158	60.9%
b) No	<u>101</u>	<u>39.1%</u>
	259	100.0%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 7) Have you ever used the Internet to trade a stock, pay a bill, or conduct online banking?

	N	Valid %
a) Yes	95	36.6%
b) No	<u>164</u>	<u>63.4%</u>
	259	100.0%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 8) Have you **ever** connected to the Internet **without** using a personal computer? That is, have you ever connected to the Internet using a PDA, cellular phone, other handheld device, or game console?

	N	Valid %
a) Yes	22	8.7%
b) No	236	91.3%
	259	100.0%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 9) [ASK ONLY IF QUESTION 8 = 1] How often do you connect to the Internet using one of these devices? [READ RESPONSES]

	N	Valid %
a) About once a year	3	15.4%
b) At least once a year but less than once a month	2	10.5%
c) At least once a month but less than once a week	11	51.9%
d) At least once a week but less than once a day	1	5.1%
e) At least once a day	4	17.1%
	22	100.0%
f) Don't know [VOLUNTEERED]	1	
g) Refused/other [VOLUNTEERED]	0	

Household Computers

- 10) How many computers are currently in use in your household? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	123	30.7%
1	200	49.9%
2	49	12.3%
3	17	4.3%
4	6	1.4%
5	0	0.0%
6	1	0.2%
7	2	0.5%
8	0	0.0%
9	0	0.0%
10	0	0.0%
11	1	0.2%
Refused/other [VOLUNTEERED]	2	0.5%
	400	100.0%

11) [ASK ONLY IF Q10 = 0] Which of the following statements best describes why you do not have a computer at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) I have no time to use a computer at home	11	10.2%
b) I can use a computer somewhere else	11	10.2%
c) I do not want a computer at home	47	43.6%
d) A home computer is too expensive	32	29.7%
e) Computers are too hard to learn and use	7	6.2%
	108	100.0%
f) Don't know [VOLUNTEERED]	8	
g) Refused/other [VOLUNTEERED]	7	

12) How many computers in your household are connected to the Internet? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	46	16.9%
1	183	66.7%
2	32	11.8%
3	8	3.0%
4	2	0.8%
5	1	0.4%
7	1	0.4%
	274	100.0%
Don't know [VOLUNTEERED]	0	
Refused [VOLUNTEERED]	3	

13) [ASK ONLY IF QUESTION 12 = 0] You indicated that you do not have Internet access at home. Which of the following is the primary reason that you have chosen not to have Internet access at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) A hardware or software problem	2	4.7%
b) Not sure how to use the Internet	4	10.0%
c) Internet access is not worth the price (too expensive)	15	35.1%
d) Lack of Internet availability or coverage	1	2.4%
e) Do not need to access the Internet from home	14	31.3%
f) Use the Internet at work or at school	5	11.3%
g) Combination [VOLUNTEERED]	2	5.3%
	44	100.0%
h) Don't know [VOLUNTEERED]	1	
i) Refused/other [VOLUNTEERED]	1	

Household Internet Usage and Connection Type

14) When you use the Internet at home, is it primarily to complete a work or school assignment, for recreation, or about equally for work and recreation?

	N	Valid %
a) Complete a work or school assignment	15	7.0%
b) Recreation	107	48.3%
c) About equal work and recreation	99	44.7%
	221	100.0%
d) Don't know [VOLUNTEERED]	3	
e) Refused/other [VOLUNTEERED]	7	

15) Next, I will read you several ways people connect to the Internet from home. Which of these types of connections do you use **most often** to connect to the Internet from your home?

	N	Valid %
a) Dial-up modem	128	60.3%
b) DSL	11	5.2%
c) Cable modem	68	31.9%
d) Fixed wireless	1	0.5%
e) Satellite	4	2.0%
f) Some other type of connection [RECORD RESPONSE]	0	0.0%
	212	100.0%
g) Don't know/Refused [VOLUNTEERED]	19	

Dial-up Connection Detail

16) You indicated that you do not have a high-speed Internet connection at home. Which of the following is the primary reason that you have chosen not to have high-speed Internet access at home? [ROTATE]

	N	Valid %
a) A hardware or software problem	4	3.3%
b) Not sure how to use the Internet	0	0.0%
c) High-speed Internet access is not worth the price (too expensive)	50	44.2%
d) Lack of high-speed Internet availability or coverage	15	13.5%
e) Don't need high-speed access to the Internet from home	27	23.5%
f) Use high-speed Internet at work or at school	6	5.0%
g) Combinations [VOLUNTEERED]	12	10.5%
	113	100.0%
h) Don't know [VOLUNTEERED]	8	
i) Refused/other [VOLUNTEERED]	7	

17) [ASK ONLY IF QUESTION 16 = 4] Do you plan on purchasing high-speed Internet access when it becomes available in your area? [SKIP TO QUESTION 20 WHEN COMPLETE]

	N	Valid %
a) Yes	10	76.2%
b) No	<u>3</u>	<u>23.8%</u>
	14	100.0%
c) Don't know [VOLUNTEERED]	2	
d) Refused/other [VOLUNTEERED]	0	

High-speed Connection Detail

18) When did you have your high-speed Internet connection installed? [RECORD FREE RESPONSE DATE. IF ONLY MONTH AND YEAR ARE GIVEN, SET THE DATE TO THE 1st OF THE MONTH. RECORD IN MM/DD/YYYY FORMAT. RECORD DON'T KNOW = 1/1/1911; REFUSED/OTHER = 2/2/1911]

	N	Valid %
1997	1	1.3%
1998	1	1.3%
1999	2	2.7%
2000	5	6.7%
2001	21	28.0%
2002	36	48.0%
2003	<u>9</u>	<u>12.0%</u>
	75	100.0%
Don't know [VOLUNTEERED]	0	
Refused/other [VOLUNTEERED]	18	

19) [ASK ONLY IF QUESTION 18 IS 9/1/2002 OR LATER] Was your high-speed Internet connection installed on time by the provider?

	N	Valid %
a) Yes	13	100.0%
b) No	<u>0</u>	<u>0.0%</u>
	13	100.0%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

Additional Connection Detail

20) Would you mind telling me about how much you pay, on a monthly basis, for the Internet connection and e-mail service from your home? [RECORD RAW AMOUNT IN DOLLARS AND CENTS. RECORD ALL ANSWERS WITH TWO DECIMAL PLACES. CODE DON'T KNOW = \$888.88; REFUSED/OTHER = \$999.99]

Type of Connection		Cost					Total
		.01-14.99	15.00-19.99	20.00-34.99	35.00-49.99	50.0-Highest	
Dial-up	Count	N = 35	N = 14	N = 53	N = 1	N = 1	N = 104
	%	33.7%	13.5%	51.0%	1.0%	1.0%	100.0%
Broadband	Count	N = 1	N = 3	N = 17	N = 26	N = 10	N = 57
	%	1.8%	5.3%	29.8%	45.6%	17.5%	100.0%

21) Would you please tell me the name of your Internet service provider at your home? [CODE FREE RESPONSE BASED ON THE OPTIONS IN ALPHABETICAL ORDER BELOW. **DO NOT READ THE LIST OF OPTIONS.** IF RESPONSE IS NOT LISTED USE CODE 19 (OTHER) AND RECORD NAME]

	N	Valid %
a) ACD.net	0	0.0%
b) America OnLine (or AOL)	53	27.4%
c) Arialink	0	0.0%
d) AT&T (or AT&T Broadband, AT&T WorldNet, Comcast)	7	3.6%
e) Charter	59	30.3%
f) CompuServe	2	1.1%
g) Corecomm/Voyager	0	0.0%
h) EarthLink	0	0.0%
i) Juno/NetZero (United Online)	8	4.2%
j) Mercury.net	3	1.4%
k) Millennium (or Millennium Digital)	0	0.0%
l) MSN (or Microsoft Network)	13	6.9%
m) Qwest	0	0.0%
n) RoadRunner	0	0.0%
o) SBC/Prodigy/Yahoo (or Ameritech)	10	5.3%
p) Speednet	5	2.5%
q) TDS Metrocomm	0	0.0%
r) Verizon	0	0.0%
s) Other [See Appendix for Company Name]	34	17.4%
	194	100.0%
t) Don't know [VOLUNTEERED]	9	
u) Refused/other [VOLUNTEERED]	9	

22) Thinking about the services you receive from your Internet service provider, are you very satisfied, somewhat satisfied, neutral, somewhat unsatisfied, or very unsatisfied with ...
 [ROTATE. CODE VERY SATISFIED = 1, SOMEWHAT SATISFIED = 2, NEUTRAL = 3, SOMEWHAT UNSATISFIED = 4, VERY UNSATISFIED = 5, DON'T KNOW = 6, REFUSED/OTHER = 7]

- a) the monthly fee for your Internet connection?
- b) the speed of your Internet connection?
- c) the service quality of your Internet connection?
- d) the customer service at your Internet service provider?
- e) your choice of providers (that is, that there are multiple companies competing for your business)?

	Monthly fee fo your Internet connection		Speed of your Internet connection		Service quality of your Internet connection		Customer service at your Internet service provider		Your choice of providers	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Very Satisfied	87	44.1%	61	30.3%	92	44.0%	104	52.7%	82	43.8%
Somewhat Satisfied	57	29.0%	79	39.2%	87	41.7%	67	33.9%	53	28.5%
Neutral	22	11.2%	15	7.5%	17	8.2%	18	9.0%	33	17.8%
Somewhat Unsatisfied	18	9.3%	33	16.4%	10	4.7%	4	2.2%	12	6.2%
Very Unsatisfied	13	6.4%	13	6.6%	3	1.2%	4	2.1%	7	3.7%
Total	197	100.0%	202	100.0%	208	100.0%	197	100.0%	187	100.0%
Don't know [VOLUNTEERED]	13		9		4		16		25	
Refused [VOLUNTEERED]	3		1		0		0		0	

Demographics

To conclude the survey, I just have a few more questions for you.

23) What is your ZIP code? [RECORD ZIP CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999]

24) In what county do you live? [CODE WITH FIPS CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999. VALID RESPONSES ARE MIDLAND, BAY, AND SAGINAW COUNTY]

County	Frequency	Percent
Bay County	116	29.0%
Midland County	73	18.2%
Saginaw County	211	52.8%
Total	400	100.0%

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

	N	Valid %
a) Yes	123	31.4%
b) No	270	68.6%
	394	100.0%
c) Refused/other [VOLUNTEERED]	6	

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

	N	Valid %
a) >25	33	8.8%
b) 25–34	56	15.0%
c) 35–44	68	18.3%
d) 45–54	68	18.3%
e) 55–64	70	18.9%
f) 65–74	44	11.7%
g) 75+	33	8.9%
	372	100.0%
h) Refused [VOLUNTEERED]	28	

27) What is the highest level of education you have completed?

	N	Valid %
a) Less than high school	65	16.7%
b) High school graduate	137	35.1%
c) Some college or technical degree	117	30.1%
d) College graduate	46	11.7%
e) Postgraduate study or degree	<u>25</u>	<u>6.4%</u>
	390	100.0%
f) Refused [VOLUNTEERED]	10	

28) Gender [BY OBSERVATION ONLY. CODE MALE = 1, FEMALE = 2]

	N	Valid %
Male	195	48.7%
Female	<u>205</u>	<u>51.3%</u>
	400	100.0%

Appendix – Other Answers to Question 21

(Some respondents may have more than one provider; provider may be identified by more than one name.)

Response	Frequency	Percent
BREFMAN	1	0.2%
CENTRAL MICHIGAN UNIVERSITY	1	0.1%
CENTURY	1	0.1%
CENTURY TEL	5	1.3%
CENTURYTEL	1	0.1%
CENTURYTELL	1	0.3%
CHARTER	1	0.1%
COGNISURF	1	0.3%
CONCENTRIC	1	0.3%
DIAMOND	2	0.6%
DIAMONDS COMMUNICATION	1	0.3%
EDZONE	1	0.3%
FAMILY EXPLORER	1	0.1%
FAMILY VIDEO	2	0.5%
FAMILY VIDEO (FAM VID)	1	0.1%
HIGH STREAM.NET	1	0.1%
JOURNEY COMMUNICATION	1	0.3%
MERIT	1	0.2%
MICHCOM	1	0.3%
MICHNET	1	0.2%
MINDNET	1	0.2%
PEOPLE PC	1	0.1%
QUIK	1	0.1%
TIGER COMMUNICATIONS	1	0.3%
TOAST NET	1	0.3%
TURBO NET	1	0.1%
USOL	1	0.3%
VOYAGER	1	0.1%
WALMART CONNECT	1	0.3%
X AND O COMMUNICATIONS	1	0.3%
XO	1	0.3%
XO COMMUNICATIONS OR CONCENTRIC.NET	1	0.3%



Appendix C: Residential Survey Instrument Bay County

[INSTRUCTIONS TO PHONE BANK IN CAPS, BRACKETS]

[INTRODUCTION]

Hello, I'm calling from Public Sector Consultants in Lansing, Michigan. We are conducting a survey in the tri-county area about how residents use information technology in their daily lives, and about the types of Internet connections that people use from their homes. The survey is not being conducted for any candidate, political party, or business.

[IF THE RESPONDENT ASKS FOR MORE INFORMATION ABOUT THE SURVEY SPONSOR: "The survey is being conducted for the LinkMBS Team, an organization that promotes economic development in Midland, Bay, and Saginaw Counties."]

[RANDOM SELECTION OF RESPONDENT AT HOUSEHOLD LEVEL]

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

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

Are you a resident of Midland, Bay, and Saginaw County?

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

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

- 1) To begin the survey, would you please tell me how many phone lines you have in your house? Please include all phone, fax, and computer lines, but do *not* include cellular telephones. [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
1	77	67.0%
2	26	22.6%
3	4	3.5%
4	4	3.5%
5	2	1.7%
6+	1	0.9%
Don't know [VOLUNTEERED]	0	0.0%
Refused/Other [VOLUNTEERED]	1	0.9% ¹⁰

Use of the Internet

- 2) Have you yourself **ever** used the Internet?

	N	Valid %
a) Yes	78	67.2%
b) No	38	32.8%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 3) [ASK ONLY IF Q2 = 2] Which of the following reasons best describes why you have not used the Internet? [ROTATE; SKIP TO QUESTION 10 WHEN COMPLETE]

	N	Valid %
a) No access to the Internet	14	37.8%
b) Too complicated/don't understand the Internet	9	24.3%
c) Not worth the time, hassle, or expense	11	29.7%
d) It's difficult to read information on the Internet	0	0.0%
e) Don't know [VOLUNTEERED]	0	0.0%
f) Refused/other [VOLUNTEERED]	3	8.1%

¹⁰ Percentages may not = 100% due to rounding.

- 4) Which of the following statements best describes how often you usually use the Internet? Do you usually use the Internet ...

	N	Valid %
a) About once a year	3	3.9%
b) At least once a year but less than once a month	5	6.5%
c) At least once a month but less than once a week	6	7.8%
d) At least once a week but less than once a day	14	18.2%
e) At least once a day	48	62.3%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	1	1.3%

- 5) Do regularly use the Internet from somewhere other than your home?

	N	Valid %
a) Yes	32	41.0%
b) No	46	59.0%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 6) Have you **ever** purchased anything over the Internet?

	N	Valid %
a) Yes	50	64.9%
b) No	27	35.1%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 7) Have you **ever** used the Internet to trade a stock, pay a bill, or conduct online banking?

	N	Valid %
a) Yes	30	38.5%
b) No	48	61.5%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 8) Have you **ever** connected to the Internet **without** using a personal computer? That is, have you ever connected to the Internet using a PDA, cellular phone, other handheld device, or game console?

	N	Valid %
a) Yes	4	5.2%
b) No	73	94.8%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 9) [ASK ONLY IF QUESTION 8 = 1] How often do you connect to the Internet using one of these devices? [READ RESPONSES]

	N	Valid %
a) About once a year	1	20.0%
b) At least once a year but less than once a month	0	0.0%
c) At least once a month but less than once a week	3	60.0%
d) At least once a week but less than once a day	0	0.0%
e) At least once a day	0	0.0%
f) Don't know [VOLUNTEERED]	1	20.0%
g) Refused/other [VOLUNTEERED]	0	0.0%

Household Computers

- 10) How many computers are currently in use in your household? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	36	31.3%
1	60	52.2%
2	8	7.0%
3	5	4.3%
4	2	1.7%
5	1	0.9%
6	0	0.0%
7	1	0.9%
8	0	0.0%
9	0	0.0%
10	0	0.0%
11	1	0.9%
Refused/Other [VOLUNTEERED]	1	0.9%

11) [ASK ONLY IF Q10 = 0] Which of the following statements best describes why you do not have a computer at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) I have no time to use a computer at home	6	16.7%
b) I can use a computer somewhere else	1	2.8%
c) I do not want a computer at home	9	25.0%
d) A home computer is too expensive	10	27.8%
e) Computers are too hard to learn and use	1	2.8%
f) Don't know [VOLUNTEERED]	5	13.9%
g) Refused/other [VOLUNTEERED]	4	11.1%

12) How many computers in your household are connected to the Internet? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	12	15.2%
1	52	65.8%
2	11	13.9%
3	2	2.5%
4	0	0.0%
5	1	1.3%
7	0	0.0%
Don't know [VOLUNTEERED]	0	0.0%
Refused [VOLUNTEERED]	1	1.3%

13) [ASK ONLY IF QUESTION 12 = 0] You indicated that you do not have Internet access at home. Which of the following is the primary reason that you have chosen not to have Internet access at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) A hardware or software problem	0	0.0%
b) Not sure how to use the Internet	1	8.3%
c) Internet access is not worth the price (too expensive)	6	50.0%
d) Lack of Internet availability or coverage	0	0.0%
e) Do not need to access the Internet from home	4	33.3%
f) Use the Internet at work or at school	0	0.0%
g) Combination [VOLUNTEERED]	0	0.0%
h) Don't know [VOLUNTEERED]	0	0.0%
i) Refused/other [VOLUNTEERED]	1	8.3%

Household Internet Usage and Connection Type

14) When you use the Internet at home, is it primarily to complete a work or school assignment, for recreation, or about equally for work and recreation?

	N	Valid %
a) Complete a work or school assignment	2	2.9%
b) Recreation	37	54.4%
c) About equal work and recreation	27	39.7%
d) Don't know [VOLUNTEERED]	1	1.5%
e) Refused/other [VOLUNTEERED]	1	1.5%

15) Next, I will read you several ways people connect to the Internet from home. Which of these types of connections do you use **most often** to connect to the Internet from your home?

	N	Valid %
a) Dial-up modem	30	45.5%
b) DSL	2	3.0%
c) Cable modem	29	43.9%
d) Fixed wireless	1	1.5%
e) Satellite	1	1.5%
f) Some other type of connection [RECORD RESPONSE]	0	0.0%
g) Don't know / Refused [VOLUNTEERED]	3	4.5%

Dial-up Connection Detail

16) You indicated that you do not have a high-speed Internet connection at home. Which of the following is the primary reason that you have chosen not to have high-speed Internet access at home? [ROTATE]

	N	Valid %
a) A hardware or software problem	0	0.0%
b) Not sure how to use the Internet	0	0.0%
c) High-speed Internet access is not worth the price (too expensive)	15	51.7%
d) Lack of high-speed Internet availability or coverage	4	13.8%
e) Don't need high-speed access to the Internet from home	3	10.3%
f) Use high-speed Internet at work or at school	0	0.0%
g) Combinations [VOLUNTEERED]	3	10.3%
h) Don't know [VOLUNTEERED]	2	6.9%
i) Refused/other [VOLUNTEERED]	2	6.9%

17) [ASK ONLY IF QUESTION 16 = 4] Do you plan on purchasing high-speed Internet access when it becomes available in your area? [SKIP TO QUESTION 20 WHEN COMPLETE]

	N	Valid %
a) Yes	1	20.0%
b) No	2	40.0%
c) Don't know [VOLUNTEERED]	2	40.0%

High-speed Connection Detail

18) When did you have your high-speed Internet connection installed? [RECORD FREE RESPONSE DATE. IF ONLY MONTH AND YEAR ARE GIVEN, SET THE DATE TO THE 1st OF THE MONTH. RECORD IN MM/DD/YYYY FORMAT. RECORD DON'T KNOW = 1/1/1911; REFUSED/OTHER = 2/2/1911]

	N	Valid %
1997	1	3.7%
1998	1	3.7%
1999	2	7.4%
2000	4	14.8%
2001	5	18.5%
2002	13	48.1%
2003	1	3.7%
Don't Know/ Refused [VOLUNTEERED]	7	6.0%

19) [ASK ONLY IF QUESTION 18 IS 9/1/2002 OR LATER] Was your high-speed Internet connection installed on time by the provider?

	N	Valid %
a) Yes	3	100.0%
b) No	0	0.0%

Additional Connection Detail

20) Would you mind telling me about how much you pay, on a monthly basis, for the Internet connection and e-mail service from your home? [RECORD RAW AMOUNT IN DOLLARS AND CENTS. RECORD ALL ANSWERS WITH TWO DECIMAL PLACES. CODE DON'T KNOW = \$888.88; REFUSED/OTHER = \$999.99]

Type of Connection		Cost					Total
		.01-14.99	15.00-19.99	20.00-34.99	35.00-49.99	50.0-Highest	
Dial-up	Count	11	1	14	0	0	26
	%	42.3%	3.8%	53.8%	0.0%	0.0%	100.0%
Broadband	Count	1	1	5	12	4	23
	%	4.3%	4.3%	21.7%	52.2%	17.4%	100.0%

21) Would you please tell me the name of your Internet service provider at your home? [CODE FREE RESPONSE BASED ON THE OPTIONS IN ALPHABETICAL ORDER BELOW. **DO NOT READ THE LIST OF OPTIONS.** IF RESPONSE IS NOT LISTED USE CODE 19 (OTHER) AND RECORD NAME]

	N	Valid %
a) ACD.net	0	0.0%
b) America OnLine (or AOL)	10	15.4%
c) Arialink	0	0.0%
d) AT&T (or AT&T Broadband, AT&T WorldNet, Comcast)	2	3.1%
e) Charter	25	38.5%
f) CompuServe	0	0.0%
g) Corecomm/Voyager	0	0.0%
h) EarthLink	0	0.0%
i) Juno/NetZero (United Online)	2	3.1%
j) Mercury.net	0	0.0%
k) Millennium (or Millennium Digital)	0	0.0%
l) MSN (or Microsoft Network)	5	7.7%
m) Qwest	0	0.0%
n) RoadRunner	0	0.0%
o) SBC/Prodigy/Yahoo (or Ameritech)	1	1.5%
p) Speednet	3	4.6%
q) TDS Metrocomm	0	0.0%
r) Verizon	0	0.0%
s) Other [See Appendix for Company Name]	10	15.4%
t) Don't know [VOLUNTEERED]	2	3.1%
u) Refused/other [VOLUNTEERED]	5	7.7%

22) Thinking about the services you receive from your Internet service provider, are you very satisfied, somewhat satisfied, neutral, somewhat unsatisfied, or very unsatisfied with ... [ROTATE. CODE VERY SATISFIED = 1, SOMEWHAT SATISFIED = 2, NEUTRAL = 3, SOMEWHAT UNSATISFIED = 4, VERY UNSATISFIED = 5, DON'T KNOW = 6, REFUSED/OTHER = 7]

- a) the monthly fee for your Internet connection?
- b) the speed of your Internet connection?
- c) the service quality of your Internet connection?
- d) the customer service at your Internet service provider?
- e) your choice of providers (that is, that there are multiple companies competing for your business)?

	Monthly fee for your Internet connection		Speed of your Internet connection		Service quality of your Internet connection		Customer service at your Internet service provider		Your choice of providers	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Very Satisfied	28	44.4%	23	35.9%	33	51.6%	33	51.6%	28	44.4%
Somewhat Satisfied	15	23.8%	21	32.8%	23	35.9%	17	26.6%	13	20.6%
Neutral	8	12.7%	3	4.7%	3	4.7%	5	7.8%	11	17.5%
Somewhat Unsatisfied	6	9.5%	12	18.8%	2	3.1%	1	1.6%	4	6.3%
Very Unsatisfied	4	6.3%	3	4.7%	2	3.1%	2	3.1%	3	4.8%
Don't Know	1	1.6%	1	1.6%	1	1.6%	6	9.4%	4	6.3%
Refused	1	1.6%	1	1.6%	0	0.0%	0	0.0%	0	0.0%

Demographics

To conclude the survey, I just have a few more questions for you.

23) What is your ZIP code? [RECORD ZIP CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999]

24) In what county do you live? [CODE WITH FIPS CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999. VALID RESPONSES ARE MIDLAND, BAY, AND SAGINAW COUNTY]

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

	N	Valid %
a) Yes	33	28.7%
b) No	81	70.4%
c) Refused/other [VOLUNTEERED]	1	0.9%

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

	N	Valid %
a) >25	8	7.5%
b) 25-34	18	16.8%
c) 35-44	17	15.9%
d) 45-54	18	16.8%
e) 55-64	22	20.6%
f) 65-74	17	15.9%
g) 75+	7	6.5%
h) Refused [VOLUNTEERED]		0.0%

27) What is the highest level of education you have completed?

	N	Valid %
a) Less than high school	21	18.1%
b) High school graduate	28	24.1%
c) Some college or technical degree	42	36.2%
d) College graduate	12	10.3%
e) Postgraduate study or degree	7	6.0%
f) Refused [VOLUNTEERED]	6	5.2%

28) Gender [BY OBSERVATION ONLY. CODE MALE = 1, FEMALE = 2]

	N	Valid %
Male	48	41.7%
Female	67	58.3%
	115	100.0%

Appendix – Other Answers to Question 21

(Some respondents may have more than one provider; provider may be identified by more than one name.)

Response	Frequency
BREFMAN	1
CONCENTRIC	1
HIGH STREAM.NET	1
JOURNEY COMMUNICATION	1
MERIT	1
MICHCOM	1
PEOPLE PC	1
TIGER COMMUNICATIONS	1
TOAST NET	1
VOYAGER	1
XO	1



Appendix D: Residential Survey Instrument Midland County

[INSTRUCTIONS TO PHONE BANK IN CAPS, BRACKETS]

[INTRODUCTION]

Hello, I'm calling from Public Sector Consultants in Lansing, Michigan. We are conducting a survey in the tri-county area about how residents use information technology in their daily lives, and about the types of Internet connections that people use from their homes. The survey is not being conducted for any candidate, political party, or business.

[IF THE RESPONDENT ASKS FOR MORE INFORMATION ABOUT THE SURVEY SPONSOR: "The survey is being conducted for the LinkMBS Team, an organization that promotes economic development in Midland, Bay, and Saginaw Counties."]

[RANDOM SELECTION OF RESPONDENT AT HOUSEHOLD LEVEL]

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

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

Are you a resident of Midland, Bay, and Saginaw County?

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

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

- 1) To begin the survey, would you please tell me how many phone lines you have in your house? Please include all phone, fax, and computer lines, but do *not* include cellular telephones. [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
1	54	73.0%
2	15	20.3%
3	2	2.7%
4	1	1.4%
5	0	0.0%
6+	0	0.0%
Don't know [VOLUNTEERED]	1	1.4%
Refused/Other [VOLUNTEERED]	1	1.4% ¹¹

Use of the Internet

- 2) Have you yourself **ever** used the Internet?

	N	Valid %
a) Yes	59	80.8%
b) No	14	19.2%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 3) [ASK ONLY IF Q2 = 2] Which of the following reasons best describes why you have not used the Internet? [ROTATE; SKIP TO QUESTION 10 WHEN COMPLETE]

	N	Valid %
a) No access to the Internet	6	42.9%
b) Too complicated/don't understand the Internet	1	7.1%
c) Not worth the time, hassle, or expense	3	21.4%
d) It's difficult to read information on the Internet	3	21.4%
e) Don't know [VOLUNTEERED]	0	0.0%
f) Refused/other [VOLUNTEERED]	1	7.1%

¹¹ Percentages may not = 100% due to rounding.

- 4) Which of the following statements best describes how often you usually use the Internet? Do you usually use the Internet ...

	N	Valid %
a) About once a year	3	5.1%
b) At least once a year but less than once a month	3	5.1%
c) At least once a month but less than once a week	9	15.3%
d) At least once a week but less than once a day	10	16.9%
e) At least once a day	34	57.6%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	0	0.0%

- 5) Do regularly use the Internet from somewhere other than your home?

	N	Valid %
a) Yes	26	44.1%
b) No	33	55.9%
c) Don't know [VOLUNTEERED]	0	
d) Refused/other [VOLUNTEERED]	0	

- 6) Have you **ever** purchased anything over the Internet?

	N	Valid %
a) Yes	32	54.2%
b) No	27	45.8%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 7) Have you **ever** used the Internet to trade a stock, pay a bill, or conduct online banking?

	N	Valid %
a) Yes	19	32.2%
b) No	40	67.8%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 8) Have you **ever** connected to the Internet **without** using a personal computer? That is, have you ever connected to the Internet using a PDA, cellular phone, other handheld device, or game console?

	N	Valid %
a) Yes	5	8.5%
b) No	54	91.5%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 9) [ASK ONLY IF QUESTION 8 = 1] How often do you connect to the Internet using one of these devices? [READ RESPONSES]

	N	Valid %
a) About once a year	0	0.0%
b) At least once a year but less than once a month	1	20.0%
c) At least once a month but less than once a week	3	60.0%
d) At least once a week but less than once a day	0	0.0%
e) At least once a day	1	20.0%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	0	0.0%

Household Computers

- 10) How many computers are currently in use in your household? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	14	19.4%
1	45	62.5%
2	9	12.5%
3	2	2.8%
4	1	1.4%
5	0	0.0%
6	0	0.0%
7	1	1.4%
8	0	0.0%
9	0	0.0%
10	0	0.0%
11	0	0.0%
Don't know [VOLUNTEERED]	0	0.0%
Refused/Other [VOLUNTEERED]	0	0.0%

11) [ASK ONLY IF Q10 = 0] Which of the following statements best describes why you do not have a computer at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) I have no time to use a computer at home	2	14.3%
b) I can use a computer somewhere else	2	14.3%
c) I do not want a computer at home	8	57.1%
d) A home computer is too expensive	2	14.3%
e) Computers are too hard to learn and use	0	0.0%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	0	0.0%

12) How many computers in your household are connected to the Internet? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	9	15.5%
1	43	74.1%
2	3	5.2%
3	1	1.7%
4	1	1.7%
5	0	0.0%
6	0	0.0%
7	1	1.7%
Don't know [VOLUNTEERED]	0	0.0%
Refused [VOLUNTEERED]	0	0.0%

13) [ASK ONLY IF QUESTION 12 = 0] You indicated that you do not have Internet access at home. Which of the following is the primary reason that you have chosen not to have Internet access at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) A hardware or software problem	1	11.1%
b) Not sure how to use the Internet	0	0.0%
c) Internet access is not worth the price (too expensive)	3	33.3%
d) Lack of Internet availability or coverage	0	0.0%
e) Do not need to access the Internet from home	2	22.2%
f) Use the Internet at work or at school	3	33.3%
g) Combination [VOLUNTEERED]	0	0.0%
h) Don't know [VOLUNTEERED]	0	0.0%
i) Refused/other [VOLUNTEERED]	0	0.0%

Household Internet Usage and Connection Type

14) When you use the Internet at home, is it primarily to complete a work or school assignment, for recreation, or about equally for work and recreation?

	N	Valid %
a) Complete a work or school assignment	4	8.0%
b) Recreation	24	48.0%
c) About equal work and recreation	22	44.0%
d) Don't know [VOLUNTEERED]	0	0.0%
e) Refused/other [VOLUNTEERED]	0	0.0%

15) Next, I will read you several ways people connect to the Internet from home. Which of these types of connections do you use **most often** to connect to the Internet from your home?

	N	Valid %
a) Dial-up modem	31	62.0%
b) DSL	2	4.0%
c) Cable modem	15	30.0%
d) Fixed wireless	0	0.0%
e) Satellite	0	0.0%
f) Some other type of connection [RECORD RESPONSE]	0	0.0%
g) Don't know / Refused [VOLUNTEERED]	2	4.0%

Dial-up Connection Detail

16) You indicated that you do not have a high-speed Internet connection at home. Which of the following is the primary reason that you have chosen not to have high-speed Internet access at home? [ROTATE]

	N	Valid %
a) A hardware or software problem	1	3.2%
b) Not sure how to use the Internet	0	0.0%
c) High-speed Internet access is not worth the price (too expensive)	12	38.7%
d) Lack of high-speed Internet availability or coverage	3	9.7%
e) Don't need high-speed access to the Internet from home	9	29.0%
f) Use high-speed Internet at work or at school	1	3.2%
g) Combinations [VOLUNTEERED]	3	9.7%
h) Don't know [VOLUNTEERED]	1	3.2%
i) Refused/other [VOLUNTEERED]	1	3.2%

17) [ASK ONLY IF QUESTION 16 = 4] Do you plan on purchasing high-speed Internet access when it becomes available in your area? [SKIP TO QUESTION 20 WHEN COMPLETE]

	N	Valid %
a) Yes	3	100.0%
b) No	0	0.0%
c) Don't know [VOLUNTEERED]	0	0.0%

High-speed Connection Detail

18) When did you have your high-speed Internet connection installed? [RECORD FREE RESPONSE DATE. IF ONLY MONTH AND YEAR ARE GIVEN, SET THE DATE TO THE 1st OF THE MONTH. RECORD IN MM/DD/YYYY FORMAT. RECORD DON'T KNOW = 1/1/1911; REFUSED/OTHER = 2/2/1911]

	N	Valid %
1997	0	0.0%
1998	0	0.0%
1999	0	0.0%
2000	0	0.0%
2001	4	23.5%
2002	7	41.2%
2003	1	5.8%
Don't know/ refused [VOLUNTEERED]	5	29.4%

19) [ASK ONLY IF QUESTION 18 IS 9/1/2002 OR LATER] Was your high-speed Internet connection installed on time by the provider?

	N	Valid %
a) Yes	3	100.0%
b) No	0	0.0%

Additional Connection Detail

20) Would you mind telling me about how much you pay, on a monthly basis, for the Internet connection and e-mail service from your home? [RECORD RAW AMOUNT IN DOLLARS AND CENTS. RECORD ALL ANSWERS WITH TWO DECIMAL PLACES. CODE DON'T KNOW = \$888.88; REFUSED/OTHER = \$999.99]

Type of Connection		Cost					Total
		.01 – 14.99	15.00 – 19.99	20.00 – 34.99	35.00 – 49.99	50.0 – Highest	
Dial-up	Count	5	4	12	1	0	22
	%	22.7%	18.2%	54.5%	4.5%	0.0%	100.0%
Broadband	Count	0	1	3	4	1	9
	%	0.0%	11.1%	33.3%	44.4%	11.1%	100.0%

21) Would you please tell me the name of your Internet service provider at your home? [CODE FREE RESPONSE BASED ON THE OPTIONS IN ALPHABETICAL ORDER BELOW. **DO NOT READ THE LIST OF OPTIONS.** IF RESPONSE IS NOT LISTED USE CODE 19 (OTHER) AND RECORD NAME]

	N	Valid %
a) ACD.net	0	0.0%
b) America OnLine (or AOL)	16	33.3%
c) Arialink	0	0.0%
d) AT&T (or AT&T Broadband, AT&T WorldNet, Comcast)	0	0.0%
e) Charter	12	25.0%
f) CompuServe	0	0.0%
g) Corecomm/Voyager	0	0.0%
h) EarthLink	0	0.0%
i) Juno/NetZero (United Online)	4	8.3%
j) Mercury.net	3	6.3%
k) Millennium (or Millennium Digital)	0	0.0%
l) MSN (or Microsoft Network)	1	2.1%
m) Qwest	0	0.0%
n) RoadRunner	0	0.0%
o) SBC/Prodigy/Yahoo (or Ameritech)	2	4.2%
p) Speednet	1	2.1%
q) TDS Metrocomm	0	0.0%
r) Verizon	0	0.0%
s) Other [See Appendix for Company Name]	5	10.4%
t) Don't know [VOLUNTEERED]	2	4.2%
u) Refused/other [VOLUNTEERED]	2	4.2%

22) Thinking about the services you receive from your Internet service provider, are you very satisfied, somewhat satisfied, neutral, somewhat unsatisfied, or very unsatisfied with ...
 [ROTATE. CODE VERY SATISFIED = 1, SOMEWHAT SATISFIED = 2, NEUTRAL = 3, SOMEWHAT UNSATISFIED = 4, VERY UNSATISFIED = 5, DON'T KNOW = 6, REFUSED/OTHER = 7]

- a) the monthly fee for your Internet connection?
- b) the speed of your Internet connection?
- c) the service quality of your Internet connection?
- d) the customer service at your Internet service provider?
- e) your choice of providers (that is, that there are multiple companies competing for your business)?

	Monthly fee for your Internet connection		Speed of your Internet connection		Service quality of your Internet connection		Customer service at your Internet service provider		Your choice of providers	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Very Satisfied	20	42.6%	15	31.3%	24	50.0%	26	54.2%	19	39.6%
Somewhat Satisfied	14	29.8%	23	47.9%	16	33.3%	13	27.1%	10	20.8%
Neutral	4	8.5%	2	4.2%	5	10.4%	4	8.3%	8	16.7%
Somewhat Unsatisfied	3	6.4%	5	10.4%	2	4.2%	1	2.1%	2	4.2%
Very Unsatisfied	2	4.3%	2	4.2%	1	2.1%	0	0.0%	2	4.2%
Don't Know [VOLUNTEERED]	3	6.4%	1	2.1%	0	0.0%	4	8.3%	7	14.6%
Refused [VOLUNTEERED]	1	2.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Demographics

To conclude the survey, I just have a few more questions for you.

23) What is your ZIP code? [RECORD ZIP CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999]

24) In what county do you live? [CODE WITH FIPS CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999. VALID RESPONSES ARE MIDLAND, BAY, AND SAGINAW COUNTY]

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

	N	Valid %
a) Yes	31	43.1%
b) No	40	55.6%
c) Refused/other [VOLUNTEERED]	1	1.4%

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

	N	Valid %
a) >25	6	8.6%
b) 25–34	16	22.9%
c) 35–44	17	24.3%
d) 45–54	8	11.4%
e) 55–64	13	18.6%
f) 65–74	4	5.7%
g) 75+	6	8.6%
h) Refused [VOLUNTEERED]		0.0%

27) What is the highest level of education you have completed?

	N	Valid %
a) Less than high school	7	9.5%
b) High school graduate	28	37.8%
c) Some college or technical degree	17	23.0%
d) College graduate	12	16.2%
e) Postgraduate study or degree	9	12.2%
f) Refused [VOLUNTEERED]	1	1.4%

29) Gender [BY OBSERVATION ONLY. CODE MALE = 1, FEMALE = 2]

	N	Valid %
Male	36	50.0%
Female	36	50.0%
	72	100.0%

Appendix – Other Answers to Question 21

(Some respondents may have more than one provider.)

Response	Frequency
CENTRAL MICHIGAN UNIVERSITY	1
COGNISURF	1
FAMILY VIDEO	1
FAMILY VIDEO (FAM VID)	1
MINDNET	1
QUIK	1
WALMART CONNECT	1



Appendix E: Residential Survey Instrument Saginaw County

[INSTRUCTIONS TO PHONE BANK IN CAPS, BRACKETS]

[INTRODUCTION]

Hello, I'm calling from Public Sector Consultants in Lansing, Michigan. We are conducting a survey in the tri-county area about how residents use information technology in their daily lives, and about the types of Internet connections that people use from their homes. The survey is not being conducted for any candidate, political party, or business.

[IF THE RESPONDENT ASKS FOR MORE INFORMATION ABOUT THE SURVEY SPONSOR: “The survey is being conducted for the LinkMBS Team, an organization that promotes economic development in Midland, Bay, and Saginaw Counties.”]

[RANDOM SELECTION OF RESPONDENT AT HOUSEHOLD LEVEL]

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

Yes..... Continue
No Terminate

Are you a resident of Midland, Bay, and Saginaw County?

Yes..... Continue
No Terminate

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

- 1) To begin the survey, would you please tell me how many phone lines you have in your house? Please include all phone, fax, and computer lines, but do *not* include cellular telephones. [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
1	144	67.6%
2	43	20.2%
3	13	6.1%
4	5	2.3%
5	5	2.3%
6+	2	1.0%
Don't know [VOLUNTEERED]	0	0.0%
Refused/other [VOLUNTEERED]	1	0.0% ¹²

Use of the Internet

- 2) Have you yourself **ever** used the Internet?

	N	Valid %
a) Yes	122	57.5%
b) No	90	42.5%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 3) [ASK ONLY IF Q2 = 2] Which of the following reasons best describes why you have not used the Internet? [ROTATE; SKIP TO QUESTION 10 WHEN COMPLETE]

	N	Valid %
a) No access to the Internet	18	19.8%
b) Too complicated/don't understand the Internet	19	20.9%
c) Not worth the time, hassle, or expense	30	33.0%
d) It's difficult to read information on the Internet	8	8.8%
e) Don't know [VOLUNTEERED]	9	9.9%
f) Refused/other [VOLUNTEERED]	7	7.7%

¹² Percentages may not = 100% due to rounding.

- 4) Which of the following statements best describes how often you usually use the Internet? Do you usually use the Internet ...

	N	Valid %
a) About once a year	1	0.8%
b) At least once a year but less than once a month	11	9.0%
c) At least once a month but less than once a week	17	13.9%
d) At least once a week but less than once a day	19	15.6%
e) At least once a day	73	59.8%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	1	0.8%

- 5) Do regularly use the Internet from somewhere other than your home?

	N	Valid %
a) Yes	58	47.5%
b) No	64	52.5%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 6) Have you **ever** purchased anything over the Internet?

	N	Valid %
a) Yes	75	61.5%
b) No	47	38.5%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 7) Have you **ever** used the Internet to trade a stock, pay a bill, or conduct online banking?

	N	Valid %
a) Yes	46	37.7%
b) No	76	62.3%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 8) Have you **ever** connected to the Internet **without** using a personal computer? That is, have you ever connected to the Internet using a PDA, cellular phone, other handheld device, or game console?

	N	Valid %
a) Yes	13	10.7%
b) No	109	89.3%
c) Don't know [VOLUNTEERED]	0	0.0%
d) Refused/other [VOLUNTEERED]	0	0.0%

- 9) [ASK ONLY IF QUESTION 8 = 1] How often do you connect to the Internet using one of these devices? [READ RESPONSES]

	N	Valid %
a) About once a year	2	15.4%
b) At least once a year but less than once a month	2	15.4%
c) At least once a month but less than once a week	5	38.5%
d) At least once a week but less than once a day	1	7.7%
e) At least once a day	3	23.1%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	0	0.0%

Household Computers

- 10) How many computers are currently in use in your household? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	72	33.8%
1	95	44.6%
2	32	15.0%
3	10	4.7%
4	3	1.4%
5	0	0.0%
6	0	0.0%
7	0	0.0%
8	0	0.0%
9	0	0.0%
10	0	0.0%
11	0	0.0%
12	0	0.0%
Don't know [VOLUNTEERED]	0	0.0%
Refused/other [VOLUNTEERED]	1	0.5%

11) [ASK ONLY IF Q10 = 0] Which of the following statements best describes why you do not have a computer at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) I have no time to use a computer at home	2	2.7%
b) I can use a computer somewhere else	9	12.3%
c) I do not want a computer at home	29	39.7%
d) A home computer is too expensive	20	27.4%
e) Computers are too hard to learn and use	6	8.2%
f) Don't know [VOLUNTEERED]	3	4.1%
g) Refused/other [VOLUNTEERED]	4	5.5%

12) How many computers in your household are connected to the Internet? [RECORD RAW NUMBER. CODE DON'T KNOW = 888; REFUSED/OTHER = 999]

	N	Valid %
0	25	17.7%
1	88	62.4%
2	18	12.8%
3	6	4.3%
4	2	1.4%
5	0	0.0%
7	0	0.0%
Don't know [VOLUNTEERED]	0	0.0%
Refused/other [VOLUNTEERED]	2	1.4%

13) ASK ONLY IF QUESTION 12 = 0] You indicated that you do not have Internet access at home. Which of the following is the primary reason that you have chosen not to have Internet access at home? [ROTATE. SKIP TO QUESTION 23 WHEN COMPLETE]

	N	Valid %
a) A hardware or software problem	1	4.2%
b) Not sure how to use the Internet	3	12.5%
c) Internet access is not worth the price (too expensive)	6	25.0%
d) Lack of Internet availability or coverage	1	4.2%
e) Do not need to access the Internet from home	8	33.3%
f) Use the Internet at work or at school	2	8.3%
g) Combination [VOLUNTEERED]	2	8.3%
h) Don't know [VOLUNTEERED]	1	4.2%
i) Refused/other [VOLUNTEERED]	0	0.0%

Household Internet Usage and Connection Type

14) When you use the Internet at home, is it primarily to complete a work or school assignment, for recreation, or about equally for work and recreation?

	N	Valid %
a) Complete a work or school assignment	10	8.8%
b) Recreation	46	40.4%
c) About equal work and recreation	50	43.9%
d) Don't know [VOLUNTEERED]	2	1.8%
e) Refused/other [VOLUNTEERED]	6	5.3%

15) Next, I will read you several ways people connect to the Internet from home. Which of these types of connections do you use **most often** to connect to the Internet from your home?

	N	Valid %
a) Dial-up modem	67	58.3%
b) DSL	7	6.1%
c) Cable modem	24	20.9%
d) Fixed wireless	0	0.0%
e) Satellite	3	2.6%
f) Some other type of connection [RECORD RESPONSE]	0	0.0%
g) Don't know /refused [VOLUNTEERED]	14	12.2%

Dial-up Connection Detail

16) You indicated that you do not have a high-speed Internet connection at home. Which of the following is the primary reason that you have chosen not to have high-speed Internet access at home? [ROTATE]

	N	Valid %
a) A hardware or software problem	3	4.5%
b) Not sure how to use the Internet	0	0.0%
c) High-speed Internet access is not worth the price (too expensive)	23	34.3%
d) Lack of high-speed Internet availability or coverage	8	11.9%
e) Don't need high-speed access to the Internet from home	15	22.4%
f) Use high-speed Internet at work or at school	4	6.0%
g) Combinations [VOLUNTEERED]	5	7.5%
h) Don't know [VOLUNTEERED]	5	7.5%
i) Refused/other [VOLUNTEERED]	4	6.0%

17) [ASK ONLY IF QUESTION 16 = 4] Do you plan on purchasing high-speed Internet access when it becomes available in your area? [SKIP TO QUESTION 20 WHEN COMPLETE]

	N	Valid %
a) Yes	6	85.7%
b) No	1	14.3%
c) Don't know [VOLUNTEERED]	0	0.0%

High-speed Connection Detail

18) When did you have your high-speed Internet connection installed? [RECORD FREE RESPONSE DATE. IF ONLY MONTH AND YEAR ARE GIVEN, SET THE DATE TO THE 1st OF THE MONTH. RECORD IN MM/DD/YYYY FORMAT. RECORD DON'T KNOW = 1/1/1911; REFUSED/OTHER = 2/2/1911]

	N	Valid %
1997	0	0.0%
1998	0	0.0%
1999	0	0.0%
2000	1	2.9%
2001	8	23.5%
2002	16	47.0%
2003	5	14.7%
Don't know/refused [VOLUNTEERED]	4	11.7%

19) [ASK ONLY IF QUESTION 18 IS 9/1/2002 OR LATER] Was your high-speed Internet connection installed on time by the provider?

	N	Valid %
a) Yes	7	100.0%
b) No	0	0.0%

Additional Connection Detail

20) Would you mind telling me about how much you pay, on a monthly basis, for the Internet connection and e-mail service from your home? [RECORD RAW AMOUNT IN DOLLARS AND CENTS. RECORD ALL ANSWERS WITH TWO DECIMAL PLACES. CODE DON'T KNOW = \$888.88; REFUSED/OTHER = \$999.99]

Type of Connection		Cost					Total
		.01-14.99	15.00-19.99	20.00-34.99	35.00-49.99	50.0-Highest	
Dial-up	Count	19	9	27	0	1	56
	%	33.9%	16.1%	48.2%	0.0%	1.8%	100.0%
Broadband	Count	0	1	8	10	5	24
	%	0.0%	4.2%	33.3%	41.7%	20.8%	100.0%

21) Would you please tell me the name of your Internet service provider at your home? [CODE FREE RESPONSE BASED ON THE OPTIONS IN ALPHABETICAL ORDER BELOW. **DO NOT READ THE LIST OF OPTIONS.** IF RESPONSE IS NOT LISTED USE CODE 19 (OTHER) AND RECORD NAME]

	N	Valid %
a) ACD.net	0	0.0%
b) America OnLine (or AOL)	27	27.0%
c) Arialink	0	0.0%
d) AT&T (or AT&T Broadband, AT&T WorldNet, Comcast)	5	5.0%
e) Charter	21	21.0%
f) CompuServe	2	2.0%
g) Corecomm/Voyager	0	0.0%
h) EarthLink	0	0.0%
i) Juno/NetZero (United Online)	3	3.0%
j) Mercury.net	0	0.0%
k) Millennium (or Millennium Digital)	0	0.0%
l) MSN (or Microsoft Network)	8	8.0%
m) Qwest	0	0.0%
n) RoadRunner	0	0.0%
o) SBC/Prodigy/Yahoo (or Ameritech)	8	8.0%
p) Speednet	1	1.0%
q) TDS Metrocomm	0	0.0%
r) Verizon	0	0.0%
s) Other [See Appendix for Company Name]	18	18.0%
t) Don't know [VOLUNTEERED]	5	5.0%
u) Refused/other [VOLUNTEERED]	2	2.0%

22) Thinking about the services you receive from your Internet service provider, are you very satisfied, somewhat satisfied, neutral, somewhat unsatisfied, or very unsatisfied with ... [ROTATE. CODE VERY SATISFIED = 1, SOMEWHAT SATISFIED = 2, NEUTRAL = 3, SOMEWHAT UNSATISFIED = 4, VERY UNSATISFIED = 5, DON'T KNOW = 6, REFUSED/OTHER = 7]

- a) the monthly fee for your Internet connection?
- b) the speed of your Internet connection?
- c) the service quality of your Internet connection?
- d) the customer service at your Internet service provider?
- e) your choice of providers (that is, that there are multiple companies competing for your business)?

	Monthly fee for your Internet connection		Speed of your Internet connection		Service quality of your Internet connection		Customer service at your Internet service provider		Your choice of providers	
	N	Valid %	N	Valid %	N	Valid %	N	Valid %	N	Valid %
Very Satisfied	39	38.6%	23	22.8%	35	34.7%	45	45.0%	35	34.7%
Somewhat Satisfied	27	26.7%	36	35.6%	48	47.5%	37	37.0%	30	29.7%
Neutral	10	9.9%	10	9.9%	9	8.9%	9	9.0%	14	13.9%
Somewhat Unsatisfied	9	8.9%	17	16.8%	6	5.9%	2	2.0%	6	5.9%
Very Unsatisfied	6	5.9%	8	7.9%	0	0.0%	2	2.0%	3	3.0%
Don't Know [VOLUNTEERED]	9	8.9%	7	6.9%	3	3.0%	5	5.0%	13	12.9%
Refused [VOLUNTEERED]	1	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Demographics

To conclude the survey, I just have a few more questions for you.

23) What is your ZIP code? [RECORD ZIP CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999]

24) In what county do you live? [CODE WITH FIPS CODE. CODE DON'T KNOW = 88888, REFUSED/OTHER = 99999. VALID RESPONSES ARE MIDLAND, BAY, AND SAGINAW COUNTY]

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

	N	Valid %
a) Yes	59	28.0%
b) No	148	70.1%
c) Refused/other [VOLUNTEERED]	4	1.9%

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

	N	Valid %
a) >25	18	9.3%
b) 25–34	21	10.8%
c) 35–44	34	17.5%
d) 45–54	42	21.6%
e) 55–64	35	18.0%
f) 65–74	23	11.9%
g) 75+	21	10.8%
h) Don't know [VOLUNTEERED]	0	0.0%
i) Refused/ other [VOLUNTEERED]	0	0.0%

27) What is the highest level of education you have completed?

	N	Valid %
a) Less than high school	37	17.5%
b) High school graduate	81	38.2%
c) Some college or technical degree	58	27.4%
d) College graduate	23	10.8%
e) Postgraduate study or degree	10	4.7%
f) Don't know [VOLUNTEERED]	0	0.0%
g) Refused/other [VOLUNTEERED]	3	0.0%

28) Gender [BY OBSERVATION ONLY. CODE MALE = 1, FEMALE = 2]

	N	Valid %
a) Male	110	52.1%
b) Female	101	47.9%
	211	100.0%

Appendix – Other Answers to Question 21

(Some respondents may have more than one provider.)

Response	Frequency
CENTURY	1
CENTURY TEL	5
CENTURYTEL	1
CENTURYTELL	1
CHARTER	1
DIAMOND	2
DIAMONDS COMMUNICATION	1
EDZONE	1
FAMILY EXPLORER	1
FAMILY VIDEO	1
MICHNET	1
TURBO NET	1
USOL	1
X AND O COMMUNICATIONS	1
XO COMMUNICATIONS OR CONCENTRIC.NET	1