

# 2014 Vermont Residential Telecommunications Survey Report

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Prepared for the Vermont Public Service Department

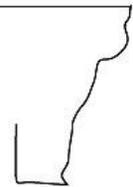
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August 2014

**CASTLETON POLLING INSTITUTE**

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*Amplifying the Voices of Vermont*



**Table of Contents**

Introduction ..... 2

Summary results ..... 2

Internet ..... 3

Landline Telephone Service ..... 9

Cell Phone Service ..... 12

Television Services ..... 15

Demographics ..... 16

## Introduction

The Polling Institute at Castleton College conducted two independent surveys for the Vermont Public Service Department to measure the public's use of and satisfaction with telecommunications throughout the state. The surveys covered a wide array of issues, including internet, television, cell phone, and traditional landline phone access.

The residential survey began on June 25 and ended on July 10, 2014. Respondents were chosen using random selection from a dual-frame sample of all landlines and cell phones in the 802 area code. Respondents within households were selected by asking for the individual "who knows the most about the household's telephone and computer activities." Consequently, the gender and age distributions in the final sample do not match the state's gender distribution, and the survey should be seen as representative of households, not individuals.

## Summary results

- Seventy-four percent of Vermont households purchase broadband Internet access, up from 56 percent in 2012.
- Half of all respondents pay \$60 per month or less for their Internet service, but because of bundling, many respondents reported their overall monthly payments that include other services, such as cable television.
- Comcast and FairPoint remain the two most common Internet service providers for Vermont households.
- About two-thirds of Vermont households consider the landline to be their primary telephone service, although about three-quarters of landline users also use a cell phone.
- Verizon is the most prevalent cell phone provider (45 percent); AT&T provides service to 39 percent of households.
- A plurality of households (42 percent) get their television service through cable; 34 percent get television via satellite, and 9 percent get television service through the Internet.

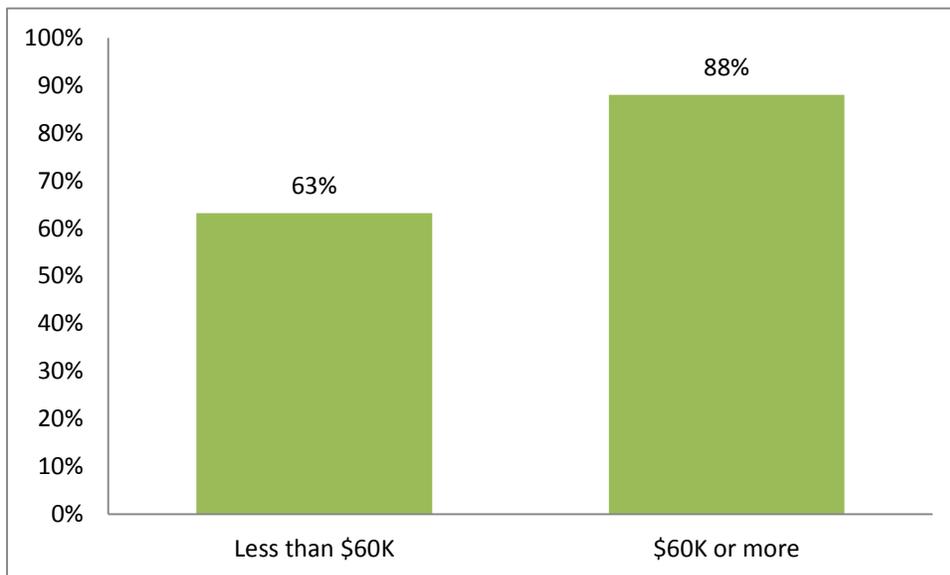
## Internet

A super-majority of Vermonters (85 percent) believes that broadband Internet access is available where they live, whether or not they subscribe to a service. In the Northeast Kingdom, only 76 percent believe that broadband access is available to them, and households with income below \$60K are less likely to believe that broadband access is available to them where they live than are those from households earning more than \$60K (81 percent to 91 percent, respectively).

About three-quarters of all households surveyed (74 percent) say that they purchase broadband access at their homes. Naturally, higher-income households are more likely to purchase broadband access than are lower income households (see illustration below), and those living in the Champlain Valley are most likely to purchase broadband access. The most prevalent response to the question, “Why don’t you purchase broadband Internet access at home?” is that they do not really want it or that they don’t have a computer. Several respondents cited access limited to dial up connections as their primary reason, and about an equal number cited the costs as the primary reason for not purchasing broadband access.

For the 24 percent who do not purchase the Internet at home, only 6 percent (1 percent of the entire sample) say that they plan to purchase it within the coming year; the majority of those who do not purchase the internet at home (64 percent of non-purchasers, 16 percent of the overall sample) say that they will never purchase Internet services. Older respondents were more likely to say that they will never purchase broadband access.

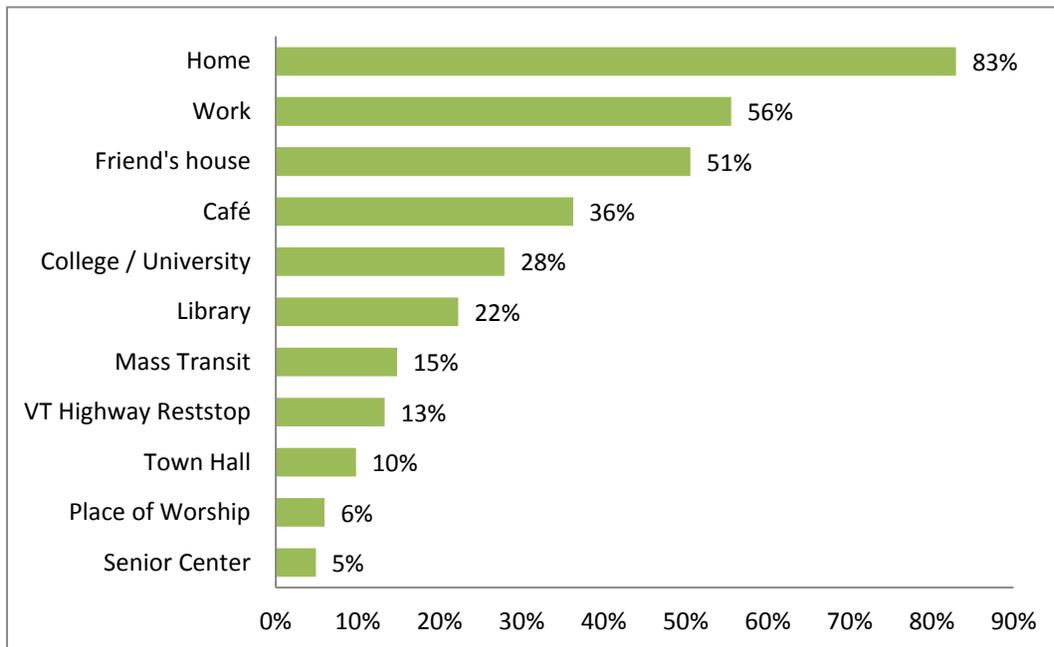
Figure 1. Percent of Vermont households that purchase broadband Internet access, by Income



Eighty-three percent of residential respondents said that they use the Internet at home.<sup>1</sup> Not surprisingly, the percentage using the Internet at home increases with the level of household income. In households with incomes below \$60K, 75 percent use the Internet at home, whereas in households with incomes above \$60K, 96 percent use the Internet at home. In addition, households with no children were less likely to report using the Internet at home (82 percent) than were households where children are present (94 percent).

Just over half of residential respondents (56 percent) also use the Internet at work; this also differs dramatically by income, with 40 percent of those with household incomes below \$60K and 77 percent of those with incomes above \$60K using the Internet at work. Figure 2 (below) illustrates the various places where Vermonters access the Internet.

**Figure 2. Percent of Respondents using the Internet at places**

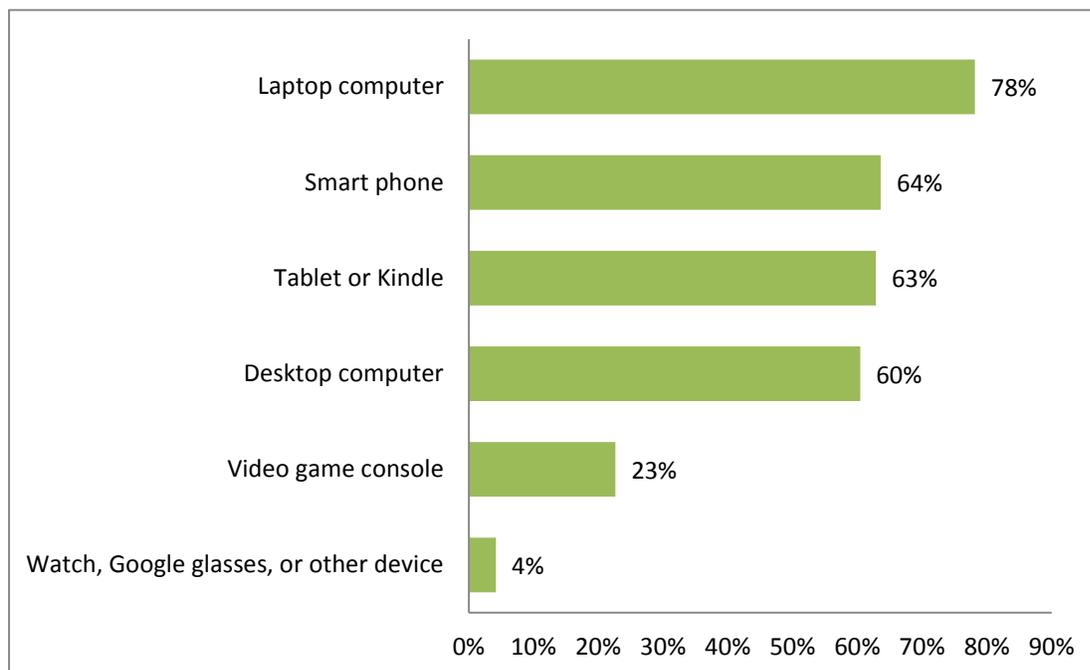


For the majority of households (74 percent), every member of the household uses the Internet, and 77 percent of respondents report using it daily—about the same as in the 2012 survey where 76 percent reported using the Internet daily. One small change is that respondents in the Northeast Kingdom and in Central Vermont are more likely to report using the Internet daily today than in 2012 (by magnitudes close to 10 percentage points). The most common reason why respondents do not use the Internet more frequently than they do is that they don't see a need for it.

<sup>1</sup> The difference between the percent who purchase broadband access at home (74 percent) and the percent that use the Internet at home (83 percent) is the result of residents receiving access at their home that they do not personally purchase, accessing the Internet with their smartphone data plans, and accessing the Internet with dial-up service.

The most common device used at home to connect to the Internet is the laptop computer; 78 percent of households connect via laptops, followed by smart phones (64 percent), tablets or Kindles (63 percent), and desktop computers (60 percent). In 83 percent of the households surveyed, multiple members of the household connect to the Internet simultaneously over different devices.

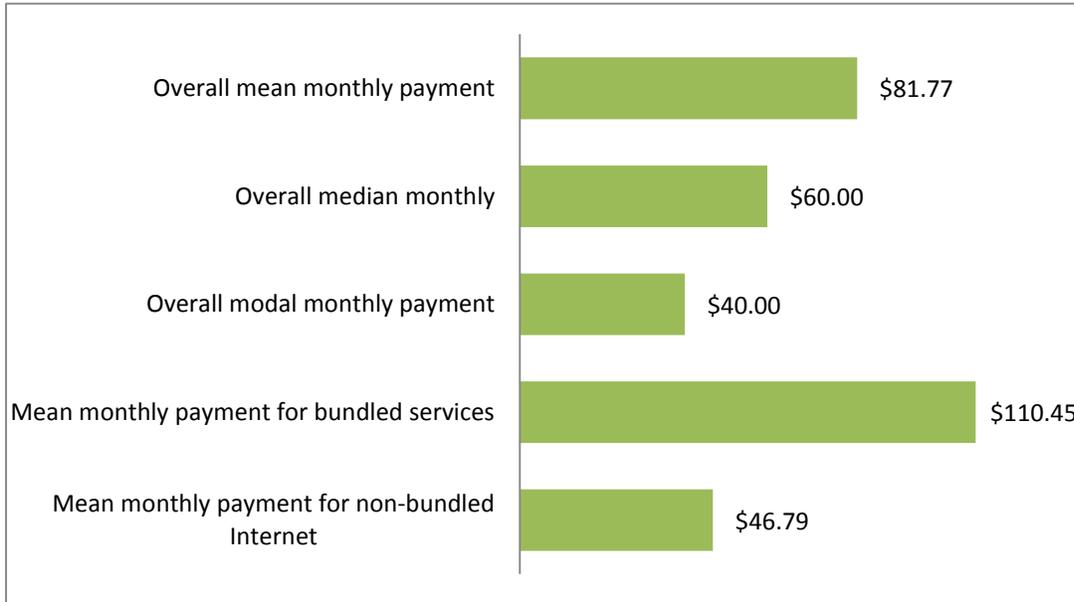
Figure 3. Devices used to connect to the Internet at home



As in the 2012 survey, Comcast and Fairpoint are by far the most prevalent providers of Internet service to Vermont residents (used by 27 and 23 percent, respectively), although the number of residents for whom Comcast is the provider dropped significantly from the 40 percent level cited in the 2012 study; the percent for whom Fairpoint provides their primary connection to the Internet, on the other hand, remains steady from the prior study.

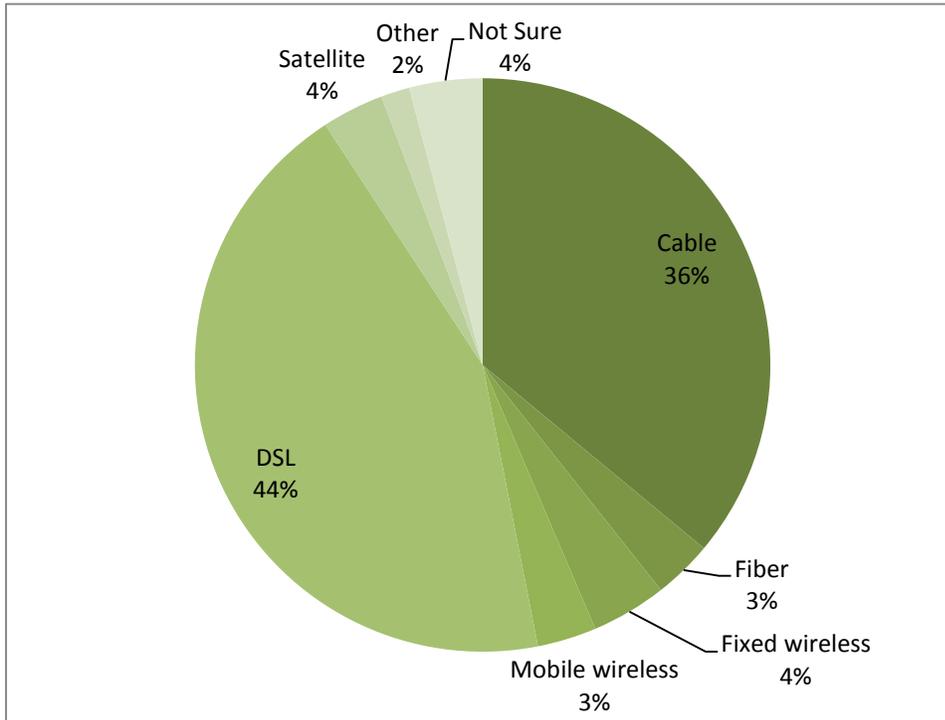
Vermonters, on average, report paying \$81.77 for their Internet service—a 68 percent increase over the \$48.54 average measured in the 2012 survey; however, the reported costs were often what is paid for bundled packages that include services beyond the provision of Internet access. When separating bundled packages from non-bundled, it appears that there have been little change in the cost since 2012, as illustrated by Figure 4. Half of all respondents pay \$60 per month or less; the modal response was \$40 per month. Forty-eight percent of those who purchase Internet service for the home have a bundled package.

Figure 4. Average monthly payment for Internet service



DSL and Cable are the two primary ways that Vermont residents connect to the Internet from their homes, with 44 percent connecting with DSL and 36 percent connecting with cable. Only 6 percent of Vermont households have a secondary means for accessing the Internet in the event that their primary source goes down.

Figure 5. Means of connecting to the Internet from home

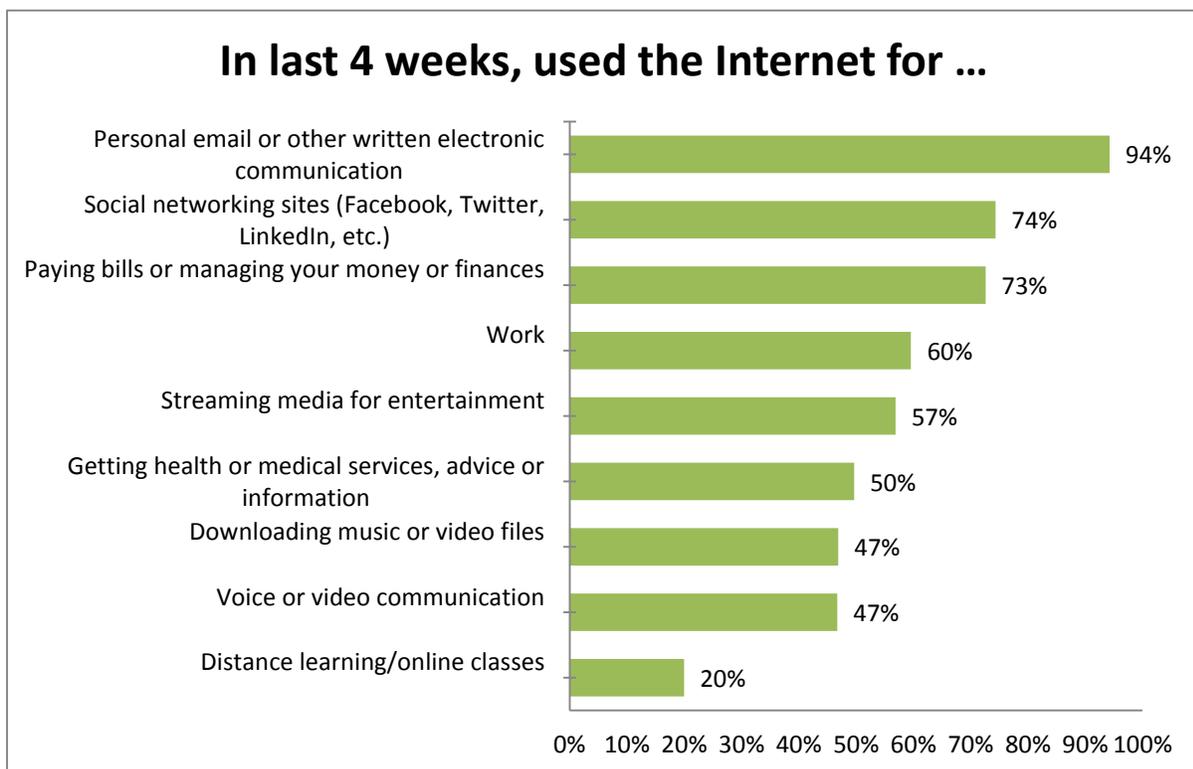


While only 3 percent of our survey respondents say that they connect to the web via fiber, 47 percent say that they would like to have a fiber connection to their home. Before asking respondents, interviewers noted the benefits of fiber in terms of speed. Of those who said that they would like to have a fiber connection, 26 percent said that they wouldn't pay more than they are currently paying for access to the Internet, but 11 percent said that they would pay an additional \$5 per month, 22 percent said that they would pay an additional \$10 per month, and 19 percent said that they would pay an additional \$20 per month. Another 8 percent said that they would willingly pay \$30 or \$40 per month for the additional benefits of a fiber connection.

Sixteen percent of households that already have broadband Internet service to their homes say that they are likely to upgrade their service for faster speed in the next year.

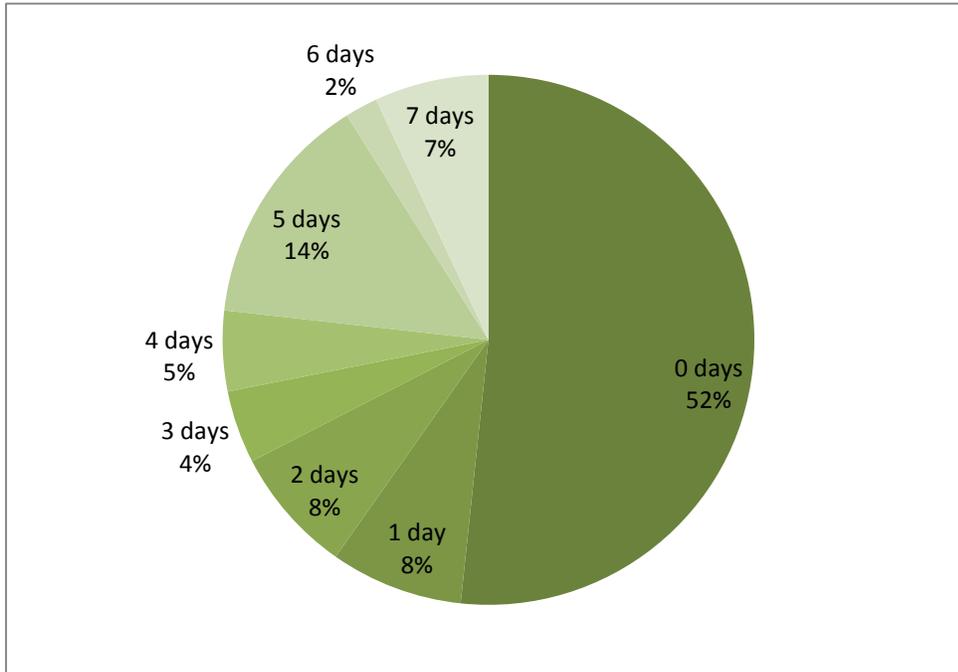
Email and other electronic communication are still the most common use of the Internet for Vermont residents; 96 percent used the Internet for email, same as in 2012. The percent that use the Internet for voice or video conferencing rose 25 percentage point since 2012, social networking rose 12 percentage points, and using the Internet for work rose by 10 percentage points since 2012.

Figure 6. How Vermont households use the Internet at home



Of those who work for pay, 52 percent did not work from a home office at all in the prior week, and 23 percent worked from a home office 5 or more days.

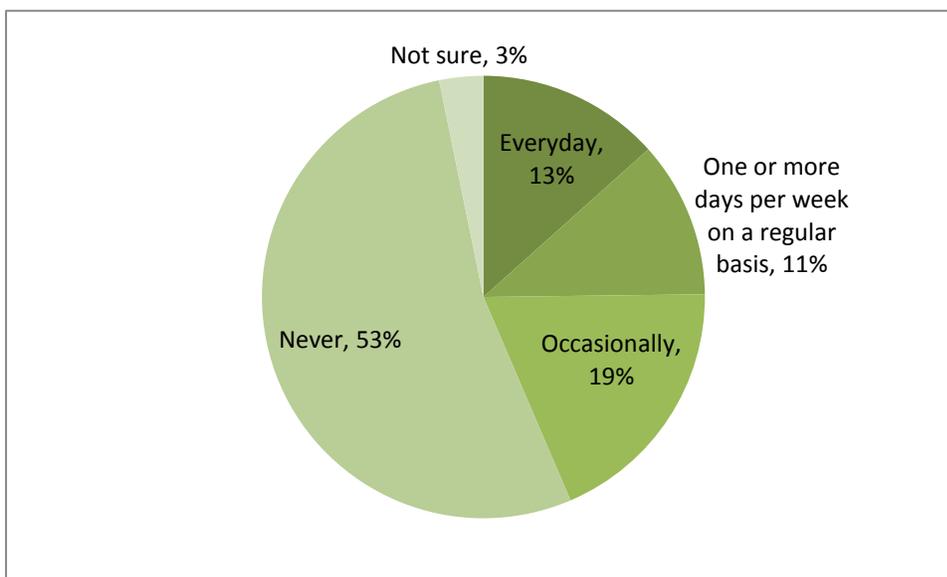
Figure 7. Number of days in the past week worked from home office



A majority of those who are in the workforce spend less than half of their time online or on the phone; in fact, 11 percent spend no time at work online or on the phone. On the other hand, 22 percent say that they spend most of their work time online or on the phone.

The majority of those in the workforce in our survey never telecommute, and of this group, 97 percent say that they will not be telecommuting in the near future.

Figure 8. Frequency of telecommuting for Vermont workers

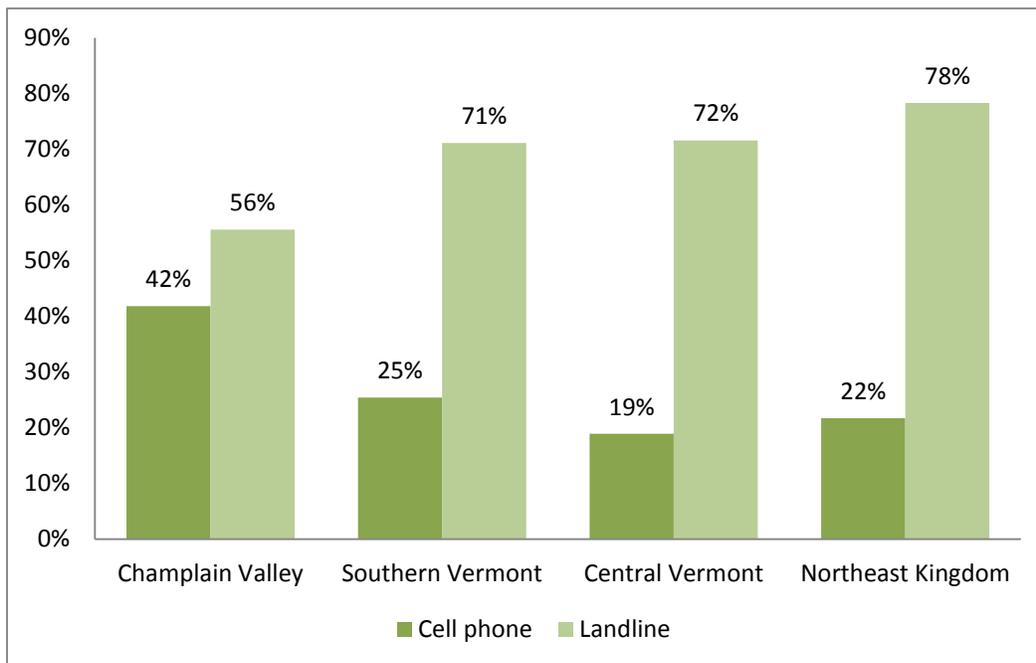


While 69 percent of respondents say that there are computers with free access to the Internet available in their community, only 20 percent of those with the resources in their communities have made use of them. Lastly, of the small group that have used the free access resources in their communities, 76 percent say that they have no trouble getting access to the computers when needed, although 45 percent also say that their community needs more terminals for public use.

## Landline Telephone Service

Nearly two-thirds of Vermont residents (66 percent) consider their landline to be their primary telephone service. Regionally, however, the picture looks very different. Only 56 percent of residents in the Champlain Valley consider their landline to be their primary phone, whereas landline is the primary service for more than 70 percent of the households in the other three regions (see Figure 9).

Figure 9. Primary Telephone Service, by Region



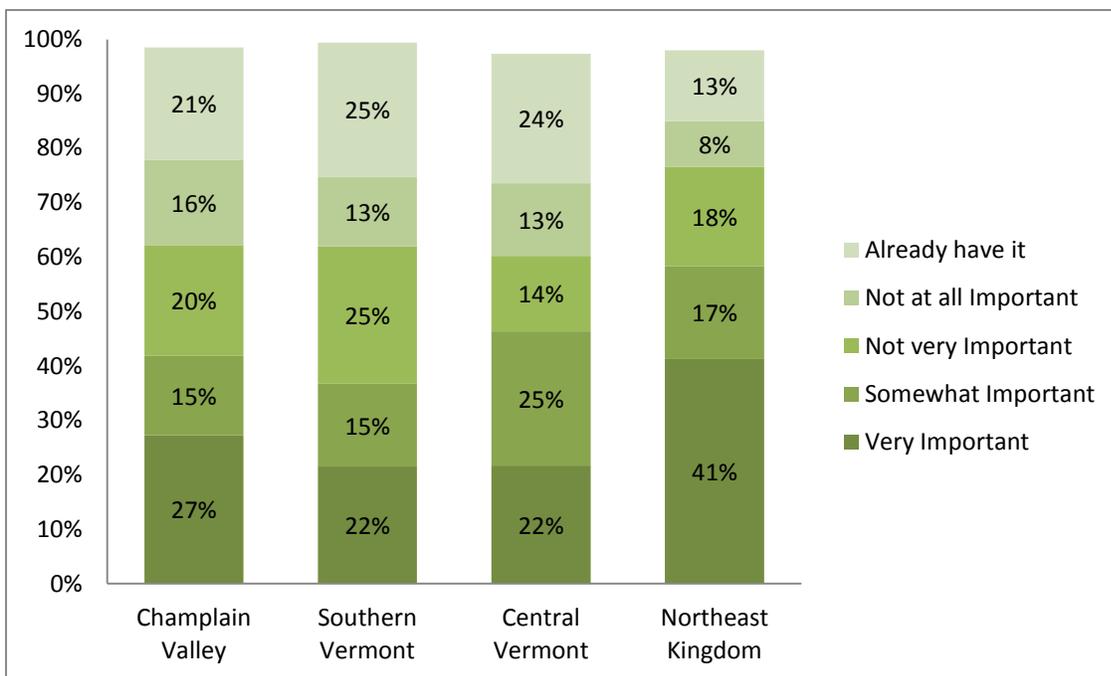
The most prevalent provider of landline service is FairPoint (52 percent of landline households), distantly followed by Comcast (20 percent of households). FairPoint's share of the market has grown significantly from the figures in the 2012 survey, while Comcast's market share has remained stable. The changes in landline market share must be seen in light of the trend toward cell-phone-only households—the denominator in the equation is declining.

Overall, landline subscribers are very satisfied (47 percent) or satisfied (39 percent) with their local telephone provider, although only 37 percent of FairPoint's customers say that they are very satisfied. Ninety-five percent of landline customers are either very satisfied (40 percent) or satisfied (45 percent) with the products and service selections available from their provider, and 69 percent are either very

satisfied (42 percent) or somewhat satisfied (27 percent) with the time it takes for their landline provider to resolve an issue. As far as the ease of understanding the monthly bill, 14 percent of the survey respondents say that it is either somewhat difficult (11 percent) or very difficult (3 percent) to understand the bill; a majority (54 percent) say that the bill is very easy to understand.

Toll calls present a larger problem for some Vermont residents than for others. Only 43 percent of all respondents say that it is either very important (26 percent) or somewhat important (17 percent) to have the entire state as a local calling area; however, in the Northeast Kingdom, 58 percent say that it is either very important (41 percent) or somewhat important (17 percent). Residents of the Northeast Kingdom are also the least likely to have a state-wide local calling area (22 percent for Vermonters generally, but only 13 percent of Northeast Kingdom households). Although only 23 percent of respondents overall say that they would be willing to pay more for local service to have the entire state as their local calling area, 41 percent of those for whom it is very important say that they would pay an additional cost.

**Figure 10. Importance of having the entire state as a local calling area, by region**



The vast majority of landline customers do not expect to make any changes in their service in the near future. Only 5 percent said that they may drop a phone line in the next 6 months, and 3 percent said that they are likely to drop landline service completely in the next year.

All survey respondents were read the following statement and question: “Due to recent FCC changes, the Federal government will reduce financial support for telephone service for many high-cost rural areas. How important is it for the state to fund such high cost, rural service?” Phrased in a way that puts the burden on the state, 72 percent of respondents said that it is either very important (48 percent) or

somewhat important (24 percent) for the state to fund high-cost rural service. Only 9 percent said that it was not very important

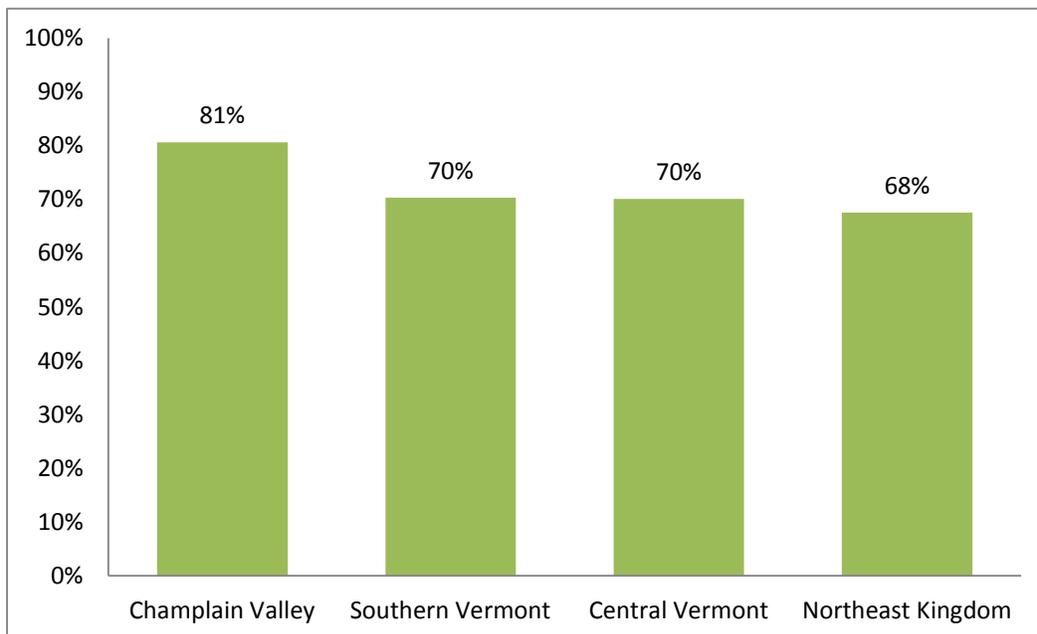
In addition, a plurality (45 percent) believes that telephone rates for all Vermonters should be increased in order to cover high-cost rural service, with 41 percent opposing any increase and 13 percent unsure. Phrased another way that puts the burden on rural rate payers, a slim majority (52 percent) disagree with the idea that rates for rural areas should be increased to offset the need to raise service charges on all Vermonters.

**Table 1. Attitudes about sharing the burden of delivering telephone service to high-cost rural areas**

	Yes	No	No opinion
<b>Increase rates for all Vermonters to cover high cost, rural service</b>	45%	41%	13%
<b>Increase rates for rural residents to offset the need to raise service charges on all Vermonters</b>	31%	52%	17%

About three-quarters of all landline customers in our sample also use a cell phone, although as Figure 11 illustrates, it does vary by region. Thirty-six percent of survey respondents receive the majority of their calls on their cell phone, while 60 percent receive the majority on a landline.

**Figure 11. Percent of respondents with a landline phone who also use a cell phone, by region**



## Cell Phone Service

The vast majority of those without a cell phone (69 percent, n=120) say that they either do not need or do not want one for a wide variety of reasons; however, about 31 percent say that they do not own a cell phone because of the cost or the perception that the service (signal) is poor. The average number of cell phones per household in Vermont is 2.39, which is also about the average number of individuals per household.

In our sample, only 12 percent of households are classified as “cell-phone only” households, although the National Health Statistics Report (No. 70, December 2013) estimates the percent of households in Vermont that are “cell phone only” is close to 30 percent.<sup>2</sup> While we recognize that we are underestimating the number of cell-phone-only households, it is useful still to explore the relationship between cell-phone-only households and other variables. The majority of cell-phone-only respondents who have dropped a landline in the past would never go back to a landline; 12 percent of cell-phone-only respondents have never had a landline.

The most prevalent provider of residential cell phone service in Vermont is Verizon, providing service to 45 percent of the cell phone users, followed by AT&T, providing service to 39 percent. Forty-five percent of AT&T subscribers are aware that Verizon provides service in their area, and 42 percent of Verizon subscribers are aware of AT&T in their area.

In addition to voice, 85 percent of Vermont residential cell phone users have plans that include texting, and 73 percent have plans that include data. Not surprisingly, data plans, and to a lesser extent texting plans, are more common with subscribers from wealthier households.

The average monthly cell phone bill, according to survey respondents, is \$109.82. Naturally, this amount varies by region and household income. The following figures illustrate those differences.

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<sup>2</sup> The data in the National Health Statistics Report come from a number of sources, including the National Health Interview Survey (2007-2012), the U.S. Census Bureau’s American Community Survey (2006-2011) and infoUSA.com consumer database (2007-2012). The model based on a longitudinal approach and large samples from the data sources used in the National Health Statistics Report generates the best estimates for wireless substitution rates in the states. The National Health Statistics Reports are produced by the Center for Disease Control and Prevention and the National Center for Health Statistics.

Figure 12. Average monthly cell phone bill, by region

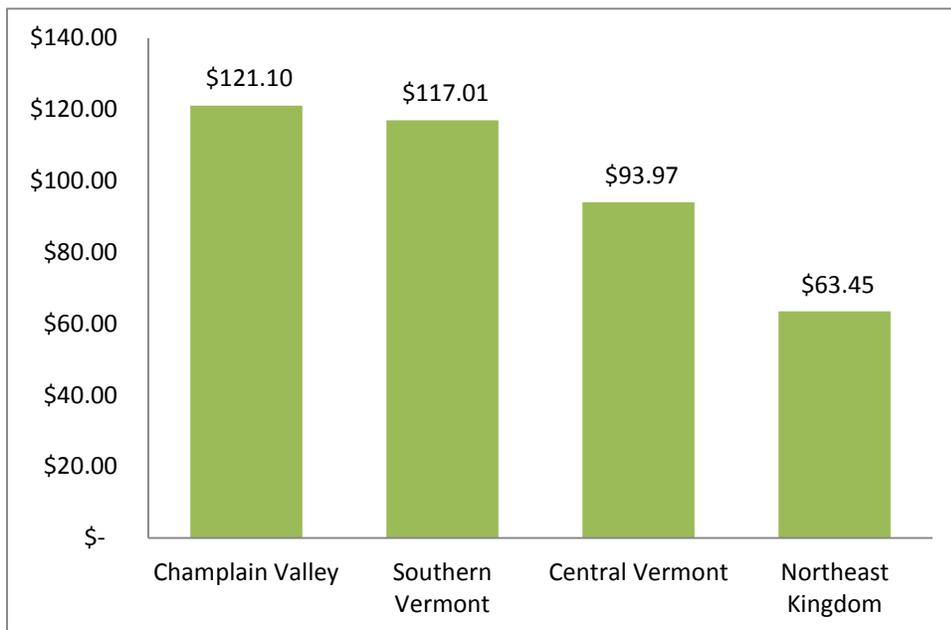
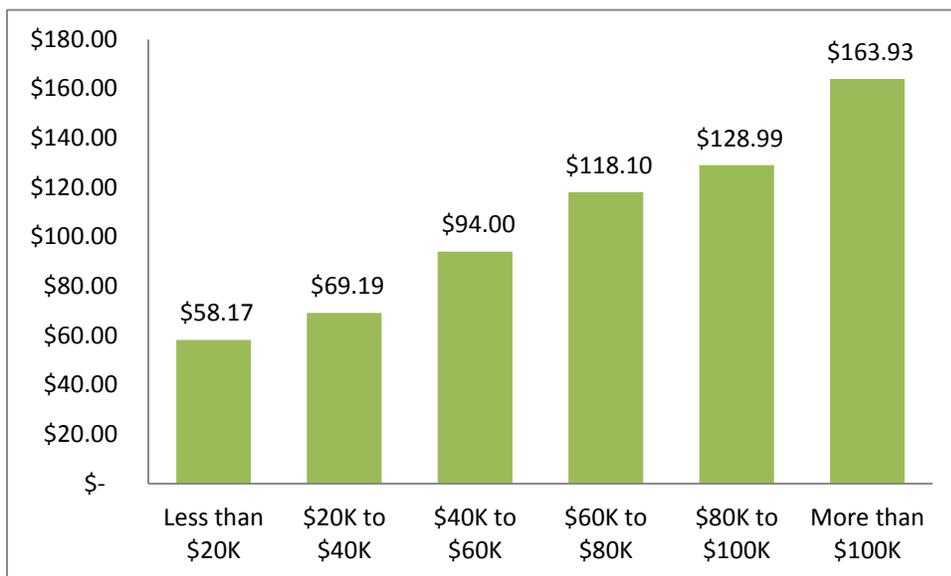
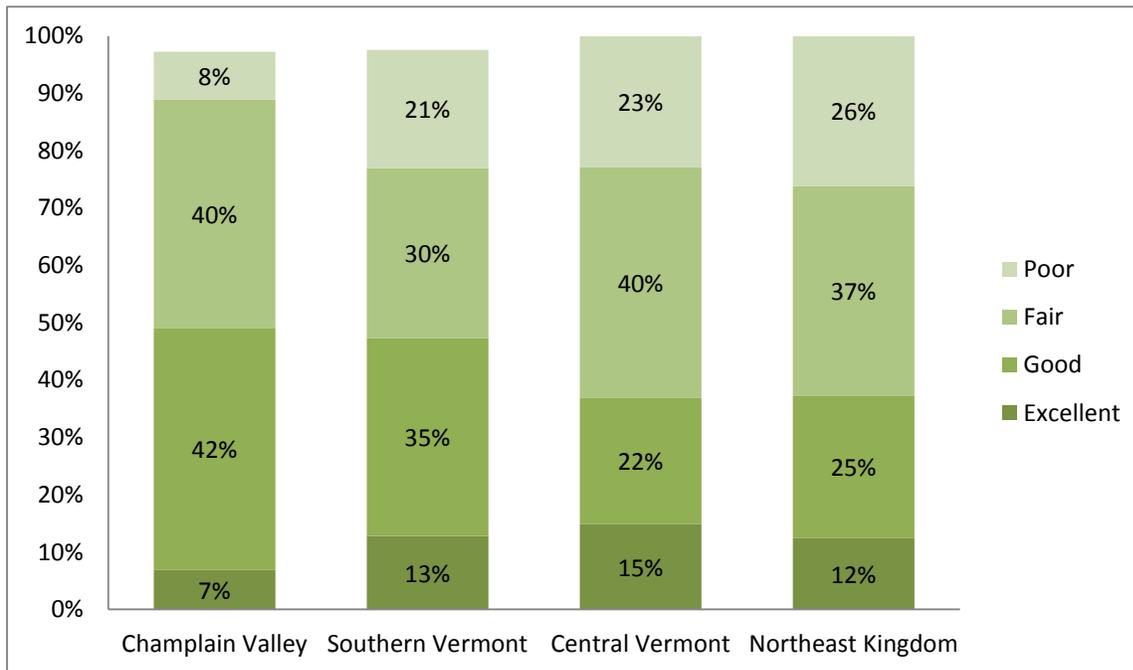


Figure 13. Average monthly cell phone bill, by household income



A slight majority of cell phone users rates the cell phone signal coverage across the state as either fair (37 percent) or poor (16 percent), while nearly as many rate service as either excellent (11 percent) or good (35 percent). Cell phone users in the Champlain Valley and Southern Vermont rate the coverage across the state more favorably than do those Central Vermont and in the Northeast Kingdom, as illustrated by Figure 14.

Figure 14. Rating the state-wide cell phone coverage, by region



A majority of cell phone users (57 percent) believe that where cell phone service is available, it is just as reliable as landline service, and 38 percent believe it is not as reliable. A vast majority of Vermonters (80 percent) favor adding more cell towers to increase coverage across the state. Support for adding cell towers is greatest in the Northeast Kingdom (93 percent). When it comes to adding towers, 43 percent prefer installing a large number of shorter towers to a smaller number of tall towers (33 percent); 17 percent are ambivalent about the types of towers. Eighty-five percent of Vermonters support building more towers “if it were necessary to improve two-way mobile radio communications for police, ambulance, or fire services.”

About three in ten Vermonters (29 percent) have used telephone service provided by a cable company. The most prevalent provider of this service is Comcast, providing to 79 percent of those who have used it; Charter provided the service to 6 percent.

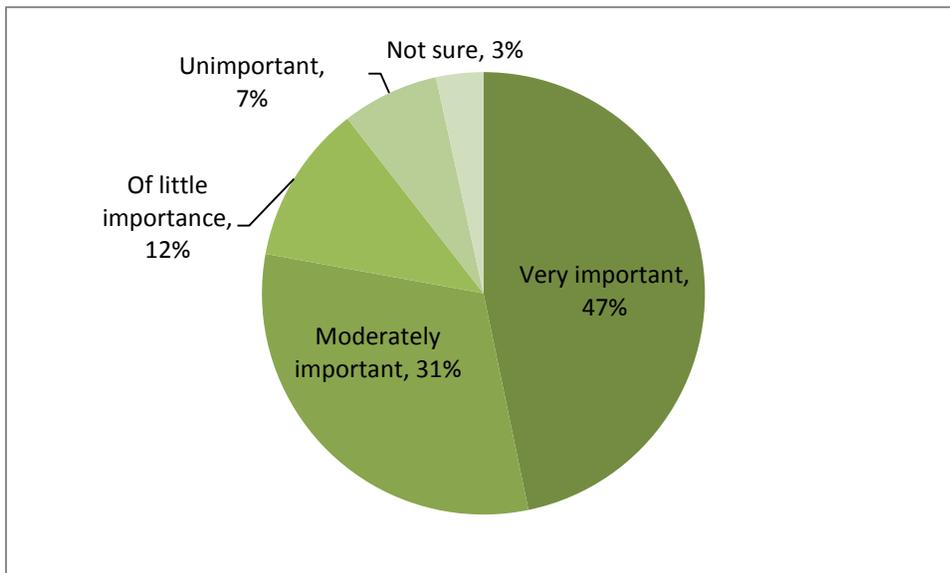
Nomadic VoIP is popular among Vermont adults younger than 55. Overall, 42 percent of Vermonters say that they have used a Nomadic VoIP service to make calls, but among those under 55 years old, a majority used Nomadic VoIP services. Among those who have used Nomadic VoIP, 68 percent have used video chat through that service.

### Television Services

On average, survey respondents have two televisions in their respective homes. A plurality of Vermonters (42 percent) get their TV service through cable; another 34 percent subscribe to satellite service, 9 percent get access through Internet TV, and 5 percent use a broadcast antenna. More than two-thirds of respondents with TVs in the home (68 percent) say that they have watched a public access channel, although the majority (52 percent) have watched less than an hour per week in the last year, and 28 percent say that they watched one to two hours per week. Of those who have watched a public access channel, 28 percent say that they have watched a town meeting on at least one occasion.

Regardless of the extent to which Vermonters watch public access channels, there is support for the value of having them. Of those who have watched public access television, just shy of a majority (47 percent) say that it is very important to have them available, and another 31 percent say that it is moderately important to have them available.

Figure 15. Importance of public access channels, as judged by those who have watched them



## Demographics

The sample demographics skew more female and older than the general population, but these data have been weighted to reflect household characteristics in terms of income and regions. All 14 counties in the state are represented proportional to their population size. The tables below show the distribution of select demographics.

### Gender of respondent

Male	204	41%
Female	300	59%

### Education level of respondent

Less than HS	15	3%
HS diploma	137	27%
Some college	81	16%
College degree	157	31%
Some post-graduate work	18	3%
Post-graduate degree	92	18%

### Age of respondent

18 - 24	18	4%
25 - 34	36	7%
35 - 44	50	10%
45 - 54	86	17%
55 - 64	123	25%
65 or older	185	37%

### Household income

Less than \$20K	36	8%
\$20K to \$40K	96	22%
\$40K to \$60K	90	21%
\$60K to \$80K	86	20%
\$80K to \$100K	41	9%
More than \$100K	83	19%