# CONNECT SOUTH CAROLINA
# FINAL GRANT REPORT

JANUARY
2015

## LETTER FROM THE EXECUTIVE DIRECTOR

History is a wonderful teacher. In 1829, Boston's Tremont House became the first public building in the United States to feature indoor running water. In the 1920's, only 1% of U.S. households featured both electricity and water; however, nearly 30% had access to telephones. It wasn't until 1933 that electricity came to rural America due to President Roosevelt's Tennessee Valley Authority. Interestingly, electricity was necessary before fresh water because electric pumps were required to move the water.

With that as background, can you imagine growing up in a house that featured electricity, running water, and a telephone versus a home that was completely disconnected? Can you imagine the opportunity gap of that era?

Now, fast forward over eighty years to today and ask the same questions regarding broadband!

Can you imagine growing up in a house that features broadband internet versus a home that is disconnected? Can you imagine the opportunity gap of this era and the magnitude of this digital divide?

I can think of no better way better way to ensure South Carolina's global competitiveness than to get our state connected – fast! This work can't take twenty years because we cannot afford to leave generations behind. This is our generation's "fresh water" and time is of the essence!

Join us in our efforts,

*Jim Stritzinger*

Jim Stritzinger
Connect South Carolina

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# I INTRODUCTION

# I. INTRODUCTION

## Background

Technology plays a pivotal role in the way businesses operate, the type of service consumers expect, how institutions provide services, and where consumers choose to live, work, and play. The success of a community has also become dependent on how broadly and deeply the community adopts technology resources – this includes access to reliable high-speed networks, digital literacy of residents, and the use of online resources locally for business, government, and leisure. As noted in the National Broadband Plan, broadband Internet is "a foundation for economic growth, job creation, global competitiveness and a better way of life."[1]

Despite the growing dependence on technology, the United States Census reports that 27% of Americans do not have a high-speed connection at home. Connected Nation's studies also show[2] that 19.1 million children do not have broadband at home, and 6.1 million of those children live in low-income households. In 2014, Connected Nation also surveyed[3] 4,206 businesses in 7 states. Based on this data, Connected Nation estimates that nearly 1.5 million businesses – 20% – in the United States do not use broadband technology today.[4]

Deploying broadband infrastructure, services, and application, as well as supporting the universal adoption and meaningful use of broadband, are challenging but required building blocks of a twenty-first century community. To assist communities, Connected Nation developed the Connected Community Engagement Program to identify local technology assets, complete an assessment of local broadband access, adoption, and use, and develop an action plan for pursuing solutions.[5]

## History of the Project

Connect South Carolina, established in 2008, is a subsidiary of Connected Nation and was the South Carolina state designee for the United States Department of Commerce's State Broadband Initiative grant. This public-private initiative has been established to help communities plan for technology expansion, conduct surveys to assess the current state of broadband adoption across South Carolina, and work with each of the state's broadband providers to create detailed maps of broadband coverage. Connect South Carolina works closely with the Governor's Office, the SC Chief Information Officer, our

[1] Connecting America: The National Broadband Plan, Federal Communications Commission, April 2010, http://www.broadband.gov/download-plan/.
[2] Broadband Technology Fact Sheet, Pew Research Internet Project, September 2013, http://www.pewinternet.org/fact-sheets/broadband-technology-fact-sheet/.
[3] The Adoption Gap in Low-Income Households with Children: 2011 Residential Survey Preliminary Findings, Connected Nation Inc., September 2011, http://www.connectednation.org/_documents/connectednationlow-income2011surveyfindingsfinal.pdf.
[4] Broadband and Business: Connected Nation 2014 Business Survey Results, Connected Nation Inc., http://www.connectednation.org/sites/default/files/biz_infographic_2014_cn_final.pdf.
[5] Connected Nation, parent company for Connect South Carolina, is a national non-profit 501(c)(3) organization that works in multiple states to engage community stakeholders, state leaders, and technology providers to develop and implement technology expansion programs with core competencies centered around the mission to improve digital inclusion for people and places previously underserved or overlooked.

Broadband Advisory Council, all 45 regional broadband providers, and local leaders and champions as they address challenges and take advantage of opportunities related to broadband across the state. Connect South Carolina's State Broadband Initiative (SBI) efforts were funded by the United States Department of Commerce's SBI grant program through the National Telecommunications and Information Administration (NTIA). More information is available at http://www2.ntia.doc.gov.

# II LOCAL PLANNING

# II. Local Planning

Connected Nation, Connect South Carolina's parent organization, created the Connected Community Engagement Program to guide a community through an assessment of its overall broadband assets while providing a benchmark for broadband proficiency. By actively participating in the Connected Community program, 35 communities are now boosting their capabilities in education, healthcare, and public safety, while stimulating economic growth and spurring job creation. These communities have collaborated with multiple organizations and residents to:

1. Empower a community team leader (local champion) and create a community team composed of a diverse group of local residents from various sectors of the economy, including education, government, healthcare, libraries, and the private sector, among others.

2. Identify the community's technology assets, such as local infrastructure, providers, facilities, websites, and innovative uses employed by institutions.

3. Complete the Connected Assessment, a measurement of the community's access, adoption, and use of broadband based on the recommendations of the National Broadband Plan.

4. Develop and receive a custom, comprehensive Technology Action Plan specifically tailored to match gaps in the local broadband ecosystem to solutions and best practices being used by communities across the nation.

5. Pursue Connected certification, a nationally recognized platform for spotlighting communities that excel in the access, adoption, and use of broadband.

## Connected Assessment

The Connected assessment framework is broken into three areas: ***Access***, ***Adoption***, & ***Use***.

Each assessment area has a maximum of 40 possible points. To achieve **Connected certification**, the community must have a minimum of 32 points in each section and 100 points out of 120 points overall.

The **Access** focus area documents the broadband and technology foundation in a community. The criteria within the Access focus area endeavors to identify gaps that could affect a local community broadband ecosystem including: broadband availability and speeds, in addition to last and middle mile competition issues. As noted in the National Broadband Plan, broadband Access "is a foundation for economic growth, job creation, global competitiveness and a better way of life."

> ***It is clear that when 50 community leaders, business owners, and public officials attend an initial meeting on broadband, they understand the important role that the Internet and technology play in the lives of the citizens of Greenwood County. It's exciting to know that these people care a great deal about where they live and are invested in this process and the time it takes to help introduce widespread use of the best technologies to the community.***
>
> **Heather Jones**
> **CEO-Greenwood Partnership Alliance**

Broadband **Adoption** is important for consumers, institutions, and communities alike to take the next step in fully utilizing broadband appropriately. The Adoption component of the Connected Assessment seeks to ensure the ability of all individuals, including vulnerable populations, to access and use broadband by documenting a community's public computer access and digital literacy programs.

Broadband **Use** is the most important component because it is where the value of broadband can finally be realized. However, without Access and Adoption of broadband, meaningful Use is not possible. As defined by the National Broadband Plan, meaningful Use of broadband includes those areas of economic opportunity, education, government, and healthcare where value to individuals, organizations, and communities can be achieved.

## Analysis of the Connected Assessment

The Community Technology Scorecard provides a summary of South Carolina's Connected Assessments. The Connected Assessment's criteria are reflective of the recommendations made by the Federal Communications Commission's National Broadband Plan. Lower scores indicate weaknesses in the community's broadband ecosystem but do not necessarily signify a lack of service.

| Community Name | Access Score | Adoption Score | Use Score | Total Score | Status | Date of Completion |
|---|---|---|---|---|---|---|
| Abbeville County | 36 | 34 | 38 | 108 | Certified | 10/8/2014 |
| Anderson County | 32 | 32 | 40 | 104 | Certified | 5/14/2013 |
| Clarendon County | 37 | 32 | 31 | 90 | Action Plan | 1/30/2014 |
| Dorchester County (Upper) | 10 | 34 | 26 | 70 | Action Plan | 11/15/2013 |
| Greenwood County (2013) | 30 | 40 | 40 | 110 | Action Plan | 7/15/2013 |
| Greenwood County (2015) | 32 | 40 | 40 | 112 | Certified | 1/5/2015 |
| Hampton County | 8 | 24 | 34 | 66 | Action Plan | 9/19/2013 |
| City of Hartsville | 34 | 34 | 36 | 104 | Certified | 2/26/2015 |
| Town of Hilton Head Island | 34 | 40 | 40 | 114 | Certified | 12/2/2014 |
| Lexington County | 34 | 40 | 40 | 114 | Certified | 11/26/2014 |
| Marlboro County | 22 | 32 | 39 | 93 | Action Plan | 11/12/2013 |
| Saluda County | 12 | 38 | 40 | 90 | Action Plan | 2/27/2013 |

As a result of the Connected Community Engagement Program, six South Carolina communities have achieved Certification: Abbeville, Anderson, Greenwood, and Lexington Counties, as well as the City of Hartsville and the Town of Hilton Head Island. Certification assessments for Berkeley and Richland Counties are near completion.

In addition to the communities which have completed the Connected Community Engagement Program, multiple communities have expressed interest in participating in the program. Many of these communities have noted the benefits their neighbors have reaped from completing the assessments of broadband access, adoption, and use and would like to also receive Technology Action Plans. For example, Greenwood County completed the Connected program in 2013. In spite of not reaching the

necessary scores to be designated a certified Connected community, the Greenwood team used their Technology Action Plan as a guide to address the gaps in their broadband landscape, resulting in achieving the designation of certified Connected community during a recent reassessment. The communities in South Carolina which have completed the Connected program understand the value of continually monitoring the state of broadband access, adoption, and use in order to progress with the constantly changing environment.

***Being certified as an official Connected community and the first in our state is a big step in preparing our residents and businesses for future economic success. Not only is it a step in the right direction, but our participation in this program also serves as a model to other communities, illustrating the importance of recognizing just how vital connectivity is in our society. We will continue to work toward seeking opportunities for affordable broadband and digital services, in addition to widespread promotion of the benefits broadband adoption and use can offer to our community. Our team is encouraged by the community's support at the unveiling of our technology plan and appreciates the recognition by Connected Nation and Connect South Carolina.***

**Steve Newton**
**Community Champion and Anderson County Grant Writer**


Figure 1: City of Hartsville Certification (Photo by JIM FAILE/HARTSVILLE MESSENGER)

Figure 2: Greenwood County Certification Award Presentation

Figure 3: Hilton Head Island Certification Award Presentation


Figure 4: Lexington County Certification Award Presentation

**Connected Case Study: Hilton Head Island**

**In December 2014, Hilton Head Island was certified as South Carolina's fourth Connected community. Today, the groups that helped to improve broadband expansion and adoption in the area continue to move forward, breaking through obstacles to improve connectivity and access for everyone.**

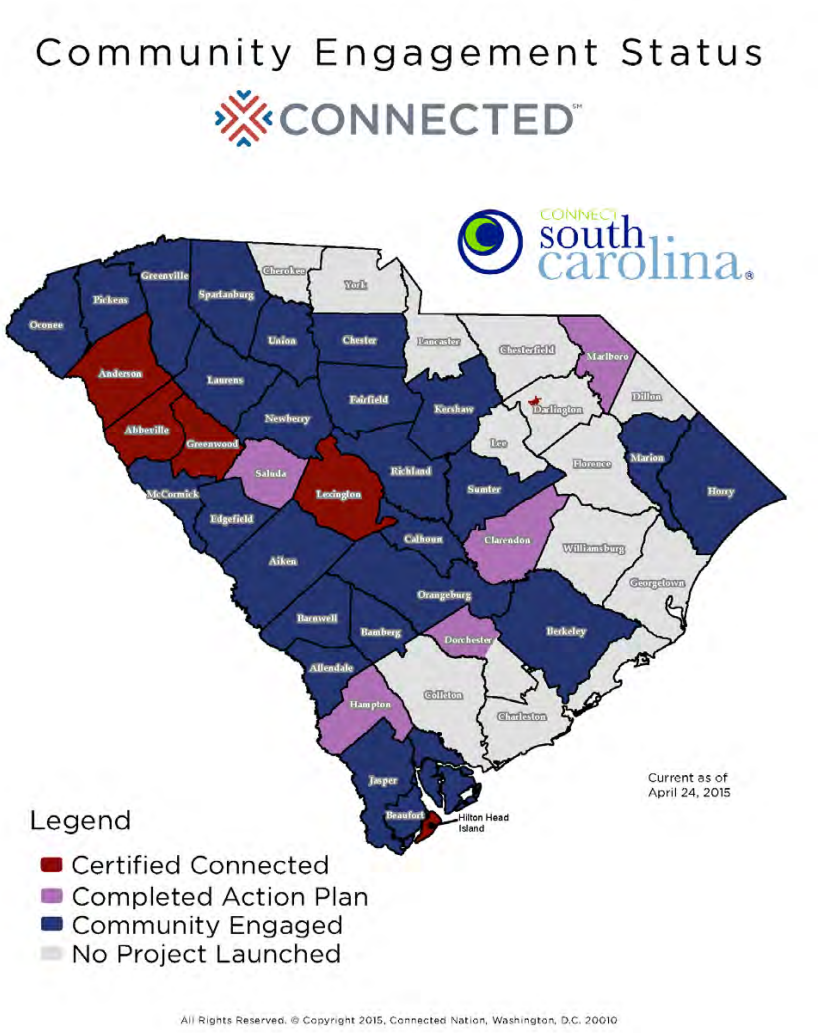
**Primarily a tourism and vacation spot along the coast of South Carolina, Hilton Head Island's broadband expansion developments met with barriers based on the migratory tourism economy. With approximately 70% of the town based in gated communities, with strict rules as to the infrastructure available, local and nationwide telecommunications companies were unable to establish towers in the area. Unreliable cell phone coverage supported by a small number of towers first spurred the community to investigate their telecommunications network. A group of volunteers with backgrounds in technology and telecommunications took on the challenge and formed the Information Technology Taskforce in an effort to change the area's wireless climate.**

**Inviting AT&T and Verizon Wireless officials to meet with the town revealed that the strict rules in gated communities were barring the construction of cell phone towers. In response, rules were relaxed and a tower was built in a gated community for the first time in 20 years. The success turned the taskforce's and the community's attention to other aspects of the network, such as broadband connectivity.**

**"That worked so well, we wondered what else we could work on," said Jim Collet, Information Technology Taskforce Chairman. "We heard about Connected Nation and Connect South Carolina and we thought that would be a good model to follow." Working with AT&T, Verizon, and Comcast, Connect South Carolina and the Technology Taskforce were able to add 17 more telecom antennas across the city to improve wireless access and cell phone coverage. The broadband survey of the area revealed a high level of access to broadband connectivity but also a lower level of usage and understanding, indicating the resources were underutilized. By increasing awareness and adding infrastructure, Hilton Head Island completed Connected certification.**

**Since partnering with Connect South Carolina and receiving a Connected community designation, Hilton Head Island has become a primary resource in expanding broadband access and adoption across the surrounding area of Beaufort County. The Beaufort County school system has since started a tablet program for students, giving children a chance to interact with technology early on and learn in new ways. The Technology Taskforce continues to build up broadband infrastructure in Hilton Head to diversify and strengthen their economic base, starting with a fiber network in the community to attract businesses. Increasing broadband access to Beaufort County is next on the agenda, as well as furthering adoption, understanding, and awareness on Hilton Head Island.**

**With plans organized and a group of passionate, talented volunteers to carry the momentum forward, Hilton Head Island's Connected certification reveals new opportunities for the community and a chance to spread their success to neighbors. Connect South Carolina and Connected Nation will continue to support their efforts moving forward toward reaching new milestones.**



# III STRATEGIC PARTNERSHIPS

# III. Strategic Partnerships

## Partnering With South Carolinians

Over the past five years, South Carolina's citizens, businesses, governmental agencies, municipalities, etc. have often reached out to Connect South Carolina with questions about broadband related issues. In each case, CSC has responded promptly with information or suggested solutions based on the team's provider relationships, ongoing research, and community partnerships. In this regard, Connect South Carolina has become the central go-to organization for broadband related issues. In addition to being recognized as the broadband expert in public and private sectors, the organization has raised the visibility of broadband successes and challenges through frequent press releases highlighting the most recent public policy updates, survey results, and community accomplishments, as well as formal presentations to various statewide leaders and associations.

**Hampton County, one of the most rural communities in South Carolina, is faced with some of the greatest broadband accessibility challenges in the state. Connect South Carolina helped the Hampton County Literacy Council secure refurbished laptops through Every Community Online to be used for GED preparation and testing as well as digital literacy training.**

## South Carolina Broadband Advisory Council

In 2013, the Connect South Carolina team organized and established the South Carolina Broadband Advisory Council, consisting of key statewide stakeholders tasked with identifying and removing barriers to broadband access, while also determining opportunities for increasing broadband applications and adoption in the state. Council members include representation from broadband providers, related trade associations, state agencies, and even leaders in the entrepreneurial community. During the quarterly meetings, issues affecting the deployment and use of broadband in South Carolina are discussed. In addition, council members are regularly updated on the latest national broadband policy implications by Connected Nation experts. As leaders come around the table to discuss broadband in a comprehensive fashion, solutions and opportunities are examined so that South Carolina can work towards ensuring the best possible broadband service and use exists for its citizens.

## Summits

In partnership with IT-oLogy, Connect South Carolina hosted two annual summits that were titled **Connections** in 2013 and 2014. Each event was designed to showcase innovative uses of technology and the need for robust broadband infrastructure to support the variety of applications. A third summit is planned for May 2015. Each summit had attendance of more than 150 and drew stakeholders from government, healthcare, education, information technology, and public safety, in addition to individual South Carolina citizens with vested interest in broadband.

## IT-oLogy

In 2013, Connect South Carolina has also partnered with IT-oLogy, a Columbia, South Carolina-based, non-profit collaboration of businesses, academic institutions, and organizations dedicated to growing the IT talent pipeline, fostering economic development, and advancing the IT profession. Connect South Carolina and IT-oLogy partnership shows the mutual commitment to helping more communities get connected and helping more workers increase their skills through technology expansion in South Carolina.

***When we look at the supply chain for talent with digital skills that can be applied in business, this partnership triggers some key things. Connect South Carolina adds to the content package delivered to rural communities, and IT-oLogy broadens the access to populations of new talent.***

**Lonnie Emard**
**IT-oLogy President**

# IV STATEWIDE INITIATIVES AND RESEARCH

# IV. Statewide Initiatives and Research

## Broadband Mapping in South Carolina

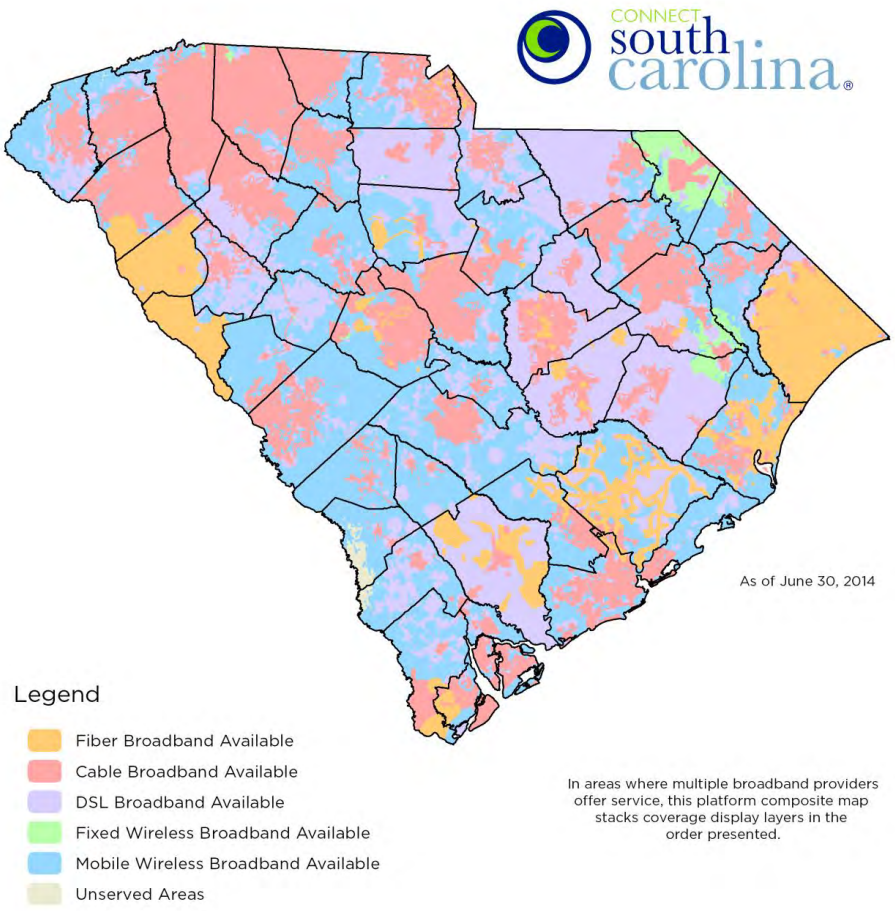
For South Carolina communities to continue to thrive through a vibrant broadband and technology ecosystem, broadband networks must be widely available and continuously improving to meet the increased needs of businesses and institutions. Ongoing investment in South Carolina broadband infrastructure that is broad in geographic scope and continual in its improvement is a vital need across the state.

To promote informed action, Connect South Carolina has extensively mapped and researched broadband investment and availability throughout the state at various technology, speed, and quality tiers. With a team of expert GIS analysts, quality broadband maps are provided with a dedication to reliability, thoroughness, and specificity.

Since Connect South Carolina's initial SBI map was released in spring 2010, the organization has collected and released new data semi-annually, with updates in April and October each year. The most current Broadband Inventory Maps were released in the fall of 2014. As the following map indicates, service inventory at speed levels of 3 Mbps download/768 Kbps upload showcases wide coverage across the state.

# Broadband Service Inventory for the State of South Carolina

Advertised Speeds of at Least 3 Mbps Downstream and 768 Kbps Upstream



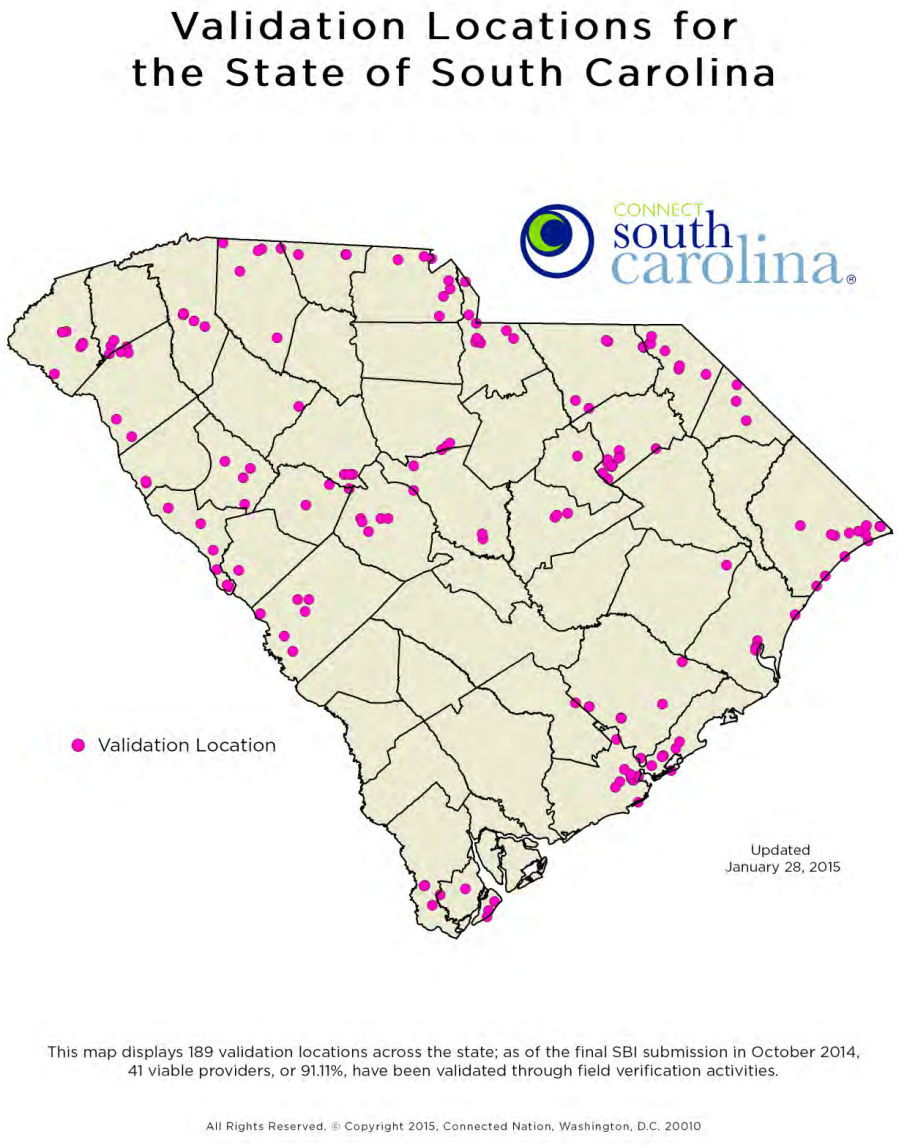
Connect South Carolina additionally provides My ConnectView™, a publicly-available, interactive mapping tool capable of delivering customized searches and detailed connectivity options at the address level. Since its launch in April of 2012, My ConnectView™ has received 8,762 visits.

In addition to simply mapping service provider data, Connect South Carolina has validated and verified this information, frequently through direct site visits by certified network engineers (see the following map, *Validation Locations for the State of South Carolina*). This provider engagement and validation is essential to gathering meaningful, accurate data regarding South Carolina's broadband ecosystem. Over the past five years, Connect South Carolina has developed strong relationships with commercial and residential broadband providers across the state to collect the extensive datasets that populate the state broadband maps. In fact, Connect South Carolina is unique among many SBI state programs in the fact that it enjoys 100% provider participation in the broadband data collection process, showcasing a dedication by the state's providers to ensure communities have access to quality information regarding their broadband coverage.

**Other Maps Created by Connect South Carolina**

- ✓ Broadband Service Inventory (Advertised Speeds of at Least 768 Kbps Downstream and 200 Kbps Upstream)
- ✓ Broadband Service Inventory (Advertised Speeds of at Least 3 Mbps Downstream and 768 Kbps Upstream)
- ✓ Density of Households Unserved by a Broadband Provider
- ✓ Maximum Advertised Download Speed
- ✓ Density of Providers
- ✓ Broadband Growth
- ✓ Multiple/Single Platform
- ✓ Underserved Areas
- ✓ Underserved Areas with Mobile
- ✓ Average Download Speed
- ✓ Broadband Service Inventory by Congressional District
- ✓ FCC Rural Broadband Experiments Eligible Census Blocks
- ✓ Mobility Fund Eligible Census Blocks

In some cases, the validation process results in improved broadband availability. In one such situation, Connect South Carolina received broadband inquiries from residents in Calico Farms, a large subdivision in Blythewood (Richland County). The Engineering and Technical Services (ETS) Team traveled to Calico Farms to complete a deployment cost propagation. Connect South Carolina provided the Calico Farms Home Owners Association (HOA) with the propagation study data and advice about how to approach broadband providers. After much diligence, TruVista, a provider in a neighboring county, attended a Calico Farms HOA meeting and came up with a plan to serve the area.

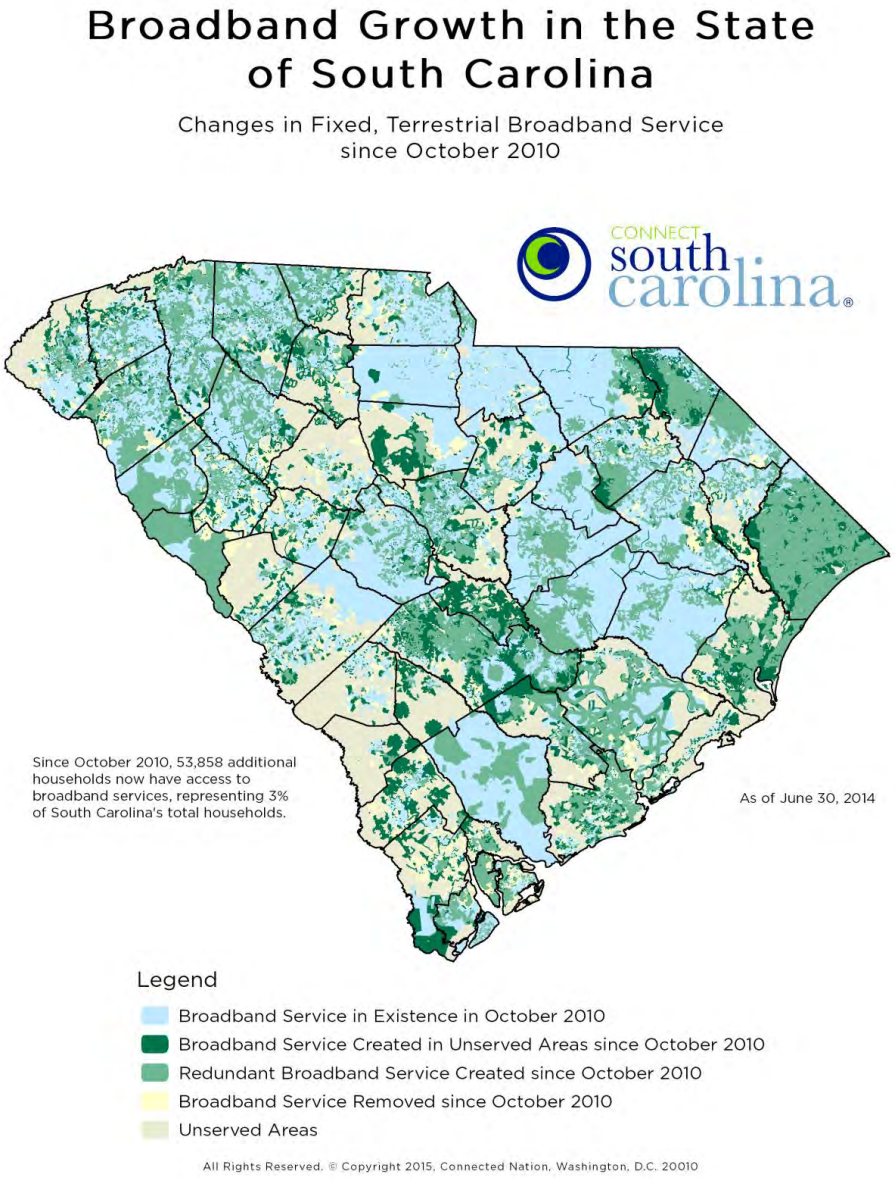



The data processed by Connect South Carolina is also submitted for additional analysis and use in the National Broadband Map, the first searchable inventory of broadband services across the country. The National Broadband Map is released and maintained by the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA), in collaboration with the Federal Communications Commission (FCC), and in partnership with 50 states, five territories, and the District of Columbia.

## Broadband Growth in South Carolina

Since Connect South Carolina's inception, the state has seen a solid performance of broadband growth. As indicated in the map below, new broadband build-out has occurred in locations all across South

Carolina, connecting 13,653 additional households at speeds of at least 768 Kbps download/200 Kbps upload since 2011.



Additionally, as educational institutions, governments, hospitals, businesses, and homes require more and more bandwidth to make use of their technology, South Carolina has seen a rise in broadband at higher speed tiers. For example, at speeds of at least 25 Mbps download/1.5 Mbps upload, the state moved from 38.63% of households with service in 2011 to over 83% served in 2014 as indicated in following chart, *Broadband Availability by Speed Tier*.

CONNECT south carolina.

## Broadband Availability by Speed Tier

**Statewide Availability to Terrestrial, Non-Mobile Broadband Platforms**

| Speed Tier Download/Upload | Percent Households Served 10/1/11 | Percent Households Served 10/1/12 | Percent Households Served 10/1/13 | Percent Households Served 10/1/14 |
|---|---|---|---|---|
| 768 Kbps/200 Kbps | 96.16 | 96.82 | 96.96 | 96.91 |
| 1.5 Mbps/200 Kbps | 96.14 | 96.74 | 96.24 | 96.71 |
| 3 Mbps/768 Kbps | 86.93 | 93.02 | 93.91 | 94.37 |
| 6 Mbps/1.5 Mbps | 69.39 | 86.49 | 88.03 | 88.08 |
| 10 Mbps/1.5 Mbps | 64.75 | 85.74 | 87.94 | 87.91 |
| 25 Mbps/1.5 Mbps | 38.63 | 77.43 | 80.19 | 83.01 |
| 50 Mbps/1.5 Mbps | 37.48 | 77.32 | 79.27 | 80.40 |
| 100 Mbps/1.5 Mbps | 1.06 | 35.66 | 38.00 | 38.23 |

Source: October 2011 - 2014 Connect South Carolina Broadband Availability Submissions to NTIA



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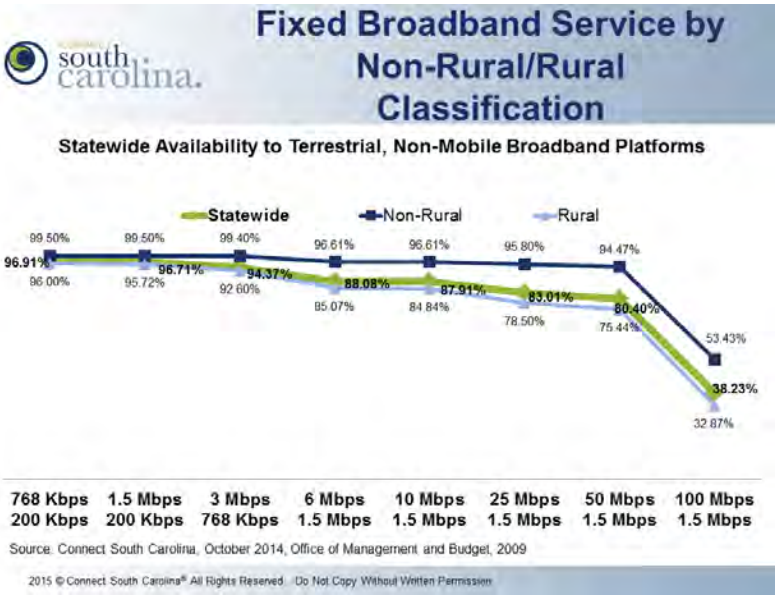
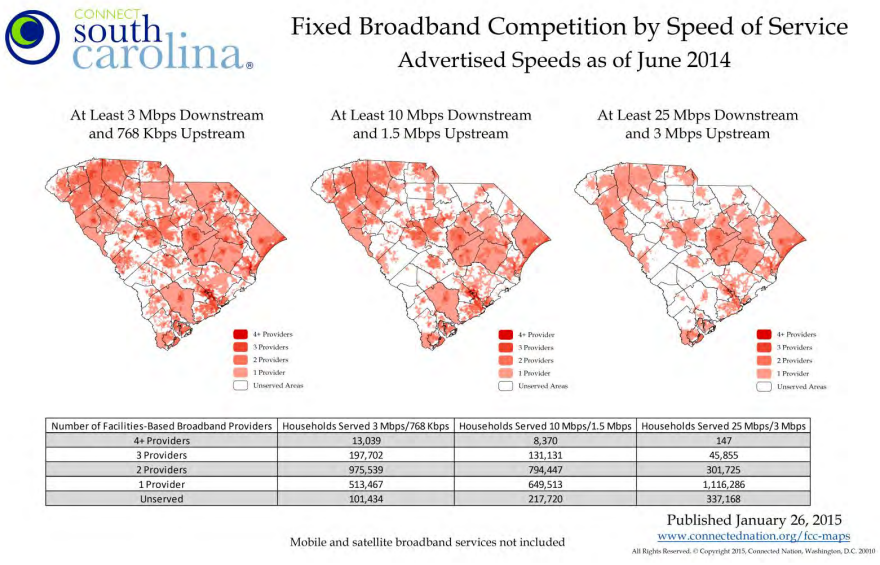
## The Broadband Availability Gap

While broadband access is increasing and faster speeds are becoming more widespread, South Carolina still has work to do to ensure growth continues for statewide connectivity. In rural South Carolina, for example, robust speeds are often lacking, showcasing a speed gap between urban and rural communities.




These rural speed gaps are evident in portions of the Upstate and Lowcountry creating an additional challenge for economic development and growth in these areas.



As Internet and web applications continue to develop, along with the number of connected devices in a typical household or business, there is an increasing need for faster, more robust broadband speeds. The National Broadband Plan, released in 2010, recommended a national broadband speed target for households and small businesses of 4 Mbps download/1 Mbps upload. The National Broadband Plan also recommended that the FCC reassess this target every four years. As such, in January 2015, the FCC adjusted the definition of "advanced broadband" to 25 Mbps download/3 Mbps upload.

In adopting this target, the FCC found that 17 percent of the U.S. population did not have access to 25 Mbps/3 Mbps broadband, but, when available, consumers were subscribing to broadband at these higher speeds. The FCC also determined that over half of rural Americans did have not access to 25 Mbps down/3 Mbps up connectivity.

Broadband availability in South Carolina follows a similar pattern with only 81.28% of households in the state having access to 25 Mbps download/3 Mbps upload broadband networks; however, 337,168 households continue to be marginalized with broadband speeds below this national benchmark. The vast majority of the areas in South Carolina without access are located in rural regions of the state.

### The Broadband Competition Gap

In addition to a lack of availability, particularly in rural areas, is a lack of broadband competition among high-speed tiers. As evidenced in the previous map, only 147 households have access to speeds at 25 Mbps download/3 Mbps upload from four or more providers, while 45,855 households have access to the same speed tiers from at least 3 providers. Geographically, the areas with greater concentration of providers are, not surprisingly, located in more urban areas, leaving rural residents with fewer choices for access.

## Research

While expanded broadband access is important, without corresponding broadband adoption among South Carolina consumers and businesses, further investment and build-out could be deterred. Therefore, it is in the interest of both private and public leaders statewide to collaborate to bridge the remaining broadband adoption gaps, explored below, and ensure that all South Carolinians are able to participate and compete in the twenty-first century interconnected global economy.

## Business and Residential Technology Assessments

To complement the Connected Community Engagement Program, Connect South Carolina periodically conducts statewide residential and business technology surveys to understand broadband demand trends across the state. The purpose of this research is to better understand the drivers and barriers to technology and broadband adoption, while estimating the broadband adoption gaps across the state of South Carolina. Key questions the data address are:

- Who, where, and how are households in South Carolina using broadband technology?
- How is this technology impacting South Carolina households and residents?

- Who is not adopting broadband service and why?
- What are the barriers that prevent citizens from embracing this empowering technology?

Through Connect South Carolina's research, many insights are realized. The state's 2014 Residential Technology assessment revealed the following key findings:

- 80% of adults in the state subscribe to home broadband service, up from 78% in 2010.
- More than three out of five South Carolina adults (61%) use mobile broadband service, up from 39% in 2010 when Connect South Carolina began measuring this trend.
- More than 423,000 adults still do not subscribe to home broadband service. These South Carolinians cite many different reasons for not subscribing, including cost, the belief that broadband is not relevant or beneficial to them, and a lack of digital literacy skills.
- Nearly one in four parents of school-age children in South Carolina (23%) say that their children's school provides them with a laptop or tablet computer; the majority of those parents (55%) report that receiving a computer from the school had a positive impact on their child's grades.
- Nearly one-half of working-age South Carolina adults (46%) rely on the Internet to seek out or apply for jobs, while one in three (33%) go online to further their educations by taking online classes.
- Additionally, the results of Connect South Carolina's 2014 Business Technology Survey released in the summer of 2014, revealed that more than four out of five businesses in the state (81%) use broadband, while 11,000 businesses do not.
- 25% of businesses in the state have difficulty finding employees with the necessary technological skills.
- South Carolina businesses earned $15.6 billion in 2013 from online sales.

To supplement extensive research and data findings, Connect South Carolina has developed the following white papers which address sector and demographic issues. Full reports are available at http://www.connectsc.org/policy.

- Broadband as an Economic Development Tool, 2014
- Making an Impact: Technology Use Among Women-Owned Businesses in South Carolina, 2013
- Closing the Digital Divide in South Carolina, 2013
- Mobile Broadband Helps Bridge the Gap in Internet Utilization Across South Carolina, 2013
- Technology Adoption Among Agribusinesses and Rural Businesses, 2012
- Broadband: Helping South Carolinians Stay Healthy, 2012
- Cost as a Barrier to Broadband Adoption: Structuring Subsidy Programs that Work, 2012
- Broadband - A Technology Tool for Lifelong Learning, 2012

## Community Anchor Institutions

As part of the Department of Commerce's State Broadband Initiative, Connect South Carolina has collected connectivity information statewide for community anchor institutions (CAIs). CAIs were categorized into the following classifications for the SBI grant program:

- K-12 School
- Library
- Medical/Healthcare
- Public Safety
- University, College, or Other Postsecondary
- Other Community Support – Governmental
- Other Community Support – Nongovernmental

In addition to the location information on each CAI, such as address and latitude/longitude coordinates, Connect South Carolina has been collecting data on the Internet connections, or lack of, which are used at each of the facilities. The connectivity information provides significant analysis opportunities to compare CAI subscription speeds to other available speeds and to analyze the spatial distribution of CAIs that do not subscribe to high-speed Internet.

In South Carolina, complete information (address, longitude, latitude, download, upload and type of transmission) has been collected for 3,047 CAIs; another 1,279 CAIs have partial data.

## Policy Implications

Ongoing federal policy has great implications for South Carolina as community leaders aim to be better informed in order to promote the growth of technology in their region. Connected Nation, Connect South Carolina's parent organization, is well equipped to collect, analyze, and distribute a wealth of information on national broadband policy through its Policy Department which brings years of government, economic, and technology experience and expertise to states engaged in the Connected processes.

**Connected Nation's Policy Department benefits communities in numerous ways including:**

- **Development and release of White Papers on pertinent technology policy news**
- **Conference calls with broadband experts**
- **Guidance on grants and available federal funding applications**
- **Policy Consultation Services**

Specifically, the Connected Nation Policy team has been tracking three particularly relevant issues for communities: the FCC's benchmark for "advanced broadband" being raised to 25 Mbps, E-Rate Reform, and the Connect America Fund phases.

## FCC Increases Benchmark for Advanced Broadband to 25 Mbps

South Carolina communities looking to remain above the curve with robust speeds now have a higher threshold for what is considered "advanced broadband" by the FCC. On January 29, 2015, the FCC determined that broadband deployment at speeds of 25 Mbps download/3 Mbps upload was not developing in the United States on a "reasonable and timely basis." With this, the FCC defined "advanced broadband" at this threshold stating that prior definitions of broadband were "dated and inadequate" based on "advances in technology, market offerings by broadband providers, and consumer demand."

As mentioned previously, the FCC found that 17 percent of the U.S. population did not have access to 25 Mbps download/3 Mbps upload broadband and over half of rural Americans did have such access. Additionally, the FCC found that the gap is persisting, with broadband access at 25 Mbps download/3 Mbps upload increasing by only 3 percentage points last year.

In South Carolina, 81% of households have access to 25 Mbps download/3 Mbps upload leaving 337,168 households in the state only able to get broadband access below this benchmark.

To further analyze the policy implications and impact this new benchmark will have on states nationwide, Connect South Carolina and Connected Nation have created a White Paper outlining specifics.

## E-Rate Reform

In 2014, the FCC undertook the most significant changes to the Universal Service Fund (USF) Schools and Libraries program (commonly known as "E-rate") since its inception. The E-rate program subsidizes telecommunications and Internet services for K-12 schools and public libraries and is the single largest federal educational technology program. For rural areas, E-rate funds are critically important in helping districts manage the high cost of broadband connectivity.

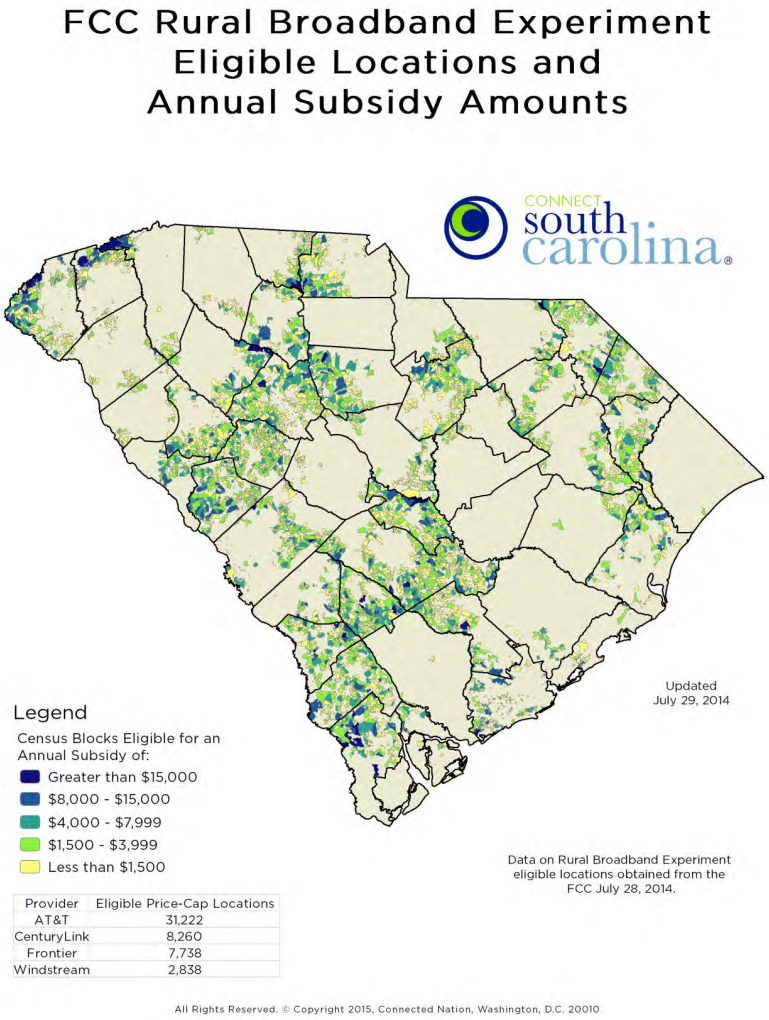
The FCC's changes include structural reforms designed to modernize the E-rate program, additions designed to accommodate the goals of President Barack Obama's "ConnectED" initiative, and an overall substantial increase to the amount of E-rate funding that will flow to schools and libraries for broadband and Internet connectivity. Combined, orders adopted by the Commission in July and December 2014 mark a key milestone in the FCC's efforts to revamp and reorient all four of its universal service subsidy programs away from legacy services, such as pagers and voice telephony, and toward broadband services that meet twenty-first century connectivity needs.

## Connect America Fund

As previously stated, South Carolina has made significant strides in broadband availability over the last five years; however, opportunities remain to improve access to advanced broadband speeds and ensure that all South Carolina businesses, governments, and residents have equitable connectivity.

Connect South Carolina has used the broadband infrastructure information it has collected and validated to work directly with communities and providers to solve access gaps in their communities. One important example is the effort various South Carolina communities made to participate in an FCC experimental program that would provide direct funding for network upgrades.

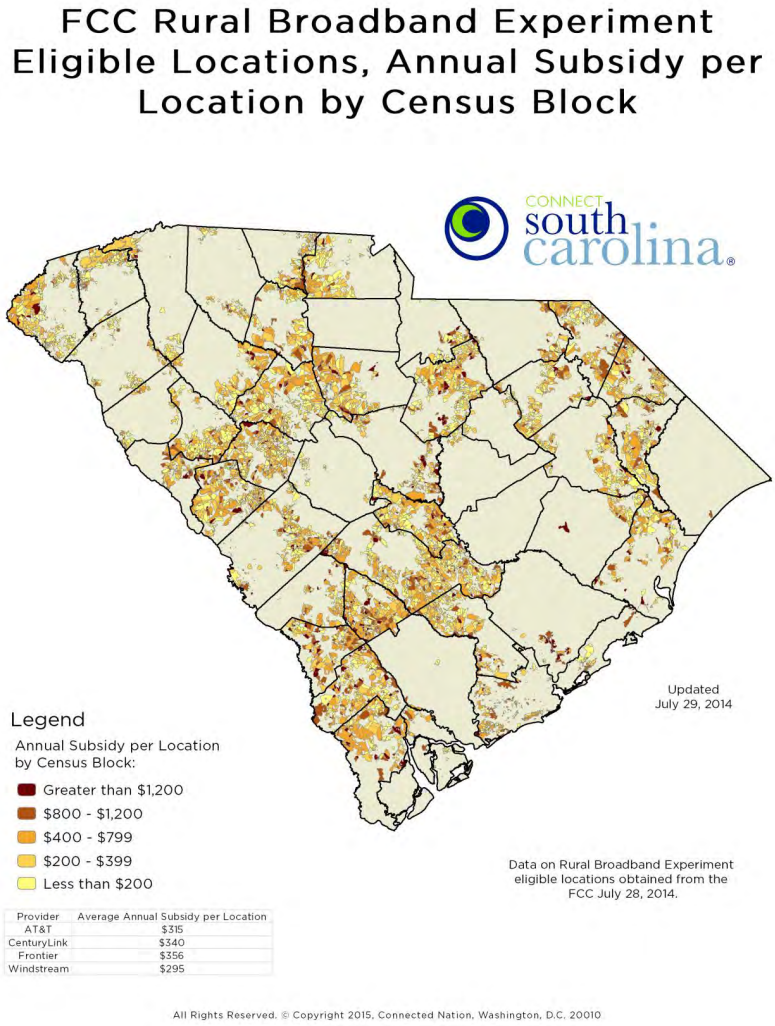
In January 2014, the FCC created the Rural Broadband Experiment program (RBE). The launch of the program marked the first time that the FCC had considered investing a portion of its $4 billion per year telecommunications network subsidy program into an application-based, competitive bidding framework. Part of the Connect America Fund (CAF), the Rural Broadband Experiment program sought to determine how the FCC could allocate broadband network subsidies to rural communities in a cost-effective way.




Eligible areas for the RBE program were defined as any area without access to fixed broadband at the 3 Mbps download/768 Kbps upload speed. In those areas within the service territories of larger, price cap local telephone companies (AT&T, CenturyLink, Frontier), the FCC sought projects that would serve entire census tracts that include unserved census blocks.

In early 2014, the FCC solicited “expressions of interest” from providers, communities, institutions, and public-private partnerships regarding their ideas and proposals on how they could use CAF subsidies to

support broadband infrastructure build-out in currently unserved areas. The FCC received nearly 1,000 expressions of interest from applicants across the country, 19 of which were from South Carolina.




Applicants in South Carolina ranged from small rural ILECs, CLECs, fixed wireless providers, DSL providers, and one county government. The proposed technology solution included the use of fiber, fixed wireless, a whitespace network, mobile, and DSL services; however, the majority of proposals included either fiber deployment or fixed wireless networks. Proposed project scopes ranged from county-level deployments to small regional deployments. Project funding requests ranged from as low as $10,000 to as much as $13-$15 million in subsidies and the overall budget for all 19 proposed projects was upward of $262 million. *Please see Appendix 7 for the full list of expressions of interest from South Carolina.*

In December 2014, the FCC Wireline Competition Bureau announced the 40 provisional winners in the Rural Broadband Experiment project and while none were awarded to South Carolina this round, Connect South Carolina played an instrumental role in assisting various applicants with details serving as

a learning process for providers and communities looking for future Connect America Fund subsidy opportunities.

# V CONCLUSION

# V. Conclusion

In the last five years, Connect South Carolina has championed improved broadband access, adoption, and use for all South Carolinians. The state has seen significant technology gains during this time including new broadband build-out across South Carolina connecting 13,653 additional households at speeds of at least 768 Kbps download/200 Kbps upload since 2011. South Carolina communities have also taken note and actively pursued improved broadband resources through the Connected community certification process.

While South Carolina has a significant list and data points highlighting the marked improvement of broadband in South Carolina, a need for action remains. In light of the FCC's announcement of a new broadband standard of 25 Mbps download and 3 Mbps upload, South Carolina still has work to do with more than 337,000 households without adequate connectivity.

Connect South Carolina is excited to continue our work and be part of the solution to improve broadband access, adoption, and use. Communities are eager and poised to produce meaningful technology environments through meaningful planning.

# VI APPENDIX

# APPENDIX 1: LOCAL PLANNING

The Connected Community Engagement Program planning framework provides a clear path for the sustainable acceleration of broadband access, adoption, and use.


**Step 1: Engage.**
Successful strategies to bridge the local digital divide and increase broadband access, adoption, and use are predicated on broad and sustained stakeholder participation. A successful local technology planning team should include people from multiple sectors, including:

- State and Local Government
- Public Safety
- Education (K-12, Higher Ed)
- Library
- Business & Industry
- Agriculture
- Recreation and Tourism
- Healthcare
- Community Organizations
- Technology Providers

**Step 2: Assess.**

The Connected planning process guides the local technology planning team through an assessment of community technology resources, strengths, assets, needs, and gaps in order to identify and develop strategies to address specific technology gaps and opportunities in the community. The Connected assessment framework is separated into three distinct broadband measures: access, adoption, and use. Each area has a maximum of 40 points. To achieve Connected certification, the community must have a minimum of 32 points within each section and 100 out of the 120 points total overall.

| Community Name | Access Score | Adoption Score | Use Score | Total Score | Status | Date of Completion |
|---|---|---|---|---|---|---|
| Abbeville County | 36 | 34 | 38 | 108 | Certified | 10/8/2014 |
| Anderson County | 32 | 32 | 40 | 104 | Certified | 5/14/2013 |
| Clarendon County | 37 | 32 | 31 | 90 | Action Plan | 1/30/2014 |
| Dorchester County (Upper) | 10 | 34 | 26 | 70 | Action Plan | 11/15/2013 |
| Greenwood County (2013) | 30 | 40 | 40 | 110 | Action Plan | 7/15/2013 |
| Greenwood County (2015) | 32 | 40 | 40 | 112 | Certified | 1/5/2015 |
| Hampton County | 8 | 24 | 34 | 66 | Action Plan | 9/19/2013 |
| City of Hartsville | 34 | 34 | 36 | 104 | Certified | 2/26/2015 |
| Town of Hilton Head Island | 34 | 40 | 40 | 114 | Certified | 12/2/2014 |
| Lexington County | 34 | 40 | 40 | 114 | Certified | 11/26/2014 |
| Marlboro County | 22 | 32 | 39 | 93 | Action Plan | 11/12/2013 |
| Saluda County | 12 | 38 | 40 | 90 | Action Plan | 2/27/2013 |

| ACCESS | ADOPTION | USE |
|---|---|---|
| 1. Broadband Availability | 6. Digital Literacy | 10. Economic Opportunity |
| 2. Broadband Speeds | 7. Public Computer Centers | 11. Education |
| 3. Broadband Competition | 8. Broadband Awareness | 12. Government |
| 4. Middle Mile Access | 9. Vulnerable Population Focus | 13. Healthcare |
| 5. Mobile Broadband Availability | | |

The **ACCESS** criteria determine whether a broadband and technology foundation exists within a community. The measurement seeks to identify gaps in the local broadband ecosystem, such as last and middle mile issues, cost barriers, and competition needs. Access scores are determined by evaluating:

- **Broadband Availability** – is measured by analyzing provider availability of at least 3 Mbps download and 768 Kbps upload broadband service gathered by Connected Nation's broadband mapping program. In communities that may have broadband data missing, community teams were able to improve the quality of data to ensure all providers are included.

- **Broadband Speed** – is measured by analyzing the speed tiers available within a community. Connected Nation will analyze broadband data submitted through its broadband mapping program. Specifically, Connected Nation will break down the coverage by the highest speed tier

with at least 75% of households covered. In communities that may have broadband data missing, community teams were able to improve the quality of data to ensure all providers are included.

- **Broadband Competition** – is measured by analyzing the number of broadband providers available in a particular community and the percentage of that community's residents with more than one broadband provider available. Connected Nation performed this analysis by reviewing the data collected through the broadband mapping program. In communities that may have broadband data missing, community teams were able to improve the quality of data to ensure all providers are included.

- **Middle Mile Access** – is measured based on a community's availability to fiber. Three aspects of availability exist: proximity to fiber middle mile points of presence (POPs), number of fiber middle mile providers available, and available bandwidth. Data was collected by the community in coordination with Connected Nation.

- **Mobile Broadband Availability** – is measured by analyzing provider availability of mobile broadband service gathered by Connected Nation's broadband mapping program. In communities that may have mobile broadband data missing, community teams were able to improve the quality of data to ensure all providers are included.

**Identified Priority Projects for Broadband Access**

| Community | Aggregate and Validate Broadband Demand | Conduct a Vertical Assets Inventory | Conduct Infrastructure Build-Out Analysis | Conduct Local Ordinance Analysis and Remove Barriers | Construct Infrastructure | Develop Infrastruture Partnerships | Explore Infrastructure Funding | Validate Infrastructure Service | Complete an Evaluation of Grant Programs |
|---|---|---|---|---|---|---|---|---|---|
| Abbeville County | | x | | | | | | | |
| Anderson County | x | x | x | | | | | | |
| Clarendon County | | | | | | | | | |
| Dorchester County (Upper) | x | | x | | | | | | |
| Greenwood County (2013) | x | x | x | | | | | | x |
| Greenwood County (2015) | | | | | | | | | |
| Hampton County | | x | | | | | | | |
| City of Hartsville | | | | | | | | | |
| Town of Hilton Head Island | | | | | | | | | |
| Lexington County | x | | x | | | | | | |
| Marlboro County | | x | x | | | | | | |
| Saluda County | | x | | | | | | | |

The **ADOPTION** component seeks to ensure that all local residents have access to and the ability to use broadband. Broadband adoption scores are comprised of:

- **Digital Literacy** – is measured by first identifying all digital literacy programs in the community. Once the programs are determined, a calculation of program graduates will be made on a per capita basis. A digital literacy program includes any digital literacy course offered for free or at very low cost through a library, seniors center, community college, K-12 school, or other group serving the local community. A graduate is a person who has completed the curriculum offered by any organization within the community. The duration of individual courses may vary.

- **Public Computer Centers** – is measured based on the number of hours computers are available

each week per 1,000 low-income residents. Available computer hours is calculated by taking the overall number of computers multiplied by the number of hours open to a community during the course of the week.

- **Broadband Awareness** – is measured based on the percentage of the population reached. All community broadband awareness programs are first identified, and then each program's community reach is compiled and combined with other campaigns.

- **Vulnerable Population Focus** – A community tallies each program or ability within the community to encourage technology adoption among vulnerable groups. Methods of focusing on vulnerable groups may vary, but explicitly encourage technology use among vulnerable groups. Example opportunities include offering online GED classes, English as a Second Language (ESL) classes, video-based applications for the deaf, homework assistance for students, and job-finding assistance. Communities receive points for each group on which they focus. Groups may vary by community, but include low-income, minority, senior, children, etc.

**Identified Priority Projects for Broadband Adoption**

| Community | Address Digital Literacy and Low-Cost Broadband | Begin a Device Refurbishment and Recycling Program | Build Technology Awareness | Develop Technology Mentorship Program | Establish a Community Technology Academy | Promote Community/ Education Collaboration | Procure Mobile Technology Center |
|---|---|---|---|---|---|---|---|
| Abbeville County | | | | | | | |
| Anderson County | x | | | | x | | |
| Clarendon County | | | | x | x | | x |
| Dorchester County (Upper) | | | | x | x | | |
| Greenwood County (2013) | | | | | | | |
| Greenwood County (2015) | | | | | | | |
| Hampton County | | | | | | | |
| City of Hartsville | | x | | x | | | |
| Town of Hilton Head Island | | | | | | x | |
| Lexington County | | | | | | | |
| Marlboro County | | | | | | | |
| Saluda County | | | x | | | | x |

The **USE** measurement seeks to realize the value of broadband on the community. As defined by the National Broadband Plan, meaningful use of broadband benefits individuals, organizations, and communities through economic, education, government, and healthcare opportunities. Use scores are comprised of:

- **Economic Opportunity** – A community receives one point per basic use of broadband and two points per advanced use of broadband. Categories within economic opportunity include: economic development, business development, tourism, and agriculture.

- **Education** – Categories within education include K-12, higher education, and libraries.

- **Government** – Categories within government include general government, public safety, energy, and the environment.

- **Healthcare** – Entities within healthcare can include, but are not limited to, hospitals, medical and dental clinics, health departments, nursing homes, assisted living facilities, and pharmacies.

| Identified Priority Projects for Broadband Use | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | Enhance Telework Support and Attraction | Host a Technology Summit | Tech. for Agriculture | Tech. for Economic Development | Tech. for Education | Tech. for E-Government | Tech for Healthcare | Tech. for Public Safety | Tech. for Seniors | Tech. for Small Business | User Submitted |
| Abbeville County | | x | | | x | | | | | | |
| Anderson County | | | | | | | | | | | |
| Clarendon County | | | | | | | | | | x | |
| Dorchester County (Upper) | x | | | | | | | x | | x | |
| Greenwood County (2013) | | | | | x | | | | | | x |
| Greenwood County (2015) | | | | | x | | | | | x | x |
| Hampton County | | | | | x | | | | | | |
| City of Hartsville | | | | | | | | | | x | |
| Town of Hilton Head Island | | | | x | x | | | | | | |
| Lexington County | | | | | | | | | | | |
| Marlboro County | x | | | | x | | | | | | |
| Saluda County | | | | | | | | | | x | |

**Step 3: Plan.**
Once community resources and needs are identified, the community planning team begins to identify local priorities and policies, programs, and technical solutions that will accelerate broadband access, adoption, and use. Connected Nation provides recommended actions based on best practices from communities across the United States.

**Step 4: Act.**
The technology planning team works together to ensure that selected policies, programs, and technical solutions are adopted, implemented, improved, and maintained. The Connected program also provides a platform for collaboration and the sharing of best practices between communities. Connected Nation provides communications support to raise awareness of your community's efforts. For communities that measurably demonstrate proficiency in broadband access, adoption, and use in the Connected Assessment, Connected Nation offers Connected certification, a nationally recognized certification that provides an avenue for pursuing opportunities as a recognized, technologically advanced community. For more information about the Connected program, visit: www.connectmycommunity.org.

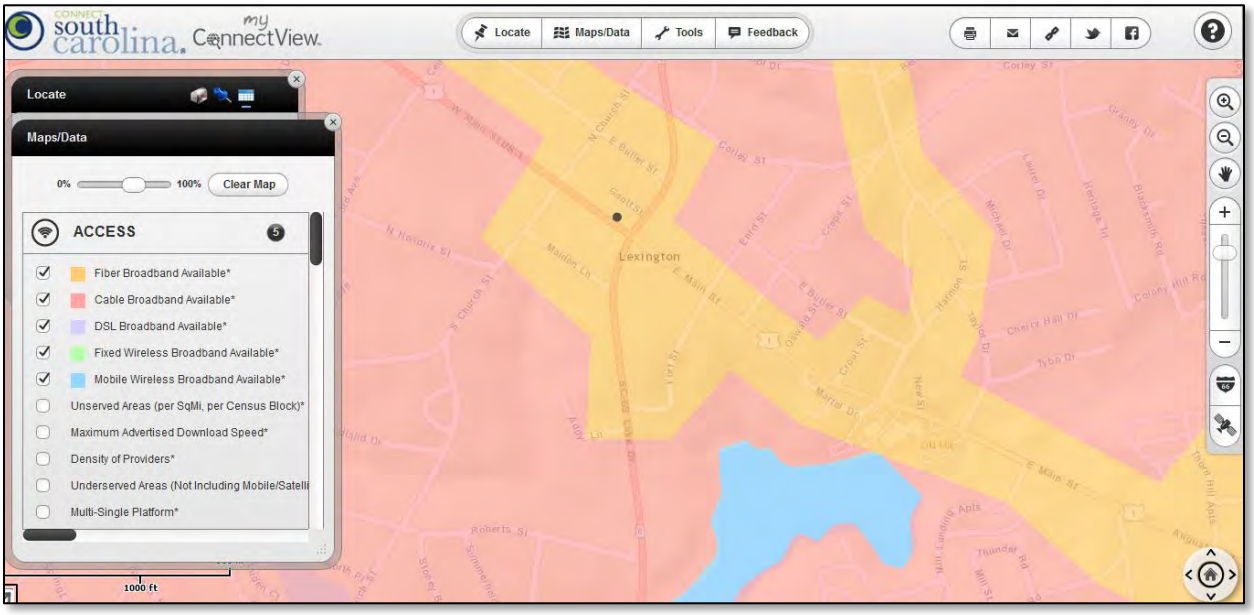
# APPENDIX 2: PROVIDER ENGAGEMENT

| PROVIDER NAME | PLATFORM | WEBSITE |
|---|---|---|
| AT&T Mobility LLC | Mobile Wireless | http://wireless.att.com |
| AT&T South Carolina | DSL | http://www.bellsouth.com |
| Atlantic Broadband | Cable | http://www.atlanticbb.com |
| Bluffton Telephone | Cable, DSL, Fiber | http://www.hargray.com |
| CenturyLink | DSL | http://www.centurylink.com |
| Charter Communications, Inc. | Cable | http://www.charter.com |
| Chesnee Communications | Cable, DSL | http://www.chesnet.net |
| Comcast | Cable | http://www.comcast.com |
| Comporium Communications | Cable, DSL, Fiber, Fixed Wireless, Mobile Wireless | http://www.comporium.com |
| Countrywide Wireless | Fixed Wireless | http://mycountrywidewireless.com |
| Cricket Wireless | Mobile Wireless | http://www.mycricket.com |
| Electronics Service Company | Fixed Wireless | http://www.ecswireless.com |
| Family View Cable | Cable | http://famview.com |
| Frontier Communications of the Carolinas, Inc. | DSL, Fiber | http://www.frontier.com |
| FTC (Farmers Telephone Cooperative) | DSL, Fiber, Mobile Wireless | http://www.ftc-i.net |
| Globalvision | Fixed Wireless | http://www.globalvision.net/ |
| Hargray Telephone | Cable, DSL | http://www.hargray.com |
| Home Telecom | Cable, DSL, Fiber | http://www.hometelco.com |
| Horry Telephone Cooperative, Inc. | Cable, DSL, Fiber | http://www.htcinc.net |
| Hughes Network Systems, LLC | Satellite | http://www.hughesnet.com |
| Level 3 Communications, LLC | Fiber | http://www.level3.com |
| MetroCast Communications | Cable | http://www.metrocast.com |
| Northland Cable Television | Cable | http://www.northlandcabletv.com |
| NTInet, Inc. | Fixed Wireless | http://ntinet.com |
| PDOL.com | Fixed Wireless | http://pdol.com |
| PRT Communications | DSL, Mobile Wireless | http://www.prtcnet.com |
| PRTC | DSL, Fiber | http://www.prtc.coop |
| Sandhill Telephone Cooperative | DSL | http://www.shtc.net |
| Skycasters | Satellite | http://www.skycasters.com |
| Skyrunner, Inc. | Fixed Wireless | http://skyrunner.net |
| Southern Coastal Cable LLC | Cable | http://sccctv.net |
| Sprint | Mobile Wireless | http://www.sprint.com |
| StarBand Communications | Satellite | http://starband.com |
| TDS Telecom | DSL | http://www.tdstelecom.com |
| Time Warner Cable | Cable | http://www.timewarnercable.com |
| T-Mobile | Mobile Wireless | http://www.t-mobile.com |

| | | |
|---|---|---|
| TruVista | DSL, Fiber | http://www.truvista.net |
| tw telecom of south carolina llc | DSL, Fiber | http://www.twtelecom.com |
| U.S. Cellular | Mobile Wireless | http://www.uscellular.com |
| Verizon Wireless | Mobile Wireless | http://www.verizonwireless.com |
| ViaSat | Satellite | http://www.wildblue.com |
| West Carolina Tel | DSL, Fiber | http://www.wctelephone.com |
| Windstream South Carolina, LLC | DSL | http://www.windstream.com |
| WOW! | Cable | http://www.wowway.com/home-map |

# APPENDIX 3: MY CONNECTVIEW™ INTERACTIVE MAP SCREENSHOT EXAMPLE

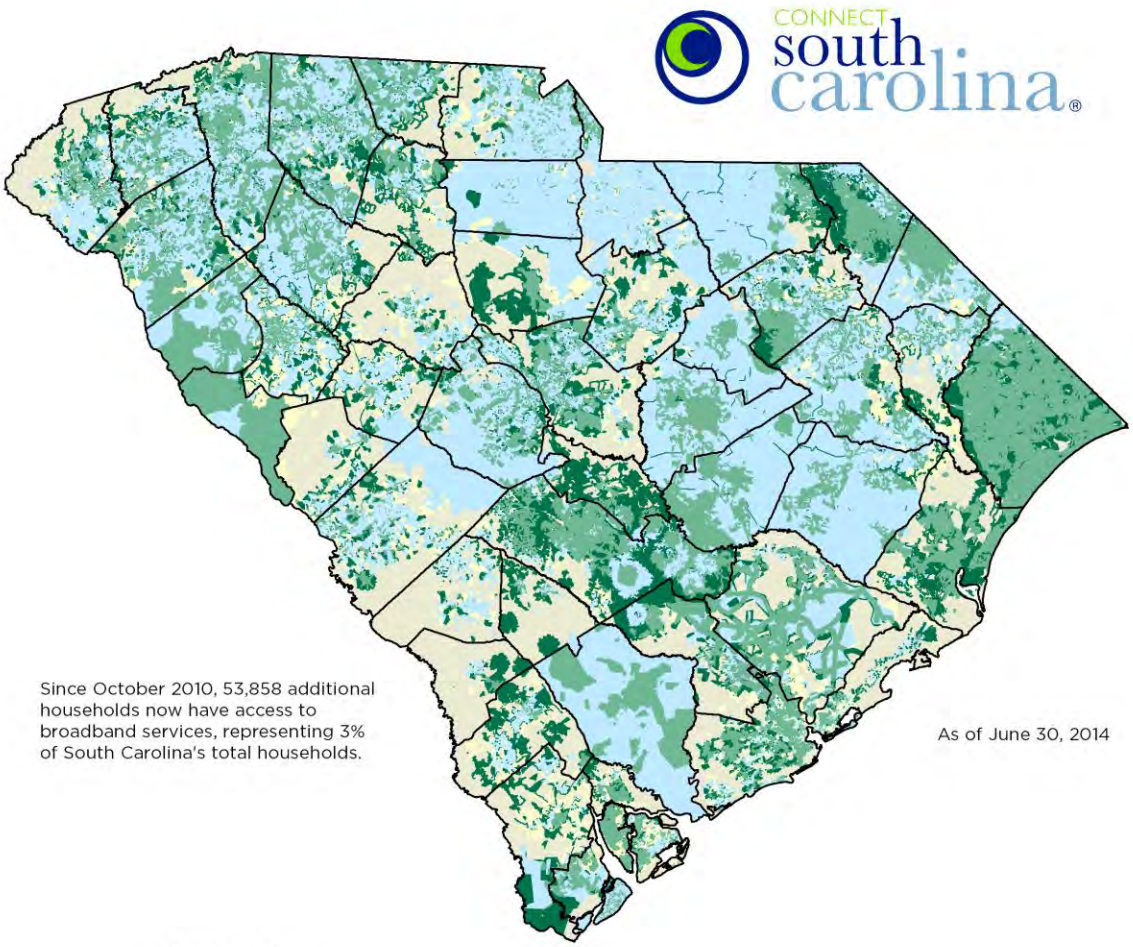
The following provides a screenshot of My ConnectView™ with focus on broadband service types available in the Lexington, South Carolina area. The full map is available at: http://www.connectsc.org/interactive-map.



## APPENDIX 4: CONNECT SOUTH CAROLINA MAPS

# Broadband Growth in the State of South Carolina

Changes in Fixed, Terrestrial Broadband Service since October 2010

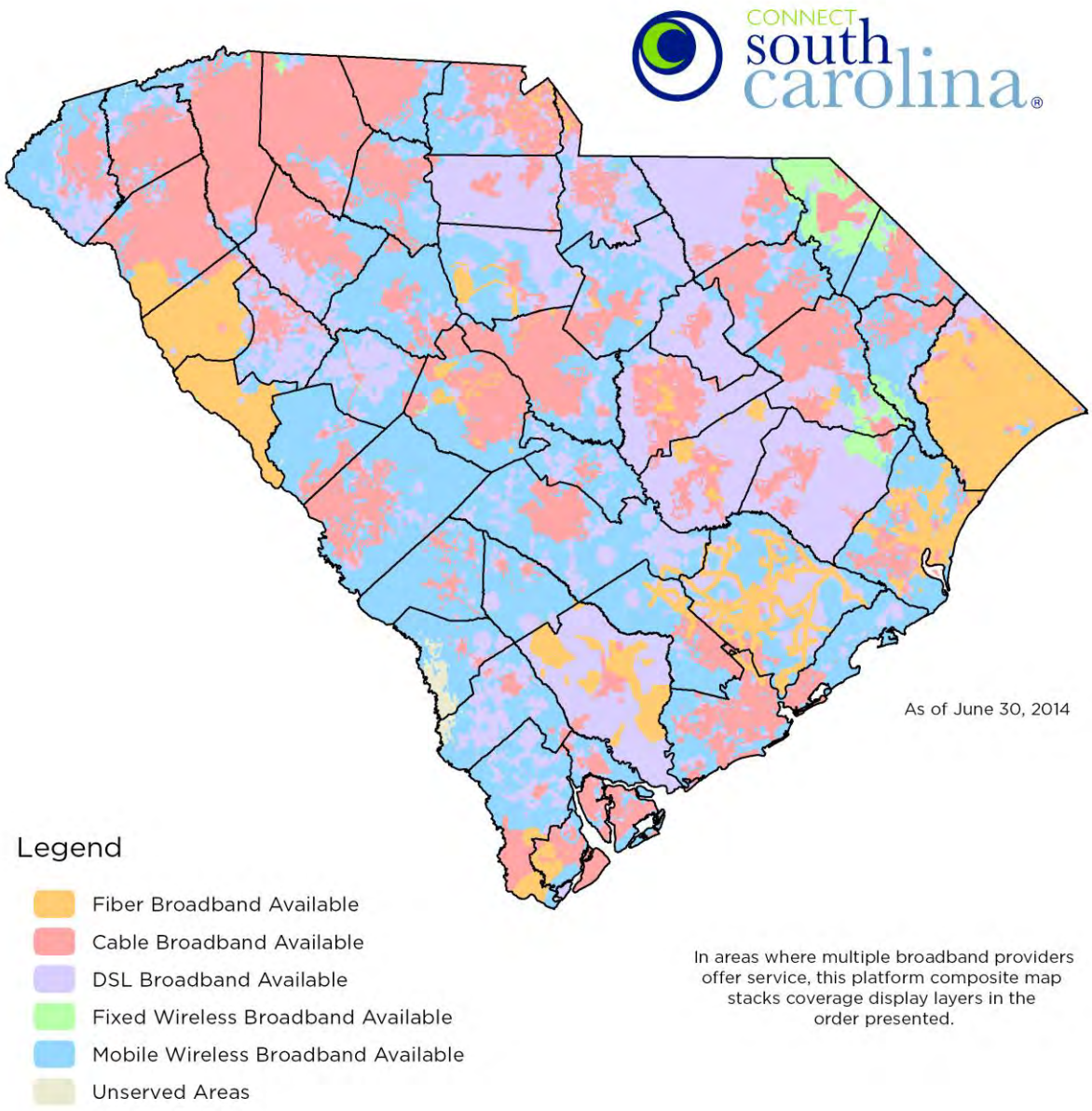



Legend

- Broadband Service in Existence in October 2010
- Broadband Service Created in Unserved Areas since October 2010
- Redundant Broadband Service Created since October 2010
- Broadband Service Removed since October 2010
- Unserved Areas

# Broadband Service Inventory for the State of South Carolina

Advertised Speeds of at Least 3 Mbps Downstream and 768 Kbps Upstream

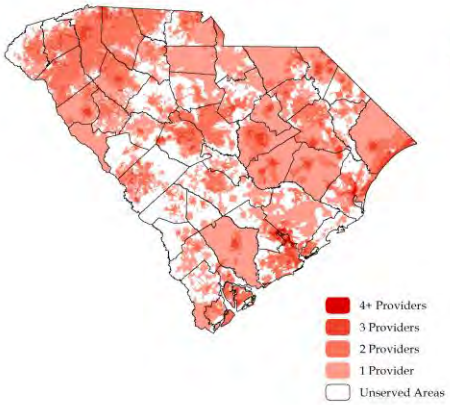


CONNECT south carolina®

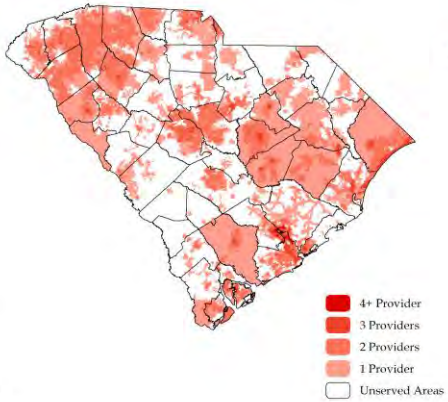
# Fixed Broadband Competition by Speed of Service

## Advertised Speeds as of June 2014

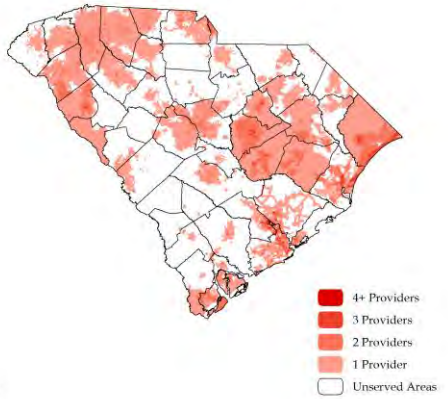
At Least 3 Mbps Downstream and 768 Kbps Upstream




At Least 10 Mbps Downstream and 1.5 Mbps Upstream




At Least 25 Mbps Downstream and 3 Mbps Upstream



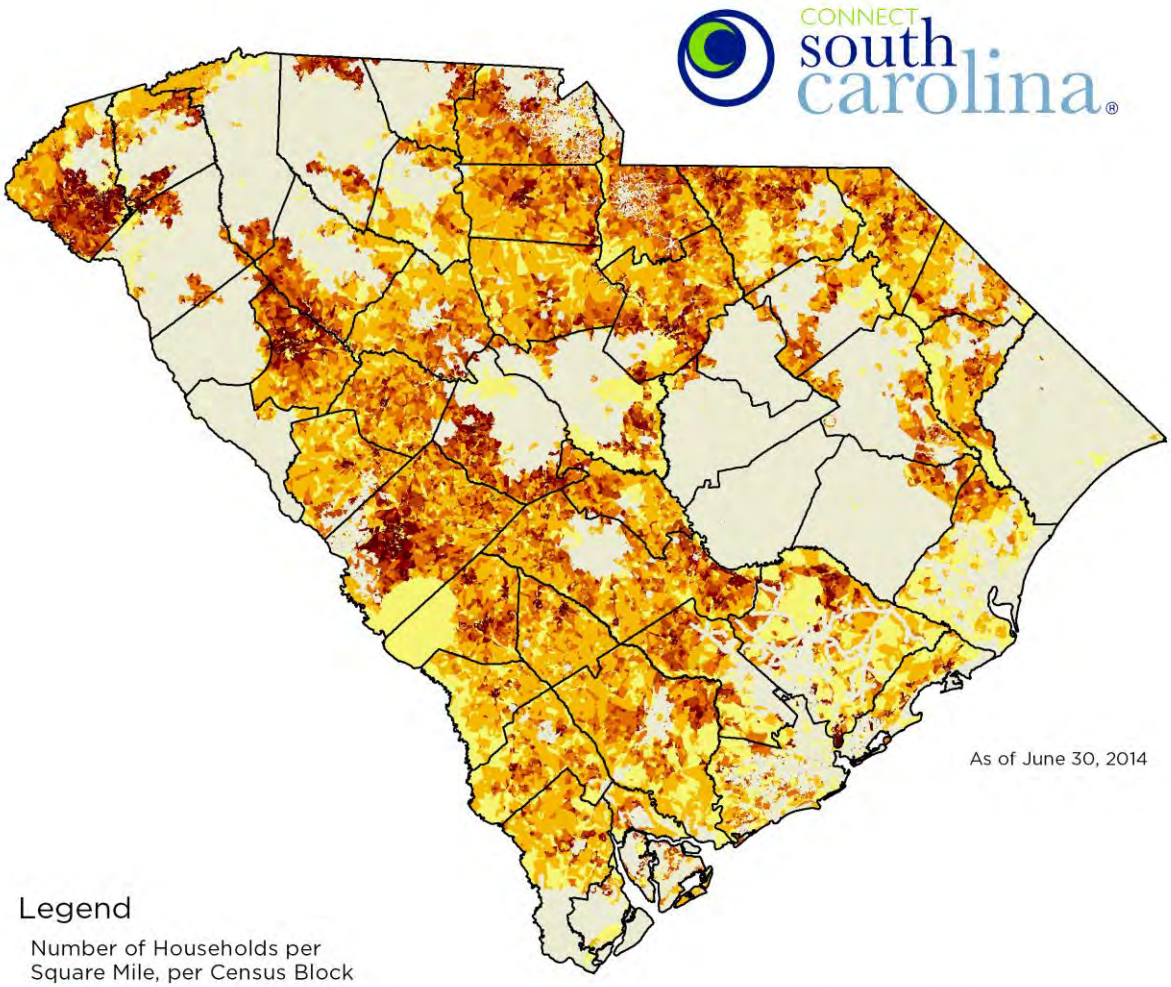

| Number of Facilities-Based Broadband Providers | Households Served 3 Mbps/768 Kbps | Households Served 10 Mbps/1.5 Mbps | Households Served 25 Mbps/3 Mbps |
|---|---|---|---|
| 4+ Providers | 13,039 | 8,370 | 147 |
| 3 Providers | 197,702 | 131,131 | 45,855 |
| 2 Providers | 975,539 | 794,447 | 301,725 |
| 1 Provider | 513,467 | 649,513 | 1,116,286 |
| Unserved | 101,434 | 217,720 | 337,168 |

Published January 26, 2015

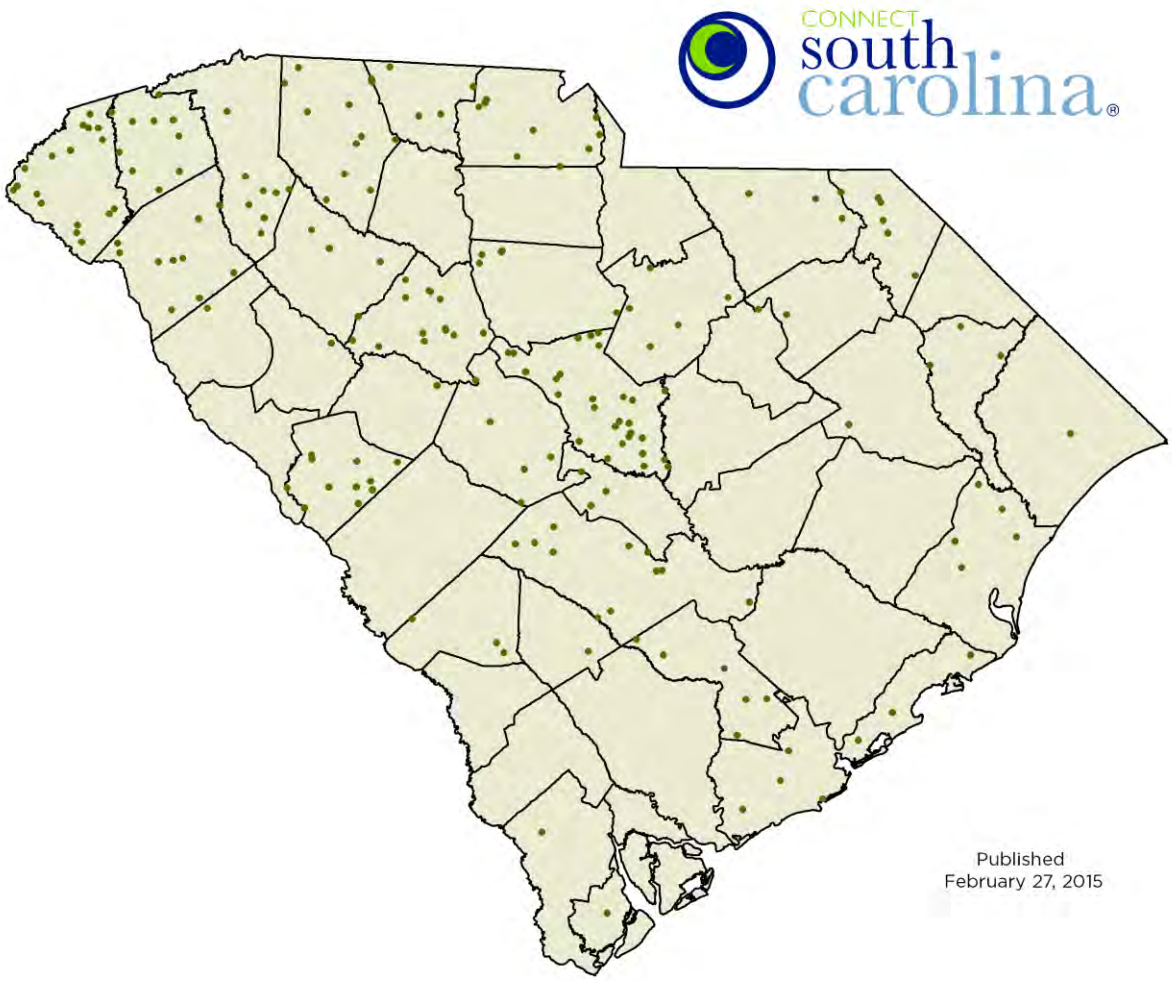
www.connectednation.org/fcc-maps

Mobile and satellite broadband services not included

# Density of South Carolina Households Unserved by the FCC's New Broadband Definition of 25 Mbps Download and 3 Mbps Upload

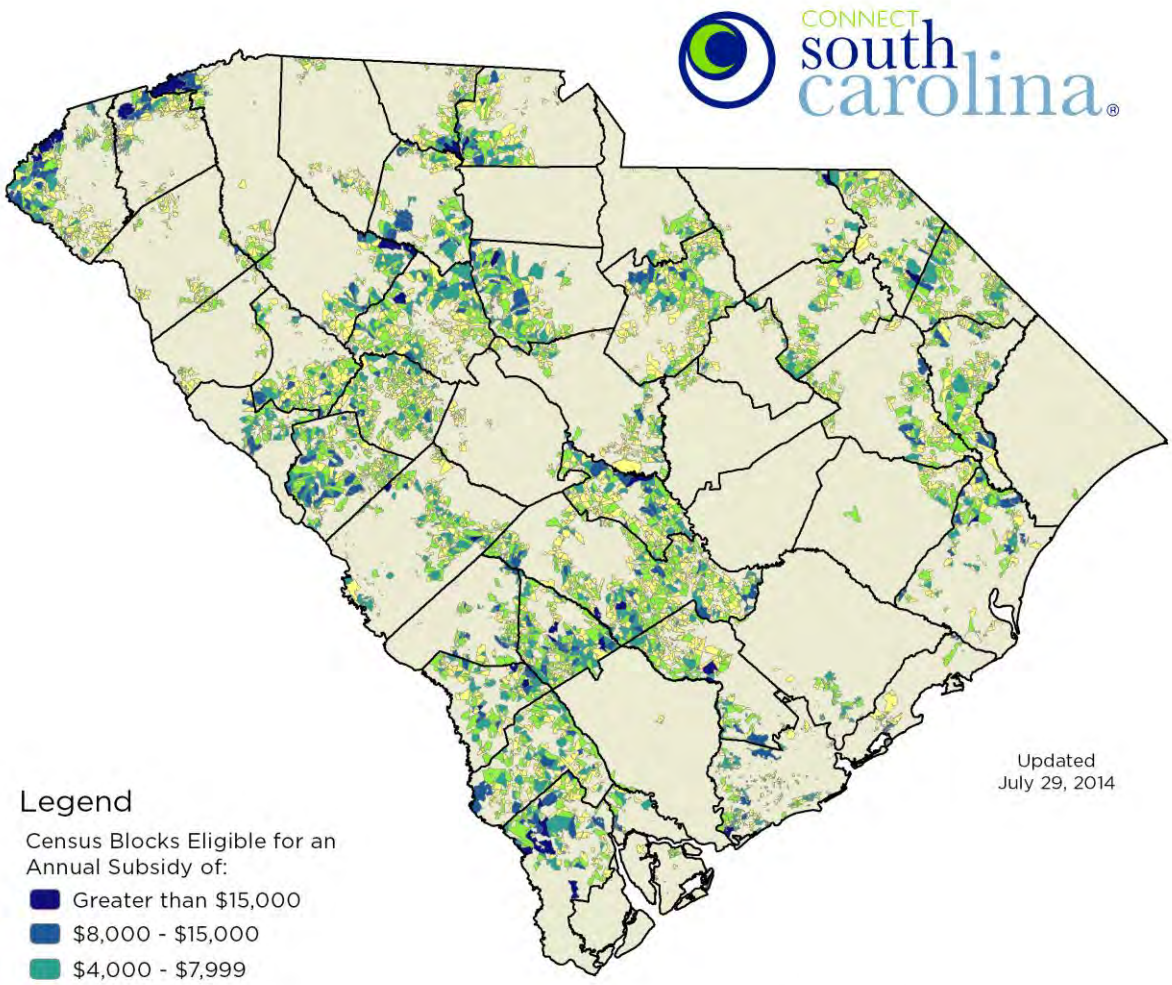


# Broadband Inquiry Density for the State of South Carolina



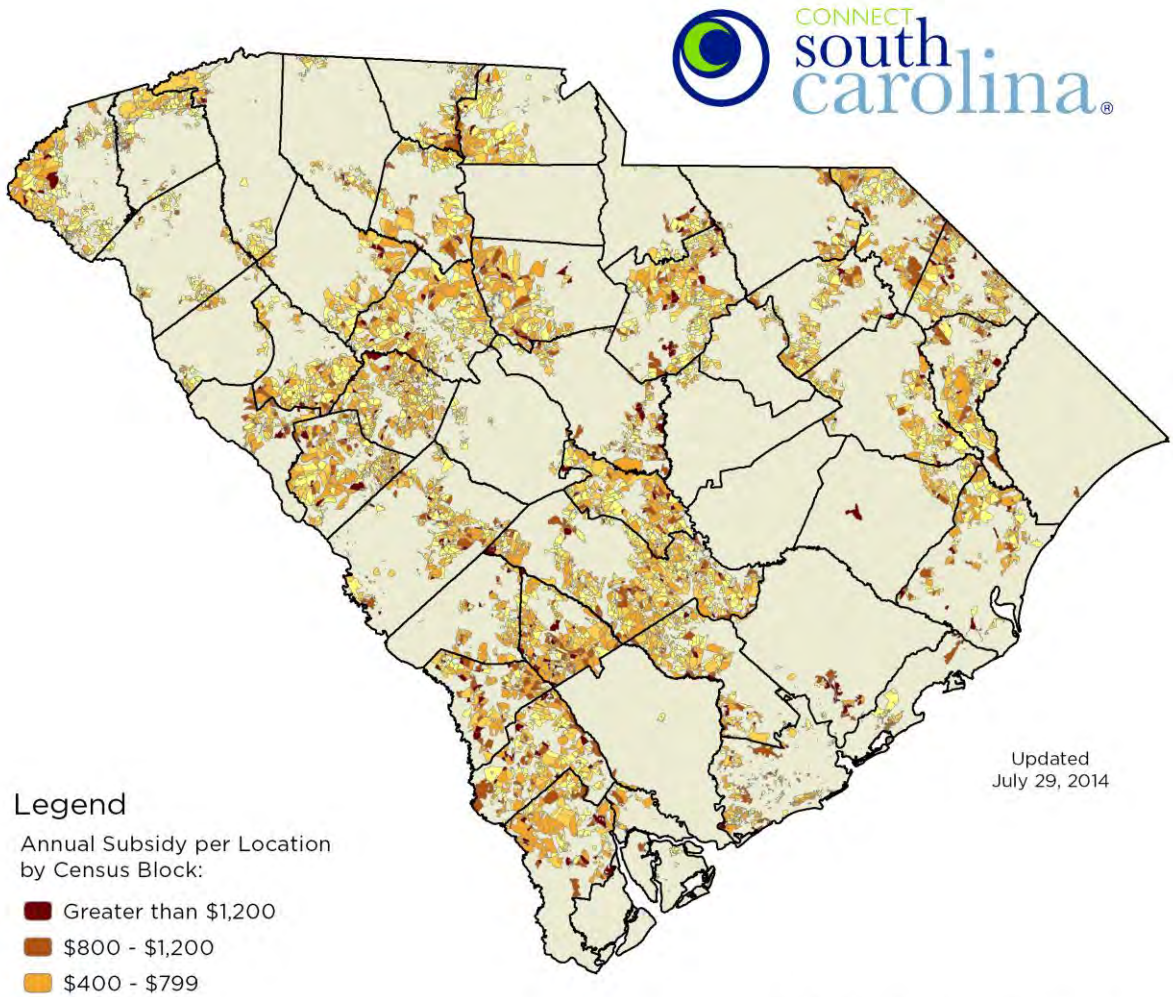

*1 dot = 1 inquiry*

# FCC Rural Broadband Experiment Eligible Locations and Annual Subsidy Amounts



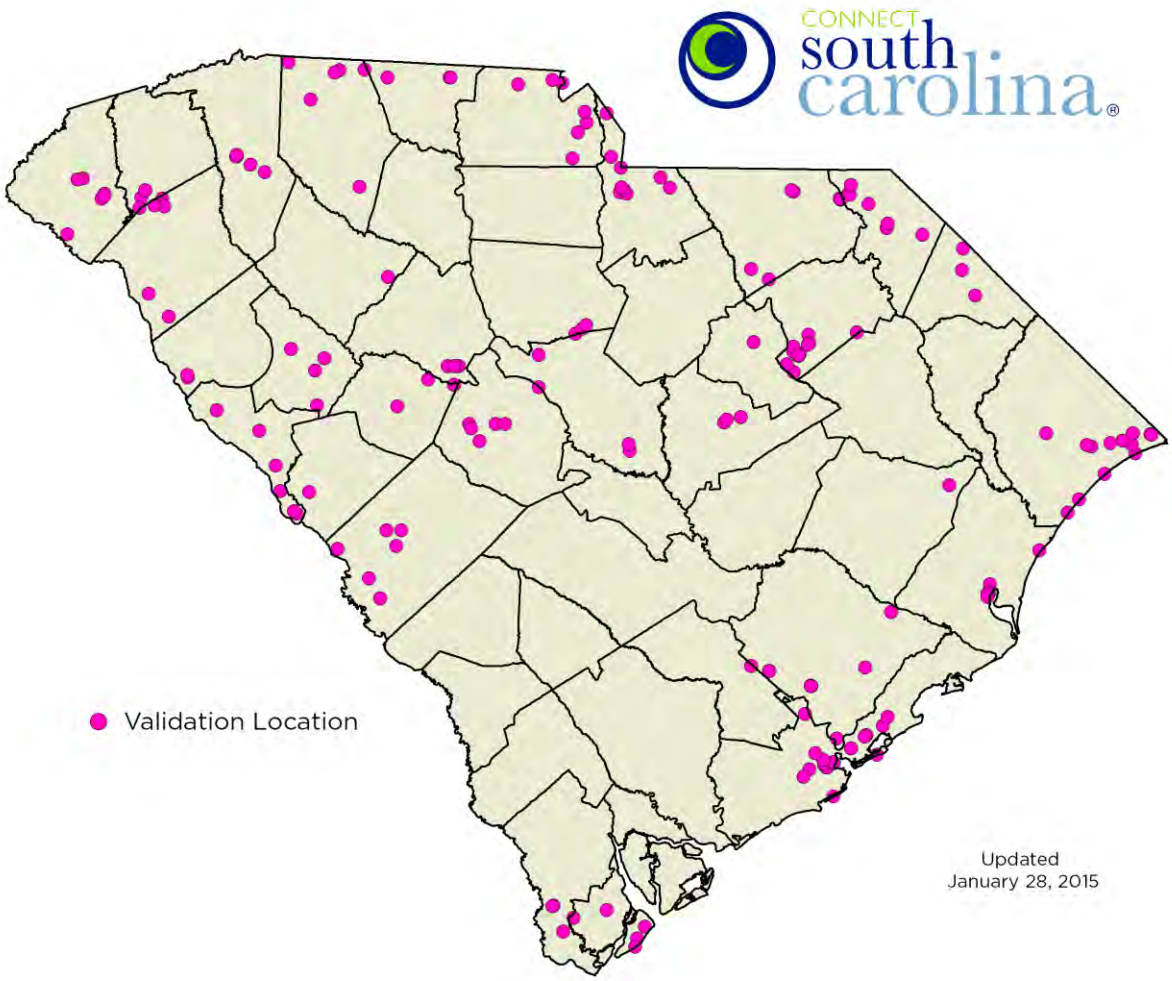

| Provider | Eligible Price-Cap Locations |
|---|---|
| AT&T | 31,222 |
| CenturyLink | 8,260 |
| Frontier | 7,738 |
| Windstream | 2,838 |

# FCC Rural Broadband Experiment Eligible Locations, Annual Subsidy per Location by Census Block




| Provider | Average Annual Subsidy per Location |
|---|---|
| AT&T | $315 |
| CenturyLink | $340 |
| Frontier | $356 |
| Windstream | $295 |

# Validation Locations for the State of South Carolina

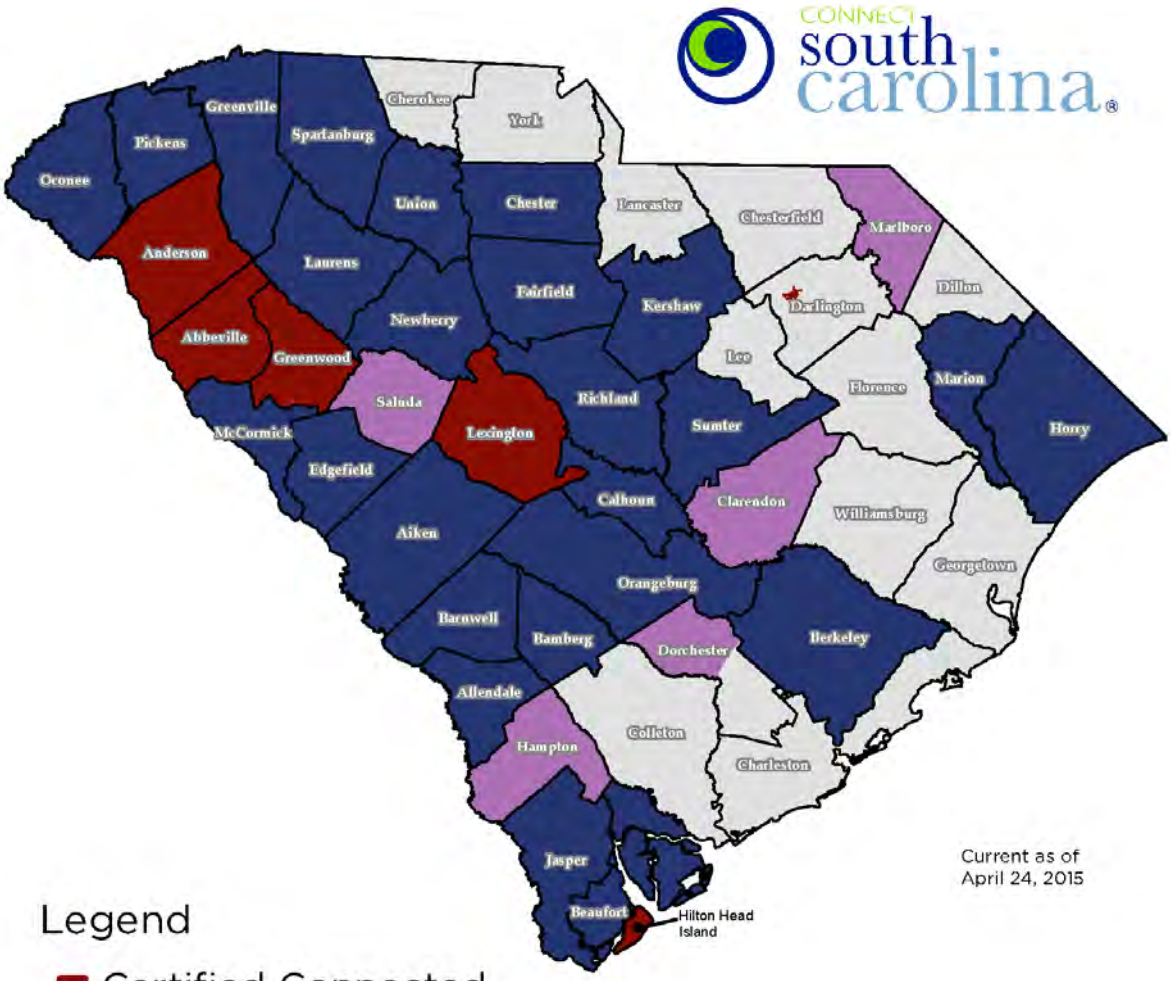



This map displays 189 validation locations across the state; as of the final SBI submission in October 2014, 41 viable providers, or 91.11%, have been validated through field verification activities.

# Community Engagement Status

CONNECTED℠

CONNECT south carolina®

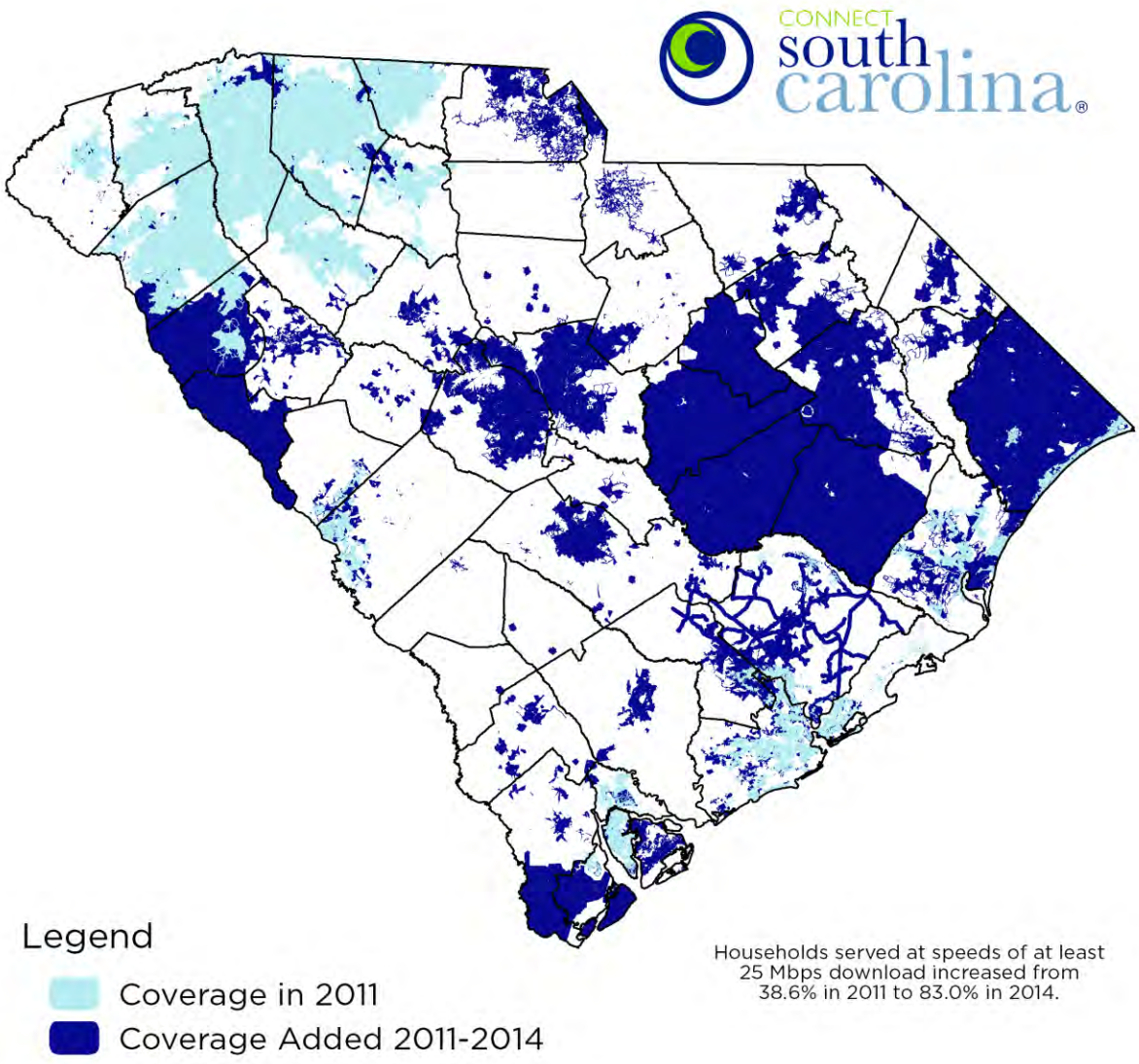



Current as of April 24, 2015

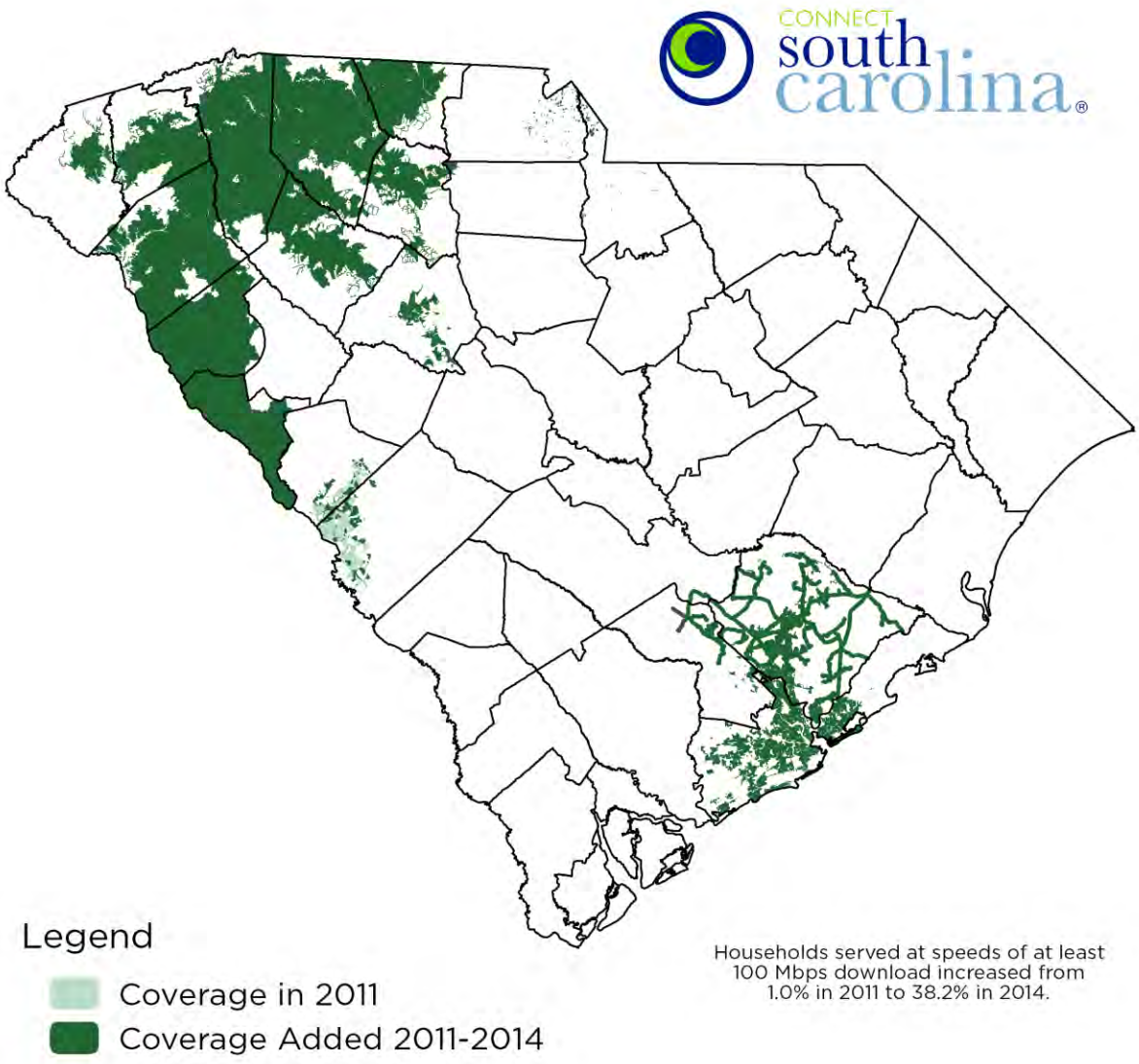
Legend

- Certified Connected
- Completed Action Plan
- Community Engaged
- No Project Launched

# South Carolina's Progression of 25 Mbps Download Broadband



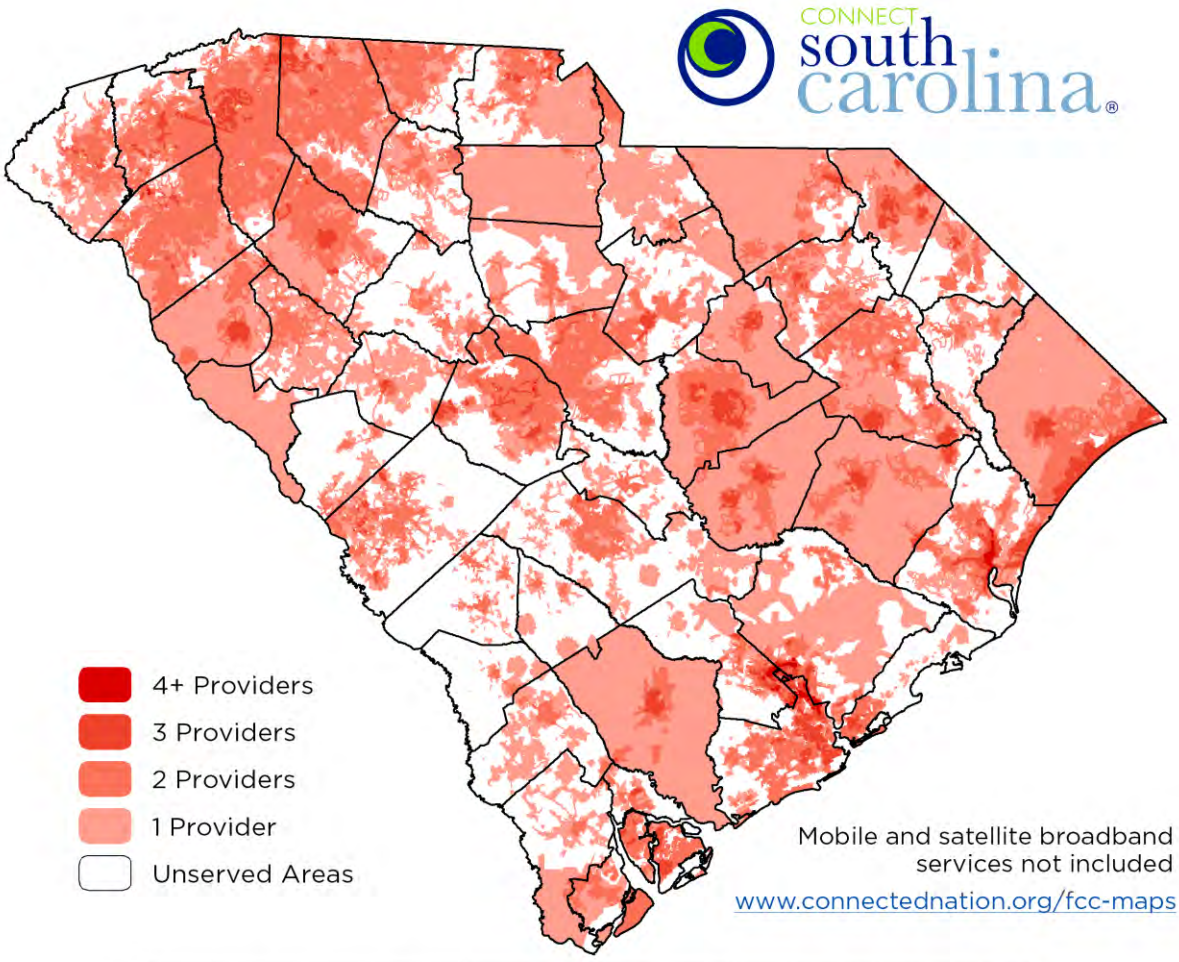
# South Carolina's Progression of 100 Mbps Download Broadband



# Fixed Broadband Competition by Speed of Service

## Advertised Speeds as of June 2014

At Least 3 Mbps Downstream and 768 Kbps Upstream

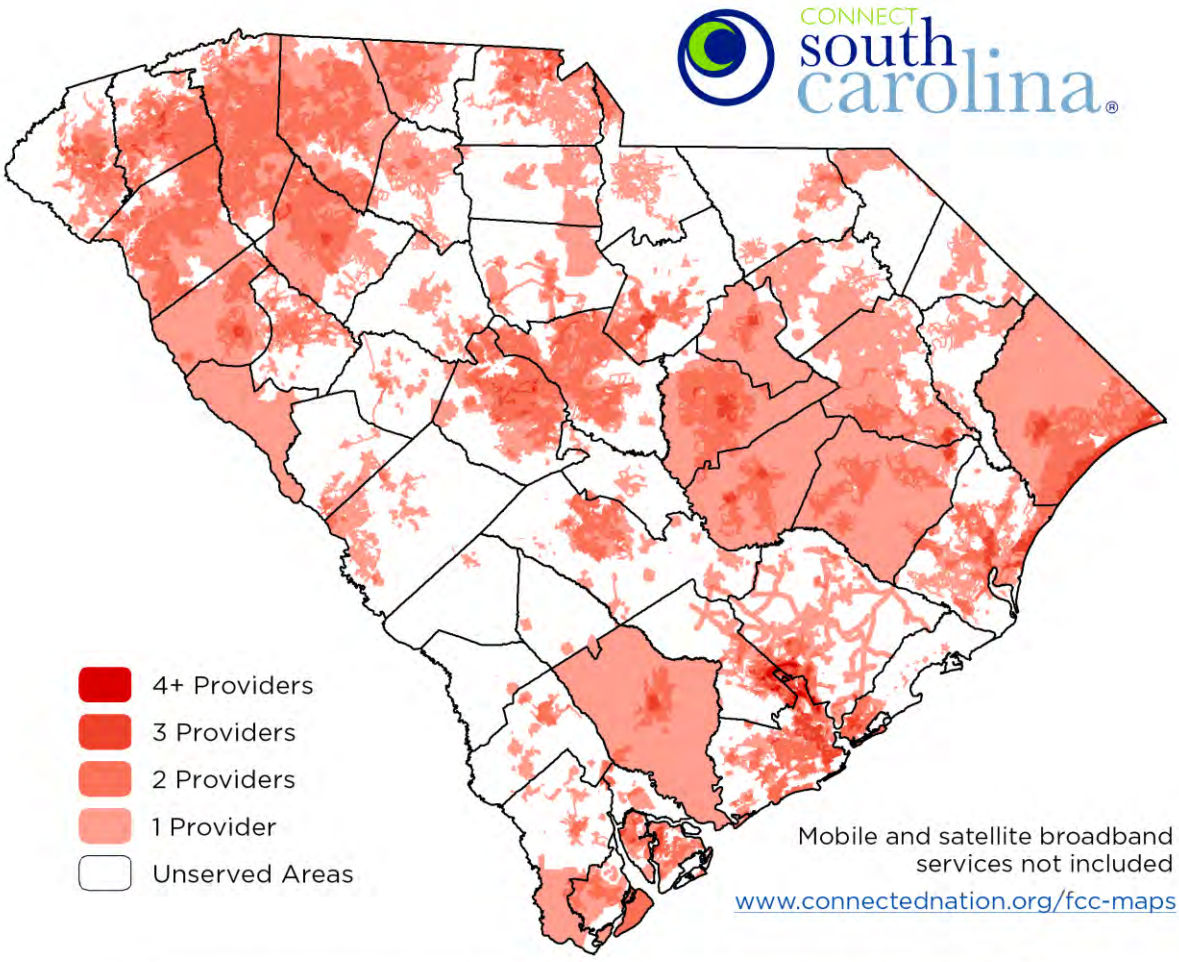



| Number of Facilities-Based Broadband Providers | Households Served 3 Mbps/768 Kbps | Households Served 3 Mbps/768 Kbps (Percent) |
|---|---|---|
| 4+ Providers | 13,039 | 0.72% |
| 3 Providers | 197,702 | 10.98% |
| 2 Providers | 975,539 | 54.16% |
| 1 Provider | 513,467 | 28.51% |
| Unserved | 101,434 | 5.63% |

# Fixed Broadband Competition by Speed of Service

## Advertised Speeds as of June 2014

At Least 10 Mbps Downstream and 1.5 Mbps Upstream

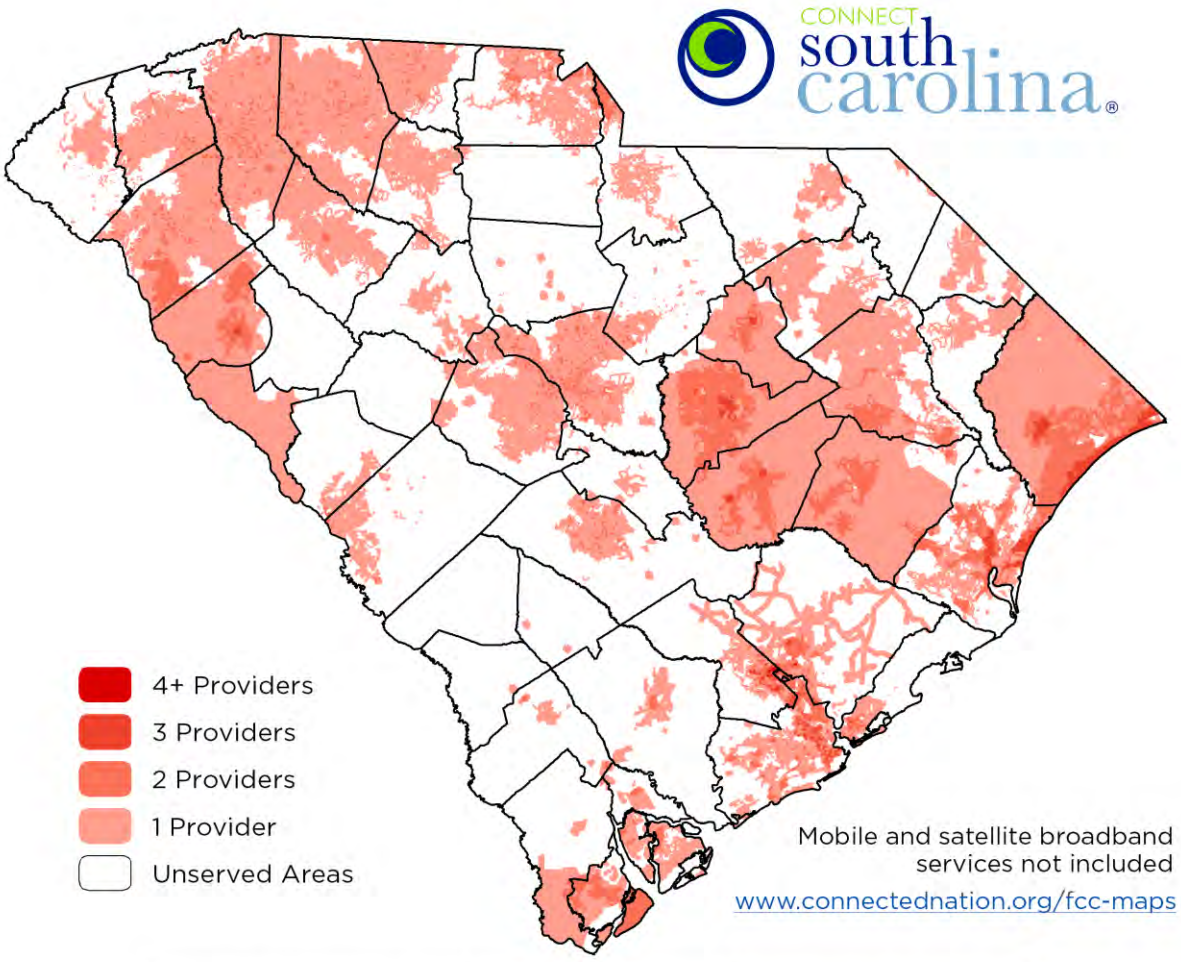



| Number of Facilities-Based Broadband Providers | Households Served 10 Mbps/1.5 Mbps | Households Served 10 Mbps/1.5 Mbps (Percent) |
|---|---|---|
| 4+ Providers | 8,370 | 0.46% |
| 3 Providers | 131,131 | 7.28% |
| 2 Providers | 794,447 | 44.11% |
| 1 Provider | 649,513 | 36.06% |
| Unserved | 217,720 | 12.09% |

# Fixed Broadband Competition by Speed of Service

## Advertised Speeds as of June 2014

At Least 25 Mbps Downstream and 3 Mbps Upstream




| Number of Facilities-Based Broadband Providers | Households Served 25 Mbps/3 Mbps | Households Served 25 Mbps/3 Mbps (Percent) |
|---|---|---|
| 4+ Providers | 147 | 0.01% |
| 3 Providers | 45,855 | 2.55% |
| 2 Providers | 301,725 | 16.75% |
| 1 Provider | 1,116,286 | 61.98% |
| Unserved | 337,168 | 18.72% |

# APPENDIX 5: ENGINEERING & TECHNICAL SERVICES FIELD VALIDATION TECHNIQUES

## Introduction

Connected Nation, Inc. is a not-for-profit working across states and with the federal government to implement the State Broadband Data and Development (SBDD) program created by the Broadband Data Improvement Act of 2008 and funded by the American Recovery and Reinvestment Act of 2009, and is managed by the National Telecommunications and Information Administration (NTIA) within the Department of Commerce. One of the main components of the SBDD program is the creation of a detailed, nationwide map of broadband coverage in order to accurately pinpoint remaining gaps in broadband availability across the nation. Connected Nation is the largest mapping agent across the nation supporting the SBDD program, working in Alaska, Florida, Iowa, Kansas, Michigan, Minnesota, Nevada, Ohio, Puerto Rico, South Carolina, Tennessee, and Texas to collect, process, integrate, and validate provider data, and map the broadband inventory across these jurisdictions.
Connected Nation's methodology for fulfilling the charge of the SBDD program starts with first establishing a trustworthy relationship with the dozens and sometimes hundreds of providers in each jurisdiction. Our mapping and engineering experts work with the providers to understand what data they have or can develop in-house describing their service territory by speed tier. Connected Nation then processes these data through a validation process that helps ensure the accuracy of the mapping data. This validation process is informed by, among other methods, broadband inquiries provided by consumers and local stakeholders about the information depicted through Connected Nation's interactive broadband maps. This crowdsourcing approach is instrumental in helping to guide our validation process. Where providers are unable or unwilling to participate in the program and share data about their service territory, Connected Nation implements an estimation of their service territory using various techniques.

This white paper provides an overview of Connected Nation's methodology for provider outreach and relationship management, consumer data collection, and analysis to leverage crowdsourcing data stemming from broadband inquiries, and field validation of data volunteered by thousands of participating broadband providers. The memorandum also describes Connected Nation's methodology for estimating the broadband coverage of providers who do not choose to participate in the SBDD program and volunteer estimates of their service territory.

### Provider Relationship Management

Over the past two years, Connected Nation's Engineering & Technical Services ("ETS") team has created a strong rapport with broadband providers on a local and national level. The goal was to develop trustworthy relations with thousands of providers across the jurisdictions where we are charged with completing a broadband inventory map: Alaska, Florida, Iowa, Kansas, Michigan, Minnesota, Nevada, Ohio, Puerto Rico, South Carolina, Tennessee, and Texas. Beginning with an initial database of several thousand potential providers two years ago, the ETS team has contacted every known provider of broadband services in 12 U.S. states and territories, spoken with provider executives and broadband technicians, identified that the companies were viable providers of backhaul and residential broadband services, and learned about each of the 1,400 viable broadband service businesses. The ETS team has worked with providers, large and small, to understand what data they had available or could develop within the allotted time; it has collected these data and in tandem with Connected Nation's mapping

team of GIS technicians, validated, integrated, and ultimately mapped the service territory of approximately 1,400 providers.

The NITA requires two annual updates to the SBDD mapping data – one in the spring and one in the fall. During these biannual mapping cycles, each provider is contacted at least three times by ETS team members by e-mail or telephone. Each year, providers rely on Connected Nation's ETS team members as well for information about mapping updates or federal programs. While in the field, ETS team members also meet and talk face-to-face with broadband business owners, ask questions, and learn a variety of useful information:

- What challenges do providers face in the current business environment?
- Which providers are growing and which are contracting?
- Which providers seek help and which have received assistance?
- Which providers are reluctant to participate in special programs?
- Which providers have compelling success stories that can be shared?
- Who is pushing the envelope to extend broadband services in new ways and to more remote locations?
- How is new broadband deployment financed in different regions and for different platforms?
- How have federal stimulus funding programs impacted the business?
- Do providers find the annual RUS funds accessible and practical to manage?

Members of the ETS team regularly attend provider conferences and trade shows to stay abreast of ever-changing regulatory and technical advances. On many occasions, the attending ETS team member is participating as one of the defining speakers to share knowledge on broadband mapping, digital literacy, broadband adoption and sustainability programs, and to report on real-time research analysis conducted by Connected Nation.

### Consumer Data Collection and Analysis

Broadband inquiries ("BBIs") are submitted frequently by consumers via Connected Nation's state-level websites. Inquirers often seek help to identify local broadband provider options, or to learn when a specific provider may be able to provide service at a particular location. Consumer comments also provide information which may help validate the underlying mapping data.

To date, Connected Nation has received more than 20,000 BBIs, representing a large crowdsourcing database of service information and consumer experiences. The primary objectives of Connected Nation regarding these inquiries are to 1) improve the accuracy of the state maps with submitted consumer information and follow-up field research, 2) provide broadband options to consumers through cooperation with mapped providers and by facilitating new broadband service options, and 3) map and analyze information from consumers about areas of unmet broadband demand and alternatives to currently mapped services.

The process for responding to a BBI is straightforward, while the tools used by the ETS team are varied. Tools include the state BroadbandStat maps, ArcGIS Explorer for reviewing (i) confidential provider inventory maps, (ii) geocoded BBIs; and (iii) geocoded tower location maps, provider data submission updates, provider websites, QuickBase, the Federal Communications Commission ("FCC") Spectrum Dashboard, FCC Universal Licensing System and Antenna Structure Registration databases, and a

plethora of other useful resources.

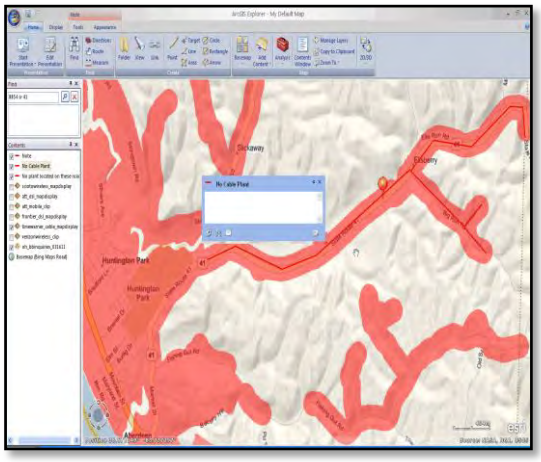
Following completion of desktop research and a provider inventory for the BBI address, an ETS team member speaks directly to the BBI consumer to gather more specific information, with the objective of either: a) confirming or revising the BBI's provider inventory, or b) gathering information about possible broadband options near the BBI address.

While the mapping engine is designed to capture the **supply** of broadband services in any particular state, the BBI process has the ability to capture **demand** information, and measure that demand against the available supply. Examples of questions that may be answered by a completed BBI dataset:

- Where are there concentrations of unmet demand (e.g., neighborhoods, lakeshores, school district boundaries)?
- Where are areas where consumers say price is a barrier for broadband adoption?
- Which providers are most often reported as mapped, but not providing service?
- How many unserved consumers are close to a wireless tower, and how many might be able to receive wireless broadband with installation of a signal repeater?
- What service platform is most requested by BBI consumers?
- Which service providers are most often requested by BBI consumers?

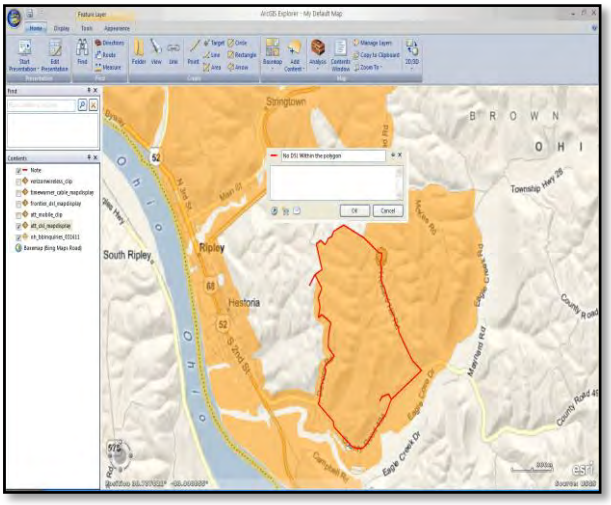
The answers to these and other questions present opportunities to Connected Nation for identifying and participating in broadband expansion opportunities and challenges.

Following the completion of the provider inventory with the consumer, the ETS team member can offer the consumer location-specific options for obtaining service, such as providing contact information for providers that the consumer was unaware were available, including satellite providers offering service and equipment assistance in certain situations. Potentially, the BBI process can capture information related to satellite referrals and other data points. Further, in instances where the provider inventory indicates a mapping discrepancy, the GIS department can potentially capture information related to census-block and road-segment reporting. Such information can yield other information, such as which platform is more likely to be overstated due to these issues, or what percentage of the mapped population is affected by use of these reporting blocks.



Although Connected Nation's GIS department could have simply created a "pin-point polygon" around the customer's home demonstrating no service on the Connected Nation online broadband mapping platform, follow-up calls to the consumer indicated a larger potential problem: the consumer commented on the mapped area stating that cable modem service is "generally unavailable for several miles on my road." The ETS team elected to conduct on-site research, and the results of the field validation effort produced a fairly noticeable mapping refinement (the pink shading at right represents

the provider service area while the dark red line indicates where there is no cable plant).




Mapping discrepancies similar to the example above are certainly to be expected in areas where providers submit census-block data. At left, the red-line polygon indicates an unserved area within the orange-shaded service region. This discussion drives home the importance of BBI, crowdsourcing information and the field validation effort as a way of resolving broadband inquiries, improving the broadband maps, and responding more fully to clients, the general public demanding broadband, and other stakeholders.

### Field Data Collection

Connected Nation's ETS team has driven nearly 100,000 miles and completed thousands of on-site validations of data submitted by the thousands of broadband providers included in Connected Nation broadband maps. Provider field validations are performed throughout the calendar year to meet NTIA requirements, as well as to test and confirm provider service boundaries, deployed assets, broadband speeds, and delivery platforms. ETS team members utilize a variety of resources for validation support, including provider coverage maps, FCC databases, and volunteered provider data submissions. Validation locations are selected based on a broad set of criteria, and include all platform types. A significant benefit to field work is that the ETS team gains a better understanding of the local broadband environment while on-site and can identify previously unknown broadband providers – particularly, fixed wireless providers. Such first-hand knowledge can be an important asset in informing future programs.

Various tools, visual inspections, and tests provide the basis for a validation report. ETS engineers utilize spectrum analyzers and frequency-tuned antennas, GPS devices, cameras, and mapping programs to test, capture, and record validation information. All validation information can now be recorded directly into Connected Nation's QuickBase tool for geocoding, review, analysis, and reporting. Using common laptop computer software, ETS engineers can access open broadband connections, determine the first-, middle-, and last-mile providers for an Internet connection, and complete speed tests through Connected Nation's online speed test tools or through other speed-test utilities.

Visual confirmation of a provider's presence in a community includes visiting provider offices and network operations centers, identifying and inspecting overhead (utility pole) and underground (pedestals and cabinets) gear labeled with provider names, seeking print-media listings and outdoor advertisements, researching federal licenses and local franchises, and testing wireless frequencies for transmissions and signal strengths. Validations may also include direct communication with broadband consumers in the provider's service area.

### Data Validation of Participating Provider

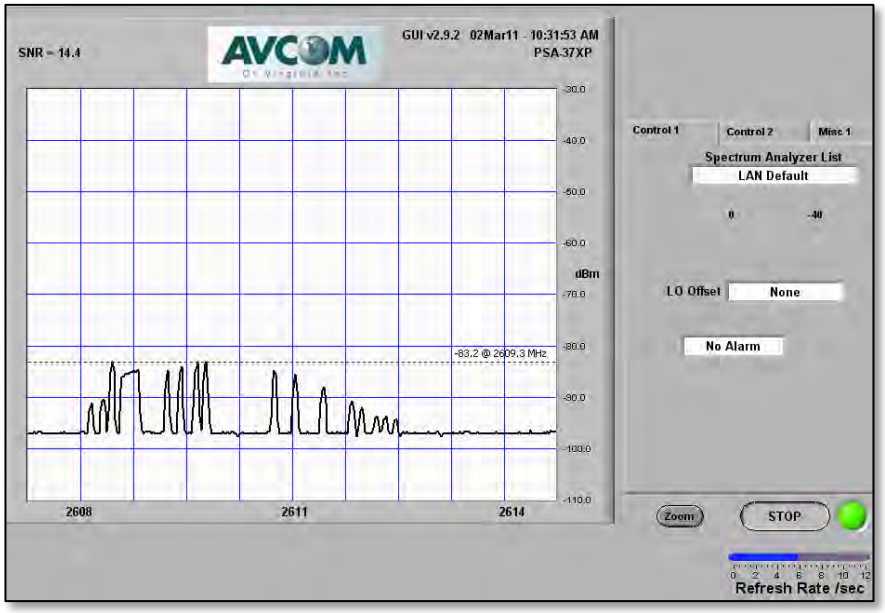
Field validations on data volunteered by broadband providers begin weeks in advance of the field trips as members of the ETS team work to prioritize an area of the state for field visitation. As described above, this process is also informed by crowdsourcing data collected through broadband inquiries from the general public. The next task involves identifying all viable providers in the defined area and determining their current level of participation in the broadband mapping program. Contact attempts are made to schedule on-site visits with providers to engage active participation in the validation process and to further the relationship. Lastly, ETS specialists will research the FCC Spectrum Dashboard to identify licensed mobile and fixed wireless spectrum users in the area. Armed with relevant data, provider appointments and an arsenal of test equipment (as shown below), the ETS team member sets out to determine how closely the actual broadband environment matches the graphic depiction displayed on the Connected Nation state-level interactive broadband map.

The video available at this link http://www.youtube.com/watch?v=tNMEQKHbDls provides an example of a typical Connected Nation field validation performed by ETS member Dwayne Goodman in Midlothian, a community south of Dallas, Texas.

Another typical field validation exercise was conducted on broadband data provided to Connected Nation by a fixed wireless provider in Michigan using licensed BRS spectrum to deliver broadband services across mostly rural areas in the upper portion of Michigan's Lower Peninsula.

The ETS member is armed with a propagation map such as the one depicted below displaying coverage in Alden, MI, which is 21.5 miles from the wireless provider's transmit site west of Traverse City, MI. Using the data submitted by the provider, the ETS team conducting this field validation calculated a receiver threshold at the test point of approximately -81dBm using a 9dBi gain receive antenna, and an actual field reading of -83.2dBm, as depicted in the chart on the following page.


Torch Lake
Elk Rapids
Alden
Rapid City
Acme
Baker Creek
Williamsburg
72


SNR = 14.4
AVCOM
GUI v2.9.2 02Mar11 - 10:31:53 AM
PSA-37XP
-30.0
-40.0
-50.0
-60.0
dBm
-70.0
-80.0
-83.2 @ 2609.3 MHz
-90.0
-100.0
-110.0
2608
2611
2614
Control 1
Control 2
Misc 1
Spectrum Analyzer List
LAN Default
0
-40
LO Offset
None
No Alarm
Zoom
STOP
0 2 4 6 8 10 12
Refresh Rate /sec

Occasionally, field validations uncover information that is contrary to data submitted by a provider. One such instance involved a Michigan Competitive Local Exchange Carrier (CLEC) that had provided coordinates for a remote terminal, a field enclosure that houses DSL distribution equipment (see picture below).


The CLEC affirmed they provided DSL services to the surrounding community over copper owned by the Incumbent Local Exchange Carrier (ILEC), but from equipment owned by the CLEC.

An ETS team member drove to the listed coordinates and located underground telephone pedestals belonging to the ILEC, but there was no remote terminal enclosure belonging to the CLEC. What was found at that location was a concrete pad with empty conduit. This suggests that someone prepared for an enclosure to be installed, but no equipment is in place and no wires have been installed. Such field validation is then used to make relevant corrections to that provider's estimated broadband service territory.

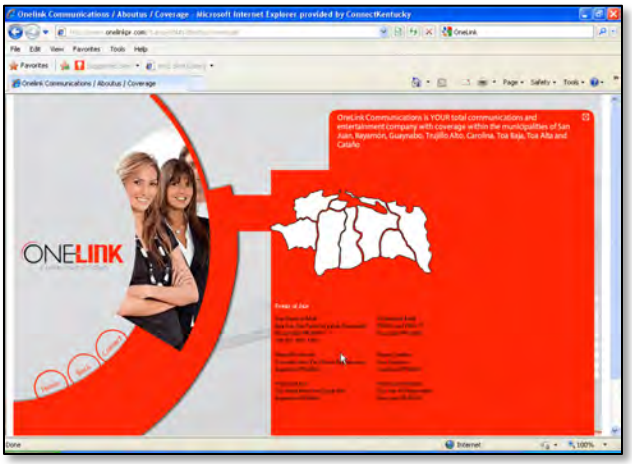
### Data Submission of Non-Participating Provider

In instances where providers are unable or unwilling to participate in the data collection process, Connected Nation has developed an internal "play book" of best practices necessary for extraction of data from a combination of field validation techniques paired with publically available data. One such example includes Connected Nation's estimation of San Juan Cable, LLC's or OneLink Communications' service territory for the cable broadband provider in the greater San Juan area in Puerto Rico. Connect Puerto Rico, a wholly owned subsidiary of Connected Nation, is working for the Office of the Chief Information Officer of Puerto Rico (OCIO) to implement the SBDD program across Puerto Rico.

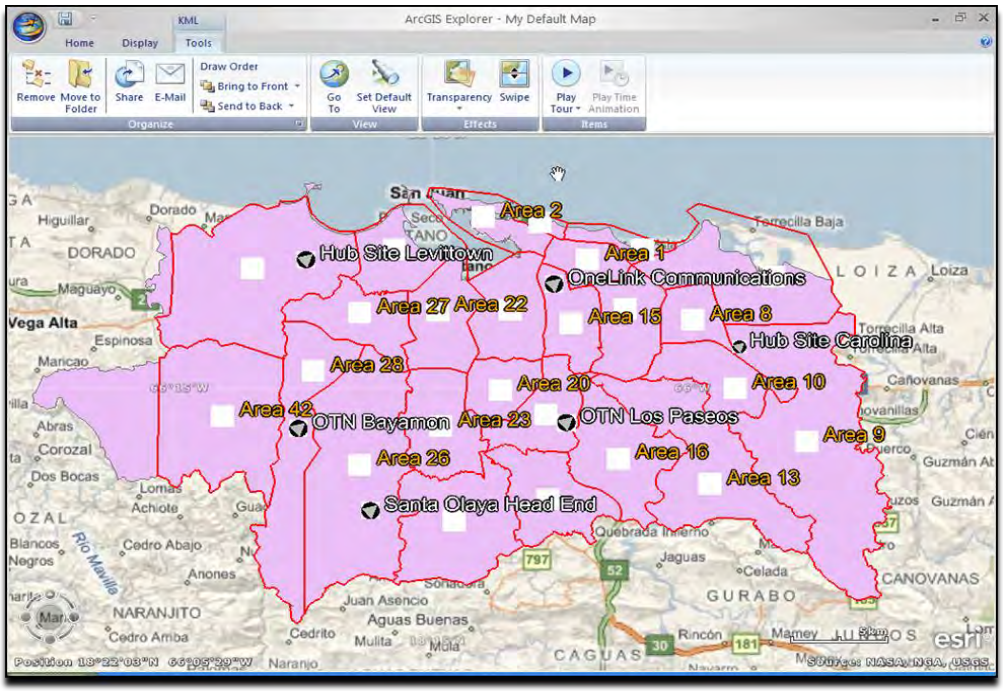
***Background:*** Following the protocols described in this memorandum, from September 2009 to the present, Connected Nation's staff, as well as staff from OCIO, have reached out to OneLink Communications on numerous occasions to inform them about the SBDD mapping program goals and processes and engage the company in a secure, trustworthy partnership to ensure accurate mapping of its broadband service territory. Despite Connected Nation's and OCIO's best efforts, to date we have been unable to engage OneLink Communications in meaningful discussions about its broadband service coverage.

***Identification of Provider's Legal Name, d.b.a., and FRN:*** Connected Nation began building a file of OneLink's profile based on anecdotal information and, as time progressed, enriched the file with information obtained through the public domain. For example, Connected Nation received information from the Junta Reglamentadora de Telecomunicaciones de Puerto Rico ("JRT") indicating that territory once operated by Adelphia was the same territory now operated by OneLink. A search for a Federal Registration Number ("FRN") on the FCC **CO**mmission **RE**gistration **S**ystem ("CORES") system did not yield results. It was later discovered that the entity of record with the JRT was, in fact, San Juan Cable, LLC. A new search on the FCC CORES site yielded an FRN of 0013778857 and additional contact data.

***Identification of Provider's Coverage Area:*** Connected Nation extracted the municipality boundaries where the company operates from OneLink's publicly available website and used the company's published boundaries to create a GIS shapefile of the greatest advertised broadband package offered across OneLink's service area.



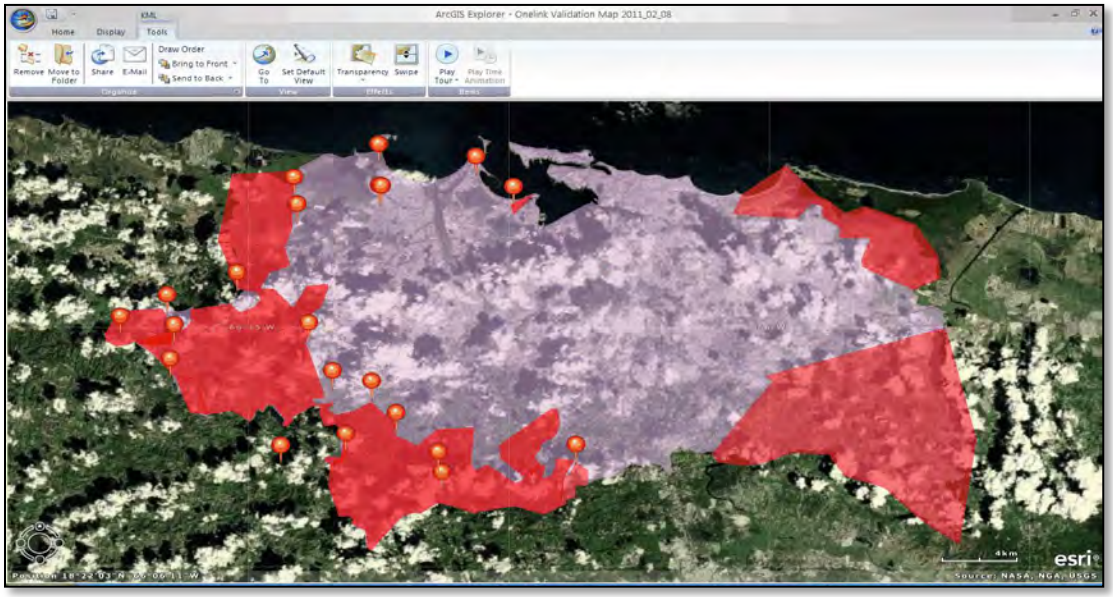
These polygons were then compared against generic data supplied by OneLink during the course of attempted communication (see comparative illustration below). The purple shaded area is Connected Nation's coverage polygon extracted from OneLink's website and the red outlines illustrate the franchisee boundaries submitted by OneLink.




Using this combined coverage polygon as the basis for further investigation, Connected Nation set out on an exploratory "drive test" to determine where cable plant existed and estimate where cable modem likely existed in the greater San Juan area. During the period of February 7 - 11, 2011, Connected Nation deployed five ETS members (all highly trained former telecommunications operators) to conduct a thorough analysis of OneLink's "alleged" coverage area.

At the conclusion of this week-long exercise, Connected Nation had driven through several hundred miles of the OneLink franchise area, located above-ground and underground plant (consisting of both fiber and coaxial cable), visited with and surveyed numerous local residents inquiring about their broadband service, obtained collateral material from OneLink's local offices (to determine maximum advertised connection speeds), and created a polygon that illustrates the identified and likely coverage area of OneLink.

The image below shows the results of the validation efforts in terms of the revisions made to the advertised cable broadband availability in the greater San Juan area. Polygons in red, demonstrate areas where Connected Nation reasonably believes broadband "gaps" exist in OneLink's franchise area. Connected Nation submitted the purple-shaded areas, along with full attributes, as the estimate of OneLink's broadband service territory to the NTIA in the Puerto Rico SBDD broadband data submission of April 1, 2011.




## Validation Achievements

In-field validations have proven to be the most reliable verification method of local broadband landscapes across jurisdictions mapped by Connected Nation. No other methodology can ascertain deployed asset coordinates, wireless broadband frequency and signal strength attributes, and physical plant locations as accurately as being there in person. The Connected Nation ETS team has discovered cable broadband services where they were not reported to exist, no cable broadband where it was reported to exist, missing DSL equipment, and wireless broadband towers at locations other than reported, which directly affects signal coverage area. All of this information is used to revise, refine, and reconfirm the mapping database that ultimately feeds the National Broadband Map.

Additionally, many fixed wireless providers operate “below the radar,” meaning they are not a member of any association, and typically do not advertise their services, but they still offer a viable service with broadband speeds often exceeding those of DSL providers. The only dependable process to certify there is no fixed wireless broadband coverage in a given area is to conduct a frequency analysis with a spectrum analyzer across all available frequencies.

# APPENDIX 6: CONNECTED NATION POLICY BRIEFS

## Connected Nation Policy Briefs on E-Rate

- December 22, 2014: FCC Releases Details on Expanded E-rate Program
- December 11, 2014: FCC Increases E-rate Cap to $3.9 Billion; Further Reforms the Program to Support Connectivity Goals
- November 17, 2014: FCC Chairman Proposes Permanent $1.5 Billion Increase in Annual E-rate Funding
- October 6, 2014: FCC Chairman Outlines Priority to Close School and Library "Rural Fiber Gap," as USAC Starts to Implement Modernization
- August 4, 2014: E-rate Modernization Order
- July 11, 2014: FCC Votes for E-rate Modernization
- June 23, 2014: FCC Chairman Proposes Changes to E-rate Program, Places Focus on Wi-Fi Connections Within Schools and Libraries
- March 7, 2014: FCC Reinvigorates Debate Over Reform of the E-rate Program

## Connected Nation Policy Briefs on Rural Broadband Experiments

- December 24, 2014: FCC Makes Additional Funding Available for Rural Broadband Experiments and Seeks Comment on Waiver Requests
- December 19, 2014: FCC Requests All Interested Rural Broadband Experiment Applicants to File Financial and Technical Information
- December 5, 2014: FCC Announces Provisional Winners in Rural Broadband Experiment Auction
- August 25, 2014: Rural Broadband Experiments Formal Application Window and Budget: FAQ
- August 8, 2014: UPDATED: Rural Broadband Experiments Formal Application Window and Budget: FAQ
- July 24, 2014: Rural Broadband Experiments Formal Application Window and Budget: FAQ
- July 11, 2014: FCC Announces Budget and Application Window for Rural Broadband Experiments
- April 1, 2014: FCC Rural Broadband Experiment – Expressions of Interest from South Carolina
- February 7, 2014: FCC Identifies Potential Areas for Rural Broadband Experiments, Outlines Process for Filing "Expression of Interests" Due March 7
- January 30, 2014: FCC Invites Rural Broadband Infrastructure Funding Proposals

## APPENDIX 7: SOUTH CAROLINA EXPRESSIONS OF INTEREST SUBMITTED

| Name of Filer | Expression Filed |
|---|---|
| Chester Telephone Company | http://apps.fcc.gov/ecfs/document/view?id=7521088979 |
| Comporium Companies | http://apps.fcc.gov/ecfs/document/view?id=7521089768 |
| DFJB, LLC dba GlobalVision | http://apps.fcc.gov/ecfs/document/view?id=7521087963 |
| Donald J. Evans | http://apps.fcc.gov/ecfs/document/view?id=7521091557 |
| Electronics Service Company of Hamlet, LLC | http://apps.fcc.gov/ecfs/document/view?id=7521088806 |
| Fairfield Communications, Inc./TruVista Communications of Georgia, LLC | http://apps.fcc.gov/ecfs/document/view?id=7521088980 |
| FamilyView Cablevision | http://apps.fcc.gov/ecfs/document/view?id=7521089160 |
| FTC Communications, LLC | http://apps.fcc.gov/ecfs/document/view?id=7521089232 |
| Home Telecom | http://apps.fcc.gov/ecfs/document/view?id=7521089462 |
| Horry Telephone Cooperative, Inc. | http://apps.fcc.gov/ecfs/document/view?id=7521089633 |
| Orangeburg County Broadband | http://apps.fcc.gov/ecfs/document/view?id=7521089568 |
| Palmetto Telephone Communications, LLC | http://apps.fcc.gov/ecfs/document/view?id=7521088583 |
| PBT Telecom, Inc. | http://apps.fcc.gov/ecfs/document/view?id=7521089565 |
| Pee Dee Healthy Start Inc. | http://apps.fcc.gov/ecfs/document/view?id=7521089786 |
| Piedmont Rural Telephone Cooperative | http://apps.fcc.gov/ecfs/document/view?id=7521089067 |
| PRT Communications LLC | http://apps.fcc.gov/ecfs/document/view?id=7521089074 |
| Sandhill Telephone Cooperative | http://apps.fcc.gov/ecfs/document/view?id=7521089226 |
| Southern Coastal Cable | http://apps.fcc.gov/ecfs/document/view?id=7521088721 |
| West Carolina Communications, LLC | http://apps.fcc.gov/ecfs/document/view?id=7521088834 |

# APPENDIX 8: RESEARCH: RESIDENTIAL AND BUSINESS BROADBAND TRENDS

## Adoption

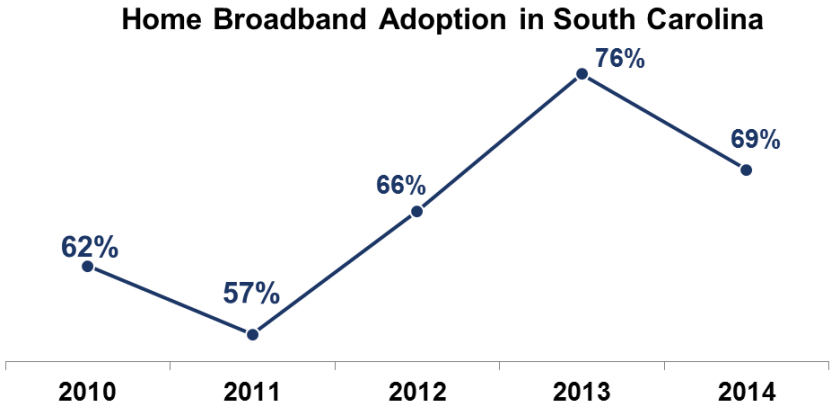
While expanded broadband access is important, without corresponding broadband adoption among South Carolina consumers and businesses, further investment and build-out could be deterred. Therefore, it is in the interest of both private and public leaders in South Carolina to collaborate to bridge the remaining broadband adoption gaps, explored below, and ensure that all South Carolinians are able to participate and compete in the twenty-first century interconnected global economy.

### Trends in Broadband Adoption Among South Carolina Homes and Businesses

Connect South Carolina's innovative research on broadband access, adoption, and use is unprecedented. Connect South Carolina conducts annual statewide residential and business surveys. These surveys provide information on the people, businesses, and communities that are taking advantage – and more importantly, not yet taking advantage – of the expansive opportunities provided through broadband adoption. In addition, Connect South Carolina has worked with economic development professionals across the state to measure the impact of broadband availability on businesses when they determine where to relocate or expand.

#### *South Carolina Residential Broadband Trends*

Connect South Carolina's 2014 Residential Technology Assessment revealed that 31% of South Carolinians have not adopted broadband at home. While 69% of adults in the state subscribe to home broadband service, up from 62% in 2010, this leaves nearly 1.2 million adults statewide who still do not subscribe to home broadband service.



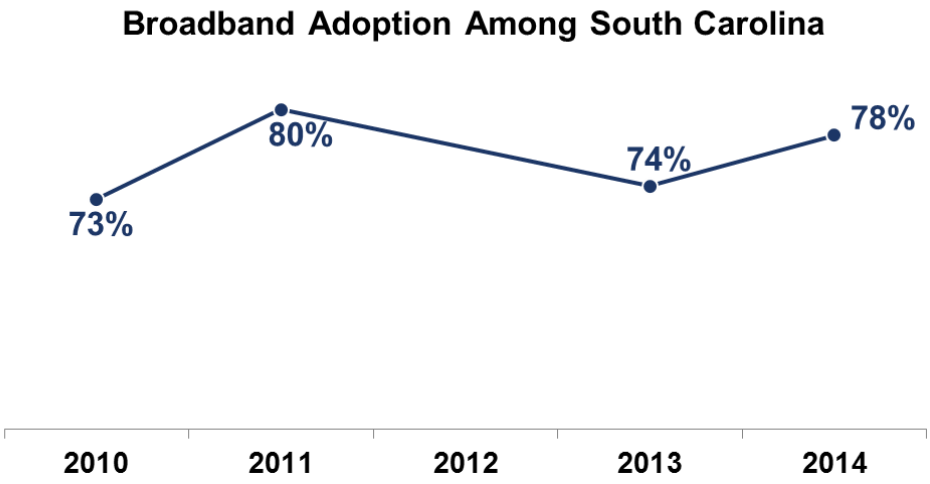

The barriers to home broadband adoption are consistently delineated into three main categories: (1) affordability of service and/or the device; (2) a lack of perceived relevance of online resources; and (3) a lack of digital skills to fully benefit from the devices and broadband connectivity. Since 2012, the belief that home broadband service is not relevant or worthwhile

has been the top barrier to home broadband adoption, cited by more than one-third (38%) of non-adopters in the state. The share of non-adopters who cite cost as their main barrier to home broadband adoption has dropped since 2011, from 32% of non-adopters that year to 20% of non-adopters in 2014. The lack of digital literacy skills has also declined as a barrier to home broadband adoption since 2011 from 17% to 11% of non-adopters; this represents approximately 125,000 fewer adults who said that their lack of digital literacy skills prevented them from subscribing to broadband.

***South Carolina Business Broadband Trends***

Broadband is the catalyst that helps South Carolina businesses increase their revenues and productivity. According to Connect South Carolina's Business Technology Assessments, South Carolina businesses earned an estimated $30.3 billion in revenue from online sales in 2013, an increase of approximately $6.3 billion since 2010. Because of the huge impact that broadband has on businesses and the workforce, Connect South Carolina surveyed businesses in the state about their broadband adoption and usage.

Results of Connect South Carolina's 2014 Business Technology Survey released in summer 2014 revealed that nearly four out of five businesses in the state (78%) use broadband, up from 73% of businesses in 2010.




Despite this increase, approximately 22,000 South Carolina businesses still do not use broadband. Additionally, over one in five South Carolina businesses (22%) have difficulty finding employees with the necessary technological skills, suggesting that technology training can help empower South Carolina's workforce.

**Topical Reports**

In addition to statewide research surveys, Connect South Carolina published several reports that explored broadband issues and their interactions with other industries in the state. Connect South Carolina publications have explored the impact of broadband on South Carolina's economy, e-learning opportunities through high-speed Internet, and broadband adoption among women-owned businesses. These reports uncover and highlight broadband successes and opportunities within the state and show how South Carolina residents and businesses benefit from broadband adoption.

Among these studies:

Technology Adoption Among Agribusinesses and Rural Businesses (2012) showed that approximately 4,000 rural businesses do not use a computer in their daily operation, and almost 5,000 can't go online because of a lack of a broadband connection. Approximately one in seven broadband-connected rural businesses (14%) reported that they expected to make a change to their current broadband service in the next twelve months, compared to 10% of non-rural businesses. Based on their self-reported median annual revenues, rural businesses earn approximately $972 million in online sales to annually.

Broadband: Helping South Carolinians Stay Healthy (2012) reported that across the state of South Carolina, more than one-half of Internet users (52%) go online for e-health purposes. This translates into approximately 1.4 million South Carolina residents age 18 or older who use the Internet to find medical information or communicate with doctors or other healthcare professionals. In addition, one-quarter of South Carolina adults (25%) who subscribe to Internet service on their cell phones access e-health applications on those phones, which represents approximately 274,000 mobile e-health users.

Cost as a Barrier to Broadband Adoption: Structuring Subsidy Programs That Work (2012) revealed that more than one-third (37%) of South Carolina's non-adopters would be willing to subscribe to home broadband service if cost were not a factor, suggesting that approximately 570,000 South Carolina households would subscribe to broadband if the price were lower. In South Carolina, the Van Westendorp Optimal Price Point among non-adopters who could be convinced to subscribe at a reduced price is $22.00 per month, and the range of acceptable prices fell between $18.00 and $28.00 per month.

Broadband-A Technology Tool for Lifelong Learning (2012) reported that just over one-half of South Carolina adults who do not have a college education (55%) own a home computer, while slightly more than one in three (35%) subscribe to home broadband service. More than one in three adult Internet users (39%) who do not have a college education take online classes or conduct research for schoolwork via the Internet.

Mobile Broadband Helps Bridge the Gap in Internet Utilization Across South Carolina (2013) noted that over one-half of residents age 18 or older (51%) access the Internet via cell phone or subscribe to mobile wireless service via a laptop or tablet. This represents approximately 1.8 million South Carolina adults who use mobile broadband. South Carolina adults age 18-34, as well as African Americans in the state, are more likely to subscribe to mobile broadband service than home broadband. Even though rural South Carolina residents are less likely than urban residents to subscribe to mobile broadband service, those who do subscribe to mobile service are more likely to access a variety of online applications.

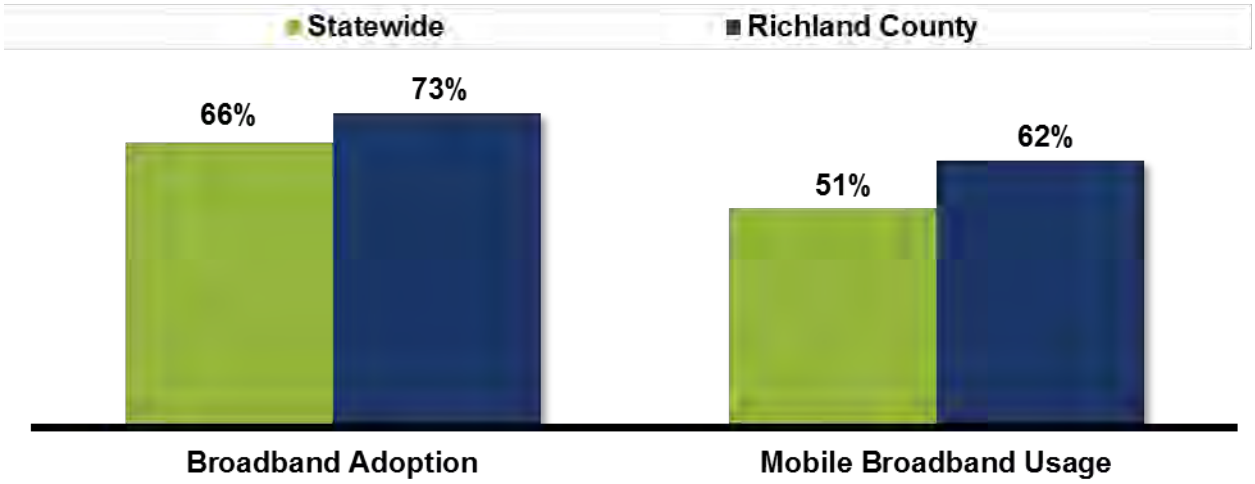
Closing the Digital Divide in South Carolina (2013) showed that the broadband adoption gap between the statewide average and African Americans, the elderly, and rural South Carolina residents has decreased between 2010 and 2012. In addition to differences in technology adoption across demographic groups, there are differences within each demographic category. Along the income line, the broadband gap tends to shrink between rural and non-rural residents in South Carolina. This decreasing gap is significant in higher income brackets. In fact, the gap in broadband adoption decreased to 4% among those with household incomes of $50,000 or more.

Making an Impact: Technology Use Among Women-Owned Businesses in South Carolina (2013) revealed that more than four out of five women-owned businesses (82%) in South Carolina use computers, and 70% of women-owned businesses in the state use broadband. Women-owned businesses are less likely than other privately-owned businesses in the state to use these types of technology. On average, women-owned businesses that sell goods or services online earn $244,000 annually in online sales.

Broadband as an Economic Development Tool (2014) reported that more than three out of four economic development professionals (78%) who help businesses relocate or expand say that it is “extremely important” or “very important” for a site to have available broadband service in order to attract new businesses. More than one-half of site selection consultants (55%) report that businesses always or often ask whether a particular type of broadband service is available at the proposed location. Over three out of four site selection consultants (76%) say businesses always or often ask whether employees can learn the required technical skills through a nearby college, university, or trade school. Nearly two-thirds of surveyed economic development professionals believe that a community would become more attractive to businesses if the community were certified as having high-quality broadband service and a digitally-skilled workforce.

In addition to these reports, Connect South Carolina has also conducted various analyses to track home broadband adoption and address adoption issues among South Carolina residents and businesses by region. For instance, Connect South Carolina estimated home broadband adoption and mobile broadband usage in Richland County in South Carolina based on its 2012 Residential Technology Assessment Survey.

The data show that Richland County is more likely to embrace broadband compared to the rest of the state.



# APPENDIX 9: RESIDENTIAL SURVEY METHODOLOGY

Connect South Carolina estimated broadband adoption and barriers to adoption through a series of random digit dial telephone surveys conducted from 2010 through 2014. The samples for each residential survey, as well as the margins of error, are as follows:

| Year | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|
| All respondents | 1,200 | 1,200 | 1,204 | 1,200 | 1,000 |
| Effective sample size (post-weighting) | 1,122 | 1,041 | 921 | 762 | 658 |
| Margin of error ( percentage point +/-)* | 2.93 | 3.04 | 3.23 | 3.55 | 3.82 |
| Rural respondents | 401 | 398 | 398 | 507 | 300 |
| Effective sample size (post-weighting) | 382 | 309 | 253 | 207 | 176 |
| Margin of error (percentage point +/-)* | 5.01 | 5.57 | 6.16 | 6.81 | 7.39 |

**Margins of error reported at the 95% CI, based on the post-weighting effective sample size*

The statewide and rural broadband adoption estimates for 2014 are the result of a random digit dial telephone survey of 1,000 adults in South Carolina between September 17 and October 16, 2014. Of the 1,000 respondents randomly contacted statewide, 202 were called on their cellular phones and 798 were contacted via landline telephone. Once the respondent agreed to participate, surveys took approximately ten (10) minutes to complete.

To ensure that each sample was representative of the state's adult population for each survey, Connect South Carolina set quotas by age, gender, and county of residence, then weighted the results to coincide with the most recent United States Census population estimates for each year. As with any survey, question wording and the practical challenges of data collection may have introduced an element of error or bias that is not reflected in the reported margins of error.

Connect South Carolina applied rim weighting to correct for minor variations and to ensure that the samples matched the most recent U.S. Census estimates of the state's adult population by age, gender, and the urban/rural classification of each respondent's county of residence. For the purpose of setting quotas and weighting, Connect South Carolina defines "rural" respondents as adults living in a county that is not a part of a Metropolitan Statistical Area (MSA), as designated by the United States Office of Management and Budget. Connect South Carolina defines “low-income households” as those reporting annual household incomes less than $25,000.

Thoroughbred Research Group, located in Louisville, Kentucky, conducted the surveys in English on behalf of Connect South Carolina. Lucidity Research, LLC, of Westminster, Maryland, provided weighting and research consultation. Cross-tabulations were calculated using WinCross 11.0, while weighting and regression analyses were conducted using SPSS Statistics v. 20. Starting in 2011, surveys and survey methodologies were peer reviewed by experts in the fields of data collection and analysis. Dr. Mingjie Sun of Iowa State University reviewed the results and survey methodology used in the most recent (2014) residential survey.

As part of the State Broadband Initiative grant program, Connected Nation, Inc. and its subsidiaries have been surveying broadband adoption and use in eight states since 2010 using the same survey questions and methodologies.

In any given year in any one particular state, small sample sizes among respondents in the cross-tabulated portions of the state samples can result in wide variations in observed results and wide margins of error. For this reason, Connect South Carolina employed a logistic regression model to estimate broadband adoption and mobile adoption rates for Hispanics, African Americans, low-income households, households with children, and adults age 65 and older from 2010-2014. Connect South Carolina calculated these estimates based on a number of demographic factors that have historically been studied as having impacts on home broadband adoption rates (including age, employment, race, ethnicity, household income, the presence of children at home, education level, state of residence, and whether the household was in a rural portion of the state), as well as a time element.

The estimated results as well as the observed results can be found in Appendix 11. The model used in the calculation of the estimated samples can be found in Appendix 10.

Connect South Carolina conducted these residential surveys as part of the State Broadband Initiative (SBI) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009.

# APPENDIX 10: LOGISTIC REGRESSION MODEL FOR HOME BROADBAND ADOPTION

## Data

Data were collected through random digit dial surveys of adults in eight states: Iowa, Michigan, Minnesota, Nevada, Ohio, South Carolina, Tennessee, and Texas. The dataset includes 46,613 cases from Connected Nation's 2010-2014 Residential Technology Assessments in those eight states.

This dataset has a binary response dependent variable called "**Broadband**" which is equal to 1 if a respondent reported that s/he subscribed to broadband at home, and 0 if the respondent said that s/he did not subscribe to any home Internet service or only subscribed to dial-up Internet service. The independent variables were chosen as those that have historically been studied as linked to home broadband adoption and are as follows: **sample** (indicating whether a respondent was contacted by landline or cell phone), **age**, **employment status**, **educational attainment, survey year, state of residence**, **presence of children at home**, **race/ethnicity**, **annual household income**, **and home computer ownership.**

## Model Summaries

The overall test for the model gives chi-square test of 18900.762 with p-value of 0 indicates that the model as a whole fits significantly better than a null model (a model with no independent variable); 87.5% of respondents have been accurately classified as being a home broadband adopter or not by this model; The Hosmer and Lemeshow's goodness of fit test gives a p-value of 0.27 to reflect that this model adequately fit the data.

Model[6]

| Independent variable | B | S.E. | Wald | df | Sig. | Odds Ratio |
|---|---|---|---|---|---|---|
| Sample(ref: contacted by Landline) | -.406 | .035 | 138.252 | 1 | 0 | .666 |
| Age(ref:18-34) | | | 180.456 | 4 | 0 | |
| 35-44 | 0.018 | 0.057 | 0.099 | 1 | 0.753 | 1.018 |
| 45-54 | -0.236 | 0.053 | 19.991 | 1 | 0 | 0.79 |
| 55-64 | -0.298 | 0.057 | 27.593 | 1 | 0 | 0.742 |
| 65 or older | -0.74 | 0.061 | 148.369 | 1 | 0 | 0.477 |
| Employment status (ref: employed) | -0.086 | 0.039 | 4.802 | 1 | 0.028 | 0.918 |
| Educational attainment (ref: college degree or above) | | | 295.116 | 3 | 0 | |
| No high school diploma | -0.98 | 0.072 | 185.352 | 1 | 0 | 0.375 |
| High school diploma | -0.624 | 0.045 | 195.47 | 1 | 0 | 0.536 |
| Some college | -0.245 | 0.045 | 30.165 | 1 | 0 | 0.783 |
| Year(ref: 2014) | | | 263.199 | 4 | 0 | |
| 2010 | -0.585 | 0.056 | 109.149 | 1 | 0 | 0.557 |
| 2011 | -0.501 | 0.056 | 78.825 | 1 | 0 | 0.606 |
| 2012 | -0.075 | 0.058 | 1.697 | 1 | 0.193 | 0.927 |
| 2013 | 0.069 | 0.058 | 1.401 | 1 | 0.237 | 1.071 |
| State(ref: Texas) | | | 28.184 | 7 | 0 | |
| Iowa | -0.059 | 0.066 | 0.799 | 1 | 0.371 | 0.943 |
| Michigan | 0.008 | 0.066 | 0.016 | 1 | 0.9 | 1.008 |
| Minnesota | 0.035 | 0.068 | 0.261 | 1 | 0.61 | 1.035 |
| Nevada | 0.229 | 0.068 | 11.319 | 1 | 0.001 | 1.258 |
| Ohio | 0.01 | 0.066 | 0.021 | 1 | 0.884 | 1.01 |
| South Carolina | -0.045 | 0.066 | 0.453 | 1 | 0.501 | 0.956 |
| Tennessee | -0.09 | 0.067 | 1.794 | 1 | 0.18 | 0.914 |
| Number of children at home | 0.121 | 0.031 | 14.977 | 1 | 0 | 1.129 |
| Race/ethnicity (ref: white non-Hispanic) | | | 41.979 | 3 | 0 | |
| African Americans | -0.29 | 0.06 | 23.639 | 1 | 0 | 0.748 |
| Hispanics | -0.342 | 0.072 | 22.422 | 1 | 0 | 0.711 |
| Other races or ethnicities | 0.025 | 0.106 | 0.058 | 1 | 0.81 | 1.026 |
| Household income (ref: $75,000 or more) | | | 658.832 | 4 | 0 | |
| Less than $25,000 | -1.342 | 0.055 | 589.801 | 1 | 0 | 0.261 |
| $25,000 to less than $35,000 | -1.025 | 0.059 | 299.919 | 1 | 0 | 0.359 |
| $35,000 to less than $50,000 | -0.816 | 0.055 | 218.832 | 1 | 0 | 0.442 |
| $50,000 to less than $75,000 | -0.447 | 0.054 | 68.285 | 1 | 0 | 0.639 |
| Computer ownership (ref: no computer at home) | 4.115 | 0.062 | 4413.038 | 1 | 0 | 61.225 |
| Constant | -0.68 | 0.047 | 211.602 | 1 | 0 | 0.507 |

[6] **B**- These are values of $b_i$ in the equation of $\log(p/1-p)=b0+b_1x_1+ b_2x_2+ b_3x_3+...+b_ix_i$, where p is the probability of individuals subscribing to home broadband service, and $x_i$ are demographical variables such as age and household income;
**S.E.-** These are standard errors associated with the coefficient of B;
**Wald and Sig**- Wald chi-square value and 2-tailed p-value are used to test the null hypothesis that the coefficient of B is 0. At the level of 0.05, the p-value of 0.05 or less indicates that the coefficient of B is significantly different from 0;
**df**- Degrees of freedom for each test of B;
**Odds Ratio**- These are the exponentiations of B, indicating each group's likelihood of subscribing to home broadband service when compared to the reference group.

## APPENDIX 11: RESEARCH REPORTS

Connect South Carolina 2010-2014 Residential Technology Assessment Survey Trends (first 17 pages)

Connect South Carolina Annual Technology Assessment which covers 2010-2014 (next 67 pages)

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU HAVE A CELLULAR PHONE? | | | | | |
| Base: Respondents Contacted Via Landline | | | | | |
| Unweighted Sample Size (n=) | 995 | 999 | 1,000 | 1,004 | 798 |
| Yes | 80% | 76% | 82% | 81% | 78% |
| No | 20% | 24% | 18% | 19% | 22% |
| Don't know/refused | 0% | 0% | 0% | <1% | <1% |
| | | | | | |
| DOES YOUR HOUSEHOLD ALSO HAVE A LAND LINE TELEPHONE CONNECTION? | | | | | |
| Base: Respondents Contacted Via Cell Phone | | | | | |
| Unweighted Sample Size (n=) | 205 | 201 | 200 | 200 | 202 |
| Yes | 47% | 42% | 35% | 38% | 32% |
| No | 53% | 58% | 65% | 62% | 68% |
| Don't know/refused | 0% | 0% | <1% | 0% | 0% |
| | | | | | |
| DOES YOUR HOUSEHOLD HAVE A COMPUTER? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 1,200 | 1,200 | 1,200 | 1,204 | 1,000 |
| Yes | 79% | 72% | 78% | 87% | 77% |
| No | 21% | 27% | 22% | 13% | 23% |
| Don't know/refused | 0% | <1% | 0% | 0% | 0% |
| | | | | | |
| WHAT TYPE OF COMPUTER DO YOU HAVE AT HOME? | | | | | |
| Base: Households With Computers | | | | | |
| Unweighted Sample Size (n=) | 933 | 857 | 949 | 1027 | 747 |
| Desktop computer | 78% | 70% | 66% | 61% | 60% |
| Laptop computer | 58% | 65% | 67% | 70% | 71% |
| A tablet computer, such as an iPad | 0% | 8% | 22% | 30% | 32% |
| Don't know/refused | <1% | 1% | 1% | 2% | 1% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU SUBSCRIBE TO THE INTERNET AT HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 1,200 | 1,200 | 1,200 | 1,204 | 1,000 |
| Yes | 74% | 66% | 72% | 84% | 75% |
| No | 26% | 34% | 28% | 16% | 24% |
| Don't know/refused | <1% | 1% | <1% | 0% | 1% |
| | | | | | |
| DO YOU USE THE INTERNET FROM ANY LOCATIONS OUTSIDE OF YOUR OWN HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 1,200 | 1,200 | 1,200 | 1,204 | 1,000 |
| Yes | 58% | 48% | 54% | 60% | 53% |
| No | 42% | 51% | 46% | 40% | 47% |
| Don't know/refused | 1% | <1% | <1% | <1% | <1% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| AT WHAT LOCATIONS OUTSIDE OF YOUR OWN HOME DO YOU USE THE INTERNET? | | | | | |
| Base: Respondents Who Use The Internet Someplace Other Than Home | | | | | |
| Unweighted Sample Size (n=) | 667 | 539 | 599 | 664 | 472 |
| At work | 57% | 59% | 48% | 53% | 49% |
| At the library | 28% | 17% | 18% | 9% | 13% |
| At someone else's home | 20% | 18% | 18% | 9% | 15% |
| Restaurants or coffee shops | 13% | 11% | 16% | 13% | 21% |
| At school | 9% | 8% | 10% | 9% | 8% |
| On cell phone or handheld device | 6% | 14% | 24% | 28% | 27% |
| Hotels | 5% | 8% | 13% | 8% | 6% |
| At a community center | 4% | 3% | 4% | 2% | 4% |
| Airports | 3% | 4% | 7% | 3% | 3% |
| Through wifi or an aircard | 3% | 8% | 14% | 8% | 7% |
| At the store/while shopping | 0% | 0% | 0% | 1% | 1% |
| While traveling/on vacation | 0% | 0% | 0% | <1% | 1% |
| In the car/while driving | 0% | 0% | 0% | <1% | 0% |
| In a hospital or doctor's office | 0% | 0% | 0% | <1% | <1% |
| At a second home/cabin | 0% | 0% | 0% | <1% | <1% |
| At church | 0% | 0% | 0% | 1% | 1% |
| Other (specify) | 2% | 1% | 2% | 1% | 3% |
| Don't know/refused | 3% | 3% | 2% | 2% | 1% |
| | | | | | |
| WHICH OF THE FOLLOWING DESCRIBE THE TYPE OF INTERNET SERVICE YOU HAVE AT HOME? | | | | | |
| Base: Households With Internet Service | | | | | |
| Unweighted Sample Size (n=) | 866 | 775 | 879 | 980 | 712 |
| Dial-up service through your telephone line | 13% | 9% | 6% | 7% | 6% |
| Broadband or high-speed Internet service | 84% | 87% | 91% | 90% | 91% |
| Don't know/refused | 4% | 5% | 3% | 3% | 3% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| WHICH OF THE FOLLOWING DESCRIBES THE BROADBAND SERVICE YOU HAVE AT HOME? | | | | | |
| Base: Respondents Who Subscribe To Home Broadband Service | | | | | |
| Unweighted Sample Size (n=) | 720 | 673 | 798 | 878 | 644 |
| DSL service, usually provided by a telephone company | 45% | 36% | 37% | 34% | 33% |
| Cable modem, usually provided by a cable TV company | 44% | 52% | 47% | 54% | 54% |
| Fixed wireless broadband, connecting to the Internet through an outdoor antenna | 5% | 5% | 3% | 3% | 1% |
| Fiber to the home | 4% | 11% | 8% | 6% | 6% |
| Satellite broadband | 3% | 5% | 6% | 5% | 6% |
| Wireless/wifi | 1% | 2% | 6% | 2% | 3% |
| Broadband over power lines through your electric company, also known as BPL | 0% | 2% | 3% | 1% | 1% |
| Other (specify) | 0% | 0% | 0% | 0% | <1% |
| None of these | <1% | <1% | 0% | <1% | <1% |
| Don't know/refused | 6% | 5% | 6% | 2% | 3% |
| | | | | | |
| DO YOU USE WI-FI ZONES, SOMETIMES CALLED 'HOTSPOTS' TO ACCESS THE INTERNET? | | | | | |
| Base: Respondents Who Use The Internet Outside Of Home And Have A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 379 | 346 | 428 | 494 | 358 |
| Yes | 57% | 62% | 64% | 68% | 68% |
| No | 42% | 37% | 35% | 31% | 32% |
| Don't know/refused | 1% | 1% | 1% | 1% | 1% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| AT WHAT LOCATIONS DO YOU NORMALLY USE WI-FI HOTSPOTS? | | | | | |
| Base: Use Wi-Fi Hotspots | | | | | |
| Unweighted Sample Size (n=) | 210 | 207 | 266 | 322 | 238 |
| Hotels | 70% | 75% | 69% | 18% | 21% |
| Restaurants or coffee shops | 55% | 61% | 71% | 52% | 54% |
| Airports | 47% | 43% | 47% | 10% | 9% |
| At work | 45% | 54% | 52% | 17% | 29% |
| At the library | 36% | 36% | 37% | 10% | 8% |
| Outdoor public zones, such as in parks | 27% | 28% | 34% | 12% | 8% |
| At a community center | 12% | 15% | 16% | 6% | 5% |
| At school | 0% | 0% | 0% | 9% | 6% |
| At the store | 0% | 0% | 0% | 1% | 4% |
| At home | 0% | 0% | 0% | 6% | 6% |
| At someone else's home | 0% | 0% | 0% | 3% | 2% |
| While traveling/ on vacation | 0% | 0% | 0% | 1% | 2% |
| At church | 0% | 0% | 0% | 1% | 1% |
| At a hospital or doctor's office | 0% | 0% | 0% | 2% | 3% |
| In the car/ while driving | 0% | 0% | 0% | 1% | 1% |
| Other (specify) | 2% | 0% | 1% | 2% | 3% |
| None of these | 7% | 6% | 4% | 0% | 0% |
| Don't know/refused | 1% | 1% | <1% | 8% | 9% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Statewide | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| ON YOUR LAPTOP OR TABLET COMPUTER, DO YOU SUBSCRIBE TO A MOBILE WIRELESS SERVICE THAT ALLOWS YOU TO ACCESS THE INTERNET THROUGH A CELLULAR NETWORK? Base: Households With A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 532 | 545 | 653 | 736 | 537 |
| Yes | 20% | 21% | 15% | 15% | 19% |
| No | 77% | 76% | 81% | 82% | 79% |
| Don't know/refused | 3% | 3% | 3% | 3% | 3% |
| | | | | | |
| WHICH OF THE FOLLOWING DESCRIBES THE WAY YOU WORK FROM HOME, WHEN YOU DO SO? Base: Employed Adults | | | | | |
| Unweighted Sample Size (n=) | 657 | 610 | 596 | 615 | 423 |
| You work at home, often using the Internet, but typically outside of normal business hours | 28% | 29% | 29% | 26% | 29% |
| You work at home using an Internet connection, instead of commuting to your usual work place | 15% | 17% | 14% | 16% | 15% |
| You own and operate a business out of your home | 11% | 11% | 11% | 8% | 11% |
| Other (specify) | 3% | 1% | 2% | 2% | 1% |
| Don't know/refused | 1% | 4% | 2% | 1% | 3% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU HAVE A CELLULAR PHONE? | | | | | |
| Base: Respondents Contacted Via Landline | | | | | |
| Unweighted Sample Size (n=) | 358 | 354 | 357 | 462 | 266 |
| Yes | 72% | 71% | 76% | 80% | 72% |
| No | 28% | 29% | 24% | 20% | 28% |
| Don't know/refused | 0% | 0% | 0% | <1% | <1% |
| | | | | | |
| DOES YOUR HOUSEHOLD ALSO HAVE A LAND LINE TELEPHONE CONNECTION? | | | | | |
| Base: Respondents Contacted Via Cell Phone | | | | | |
| Unweighted Sample Size (n=) | 43 | 44 | 41 | 45 | 34 |
| Yes | 63% | 31% | 22% | 45% | 58% |
| No | 37% | 69% | 78% | 55% | 42% |
| Don't know/refused | 0% | 0% | 0% | 0% | 0% |
| | | | | | |
| DOES YOUR HOUSEHOLD HAVE A COMPUTER? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 401 | 398 | 398 | 507 | 300 |
| Yes | 67% | 64% | 75% | 79% | 67% |
| No | 33% | 36% | 25% | 21% | 33% |
| Don't know/refused | 0% | 0% | 0% | 0% | 0% |
| | | | | | |
| WHAT TYPE OF COMPUTER DO YOU HAVE AT HOME? | | | | | |
| Base: Households With Computers | | | | | |
| Unweighted Sample Size (n=) | 268 | 263 | 304 | 401 | 205 |
| Desktop computer | 79% | 64% | 64% | 59% | 68% |
| Laptop computer | 55% | 65% | 65% | 70% | 64% |
| A tablet computer, such as an iPad | 0% | 8% | 17% | 30% | 25% |
| Don't know/refused | 0% | 1% | <1% | 1% | <1% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU SUBSCRIBE TO THE INTERNET AT HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 401 | 398 | 398 | 507 | 300 |
| Yes | 60% | 58% | 66% | 75% | 63% |
| No | 40% | 42% | 34% | 25% | 35% |
| Don't know/refused | <1% | <1% | <1% | 0% | 2% |
| DO YOU USE THE INTERNET FROM ANY LOCATIONS OUTSIDE OF YOUR OWN HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 401 | 398 | 398 | 507 | 300 |
| Yes | 50% | 51% | 49% | 58% | 46% |
| No | 50% | 49% | 51% | 42% | 54% |
| Don't know/refused | <1% | 1% | <1% | 1% | <1% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| AT WHAT LOCATIONS OUTSIDE OF YOUR OWN HOME DO YOU USE THE INTERNET? Base: Respondents Who Use The Internet Someplace Other Than Home Unweighted Sample Size (n=) | 194 | 176 | 177 | 254 | 115 |
| At work | 50% | 48% | 49% | 50% | 37% |
| At the library | 30% | 27% | 30% | 15% | 27% |
| At someone else's home | 30% | 25% | 23% | 9% | 26% |
| Restaurants or coffee shops | 12% | 4% | 17% | 14% | 8% |
| At school | 9% | 8% | 10% | 11% | 5% |
| On cell phone or handheld device | 6% | 15% | 18% | 28% | 25% |
| Hotels | 4% | 5% | 8% | 4% | 4% |
| Airports | 3% | 3% | 4% | 1% | 2% |
| Through wifi or an aircard | 3% | 8% | 9% | 11% | 8% |
| At a community center | 2% | 5% | 4% | 1% | 3% |
| At the store/ while shopping | 0% | 0% | 0% | <1% | 0% |
| While traveling/ on vacation | 0% | 0% | 0% | <1% | 1% |
| In the car/ while driving | 0% | 0% | 0% | <1% | 0% |
| In a hospital or doctor's office | 0% | 0% | 0% | 0% | 0% |
| At a second home/ cabin | 0% | 0% | 0% | <1% | <1% |
| At church | 0% | 0% | 0% | <1% | 1% |
| Other (specify) | <1% | 1% | 1% | <1% | 1% |
| Don't know/refused | 2% | 4% | 3% | 3% | 2% |
| | | | | | |
| WHICH OF THE FOLLOWING DESCRIBES THE TYPE OF INTERNET SERVICE YOU HAVE AT HOME? Base: Households That Subscribe To Home Internet Service Unweighted Sample Size (n=) | 241 | 231 | 278 | 379 | 190 |
| Dial-up service through your telephone line | 19% | 15% | 11% | 9% | 10% |
| Broadband or high-speed Internet service | 77% | 82% | 85% | 89% | 88% |
| Don't know/refused | 4% | 5% | 5% | 2% | 3% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| WHICH OF THE FOLLOWING DESCRIBES THE BROADBAND SERVICE YOU HAVE AT HOME? | | | | | |
| Base: Households That Subscribe To Home Broadband Service | | | | | |
| Unweighted Sample Size (n=) | 185 | 191 | 243 | 331 | 162 |
| DSL service, usually provided by a telephone company | 47% | 49% | 50% | 44% | 47% |
| Cable modem, usually provided by a cable TV company | 36% | 39% | 31% | 37% | 41% |
| Satellite broadband | 5% | 7% | 9% | 7% | 10% |
| Fiber to the home | 5% | 9% | 12% | 6% | 6% |
| Fixed wireless broadband, connecting to the Internet through an outdoor antenna | 3% | 3% | 7% | 8% | 2% |
| Wireless/wifi | 1% | 4% | 6% | 2% | 3% |
| Broadband over power lines through your electric company, also known as BPL | 0% | 2% | 5% | 2% | 2% |
| Other (specify) | 0% | 0% | 0% | 0% | 0% |
| None of these | 0% | <1% | 0% | <1% | 0% |
| Don't know/refused | 7% | 4% | 4% | 1% | 5% |
| | | | | | |
| DO YOU USE WI-FI ZONES, SOMETIMES CALLED 'HOTSPOTS' TO ACCESS THE INTERNET? | | | | | |
| Base: Respondents Who Use The Internet Outside Of Home And Have A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 95 | 95 | 120 | 191 | 71 |
| Yes | 50% | 58% | 63% | 64% | 62% |
| No | 48% | 41% | 36% | 35% | 38% |
| Don't know/refused | 2% | 1% | 2% | 1% | 0% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| AT WHAT LOCATIONS DO YOU NORMALLY USE WI-FI HOTSPOTS? | | | | | |
| Base: Use Wi-Fi Hotspots | | | | | |
| Unweighted Sample Size (n=) | 47 | 53 | 71 | 114 | 48 |
| Hotels | 79% | 79% | 63% | 15% | 26% |
| Restaurants or coffee shops | 59% | 57% | 64% | 67% | 56% |
| Airports | 51% | 45% | 37% | 7% | 6% |
| At work | 45% | 53% | 48% | 14% | 14% |
| At the library | 33% | 50% | 39% | 16% | 5% |
| Outdoor public zones, such as in parks | 22% | 29% | 34% | 9% | 5% |
| At a community center | 11% | 30% | 31% | 3% | 7% |
| At school | 0% | 0% | 0% | 16% | 2% |
| At the store | 0% | 0% | 0% | 3% | 11% |
| At home | 0% | 0% | 0% | 5% | 3% |
| At someone else's home | 0% | 0% | 0% | 0% | 0% |
| While traveling/ on vacation | 0% | 0% | 0% | 1% | 0% |
| At church | 0% | 0% | 0% | 0% | 3% |
| At a hospital or doctor's office | 0% | 0% | 0% | 1% | 5% |
| In the car/ while driving | 0% | 0% | 0% | 0% | 0% |
| Other (specify) | 0% | 0% | 2% | 2% | 7% |
| None of these | 5% | 5% | 4% | 0% | 0% |
| Don't know/refused | 0% | 4% | 1% | 4% | 11% |
| | | | | | |
| ON YOUR LAPTOP OR TABLET COMPUTER, DO YOU SUBSCRIBE TO A MOBILE WIRELESS SERVICE THAT ALLOWS YOU TO ACCESS THE INTERNET THROUGH A CELLULAR NETWORK? | | | | | |
| Base: Households With A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 144 | 167 | 202 | 284 | 132 |
| Yes | 21% | 21% | 14% | 18% | 14% |
| No | 75% | 75% | 85% | 80% | 83% |
| Don't know/refused | 4% | 5% | 1% | 2% | 3% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Rural | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| WHICH OF THE FOLLOWING DESCRIBES THE WAY YOU WORK FROM HOME, WHEN YOU DO SO? Base: Employed Adults | | | | | |
| Unweighted Sample Size (n=) | 193 | 188 | 190 | 251 | 99 |
| You work at home, often using the Internet, but typically outside of normal business hours | 26% | 22% | 24% | 15% | 20% |
| You work at home using an Internet connection, instead of commuting to your usual work place | 14% | 14% | 7% | 8% | 17% |
| You own and operate a business out of your home | 14% | 11% | 14% | 8% | 13% |
| Other (specify) | 3% | 1% | 2% | 3% | 1% |
| Don't know/refused | 1% | 3% | 4% | 1% | 2% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Low-Income | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU HAVE A CELLULAR PHONE? | | | | | |
| Base: Respondents Contacted Via Landline | | | | | |
| Unweighted Sample Size (n=) | 206 | 233 | 224 | 194 | 167 |
| Yes | 56% | 51% | 64% | 67% | 61% |
| No | 44% | 49% | 36% | 33% | 39% |
| Don't know/refused | 0% | 0% | 0% | 0% | 0% |
| | | | | | |
| DOES YOUR HOUSEHOLD ALSO HAVE A LAND LINE TELEPHONE CONNECTION? | | | | | |
| Base: Respondents Contacted Via Cell Phone | 158 | 174 | 205 | 187 | 134 |
| Unweighted Sample Size (n=) | 51 | 48 | 49 | 28 | 31 |
| Yes | 44% | 27% | 22% | n/a | 29% |
| No | 56% | 73% | 77% | n/a | 71% |
| Don't know/refused | 0% | 0% | 1% | n/a | 0% |
| | | | | | |
| DOES YOUR HOUSEHOLD HAVE A COMPUTER? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 257 | 281 | 273 | 222 | 198 |
| Yes | 53% | 41% | 53% | 67% | 49% |
| No | 47% | 59% | 47% | 33% | 51% |
| Don't know/refused | 0% | 0% | 0% | 0% | 0% |
| | | | | | |
| WHAT TYPE OF COMPUTER DO YOU HAVE AT HOME? | | | | | |
| Base: Households With Computers | | | | | |
| Unweighted Sample Size (n=) | 130 | 110 | 146 | 136 | 84 |
| Desktop computer | 74% | 65% | 59% | 52% | 58% |
| Laptop computer | 50% | 48% | 56% | 58% | 57% |
| A tablet computer, such as an iPad | 0% | 1% | 3% | 19% | 17% |
| Don't know/refused | 1% | 0% | 1% | 0% | 0% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Low-Income | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| DO YOU SUBSCRIBE TO THE INTERNET AT HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 257 | 281 | 273 | 222 | 198 |
| Yes | 46% | 35% | 42% | 64% | 44% |
| No | 54% | 65% | 58% | 36% | 56% |
| Don't know/refused | 0% | 0% | 0% | 0% | 0% |
| | | | | | |
| DO YOU USE THE INTERNET FROM ANY LOCATIONS OUTSIDE OF YOUR OWN HOME? | | | | | |
| Base: All Respondents Surveyed | | | | | |
| Unweighted Sample Size (n=) | 257 | 281 | 273 | 222 | 198 |
| Yes | 41% | 32% | 35% | 42% | 29% |
| No | 58% | 68% | 65% | 57% | 71% |
| Don't know/refused | 1% | <1% | 0% | 1% | 0% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Low-Income | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| AT WHAT LOCATIONS OUTSIDE OF YOUR OWN HOME DO YOU USE THE INTERNET? | | | | | |
| Base: Respondents Who Use The Internet Someplace Other Than Home | | | | | |
| Unweighted Sample Size (n=) | 98 | 72 | 83 | 66 | 49 |
| At the library | 52% | 50% | 48% | 17% | 41% |
| At someone else's home | 40% | 39% | 31% | 20% | 31% |
| At work | 17% | 19% | 23% | 28% | 15% |
| At school | 15% | 10% | 6% | 15% | 10% |
| Restaurants or coffee shops | 9% | 7% | 4% | 9% | 11% |
| At a community center | 4% | 9% | 4% | 0% | 10% |
| On cell phone or handheld device | 3% | 5% | 11% | 29% | 19% |
| Airports | 3% | 0% | 1% | 1% | 4% |
| Hotels | 3% | 4% | 1% | 2% | 4% |
| Through wifi or an aircard | 1% | 10% | 6% | 13% | 1% |
| At the store/while shopping | 0% | 0% | 0% | 0% | 0% |
| While traveling/on vacation | 0% | 0% | 0% | 0% | 0% |
| In the car/while driving | 0% | 0% | 0% | 0% | 0% |
| In a hospital or doctor's office | 0% | 0% | 0% | 0% | 0% |
| At a second home/cabin | 0% | 0% | 0% | 0% | 0% |
| At church | 0% | 0% | 0% | 0% | 0% |
| Other (specify) | 0% | 1% | 1% | 0% | 2% |
| Don't know/refused | 4% | 3% | 1% | 3% | 2% |
| | | | | | |
| WHICH OF THE FOLLOWING DESCRIBE THE TYPE OF INTERNET SERVICE YOU HAVE AT HOME? | | | | | |
| Base: Households That Subscribe To Home Internet Service | | | | | |
| Unweighted Sample Size (n=) | 112 | 89 | 121 | 124 | 74 |
| Dial-up service through your telephone line | 20% | 13% | 11% | 21% | 14% |
| Broadband or high-speed Internet service | 74% | 73% | 84% | 76% | 84% |
| Don't know/refused | 6% | 14% | 6% | 4% | 3% |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Low-Income | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| WHICH OF THE FOLLOWING DESCRIBES THE BROADBAND SERVICE YOU HAVE AT HOME? | | | | | |
| Base: Households That Subscribe To Home Broadband Service | | | | | |
| Unweighted Sample Size (n=) | 81 | 65 | 98 | 93 | 60 |
| DSL service, usually provided by a telephone company | 46% | 41% | 46% | 41% | 34% |
| Cable modem, usually provided by a cable TV company | 45% | 48% | 40% | 49% | 39% |
| Fixed wireless broadband, connecting to the Internet through an outdoor antenna | 5% | 3% | 7% | 5% | 0% |
| Fiber to the home | 4% | 6% | 8% | 3% | 9% |
| Satellite broadband | 3% | 5% | 5% | 3% | 4% |
| Wireless/wifi | 1% | 0% | 3% | 2% | 6% |
| Broadband over power lines through your electric company, also known as BPL | 0% | 3% | 2% | 2% | 1% |
| Other (specify) | 0% | 0% | 0% | 0% | 0% |
| None of these | 0% | 0% | 0% | 0% | 0% |
| Don't know/refused | 6% | 4% | 8% | 4% | 10% |
| | | | | | |
| DO YOU USE WI-FI ZONES, SOMETIMES CALLED 'HOTSPOTS' TO ACCESS THE INTERNET? | | | | | |
| Base: Use Internet Outside Of Home And Have A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 32 | 14 | 28 | 35 | 25 |
| Yes | 62% | n/a | n/a | 74% | n/a |
| No | 38% | n/a | n/a | 26% | n/a |
| Don't know/refused | 0% | n/a | n/a | 0% | n/a |

## CONNECT SOUTH CAROLINA 2010-2014 RESIDENTIAL TECHNOLOGY ASSESSMENT SURVEY TRENDS

| | Low-Income | | | | |
|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 |
| ON YOUR LAPTOP OR TABLET COMPUTER, DO YOU SUBSCRIBE TO A MOBILE WIRELESS SERVICE THAT ALLOWS YOU TO ACCESS THE INTERNET THROUGH A CELLULAR NETWORK? Base: Households With A Laptop Or Tablet Computer | | | | | |
| Unweighted Sample Size (n=) | 62 | 49 | 76 | 78 | 51 |
| Yes | 15% | 25% | 9% | 20% | 16% |
| No | 83% | 68% | 87% | 77% | 84% |
| Don't know/refused | 2% | 7% | 4% | 3% | 0% |
| | | | | | |
| WHICH OF THE FOLLOWING DESCRIBE THE WAY YOU WORK FROM HOME, WHEN YOU DO SO? Base: Employed Adults | | | | | |
| Unweighted Sample Size (n=) | 72 | 72 | 71 | 58 | 39 |
| You work at home, often using the Internet, but typically outside of normal business hours | 12% | 12% | 6% | 5% | 0% |
| You own and operate a business out of your home | 9% | 5% | 3% | 3% | 8% |
| You work at home using an Internet connection, instead of commuting to your usual work place | 7% | 3% | 2% | 5% | 0% |
| Other (specify) | 3% | 0% | 3% | 1% | 1% |
| Don't know/refused | 0% | 5% | 3% | 0% | 0% |

Low-Income households = annual household income less than $25,000
Cells marked as "n/a" are not reported due to small sample sizes

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN WAS THE LAST TIME YOU PURCHASED A HOME COMPUTER? | | | |
| Base: Households With Computers | | | |
| Unweighted Sample Size (n=) | 933 | 268 | 130 |
| Within the past 12 months | 30% | 28% | 31% |
| Between one and two years ago | 30% | 29% | 34% |
| Between three and four years ago | 20% | 18% | 14% |
| More than four years ago | 17% | 21% | 16% |
| Don't know/refused | 3% | 4% | 5% |
| | | | |
| WHY DON'T YOU HAVE A COMPUTER AT HOME? | | | |
| Base: Households Without Computers | | | |
| Unweighted Sample Size (n=) | 267 | 133 | 127 |
| You don't need a computer | 61% | 58% | 57% |
| Too expensive | 35% | 33% | 39% |
| You use a computer at a different location | 13% | 13% | 7% |
| Computers are too complicated/don't know how to use one | 3% | 4% | 5% |
| Have access on cell phone | <1% | 1% | 0% |
| Any other reason? | 3% | 5% | 4% |
| Don't know/refused | 1% | 1% | 0% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE? | | | |
| Base: Households That Do Not Subscribe To Home Internet Service | | | |
| Unweighted Sample Size (n=) | 334 | 160 | 145 |
| Yes | 68% | 63% | 69% |
| No | 12% | 14% | 10% |
| Don't know/refused | 21% | 23% | 21% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHAT DO YOU PAY EACH MONTH FOR YOUR INTERNET SERVICE?<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 866 | 241 | 112 |
| Less than $10 | 3% | 3% | 3% |
| Between $10 and $19 | 6% | 7% | 8% |
| Between $20 and $29 | 15% | 15% | 25% |
| Between $30 and $39 | 17% | 17% | 11% |
| Between $40 and $49 | 14% | 13% | 11% |
| $50 or more | 20% | 21% | 26% |
| Don't know/refused | 25% | 25% | 15% |
| | | | |
| DOES YOUR INTERNET PROVIDER ALSO PROVIDE YOUR HOME WITH OTHER SERVICES, SUCH AS YOUR TELEPHONE, CELL PHONE SERVICE, OR TELEVISION? THIS IS OFTEN CALLED 'BUNDLING.'<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 866 | 241 | 112 |
| Yes | 80% | 78% | 78% |
| No | 19% | 21% | 21% |
| Don't know/refused | 2% | 1% | 1% |
| | | | |
| WHAT OTHER SERVICES ARE BUNDLED WITH YOUR HOME INTERNET SERVICE?<br>Base: Households That Subscribe To Home Internet Service Bundled With Other Services<br>Unweighted Sample Size (n=) | 686 | 185 | 85 |
| Home phone service (land line) | 75% | 79% | 66% |
| Television | 60% | 51% | 56% |
| Cellular phone service | 13% | 14% | 12% |
| Other | 1% | 1% | 0% |
| Don't know/refused | 3% | 2% | 4% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHAT IS THE NAME OF THE COMPANY THAT PROVIDES YOUR INTERNET ACCESS?<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 866 | 241 | 112 |
| AT&T (or BellSouth) | 26% | 15% | 30% |
| Time Warner | 18% | 13% | 15% |
| Charter | 12% | 4% | 13% |
| Comcast | 7% | 3% | 5% |
| Comporium | 6% | 8% | 5% |
| Windstream | 2% | 1% | 2% |
| HTC/Horry Telephone Corp | 2% | <1% | 4% |
| Verizon | 2% | 4% | 2% |
| Hargray | 2% | 10% | 3% |
| AOL | 2% | 1% | 1% |
| Farmers Telephone | 2% | 3% | 3% |
| Home Telephone | 1% | 0% | 5% |
| Knology | 1% | 1% | 0% |
| CenturyLink | 1% | 5% | 1% |
| Atlantic Broadband | 1% | 0% | 2% |
| TruVista | 1% | 2% | 1% |
| Alltel | 1% | 3% | 1% |
| HughesNet | 1% | 2% | 0% |
| Embarq | 1% | 3% | 0% |
| Sandhill | 1% | 3% | 1% |
| TDS | <1% | <1% | 1% |
| Other (Specify) | 8% | 12% | 6% |
| Don't Know/Refused | 5% | 8% | 2% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN DID YOU FIRST BEGIN SUBSCRIBING TO BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| Within the last six months | 10% | 10% | 18% |
| Between 7 and 12 months ago | 6% | 5% | 17% |
| Between 1 and 2 years ago | 21% | 27% | 21% |
| Between 2 and 3 years ago | 14% | 11% | 11% |
| Between 3 and 5 years ago | 20% | 20% | 16% |
| Between 5 and 7 years ago | 12% | 9% | 4% |
| More than 7 years ago | 16% | 13% | 12% |
| Don't know/refused | 2% | 3% | 0% |
| | | | |
| WHICH OF THE FOLLOWING CONTRIBUTED TO YOUR DECISION TO SUBSCRIBE TO BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| You realized broadband was worth the extra money | 50% | 46% | 52% |
| You got a computer in your home | 45% | 45% | 57% |
| The cost of broadband became affordable | 43% | 38% | 46% |
| You learned that broadband became available in your area | 39% | 41% | 50% |
| You needed to conduct business online | 34% | 30% | 22% |
| You heard about the benefits of broadband in the news or through your community | 26% | 23% | 28% |
| A friend or family member convinced you to subscribe | 17% | 19% | 21% |
| Dial-up was too slow | 0% | 0% | 0% |
| Other | 5% | 4% | 0% |
| Don't know/refused | 4% | 5% | 2% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| OVERALL, HOW SATISFIED ARE YOU WITH YOUR BROADBAND SERVICE? ARE YOU... | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| Very satisfied | 78% | 77% | 66% |
| Somewhat satisfied | 19% | 20% | 25% |
| Not satisfied | 2% | 2% | 7% |
| Don't know/refused | <1% | 1% | 2% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, HOW MANY BROADBAND PROVIDERS DO YOU HAVE TO CHOOSE FROM, IN YOUR AREA? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| One | 24% | 28% | 22% |
| Two | 29% | 26% | 33% |
| Three | 20% | 19% | 23% |
| Four | 6% | 6% | 3% |
| Five or more | 5% | 4% | 4% |
| Don't know/refused | 16% | 16% | 15% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, WHAT IS THE APPROXIMATE DOWNLOAD SPEED PROVIDED BY YOUR INTERNET SERVICE PROVIDER? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| Less than 768 kilobits per second | 5% | 6% | 9% |
| About 768 kilobits per second | 5% | 6% | 4% |
| About 1.5 megabits per second | 6% | 9% | 4% |
| About 3.0 megabits per second | 8% | 10% | 6% |
| About 6.0 megabits per second | 8% | 5% | 10% |
| About 10.0 megabits per second | 5% | 4% | 3% |
| Over 10.0 megabits per second | 4% | 2% | 5% |
| Refused | 0% | 0% | 0% |
| Don't know/remember | 60% | 59% | 58% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| TO WHAT EXTENT WOULD YOU SAY THE ACTUAL SPEEDS YOU RECEIVE COMPARE TO THE SPEEDS ADVERTISED BY THE INTERNET PROVIDER YOU USE? WOULD YOU SAY THE ACTUAL SPEED YOU RECEIVE ARE … | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 720 | 185 | 81 |
| Less than or slower than what is advertised | 23% | 23% | 30% |
| About the same as what is advertised | 66% | 66% | 57% |
| Faster than advertised | 5% | 5% | 8% |
| Don't know/remember | 6% | 6% | 5% |
| | | | |
| IS BROADBAND SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE? | | | |
| Base: Households That Subscribe To Dial-Up Service Or Do Not Know What Type Of Internet Service They Have | | | |
| Unweighted Sample Size (n=) | 146 | 56 | 31 |
| Yes | 43% | 36% | 50% |
| No | 31% | 43% | 19% |
| Don't know/refused | 27% | 21% | 31% |
| | | | |
| WOULD YOU SIGN UP FOR BROADBAND SERVICE IF IT WERE AVAILABLE IN YOUR AREA? | | | |
| Base: Households With Dial-Up Service Who Say Broadband Is Not Available | | | |
| Unweighted Sample Size (n=) | 86 | 37 | 15 |
| Yes | 50% | 67% | n/a |
| No | 25% | 33% | n/a |
| Don't know/refused | 25% | 0% | n/a |
| | | | |
| DO YOU ACCESS THE INTERNET THROUGH A CELLULAR PHONE OR OTHER MOBILE DEVICE? | | | |
| Base: All Adults Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 988 | 295 | 164 |
| Yes | 29% | 29% | 21% |
| No | 71% | 70% | 79% |
| Don't know/refused | <1% | <1% | 0% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING TYPES OF INFORMATION DO YOU USE THE INTERNET TO LOOK FOR ONLINE?<br>Base: All Adults Who Use The Internet<br>Unweighted Sample Size (n=) | 988 | 295 | 164 |
| Product or service information | 78% | 75% | 59% |
| Health or medical information | 70% | 66% | 60% |
| Information about events in your community | 59% | 52% | 44% |
| Information about government services or policies | 52% | 48% | 41% |
| Research for schoolwork | 51% | 47% | 56% |
| Jobs or employment | 45% | 44% | 59% |
| None of the above | 6% | 7% | 6% |
| Don't know/refused | 1% | 1% | 1% |
| | | | |
| WHICH OF THE FOLLOWING WAYS OF COMMUNICATING WITH OTHERS DO YOU USE?<br>Base: All Adults Who Use The Internet<br>Unweighted Sample Size (n=) | 988 | 295 | 164 |
| E-mail | 89% | 84% | 78% |
| Through a profile on a social or professional | 56% | 55% | 55% |
| Networking site such as Facebook, MySpace, or LinkedIn | 0% | 0% | 0% |
| Instant messages | 37% | 35% | 41% |
| Posting content to a website | 31% | 31% | 31% |
| Posting content to a blog | 12% | 15% | 14% |
| Chatting in chat rooms | 10% | 14% | 16% |
| Posting content to a microblog such as Twitter | 9% | 12% | 16% |
| None of the above | 7% | 9% | 14% |
| Don't know/refused | <1% | <1% | <1% |
| | | | |
| DO YOU MAKE OR RECEIVE HOME TELEPHONE CALLS THROUGH YOUR INTERNET CONNECTION?<br>Base: Households That Subscribe To Home Broadband Service<br>Unweighted Sample Size (n=) | 720 | 185 | 81 |
| Yes | 18% | 14% | 10% |
| No | 82% | 85% | 90% |
| Don't know/refused | <1% | 1% | 0% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING TYPES OF INDIVIDUALS OR ORGANIZATIONS DO YOU INTERACT WITH ONLINE, BY VISITING A WEBSITE OR COMMUNICATING ONLINE TO OBTAIN INFORMATION? | | | |
| Base: All Adults Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 988 | 295 | 164 |
| Friends or family | 83% | 81% | 72% |
| Companies with which you do business | 57% | 54% | 30% |
| People with whom you work | 51% | 46% | 24% |
| Teachers for yourself or someone else | 38% | 33% | 34% |
| Your health insurance company | 37% | 36% | 20% |
| State government | 36% | 29% | 25% |
| Doctors or other healthcare professionals | 31% | 31% | 29% |
| Your local government | 26% | 20% | 15% |
| Elected officials or candidates | 24% | 22% | 12% |
| None of the above | 8% | 12% | 19% |
| Don't know/refused | 1% | 0% | 1% |
| | | | |
| WHICH OF THE FOLLOWING TYPES OF TRANSACTIONS HAVE YOU COMPLETED ONLINE? | | | |
| Base: All Adults Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 988 | 295 | 164 |
| Purchasing a product or service online | 75% | 72% | 53% |
| Booking travel arrangements | 62% | 55% | 26% |
| Online Banking | 62% | 55% | 39% |
| Paying bills | 61% | 57% | 41% |
| Online transactions with government (such as e-filing for taxes) | 41% | 33% | 22% |
| Selling a product or service online | 27% | 22% | 19% |
| Buying, selling, or trading investments | 20% | 16% | 11% |
| None of the above | 12% | 17% | 28% |
| Don't know/refused | 1% | <1% | 0% |

## CONNECT SOUTH CAROLINA -- 2010 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT ONLINE? | | | |
| Base: All Adults Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 988 | 295 | 164 |
| Using a search engine | 79% | 71% | 69% |
| Sending or receiving photos | 72% | 66% | 59% |
| Reading online newspapers or other news sources | 69% | 63% | 58% |
| Playing games online | 49% | 50% | 57% |
| Downloading music | 49% | 50% | 49% |
| Watching videos, movies, or TV shows online | 44% | 41% | 48% |
| Working from home | 29% | 26% | 12% |
| Reading blogs | 28% | 32% | 30% |
| Taking online classes | 21% | 19% | 18% |
| None of the above | 6% | 10% | 11% |
| Don't know/refused | <1% | 0% | 0% |

Low-Income households = annual household income less than $25,000

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN WAS THE LAST TIME YOU PURCHASED A HOME COMPUTER? | | | |
| Base: Households With Computers | | | |
| Unweighted Sample Size (n=) | 857 | 263 | 110 |
| Within the past 12 months | 29% | 32% | 26% |
| Between one and two years ago | 26% | 28% | 23% |
| Between three and four yeas ago | 19% | 14% | 13% |
| More than four years ago | 22% | 22% | 32% |
| Don't know/refused | 5% | 5% | 6% |
| | | | |
| WHY DON'T YOU HAVE A COMPUTER AT HOME? | | | |
| Base: Households Without Computers | | | |
| Unweighted Sample Size (n=) | 342 | 135 | 171 |
| You don't need a computer | 46% | 34% | 39% |
| Too expensive | 35% | 44% | 42% |
| You use a computer at a different location | 22% | 34% | 22% |
| Computers are too complicated | 19% | 17% | 20% |
| Your computer is broken, and you have not had it fixed or repaired yet | 13% | 13% | 11% |
| You have access on a cell phone | 1% | 0% | 1% |
| Any other reason? | <1% | 1% | 0% |
| Don't know/Refused | 5% | 4% | 3% |
| | | | |
| DO YOU USE A COMPUTER ANYPLACE OTHER THAN AT HOME? | | | |
| Base: Households Without Computers | | | |
| Unweighted Sample Size (n=) | 343 | 135 | 171 |
| Yes | 37% | 43% | 40% |
| No | 63% | 57% | 60% |
| Don't know/refused | 0% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW OFTEN, IF EVER, DO YOU GO ONLINE FROM HOME?<br>Base: Households That Do Not Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 775 | 231 | 89 |
| Every day | 77% | 76% | 61% |
| Several times per week | 14% | 17% | 17% |
| Once per week or less | 7% | 4% | 11% |
| Never | 3% | 3% | 10% |
| Don't know/refused | <1% | <1% | 0% |
| | | | |
| WHEN YOU ARE AT YOUR HOME, WHICH OF THE FOLLOWING DEVICES DO YOU USE TO ACCESS THE INTERNET?<br>Base: Respondents Who Use The Internet At Home<br>Unweighted Sample Size (n=) | 747 | 221 | 79 |
| A desktop computer | 63% | 53% | 59% |
| A laptop computer | 58% | 57% | 44% |
| A cell phone | 33% | 31% | 14% |
| A game console, like an Xbox 360 or Nintendo Wii | 19% | 24% | 11% |
| A tablet computer, like an iPad | 8% | 10% | 0% |
| Other | <1% | <1% | 0% |
| None of the above, or don't know | 1% | 1% | 1% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE?<br>Base: Households That Do Not Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 425 | 167 | 192 |
| Yes | 69% | 70% | 75% |
| No | 9% | 16% | 7% |
| Don't know/Refused | 23% | 14% | 17% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHAT DO YOU PAY EACH MONTH FOR YOUR INTERNET SERVICE?<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 775 | 231 | 89 |
| Less than $10 | 1% | 1% | 1% |
| Between $10 and $19 | 4% | 2% | 9% |
| Between $20 and $29 | 13% | 15% | 16% |
| Between $30 and $39 | 17% | 16% | 18% |
| Between $40 and $49 | 17% | 13% | 13% |
| Between $50 and $74 | 16% | 17% | 16% |
| $75 or more | 8% | 10% | 10% |
| Don't know/refused | 24% | 26% | 18% |
| | | | |
| DOES YOUR INTERNET PROVIDER ALSO PROVIDE YOUR HOME WITH OTHER SERVICES, SUCH AS YOUR TELEPHONE, CELL PHONE SERVICE, OR TELEVISION? THIS IS OFTEN CALLED 'BUNDLING.'<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 775 | 231 | 89 |
| Yes | 82% | 80% | 70% |
| No | 17% | 19% | 29% |
| Don't know/refused | 1% | 1% | 1% |
| | | | |
| WHAT OTHER SERVICES ARE BUNDLED WITH YOUR HOME INTERNET SERVICE?<br>Base: Households That Subscribe To Home Internet Service Bundled With Other Services<br>Unweighted Sample Size (n=) | 634 | 188 | 64 |
| Home phone service (landline) | 76% | 80% | 86% |
| Television | 61% | 53% | 53% |
| Cellular phone service | 12% | 8% | 7% |
| Other | <1% | 1% | 0% |
| Don't know/refused | 2% | 3% | 0% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN DID YOU FIRST BEGIN SUBSCRIBING TO HOME BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Within the last six months | 6% | 11% | 22% |
| Between 7 and 12 months ago | 5% | 6% | 11% |
| Between 1 and 2 years ago | 14% | 18% | 15% |
| Between 2 and 3 years ago | 12% | 13% | 14% |
| Between 3 and 4 years ago | 11% | 11% | 8% |
| Between 4 and 5 years ago | 9% | 9% | 8% |
| Between 5 and 7 years ago | 13% | 9% | 8% |
| Between 7 and 10 years ago | 14% | 13% | 4% |
| More than 10 years ago | 14% | 9% | 7% |
| Don't know/refused | 2% | 3% | 1% |
| | | | |
| WHICH OF THE FOLLOWING CONTRIBUTED TO YOUR DECISION TO SUBSCRIBE TO BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| You realized broadband was worth the extra money | 48% | 44% | 38% |
| You bought or received a computer for your home | 43% | 42% | 50% |
| Broadband became available in your area | 42% | 45% | 37% |
| You needed to conduct business online | 35% | 29% | 23% |
| Broadband services now cost less than they used to | 28% | 24% | 27% |
| Someone in your home needed broadband for school | 26% | 28% | 35% |
| You heard about the benefits of broadband in the news or through your community | 26% | 23% | 27% |
| A friend or family member convinced you | 17% | 22% | 23% |
| You learned about an application that required broadband | 10% | 12% | 10% |
| You took a class on how to use broadband | 2% | 2% | 2% |
| Dial-up was too slow | 0% | 0% | 0% |
| Other | <1% | 0% | 0% |
| Don't know/refused | 5% | 5% | 5% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DECIDED TO SUBSCRIBE TO HOME BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| You needed to conduct business online | 16% | 15% | 10% |
| You realized broadband was worth the extra money | 16% | 13% | 11% |
| Someone in your home needed broadband for school | 14% | 18% | 25% |
| Broadband became available in your area | 14% | 14% | 8% |
| You bought or received a computer for your home | 9% | 7% | 12% |
| A friend or family member convinced you | 8% | 10% | 12% |
| You heard about the benefits of broadband in the news or through your community | 6% | 6% | 8% |
| Broadband services now cost less than they used to | 5% | 7% | 6% |
| You learned about an application that required broadband | 2% | 2% | 0% |
| You took a class on how to use broadband | <1% | 0% | 0% |
| Dial-up was too slow | 0% | 0% | 0% |
| Other | <1% | 0% | 0% |
| Don't know/refused | 9% | 7% | 9% |
| | | | |
| OVERALL, HOW SATISFIED ARE YOU WITH YOUR BROADBAND SERVICE? ARE YOU... | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied | 63% | 61% | 63% |
| Somewhat satisfied | 33% | 35% | 32% |
| Not satisfied | 3% | 4% | 2% |
| Don't know/refused | <1% | 0% | 2% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... YOUR AVERAGE DOWNLOAD SPEED? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 35% | 28% | 43% |
| 4 | 37% | 41% | 31% |
| 3 | 18% | 19% | 16% |
| 2 | 6% | 6% | 6% |
| Not satisfied at all (1) | 2% | 3% | 4% |
| Don't know/refused | 3% | 3% | 1% |
| | | | |
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... YOUR AVERAGE UPLOAD SPEED? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 34% | 35% | 45% |
| 4 | 33% | 29% | 25% |
| 3 | 19% | 22% | 11% |
| 2 | 6% | 5% | 6% |
| Not satisfied at all (1) | 3% | 4% | 6% |
| Don't know/refused | 4% | 5% | 8% |
| | | | |
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... YOUR VIDEO QUALITY | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 48% | 52% | 55% |
| 4 | 31% | 25% | 25% |
| 3 | 14% | 16% | 12% |
| 2 | 3% | 3% | 2% |
| Not satisfied at all (1) | 2% | <1% | 3% |
| Don't know/refused | 2% | 4% | 4% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... THE RELIABILITY OF YOUR SERVICE, BEING ABLE TO ACCESS IT WHEN YOU WANT TO? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 53% | 51% | 66% |
| 4 | 29% | 30% | 15% |
| 3 | 11% | 13% | 8% |
| 2 | 4% | 4% | 3% |
| Not satisfied at all (1) | 2% | 2% | 6% |
| Don't know/refused | 1% | 0% | 1% |
| | | | |
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... YOUR PROVIDER'S CUSTOMER SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 40% | 42% | 54% |
| 4 | 23% | 23% | 19% |
| 3 | 23% | 19% | 10% |
| 2 | 7% | 7% | 8% |
| Not satisfied at all (1) | 5% | 6% | 4% |
| Don't know/refused | 2% | 3% | 6% |
| | | | |
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... THE MONTHLY PRICE YOU PAY FOR YOUR CURRENT BROADBAND SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 22% | 28% | 40% |
| 4 | 24% | 21% | 14% |
| 3 | 32% | 29% | 20% |
| 2 | 10% | 8% | 12% |
| Not satisfied at all (1) | 7% | 9% | 12% |
| Don't know/refused | 4% | 6% | 2% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT YOUR HOME BROADBAND SERVICE, HOW WOULD YOU RATE YOUR SATISFACTION WITH... YOUR CONTRACT WITH YOUR CURRENT BROADBAND PROVIDER AND THEIR TERMS OF SERVICE? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Very satisfied (5) | 37% | 35% | 50% |
| 4 | 28% | 28% | 21% |
| 3 | 19% | 21% | 12% |
| 2 | 5% | 5% | 3% |
| Not satisfied at all (1) | 4% | 4% | 7% |
| Don't know/refused | 6% | 8% | 5% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, WHAT IS THE APPROXIMATE DOWNLOAD SPEED PROVIDED BY YOUR INTERNET SERVICE PROVIDER? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Less than 768 kilobits per second | 2% | 1% | 2% |
| About 768 kilobits per second | 6% | 4% | 6% |
| About 1.5 megabits per second | 6% | 13% | 8% |
| About 3.0 megabits per second | 6% | 6% | 5% |
| About 4.0 megabits per second | 5% | 5% | 5% |
| About 6.0 megabits per second | 7% | 7% | 11% |
| About 10.0 megabits per second | 3% | 2% | 5% |
| Over 10.0 megabits per second per second | 8% | 8% | 4% |
| Refused | 1% | 0% | 0% |
| Don't know/remember | 58% | 53% | 54% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| TO WHAT EXTENT WOULD YOU SAY THE ACTUAL SPEEDS YOU RECEIVE COMPARE TO THE SPEEDS ADVERTISED BY THE INTERNET PROVIDER YOU USE? WOULD YOU SAY THE ACTUAL SPEEDS YOU RECEIVE ARE …<br>Base: Households That Subscribe To Home Broadband Service<br>Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Less than or slower that what is advertised | 27% | 27% | 29% |
| About the same as what is advertised | 58% | 60% | 53% |
| Faster than advertised | 6% | 6% | 10% |
| Refused | <1% | 0% | 2% |
| Don't know/remember | 8% | 7% | 6% |
| | | | |
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT USING THE INTERNET?<br>Base: All Adults Who Use The Internet<br>Unweighted Sample Size (n=) | 865 | 273 | 128 |
| Communicating through e-mail or other ways of sending messages | 88% | 84% | 75% |
| Researching or purchasing goods or services | 80% | 74% | 70% |
| Exploring or participating in hobbies or personal interests | 75% | 73% | 66% |
| Reading online newspapers or other news sources | 67% | 65% | 63% |
| Online banking or paying bills | 65% | 59% | 40% |
| Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices | 52% | 48% | 45% |
| Searching or applying for jobs | 47% | 51% | 62% |
| Taking online classes or conducting research for schoolwork | 45% | 50% | 43% |
| Interacting with government offices or elected officials | 28% | 24% | 17% |
| None of the above | 1% | 1% | 2% |
| Don't know/refused | <1% | 1% | <1% |
| | | | |
| DO YOU MAKE OR RECEIVE HOME TELEPHONE CALLS THROUGH YOUR INTERNET CONNECTION?<br>Base: Households That Subscribe To Home Broadband Service<br>Unweighted Sample Size (n=) | 673 | 191 | 65 |
| Yes | 20% | 15% | 10% |
| No | 79% | 83% | 89% |
| Don't know/refused | 2% | 2% | 1% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE? | | | |
| Base: Households That Subscribe To Dial-Up Service Or Do Not Know What Type Of Internet Service They Have | | | |
| Unweighted Sample Size (n=) | 102 | 40 | 24 |
| Yes | 71% | 77% | n/a |
| No | 20% | 16% | n/a |
| Don't know/refused | 9% | 7% | n/a |
| | | | |
| ON YOUR CELL PHONE, DO YOU SUBSCRIBE TO A PLAN THAT ALLOWS YOU TO ACCESS THE INTERNET? | | | |
| Base: Respondents Who Own Cell Phones | | | |
| Unweighted Sample Size (n=) | 960 | 301 | 165 |
| Yes | 47% | 49% | 34% |
| No | 52% | 49% | 65% |
| Don't know/refused | 2% | 2% | 1% |
| | | | |
| HOW OFTEN, IF EVER, DO YOU GO ONLINE USING YOUR CELL PHONE? | | | |
| Base: Respondents Who Own Cell Phones That Allow Internet Access | | | |
| Unweighted Sample Size (n=) | 421 | 135 | 49 |
| Every day | 51% | 48% | 28% |
| Several times per week | 14% | 15% | 17% |
| Once per week or less | 16% | 20% | 28% |
| Never | 18% | 16% | 27% |
| Don't know/refused | 1% | <1% | 0% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT ON YOUR CELL PHONE USING YOUR MOBILE BROADBAND SERVICE? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Communicating through e-mail or other ways of sending messages | 85% | 82% | 74% |
| Exploring or participating in hobbies or personal interests | 65% | 63% | 55% |
| Reading online newspapers or other news sources | 53% | 53% | 36% |
| Researching or purchasing goods or services | 46% | 38% | 31% |
| Online banking or paying bills | 36% | 37% | 18% |
| Searching for medical information, or communicating with doctors or other healthcare professionals | 25% | 22% | 29% |
| Searching or applying for jobs | 20% | 26% | 42% |
| Taking online classes or conducting research for schoolwork | 13% | 13% | 15% |
| Interacting with government offices or elected officials | 12% | 13% | 11% |
| None of the above | 4% | 4% | 8% |
| Don't know/refused | <1% | 0% | 0% |
| | | | |
| OVERALL, HOW SATISFIED ARE YOU WITH THE MOBILE BROADBAND SERVICE ON YOUR CELL PHONE? ARE YOU... | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied | 47% | 49% | 34% |
| Somewhat satisfied | 48% | 45% | 55% |
| Not satisfied | 5% | 4% | 11% |
| Don't know/refused | <1% | 1% | 0% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... YOUR AVERAGE DOWNLOAD SPEED? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 24% | 21% | 25% |
| 4 | 25% | 25% | 18% |
| 3 | 26% | 29% | 37% |
| 2 | 13% | 7% | 11% |
| Not satisfied at all (1) | 6% | 12% | 6% |
| Don't know/refused | 6% | 6% | 4% |
| | | | |
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... YOUR AVERAGE UPLOAD SPEED? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 23% | 19% | 11% |
| 4 | 26% | 31% | 30% |
| 3 | 29% | 24% | 27% |
| 2 | 12% | 11% | 22% |
| Not satisfied at all (1) | 6% | 11% | 6% |
| Don't know/refused | 4% | 3% | 4% |
| | | | |
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... YOUR VIDEO QUALITY? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 32% | 40% | 41% |
| 4 | 27% | 25% | 11% |
| 3 | 20% | 20% | 15% |
| 2 | 6% | 2% | 7% |
| Not satisfied at all (1) | 6% | 11% | 16% |
| Don't know/refused | 7% | 2% | 9% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... THE RELIABILITY OF YOUR SERVICE, BEING ABLE TO ACCESS IT WHEN YOU WANT TO? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 37% | 38% | 39% |
| 4 | 33% | 25% | 21% |
| 3 | 17% | 22% | 22% |
| 2 | 9% | 8% | 6% |
| Not satisfied at all (1) | 4% | 6% | 12% |
| Don't know/refused | 1% | 1% | 0% |
| | | | |
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... YOUR PROVIDER'S CUSTOMER SERVICE? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 40% | 42% | 44% |
| 4 | 32% | 24% | 14% |
| 3 | 19% | 15% | 25% |
| 2 | 4% | 6% | 6% |
| Not satisfied at all (1) | 5% | 13% | 12% |
| Don't know/refused | 1% | 1% | 0% |
| | | | |
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... THE MONTHLY PRICE YOU PAY? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 26% | 29% | 62% |
| 4 | 26% | 25% | 20% |
| 3 | 26% | 21% | 6% |
| 2 | 8% | 7% | 5% |
| Not satisfied at all (1) | 11% | 12% | 6% |
| Don't know/refused | 4% | 6% | 0% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... YOUR CURRENT CONTRACT AND ITS TERMS OF SERVICE? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 33% | 42% | 51% |
| 4 | 29% | 19% | 32% |
| 3 | 22% | 23% | 4% |
| 2 | 7% | 6% | 1% |
| Not satisfied at all (1) | 4% | 6% | 3% |
| Don't know/refused | 5% | 4% | 9% |
| | | | |
| NOW THINKING ABOUT BROADBAND SERVICE ON YOUR CELL PHONE, HOW WOULD YOU RATE... THE SERVICE AREA WHERE YOU CAN ACCESS BORADBAND ON YOUR CELL PHONE? | | | |
| Base: Respondents Who Access The Internet On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 332 | 105 | 33 |
| Very satisfied (5) | 31% | 35% | 36% |
| 4 | 35% | 28% | 33% |
| 3 | 19% | 15% | 18% |
| 2 | 9% | 14% | 7% |
| Not satisfied at all (1) | 4% | 6% | 7% |
| Don't know/refused | 1% | 2% | 0% |

Low-Income households = annual household income less than $25,000

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOU HAVE A CELLULAR PHONE? | | | |
| Base: Respondents Contacted On Their Landline Phones | | | |
| Unweighted Sample Size (n=) | 2,201 | 720 | 855 |
| Yes | 62% | 67% | 51% |
| No | 37% | 33% | 48% |
| Don't know/refused | <1% | <1% | <1% |
| | | | |
| DOES YOUR HOUSEHOLD ALSO HAVE A LANDLINE TELEPHONE CONNECTION? | | | |
| Base: Respondents Contacted On Their Cellular Phones | | | |
| Unweighted Sample Size (n=) | 200 | 53 | 88 |
| Yes | 34% | 45% | 29% |
| No | 63% | 55% | 68% |
| Don't know/refused | 3% | 0% | 3% |
| | | | |
| DOES YOUR HOUSEHOLD HAVE A COMPUTER? | | | |
| Base: All Non-Adopters Surveyed | | | |
| Unweighted Sample Size (n=) | 2,401 | 773 | 943 |
| Yes | 46% | 47% | 35% |
| No | 54% | 53% | 65% |
| Don't know/refused | <1% | <1% | <1% |
| | | | |
| WHAT TYPE OF COMPUTER DO YOU HAVE AT HOME? | | | |
| Base: Households With Computers | | | |
| Unweighted Sample Size (n=) | 969 | 309 | 264 |
| Desktop computer | 71% | 70% | 70% |
| Laptop computer | 46% | 48% | 41% |
| A tablet computer, such as an iPad | 3% | 4% | 1% |
| Don't know/refused | 2% | 1% | 1% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOU USE THE INTERNET FROM ANY LOCATIONS OUTSIDE OF YOUR OWN HOME?<br>Base: All Non-Adopters Surveyed<br>Unweighted Sample Size (n=) | 2,401 | 773 | 943 |
| Yes | 33% | 40% | 29% |
| No | 66% | 60% | 71% |
| Don't know/refused | <1% | <1% | <1% |
| | | | |
| AT WHAT LOCATIONS OUTSIDE OF YOUR OWN HOME DO YOU USE THE INTERNET?<br>Base: Respondents Who Use The Internet Someplace Other Than Home<br>Unweighted Sample Size (n=) | 514 | 172 | 148 |
| At work | 35% | 33% | 12% |
| At the library | 31% | 27% | 51% |
| At someone else's home | 24% | 21% | 27% |
| Through a cell phone or handheld device | 10% | 14% | 9% |
| Through wifi or an aircard | 7% | 10% | 5% |
| At restaurants or coffee shops | 6% | 10% | 3% |
| At school | 5% | 7% | 8% |
| Hotels | 4% | 4% | 1% |
| At a community center | 3% | 3% | 5% |
| Airports | 1% | 2% | 0% |
| Other | <1% | 1% | 1% |
| Don't know/refused | 4% | 2% | 4% |
| | | | |
| DO YOU USE WI-FI ZONES, SOMETIMES CALLED "HOTSPOTS" TO ACCESS THE INTERNET SOMEPLACE OTHER THAN AT HOME?<br>Base: Respondents Who Own A Laptop Or Tablet Computer And Use The Internet Someplace Other Than Home<br>Unweighted Sample Size (n=) | 166 | 58 | 30 |
| Yes | 59% | 73% | 61% |
| No | 41% | 25% | 38% |
| Don't know/refused | <1% | 1% | <1% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| ON YOUR LAPTOP OR TABLET COMPUTER, DO YOU SUBSCRIBE TO A MOBILE WIRELESS SERVICE THAT ALLOWS YOU TO ACCESS THE INTERNET THROUGH A CELLULAR NETWORK? | | | |
| Base: Respondents Who Own A Laptop Or Tablet Computer | | | |
| Unweighted Sample Size (n=) | 386 | 117 | 92 |
| Yes | 22% | 25% | 13% |
| No | 73% | 72% | 78% |
| Don't know/refused | 5% | 3% | 9% |
| | | | |
| WHY DON'T YOU SUBSCRIBE TO THE INTERNET AT HOME? | | | |
| Base: Households That Do Not Subscribe To Home Internet Service | | | |
| Unweighted Sample Size (n=) | 1,846 | 589 | 817 |
| There is nothing on the Internet that you want to see or use | 37% | 35% | 32% |
| The monthly cost of Internet service is too expensive | 32% | 33% | 39% |
| The cost of a computer is too expensive | 28% | 31% | 38% |
| The activation and installation fees are too expensive | 25% | 25% | 31% |
| You can get Internet access somewhere else | 20% | 20% | 21% |
| Concerns about fraud or identity theft | 20% | 20% | 22% |
| The Internet is too complicated | 17% | 15% | 20% |
| You don't feel comfortable using a computer | 16% | 16% | 15% |
| Broadband isn't available in your area, and you don't want dial-up | 10% | 11% | 10% |
| You don't own a computer or your computer doesn't work | <1% | <1% | <1% |
| You don't want or need the Internet | 0% | 0% | 0% |
| Any other reason? | <1% | <1% | <1% |
| Don't know/refused | 4% | 6% | 3% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DO NOT SUBSCRIBE TO HOME INTERNET SERVICE? | | | |
| Base: Households That Do Not Subscribe To Home Internet Service | | | |
| Unweighted Sample Size (n=) | 1,846 | 589 | 817 |
| There is nothing on the Internet that you want to see or use | 28% | 26% | 22% |
| The monthly cost of Internet service is too expensive | 18% | 17% | 22% |
| The cost of a computer is too expensive | 13% | 16% | 19% |
| You can get Internet access somewhere else | 7% | 8% | 5% |
| You don't feel comfortable using a computer | 7% | 5% | 6% |
| The Internet is too complicated | 6% | 5% | 6% |
| Concerns about fraud or identity theft | 5% | 4% | 5% |
| Broadband isn't available in your area, and you don't want dial-up | 4% | 5% | 3% |
| The activation and installation fees are too expensive | 4% | 3% | 3% |
| You don't own a computer or my computer doesn't work | <1% | <1% | <1% |
| You don't want or need the Internet | 0% | 0% | 0% |
| Other | <1% | <1% | <1% |
| Don't know/refused | 7% | 10% | 8% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHY DON'T YOU SUBSCRIBE TO BROADBAND INTERNET SERVICE AT HOME?<br>Base: Households That Subscribe To Dial-Up Internet Service<br>Unweighted Sample Size (n=) | 555 | 184 | 126 |
| The monthly cost of broadband service is too expensive | 24% | 25% | 32% |
| Broadband service is not available where you live | 24% | 31% | 18% |
| There is nothing you want to see or do online that requires broadband | 23% | 22% | 22% |
| The activation and installation fees are too expensive | 20% | 19% | 25% |
| You do not use the Internet very often from home | 18% | 20% | 23% |
| Concerns about fraud or identity theft | 16% | 16% | 19% |
| You can get broadband access somewhere else | 10% | 12% | 13% |
| Broadband is too complicated | 9% | 5% | 14% |
| Available broadband service is not fast enough to be worthwhile | 6% | 4% | 7% |
| Any other reason? | 1% | 0% | 0% |
| Don't know what it is/anything about it | 7% | 6% | 8% |
| Don't know/refused | 4% | 4% | 2% |
| | | | |
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DO NOT SUBSCRIBE TO HOME BROADBAND SERVICE?<br>Base: Households That Subscribe To Dial-Up Internet Service<br>Unweighted Sample Size (n=) | 555 | 184 | 126 |
| Broadband service is not available where you live | 21% | 26% | 11% |
| There is nothing you want to see or do online that requires broadband | 18% | 18% | 19% |
| The monthly cost of broadband service is too expensive | 18% | 21% | 23% |
| You do not use the Internet very often from home | 11% | 10% | 16% |
| The activation and installation fees are too expensive | 6% | 4% | 6% |
| Broadband is too complicated | 3% | 1% | 3% |
| You can get broadband access somewhere else | 3% | 5% | 4% |
| Concerns about fraud or identity theft | 3% | 3% | 5% |
| Available broadband service is not fast enough to be worthwhile | 2% | <1% | 2% |
| Other | 1% | 0% | 0% |
| Don't know what it is/anything about it | 7% | 6% | 8% |
| Don't know/refused | 7% | 6% | 4% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HAVE YOU EVER SUBSCRIBED TO BROADBAND INTERNET SERVICE? | | | |
| Base: All Non-Adopters Surveyed | | | |
| Unweighted Sample Size (n=) | 2,401 | 773 | 943 |
| Yes | 12% | 10% | 12% |
| No | 86% | 89% | 87% |
| Don't know/refused | 2% | 1% | 1% |
| | | | |
| WHEN DID YOU STOP SUBSCRIBING TO BROADBAND SERVICE? | | | |
| Base: Households That Subscribed To Broadband In The Past | | | |
| Unweighted Sample Size (n=) | 213 | 64 | 75 |
| Within the past twelve months | 32% | 26% | 36% |
| Between one and two years ago | 27% | 31% | 27% |
| Between two and three years ago | 11% | 17% | 15% |
| Between three and four years ago | 8% | 6% | 6% |
| More than four years ago | 15% | 16% | 10% |
| Don't know/refused | 8% | 5% | 5% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE? | | | |
| Base: All Non-Adopters Surveyed | | | |
| Unweighted Sample Size (n=) | 2,401 | 773 | 943 |
| Yes | 50% | 45% | 52% |
| No* | 23% | 28% | 20% |
| Don't know/refused | 28% | 28% | 28% |
| * Includes respondents mentioning "not available" as a reason for not having Internet or broadband | | | |
| | | | |
| IF YOU COULD SUBSCRIBE TO HOME BROADBAND SERVICE AT A PRICE YOU CONSIDER ACCEPTABLE, WOULD YOU DO SO? | | | |
| Base: All Non-Adopters Surveyed | | | |
| Unweighted Sample Size (n=) | 2,401 | 773 | 943 |
| Yes | 37% | 43% | 43% |
| No | 55% | 50% | 51% |
| Don't know/refused | 8% | 7% | 5% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| AT WHAT MONTHLY PRICE WOULD YOU CONSIDER A HOME BROADBAND SUBSCRIPTION TO BE 'TOO EXPENSIVE TO CONSIDER'?<br>Base: Respondents Willing To Subscribe At A Price They Deemed "Acceptable"<br>Unweighted Sample Size (n=) | 451 | 165 | 196 |
| Under $5 | <1% | 0% | <1% |
| $5 to $9 | <1% | 1% | 0% |
| $10 to $14 | 2% | 1% | 3% |
| $15 to $19 | 2% | 3% | 1% |
| $20 to $24 | 7% | 6% | 8% |
| $25 to $29 | 9% | 12% | 9% |
| $30 to $34 | 15% | 15% | 18% |
| $35 to $39 | 6% | 3% | 4% |
| $40 to $44 | 10% | 12% | 10% |
| $45 to $49 | 2% | 2% | 3% |
| $50 or more | 46% | 46% | 44% |
| | | | |
| AND AT WHAT MONTHLY PRICE WOULD YOU CONSIDER A HOME BROADBAND SUBSCRIPTION TO BE 'GETTING EXPENSIVE, BUT STILL WORTH THE COST?'<br>Base: Respondents Willing To Subscribe At A Price They Deemed "Acceptable"<br>Unweighted Sample Size (n=) | 451 | 165 | 196 |
| Under $5 | <1% | 0% | <1% |
| $5 to $9 | 2% | 2% | 2% |
| $10 to $14 | 5% | 6% | 7% |
| $15 to $19 | 12% | 16% | 13% |
| $20 to $24 | 15% | 16% | 19% |
| $25 to $29 | 13% | 8% | 13% |
| $30 to $34 | 12% | 13% | 9% |
| $35 to $39 | 5% | 5% | 5% |
| $40 to $44 | 12% | 12% | 11% |
| $45 to $49 | 7% | 5% | 7% |
| $50 or more | 15% | 17% | 14% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| NOW, AT WHAT MONTHLY PRICE WOULD YOU CONSIDER A HOME BROADBAND SUBSCRIPTION TO BE 'A BARGAIN, DEFINITELY WORTH THE MONEY?'<br>Base: Respondents Willing To Subscribe At A Price They Deemed "Acceptable"<br>Unweighted Sample Size (n=) | 451 | 165 | 196 |
| Under $5 | 1% | 2% | 1% |
| $5 to $9 | 6% | 4% | 7% |
| $10 to $14 | 16% | 21% | 18% |
| $15 to $19 | 19% | 13% | 19% |
| $20 to $24 | 17% | 21% | 16% |
| $25 to $29 | 15% | 12% | 17% |
| $30 to $34 | 12% | 11% | 11% |
| $35 to $39 | 4% | 5% | 2% |
| $40 to $44 | 3% | 2% | 2% |
| $45 to $49 | 2% | 2% | 1% |
| $50 or more | 6% | 7% | 5% |
| | | | |
| AND AT WHAT MONTHLY PRICE WOULD YOU CONSIDER A HOME BROADBAND SUBSCRIPTION TO BE 'SO INEXPENSIVE THAT YOU WOULD QUESTION THE QUALITY OF THE SERVICE AND NOT CONSIDER SUBSCRIBING?'<br>Base: Respondents Willing To Subscribe At A Price They Deemed "Acceptable"<br>Unweighted Sample Size (n=) | 451 | 165 | 196 |
| Under $5 | 8% | 9% | 9% |
| $5 to $9 | 24% | 25% | 27% |
| $10 to $14 | 28% | 30% | 26% |
| $15 to $19 | 16% | 11% | 17% |
| $20 to $24 | 13% | 13% | 12% |
| $25 to $29 | 4% | 5% | 3% |
| $30 to $34 | 1% | <1% | <1% |
| $35 to $39 | 2% | 1% | 2% |
| $40 to $44 | 1% | 1% | 0% |
| $45 to $49 | <1% | <1% | 0% |
| $50 or more | 3% | 3% | 4% |

## CONNECT SOUTH CAROLINA -- 2011 RESIDENTIAL NON-ADOPTER TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| ON YOUR CELL PHONE, DO YOU SUBSCRIBE TO A PLAN THAT ALLOWS YOU TO ACCESS THE INTERNET? | | | |
| Base: Respondents Who Own Cell Phones | | | |
| Unweighted Sample Size (n=) | 1,533 | 503 | 516 |
| Yes | 41% | 44% | 41% |
| No | 56% | 53% | 56% |
| Don't know/refused | 3% | 2% | 3% |
| | | | |
| HOW OFTEN, IF EVER, DO YOU GO ONLINE USING YOUR CELL PHONE? | | | |
| Base: Respondents Who Own Cell Phones That Allow Internet Access | | | |
| Unweighted Sample Size (n=) | 418 | 142 | 143 |
| Every day | 45% | 54% | 41% |
| Several times per week | 16% | 11% | 16% |
| Once per week or less | 17% | 16% | 18% |
| Never | 21% | 20% | 25% |
| Don't know/refused | <1% | <1% | 1% |
| | | | |
| HOW INTERESTED WOULD YOU BE IN HAVING ACCESS TO THE INTERNET ON YOUR CELL PHONE IF YOU COULD PRE-PAY A FEE BASED ON THE AMOUNT OF TIME YOU SPEND ONLINE OR THE AMOUNT OF DATA YOU ACCESS INSTEAD OF HAVING A MONTHLY CONTRACT WITH YOUR PROVIDER? | | | |
| Base: Cell Phone Users That Don't Use Phone For Internet Access | | | |
| Unweighted Sample Size (n=) | 1,256 | 409 | 429 |
| Very interested | 4% | 6% | 6% |
| Somewhat interested | 11% | 12% | 13% |
| Not interested at all | 82% | 79% | 79% |
| Don't know/refused | 3% | 4% | 2% |

Low-Income households = annual household income less than $25,000

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHY DON'T YOU HAVE A COMPUTER AT HOME? | | | |
| Base: Households That Do Not Own Computers | | | |
| Unweighted Sample Size (n=) | 251 | 94 | 127 |
| You don't need a computer | 36% | 40% | 36% |
| Too expensive | 33% | 33% | 41% |
| Computers are too complicated | 17% | 9% | 19% |
| You have a cell phone that you use instead of a computer | 14% | 22% | 14% |
| You use a computer at a different location | 13% | 22% | 14% |
| Your computer is broken, and you have not had it fixed or repaired yet | 8% | 9% | 6% |
| You have an illness or physical condition that makes it difficult to use a computer | 4% | 1% | 4% |
| Any other reason | 3% | 2% | <1% |
| Don't know/refused | 2% | 1% | 2% |
| | | | |
| DOES YOUR HOUSEHOLD HAVE A TELEVISION? | | | |
| Base: All Respondents Surveyed | | | |
| Unweighted Sample Size (n=) | 1200 | 398 | 273 |
| Yes | 97% | 97% | 97% |
| No | 3% | 3% | 3% |
| Don't know/refused | 0% | 0% | 0% |
| | | | |
| DOES YOUR HOUSEHOLD SUBSCRIBE TO ANY OF THE FOLLOWING SERVICES? | | | |
| Base: Households With Televisions | | | |
| Unweighted Sample Size (n=) | 1173 | 388 | 265 |
| Cable television | 51% | 38% | 43% |
| Satellite television | 35% | 43% | 25% |
| None of the above | 15% | 19% | 31% |
| Don't know/refused | <1% | 1% | 1% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHAT DO YOU PAY EACH MONTH FOR YOUR CABLE TELEVISION SERVICE? | | | |
| Base: Households With Televisions | | | |
| Unweighted Sample Size (n=) | 592 | 154 | 110 |
| Less than $10 | 0% | 0% | 0% |
| Between $10 and $19 | 1% | 1% | 1% |
| Between $20 and $29 | 2% | 3% | 3% |
| Between $30 and $39 | 5% | 6% | 5% |
| Between $40 and $49 | 4% | 7% | 9% |
| Between $50 and $74 | 14% | 17% | 19% |
| Between $75 and $99 | 11% | 15% | 16% |
| Between $100 and $124 | 14% | 15% | 14% |
| Between $125 and $149 | 7% | 3% | 11% |
| $150 or more | 9% | 6% | 4% |
| Don't know/refused | 35% | 28% | 18% |
| | | | |
| WHAT DO YOU PAY EACH MONTH FOR YOUR SATELLITE TELEVISION SERVICE? | | | |
| Base: Household Has Satellite Television | | | |
| Unweighted Sample Size (n=) | 426 | 173 | 76 |
| Less than $10 | 0% | 0% | 0% |
| Between $10 and $19 | 1% | 2% | 4% |
| Between $20 and $29 | <1% | <1% | 0% |
| Between $30 and $39 | 4% | 2% | 2% |
| Between $40 and $49 | 5% | 2% | 5% |
| Between $50 and $74 | 21% | 26% | 32% |
| Between $75 and $99 | 24% | 24% | 30% |
| Between $100 and $124 | 14% | 14% | 5% |
| Between $125 and $149 | 5% | 6% | 5% |
| $150 or more | 4% | 2% | 5% |
| Don't know/refused | 23% | 22% | 12% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW OFTEN, IF EVER, DO YOU GO ONLINE FROM HOME?<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 879 | 278 | 121 |
| Several times per day | 68% | 73% | 56% |
| Once per day | 14% | 9% | 19% |
| Several times per week | 9% | 9% | 9% |
| Once per week or less | 5% | 4% | 6% |
| Never | 4% | 4% | 10% |
| Don't know/refused | <1% | 1% | 0% |
| | | | |
| WHEN YOU ARE AT YOUR HOME, WHICH OF THE FOLLOWING DEVICES DO YOU USE TO ACCESS THE INTERNET?<br>Base: Residents Who Use The Internet At Home<br>Unweighted Sample Size (n=) | 834 | 262 | 106 |
| A laptop computer | 68% | 64% | 54% |
| A desktop computer | 62% | 58% | 61% |
| A cell phone | 50% | 48% | 36% |
| A tablet computer, like an iPad | 29% | 21% | 10% |
| A game console, like an Xbox 360 or PlayStation 3 | 23% | 22% | 22% |
| An e-book reader, like a Kindle or Nook | 20% | 14% | 5% |
| A digital music player, like an iPod or MP3 player | 19% | 16% | 9% |
| Your television | 16% | 17% | 11% |
| Other (specify) | 0% | 0% | 0% |
| None of the above | <1% | 0% | 0% |
| Don't know/refused | 0% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DO NOT SUBSCRIBE TO HOME INTERNET SERVICE?<br>Base: Households That Do Not Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 316 | 118 | 152 |
| You don't want to have the Internet at your home | 18% | 15% | 21% |
| The cost of a computer is too expensive | 16% | 13% | 19% |
| The monthly cost of Internet service is too expensive | 13% | 8% | 16% |
| You don't know how to use a computer well enough to access the Internet | 9% | 6% | 8% |
| You can get Internet access somewhere else | 8% | 9% | 5% |
| There is nothing on the Internet that you want to see or use | 7% | 10% | 7% |
| You wouldn't use the Internet enough to make it worth the cost | 6% | 8% | 4% |
| You don't own a computer | 5% | 6% | 4% |
| Broadband isn't available in your area, and you don't want dial-up | 3% | 7% | 2% |
| The activation and installation fees are too expensive | 2% | 3% | 2% |
| Concerns about fraud or identity theft | 2% | 2% | 1% |
| You have an illness or physical condition that makes it difficult to use the Internet | 2% | 1% | 1% |
| The Internet is too complicated | 2% | 2% | 2% |
| Other | 2% | 1% | 0% |
| Don't know/refused | 6% | 10% | 8% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE?<br>Base: Households That Do Not Subscribe To Home Internet Service<br>Or Don't Know If They Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 321 | 120 | 152 |
| Yes | 64% | 66% | 66% |
| No | 13% | 16% | 14% |
| Don't know/refused | 23% | 18% | 20% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DOES YOUR HOME INTERNET PROVIDER ALSO PROVIDE YOUR HOME WITH OTHER SERVICES, SUCH AS YOUR TELEPHONE, CELL PHONE SERVICE, OR TELEVISION?<br>Base: Households That Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 879 | 278 | 121 |
| Yes | 81% | 79% | 78% |
| No | 19% | 21% | 21% |
| Don't know/refused | <1% | <1% | 1% |
| | | | |
| WHAT OTHER SERVICES ARE BUNDLED WITH YOUR HOME INTERNET SERVICE?<br>Base: Households That Subscribe To Home Internet Service Bundled With Other Services<br>Unweighted Sample Size (n=) | 699 | 216 | 94 |
| Home phone service (land line) | 76% | 70% | 82% |
| Television | 60% | 47% | 49% |
| Cellular phone service | 13% | 17% | 11% |
| Other (specify) | 1% | 1% | 0% |
| Don't know/refused | 3% | 7% | 3% |
| | | | |
| DID YOU FIRST SUBSCRIBE TO HOME BROADBAND SERVICE BEFORE MOST OF YOUR FRIENDS, ABOUT THE SAME TIME THAT MOST OF YOUR FRIENDS DID, OR AFTER MOST OF YOUR FRIENDS HAD ALREADY SUBSCRIBED?<br>Base: Households That Subscribe To Home Broadband Service<br>Unweighted Sample Size (n=) | 798 | 243 | 98 |
| Before most of my friends | 26% | 28% | 28% |
| About the same time | 32% | 31% | 18% |
| After most of my friends | 22% | 22% | 36% |
| Don't know/refused | 20% | 18% | 18% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| OVERALL, HOW SATISFIED ARE YOU WITH YOUR HOME BROADBAND SERVICE? ARE YOU…<br>Base: Households That Subscribe To Home Broadband Service<br>Unweighted Sample Size (n=) | 798 | 243 | 98 |
| Very satisfied | 38% | 44% | 34% |
| Mostly satisfied | 54% | 49% | 58% |
| Mostly dissatisfied | 5% | 4% | 5% |
| Very dissatisfied | 2% | 2% | 3% |
| Don't know/refused | 1% | 2% | <1% |
| | | | |
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT USING THE INTERNET?<br>Base: Respondents Who Use The Internet<br>Unweighted Sample Size (n=) | 942 | 300 | 148 |
| Communicating through e-mail or other ways of sending messages | 87% | 86% | 74% |
| Researching or purchasing goods or services | 75% | 73% | 49% |
| Exploring or participating in hobbies or personal interests | 71% | 66% | 57% |
| Using social networking sites like Facebook | 68% | 69% | 68% |
| Online banking or paying bills | 65% | 60% | 46% |
| Reading online newspapers or other news sources | 65% | 65% | 51% |
| Searching for medical information, or communicating with healthcare professionals like doctors or insurance offices | 55% | 52% | 43% |
| Searching or applying for jobs | 43% | 46% | 53% |
| Taking online classes or conducting research for schoolwork | 41% | 45% | 36% |
| Interacting with government offices or elected officials | 29% | 25% | 21% |
| None of the above | 1% | <1% | 2% |
| Don't know/refused | <1% | <1% | 0% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOU MAKE OR RECEIVE HOME TELEPHONE CALLS THROUGH YOUR INTERNET CONNECTION? | | | |
| Base: Households That Subscribe To Home Broadband Service | | | |
| Unweighted Sample Size (n=) | 798 | 243 | 98 |
| Yes | 18% | 14% | 11% |
| No | 80% | 85% | 84% |
| Don't know/refused | 2% | 1% | 5% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE? | | | |
| Base: Household Internet Service Is Not A Broadband Connection | | | |
| Unweighted Sample Size (n=) | 81 | 35 | 23 |
| Yes | 61% | 66% | n/a |
| No | 21% | 24% | n/a |
| Don't know/refused | 18% | 10% | n/a |
| | | | |
| WOULD YOU SIGN UP FOR BROADBAND SERVICE IF IT WERE AVAILABLE IN YOUR AREA? | | | |
| Base: Dial-Up Users Who Without Access To Broadband | | | |
| Unweighted Sample Size (n=) | 32 | 14 | 12 |
| Yes | 39% | n/a | n/a |
| No | 35% | n/a | n/a |
| Don't know/refused | 26% | n/a | n/a |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DO NOT SUBSCRIBE TO HOME BROADBAND SERVICE?<br>Base: Households That Subscribe To Dial-Up Service Or Do Not Know What Type Of Internet Service They Have<br>Unweighted Sample Size (n=) | 81 | 35 | 23 |
| You do not know enough about broadband, or you don't know what it is | 23% | 16% | n/a |
| Not available in your area (would sign up if it was available) | 15% | 19% | n/a |
| The monthly cost of broadband service is too expensive | 12% | 14% | n/a |
| You do not use the Internet often enough to make it worth the extra cost | 5% | 3% | n/a |
| You don't want home broadband service | 5% | 0% | n/a |
| Broadband is too complicated | 5% | 10% | n/a |
| There is nothing you want to see or do online that requires broadband | 4% | 1% | n/a |
| The activation and installation fees are too expensive | 3% | 3% | n/a |
| You have an illness or physical condition that makes it difficult to use broadband | 2% | 1% | n/a |
| Available broadband service is not fast enough to be worthwhile | 0% | 0% | n/a |
| Your computer is too old or too slow to access broadband | 0% | 0% | n/a |
| You can get broadband access somewhere else | 0% | 0% | n/a |
| Concerns about fraud or identity theft | 0% | 0% | n/a |
| Other (specify) | 6% | 4% | n/a |
| Don't know/refused | 22% | 28% | n/a |
| | | | |
| ON YOUR CELL PHONE, DO YOU SUBSCRIBE TO A PLAN THAT ALLOWS YOU TO ACCESS THE INTERNET?<br>Base: Respondents Who Own Cell Phones<br>Unweighted Sample Size (n=) | 1006 | 314 | 184 |
| Yes | 56% | 55% | 38% |
| No | 42% | 43% | 60% |
| Don't know/refused | 1% | 1% | 2% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN YOU FIRST SUBSCRIBED TO A PLAN THAT LET YOU ACCESS THE INTERNET FROM YOUR CELL PHONE, WAS IT BEFORE, ABOUT THE SAME TIME, OR AFTER MOST OF YOUR FRIENDS COULD ALREADY ACCESS THE INTERNET ON THEIR CELL PHONES? | | | |
| Base: Subscribe To A Data Plan That Allows Internet Access On Cell Phone | | | |
| Unweighted Sample Size (n=) | 532 | 158 | 57 |
| Before most of my friends | 18% | 17% | 12% |
| About the same time | 40% | 44% | 39% |
| After most of my friends | 33% | 27% | 42% |
| Don't know/refused | 9% | 12% | 7% |
| | | | |
| HOW OFTEN, IF EVER, DO YOU GO ONLINE USING YOUR CELL PHONE? | | | |
| Base: Respondents Who Subscribe To A Data Plan On Their Cell Phones | | | |
| Unweighted Sample Size (n=) | 532 | 158 | 57 |
| Several times per day | 58% | 60% | 45% |
| Once per day | 8% | 7% | 6% |
| Several times per week | 12% | 11% | 13% |
| Once per week or less | 12% | 8% | 24% |
| Never | 11% | 15% | 12% |
| Don't know/refused | 0% | 0% | 0% |
| | | | |
| DO YOU EVER USE YOUR CELL PHONE TO ACCESS THE INTERNET WHILE YOU ARE AT HOME? | | | |
| Base: Respondents Who Use Their Cell Phones To Access The Internet | | | |
| Unweighted Sample Size (n=) | 454 | 125 | 46 |
| Yes | 76% | 79% | 83% |
| No | 24% | 21% | 17% |
| Don't know/refused | <1% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT ON YOUR CELL PHONE USING YOUR MOBILE BROADBAND SERVICE?<br>Base: Respondents Who Use Their Cell Phones To Access The Internet<br>Unweighted Sample Size (n=) | 454 | 125 | 46 |
| Communicating through e-mail or other ways of sending messages | 78% | 81% | 68% |
| Using social networking sites like Facebook | 65% | 66% | 69% |
| Exploring or participating in hobbies or personal interests | 56% | 56% | 41% |
| Researching or purchasing goods or services | 49% | 56% | 38% |
| Reading online newspapers or other news sources | 47% | 57% | 32% |
| Online banking or paying bills | 38% | 43% | 35% |
| Searching for medical information, or communicating with doctors or other healthcare professionals | 28% | 30% | 16% |
| Searching or applying for jobs | 16% | 21% | 24% |
| Taking online classes or conducting research for schoolwork | 13% | 17% | 11% |
| Interacting with government offices or elected officials | 12% | 12% | 6% |
| None of the above | 5% | 3% | 8% |
| Don't know/refused | 1% | 1% | 0% |
| | | | |
| OVERALL, HOW SATISFIED ARE YOU WITH THE MOBILE BROADBAND SERVICE ON YOUR CELL PHONE? ARE YOU…<br>Base: Respondents Who Use Their Cell Phones To Access The Internet<br>Unweighted Sample Size (n=) | 454 | 125 | 46 |
| Very satisfied | 44% | 50% | 24% |
| Mostly satisfied | 48% | 41% | 54% |
| Mostly dissatisfied | 5% | 8% | 16% |
| Very dissatisfied | 1% | 1% | 0% |
| Don't know/refused | 2% | 0% | 6% |
| | | | |
| NOW THAT YOU CAN ACCESS THE INTERNET USING YOUR CELL PHONE, DO YOU FEEL THAT YOU USE YOUR HOME BROADBAND SERVICE LESS OFTEN, MORE OFTEN, OR ABOUT THE SAME AMOUNT?<br>Base: Have A Home Internet Subscription As Well As Cell Phone Data Plan<br>Unweighted Sample Size (n=) | 461 | 135 | 35 |
| More often | 12% | 14% | 47% |
| Less often | 15% | 16% | 16% |
| About the same | 73% | 68% | 37% |
| Don't know/refused | 1% | 2% | 0% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING CONTRIBUTED TO YOUR DECISION TO SUBSCRIBE TO INTERNET SERVICE ON YOUR CELL PHONE?<br>Base: Subscribe To A Data Plan That Allows Internet Access On Cell Phone<br>Unweighted Sample Size (n=) | 532 | 158 | 57 |
| You purchased or received a cell phone that could access the Internet | 69% | 68% | 69% |
| You wanted a way to access the Internet while away from home | 58% | 58% | 49% |
| Mobile Internet service was automatically included with your cell phone contract | 51% | 52% | 76% |
| You learned about an application you could use on your cell phone | 30% | 29% | 41% |
| You wanted to use your cell phone to access the Internet at home | 30% | 36% | 41% |
| Mobile Internet service now costs less than it used to | 29% | 31% | 28% |
| You needed mobile Internet service for your work | 25% | 21% | 6% |
| Mobile Internet service is less expensive than home broadband service | 21% | 28% | 33% |
| You learned that faster mobile Internet service became available in your area | 21% | 24% | 38% |
| A friend or family member convinced you | 15% | 16% | 15% |
| Any other reason?(specify) | <1% | 1% | 0% |
| Don't know/refused | 2% | 6% | 2% |

## CONNECT SOUTH CAROLINA -- 2012 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH ONE OF THESE IS THE MAIN REASON WHY YOU DECIDED TO SUBSCRIBE TO INTERNET SERVICE ON YOUR CELL PHONE?<br>Base: Subscribe To A Data Plan That Allows Internet Access On Cell Phone<br>Unweighted Sample Size (n=) | 532 | 158 | 57 |
| You wanted a way to access the Internet while away from home | 28% | 29% | 18% |
| Mobile internet service was automatically included with your cell phone contract | 21% | 21% | 38% |
| You purchased or received a cell phone that could access the internet | 16% | 7% | 12% |
| You needed mobile internet service for your work | 11% | 11% | 5% |
| You wanted to use your cell phone to access the internet at home | 5% | 10% | 12% |
| A friend or family member convinced you | 4% | 5% | 0% |
| You learned about an application you could use on your cell phone | 3% | 2% | 5% |
| Mobile internet service now costs less than it used to | 3% | 1% | 4% |
| Mobile internet service is less expensive than home broadband service | 2% | 2% | 0% |
| You learned that faster mobile internet service became available in your area | 1% | 3% | 4% |
| Other | <1% | 1% | 0% |
| Don't know/refused | 5% | 10% | 3% |

Low-Income households = annual household income less than $25,000
Cells marked as "n/a" are not reported due to small sample sizes

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHEN WAS THE LAST TIME YOU PURCHASED OR RECEIVED A DESKTOP COMPUTER FOR YOUR HOME?<br>Base: Households With A Desktop Computer<br>Unweighted Sample Size (n=) | 677 | 260 | 84 |
| Less than 6 months ago | 11% | 9% | 13% |
| 6 months to less than one year ago | 8% | 6% | 5% |
| One year to less than two years ago | 12% | 13% | 14% |
| Two years to less than four years ago | 29% | 23% | 29% |
| Four years ago or longer | 38% | 48% | 39% |
| Don't know/refused | 2% | <1% | 0% |
| | | | |
| WHEN WAS THE LAST TIME SOMEONE IN YOUR HOUSEHOLD PURCHASED OR RECEIVED A LAPTOP COMPUTER?<br>Base: Households With A Laptop Computer<br>Unweighted Sample Size (n=) | 683 | 263 | 72 |
| Less than 6 months ago | 20% | 17% | 6% |
| 6 months to less than one year ago | 15% | 15% | 16% |
| One year to less than two years ago | 23% | 29% | 24% |
| Two years to less than four years ago | 25% | 29% | 36% |
| Four years ago or longer | 15% | 9% | 17% |
| Don't know/refused | 1% | 1% | 2% |
| | | | |
| WHEN WAS THE LAST TIME SOMEONE IN YOUR HOUSEHOLD PURCHASED OR RECEIVED A TABLET COMPUTER?<br>Base: Households With A Tablet Computer<br>Unweighted Sample Size (n=) | 293 | 109 | 22 |
| Less than 6 months ago | 36% | 46% | n/a |
| 6 months to less than one year ago | 26% | 20% | n/a |
| One year to less than two years ago | 25% | 20% | n/a |
| Two years to less than four years ago | 10% | 7% | n/a |
| Four years ago or longer | 1% | 0% | n/a |
| Don't know/refused | 2% | 6% | n/a |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW OFTEN, IF EVER, DO YOU GO ONLINE OR USE THE INTERNET FROM HOME? | | | |
| Base: Households With Internet Service | | | |
| Unweighted Sample Size (n=) | 980 | 379 | 124 |
| Several times per day | 72% | 68% | 72% |
| Once per day | 13% | 14% | 10% |
| Several times per week | 7% | 8% | 6% |
| Once per week or less | 5% | 6% | 7% |
| Never | 3% | 3% | 5% |
| Don't know/refused | <1% | 1% | <1% |
| | | | |
| ON YOUR CELL PHONE, DO YOU SUBSCRIBE TO A PLAN THAT ALLOWS YOU TO ACCESS THE INTERNET? | | | |
| Base: Cell Phone Users | | | |
| Unweighted Sample Size (n=) | 1,022 | 417 | 154 |
| Yes | 69% | 65% | 60% |
| No | 31% | 33% | 40% |
| Don't know/refused | 1% | 1% | <1% |
| | | | |
| HOW OFTEN, IF EVER, DO YOU GO ONLINE OR ACCESS THE INTERNET USING YOUR CELL PHONE? | | | |
| Base: Respondents Who Have A Data Plan That Allows Internet Access On Their Cell Phone | | | |
| Unweighted Sample Size (n=) | 621 | 228 | 69 |
| Several times per day | 67% | 68% | 62% |
| Once per day | 9% | 7% | 15% |
| Several times per week | 9% | 9% | 10% |
| Once per week or less | 8% | 9% | 6% |
| Never | 6% | 6% | 8% |
| Don't know/refused | <1% | <% | 0% |
| | | | |
| DO YOU EVER USE YOUR CELL PHONE TO ACCESS THE INTERNET WHILE YOU ARE AT HOME? | | | |
| Base: Adults Who Use The Internet Via Cell Phone | | | |
| Unweighted Sample Size (n=) | 573 | 209 | 63 |
| Yes | 78% | 86% | 86% |
| No | 22% | 14% | 14% |
| Don't know/refused | 0% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT USING THE INTERNET? | | | |
| Base: Adults Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 1,008 | 393 | 138 |
| Communicating through e-mail or other ways of sending messages | 87% | 85% | 74% |
| Purchasing goods or services | 74% | 70% | 58% |
| Exploring or participating in hobbies or personal interests | 73% | 73% | 64% |
| Using social networking sites like Facebook | 71% | 71% | 75% |
| Online banking or paying bills | 70% | 65% | 61% |
| Reading online newspapers or other news sources | 67% | 74% | 64% |
| Searching for medical or healthcare information | 58% | 59% | 47% |
| Conducting research for schoolwork | 47% | 53% | 47% |
| Searching for information about government services | 45% | 50% | 39% |
| Searching or applying for jobs | 38% | 44% | 49% |
| Applying for services or filling out forms at government websites | 37% | 39% | 35% |
| Communicating with your doctor or other healthcare professionals | 24% | 22% | 16% |
| Taking online classes | 23% | 28% | 28% |
| Advertising or selling products or services | 19% | 18% | 12% |
| None of these | 2% | 3% | 6% |
| Don't know/refused | <1% | 1% | 1% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT ON YOUR CELL PHONE USING YOUR MOBILE BROADBAND SERVICE?<br>Base: Adults Who Use The Internet Via Cell Phone<br>Unweighted Sample Size (n=) | 573 | 209 | 63 |
| Communicating through e-mail or other ways of sending messages | 87% | 86% | 87% |
| Using social networking sites like Facebook | 74% | 76% | 82% |
| Exploring or participating in hobbies or personal interests | 67% | 70% | 66% |
| Reading online newspapers or other news sources | 56% | 64% | 58% |
| Online banking or paying bills | 53% | 59% | 58% |
| Purchasing goods or services | 44% | 53% | 53% |
| Searching for medical or healthcare information | 31% | 39% | 32% |
| Conducting research for schoolwork | 24% | 30% | 39% |
| Searching for information about government services | 22% | 31% | 23% |
| Communicating with your doctor or other healthcare professionals | 19% | 21% | 15% |
| Searching or applying for jobs | 16% | 23% | 23% |
| Advertising or selling products or services | 11% | 17% | 10% |
| Applying for services or filling out forms at government websites | 10% | 14% | 15% |
| Taking online classes | 8% | 11% | 18% |
| None of these | 3% | 4% | 6% |
| Don't know/refused | 1% | 1% | 1% |
| | | | |
| IN THE PAST 12 MONTHS, DID YOU USE THE INTERNET TO ORDER GOODS OR SERVICES FROM VENDORS LOCATED WITHIN THE UNITED STATES?<br>Base: Adults Who Have Made Online Purchases In The Past 12 Months<br>Unweighted Sample Size (n=) | 752 | 284 | 76 |
| Yes | 90% | 89% | 78% |
| No | 10% | 11% | 22% |
| Don't know/refused | 1% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| IN THE PAST 12 MONTHS, HOW MANY SEPARATE ORDERS DID YOU PLACE ONLINE TO VENDORS LOCATED IN THE UNITED STATES?<br>Base: Adults Who Have Made Online Purchases From U.S. Vendors<br>Unweighted Sample Size (n=) | 684 | 258 | 61 |
| 1 or 2 orders | 7% | 6% | 13% |
| 3 to 6 orders | 30% | 33% | 41% |
| 7 to 10 orders | 17% | 19% | 14% |
| 11 to 20 orders | 20% | 17% | 12% |
| More than 20 orders | 24% | 25% | 12% |
| Don't know/refused | 3% | 1% | 8% |
| | | | |
| OVER THE PAST 12 MONTHS, WHAT WOULD YOU ESTIMATE THE TOTAL COST OF GOODS AND SERVICES YOU ORDERED FROM VENDORS IN THE UNITED STATES TO BE?<br>Base: Adults Who Have Made Online Purchases From U.S. Vendors<br>Unweighted Sample Size (n=) | 684 | 258 | 61 |
| Less than $20 | 1% | 1% | 2% |
| Between $20 and $49 | 2% | 4% | 5% |
| Between $50 and $99 | 7% | 8% | 6% |
| Between $100 and $249 | 18% | 14% | 42% |
| Between $250 and $499 | 18% | 18% | 16% |
| Between $500 and $749 | 14% | 11% | 9% |
| Between $750 and $999 | 3% | 6% | 7% |
| Between $1,000 and $4,999 | 25% | 28% | 6% |
| $5,000 or more | 7% | 7% | 2% |
| Don't know/refused | 6% | 4% | 5% |
| | | | |
| IN THE PAST 12 MONTHS, DID YOU USE THE INTERNET TO ORDER GOODS OR SERVICES FROM VENDORS LOCATED OUTSIDE OF THE UNITED STATES?<br>Base: Adults Who Have Made Online Purchases From Foreign Vendors<br>Unweighted Sample Size (n=) | 752 | 284 | 76 |
| Yes | 16% | 19% | 22% |
| No | 81% | 79% | 73% |
| Don't know/refused | 3% | 3% | 4% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| IN THE PAST 12 MONTHS, HOW MANY SEPARATE ORDERS DID YOU PLACE ONLINE TO VENDORS LOCATED IN COUNTRIES OTHER THAN THE UNITED STATES?<br>Base: Adults Who Have Made Online Purchases From Foreign Vendors<br>Unweighted Sample Size (n=) | 102 | 31 | 14 |
| 1 or 2 orders | 56% | 62% | n/a |
| 3 to 6 orders | 27% | 24% | n/a |
| 7 to 10 orders | 5% | 0% | n/a |
| 11 to 20 orders | 10% | 12% | n/a |
| More than 20 orders | 2% | 2% | n/a |
| Don't know/refused | 0% | 0% | n/a |
| | | | |
| OVER THE PAST 12 MONTHS, WHAT WOULD YOU ESTIMATE THE TOTAL COST OF GOODS AND SERVICES YOU ORDERED FROM VENDORS OUTSIDE OF THE UNITED STATES TO BE?<br>Base: Adults Who Have Made Online Purchases From Foreign Vendors<br>Unweighted Sample Size (n=) | 102 | 31 | 14 |
| Less than $20 | 17% | 23% | n/a |
| Between $20 and $49 | 11% | 2% | n/a |
| Between $50 and $99 | 19% | 16% | n/a |
| Between $100 and $249 | 33% | 29% | n/a |
| Between $250 and $499 | 6% | 15% | n/a |
| Between $500 and $749 | 2% | 0% | n/a |
| Between $750 and $999 | 1% | 1% | n/a |
| Between $1,000 and $4,999 | 6% | 3% | n/a |
| $5,000 or more | <1% | 1% | n/a |
| Don't know/refused | 5% | 11% | n/a |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| OVER THE PAST 12 MONTHS, HOW MUCH REVENUE DO YOU ESTIMATE THAT YOU GENERATED FROM SELLING PRODUCTS OR SERVICES ONLINE?<br>Base: Adults Who Have Sold Goods Or Services Online In The Past 12 Months<br>Unweighted Sample Size (n=) | 201 | 69 | 22 |
| Less than $20 | 31% | 40% | n/a |
| Between $20 and $49 | 1% | 0% | n/a |
| Between $50 and $99 | 3% | 3% | n/a |
| Between $100 and $249 | 17% | 8% | n/a |
| Between $250 and $499 | 4% | 0% | n/a |
| Between $500 and $749 | 4% | 1% | n/a |
| Between $750 and $999 | 1% | 0% | n/a |
| Between $1,000 and $4,999 | 7% | 12% | n/a |
| $5,000 or more | 9% | 15% | n/a |
| Don't know/refused | 22% | 21% | n/a |
| | | | |
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...SENDING OR RECEIVING AN E-MAIL<br>Base: All Respondents<br>Unweighted Sample Size (n=) | 1,204 | 507 | 222 |
| Very difficult | 3% | 2% | 5% |
| Difficult | 6% | 10% | 14% |
| Easy | 51% | 46% | 42% |
| Very easy | 37% | 38% | 32% |
| Refused | 1% | 1% | <1% |
| Don't know | 3% | 3% | 7% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...WRITING A LETTER USING WORD PROCESSING SOFTWARE LIKE MICROSOFT WORD<br>Base: All Respondents<br>Unweighted Sample Size (n=) | 1,204 | 507 | 222 |
| Very difficult | 4% | 5% | 7% |
| Difficult | 9% | 9% | 13% |
| Easy | 48% | 44% | 44% |
| Very easy | 34% | 36% | 25% |
| Refused | 1% | 1% | <1% |
| Don't know | 4% | 5% | 11% |
| | | | |
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...CREATING OR EDITING A SPREADSHEET<br>Base: All Respondents<br>Unweighted Sample Size (n=) | 1,204 | 507 | 222 |
| Very difficult | 8% | 8% | 14% |
| Difficult | 25% | 26% | 31% |
| Easy | 41% | 41% | 34% |
| Very easy | 21% | 21% | 14% |
| Refused | 1% | 1% | <1% |
| Don't know | 5% | 3% | 7% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...ACCESSING THE INTERNET ON A MOBILE DEVICE LIKE A TABLET OR CELL PHONE<br>Base: All Respondents<br>Unweighted Sample Size (n=) | 1,204 | 507 | 222 |
| Very difficult | 5% | 5% | 7% |
| Difficult | 10% | 10% | 15% |
| Easy | 47% | 44% | 41% |
| Very easy | 33% | 34% | 29% |
| Refused | <1% | <1% | <1% |
| Don't know | 5% | 6% | 8% |
| | | | |
| DO YOU HAVE ANY CHILDREN UNDER THE AGE OF 18 LIVING AT HOME?<br>Base: All Respondents<br>Unweighted Sample Size (n=) | 1,204 | 507 | 222 |
| Yes | 35% | 38% | 34% |
| No | 64% | 61% | 66% |
| Refused | 1% | <1% | 0% |
| | | | |
| AND HOW MANY OF THOSE CHILDREN ARE CURRENTLY ENROLLED IN KINDERGARTEN THROUGH THE 12TH GRADE AT SCHOOL?<br>Base: Households With Children Under 18<br>Unweighted Sample Size (n=) | 364 | 143 | 65 |
| 0 | 17% | 15% | 23% |
| 1 | 37% | 41% | 38% |
| 2 | 31% | 28% | 26% |
| 3 or more | 14% | 17% | 10% |
| Don't know/refused | 2% | 0% | 3% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW MANY OF YOUR CHILDREN USE THE INTERNET AT SCHOOL FOR THEIR CLASS ASSIGNMENTS? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 312 | 127 | 54 |
| 0 | 11% | 14% | 20% |
| 1 | 48% | 52% | 55% |
| 2 | 28% | 22% | 18% |
| 3 or more | 10% | 11% | 4% |
| Don't know/refused | 2% | 1% | 3% |
| | | | |
| DO YOUR CHILDREN USE YOUR HOME INTERNET SERVICE FOR THEIR SCHOOLWORK? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 312 | 127 | 54 |
| Yes | 78% | 71% | 57% |
| No | 14% | 13% | 15% |
| No home Internet service in household | 8% | 17% | 28% |
| Refused | 0% | 0% | 0% |
| | | | |
| DO YOUR CHILDREN USE YOUR HOME INTERNET SERVICE FOR THEIR SCHOOLWORK? | | | |
| Base: Households With Children Under 18 | | | |
| Unweighted Sample Size (n=) | 364 | 143 | 65 |
| Yes | 63% | 60% | 42% |
| No | 12% | 11% | 11% |
| No home Internet service in household | 8% | 19% | 30% |
| Refused | 0% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOUR CHILDREN USE THE INTERNET ANYPLACE OUTSIDE OF YOUR HOME FOR THEIR SCHOOLWORK? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 312 | 127 | 54 |
| Yes | 43% | 44% | 27% |
| No | 57% | 55% | 72% |
| Refused | <1% | 1% | 1% |
| | | | |
| WHERE DO YOUR CHILDREN USE THE INTERNET FOR THEIR SCHOOLWORK? | | | |
| Base: Households Where Children Use The Internet For Schoolwork Someplace Other Than Home | | | |
| Unweighted Sample Size (n=) | 141 | 57 | 17 |
| At school | 73% | 78% | n/a |
| At the library | 21% | 26% | n/a |
| At someone else's home | 20% | 22% | n/a |
| Restaurants or coffee shops | 5% | 10% | n/a |
| Through cell phone or handheld device | 4% | 5% | n/a |
| At work | 1% | 2% | n/a |
| At a community center | 0% | 0% | n/a |
| Through wifi or an aircard | 0% | 0% | n/a |
| Through a tablet computer supplied by the school | 0% | 0% | n/a |
| Through a laptop computer supplied by the school | 0% | 0% | n/a |
| Other | 0% | 0% | n/a |
| Don't know/refused | 1% | 0% | n/a |
| | | | |
| DO YOUR CHILDREN'S SCHOOLS PROVIDE THEM WITH A LAPTOP OR TABLET COMPUTER TO USE? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 312 | 127 | 54 |
| Yes | 32% | 22% | 25% |
| No | 66% | 76% | 75% |
| Refused | 2% | 2% | 0% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW MANY OF YOUR CHILDREN HAVE A LAPTOP OR TABLET COMPUTER THAT IS PROVIDED TO THEM BY THEIR SCHOOL?<br>Base: Households With Children Enrolled In K-12 School<br>Unweighted Sample Size (n=) | 312 | 127 | 54 |
| 0 | 6% | 7% | 7% |
| 1 | 17% | 12% | 17% |
| 2 | 7% | 2% | 0% |
| 3 or more | 1% | 1% | 1% |
| Don't know/refused | <1% | 0% | 0% |
| | | | |
| SINCE THE SCHOOL SUPPLIED A COMPUTER FOR SCHOOLWORK, HOW HAS THAT AFFECTED YOUR CHILDREN'S GRADES? WOULD YOU SAY IT HAD...?<br>Base: Households Where Children's Schools Provide Laptop or Tablet Computers<br>Unweighted Sample Size (n=) | 103 | 33 | 15 |
| A positive impact | 48% | 57% | n/a |
| A negative impact | 2% | 0% | n/a |
| No impact as far as you can tell | 49% | 41% | n/a |
| Don't know/refused | <1% | 2% | n/a |
| | | | |
| AND WOULD YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH THE FOLLOWING STATEMENTS?<br>...HOME INTERNET SERVICE WOULD MAKE IT EASIER TO SEEK OUT HEALTHCARE INFORMATION<br>Base: Households That Do Not Subscribe To Home Internet Service<br>Unweighted Sample Size (n=) | 224 | 128 | 98 |
| Strongly agree | 11% | 8% | 13% |
| Agree | 51% | 60% | 55% |
| Disagree | 24% | 22% | 20% |
| Strongly disagree | 7% | 4% | 8% |
| Don't know | 7% | 6% | 5% |

## CONNECT SOUTH CAROLINA -- 2013 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| AND WOULD YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH THE FOLLOWING STATEMENTS?<br>...HOME INTERNET SERVICE WOULD MAKE IT EASIER TO RESEARCH OR BUY GOODS AND SERVICES<br>Base: Households That Do Not Subscribe To Home Internet Service | | | |
| Unweighted Sample Size (n=) | 224 | 128 | 98 |
| Strongly agree | 14% | 12% | 13% |
| Agree | 51% | 57% | 55% |
| Disagree | 20% | 15% | 16% |
| Strongly disagree | 7% | 4% | 6% |
| Refused | <1% | 1% | <1% |
| Don't know | 8% | 11% | 9% |
| | | | |
| AND WOULD YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE WITH THE FOLLOWING STATEMENTS?<br>...HOME INTERNET SERVICE WOULD MAKE IT EASIER TO INTERACT WITH LOCAL, STATE, OR FEDERAL GOVERNMENT OFFICES<br>Base: Households That Do Not Subscribe To Home Internet Service | | | |
| Unweighted Sample Size (n=) | 224 | 128 | 98 |
| Strongly agree | 11% | 13% | 12% |
| Agree | 46% | 46% | 49% |
| Disagree | 26% | 30% | 21% |
| Strongly disagree | 6% | 2% | 6% |
| Refused | <1% | 1% | <1% |
| Don't know | 10% | 7% | 12% |

Low-Income households = annual household income less than $25,000
Cells marked as "n/a" are not reported due to small sample sizes

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW OFTEN, IF EVER, DO YOU GO ONLINE OR USE THE INTERNET FROM HOME? | | | |
| Base: Households With Internet Service | | | |
| Unweighted Sample Size (n=) | 712 | 190 | 74 |
| Several times per day | 70% | 56% | 52% |
| Once per day | 12% | 13% | 8% |
| Several times per week | 10% | 20% | 20% |
| Once per week or less | 6% | 8% | 7% |
| Never | 3% | 3% | 13% |
| Don't know/refused | <1% | 0% | 0% |
| | | | |
| AND WHAT DO YOU PAY EACH MONTH FOR YOUR HOME INTERNET SERVICE? | | | |
| Base: Households With Internet Service | | | |
| Unweighted Sample Size (n=) | 712 | 190 | 74 |
| Less than $10 | 2% | 2% | 2% |
| Between $10 and $19 | 5% | 5% | 6% |
| Between $20 and $29 | 12% | 11% | 15% |
| Between $30 and $39 | 15% | 18% | 24% |
| Between $40 and $49 | 16% | 17% | 13% |
| Between $50 and $74 | 22% | 15% | 16% |
| Between $75 and $99 | 7% | 9% | 9% |
| Between $100 and $124 | 3% | 3% | 0% |
| Between $125 and $149 | 2% | 4% | 7% |
| Between $150 and $174 | 2% | 2% | 3% |
| Between $175 and $199 | 1% | 1% | 1% |
| Between $200 and $224 | 1% | 2% | 0% |
| Between $225 and $249 | <1% | <1% | 0% |
| $250 or more | <1% | 0% | 0% |
| Don't know/refused | 13% | 10% | 4% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| ON YOUR CELL PHONE, DO YOU SUBSCRIBE TO A PLAN THAT ALLOWS YOU TO ACCESS THE INTERNET?<br>Base: Cell Phone Users<br>Unweighted Sample Size (n=) | 825 | 229 | 128 |
| Yes | 66% | 57% | 42% |
| No | 33% | 43% | 57% |
| Don't know/refused | 1% | 1% | <1% |
| | | | |
| HOW OFTEN, IF EVER, DO YOU GO ONLINE OR ACCESS THE INTERNET USING YOUR CELL PHONE?<br>Base: Respondents Who Have A Data Plan That Allows Internet Access On Their Cell Phone<br>Unweighted Sample Size (n=) | 479 | 111 | 42 |
| Several times per day | 66% | 58% | 68% |
| Once per day | 7% | 6% | 0% |
| Several times per week | 9% | 8% | 4% |
| Once per week or less | 10% | 18% | 16% |
| Never | 8% | 10% | 12% |
| Don't know/refused | <1% | 0% | 0% |
| | | | |
| DO YOU USE YOUR CELL PHONE TO ACCESS THE INTERNET WHILE YOU ARE AT HOME, WHILE YOU ARE AWAY FROM HOME OR BOTH?<br>Base: Adults Who Use The Internet Via Cell Phone<br>Unweighted Sample Size (n=) | 425 | 96 | 34 |
| At home | 82% | 80% | 90% |
| Away from home | 97% | 96% | 94% |
| Both | 80% | 78% | 86% |
| Don't know/ refused | 1% | 3% | 1% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| ARE THERE LIMITS TO THE AMOUNT OF DATA YOU CAN ACCESS ON YOUR CELL PHONE EACH MONTH BEFORE YOUR SPEED IS REDUCED OR YOU ARE CHARGED MORE?<br>Base: Respondents Who Have A Data Plan That Allows Internet Access On Their Cell Phone<br>Unweighted Sample Size (n=) | 479 | 111 | 42 |
| Yes | 62% | 64% | 72% |
| No | 33% | 30% | 23% |
| Don't know/refused | 5% | 6% | 5% |
| | | | |
| IN THE PAST 12 MONTHS, HOW MANY TIMES HAVE YOU REACHED OR EXCEEDED THAT MONTHLY DATA CAP?<br>Base: Respondents Who Have A Cell Phone Data Plan That Limits Data Usage<br>Unweighted Sample Size (n=) | 275 | 65 | 24 |
| Never | 61% | 61% | n/a |
| 1 or 2 times | 17% | 11% | n/a |
| 3 or 4 times | 10% | 9% | n/a |
| 5 or more times | 8% | 7% | n/a |
| Don't know/refused | 4% | 12% | n/a |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| AND TO THE BEST OF YOUR KNOWLEDGE, WHAT IS THE ADVERTISED BANDWIDTH OR DOWNLOAD SPEED PROVIDED TO YOUR HOME BY YOUR INTERNET SERVICE PROVIDER?<br>Base: Households With Internet Service | | | |
| Unweighted Sample Size (n=) | 712 | 190 | 74 |
| Less than 768 kbps | 2% | 2% | 1% |
| At least 768 kbps, but less than 1.5 Mbps | 6% | 7% | 11% |
| At least 1.5 Mbps, but less than 4 Mbps | 5% | 10% | 4% |
| At least 4 Mbps, but less than 6 Mbps | 4% | 6% | 0% |
| At least 6 Mbps, but less than 10 Mbps | 3% | 2% | 1% |
| At least 10 Mbps, but less than 15 Mbps | 4% | 5% | 2% |
| At least 15 Mbps, but less than 20 Mbps | 2% | 2% | 0% |
| At least 20 Mbps, but less than 30 Mbps | 3% | 1% | 2% |
| At least 30 Mbps, but less than 50 Mbps | 5% | 3% | 2% |
| At least 50 Mbps, but less than 75 Mbps | 4% | 1% | 2% |
| At least 75 Mbps, but less than 100 Mbps | <1% | 0% | 0% |
| At least 100 Mbps, but less than 1 Gbps | 1% | 1% | 0% |
| 1 Gbps or more | 2% | 1% | 0% |
| Refused | <1% | 0% | 0% |
| Don't know/ remember | 58% | 59% | 74% |
| | | | |
| TO THE BEST OF YOUR KNOWLEDGE, IS BROADBAND OR HIGH SPEED INTERNET SERVICE AVAILABLE IN THE AREA WHERE YOU LIVE?<br>Base: Respondents Who Subscribe To Dial-Up Or Don't Know What Type Of Internet Service They Have | | | |
| Unweighted Sample Size (n=) | 356 | 138 | 138 |
| Yes | 62% | 58% | 66% |
| No | 16% | 21% | 9% |
| Don't know/refused | 23% | 21% | 26% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT USING THE INTERNET? | | | |
| Base: Respondents Who Use The Internet | | | |
| Unweighted Sample Size (n=) | 747 | 205 | 87 |
| Communicating through e-mail or other ways of sending messages | 86% | 83% | 75% |
| Exploring or participating in hobbies or personal interests | 74% | 73% | 65% |
| Using social networking sites like Facebook | 71% | 65% | 70% |
| Purchasing goods or services | 71% | 62% | 40% |
| Online banking or paying bills | 67% | 64% | 43% |
| Reading online newspapers or other news sources | 63% | 57% | 52% |
| Searching for medical or healthcare information | 61% | 50% | 50% |
| Searching for information about government services | 46% | 43% | 49% |
| Conducting research for schoolwork | 43% | 38% | 36% |
| Searching or applying for jobs | 41% | 38% | 40% |
| Applying for services or filling out forms at government websites | 40% | 34% | 33% |
| Communicating with your doctor or other healthcare professionals | 29% | 20% | 26% |
| Taking online classes | 26% | 20% | 27% |
| Advertising or selling products or services | 23% | 18% | 20% |
| None of these | 2% | 3% | 3% |
| Don't know/refused | 1% | 0% | 0% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| AND WHICH OF THE FOLLOWING ACTIVITIES DO YOU CONDUCT ON YOUR CELL PHONE USING YOUR MOBILE BROADBAND SERVICE?<br>Base: Adults Who Use The Internet Via Cell Phone<br>Unweighted Sample Size (n=) | 425 | 96 | 34 |
| Communicating through e-mail or other ways of sending messages | 86% | 83% | 76% |
| Using social networking sites like Facebook | 74% | 73% | 89% |
| Exploring or participating in hobbies or personal interests | 69% | 72% | 77% |
| Reading online newspapers or other news sources | 63% | 54% | 50% |
| Online banking or paying bills | 53% | 53% | 47% |
| Purchasing goods or services | 49% | 44% | 37% |
| Searching for medical or healthcare information | 42% | 36% | 63% |
| Searching for information about government services | 30% | 27% | 33% |
| Communicating with your doctor or other healthcare professionals | 29% | 20% | 26% |
| Conducting research for schoolwork | 27% | 18% | 30% |
| Searching or applying for jobs | 22% | 25% | 57% |
| Advertising or selling products or services | 20% | 18% | 36% |
| Applying for services or filling out forms at government websites | 19% | 16% | 27% |
| Taking online classes | 10% | 4% | 31% |
| None of these | 2% | 2% | 1% |
| Don't know/refused | 1% | 0% | 0% |
| | | | |
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...SENDING OR OPENING FILES ATTACHED TO AN E-MAIL<br>Base: All Respondents Surveyed<br>Unweighted Sample Size (n=) | 1,000 | 300 | 198 |
| Very difficult | 7% | 8% | 17% |
| Difficult | 11% | 20% | 24% |
| Easy | 47% | 46% | 41% |
| Very easy | 29% | 20% | 11% |
| Refused | 1% | 1% | <1% |
| Don't know | 5% | 6% | 8% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...USING A PROGRAMMING LANGUAGE TO DESIGN OR EDIT SOFTWARE<br>Base: All Respondents Surveyed<br>Unweighted Sample Size (n=) | 1,000 | 300 | 198 |
| Very difficult | 26% | 26% | 24% |
| Difficult | 42% | 41% | 44% |
| Easy | 17% | 18% | 18% |
| Very easy | 6% | 4% | 5% |
| Refused | 1% | 1% | 1% |
| Don't know | 8% | 10% | 9% |
| | | | |
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...CREATING OR EDITING A MOBILE APPLICATION OR APP<br>Base: All Respondents Surveyed<br>Unweighted Sample Size (n=) | 1,000 | 300 | 198 |
| Very difficult | 20% | 19% | 27% |
| Difficult | 38% | 44% | 34% |
| Easy | 25% | 24% | 22% |
| Very easy | 7% | 5% | 5% |
| Refused | 1% | 1% | <1% |
| Don't know | 8% | 8% | 11% |
| | | | |
| WOULD THE FOLLOWING TASKS BE VERY DIFFICULT, DIFFICULT, EASY, OR VERY EASY FOR YOU TO ACCOMPLISH WITHOUT ASSISTANCE FROM SOMEONE ELSE?<br>...USING OR MANAGING INFORMATION USING DATABASE SOFTWARE<br>Base: All Respondents Surveyed<br>Unweighted Sample Size (n=) | 1,000 | 300 | 198 |
| Very difficult | 11% | 10% | 18% |
| Difficult | 27% | 30% | 32% |
| Easy | 43% | 44% | 30% |
| Very easy | 9% | 6% | 6% |
| Refused | <1% | 1% | 1% |
| Don't know | 9% | 10% | 13% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| HOW MANY CHILDREN UNDER THE AGE OF 18 LIVE AT YOUR HOME?<br>Base: All Respondents Surveyed<br>Unweighted Sample Size (n=) | 1,000 | 300 | 198 |
| 0 | 61% | 64% | 63% |
| 1 | 15% | 12% | 14% |
| 2 | 12% | 11% | 13% |
| 3 or more | 9% | 13% | 10% |
| Don't know/refused | 3% | <1% | 0% |
| | | | |
| AND HOW MANY OF THOSE CHILDREN ARE CURRENTLY ENROLLED IN KINDERGARTEN THROUGH THE 12TH GRADE AT SCHOOL?<br>Base: Households With Children<br>Unweighted Sample Size (n=) | 276 | 74 | 55 |
| 0 | 17% | 7% | 16% |
| 1 | 38% | 48% | 42% |
| 2 | 27% | 22% | 19% |
| 3 or more | 17% | 24% | 23% |
| Don't know/refused | 1% | 0% | 0% |
| | | | |
| HOW MANY OF YOUR CHILDREN USE THE INTERNET AT SCHOOL FOR THEIR CLASS ASSIGNMENTS?<br>Base: Households With Children Enrolled In K-12 School<br>Unweighted Sample Size (n=) | 238 | 67 | 47 |
| 0 | 11% | 13% | 11% |
| 1 | 44% | 38% | 48% |
| 2 | 28% | 24% | 20% |
| 3 or more | 13% | 17% | 16% |
| Don't know/refused | 3% | 8% | 5% |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOUR CHILDREN USE YOUR HOME INTERNET SERVICE FOR THEIR SCHOOLWORK? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 238 | 67 | 47 |
| Yes | 64% | 43% | 34% |
| No | 20% | 12% | 26% |
| No home Internet service in household | 15% | 41% | 40% |
| Refused | 1% | 5% | 0% |
| | | | |
| DO YOUR CHILDREN USE THE INTERNET ANYPLACE OUTSIDE OF YOUR HOME FOR THEIR SCHOOLWORK? | | | |
| Base: Households With Children Enrolled In K-12 School | | | |
| Unweighted Sample Size (n=) | 238 | 67 | 47 |
| Yes | 47% | 51% | 45% |
| No | 51% | 47% | 55% |
| Refused | 1% | 2% | 0% |
| | | | |
| WHERE DO YOUR CHILDREN USE THE INTERNET FOR THEIR SCHOOLWORK? | | | |
| Base: Households Where Children Use The Internet For Schoolwork Someplace Other Than Home | | | |
| Unweighted Sample Size (n=) | 121 | 36 | 23 |
| At school | 58% | 35% | n/a |
| At the library | 31% | 53% | n/a |
| At someone else's home | 18% | 21% | n/a |
| Through a cell phone or handheld device | 8% | 12% | n/a |
| Restaurants or coffee shops | 6% | 7% | n/a |
| At a community center | 2% | 5% | n/a |
| At work | 1% | 4% | n/a |
| Through wifi or an aircard | 1% | 0% | n/a |
| Through a laptop computer supplied by the school | 1% | 0% | n/a |
| Through a tablet computer supplied by the school | 0% | 0% | n/a |
| Other (specify) | 1% | 0% | n/a |
| Don't know/refused | 5% | 6% | n/a |

## CONNECT SOUTH CAROLINA -- 2014 RESIDENTIAL TECHNOLOGY ASSESSMENT

| | Statewide | Rural | Low-Income |
|---|---|---|---|
| DO YOUR CHILDREN'S SCHOOLS PROVIDE THEM WITH A LAPTOP OR TABLET COMPUTER TO USE?<br>Base: Households With Children Enrolled In K-12 School<br>Unweighted Sample Size (n=) | 238 | 67 | 47 |
| Yes | 35% | 34% | 34% |
| No | 64% | 63% | 66% |
| Refused | 1% | 3% | 0% |
| | | | |
| HOW MANY OF YOUR CHILDREN HAVE A LAPTOP OR TABLET COMPUTER THAT IS PROVIDED TO THEM BY THEIR SCHOOL?<br>Base: Households With Children Enrolled In K-12 School<br>Unweighted Sample Size (n=) | 238 | 67 | 47 |
| 0 | 11% | 10% | 16% |
| 1 | 17% | 14% | 15% |
| 2 | 6% | 10% | 4% |
| 3 or more | 1% | 0% | 0% |
| Don't know/refused | 0% | 0% | 0% |
| | | | |
| SINCE THE SCHOOL SUPPLIED A COMPUTER FOR SCHOOLWORK, HOW HAS THAT AFFECTED YOUR CHILDREN'S GRADES? WOULD YOU SAY IT HAD...?<br>Base: Households Where Children's Schools Provide Laptop or Tablet Computers<br>Unweighted Sample Size (n=) | 92 | 25 | 18 |
| A positive impact | 55% | n/a | n/a |
| A negative impact | 3% | n/a | n/a |
| No impact as far as you can tell | 36% | n/a | n/a |
| Don't know/refused | 5% | n/a | n/a |

Low-Income households = annual household income less than $25,000
Cells marked as "n/a" are not reported due to small sample sizes