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Report for Residential Survey Findings

BROADBAND ADOPTION MARKET RESEARCH

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EXECUTIVE FINDINGS

1. The following is based on this residential survey conducted with Hawaii residents age 18 or older who are primary decision makers or influencers regarding the selection of a home internet service. In total, 1,042 surveys were completed. At the State level the reliability of the results are +/-3.1% at a 95% confidence level.
2. Internet access within homes is widespread – 90 percent of respondents say they use the Internet for more than an hour a week for personal use at home. The average time spent on the Internet was 13 hours per week and the median time was 7 hours a week. Fifty-seven percent use the Internet for business purposes at home.
3. Oceanic Time Warner Cable has the largest share of the home market with 65 percent of those surveyed, followed by Hawaiian Telcom at 22 percent, Clear at five percent and Satellite, Hawaii Broadband and Aloha Broadband combine for four percent.
4. Fifty-eight percent of homes have Standard or Basic Internet service levels, 32 percent have a higher speed service and 10 percent do not know what type of service they have. The majority of internet users (84%) do not know their Internet speed.
5. On average respondents access the Internet with two devices. Devices are used to access the Internet in the following percentages:
 - Smartphones (81%);
 - Laptop Computers (75%);
 - Desktop Computer (50%);
 - Game Console (42%);
 - Tablet (30%); and
 - E-Book Reader (26%).
6. Overall, the majority of people who access the Internet at home for personal use do so for more than five hours a day. Those who spend more time on the Internet tend to do so by laptop or desktop computers. The Internet is primarily accessed:
 - For email (99%);
 - To search for information (98%); and
 - For online banking (87%).
7. Fifty-seven percent of people access the Internet at home for business purposes. Thirty-one percent of these people access it for more than five hours a week.
8. There is a high level of satisfaction with Internet providers. The highest rated factor was “reliability of Internet service” (92%) followed by “customer service provided” (86%) and “speed of connectivity” (86%).
9. Respondents were least satisfied with the cost of their service (28% dissatisfied) and the value for their monthly plan (22% dissatisfied).

10. The most common problems reported by Respondents with their home Internet service were all related to the speed of their Internet:
- Netflix/Hulu/YouTube videos stopped or stuttered (34%),
 - Internet is slow when multiple people are using it (18%),
 - Internet is slow at lunch or in the evening (15%),
 - Photos and videos take too long to download/upload (22%), and
 - Video files take too long to download (7%).
11. Fifty-six percent of respondents would be likely to upgrade their Internet service if it would overcome these issues.

BACKGROUND

The Department of Commerce and Consumer Affairs (DCCA) was awarded a State Broadband Initiative (SBI) grant by the National Telecommunications & Information Administration (NTIA), which was funded through the American Recovery and Reinvestment Act of 2009 (ARRA). Grant activities include planning efforts to identify and develop policies and programs to advance digital literacy and to drive adoption of broadband service.

Although Hawaii has a fairly high adoption rate, most Hawaii consumers subscribe to lower tiers, thus providing little business incentive for providers to invest in infrastructure across the State that can support speeds comparable to that of the leading nations in the world. For this reason, increasing demand in the State for higher speed broadband services is important in the State's efforts to foster deployment of broadband infrastructure that can support world class broadband services levels.

Accurate market data will assist the State in developing optimum strategies to increase broadband usage in Hawaii.

OBJECTIVE

DCCA seeks market research to assist in the formation and targeting of strategies, policies, and programs to foster increased usage of higher speed broadband services by residents in Hawaii. Therefore this market research project was undertaken with the following objectives:

1. To understand how broadband service is used currently;
2. To determine satisfaction levels with speed and cost of subscribed service levels;
3. To gauge consumer awareness of the uses and benefits of various tiers of high speed broadband services;
4. To identify consumer motivations and obstacles to subscribing to various levels of service;
5. To identify primary barriers to subscribing to various levels of service;
6. To understand perceived benefits and value of higher speed services;
7. To identify demographic segments of key segments and growth opportunities.

METHODOLOGY

Data Collection

Telephone surveys were administered from October 24, 2013 to January 2, 2014 through both landline telephone and cellphones. There were 641 surveys collected:

- Oahu 519;
- Maui 47;
- Kauai 16; and
- Hawaii Island 59.

To supplement the telephone survey, a web survey was administered from January 2, 2014 to January 7, 2014 on a secured server using SSI Web 8.0 survey software. There were a total of 401 surveys collected via the web:

- Oahu 211;
- Maui 72;
- Kauai 35; and
- Hawaii Island 83.

In total, 1,042 surveys were completed. At the State level the reliability of the results are +/- 3.1% at a 95% confidence level.

Respondents were representative of the general population and not necessarily technical experts on broadband services. Therefore questions were designed for the average person and open-ended questions had responses that were more general than would be expected from an expert. There were approximately 40 questions that asked respondents about technology and the Internet in the State Hawaii, preference, attitudes, and behaviors related to the Internet, and demographic questions for classification purchases.

The survey response frequencies are provided in Appendix A.

Data Analysis

SMS analyzed each question to determine if there were significant differences in responses based on age groups, household size, level of education, ethnicity, and/or annual household income. Significant differences are highlighted in this report.

Charts and graphs have been included for ease of data interpretation. Sample sizes vary due to item non-response and skip patterns established in the survey to ask questions to certain respondents. Also, some figures contain data/responses with totals greater than 100 percent. In these circumstances respondents were asked questions in which they could provide more than one response, hence totals can be greater than 100 percent.

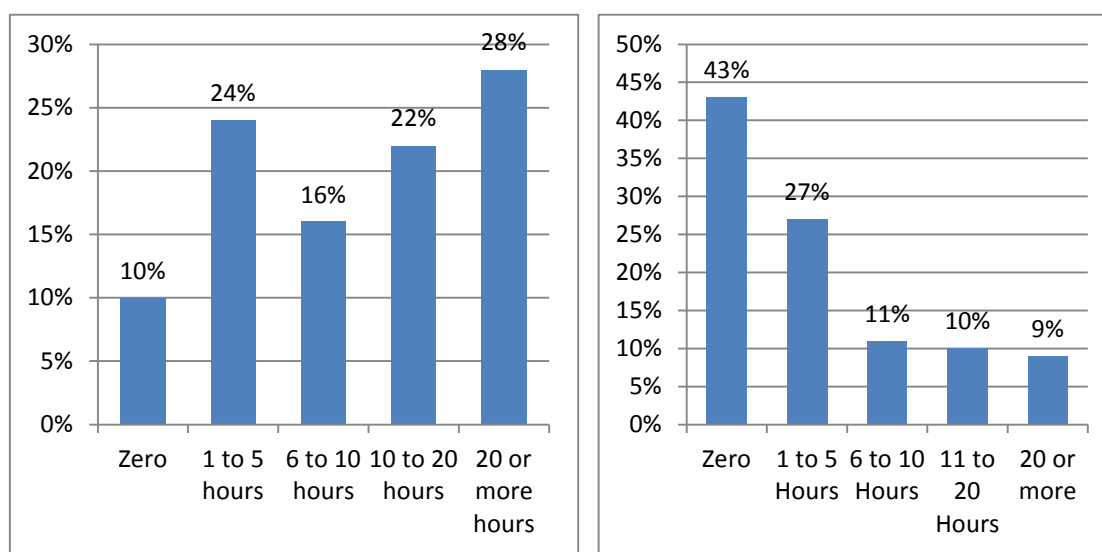
SURVEY FINDINGS

How Internet Service is Currently Used

Overall 90 percent of respondents use the Internet for at least one hour each week for personal use at home. The average number of hours spent on the Internet for personal use is 13 hours per week and the median is seven hours per week.

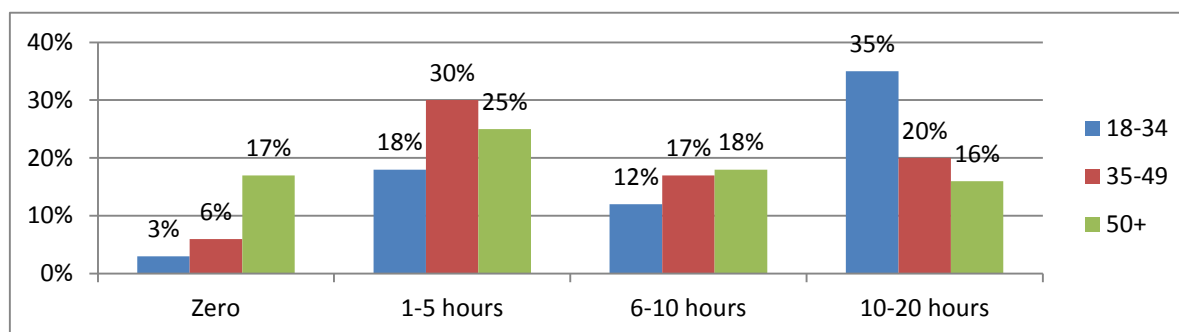
- The majority of users (66%) access the Internet more than five hours a week.
 - 28 percent of users access the Internet for 20 or more hours
 - 24 percent access the Internet for one to five hours
 - 16 percent that access the Internet for six to ten hours; and
 - 22 percent access the Internet for 10 to 20 hours.

Figure 1: Hours Using the Internet at Home for Personal (left) and for Business (right)



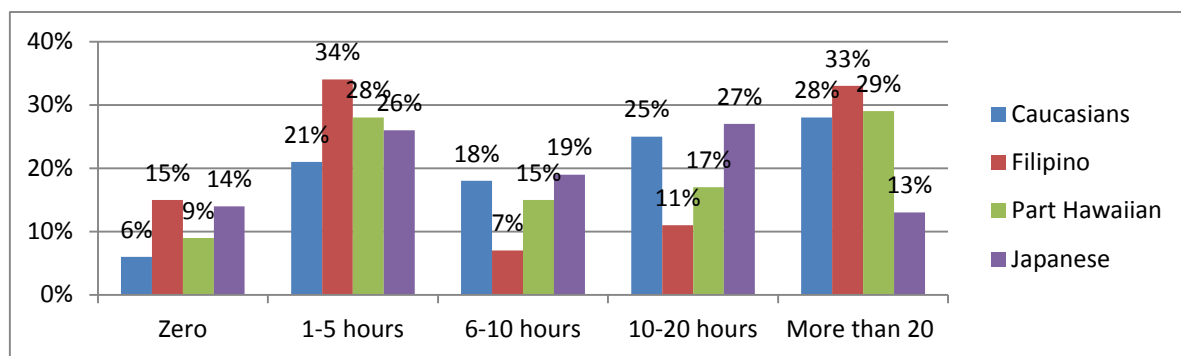
The 18 to 34 age group access the Internet at home for personal use for the longest amount of time: 67 percent do so at least 10 hours a week. The 50+ age group accesses the Internet the least: 40 percent access the Internet for 10 or more hours a week, and 17 percent do not use the Internet at all.

Figure 2: Hours Spent on the Internet per Week by Age



Caucasians are more of a “heavy user” group; 53 percent of Caucasians use the Internet ten or more hours per week, followed by Part-Hawaiians at 46 percent, Filipinos at 44 percent, and Japanese at 40 percent. Both Filipinos (15 percent) and Japanese (14 percent) had the largest percentage of those who did not use the Internet at any time during the week.

Figure 3: Hours Spent on the Internet per Week by Ethnicity



Fifty-seven percent of people use the Internet at home for business purposes. Twenty seven percent use the Internet for one to five hours a week while 30 percent use it at least six hours a week. Among those that use the Internet for business purposes the average number of hours spent is six hours a week and the median hours of business usage is three hours.

About 10 percent of survey respondents said they did not use the Internet at all. Of these, 37 percent said they had Internet in their home in the past. The biggest reason for not having the Internet in their home currently was they did not have a need for it, nor did they want it (37%).

Broadband Services Currently Used

Among Internet service providers, Oceanic Time Warner has the largest share of users at 65 percent while Hawaiian Telcom has 22 percent. These two providers together provide service to 87 percent of those surveyed.

Figure 4: Service Providers

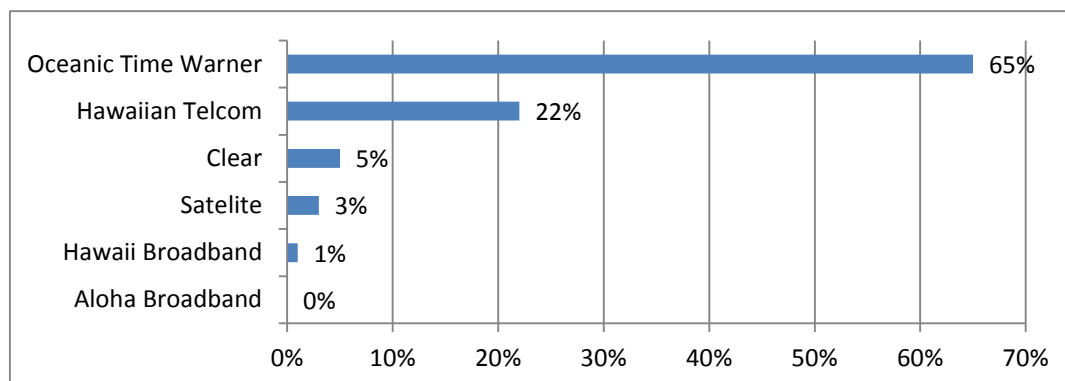
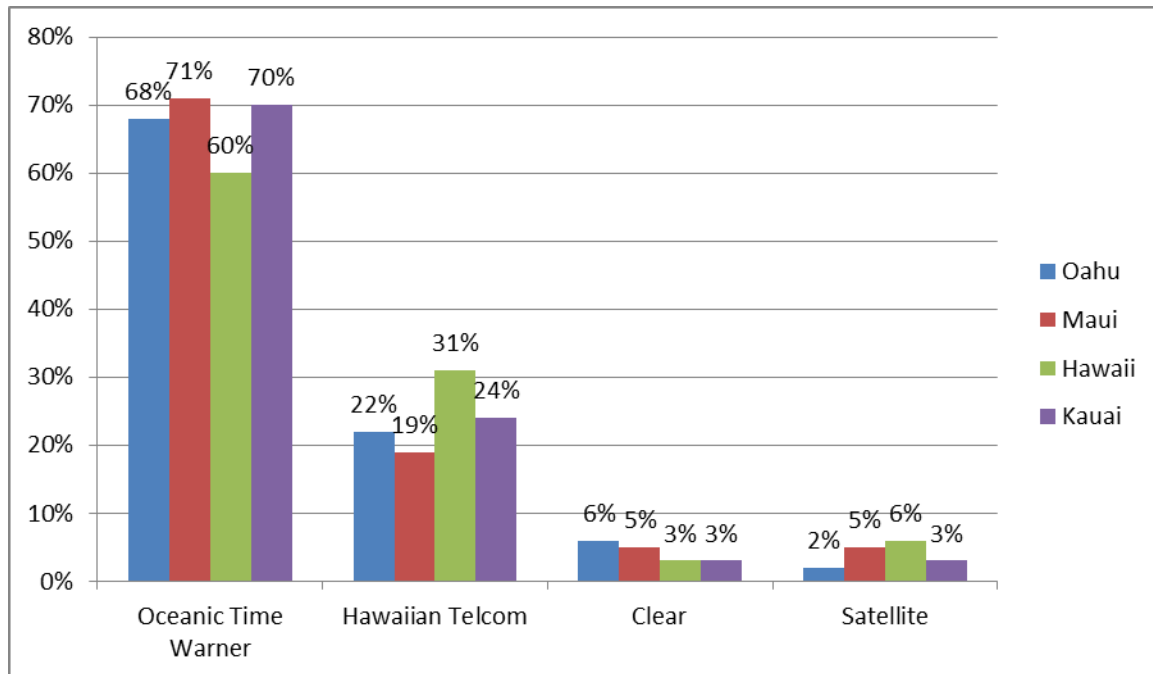


Figure 5: Internet Provider by County



The mix of providers varies a little by County. Hawai'i Island respondents are less likely to have Oceanic Time Warner as a provider and more likely to have Hawaiian Telcom and Satellite.

Fifty-eight percent of respondents have Standard or Basic Internet service for their home. Thirty-two percent subscribe to a higher speed service; while 10% do not know the type of Internet service they have.

The majority of Internet users (84%) do not know their Internet connection speed. Even among the 16 percent who reported a speed, 38 percent did not know the source of that number and 46 percent reported an advertised speed.

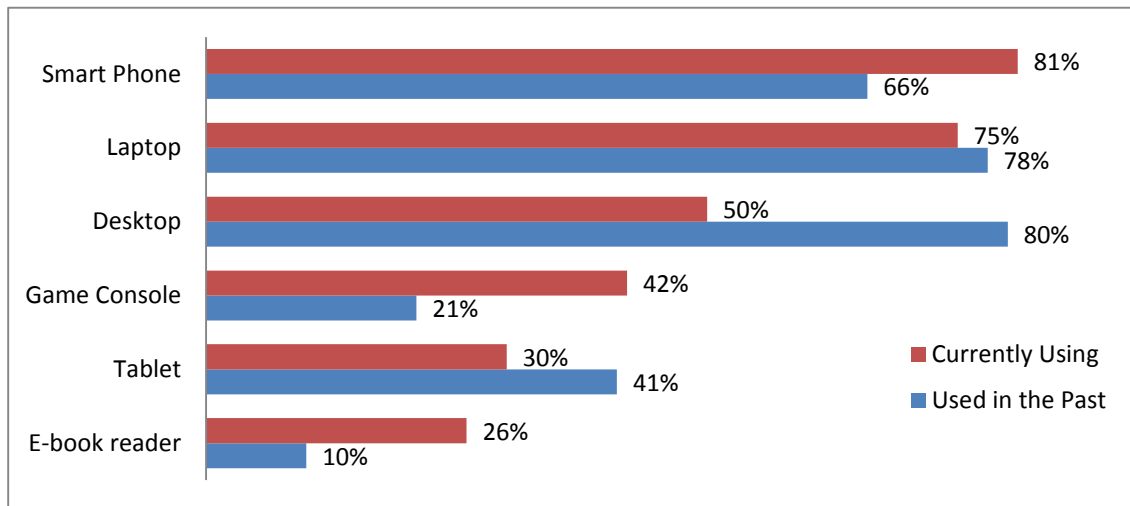
Devices Currently Used

The desktop and laptop computer use to be the most popular devices to access the Internet. Currently more people use a smart phone (81%) to access the Internet than any other device. Seventy-five percent use a laptop computer, which is close to the percentage of people that have used a laptop in the past (78%). The biggest change is that the percentage of people using a desktop computer has dropped from 80 percent in the past to 50 percent currently. On average people have about two of the devices listed.

More respondents used a Tablet in the past to access the Internet than currently (41% to 30%), while the use of E-book readers to access the Internet has increased (10% to 26%). The Pew Research Center reports that on a national level Tablet ownership is at 42 percent and E-Book Readers is at 32 percent.¹

¹ "E-Reading Rises as Device Ownership Jumps," January 16, 2014, Pew Research Center, <http://www.pewinternet.org/2014/01/16/e-reading-rises-as-device-ownership-jumps/>

Figure 6: Device Usage



The service providers by device varied as shown in the graph below. Desktop and Laptop computers are more likely to use Oceanic Time Warner.

Figure 7: Service Providers by Device

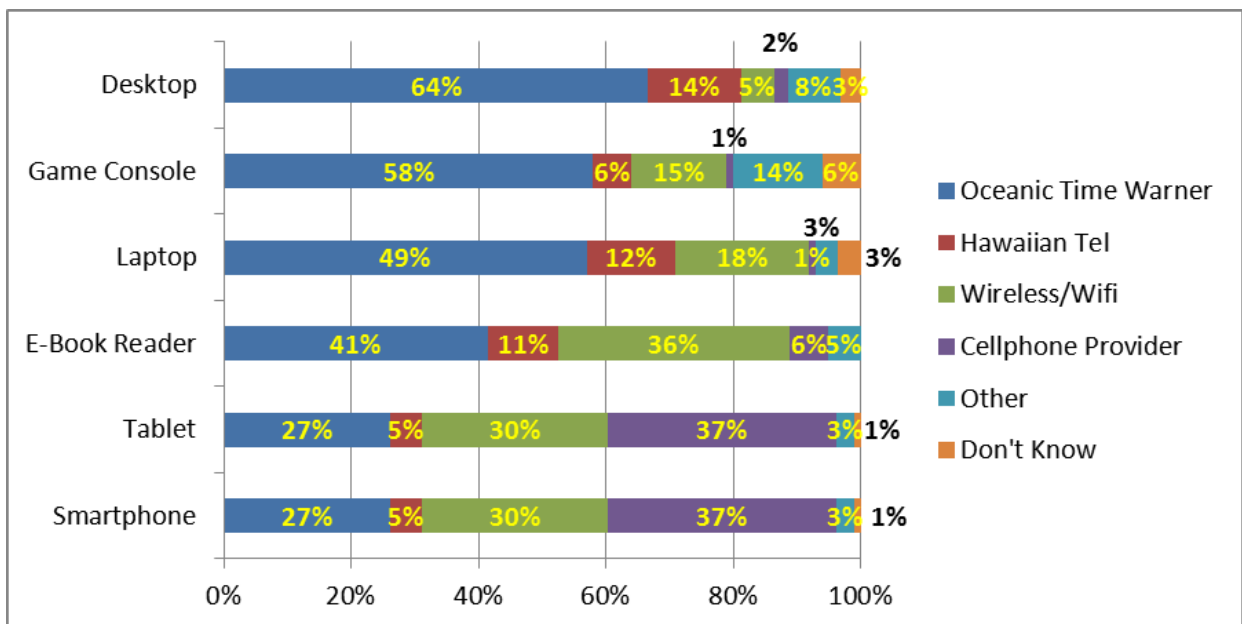
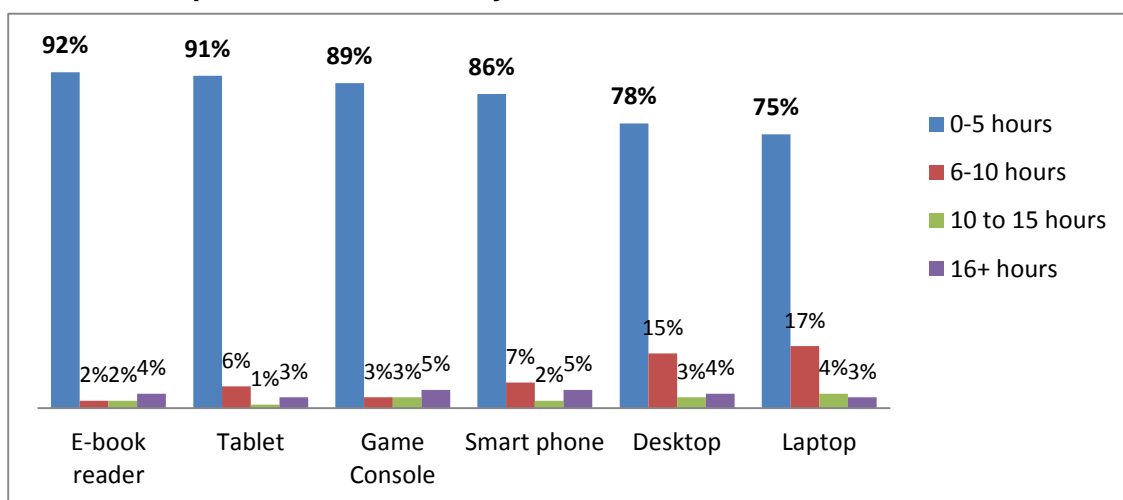


Figure 8: Hours Spent on the Internet by Device Used

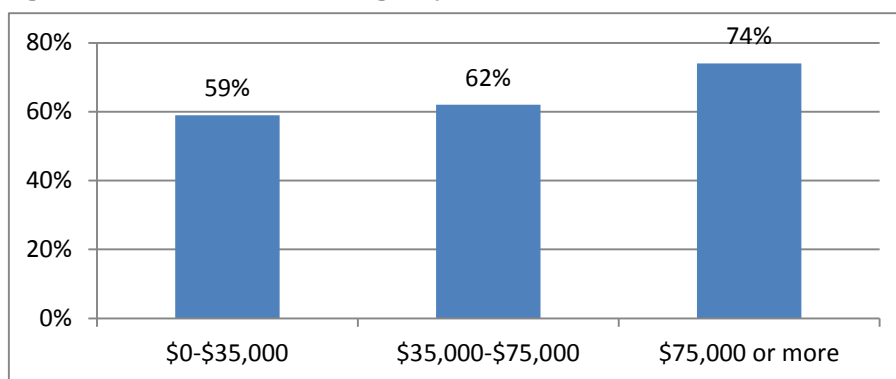


Those who use a laptop or desktop computer to access the Internet are more likely to spend more time on the Internet on a daily basis. Overall the majority of people who access the Internet do so for less than five hours a day on any one device.

Most people that only use smartphones to access the Internet reported they needed their phone to access the Internet and did not wish to spend more money to access it in other ways.

Looking at respondent segments, there are some differences in uses based on income: the higher the household income, the more likely the respondent is to be using a smart phone to connect with the Internet. Seventy four percent of households with incomes of \$75,000 or more have smartphones, 62 percent of \$35,000 to \$75,000 households, and 59 percent of \$0 to \$35,000 households have smartphones.

Figure 9: Smart Phone Usage by Income

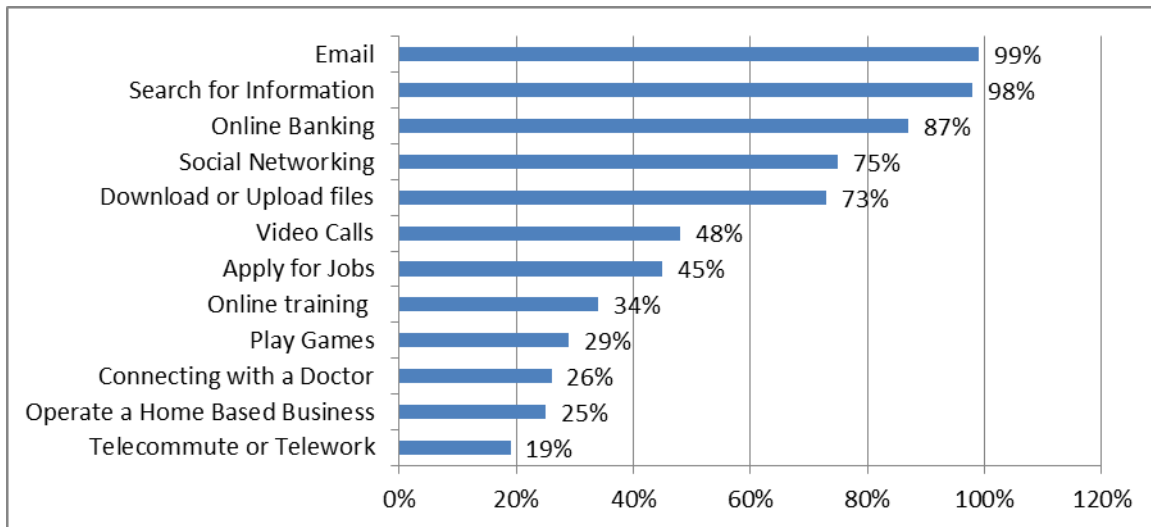


Internet usage via game consoles is primarily done by those in the 18 to 34 age group (77%).

Activities Done on the Internet

Almost everyone uses the Internet for email (99%) and to search for information (98%), as seen in following figure. The least common activity was telecommuting to work (19%). A few other things respondents reported doing on the Internet was paying bills, online shopping, travel purposes, and stocks.

Figure 10: Personally using the Internet For...

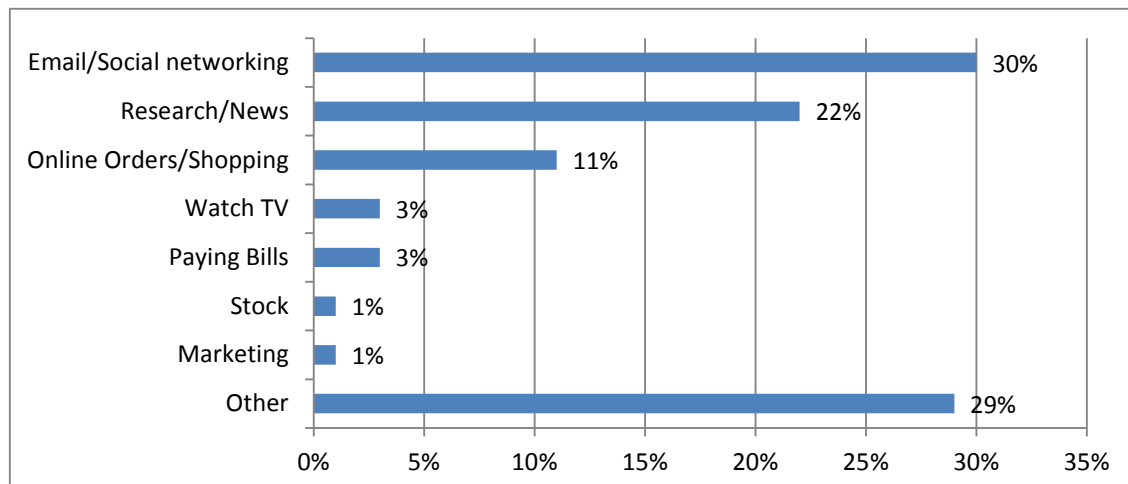


*Because respondents could choose multiple responses percentages will not equal 100 percent.

In question 26, respondents were asked what “other” activities they do on the Internet. The responses are shown below. Note this is what they reported even though they had the option of selecting it in question 25.

- Email and social networking (30%);
- Doing research or checking on the news (22%);
- Online shopping (11%); and
- Watching TV (3%).

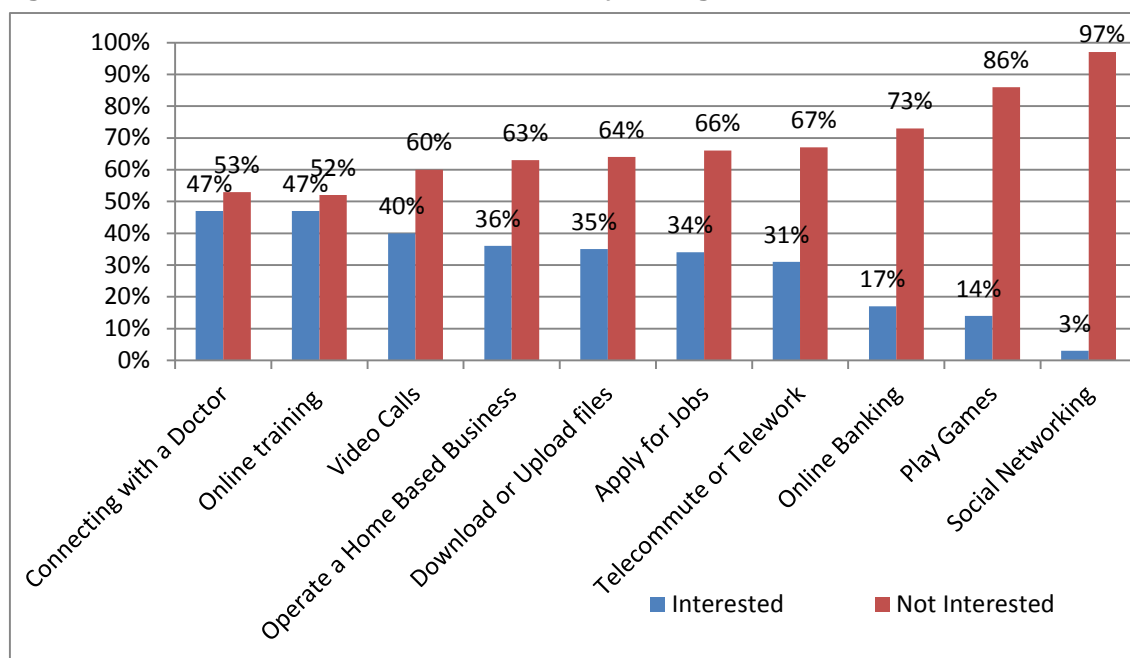
Figure 11: “Other” User Internet Activities



People who are not currently doing a specific activity on the Internet are most interested in using the Internet in the future for:

- Connecting with a doctor (47%);
- Online training (47%); and
- Making video calls (40%).

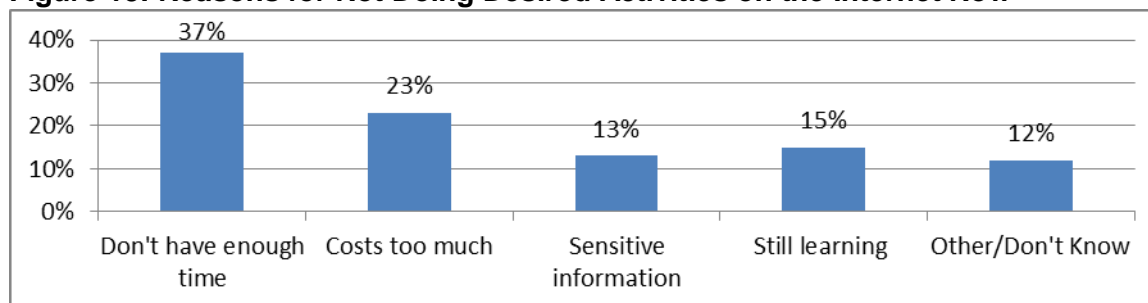
Figure 12: Interest in Activities Not Currently Doing



The primary reasons respondents are not doing activities they are interested in now are:

- Do not have enough time (37%);
- Costs too much (23%);
- Do not want to share sensitive information on the Internet (13%); and
- Still learning to use the Internet (15%).

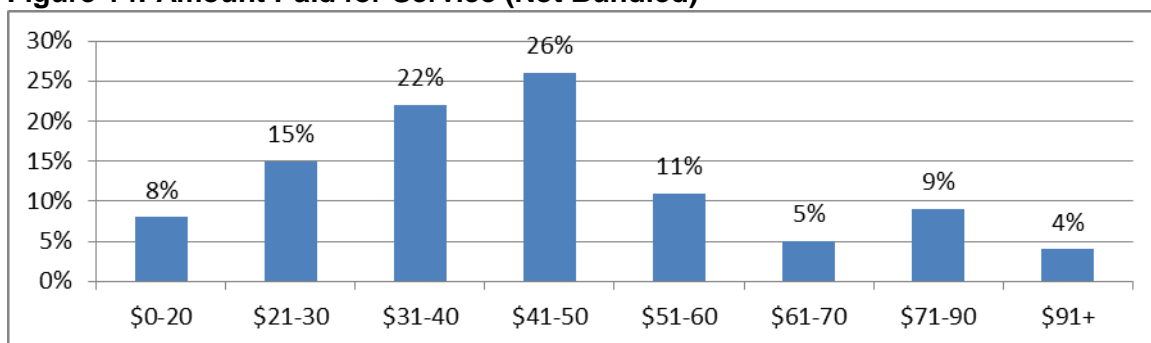
Figure 13: Reasons for Not Doing Desired Activities on the Internet Now



Reported Cost of Internet Services

The average price that people reported they pay for their Internet service (not bundled) is \$44 and the median price is \$56 per month. Using advertised prices from Oceanic Time Warner² as an indicator suggests that about half the households with unbundled Internet service have the Standard level service or slower, and the other half has Standard level service or faster.

Figure 14: Amount Paid for Service (Not Bundled)



² Basic level Internet service at Oceanic Time Warner is \$35.99 per month (3 mbps download speed and up to 1 mbps upload speed) and the Standard Internet service is \$57.99 per month (up to 15 mbps download and 1 mbps upload.) Each increment of speed faster increases the price by \$10 per month, up to 100 mbps download and 5 mbps upload at \$50 more than the Standard Internet, therefore \$107.99 per month.

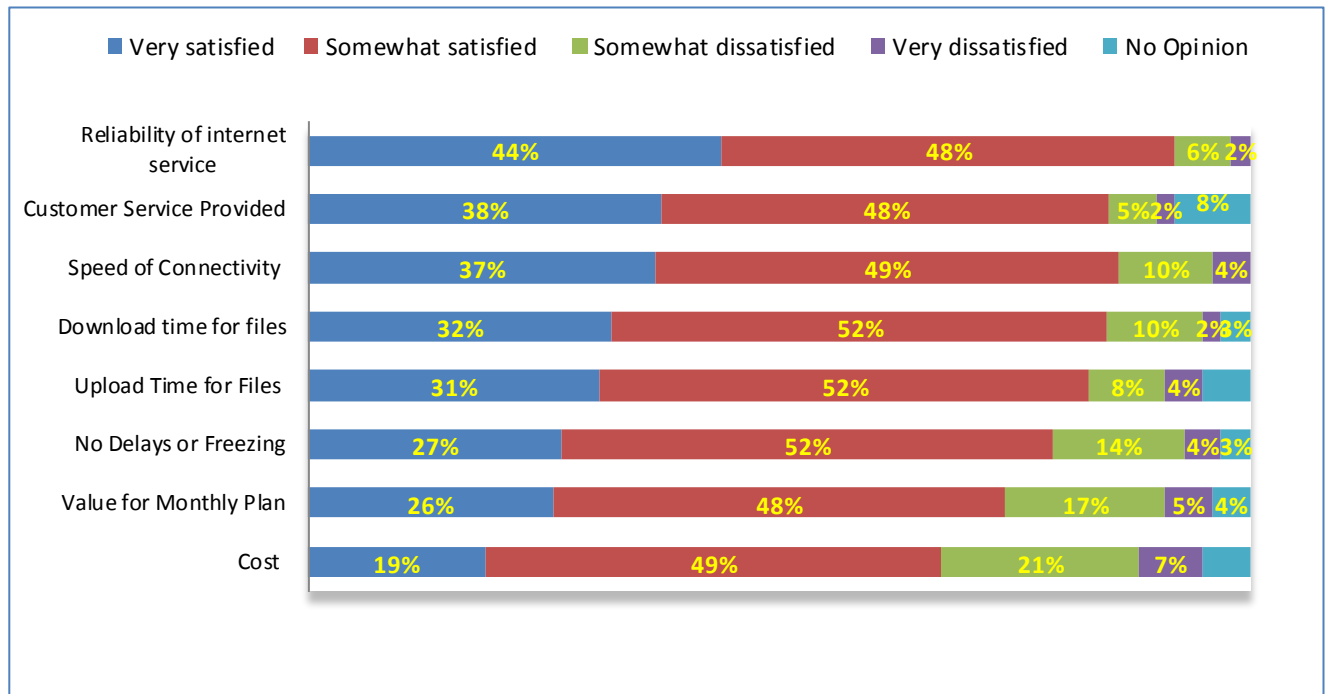
Twenty percent of respondents have switched Internet services in the last two years. The primary reasons were:

- Cost (35%);
- Moved to a new area (25%);
- Speed (11%);
- Reliability (7%); and
- Customer service (2%).

Satisfaction Levels with Subscribed Service

Overall Internet users are satisfied with their current Internet provider. Satisfaction is highest with the reliability of the service (92% very and somewhat satisfied) followed by customer service provided (86%) and speed of connectivity (84%).

Figure 15: Satisfaction with Internet



Respondents were least satisfied with the cost of their service (28% dissatisfied) and the value for their monthly plan (22% dissatisfied).

Relative to respondent characteristics, household income is correlated to satisfaction with Internet cost. The middle segment, \$35,000-\$75,000 household income per year, is the most dissatisfied group at 34 percent dissatisfied. And the \$0-\$35,000 group was the most satisfied at 75 percent, close to the 72 percent satisfaction of the \$75,000+ households.

Figure 16: Satisfaction with Cost of Internet by Household Income

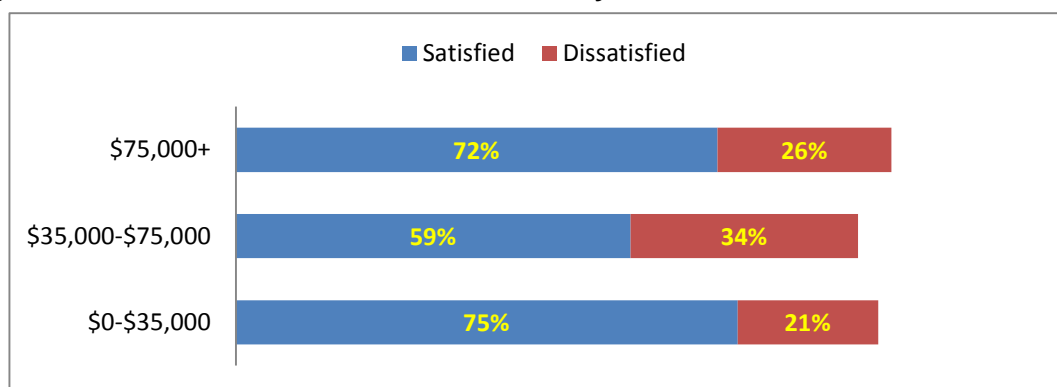
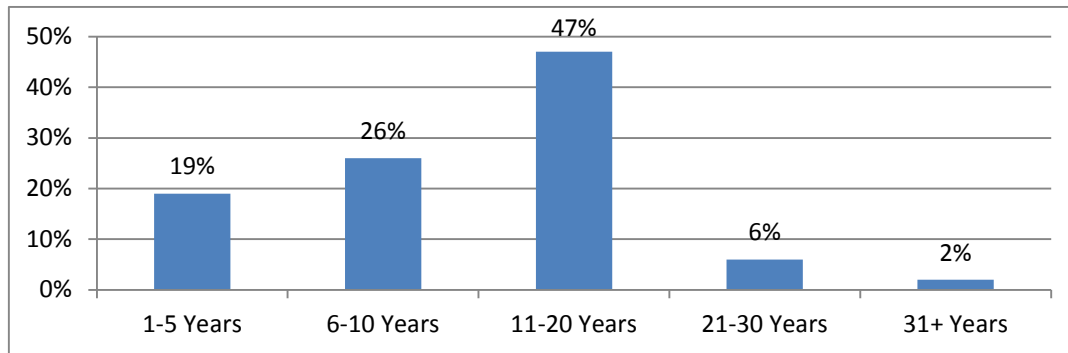
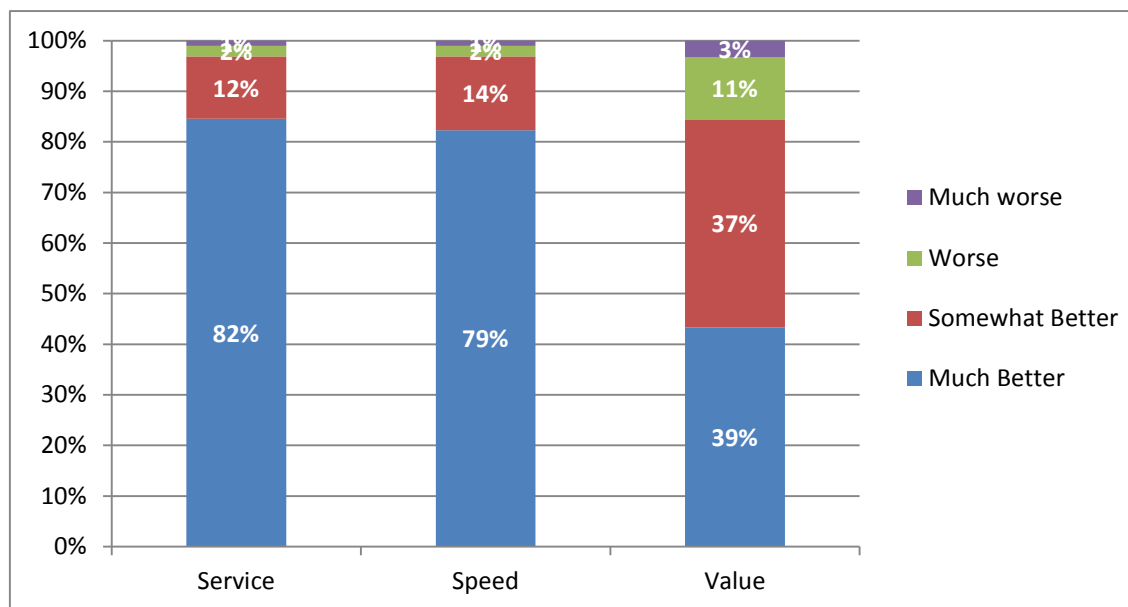


Figure 17: Years Accessing the Internet



Compared with their first interaction with the Internet, users feel the service and speed of their current Internet is “much better.” Internet users are not as positive that their current service has better value.

Figure 18: Service, Speed, and Value Ratings

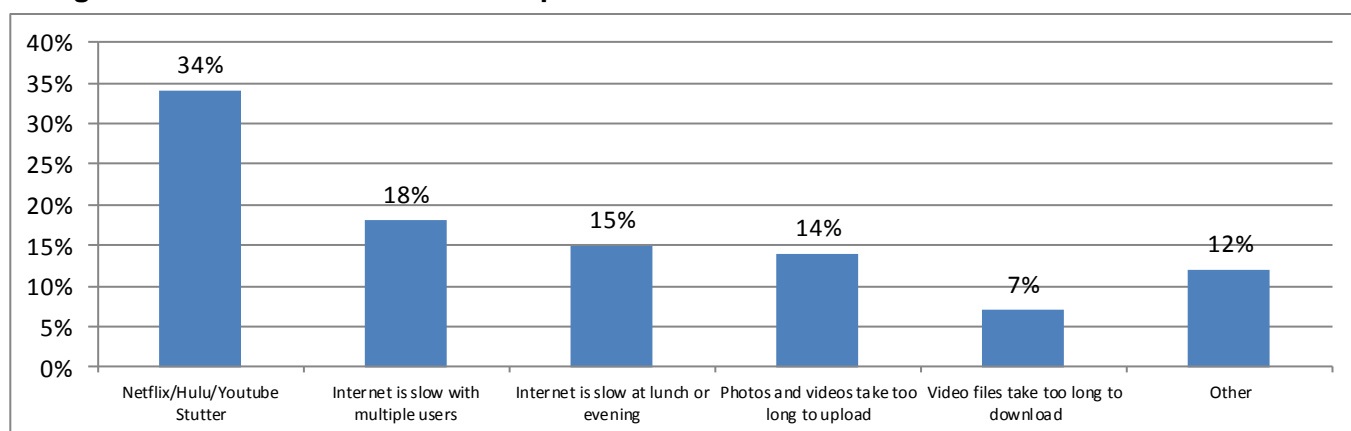


Customer Motivations Related to Internet Speed

The most common problems reported with respondents' home Internet service were all related to the speed of their Internet:

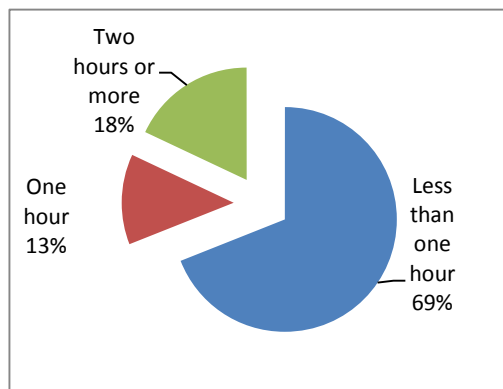
- Netflix/Hulu/YouTube videos stopped or stuttered (34%);
- Internet is slow when multiple people are using it (18%);
- Internet is slow at lunch or in the evening (15%);
- Photos and videos take too long to upload (14%); and
- Video files take too long to download (7%).

Figure 19: Problems with Internet Speed



Eighteen percent of users say they waste about two hours a day waiting on the Internet. Sixty nine percent of respondents report that they waste less than an hour of time per day waiting for slow Internet. Users in larger households (four to six people) are more likely to say they waste two or more hours a day (25%) compared with those in smaller households.

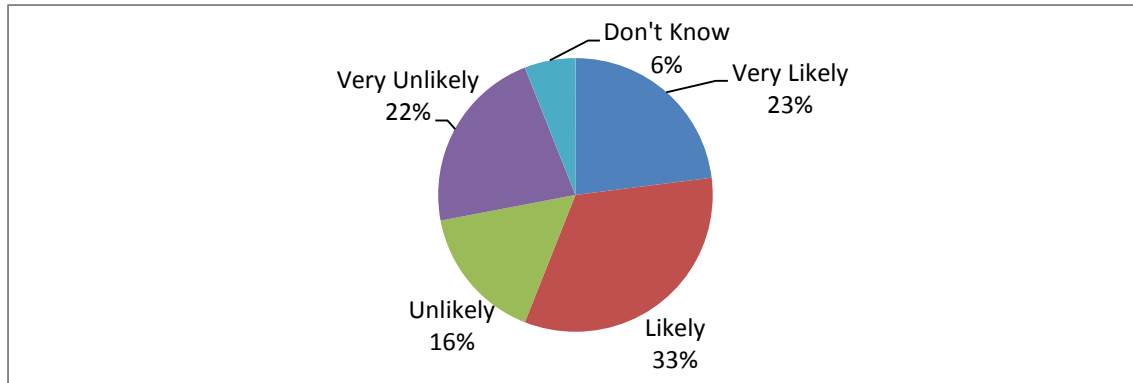
Figure 20: Time Wasted



56 percent of respondents would be “likely” or “very likely” to upgrade to a higher speed service if they could overcome all of the issues identified above and do all the things they identified that they would like to do.

The younger the user is, the greater the likelihood is that the user might upgrade his or her service level: sixty nine percent of the 18-34 age segment would be likely to upgrade; 61 percent of the 35 to 49 age segment, and 41 percent of the 50 years or older.

Figure 21: Likelihood to Upgrade

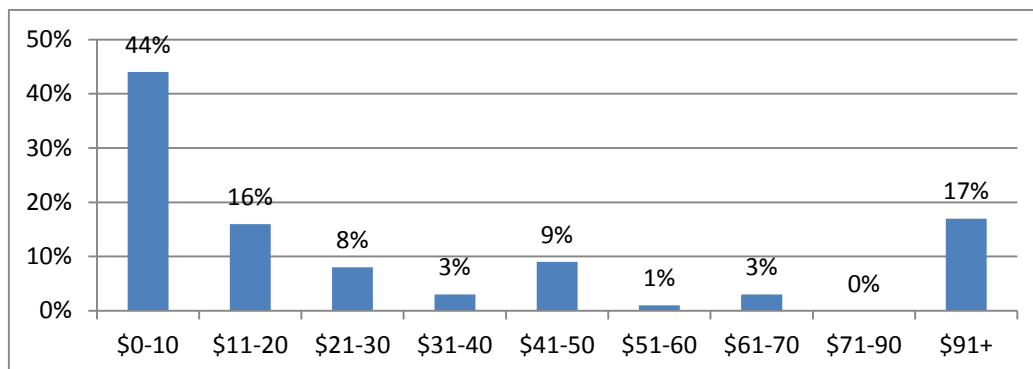


Higher household income was inversely related to likelihood to upgrade. Sixty nine percent of those households in the \$0-\$35,000 income level would be likely to upgrade; 55 percent in the \$35,000-\$75,000, and 54 percent in the \$75,000 and more.

When asked what would make them consider upgrading their service, 18 percent of respondents did not feel there was a reason to upgrade.

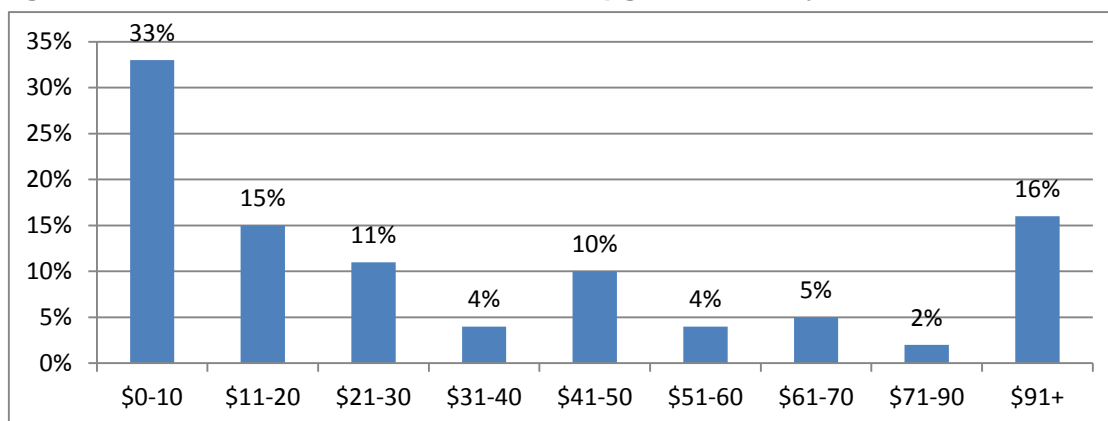
When asked to provide the monthly price increase considered reasonable to upgrade their Internet speed, 44 percent of respondents said \$0 to \$10.

Figure 22: Reasonable Incremental Cost for Upgrade Monthly



Respondents were then asked what their maximum monthly cost to upgrade would be, 33 percent said zero to ten dollars. Sixteen percent said \$91 to \$100 dollars was their maximum.

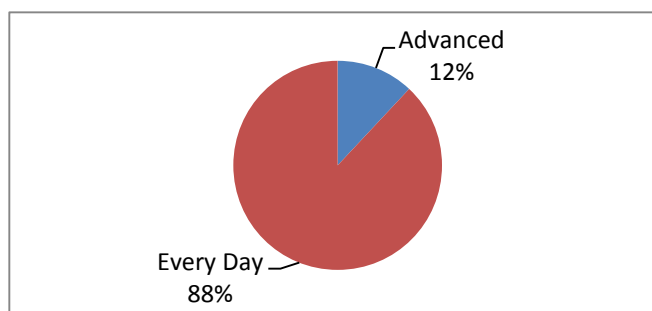
Figure 23: Maximum Incremental Cost for Upgrade Monthly



“Advanced Users”

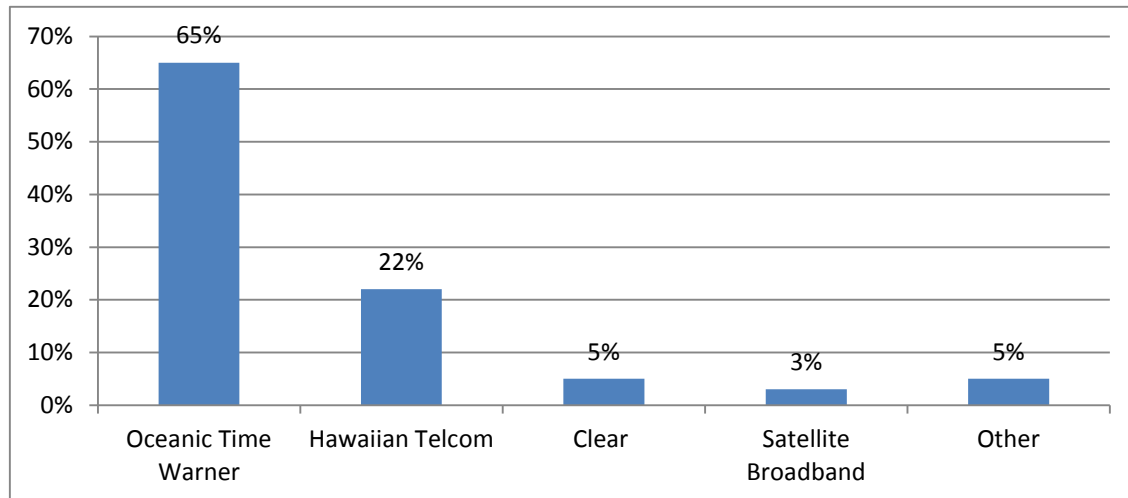
Those respondents, who do things on the Internet such as video calls, telecommuting to work, and downloading videos, pictures, files, etc., were considered “Advanced Users” for purposes of this analysis. Twelve percent of respondents were Advanced Users.

Figure 24: Advanced Users



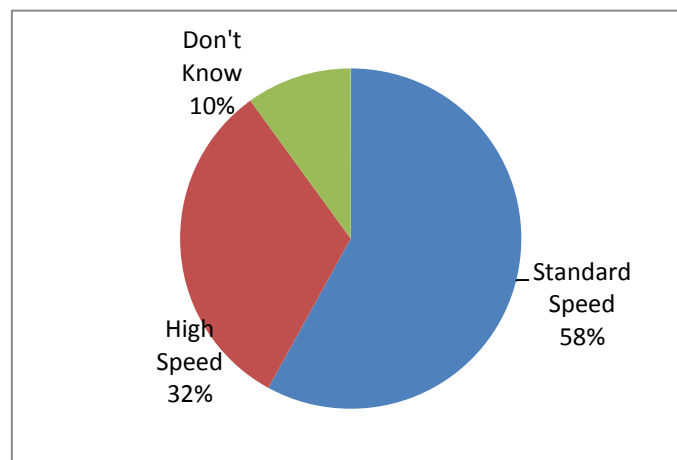
Advanced Users access Internet services similar to users overall and those who use a desktop or laptop computer to access the Internet

Figure 25: Advanced Users Internet Service



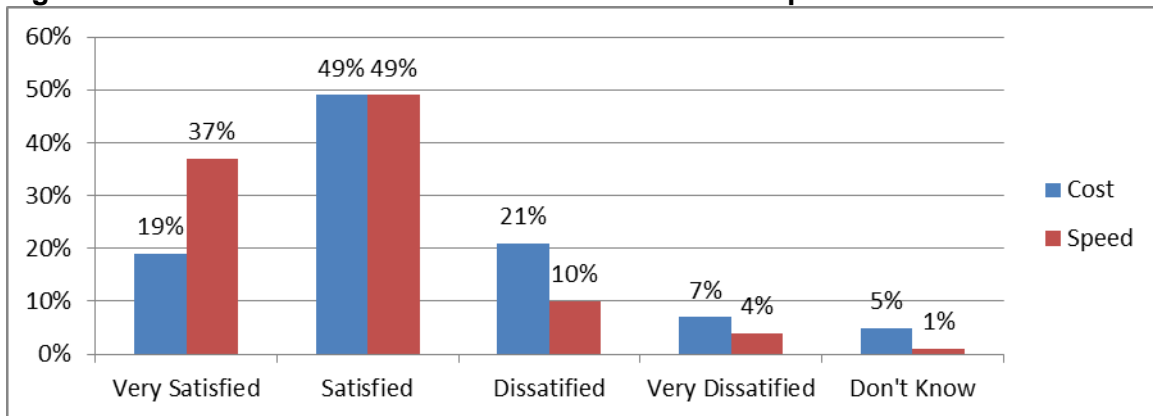
Fifty-eight percent of these Advanced Users are using a standard service to access the Internet; 32 percent are using high speed, and 10 percent do not know what they are using.

Figure 26: Type of Service for Advanced Users



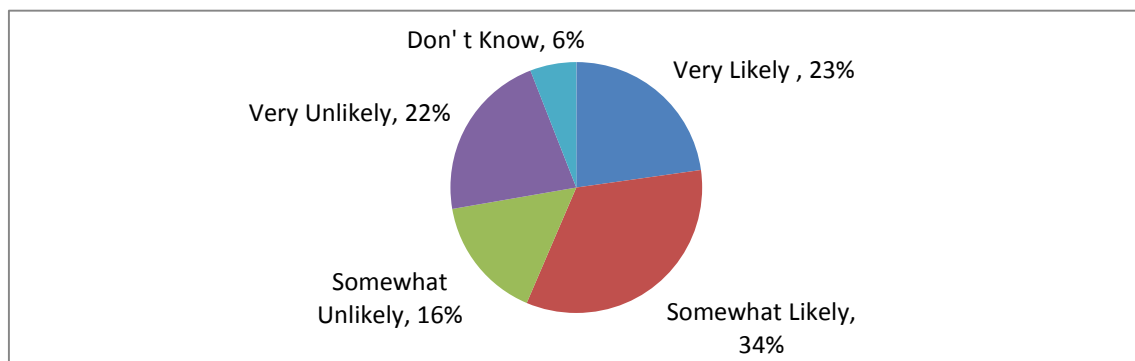
Similar to all Internet users, Advanced Users are very satisfied with the speed of their service (37%) compared to their cost of their service (19%). Fourteen percent of Advanced Users are dissatisfied or very dissatisfied with the speed of their service. Twenty eight percent are dissatisfied or very dissatisfied with the cost of their service.

Figure 27: Advanced Users Satisfaction with Cost and Speed



Among Advanced Users 57 percent say they are likely to upgrade if they could overcome all of their difficulties. This percent is similar to that of overall Internet users. Eighteen percent stated that they have no reason to upgrade.

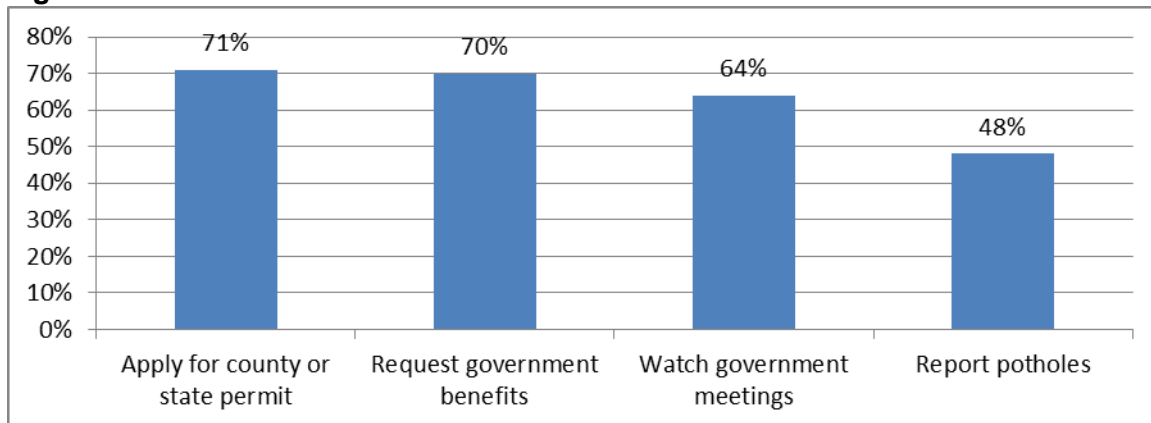
Figure 28: Likelihood to Upgrade for Advanced Users



Awareness of Online Government Services

Overall many respondents are aware that they can use the Internet to access government services.

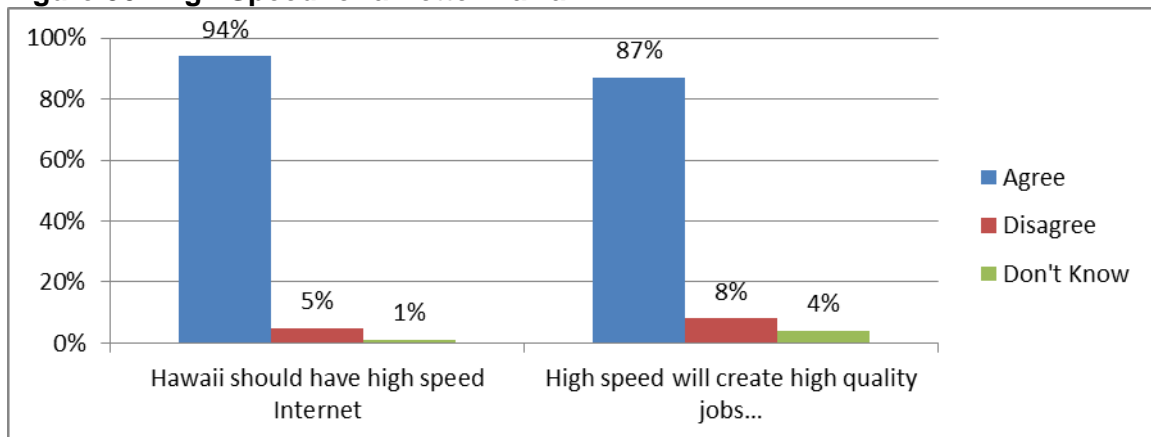
Figure 29: Awareness of Government Online Services



Impact of High Speed Internet on the State

Overall, respondents believe that Hawaii should have high speed Internet infrastructure that can provide service equal to that of the leading developed nations (94%) and that high speed world class Internet will create high quality jobs and help Hawaii diversify its economy (87%).

Figure 30: High Speed for a Better Hawaii



APPENDIX

Appendix 1: Glossary

Advanced Users: Defined for purposes of this report as Internet users who participate in video calls, telecommuting to work, and downloading videos, etc. **Basic Internet Service:** Time Warner Cable uses this term to describe its second lowest level of service at 3/1 Mbps. Term is used generally to describe Internet access speeds below high speed. Offered as a response option as a contrast to high speed.

Bundled Pricing: Service package options combine more than one service, such as Internet, television, and/or phone service, at a lower cost for the package than for each service purchased individually.

Heavy User: Defined for purposes of this report as people who access the Internet more than 10 hours a week

Standard Internet Service: Time Warner Cable uses this term to describe its 15 Mbps down/1 Mbps up service.

Wi-Fi: Wi-Fi is a wireless local area network (WLAN) that enables portable computing devices to connect easily to the Internet. A “hotspot” is a site that offers Internet access over a wireless local area network (WLAN) through an Internet Service Provider.

Appendix 2: Survey Instrument

BROADBAND RESIDENTIAL SURVEY INSTRUMENT

Hello, I'm _____ from SMS Research, a professional market research firm in Honolulu. We're doing a quick survey among Hawaii residents about technology and the Internet in the State of Hawaii. All your responses will remain confidential. Please be aware that the call may be monitored or recorded for quality purposes.

Q1. Are you a resident of the island of (island)?

Yes100%
No (TERMINATE)0%

Q2. What is your age? (IF UNDER 18 TERMINATE)

18 to 2411%
25 to 3418%
35 to 398%
40 to 449%
45 to 499%
50 to 547%
55 to 6417%
65 to 696%
70 or above13%
Don't Know, Refused2%
Mean48 years
Median47 years

Q3. Do you or does anyone in your immediate family work for any of the following types of telecommunications providers?

	Yes	No
Wireless or cell-phone service provider	<input type="radio"/>	100%
Wired Internet service provider (e.g., Oceanic Time Warner or Hawaiian Telcom)	<input type="radio"/>	100%

Q4. In the selection of a home Internet service, are you the primary decision maker, have influence over the decision, or not involved in the decision?

Primary decision maker (Skip to Q5)69%
Influences decision maker (Skip to Q5)30%
Not involved0%

[If "Not Involved"]: Can you please forward us to someone in your home who either is the primary decision-maker or who influences the decision-maker? [If unavailable, TERMINATE.]

Q5. Approximately how many hours per week do you use the Internet for personal use at home?

Zero10%
1-524%
6-1016%
10-2023%
20 or more27%
Refused1%
Mean13 hours
Median7 hours

Q6. Approximately how many hours per week do you use the Internet for business purposes at home and NOT in the office?

Zero42%
1-526%
6-1011%
10-2010%
20 or more10%
Refused1%
Mean6 hours
Median3 hours

Q7. (IF ANSWERED ZERO FOR Q5 and Q6) In the past have you used the Internet in your home?

Yes37%
No63%
DK0 (SKIP TO DEMOGRAPHICS)

Q7a. Why do you not use the Internet in your home (now, if they had it before)? (PROBE) (SKIP TO DEMOGRAPHICS)

Broadband not available in my community 0

[if above, ask] what is your Street or Condo Name: Gardenia Ainaloa Subdivision, Lower Napoopoo Rd., Oceanview Tradewind Blv, Olinda Rd.

Other (list below) 0

I'm too old/Don't know how to use it:20%
I don't have a computer/Do not want or need one:37%
It costs too much4%
Other38%

Q8. Now I would like to ask you some questions about your Internet use.

Q8a. Have you ever used a (INSERT) to access the Internet from home?

Q8b. (FOR THOSE EVER USED) Do you currently use (INSERT) to access the Internet from home?

Q8c. (FOR EACH ONE USED ASK) As far as you know, what type of connection or service do you currently have at home for your (INSERT)?

Q8d. (FOR EACH ONE USED) approximately how many hours a day do you access the Internet using your (INSERT CURRENTLY USE)?

	Q8a Ever Used	Q8b Currently Use	Q8c Type of Connectivity (Cable, Telephone, etc.)	Q8d # Hours Used per Day
Desktop computer	80%	67%	Oceanic Time warner/Roadrunner: 65% DSL/High-speed: 5% Wireless/Wi-Fi: 5% Hawaiian Telecom:7% Cellphone Provider: 3% Broadband: 2% Other: 11% Don't Know: 1%	0-5 hours: 78% 6-10 hours: 15% 10-15 hours: 3% 16+hours: 4% Mean: 4 hours Median: 3 hours
Laptop computer	70%	75%	Oceanic Time warner/Roadrunner: 42% DSL/High-speed: 3% Wireless/Wi-Fi: 21% Hawaiian Telecom:7% Cellphone Provider: 2% Broadband: 2% Other: 13% Don't Know: 10%	0-5 hours: 75% 6-10 hours: 17% 10-15 hours: 4% 16+hours: 3% Mean: 5 hours Median: 3 hours
Smart phone	60%	52%	Oceanic Time warner/Roadrunner: 27% DSL/High-speed: 2% Wireless/Wi-Fi: 30% Hawaiian Telecom:3% Cellphone Provider: 37% Other: 3% Don't Know: 1%	0-5 hours: 86% 6-10 hours: 7% 10-15 hours: 2% 16+hours: 5% Mean: 4 hours Median: 3 hours
Tablet	41%	30%	Oceanic Time warner/Roadrunner: 27% DSL/High-speed: 2% Wireless/Wi-Fi: 30% Hawaiian Telecom:3% Cellphone Provider: 37% Other: 3% Don't Know: 1%	0-5 hours: 91% 6-10 hours: 6% 10-15 hours: 1% 16+hours: 3% Mean: 4 hours Median: 3 hours
Game consoles	23%	42%	Oceanic Time warner/Roadrunner: 58% DSL/High-speed: 3% Wireless/Wi-Fi: 15% Hawaiian Telecom:3% Cellphone Provider: 1% Other: 14% Don't Know: 6%	0-5 hours: 89% 6-10 hours: 3% 10-15 hours: 3% 16+hours: 5% Mean: 4 hours Median: 3 hours
e-book reader	10%	26%	Oceanic Time warner/Roadrunner: 41% DSL/High-speed: 3% Wireless/Wi-Fi: 36% Hawaiian Telecom:8% Cellphone Provider: 6% Other: 5% Don't Know: 0%	0-5 hours: 92% 6-10 hours: 2% 10-15 hours: 2% 16+hours: 4% Mean: 3 hours Median:3 hours

Q9. (If you had a home Internet service before, and now only have mobile phone service, why have you chosen to discontinue your home Internet service) Why do you only access the Internet through a smart phone now?

Only need my phone:9%
 My independent connection:14%
 Have home internet:27%
 Cost:8%
 Other:20%
 Don't Know: 22%

Q10. How many years have you been accessing the Internet for personal use?

1-5 years:19%
 6-10 years:26%
 11-20 years:46%
 21-30 years:6%
 31+ years:2%
 Mean 11 years
 Median 15 years

(FOR THOSE WHO ONLY USE SMART PHONE NOW, SKIP TO DEMOS)

Q11. When you first started using the Internet at home, were you using a dial-up or higher speed Internet services?

Dial-up69%
 Higher speed18%
 Other.....6%
 Don't know.....8%

I would now like to ask you some questions referring only to your home Internet service.

	Much better	Somewhat better	Worse	Much worse	No opinion
Q12. Would you say your home Internet service today is much better, somewhat better, worse or much worse than it was when you first started using a service ____ year(s) ago?	82%	12%	2%	1%	2%
Q13. Would you say the speed of your home Internet service today is much better, somewhat better, worse or much worse than it was ____ year(s) ago?	79%	14%	2%	1%	3%
Q14. Would you say the value you get for the cost of your monthly Internet service plan for your home Internet service today is much better, somewhat better, worse or much worse than it was ____ year(s) ago?	39%	37%	11%	3%	7%

Q15. How would you rate your current household Internet service? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with (INSERT)?

	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied	No opinion
Reliability of Internet service	43%	48%	6%	2%	0%
Customer service provided	38%	48%	5%	2%	7%
Cost	19%	49%	21%	7%	4%
Speed of connectivity	37%	49%	10%	4%	0%
No delays or freezing	27%	52%	15%	4%	2%
Value you get for your monthly plan	26%	48%	17%	5%	3%
Upload time for files	31%	52%	8%	4%	4%
Download time for files	32%	52%	10%	2%	2%

Q16. You stated that you are (INSERT) with your Internet speed, why do you say that?

Very Satisfied

No delays/Never had problems	71%
It could be faster/seems slow	8%
Fine for my uses	10%
Paying too much	2%
Poor connection	0%
Other	8%
Don't Know	0%

Somewhat Satisfied

No delays/Never had problems	12%
It could be faster/seems slow	54%
Fine for my uses	10%
Paying too much	2%
Poor connection	1%
Other	18%
Don't Know	4%

Somewhat Dissatisfied

No delays/Never had problems	2%
It could be faster/seems slow	77%
Fine for my uses	4%
Paying too much	4%
Poor connection	1%
Other	10%
Don't Know	0%

Very Dissatisfied

No delays/Never had problems	0%
It could be faster/seems slow	89%
Fine for my uses	0%
Paying too much	0%
Poor connection	0%
Other	11%
Don't Know	1%

Q17. You stated that you are (INSERT) with your Internet delays or freezes, why do you say that?

Very Satisfied

No delays/Never had problems	71%
Difficulty maintaining connection	2%
It freezes	2%
Inconsistent	3%
Slow/Delayed	2%
Doesn't happen often	6%
Other	12%
Don't Know	0%

Somewhat Satisfied

No delays/Never had problems	16%
Difficulty maintaining connection	5%
It freezes	25%
Inconsistent	7%
Slow/Delayed	13%
Doesn't happen often	5%
Other	24%
Don't Know	2%

Somewhat Dissatisfied

No delays/Never had problems	1%
Difficulty maintaining connection	5%

It freezes	24%
Inconsistent	28%
Slow/Delayed	20%
Doesn't happen often	0%
Other	19%
Don't Know	2%

Very Dissatisfied

No delays/Never had problems	0%
Difficulty maintaining connection	21%
It freezes	24%
Inconsistent	15%
Slow/Delayed	15%
Doesn't happen often	0%
Other	24%
Don't Know	0%

Q18. What is the name of the company that provides your Internet service?

Oceanic Time Warner	66%
Hawaiian Telcom	22%
Earthlink	0%
Lavanet	0%
Aloha Broadband	0%
Clear	5%
Hawaii Broadband	1%
Hawaii Online (now part of Hawaiian Telcom) ..	0%
Sandwich Isles	0%
Satellite broadband (Specify: _____) ..	1%
Comcast	1%

Q19. Have you switched your Internet service provider in the last two years?

Yes	20%
No (SKIP Q19a)	80%

Q19a. What was your primary reason for switching providers? (DO NOT READ OPTIONS)

Cost	36%
Speed	11%
Reliability	7%
Customer Service	2%
Moved to a different area	25%
Other (Specify: Better deal/Bundle)	8%

Q20. Is your home Internet service a standard or basic level Internet service or do you subscribe to higher speed service?

Standard service	58%
Higher speed service	32%
Don't know	10%

Q21. There are various Internet connection speeds for different Internet services. These are often measured in Megabits per second or Mbps. If you know please tell us the speed of your current home Internet service?

1-15:	10%
16-30:	2%
31-50:	6%
51+:	2%
Don't know (Skip to Q23)	82%

Tested speed	17%
Advertised speed	46%
Don't know	38%

Q22. Did you test your Internet connection speed yourself or is this the advertised speed of your Internet service provider?

Q23. Can you tell us how much you pay per month for your home Internet service? If it's bundled (e.g. Internet plus another service), how much do you pay just for your Internet service? (IF DON'T KNOW ASK FOR BUNDLED AMOUNT)

Per Month

\$0-10:	1%
\$11-20:	7%
\$21-30:	15%
\$31-40:	22%
\$41-50:	26%
\$51-60:	11%
\$61-70:	5%
\$71-80:	2%
\$81-90:	7%
\$91-100:	1%
\$101-150:	2%
\$151-200:	1%
\$201+:	0%
Mean.....	\$44
Median.....	\$56

Don't know.....5%

Bundled per month

\$0-10:	5%
\$11-20:	5%
\$21-30:	8%
\$31-40:	7%
\$41-50:	7%
\$51-60:	6%
\$61-70:	4%
\$71-80:	5%
\$81-90:	5%
\$91-100:	8%
\$101-150:	20%
\$151-200:	11%
\$201+:	3%
Mean	\$82
Median	\$84

Q24. People use the home Internet for many different reasons. Do you personally use the Internet at home to (INSERT)?

Q25. You said that you do not use the Internet for (INSERT), how interested would you be in (INSERT) in the future?

	Q24 Yes	Q24 No	Q25 (IF NO) How interested would you be to use it in the future?			
			Very interested	Somewhat interested	Somewhat not interested	Not interested at all
Online training, education courses	34%	66%	18%	30%	12%	40%
Make video phone call such as through Skype or Face Time	48%	52%	16%	24%	13%	46%
Connect with your doctor and your medical information	26%	74%	16%	31%	9%	44%
Download or upload movies, books, videos and pictures or streaming music or video content	72%	27%	16%	19%	16%	48%
Play games online via a game console (such as Xbox, Wii, Playstation)	30%	70%	2%	12%	13%	73%
Operate a home-based business	25%	75%	10%	26%	8%	55%
Telecommute or telework	19%	80%	8%	25%	12%	55%
Search or apply for a job	45%	55%	18%	16%	12%	55%
Email	99%	1%	12%	17%	26%	46%
Search for Information	98%	2%	0%	25%	0%	59%
Social networking	75%	25%	0%	3%	13%	84%
Pay bills, online banking, shopping, paypal	87%	13%	7%	10%	16%	67%

Q26. What else do you use the Internet for?

Pay bills/banking:3%
 Order products:11%
 Email/Social network:30%
 Own business/work:10%
 Read/Research/News:22%
 Genealogy Search:1%
 Watch TV:3%
 Travel purposes:1%
 Marketing/Writing/Branding:1%
 Stock:1%
 Other:13%
 Don't Know:2%

Q27. (IF NO TO ANY Q24 "X" OPTIONS) You mentioned a few things you are interested in doing like (STATE TOPIC FROM Q24) and you are not now, why not?

Not Interested/Don't need it:37%
 Time constraints/busy:13%
 Costs too much:1%
 Sensitive information:1%
 Still learning to use the computer/internet:3%
 Too old/retired/disabled:1%
 Other:35%
 Don't Know:8%

Q28. Which of the following issues do you currently encounter when using your home Internet service? (MARK ALL THAT APPLY)

Netflix/Hulu/YouTube videos stutter or stop while I watch24%
 Video files take too long (30 minutes or more) to download.....7%
 Photo and video files take too long to upload..14%
 Internet is slow when multiple members in my household are on at the same time18%
 Internet is slow at lunch and/or right after work15%
 Other (Specify:.....).....1%
 Too many popups1%
 Can't get on at night5%
 Slow connection.....9%
 No issues6%

Q29. How much extra time per day does it take to conduct your normal Internet activities when the Internet is slow?

None:40%
 One:11%
 Two:4%
 Three:5%
 4-8:5%
 8+:1%
 Don't Know:34%
 Mean3 Hours
 Median1 Hour

Q30. If you learned that you could overcome all the issues you just mentioned, plus do all the things you said you were interested in with an upgrade, how likely would you be to upgrade to a higher speed Internet service?

Very likely23%
 Somewhat likely34%
 Somewhat unlikely (skip to Q31)16%
 Very Unlikely (skip to Q31)22%

Q30a. What two activities would make you most likely to consider upgrading your home Internet service?

Faster/Speed:40%
 If I used it more: 1%
 Costs less:21%
 Reliable & Consistent:1%
 Good Service:1%
 I have no reason to:18%
 Other:13%
 Don't know:6%

Q31. What would you consider to be a reasonable monthly cost increase for this higher speed home Internet service?

\$0-10:35%
 \$11-20:13%
 \$21-30:7%
 \$31-40:2%
 \$41-50:7%
 \$51+:3%
 Don't Know:34%
 Mean\$16
 Median\$5

Q32. What would be the maximum monthly cost increase acceptable to you for this higher speed home Internet service?

\$0-10:19%
 \$11-20:24%
 \$21-30:10%
 \$31-40:3%
 \$41-50:11%
 \$51+:10%
 Don't Know:24%
 Mean\$17
 Median\$26

Q33. Did you know that you can (insert) via the Internet?

	Yes	No
Report potholes or other issues to your County	48%	51%
Watch a government meeting or hearing	64%	35%
Apply for a county or state permit or license	71%	29%
Request government benefits (such as social security or unemployment)	71%	29%

Q34. Please tell us if you strongly agree, agree, disagree, or strongly disagree with the following statements.

	Strongly agree	Agree	Disagree	Strongly disagree
Hawaii should have high speed Internet infrastructure that can provide service equal to that of the leading developed nations	61%	33%	2%	1%
Access to world class high speed Internet will create high quality jobs and help Hawaii diversify its economy	47%	40%	7%	1%

Q35. Including yourself, how many people are there in your household?

1:14%
 2:26%
 3:18%
 4:17%
 5:11%
 6:8%
 7:1%
 10+:1%
 Don't know:1%
 Mean3 people
 Median4 people

Q36. Including yourself, how many people in this household use the Internet on a daily basis?

1:22%
 2:32%
 3:17%
 4:14%
 5:5%
 6:3%
 7:1%
 10+:0%
 Don't know:6%
 Mean3 people
 Median4 people

Q37. And how many children under 18 years of age are there in your household?

One	20%
Two	15%
Three	8%
Four	2%
Five or more	1%
None	53%
Refused	1%
Mean	2 children
Median	2 children

Q38. How many years have you lived in Hawaii?

Less than one year	3%
One to four years	12%
Five to nine years	7%
10 to 19 years	9%
20 years or more	23%
Born and raised here	47%
Don't Know	0%
Refused	0%
Mean	43 years
Median	30 years

Q39. What was the highest education level you completed?

Less than high school	1%
High school graduate	21%
Business/Trade school	5%
Some college	20%
College graduate/Post graduate	52%
Don't Know	0%
Refused	0%

Q40. Could you tell me your marital status?

Currently Married	52%
Currently Single	33%
Divorced, separated, widow	11%
Other response	2%
Don't Know/Refused	2%

Q41. Which background do you identify with most? (IF MIXED: Are you part Hawaiian?) (READ LIST)

Caucasian	31%
Chinese	5%
Filipino	9%
Hawaiian/Part-Hawaiian	17%
Japanese	18%
Korean	1%
Samoan	3%
Hispanic Latino	2%
Mixed	6%
Other (Specify:)	6%
Don't Know/Refused	3%

Q42. Could you tell me approximately the total annual income of your household in 2012? (READ LIST)

Less than \$15,000	7%
\$15,000 but less than \$25,000	7%
\$25,000 but less than \$35,000	6%
\$35,000 but less than \$50,000	13%
\$50,000 but less than \$75,000	15%
\$75,000 but less than \$100,000	18%
\$100,000 and over	2%
Don't Know/Refused	18%
Mean	\$70,858
Median	\$62,500

Q43. What is your residential zipcode? 9□□□□

Oahu:	70%
Maui:	11%
Hawaii:	14%
Kauai:	5%

Q44. (NOTE SEX IF OBVIOUS FROM THE VOICE. IF IN DOUBT, ASK THE FOLLOWING QUESTION) Am I speaking to a man or a woman?

Male	47%
Female	52%

Thank you and have a nice morning/afternoon/evening.