



DIGITAL 
OPPORTUNITY

DIGITAL EQUITY PLAN

South Carolina
Office of Regulatory Staff:
Digital Opportunity Department



Table of Contents

1	Executive Summary	2
2	Introduction & Vision for Digital Equity.....	5
2.1	<i>Vision</i>	7
2.2	<i>Alignment with Existing Efforts to Improve Outcomes</i>	7
2.3	<i>Goals, Objectives, and Strategy</i>	12
3	Current State of Digital Equity: Barriers and Assets	15
3.1	<i>Asset Inventory</i>	15
3.1.1	Digital Inclusion Assets by Covered Population.....	15
3.1.2	Existing Digital Equity Plans.....	17
3.1.3	Existing Digital Equity Programs.....	17
3.1.4	Broadband Adoption	17
3.1.5	Broadband Affordability	23
3.2	<i>Needs Assessment</i>	23
3.2.1	Covered Population Needs Assessment	25
3.2.2	Broadband Adoption	48
3.2.3	Broadband Affordability.....	51
4	Collaboration and Stakeholder Engagement	52
4.1	Coordination and Outreach Strategy	52
4.1.2	<i>Statewide Campaign</i>	52
4.1.3	<i>Roadshow Events</i>	52
4.1.4	<i>Organizational Interviews</i>	53
4.1.5	<i>Surveys</i>	54
4.1.6	<i>Residential Survey</i>	54
4.1.7	<i>Business and Community Anchor Institution Surveys</i>	54
4.1.8	<i>Government and Municipality Survey</i>	54
4.1.9	<i>Future Engagement Plans</i>	55
4.1.10	<i>Public Comment Period</i>	56
4.1.11	<i>Grant Planning</i>	57
5	Implementation	58
5.1	Implementation Strategy & Key Activities	58
5.2	Timeline.....	64
6	Conclusion.....	66
7	Appendices.....	67



Definitions

Defining digital equity in South Carolina

In South Carolina, *Digital Equity* refers to the ability of all individuals and communities to access and safely utilize internet resources so that they may fully participate in society and in the local, national, and global economy. This does not mean that all will utilize information technology in the same manner or pursue the same paths — it instead describes the foundation that provides all the *same access* to resources if they choose to use them. **Achieving Digital Equity is the goal of this plan.**

Other commonly used terms in this plan include:

- **Digital divide:** The digital divide is the gap between those individuals with access to technology, affordable broadband, and digital literacy training and those that do not.
- **Broadband:** For the purposes of this plan, broadband is an interchangeable term for high-speed internet that provides speeds at Federal Communications Commission (FCC) standards or higher (i.e., a minimum of 25 Mbps for download and 3 Mbps for upload).
- **Access:** This refers to the availability to an individual or household of Broadband at home or in a community institution, such as a public computer center.
- **Affordability:** This refers to the ability of a consumer to access broadband at a cost that does not prohibitively damage their overall financial wellbeing. Affordability does not mean the same thing to every individual due to variations in income and other household costs.
- **Adoption:** Adoption is residential subscribership to Broadband service.
- **Digital literacy:** Digital literacy is the ability to use the internet and modern technologies to find, evaluate, create, and communicate information.
- **Digital inclusion:** Digital inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to affordable Broadband, digital devices, skills training, and other related support.
- **Covered populations:** The Digital Equity Act of 2021 defined eight covered populations that have historically experienced lower rates of computer and internet use. These are:
 - **Low-income individuals:** Individuals living in covered households (those with incomes at or below 150 percent of the federal poverty level);
 - **Aging individuals:** Persons who are 60 years of age or older;
 - **Racial/ethnic minorities:** Members of a racial or ethnic minority group;
 - **Rural residents:** Individuals who primarily reside in a rural area;
 - **Veterans:** Individuals who previously served in the active military;
 - **Individuals with disabilities:** Individuals who have a physical or mental impairment that substantially limits one or more major life activities;
 - **Individuals with a language barrier:** including individuals who are English learners and have low literacy levels; and
 - **Incarcerated individuals:** Individuals who are incarcerated in a non-federal correctional facility.



1 Executive Summary

Introduction

Today, many South Carolinians do not have access to Broadband services in their homes, and even more still cannot afford Broadband service, do not have devices capable of using the internet to its full potential, or lack the skills to utilize digital services safely and effectively. These individuals increasingly find themselves left behind as higher-paying jobs and new services require access to Broadband *and* digital skills. Addressing these digital equity gaps is critical to ensuring that all South Carolinians have the opportunity to thrive in an economically competitive digital world.

Funding from the Digital Equity Act, alongside the Broadband Equity, Access, and Deployment (BEAD) program and others established in the federal Infrastructure Investment and Jobs Act (IIJA), creates a unique opportunity for South Carolina to invest in efforts to address these digital equity challenges and conquer the Digital Divide. This South Carolina Digital Equity Plan 1) assesses the current state of Digital Equity and the Digital Divide in South Carolina 2) prioritizes areas of greatest need and 3) lays out how the newly formed Digital Opportunity Department (DOD) of the South Carolina Office of Regulatory Staff (ORS) will work to bridge the Digital Divide and lay a foundation where every resident has equal access, opportunity, and empowerment in the digital age.

As detailed below, South Carolina's diverse communities have unique needs and challenges, and the DOD will continue to engage residents and businesses to understand and address these in a thoughtful manner, but the DOD cannot do this alone. Bridging the Digital Divide will require partnership and hard work from a multitude of agencies, organizations, non-profits, and individuals across South Carolina. Through collaborative initiatives, targeted investments, and attainable strategies, we hope to build a South Carolina where the Digital Divide is closed, and the Digital Equity challenge is solved.

Vision for Digital Equity in South Carolina

Based on existing conditions and the perspectives shared by stakeholders across South Carolina, the DOD has developed the following statement describing its vision of the future state of Digital Equity. This vision statement will be the north star for the DOD and its Digital Equity activities and inform objectives, strategies, and investments moving forward.

Our vision is for all South Carolinians to have access to affordable, reliable, high-speed internet, and to gain the necessary skills to benefit from this technology.

The vision for Digital Equity recognizes that South Carolinians have different backgrounds, cultures, needs and goals. How they choose to utilize Broadband will vary from person to person and community to community, but through the Digital Equity Plan South Carolina hopes to provide a foundation of access, affordability, and digital skills that will allow all South Carolinians to have the option to determine how they will implement their digital skills. In turn, this will strengthen South Carolina by creating a state where residents and businesses have the infrastructure and knowledge to support expanded economic opportunity in the 21st century.

The digital equity picture in South Carolina

In recent years, South Carolina has made tremendous strides in building out its broadband network and improving access for hundreds of thousands of households, but Digital Equity conditions lag behind network buildout, and the Digital Divide persists across many geographies and Covered Populations. According to US Census American Community Survey estimates, in 2021 one third of South Carolina households lacked a fixed Broadband subscription and over one quarter lacked a desktop or laptop computer. The same data source indicated that for nearly all



Covered Populations, these statistics are higher than the overall population.

Surveys and conversations with stakeholders reveal that limited access to the physical infrastructure needed to offer Broadband service and affordability are the two greatest barriers to Broadband adoption in South Carolina. Continued network expansion through the ongoing efforts of the South Carolina Broadband Office (SCBBO) and internet service providers (ISP) will help address the access concerns; however, advancing Digital Equity will require expanded efforts to address affordability alongside programs to increase availability of digital devices, improve digital literacy, and raise awareness and skills around digital safety.

There are currently a limited number of organizations addressing these topics and digital inclusion more broadly across South Carolina. As a result, some of the early work to advance Digital Equity in South Carolina will require working with grass-roots organizations to encourage and help enable the formation of new programs focused on priority topics and populations while partnering with existing agencies and organizations to expand existing programs that are working well. Due to the unique needs and perspectives of each Covered Population, these efforts will require nuanced approaches tailored to meet the Digital Equity needs of all targeted groups.

South Carolina has two distinct geographic units in need: rural and urban. When measured by share of population, South Carolina's rural communities face the greatest Digital Divide, but when measured by size of population, South Carolina's urban communities face the greatest challenges. While the types of barriers faced by populations in both areas require different approaches, rural and urban residents all expressed a need for improved and more affordable access to ensure they can participate in the modern economy and maximize their opportunities in life.

Alignment with existing efforts to improve outcomes.

The Digital Equity Plan aims to continuously align with state, local, public, and private efforts to create sustainable momentum and prioritize solving Digital Equity challenges in South Carolina.

Through research and community outreach with over 30 organizations, current and ongoing plans have been compiled in this report to align the goals of South Carolina.

South Carolina Broadband Office (SCBBO). The South Carolina Broadband Office (SCBBO) serves as the main Broadband focused agency in the state and organizes its efforts with federal, state, regional, local, and private entities to encourage the development of access to Broadband. The SCBBO's goals and involvement in the following investment programs overlap with Digital Equity to support individuals connecting to Broadband and in understanding how to use Broadband safely and effectively. With the intention to develop greater access to Broadband, SCBBO has initiated Broadband, Equity, Access, and Deployment (BEAD) planning. The SCBBO is collaboratively working with the DOD to ensure that the agency's Broadband goals of deploying infrastructure to communities and businesses are realized in conjunction with Digital Equity initiatives.

The DOD will continue to work closely with other agencies and organizations to align activities going forward and review new plans and initiatives as they are developed and made public.

Asset Inventory

Digital Equity is supported in South Carolina and for South Carolinians by a variety of means, such as the availability of computer labs, digital skills training programs, Broadband affordability initiatives, and other digital inclusion offerings.

Notably, South Carolina has a relatively limited network of assets specifically focused on digital inclusion. The South Carolina Library System and public schools are two of the primary providers of digital access and training, but frequently those offerings are limited to computer access and basic skills courses. ISPs are increasingly partnering with public entities such as libraries and technical colleges to increase digital skills, but those programs are underfunded or



undermanned.

Research and stakeholder engagement conducted in developing the Digital Equity Plan revealed that South Carolina only has one asset that directly serves all covered populations: public libraries.

To better serve Covered Populations and all geographic areas of the state, the DOD will continue engagement and research to better understand existing needs and barriers. Further efforts will also require building a network of initiatives, services, providers, and assets to address these needs and barriers.

Needs Assessment.

Digital Equity needs vary across the population groups and geographic areas of South Carolina. According to the surveys commissioned by the South Carolina Department of Administration and SCBBO in 2023 (survey), the two greatest barriers identified for all were access to residential highspeed Broadband service and affordability. Availability of devices and digital literacy are concerns for many individuals and households, but through examination of data and feedback from stakeholders engaged across the state, limited Broadband access and the high cost of service were consistently the greatest barriers to achieving Digital Equity across South Carolina.

Geographically, a common trend was found across datasets: rural counties tend to have the highest percentage of residents with Digital Equity needs, but urban counties tend to have the greatest number of residents with Digital Equity needs. Accordingly, serving rural and urban populations will require different strategies and tactics.

Covered Population Needs Assessment. Although access and affordability were the two biggest barriers to adoption, the nuances of needs vary across Covered Populations. It is important to note, however, that intersectionality exists among Covered Populations; for example, many low-income individuals are also racial or ethnic minorities, residents of rural areas, and are individuals with disabilities, all of which can compound accessibility and affordability barriers.

Goals

The following goals are designed to achieve the vision for Digital Equity in South Carolina.

Goal 1: Broadband availability and affordability

Objective: Every household and business in South Carolina can subscribe to Broadband service at an affordable rate.

Goal 2: Online accessibility and inclusivity

Objective: Every resident of South Carolina has access to reliable high-speed Broadband service in their homes and businesses.

Goal 3: Digital literacy

Objective: Every resident of South Carolina has access to education and training opportunities necessary to effectively use the internet to advance their personal goals and increase South Carolina's technology workforce competitiveness.

Goal 4: Online privacy and cybersecurity

Objective: Every resident of South Carolina can safely and securely utilize Broadband services.

Goal 5: Device availability and affordability

Objective: Every resident of South Carolina can access a desktop or laptop computer at home or in an accessible location.



2 Introduction for Digital Equity

2.1 Introduction

An individual's capacity to safely utilize high-speed internet directly affects their economic, health, and civic opportunities in the modern world. Currently, not all South Carolinians have equal access and skills to take full advantage of the benefits offered by its Broadband infrastructure. High-speed Broadband internet connections are increasingly necessary for individuals to take classes, apply for jobs, start businesses, pay bills, utilize telehealth, and access a range of resources and information that can enhance their lives. Today, many South Carolinians lack access to Broadband services in their homes, and more still cannot afford Broadband service, do not have devices capable of using the internet to its full potential, or lack the skills to utilize digital services safely and effectively. These individuals increasingly find themselves left behind as higher-paying jobs and new services require digital access and skills. Addressing this Digital Divide is critical to opening opportunities and improving outcomes for those individuals and to ensuring that all of South Carolina thrives in an economically competitive and connected world.

The impact of the Digital Divide was never more evident than during the COVID-19 pandemic, when individuals and families without Broadband connections, devices, and digital skills struggled to access education, healthcare, and information. In the post-pandemic world, disconnected communities continue to face significant challenges, and South Carolinians across geographies and backgrounds recognize the importance of addressing the Digital Divide to make South Carolina and its residents stronger today and long into the future.

Funding from the Digital Equity Act, alongside the Broadband Equity, Access, and Deployment (BEAD) program and others established in the federal Infrastructure Investment and Jobs Act (IIJA), creates a unique opportunity for South Carolina to invest in efforts to address these challenges. This South Carolina Digital Equity Plan assesses the current state of Digital Equity in the State, prioritizes areas of greatest need, and lays out how the newly formed Digital Opportunity Department (DOD) of the South Carolina Office of Regulatory Staff (ORS) will work to bridge the Digital Divide and lay a foundation where every resident has equal access, opportunity, and empowerment to use Broadband in the digital age.

South Carolina recognizes that its diverse communities have unique needs and challenges and will continue to engage residents and businesses to understand and address these in a thoughtful manner, but the DOD cannot do this alone. Bridging the Digital Divide will require partnership and hard work from a multitude of agencies, organizations, non-profits, and individuals across South Carolina. However, through collaborative initiatives, targeted investments, and attainable strategies, the DOD is confident that South Carolina's Digital Equity future is bright and one where everybody can access digital opportunities.

Assessment of digital equity state in South Carolina

In recent years, South Carolina has made tremendous strides in building out its Broadband network and improving access for hundreds of thousands of households, but Digital Equity conditions lag behind network buildout, and the Digital Divide persists across many geographies and Covered Populations. According to US Census American Community Survey estimates, in 2021 one third of South Carolina households lacked a fixed Broadband subscription, and over one quarter lacked a desktop or laptop computer. The same data source shows that for nearly all Covered Populations, these statistics are higher than the overall population.

Surveys and conversations with stakeholders reveal that limited access to service and affordability are the two greatest barriers to Broadband adoption faced by all populations in South Carolina. Continued network expansion through the ongoing efforts of the South Carolina Broadband Office (SCBBO) and internet service providers (ISP) will help address the access

concerns, but advancing Digital Equity will require expanded efforts to address affordability alongside programs to increase availability of devices, improve digital literacy, and raise awareness and skills around digital safety.

There are currently a limited number of organizations addressing these topics and digital inclusion more broadly across South Carolina. As a result, some of the early work to advance Digital Equity in South Carolina will require helping to enable and encouraging the formation of new programs focused on priority topics and populations while partnering with agencies and organizations to expand existing programs that are working well. Due to the different locations, cultures, and capacity of each Covered Population, these efforts will require nuanced approaches tailored to meet the Digital Equity needs of the targeted groups.

South Carolina has two distinct geographic units in need: rural and urban. When measured by share of population, South Carolina’s rural communities face the greatest digital divide, but when measured by size of population, South Carolina’s urban communities face the greatest challenges. While the types of barriers faced by populations in both areas vary require different approaches, rural and urban residents all express a need for improved and more affordable access to ensure they can participate in the modern economy and maximize their opportunities in life.

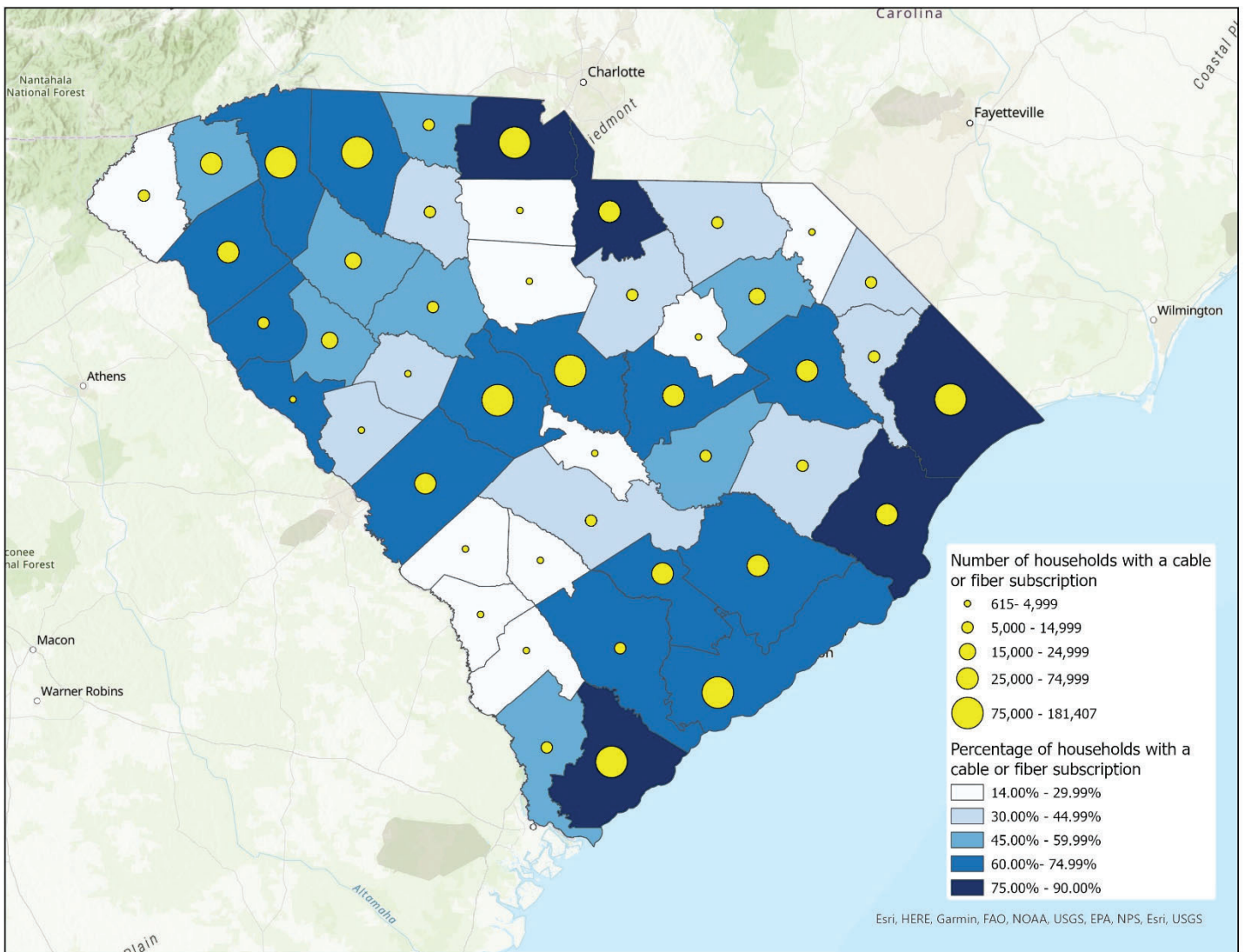


Figure 1. Number of households with a cable or fiber subscription by county, 2021 / Source: US Census American Community Survey 5-Year Estimate



Vision for digital equity in South Carolina

Based on consideration of existing conditions and the perspectives shared by stakeholders across South Carolina, the DOD has developed the following vision statement describing the future state of Digital Equity to help inform objectives, strategies, and investments moving forward.

Our vision is for all South Carolinians to have access to affordable, reliable, high-speed internet and to gain the necessary skills to benefit from this technology.

This vision for Digital Equity recognizes that South Carolinians have different backgrounds, cultures, needs, and goals. How they choose to utilize Broadband will vary from person to person and community to community, but by enacting the Digital Equity Plan, the DOD will provide a foundation of access, affordability, and digital skills that will allow all South Carolinians to have the option to efficiently and effectively utilize Broadband. In turn, this will make South Carolina a stronger and more resilient state where residents and businesses have the infrastructure and knowledge to support expanded economic opportunity in the 21st century.

2.2 Alignment with Existing Efforts to Improve Outcomes

This Digital Equity Plan aims to align existing state, local, public, and private efforts to create sustainable priorities. Through research and community outreach with approximately 30 organizations, current and ongoing efforts are listed below to reflect the goals of the DOD. By expanding the foundation of Digital Equity, this plan will advance the strategic goals of these other organizations and support the delivery of a broad range of services and economic opportunity to the residents of South Carolina. The DOD will continue to work closely with other agencies and organizations to align activities going forward and review new plans and initiatives as they are developed and made public.

Efforts to increase Broadband access and improve Digital Equity

South Carolina Broadband Office (SCBBO)

The South Carolina Broadband Office (SCBBO) serves as the main Broadband focused agency in the state and organizes its efforts with federal, state, regional, local, and private entities to encourage the development of access to Broadband. Their goals and involvement in the following investment programs overlap with Digital Equity to support individuals connecting to the internet and in understanding how to use the internet safely. With the intention to develop greater access to Broadband, SCBBO has initiated BEAD planning. SCBBO is collaboratively working with the DOD to ensure their broadband goals of securing infrastructure to communities and businesses can be communicated through Digital Equity initiatives, some of which are included as provisions in existing grant agreements awarded by the SCBBO to ISPs throughout the state.

Other state-led efforts

Broadband state-led efforts aim to ensure access to digital resources and opportunities for all individuals and provide affordable internet service throughout South Carolina. Digital Equity funds can have a profound impact on how individuals access information and services and an individual's understanding of what is available to them. While Broadband can be brought to South Carolina, it is through Digital Equity where the Digital Divide will be bridged by education and training programs. The implementation of such programs will incorporate a foundation of knowledge and safety as Broadband continues to expand.

American Rescue Plan Act – Capital Projects Fund

- The Capital Projects Fund provides \$10 billion in funding to states, territories, and tribal governments to critical capital projects that can enable work, education, and health



monitoring.

- This fund has approved South Carolina to receive \$185.8 million for a Broadband infrastructure project grant program.
- This last-mile Broadband grant program will aim to provide reliable and affordable service to rural areas that currently lack adequate internet service.

American Rescue Plan Act – Accelerated Deployment Grant Program

- This program sought to compensate a portion of construction costs for the expansion of Broadband infrastructure to households, communities, and businesses that were initiated during the Pandemic.
- The application period for this program has closed (February 2023). Projects participating in other broadband-expansion programs, such as the Rural Broadband Grant Program, are not eligible; only private investments qualify.

American Rescue Plan Act – State Fiscal Recovery Funds

- Governor Henry McMaster signed H.4408 into law, which included the allocation of \$400 million to the SCBBO to deploy Broadband infrastructure.

The Last Mile Pilot Grant Program

- This pilot program was created to provide students and teachers in eligible residential houses with Broadband.
- The funds were available to provide financial assistance to develop Broadband infrastructure and service. Eligible project costs included construction, engineering, materials, and equipment.

Rural Broadband Grant Program

- In partnership with the South Carolina Department of Commerce, a \$30 million competitive Rural Broadband Grant Program (RBGP) was created to facilitate Broadband deployment in select areas throughout the state. Eighteen ISPs in 19 counties used the funding to expand Broadband in rural areas.
- Most Projects were required to be completed at the end of 2022, and final reports were presented in January 2023. There continue to be some projects under development and construction under RDGP with an anticipated completion date of no later than January 31, 2025.

Santee Cooper

- South Carolina’s public power and water utility is accepting applications from ISPs interested in utilizing excess fiber and transmission infrastructure.
- The utility is not a provider of Broadband but is allowing Broadband providers to access its 1,200 miles (about half the width of the United States) of excess fiber and transmission poles on the nearly statewide system to help South Carolinians get access to Broadband.

Digital Equity Collaborative (DEC)

- This group represents rural, urban, local, and statewide partners that have an interest in ensuring equitable Broadband access across South Carolina.

Its goal is to maximize Broadband connectivity and Digital Literacy for all communities in South Carolina.

Other federal programs

Federal programs have been crucial in developing Broadband infrastructure in South Carolina, specifically throughout rural communities and businesses. As these federal programs are implemented, they are establishing the technical foundation for infrastructure; however, Digital Inclusion can bolster these communities to connect students, entrepreneurs, families, and communities to overcome the Digital Divide.

Rural Digital Opportunity Fund

- This fund, a \$20.4 billion, two-phase auction dedicated to bringing high-speed Broadband service to rural households and businesses nationwide, is managed by the FCC.

USDA’s ReConnect Loan and Grant Program

- This program provides financial assistance to rural areas lacking adequate Broadband service.
- Incorporated organizations, federally recognized tribes, state and local units of



government, and any other legal entities are eligible to apply. Rural areas without at least 25 Mbps downstream and 3 Mbps upstream are eligible.

- Funds can be used for infrastructure and for the cost of providing Broadband service free of charge to critical community facilities for two years; South Carolina has grant programs to incentivize organizations and companies to bridge the Digital Divide.

Tribal

The Catawba people inhabited most of the Piedmont area of South Carolina and parts of North Carolina. With 3,300 enrolled members, the Catawba Nation is centrally located in York County, South Carolina. The Nation has many thriving programs for its citizens and participates in numerous York County committees. Digital Equity can aid the Nation with in-person digital initiatives to eliminate disparities and ensure that Nation individuals can 1) understand developing projects such as their recently established economic zone, CDEZ 2) maximize the potential of developing projects, and 3) actively participate in their community development.

Catawba Digital Economic Zone (CDEZ) (2022)

- The Nation has recently focused on digital assets within the community and established a sovereign regulatory zone that plans to allow digital asset companies to remotely incorporate under the Nation's laws.
- Tribal Broadband Connectivity (TBC) grant from NTIA awarded \$900,578 to the Catawba Nation for digital equity activities.
- There are currently no state-sponsored plans in place with the Nation.

Private sector

Each grant program for the deployment of Broadband facilities administered by the State has required a private sector financial match. Through the various state grant-programs managed by the SCBBO, private industry has committed over \$161 million to expand Broadband throughout South Carolina. This is coupled with commitments from ISPs to facilitate adoption and use strategies outlined in grant applications and subsequent grant agreements. It is through private-sector investments that Broadband can be built throughout South Carolina. As part of an infrastructure build, private-sector efforts can be supplemented with digital inclusion programs for homes and businesses. Connecting these individuals with affordability programs, how-to resources, and opportunities for their families can be conducted directly through Digital Equity planning and allocation of resources for education, workforce development, and more. The Digital Equity Plan can provide additional resources to the private sector to distribute to new communities that are receiving internet or faster options such as fiber.

Efforts to improve economic and other outcomes for South Carolinians

Economic development

Positive Economic development improves the economic wellbeing and quality of life for all individuals in a community. During stakeholder engagement, several agencies, program leaders, and local leaders determined that there are major key factors to advancing economic development, which include Broadband expansion and digital inclusion efforts. Additionally, as shown below, other South Carolina entities that have proposed plans to expand Broadband infrastructure in an effort to advance residential communities' digital literacy.

Key organizations:

- South Carolina Department of Commerce
- South Carolina Council for Economic Development
- South Carolina Chamber of Commerce
- South Carolina Association for Community Economic Development
- Local/regional chambers of commerce
- Columbia Economic Development
- One Region



- South Carolina Economic Developers' Association

Existing plans:

Appalachian Development Plan

- This plan relies upon a strategic agenda for the Appalachian South Carolina area and defines how development projects will be prioritized based on available resources.
- It aims to prioritize economic development to increase income levels by encouraging projects that revitalize declining downtowns in Appalachia.
- It also aims to improve communities by building local and innovative economic-development goals to diversify the economic base.
- It supports the development of industry networks, trade organizations, and services for small businesses that promote collaboration and more.

One Region Roadmap - Economic Development Roadmap

- The economic recovery and resiliency plan for the Berkeley-Charleston-Dorchester region aims to implement strategies to advance the region's recovery from the pandemic and ensure a strong economy.
- It recommends that economic development in this region can be propelled by innovation and collaboration.

Lower Savannah Region 2022-2027 Comprehensive Economic Development Strategy

- The regional strategy document provides an economic roadmap to diversify and strengthen the Lower Savannah region.
- It aims to align education and workforce-development programs to develop the region's current and future talent and expand accessibility to education and training programs.

Workforce development and education

The structure of the modern-day workforce and education has drastically changed and continues to be more digitally based. Many job opportunities, workplace skills-development programs, class schedules, and educational resources are now found and conducted online. Without Broadband access, individuals in unserved and underserved communities could miss out on these opportunities, thus leading to further economic disparities. To improve outcomes in this space, digital inclusion can aid students by allowing them to access remote learning, access their school resources in a safe manner, and connect with educational professionals. This enables South Carolina to develop its talent and allows the workforce to access resources that South Carolina provides to continue career development and create economic stability.

Key organizations:

- SC Department of Employment and Workforce
- State Workforce Development Board
- Department of Social Services
- Local technical colleges
- South Carolina School Districts
- Department of Corrections

Existing plans:

S.C. Department of Employment and Workforce 2018 Strategic Plan

- To support and promote South Carolina's workforce system, this plan outlines strategies and that facilitate economic prosperity and financial stability for employers and communities.
- The Plan incorporated additional partners for resource sharing in SC Works Center, promoted monthly developmental training for staff, and launched a modern unemployment insurance benefits system.

Health

The COVID-19 pandemic brought unprecedented strains and challenges in healthcare nationwide and changed the way patients interact with their providers. Telehealth medicine continues to be widely needed, and stakeholders have discussed the impact of technological barriers for South Carolinians. With the modernization of telehealth moving swiftly, rural communities are at risk



of being left behind and struggling to meet basic health needs. It is essential for all residents to have access to their providers at home; with over 35% of South Carolinians living in rural areas, these plans ensure community support, access, and compassion. The support and resources available through Digital Equity can bridge gaps between patients and doctors through accessible means available through the internet and provide resources on safety measures for patient confidentiality.

Key organizations:

- South Carolina Telehealth Alliance
- Palmetto Care Connections
- SC Hospital Association
- State Hospital Providers

Existing plans:

[South Carolina Telehealth Alliance \(SCTA\) Strategic Plan](#)

- SCTA is a statewide collaboration of several organizations cooperatively expanding telehealth services throughout South Carolina. It aims to improve the health of all South Carolinians through telehealth.
- This strategy will utilize partner support and services to improve the telehealth program infrastructure and maximize the value.
- The plan evaluates the following priorities: hospital support, convenient care, primary care support, and health equity.

Civic & social engagement

As we spoke to local stakeholders and organizations, prioritization of small-town economic viability was a consistent theme, along with how Digital Equity can help small towns stay economically viable and reach their goals. Stakeholders and organizations discussed their concern that rural areas or small towns would not receive the necessary attention they may need. Additionally, rural individuals may not feel comfortable communicating with individuals who do not understand small-town living. According to the 2020 U.S. Census, 737,562 people live in non-metro areas and face unique challenges in rural communities. Both public- and private-sector relationships are helping bridge the gap to uplift community needs such as healthcare, entrepreneurship, water-treatment systems, and high-speed internet. Digital Equity visioning and program planning can boost rural communities in organizing tourism efforts, connecting businesses with modern payment technology, and establishing technical assistance. Small-town viability can be fortified by connecting these towns and establishing digital inclusion throughout the community.

Key organizations:

- Clemson University
- University of South Carolina
- U.S. Department of Agriculture Rural Development
- South Carolina Office of Rural Health
- Municipal Association of South Carolina
- South Carolina Association of Counties
- Historically Black colleges and Universities (HBCUs)

Delivery of other essential services

During emergencies, the ability to communicate and disseminate critical information relies heavily on Broadband connection. Broadband access is essential for receiving alerts, updates, and safety information whereas Digital Equity ensures that vulnerable populations are not left uninformed and unsupported during crises. Stakeholders in rural communities have described situations of attempting to call emergency services at their home but not getting connected, as Broadband was lacking in their area. They had to walk to the main road of their neighborhood to get a connection and call emergency services. With South Carolina Public Radio serving as the backbone of the state's emergency-alert system, it can aid South Carolina to extend Broadband and Digital Equity efforts to modernize systems and make alerts easily accessible.



Key organizations:

- South Carolina Department of Public Safety
- South Carolina Department of Motor Vehicles
- South Carolina Department of Transportation
- South Carolina Emergency Management Division
- South Carolina State Law Enforcement Division (SLED)
- South Carolina Forestry Law Enforcement
- South Carolina SC Safe Home
- South Carolina Education TV (ETV)PI
- Domestic Violence Help and Information
- South Carolina Department of Labor, Licensing and Regulation (SC Fire Academy)

2.3 Goals, Objectives, and Strategy

To achieve the vision for Digital Equity in South Carolina, the following goals, objectives, and strategies have been established:

Goal 1: Broadband affordability

Objective: All households and businesses in South Carolina can subscribe to Broadband service at an affordable rate.

Strategies:

- Re-purpose the existing South Carolina Broadband Advisory Committee (BBAC) to serve as a combined advisory council for both BEAD and Digital Equity.
- Establish a Digital Equity task force derived from the BBAC comprised of and representing each covered population group and regularly meet with them and partner organizations to assess progress in addressing affordability needs and barriers.
- Continue to prioritize populations in need and approach addressing barriers as implementation progresses and conditions change.
- Partner with non-profits and other organizations to promote utilization of the Affordable Connectivity Program (ACP).
 - Alternatively, explore options to create public and private affordability programs to replace ACP, should the program be discontinued.
- Encourage ISPs to offer low-cost subscription options to qualifying covered populations.

Goal 2: Online accessibility and inclusivity

Objective: Every resident of South Carolina has access to reliable high-speed Broadband service in their home and business.

Strategies:

- Create new maps that combine South Carolina Broadband Office coverage data and Covered Population statistics to further prioritize populations and geographies in need.
- Transparently communicate progress, encourage accountability, and community involvement by regularly updating maps, making speed tests available on state website, surveying residents/businesses to confirm services, and staying updated on needs and implementation progress.
- Support BEAD/SCBBO efforts to close broadband service gaps.
- Identify extremely high-cost remote, rural locations and leverage alternate technologies to reach them.



Goal 3: Digital literacy

Objective: Every resident of South Carolina has access to education and training necessary to use Broadband to advance their personal goals and increase South Carolina's technology workforce competitiveness.

Strategies:

- Establish a statewide framework for digital literacy (test or another metric).
- Work with education and non-profit partners to develop Digital Literacy training curriculum with options tailored to prioritized covered populations and provide guidance for integration into public K-12 schools and existing education programs that are underperforming or underserved.
- Support existing public and private training programs – including apprenticeships – that aim to expand the telecommunications and cybersecurity workforce by bolstering digital skills and creating career opportunities.
- Identify Covered Populations and geographic areas with greatest Digital Literacy needs to prioritize for Digital Equity grant program scoring.
- Meet with state agencies and non-profit organizations that offer similar programs and serve covered populations to establish a network of potential implementation partners, share priorities for Digital Equity, and raise awareness of upcoming Digital Equity grant program.
- Create digital training standards for partners and grant recipients to provide services that match established standards.

Goal 4: Online privacy and cybersecurity

Objective: Every resident of South Carolina can safely and securely utilize Broadband services.

Strategies:

- For underserved school districts, assist with implementation of schoolwide digital safety and awareness standards for K-12 students.
- Invest in a statewide digital safety campaign to ensure that all residents of SC can identify malicious content on their devices.
- Coordinate with the South Carolina Department of Administration's Office of Technology and Information Services, the Division of Information Security (DIS), and community anchor institutions to deliver training to Covered Populations.
- Organize a "Cybersecurity Awareness Week" to focus on internet safety and promote cybersecurity careers.
- Promote online privacy and cybersecurity efforts through SC.GOV, tax notices, DMV, SLED and other notable statewide campaigning.

Goal 5: Device availability and affordability

Objective: Every resident of South Carolina can access a desktop or laptop computer at home or in an accessible location.

Strategies:

- Prioritize Digital Equity grant program scoring toward device programs that serve geographies and populations with highest identified needs.
- Support universal one-to-one programs throughout the complete public K-12 system.
- Partner with organizations to establish a statewide computer recycling network.
- Encourage schools, libraries, and other organizations offering computer labs to consider ways to increase accessibility.
- Work with the Digital Equity task force and non-profits to raise awareness of accessible



computer labs and programs to provide devices to households.



3 Current State of Digital Equity: Barriers and Assets

3.1 Asset Inventory

The need for Broadband continues to increase due to rapid advancement in technology and unique world events, such as COVID-19. As highlighted during stakeholder interviews and focus groups, access to Broadband has become a necessity for economic opportunity, education, and overall quality of life.

The ability of South Carolinians to bridge the Digital Divide and work toward Digital Equity is supported by a variety of assets, such as computer labs, digital skills training programs, Broadband affordability initiatives, and other digital inclusion offerings.

The DOD has identified Digital Equity assets through:

- Interviews with South Carolina state agencies and local organizations such as Palmetto Care Connections and the South Carolina Council of Minority Affairs;
- Results from the three Better Internet Surveys;
- Review of existing plans, organizational websites, and research; and
- Questionnaires and research conducted by Clemson University across 72 school districts, public libraries across 46 counties, 77 institutions of higher education, and other organizations.

The following section summarizes South Carolina's current Digital Equity assets and the populations they serve. Assets may include programs, plans, or initiatives that specifically improve the State's Broadband ecosystem. A comprehensive summary of these assets will allow the State to identify areas of need and use this information to continue building their Broadband impact capacity at the State and local levels through community partnerships.

South Carolina has a relatively limited network of assets specifically focused on digital inclusion. The South Carolina Library System and public schools are two of the primary providers of digital access and training, but frequently their offerings are limited to computer access and basic skills courses. Specialized assets focused on serving the needs of specific covered populations and geographic areas are less abundant.

3.1.1. Digital Inclusion Assets by Covered Population

Research and stakeholder engagement conducted in developing the Digital Equity Plan revealed that South Carolina only has one asset that directly serves all Covered Populations: public libraries.

South Carolina has 239 libraries and bookmobiles across 41 counties. Each library is equipped with devices such as desktops, laptops, and Wi-Fi hotspots. According to the SC Library Association, all libraries in the state have an internet speed of at least 1 GB. Library cardholders can borrow Wi-Fi hotspots for personal use. The library association tracks the population of every library's service area, the number of Wi-Fi-sessions hosted per library system, and the number of physical devices borrowed.

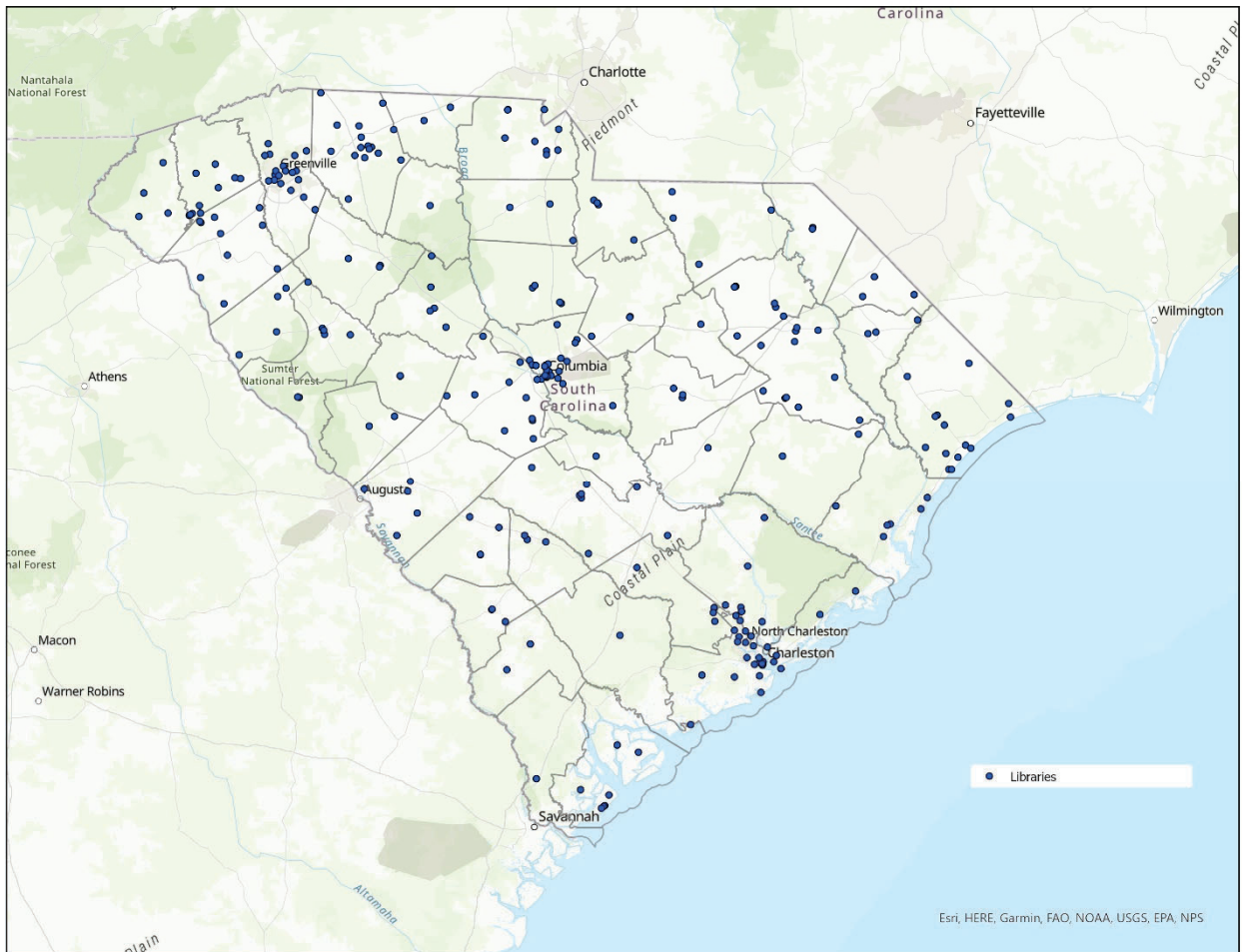


Figure 2. Locations of South Carolina Public Libraries/ Source: U.S. Department of Homeland Security

Beyond libraries, and outside of the DOD, South Carolina lacks a major statewide asset that focuses on Digital Equity opportunities for all individuals across all geographies of the state. However, there are organizations and state agencies that are making strides to improve Broadband adoption for South Carolinians. Below is a table of assets that target the identified covered populations. Some of these are statewide programs while others operate only in specific areas around the state.

Covered Populations	Assets (excluding libraries and public education institutions) *Program or initiative not offered statewide
Low-income individuals	<ul style="list-style-type: none"> • Fast Forward* • Goodwill* • United Way Association of SC
Aging individuals	<ul style="list-style-type: none"> • Palmetto Care Connections* • AARP
Racial/ethnic minorities	<ul style="list-style-type: none"> • Tri-County Cradle to Career Collaborative* • Commission for Minority Affairs
Individuals who primarily reside in a rural area	<ul style="list-style-type: none"> • Palmetto Care Connections* • Allendale Broadband Pilot Project* • Comcast Project UP* • Abbeville and Greenwood Telemedicine Centers * • Digital Literacy and Mural Initiative - NFT Museum of Newberry*
Veterans	<ul style="list-style-type: none"> • AARP



	<ul style="list-style-type: none"> • Abbeville and Greenwood Telemedicine Centers* • Goodwill
Individuals with disabilities	<ul style="list-style-type: none"> • Project Rex at Epworth Children’s Home*
Individuals with a language barrier	<ul style="list-style-type: none"> • Greenville County Schools Lifelong Learning* • Goodwill
Incarcerated individuals	<ul style="list-style-type: none"> • SC Department of Corrections internal online programs

[Section 3.1.4](#) provides a detailed description of these assets.

3.1.2. Existing Digital Equity Plans

Through research and engagement conducted in the planning process, no specific state, regional, tribal, or local Digital Equity plans were identified. The Digital Equity Collaborative, a multisector group led by the South Carolina Office of Rural Health, has been working on a Community Broadband Strategy, but it was not complete at the time of this plan’s development.

Some agencies and organizations have developed broader plans with Digital Equity components that may be leveraged to advance Digital Equity Plan goals. For example, the South Carolina Department of Education has released the *2020-2024 South Carolina Educational Technology Plan: Empowering Education with Technology*. The plan highlights challenges and barriers regarding infrastructure, device usage, teaching, and learning.

A lack of Digital Equity plans in South Carolina highlights a notable challenge for advancing the Digital Equity Plan: to better serve many populations and geographic areas of the state, the DOD will need to continue engagement and research to better understand existing needs and barriers. Further efforts will also require building a network of initiatives, services providers, and assets to address these needs and barriers. The DE plan has been inspired by the successful programs of various partners listed in the asset inventory. Upon publication of other Digital Equity plans, the DOD will coordinate with the entities to align goals and objectives.

3.1.3. Existing Digital Equity Programs

At the state level, programs and initiatives have been developed to improve Broadband access throughout the state.

[GetConnectedSC](#) is an initiative created by the ORS to bring reliable high-speed internet to every South Carolinian. The initiative connects SC residents to broadband news and resources like the Affordable Connectivity Program (ACP). Also, GetConnectedSC collected data through the Better-Internet Survey to gauge how to improve internet connections for individuals and their communities.

[South Carolina Digital Drive](#) is a GIS-based hub site which includes information pertaining to broadband that can be useful for consumers and stakeholders. Maps within the hub site showcase:

- Populations with fiber, cable or copper access;
- Populations with fiber, cable or copper adoption;
- Total housing units with at least 25 Mbps;
- Total housing units without 25 Mbps;
- ACP enrollment;
- Eligible areas for funding; and
- Broadband county dashboard.

3.1.4. Broadband Adoption

As mentioned in [section 3.1.1](#), there are organizations that have programs and initiatives dedicated to Digital Equity. Below is a comprehensive list and description of organizations and initiatives identified through



stakeholder interviews and focus groups dedicated to bridging the Digital Divide.

Assets	Programs and organizations
Programs that provide digital literacy and digital skills training, including digital skills training in service of workforce development	<ul style="list-style-type: none"> • Palmetto Care Connections (PCC) • Fast Forward • SC Works Centers • SC Department of Corrections internal online programs • South Carolina Office of Rural Health Digital Economy Ecosystem Project • South Carolina Public Libraries • Goodwill • Project Rex at Epworth Children’s Home • Greenville County Schools Lifelong Learning • NFT Museum of Newberry • Beaufort Digital Corridor Technical Talent Training (Cybersecurity Certification) • Charleston Digital Corridor Talent Development Strategy • ConnectHomeUSA
Programs that provide subsidized or low-cost devices	<ul style="list-style-type: none"> • PCC • Comcast Project UP • ConnectHomeUSA
Digital navigator programs	<ul style="list-style-type: none"> • PCC • Tri-County Cradle to Career Collaborative (TCCC) • South Carolina library system • American Association of Retired Persons (AARP) • Low Country Digital Equity Coalition
Programs that conduct awareness and outreach activities of digital inclusion programming and resources (e.g., marketing and awareness campaigns)	<ul style="list-style-type: none"> • GetConnectedSC • South Carolina Public Libraries system • South Carolina Office of Rural Health Digital Equity Collaborative
Incentives (e.g., subsidies, tax benefits) for incorporation of broadband across different sectors (e.g., education, agriculture, economic development, telemedicine)	<ul style="list-style-type: none"> • Educational Rate (E-Rate) Program • Healthcare Connection Fund Program • USDA Community Connect Program
Public computing labs	<ul style="list-style-type: none"> • South Carolina Library System • Abbeville and Greenwood Telemedicine Centers
Loaner computer/hotspot programs	<ul style="list-style-type: none"> • South Carolina Public Libraries • Participating K-12 school systems
Programs that offer discounted or low-cost devices with affordable maintenance costs	<ul style="list-style-type: none"> • Affordable Connectivity Program (ACP)
K-12 school system one-to-one computer programs	<ul style="list-style-type: none"> • Participating K-12 school systems
Computer refurbishing programs	<ul style="list-style-type: none"> • Low Country Digital Equity Coalition
Digital equity/inclusion coalitions	<ul style="list-style-type: none"> • PCC • TCCC • Fast Forward • Allendale Broadband Pilot Project



3.1.4.1. Programs that provide Digital Literacy and digital skills training, including digital skills training in support of workforce development

Palmetto Care Connections (PCC) is a non-profit organization that is widely recognized as a leading organization dedicated to bridging the Digital Divide. PCC provides technology, Broadband, and telehealth solutions to healthcare providers in rural and underserved areas in the state. It hosts the Annual Telehealth Summit of South Carolina and provides network connections for healthcare, technology, and Broadband. The PCC is also partnered with organizations such as local AARP locations to provide service to the aging population. In addition to the summit, it hosts Digital Literacy classes in 14 counties across the state – Allendale, Bamberg, Barnwell, Calhoun, Clarendon, Dillon, Hampton, Lee, Lexington, Marion, Marlboro, Orangeburg, Richland, and Williamsburg. Participants must meet eligibility requirements, and only one adult per household can participate in this program.

Fast Forward is a non-profit dedicated to Digital Literacy and to providing computer access to underserved populations in Richland, Lexington, and Fairfield counties. This organization provides literacy programs and employment preparation for low-income adults and seniors. There are eligibility requirements for participants.

ConnectHomeUSA is a program hosted by EveryoneOn, an organization dedicated to bridging the Digital Divide among public housing residents. The program offers Digital Literacy training, reduced internet service cost, and discounted computers.

Workforce development programs:

South Carolina Office of Rural Health Digital Economy Ecosystem is a pilot program that brings together technical education, job training, leadership development, and community planning to develop quality digital jobs, local entrepreneurship, and remote-work opportunities to rural communities. The SC Office of Rural Health secured U.S. Department of Agriculture funding for Digital Economy Ecosystem projects in five communities – Barnwell, Williamsburg, Orangeburg, Greenwood, and Newberry counties.

Goodwill SC offers programs tailored to workforce development. These programs teach basic computer skills to those who desire to learn. In 2022, Goodwill launched Mission Mobile, which is a renovated bus that travels through rural areas and conducts workforce development workshops. The renovated bus is wheelchair accessible and equipped with a trained specialist, individual workstations with laptops and printers, and hotspots. The program is free for anyone to use and is targeted toward low-income individuals.

Epworth Children’s Home received grant funding to develop programs to focus on providing foster youth with digital literacy skills and competencies to prepare students for the job market and workforce.

Greenville County Schools Lifelong Learning received funding to incorporate a digital literacy program into the curriculum for job-readiness classes.

Beaufort Digital Corridor Technical Talent Training offers a cybersecurity certification program and bootcamp for SC citizens ranging from middle school through adult ages.

Charleston Digital Corridor Talent Development Strategy focuses on attracting, nurturing, and promoting the region’s tech talent pool by offering training and mentorship programs.

The **South Carolina Department of Employment and Workforce** has several programs through their **SC Work Centers** that provide Digital Literacy workshops. The agency created a skill certificate to demonstrate digital literacy.

The **South Carolina Department of Corrections** offers Broadband programs in some prisons across the state. The online programs range from educational programs to rehabilitation programs to help with recidivism. Unfortunately, all prisons in the state cannot offer these programs due to some facilities having inadequate internet broadband service.

3.1.4.2. Programs that provide subsidized or low-cost devices (e.g. computers, tablets)

PCC participants may receive discounted or low-cost devices.

Comcast Project UP is a nationwide digital equity initiative created by Comcast. As a part of the nationwide



effort, the company committed \$8.3 million to a Broadband network expansion in Hampton County. In total, 2,150 homes and businesses received high-speed internet, and 690 laptops were donated to students at Estill High School and Wade Hampton High School.

ISPs can opt in to offer connected devices through ACP. Fifty-four ISPs currently participate in SC. "Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than \$10 and less than \$50 toward the purchase price."

3.1.4.3. Digital navigator programs

As mentioned in section 3.1.4.1., PCC is dedicated to guiding adults, especially the aging population, in understanding the internet and using their devices. The South Carolina Library System has also exhibited the ability to be digital navigators to diverse library visitors in different parts of the state.

Tri-County Cradle to Career Collaborative (TCCC) is a non-profit organization dedicated to bridging the Digital Divide gap in racial and ethnic minority communities in Berkeley, Charleston, and Dorchester counties. It created the *Lowcountry Connect! Digital Inclusion Pledge* that focuses on children in the Lowcountry community to have:

- Adequate hardware and software for online learning;
- Adequate access to high-speed internet at home;
- Digital skills needed to “learn, work and prosper in academic learning;” and
- An advocate in each county to ensure awareness of broadband access and adoption in “all rural and (sub)urban communities.”

Local organizations within the Lowcountry area can sign this pledge and partner with TCCC to fulfill these goals.

South Carolina government agencies and organizations are also making efforts to increase Broadband adoption for communities across the state.

The Low Country Digital Equity Coalition in conjunction with PCC provided two digital navigator train-the-trainer courses in June and July 2023 to forty-four not-for-profit, government, and public library personnel representing eighteen coastal counties.

3.1.4.4. Programs that conduct awareness and outreach activities of Digital Inclusion programming and resources (e.g., marketing and awareness campaigns)

The **GetConnectedSC** campaign (section 3.1.3) has a [webpage](#) dedicated to spreading awareness about the federal Affordable Connectivity Program. South Carolina residents can utilize this resource to see if they qualify for the program.

3.1.4.5. Existing ISP programs that promote adoption (e.g., adoption campaigns, lifeline, low-cost plans, digital inclusion initiatives)

Each ISP applying for ARPA or CPF funds in South Carolina had to commit to providing a low-cost plan with no income threshold as part of the requirements. Additionally, the following ISP programs promote adoption through low-cost plans and digital inclusion programs.

Comcast	Internet Essentials	Comcast Internet Essentials offers low-cost internet (\$9.95/month) to eligible families.
Comcast	Lift Zones	As a part of the Project UP initiative, this program focuses on providing free internet connectivity and access to hours of educational and digital skills content to help families navigate online learning and increase digital literacy.



Comcast	Internet Essentials Learning Center Program	This program aims to partner with libraries, schools, and non-profits to deliver digital literacy training through a combination of classroom-style instruction and a portfolio of online training materials.
AT&T	Access Program	AT&T offers the Access program for \$10/month or less to eligible families.
Breezeline	Internet Assist Program	The new 100 Mbps “Internet Assist Plus” service, normally \$29.99 per month, is available at no cost for qualifying households after the \$30/month ACP credit. The Internet Assist Plus package also includes one free modem. Customers may choose a higher internet speed under the program and apply the \$30 credit.
T-Mobile	Project 10Million Program	Project 10Million offers eligible households 100GB of data per year and a free mobile hotspot for five years.
Charter	Spectrum Community Center Assist	Charter’s philanthropic program aims to improve the physical condition of community centers in underserved rural and urban communities throughout several states, including South Carolina. The program provides job-skills training.

3.1.4.6. Incentives (e.g., subsidies, tax benefits) for incorporation of broadband across different sectors (e.g., education, agriculture, economic development, telemedicine)

The state designed incentive programs in response to federal funding; however, the state does not currently offer any statewide Broadband adoption incentive programs focused on particular sectors. State agencies publicize federal Broadband programs via the GetConnectedSC website, the South Carolina Digital Drive website, and other media sources that promote Broadband expansion and adoption. Education, agriculture, telemedicine, and overall economic development are state priorities; therefore, encouraging Broadband adoption in these areas is critical. The following federal programs are examples that incentivize Broadband adoption in some of these priority areas:

- [E-Rate](#): This FCC program offers discounts for telecommunications, internet access, and internal connections for schools and libraries.
- [Healthcare Connect Fund Program \(HCF\)](#): The Healthcare Connect Fund Program provides subsidy reimbursements for up to 65% of eligible broadband expenses for eligible health care providers.
 - PCC was a recipient of HCF subsidies, and the funds represent savings for healthcare providers. PCC assists healthcare providers with learning more about and connecting to a dedicated, secured, high-capacity network with connection capabilities for healthcare data, medical images, telehealth, bridge access, electronic health records and more. For rural members, PCC facilitates low-cost, high-capacity digital bandwidth that enhances all aspects of communications.
- [USDA’s Community Connect Program](#): As mentioned in section 2.2., the USDA’s Community Connect Program is a grant program that provides financial assistance to eligible applicants in rural areas lacking adequate broadband service. Funds can be used both for infrastructure and for the cost of providing Broadband service free of charge to critical community facilities for two years.

For more information on these programs, please refer to section 3.1.5 in [the BEAD Five-Year Action Plan](#).

3.1.4.7. Public computing labs

As stated in section 3.1.1, the state’s library system has several libraries across the state with public computing labs and stations. SC Works Centers and Connection Points also offer access to computers for individuals utilizing employment services through the SC Works and the Department of Employment and Workforce (DEW).



The **Abbeville and Greenwood Telemedicine Centers** is another public computing space that was created for veterans in Abbeville and Greenwood counties to have access to telehealth services without additional travel time and expenses. The centers serve more than 6,200 veterans in both counties. The centers have private rooms equipped with furniture and devices necessary for a quality telehealth appointment. They are located within the Abbeville County Library System and Greenwood County Veterans Center. Veterans who are receiving medical benefits can use these centers at no cost. These centers are a result of partnership between WCFIBER, the South Carolina Department of Veterans' Affairs, the Greenwood County Veterans Center, the Foundation for Rural Service, and the Abbeville County Public Library.

3.1.4.8. Loaner or free computer/hotspot programs

Library cardholders can borrow Wi-Fi hotspots for personal use from libraries in many locations.

The South Carolina Equipment Distribution Program distributes no-cost telecommunications equipment, including iPads, to South Carolinians with a hearing or speech impairment. Participants must have phone service and have a professional certify their application.

The South Carolina Office of Regulatory Staff in cooperation with the South Carolina Department of Education and the Commission on Higher Education distributed 100,000 hotspots and monthly internet service to school districts and higher education institutions across South Carolina from December 2020 June 2021.

3.1.4.9. Programs that offer discounted or low-cost devices with affordable maintenance costs

As part of the ACP, eligible households can receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than \$10 and less than \$50 toward the purchase price. This program is limited to one monthly service discount and one device discount per household. A combination of 55 providers offering fixed and/or mobile broadband service currently participate in this aspect of ACP offering discounts on devices to citizens throughout the State. See Appendix for a list of participating providers.

3.1.4.10. K-12 school system one-to-one computer programs.

Not all K-12 systems across the state have one-to-one computer programs. Often, these school systems distribute Chromebooks, which are known to have less functionality and range of use than laptops. Chromebooks and tablets usually are distributed for lower grades, and laptops are given to middle and high school students. Most of the devices are distributed on loan, and students in younger grades cannot take these devices home.

3.1.4.11. Computer recycling programs

The Lowcountry Digital Equity Coalition (LDEC) has requested a modification in the Charleston County procurement process regarding the Charleston County School District surplus desktops, laptops, and monitors to be earmarked for donation to LDEC member, Palmetto Goodwill. Upon receiving the surplus devices, Palmetto Goodwill's staff will wipe the computers to Department of Defense standards, thereby ensuring the complete removal of any sensitive data and then subsequently re-install operating systems and any necessary hard drives that may have been removed. These sanitized devices would then be distributed to community members enrolled in the Affordable Connectivity Program. In addition, LDEC will apply under the Not-For-Profit status eligibility category for the State Surplus System's distribution of surplus laptops and computers.

3.1.4.12. Digital equity/inclusion coalitions

The PCC, TCCC and Fast Forward are digital equity and inclusion coalitions paving the way for Digital Equity in the state. Please read section 3.1.4.1 and 3.1.4.3 for more information.



The **Allendale Broadband Pilot Project** was a public-private partnership launched by the ORS as an effort to expand Broadband access in Allendale County. The \$393,104 project established public Wi-Fi hubs and residential Wi-Fi access. The ORS partnered with the South Carolina Department of Education, USC Salkehatchie, Allendale County School District, and Allendale Hampton Jasper Regional Library.

3.1.5. Broadband Affordability

As part of its grant programs, South Carolina incentivizes internet service providers to bridge the Digital Divide by including 20% of their selection criteria toward collaboration, adoption, and community assistance. The state also requires each grant applicant to provide an affordable high-speed Internet plan (minimum speeds of 100/20 Mbps down/up with no data caps and no contract). The plan cannot include an income threshold requirement and must be provided for a disclosed period of time separate and apart from the ACP. State agencies also publicize federal Broadband affordability programs via the GetConnectedSC website, and other media channels like social media, radio, and television. Residents or organizations in South Carolina can apply for the following federal programs:

- The **Affordable Connectivity Program (ACP)** is an FCC program for households with an income at or below 200% of the Federal Poverty Guidelines or if the household meets other eligibility requirements. The program provides a discount of up to \$30 per month for internet services and up to \$75 per month on qualifying Tribal Lands. Also, eligible households can receive a one-time discount of \$100 to purchase a device (laptop, desktop, or tablet) from participating providers. This program is limited to one monthly service discount and one device discount per household.
- **Lifeline** is another FCC program for low-income individuals. This program provides discounted telephone service, Broadband internet service, or voice over internet protocol packages on qualifying plans from participating providers. Participants must meet eligibility requirements to qualify for the program.
- The Universal Service Administration Co. is an independent not-for-profit designated by the FCC. Their **Healthcare Connect Fund Program** provides a 65% discount on eligible Broadband connectivity expenses for eligible rural health care providers.

There are limited South Carolina-based organizations that focus on Broadband affordability. However, **PCC** is among the few organizations that have taken the initiative to increase broadband affordability. Palmetto Care Connections uses grant funding to offer digital devices, training, and support. Participants must meet eligibility requirements to participate. Participants will receive a digital device, technical support, and affordable internet solutions assistance.

See section 3.1.4.5 for a list of identified low-cost plans offered by ISPs.

3.2 Needs Assessment

Digital Equity needs vary across the population groups and geographic areas of South Carolina, but the two greatest barriers identified for all were access to residential highspeed Broadband service and affordability. Availability of devices and Digital Literacy are concerns for many individuals and households, but through examination of data and feedback from stakeholders engaged across the state, limited service and high cost of service were consistently the greatest barriers to achieving digital equity across South Carolina.

Geographically, a common trend was found across datasets: Rural counties tend to have the highest *concentration* of residents with Digital Equity needs, but urban counties tend to have the greatest *number* of residents with Digital Equity needs. As seen in Figure 3, in 2021 the greatest percentage of households with a Broadband subscription were Beaufort, Dorchester, Berkeley, Horry, Richland, Lexington, Lancaster, York, and Greenville. The counties with lowest percentage of household Broadband subscription are Edgefield, Bamberg, Allendale, Barnwell, Dillon, and Fairfield.

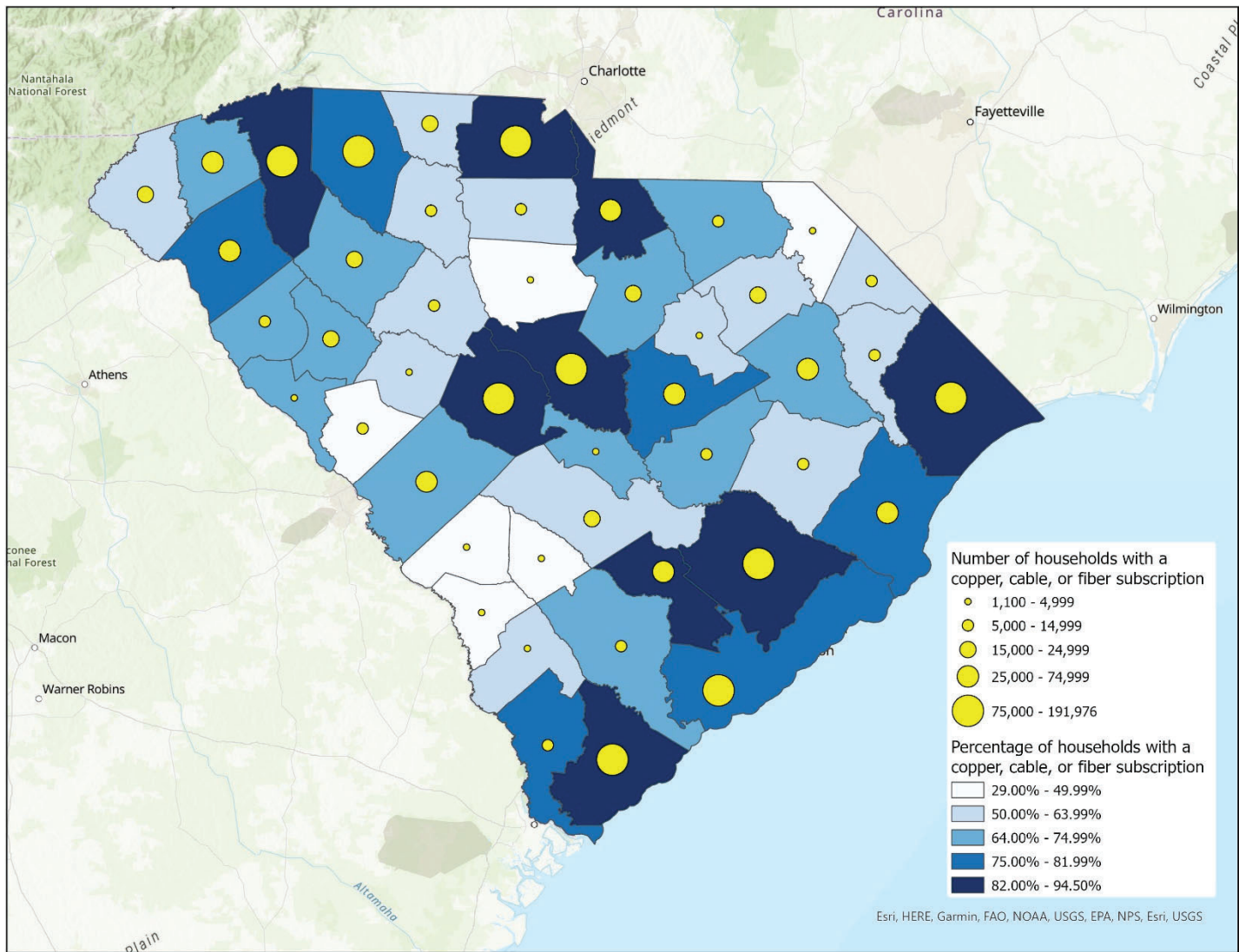


Figure 3. Number of households with a copper, cable, or fiber subscription by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

These geographic distribution trends highlight a distinct challenge in addressing Digital Equity needs. Urban areas may appear to have decreased Digital Equity concerns when considering the overall percentage of residents who have digital devices and have adopted Broadband, but they also have the greatest number of people with Digital Equity needs. Rural communities, in contrast, may appear to have overall greater need due to the high percentage of residents who have not adopted Broadband, but the total number of residents requiring assistance is lower than in urban areas. As with Covered Populations overall, serving rural and urban populations will require different strategies and tactics.

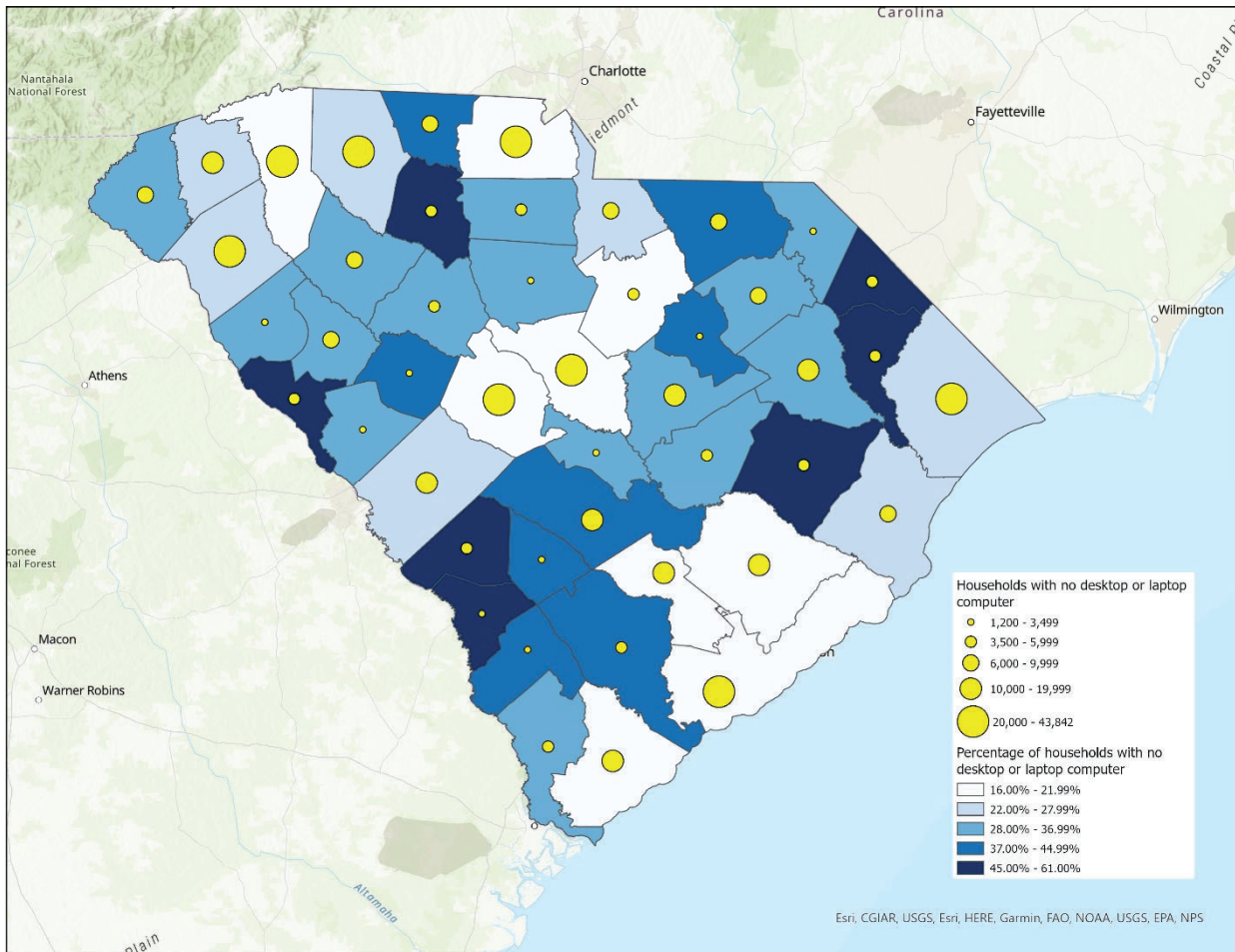


Figure 4. Number of households with no laptop or desktop computer by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

3.2.1 Covered Population Needs Assessment

Although access and affordability were the two biggest barriers to Broadband adoption, the dimension of overall needs varies across Covered Populations. In developing the Digital Equity Plan, the state surveyed and directly engaged individuals from across South Carolina to better understand their specific needs and identify opportunities to address these needs. Quantifying these needs through data analysis also helps target initiatives to advance Digital Equity by identifying the size of covered populations, where they are located, and the specific nuances of their Digital Equity needs.

This section of the Digital Equity Plan presents a summary assessment of needs for each Covered Population that draws on data and stakeholder feedback. It is important to note that available data is not perfect and only captures a moment in time. As the Broadband network buildout is ongoing and conditions continue to change, the DOD will continue analyzing data, surveying, and engagement with Covered Populations to develop programs to address needs discussed throughout this plan.

3.2.1.1 Low-income individuals

For the purpose of this plan, low-income individuals are those that live in covered households with an annual income of less than 150% of the federal poverty level. According to the U.S. Census American Community Survey (ACS), there were 1,204,075 low-income individuals located across South Carolina in 2021, making up 24% of the total population. Urban areas tend to have the highest total number of low-income households, but rural areas have the highest concentration of low-income households by percentage. For example, Greenville County had the highest number of low-income households at 19,374 in 2021, but Dillon County had the highest



concentration of low-income households at 35% in 2021.

Notably, children make up a significant portion of low-income individuals in South Carolina. In 2021, 28% of individuals in South Carolina at or below 150 percent of the federal poverty level were under 18 years old, even though children only compose 21% of the total population. Challenges children in low-income households' face accessing education and resources via the internet was a common theme raised by stakeholders, many of whom were concerned about the future workforce and skill set of current students if a significant portion of the population cannot access the internet at home to complete schoolwork. In 2021, 24% of households with children enrolled in pre-kindergarten through 12th grade lacked a fixed Broadband subscription, regardless of income level.

Among Covered Populations, low-income individuals have the lowest Broadband adoption. In 2021, 46% of low-income individuals did not have a fixed Broadband subscription, and 41% lacked a desktop or laptop computer.

Major barriers for this population, like many others, are accessibility and affordability. In both ACS data and self-reported survey data, low-income households often struggle with getting internet service at home and being able to afford those services. There is also intersectionality among Covered Populations, with many low-income individuals also being racial or ethnic minorities, residents of rural areas, and individuals with disabilities, which can compound their accessibility and affordability barriers.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying covered populations the DOD is ensuring low-income individuals can afford a Broadband internet subscription. The DOD also has plans to support universal one-to-one programs in the K-12 public school system to ensure children in low-income households do not lack access to devices.

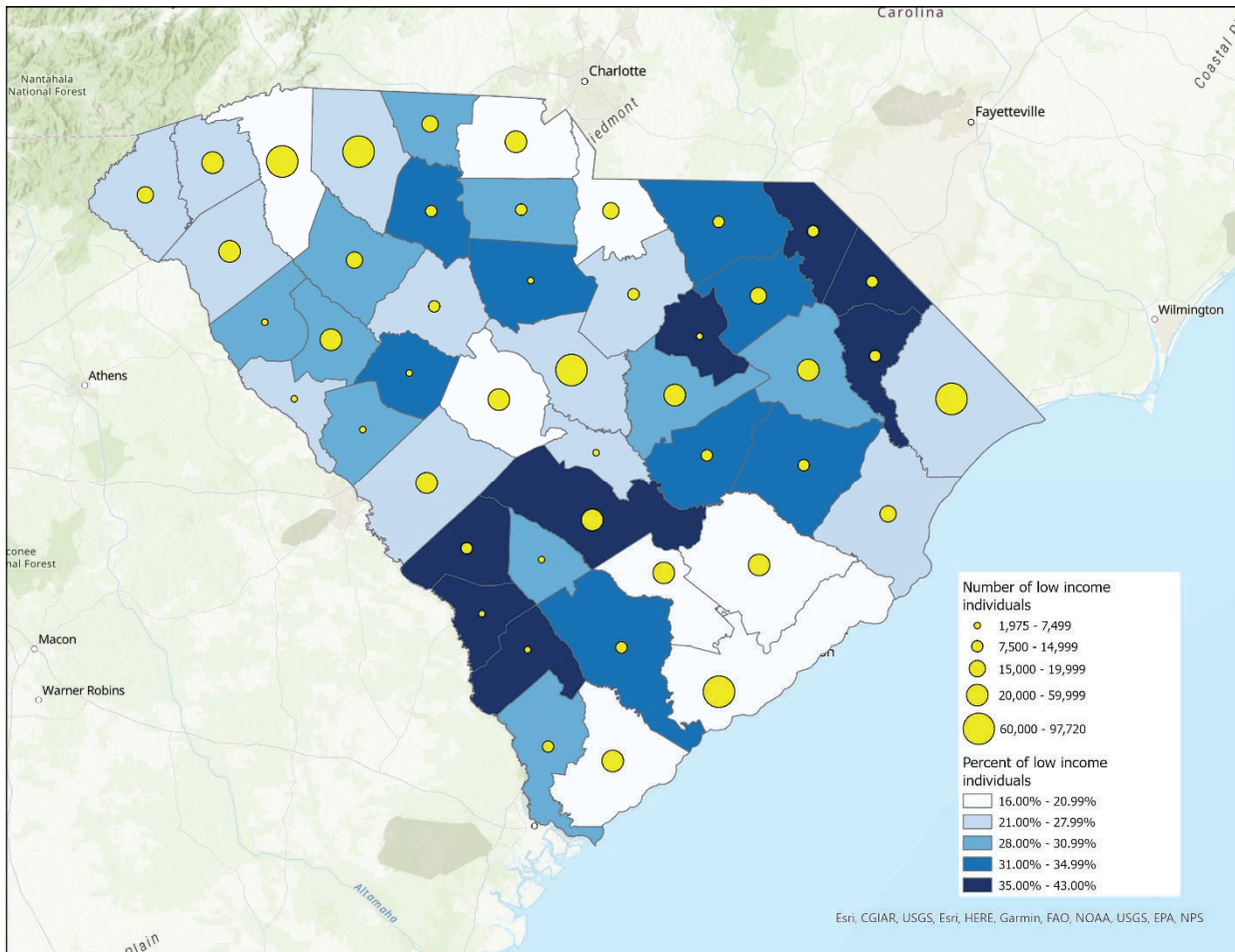


Figure 5. Number of low-income households by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

Total population (2021): 1,204,075

Population with no fixed Broadband (2021): 552,842

Share with no fixed Broadband (2021): 46%

Population with no desktop or laptop (2021): 496,205

Share with no desktop or laptop (2021): 41%

Source: GetConnectedSC Survey

Familiarity with ACP (2023): 33%

Top reasons for no Broadband (2023):

1. The cost is too high: 62%
2. There is no ISP serving my home's location: 29%
3. We access internet outside the home: 17%



Top barriers to Digital Equity

Low-income individuals are less likely to have a fixed Broadband subscription.

Not having a digital device reduces the access low-income individuals have to all the different activities or information you can access online. Low-income individuals have a much lower rate of Broadband adoption than the overall population. Only 54% of low-income individuals have fixed Broadband compared to 67% overall, suggesting accessibility and/or affordability issues that are preventing low-income individuals from accessing fixed Broadband.

“[Many of our organization’s clients are] at or below 30% poverty level, struggling on day to day. If we think from client perspective, the access to [broadband for] the everyday things would make a difference.” - Interviewee

Low-income households struggle to pay for internet services.

According to our statewide survey, both low-income individuals and the general South Carolina population report that their number one reason for not having internet at home is that the cost is too high. Sixty-two percent of low-income individuals reported cost is their number one reason not to have internet, compared to 57% of the overall population, which unsurprisingly indicates that low-income individuals face greater challenges affording broadband service.

Low-income individuals are less likely to have a desktop or laptop.

Low-income individuals are less likely to have a desktop or laptop at home, with 41% reporting no desktop or laptop compared to 26% of the overall population. While many of these individuals have smartphones that can access the internet, not having a desktop or laptop generally makes it more difficult to use the internet to perform complex tasks. A smartphone is adequate for some tasks, but things like completing research, writing a paper for school, creating a resume, applying to jobs online and other activities are much more challenging without access to a desktop or laptop. Low-income individuals might not be able to engage with these activities, even if they really want to, without a digital device. Lacking Broadband service at home, many low-income individuals (17%) access the internet outside of the home at locations such as a library, school, or other facility. This suggests that while low-income individuals do need internet access, it may currently be easier and more affordable for them to access the internet outside of the home rather than subscribing to a monthly internet service.

Low-income individuals without internet struggle to access education and other vital services.

A combination of less access to Broadband and fewer devices compared to the overall population means that low-income individuals have difficulty accessing online services. Many stakeholders pointed out that access to the internet is more than just social media or streaming services and can be used to connect an individual or household to job opportunities, education, benefits applications, telehealth services and more. A range of stakeholders, from healthcare facilities to state agencies to nonprofits, reported trying to move services online to make them more widely accessible by South Carolinians only to realize that many individuals cannot access these services because of a lack of access or a device. Low-income individuals could be left behind if they do not have adequate access to these kinds of services that could positively impact their opportunities.

“Internet is education and a job. Without those two things, you’ll never rise out of poverty.” - Interviewee



3.2.1.2 Aging individuals

The Digital Equity Act defines aging individuals as any resident 60 years or older. According to ACS, there were 1,243,880 aging individuals in South Carolina in 2021, composing 24% of the overall population. Aging individuals are relatively evenly distributed across the state as a share of county populations. The largest population of aging individuals is in Greenville County, which is home to 115,278, followed by Horry County (114,317), Charleston County (92,902), Richland County (74,965), and Spartanburg County (70,963). McCormick County has the highest concentration, with aging individuals making up 45% of the adult population, followed by Georgetown County (37%), Beaufort County (34%), Horry County (33%), and Fairfield County (33%).

South Carolina's aging population is less racially diverse than the overall population. In 2021, only 26% of aging individuals were a racial or ethnic minority, compared with 37% of the overall population. A lower share of aging individuals was in the low-income category (20%) compared to the overall population (24%). A higher share of aging individuals lived alone (39% compared with 29% overall), a higher share were veterans (16% compared with 9% overall), and a higher share had a disability (31% compared with 14% overall).

Aging individuals actually have higher rates of Broadband adoption than most other Covered Populations. In 2021, 38% of aging individuals in South Carolina had no fixed Broadband connection (compared with 33% of the overall population), and 30% lacked a laptop or desktop.

Both ACS and survey data show that aging individuals face similar challenges related to availability of service and affordability as the overall population of South Carolina. Along with these barriers, aging individuals face slightly higher challenges around Digital Literacy. Aging individuals are not always comfortable with technology such as desktops, laptops, or tablets, and they might shy away from utilizing Broadband services altogether. Stakeholders emphasized that although this population might be more hesitant to adopt technology or Broadband services, the potential benefits — such as increased access to telehealth services and opportunities to connect socially with friends and family — are worth the effort of adopting new and unfamiliar technologies.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying Covered Populations the DOD is ensuring aging individuals with fixed income can afford a Broadband internet subscription. Devices can be made readily available through the computer recycling network the DOD will establish with their partners. The DOD also plans to work with other agencies and non-profit partners to promote digital literacy and cybersecurity to increase confidence in Broadband within this Covered Population.

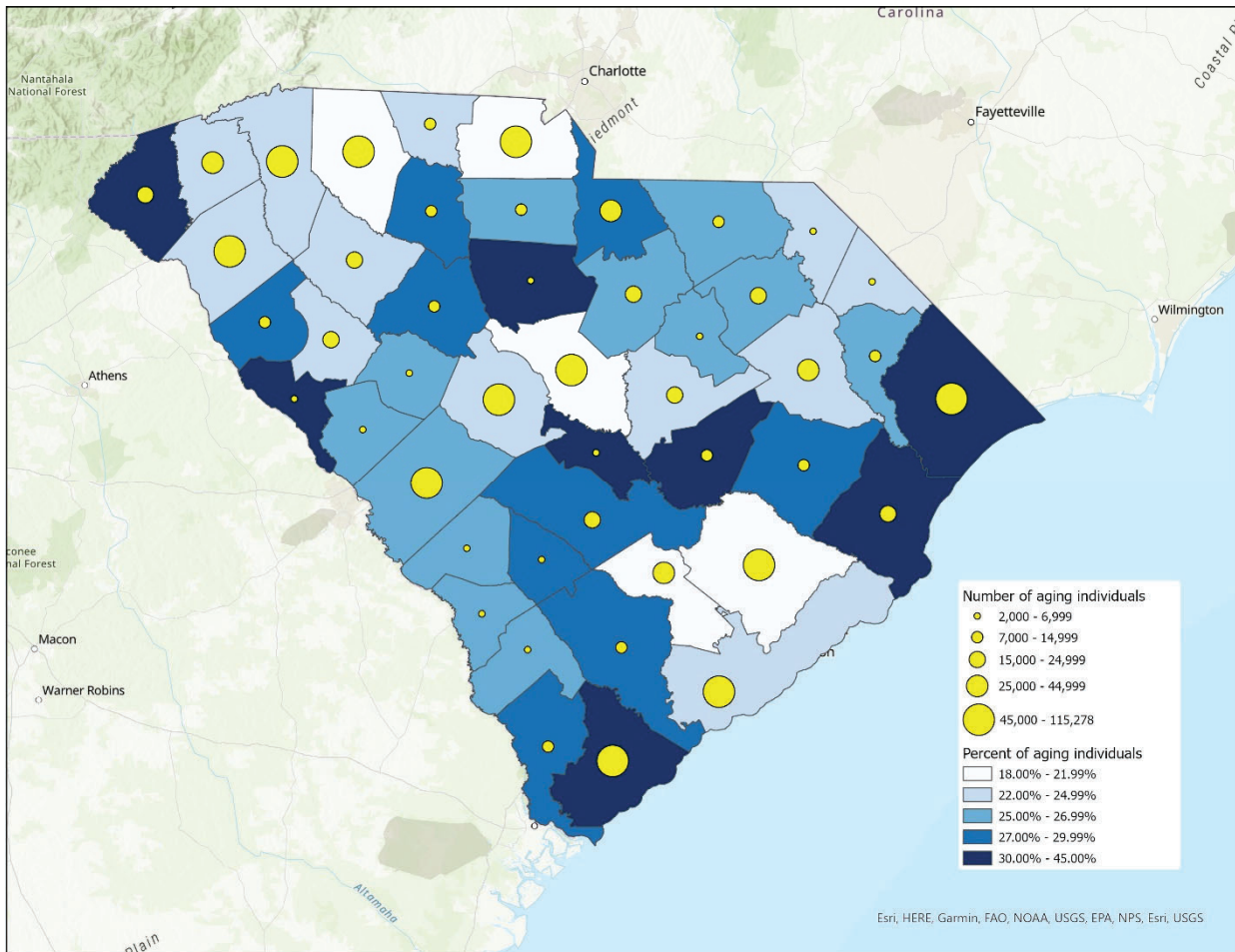


Figure 6. Number of aging individuals by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

Total population (2021): 1,243,880
 Population with no fixed Broadband (2021): 469,215
 Share with no fixed Broadband (2021): 38%
 Population with no desktop or laptop (2021): 368,999
 Share with no desktop or laptop (2021): 30%

Source: GetConnectedSC Survey

Familiarity with ACP (2023): 26%
 Top reasons for no internet (2023):

1. The cost is too high: 56%
2. There is no ISP serving my home's location: 29%
3. We access internet outside the home: 15%

Top barriers to Digital Equity

Some aging individuals cannot afford home internet services.

Although the aging population reports having no internet access because the cost is too high at almost the same rate as average South Carolinians (56% and 57%, respectively), the fact that over half of respondents indicated that cost was a primary factor indicates that affordability is a major challenge. Being unable to afford Broadband services reduces adoption among aging individuals, which limits access to things important to this audience, like telehealth or social connections with family. Additional marketing efforts from ISPs regarding



the ACP or expanding efforts like PCC that provide a device, services, and Digital Literacy training could eliminate or reduce cost barriers for this population.

Aging individuals can be less comfortable using the internet compared to other age groups.

Even if having internet access might be useful, aging individuals sometimes avoid it because of the steep learning curve or unfamiliarity with technology. Stakeholders reported this can be especially challenging for aging individuals if they do not have a trusted source of information or support when it comes to technology. Many shared stories about having to contact children or grandchildren for technical support or reaching out to libraries for help with online tasks. Stakeholders also emphasized that an important aspect of teaching Digital Literacy skills to aging individuals is to make sure that the individuals teaching those Digital Literacy skills are representative of the population they are teaching. For example, organizations like AARP noted that aging individuals would be more receptive to Digital Literacy training if they were taught by an aging individual.

Increased access to Digital Literacy training from trusted sources could help combat this barrier, particularly support outside of networks of friends and family. Organizations like AARP, PCC, or the state library system that cater to aging individuals could ramp up efforts and ensure that they have a dedicated volunteer group of adults over 60 to support these efforts. It might also be worth exploring opportunities for healthcare providers to offer training to aging individuals to make it easier to access and navigate telehealth services.

“Healthcare providers should be able to communicate to the 50-plus community on how to use these [telehealth] apps.” – Interviewee

“A stronger technological presence for the elderly could be an extra help and is almost life and death for these folks. These folks are more home bound, and a simple email could help them communicate.” – Interviewee

Aging individuals are less likely to have digital devices, such as a desktop, laptop or tablet, that they can use to access Broadband.

Without a digital device, accessing Broadband is more challenging. Even with a smartphone, which is not as widely adopted among aging individuals as it is for other groups, many online activities that were mentioned as relevant to aging individuals — such as telehealth, connecting by phone or video with friends and family, and accessing personal information and benefits — can be challenging. These tasks are not impossible without a device or internet access, but an aging individual could accomplish the same thing, like visiting with their doctor, much more easily if they had a digital device and the digital literacy skills to use it properly. Finding opportunities to provide digital devices to aging individuals and creating resources to teach aging individuals how to use these devices could combat this barrier.

“Lots of folks are using their phone to access their services. Folks that are on Medicaid don't have a lot of money, how are they buying computers or tablets?” – Interviewee

Aging individuals could be more susceptible to online criminal activity because of a lack of Digital Literacy skills.

A common concern among stakeholders regarding the aging population was that this group could be targets of online criminal activity such as scams, fraud, or catfishing. There was a desire to see access to technology and Broadband services increase for South Carolina’s aging population, but if these services are increased without also increasing Digital Literacy training, this population would be especially vulnerable. Stakeholders noted that efforts to increase access to Broadband might include offering discounted Broadband subscriptions or discounted devices; bad actors might take advantage of publicity around efforts to expand Broadband to offer fake services and steal personal information. Digital Literacy training for aging populations that focuses on online safety and marketing efforts that direct all South Carolinians to trustworthy sources of information about getting Broadband services and devices could help prevent aging individuals from falling prey to online scams.



3.2.1.3 Racial/ethnic minorities

Individuals who are members of a racial or ethnic minority comprise the largest Covered Population in South Carolina with 1,873,798 individuals in 2021 making up 37% of the total population. The largest ethnic groups within this population were Black or African American (25% of South Carolina's population), Hispanic or Latino (6.3%), two or more races (3.9%), Asian (1.6%), some other race (0.4%), and American Indian (0.2%). The largest number of racial/ethnic minorities (in descending order) lived in Richland County (244,174 individuals), Greenville County (169,865), Charleston County (142,108), Spartanburg County (105,873) and York County (85,362). The highest concentration of racial/ethnic minorities (in descending order) lived in Allendale County (78% of residents), Lee County (68%), Williamsburg County (68%), Orangeburg County (67%), and Bamberg County (64%).

Members of racial/ethnic minority groups in South Carolina account for the largest number of individuals in a Covered Population with no fixed Broadband subscription. In 2021, 742,783 individuals (40% of the population) who were members of a racial/ethnic minority lacked a fixed Broadband subscription. They also composed the largest number of individuals without a desktop or laptop (632,912 individuals and 34% of the population). Notably, there is significant intersectionality between racial or ethnic minorities and other Covered Populations. For example, in 2021, 23% of racial or ethnic minorities fell below 100% of the federal poverty level compared to only 10% of the white population. Rural counties in South Carolina also tend to have a higher share of racial or ethnic minority residents than urban counties.

Generally, racial or ethnic minorities face similar barriers to other South Carolinians, notably access and affordability challenges. In addition to these barriers, individuals who are members of an ethnic or racial minority group may also face cultural barriers that prevent them from accessing resources related to Broadband. Many stakeholders expressed skepticism that Digital Equity efforts, even though they are specifically targeted to reach unserved and underserved populations, would reach racial or ethnic minorities with the greatest needs. Lack of trust in many minority communities was raised as a major concern that could prevent successful implementation of Digital Equity initiatives. Some stakeholders felt that they had seen promises made in the past to provide resources or improve their economic outcomes, only to see those efforts fail or never occur at all.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying covered populations the DOD is ensuring racial and ethnic minorities can afford a Broadband internet subscription. Devices can be made readily available through the computer recycling network the DOD will establish with their partners. The DOD also plans to work with other agencies, non-profit partners, and community leaders to promote digital literacy and cybersecurity to increase confidence in Broadband within this Covered Population.

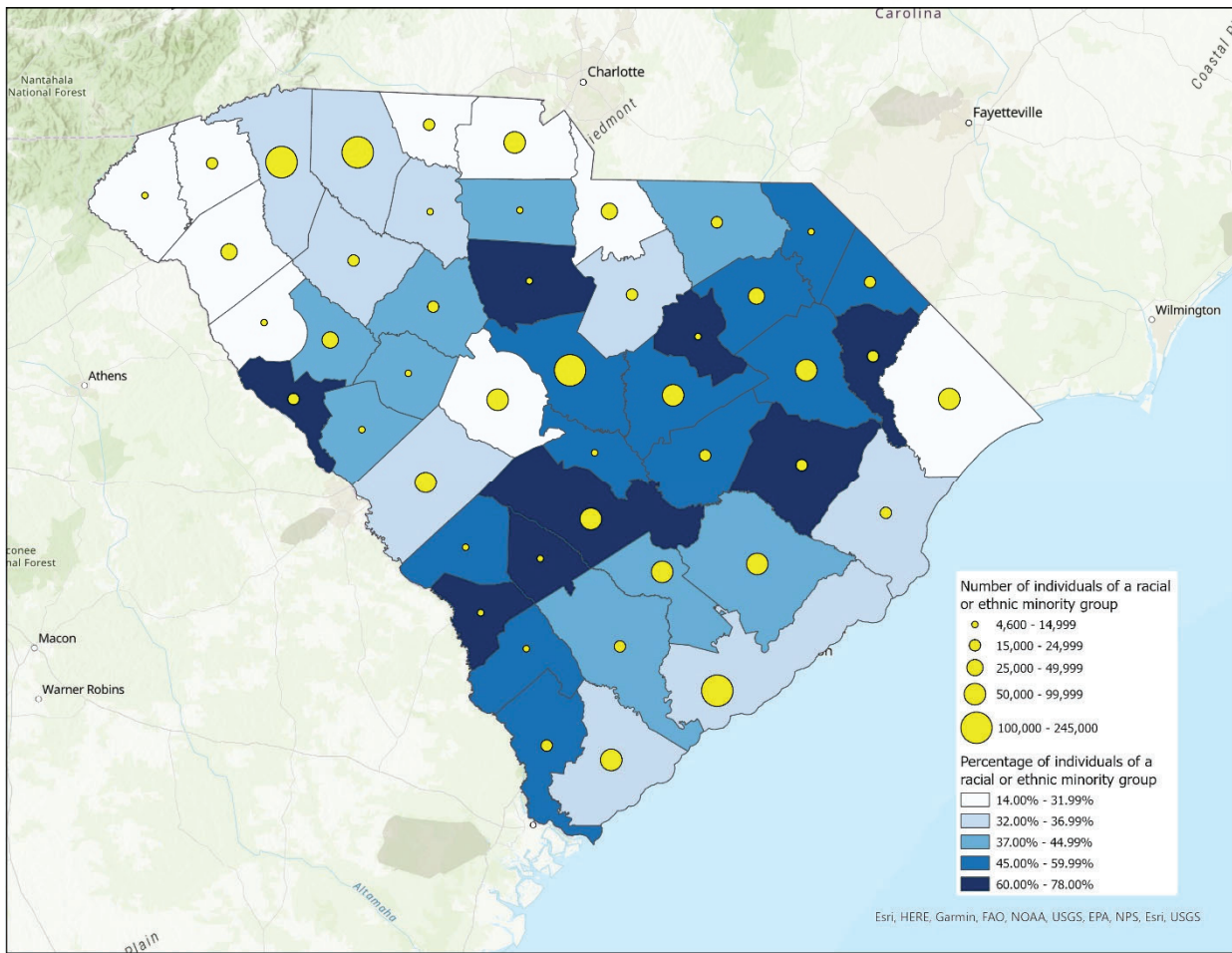


Figure 7. Number of racial/ethnic minority individuals by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

- Total population (2021): 1,872,798
- Population with no fixed Broadband (2021): 742,783
- Share with no fixed Broadband (2021): 40% (
- Population with no desktop or laptop (2021): 632,912
- Share with no desktop or laptop (2021): 34%

Source: GetConnectedSC Survey

- Familiarity with ACP (2023): 26%
- Top reasons for no internet (2023):
 1. The cost is too high: 61%
 2. There is no ISP serving my home’s location: 36%
 3. We access internet outside the home: 16%

Top barriers to Digital Equity

Access is a challenge for racial or ethnic minorities but probably not the greatest barrier.

Individuals who are members of a racial or ethnic minority have a lower share of fixed Broadband subscription, 7% less than the total population. However, members of racial or ethnic minority groups who



responded to the Better-Internet Survey indicated at a lower rate (36%) that there is no ISP serving their home than the overall respondent rate (42%). This is still a high percentage of respondents that face access as a major barrier and consistent with stakeholder perspectives shared during direct engagement; it likely relates to the fact that cost was a greater concern for many members of this Covered Population.

In the Better Internet survey responses, many individuals who are members of an ethnic or racial minority group said one of their primary reasons for having no internet is that they could access it outside of the home; this implies it is cheaper and easier to go to another location, like a library or school, to access Broadband and devices than it is to procure devices and Broadband service at home.

Individuals who are members of an ethnic or racial minority group have less access to digital devices.

In 2021, 34% of individuals who are members of an ethnic or racial minority group in South Carolina reported having no desktop or laptop compared with 26% for the total population. As discussed in previous sections, while a smartphone might be able to accomplish some online tasks, not having a desktop or laptop or even a tablet can be a serious setback when it comes to accessing Broadband. Many activities related to education, employment, benefits, telehealth and more can be completed on a device, but are much easier to complete with a desktop or laptop. Lacking these devices is another setback that makes accessing Broadband even more challenging.

Individuals who are members of an ethnic or racial minority group struggle with affording Broadband services.

This Covered Population, like the total population, listed the cost of internet being too high as their number one reason to not have internet, but they did so more often than the total population. Sixty-one percent of individuals who are members of an ethnic or racial minority group gave cost as their number one reason compared with 57% of the total population. This Covered Population is also not quite as familiar with ACP as the total population, but only by 1% less. Even if familiarity with ACP is on par with the total population, there was still only 26% of survey respondents from this Covered Populations that were familiar with ACP, thus suggesting there are opportunities to better market ACP to the 74% of individuals who are members of an ethnic or racial minority group that are unfamiliar.

Individuals who are members of an ethnic or racial minority group appear more likely to live in a location that is not served by an ISP.

Like the total population, the second-most listed reason for having no internet is that there is not an ISP that serves that location. Many stakeholders at roadshow events told stories about their experience trying to connect their home to broadband only to be told they could not be served because of infrastructure costs or lack of demand. Individuals who are members of an ethnic or racial minority group also make up a significant portion of South Carolina's population, so there could be overlap among this Covered Population and those who live in rural areas, where there tends to be less access.

Many racial or ethnic minority stakeholders who live in urban areas noted that no ISPs offer Broadband service in their locations, despite those locations being marked as served in official broadband maps. This situation will require further research to better understand these dynamics, as there may be pockets of unserved locations in urban areas, lack of service in multi-family housing units, or poor awareness of available options in these areas. All were noted concerns raised during the planning process.

“How can we through broadband and digital equity make sure it gets to the communities that need it the most?” - Interviewee

Individuals who are members of an ethnic or racial minority group are skeptical that efforts to expand Broadband access will reach them and are hesitant to trust resources or programs that might increase access to Broadband.

A frequent concern among stakeholders, especially at roadshow events, was that efforts to connect unserved and underserved populations would not actually reach their target audience. Many stakeholders felt like they



had heard government entities promise assistance or support in the past only to never see these efforts come to fruition or benefit them in a noticeable way. There was skepticism that ISPs would be willing to expand networks or use funding to lower prices for their customers. Individuals who are members of an ethnic or racial minority group already face many barriers to accessing Broadband, and it is important to recognize there is also a cultural barrier to address when seeking to expand access. It will be important for this Covered Population to see that BEAD and Digital Equity efforts can positively impact them. Many nonprofits and other organizations that had led efforts to expand Broadband or increase access to digital devices stressed the importance of engaging a local community anchor, either an institution or individual that was trusted by the community, who could champion the nonprofit's efforts. Having an ally in the community can improve the efficacy of efforts to expand broadband access.

“Unfortunately, many people don’t understand [technology]. So much deception. People are concerned with ‘stealing my data’ and there is a lot of education we need to do. People who are marginalized need protection.” – Interviewee

3.2.1.4 Rural residents

Many residents of South Carolina live in rural areas, and although that population is increasing, urban populations are growing more rapidly, which is leading to rural residents comprising a smaller share than in the past. According to the U.S. Census Decennial Census, in 2020, 1,640,556 residents of South Carolina lived in rural locations, composing 32% of the total population. From 2010 to 2020, the number of rural residents of South Carolina increased by 83,000, representing a 5% total growth. Over the same time period, the urban population of South Carolina increased by 410,060 residents, representing 13% growth.

In 2020, the counties with the most rural residents were Spartanburg County (96,809 rural residents), Horry County (85,735), Anderson County (84,862), Lexington County (73,952) and York County (63,938). The counties with the highest share of rural residents were Barnwell County (100% of residents), Hampton County (100%), Lee County (100%), Calhoun County (100%), and Bamberg County (100%).

Although specific Digital Equity data for rural residents is difficult to find, in the 18 counties that had over 50% of their residents living in rural areas in 2020 (rural counties), 50% of households did not have a fixed Broadband subscription in 2021. This is compared with only 29% of households in counties that had less than 50% of their residents living in rural areas in 2010 (urban counties). This matches with stakeholder perspectives and anecdotal observations that Broadband adoption, primarily due to limited access to services, is significantly lower in rural areas. Nonetheless, residents lacking fixed Broadband service in rural counties only composed 28% of all South Carolinians lacking fixed Broadband subscriptions. This shows that although access to service is a greater challenge for a larger share of population in rural areas, the volume of households in need is greater in urban areas.

Using a similar methodology, we estimate that 138,932 (37%) households in majority rural counties lack a desktop or laptop computer compared with 371,303 (23%) households in majority urban counties. The lack of devices in rural areas directly correlates to lack of access to Broadband service.

Overall, rural residents are more likely to have lower access to Broadband service. They also frequently face greater geographic distance from many assets, including libraries and schools, which is compounded by limited public transportation options in rural areas.

The DOD works closely with the SCBBO to ensure access to Broadband is statewide. The BBAC will work to encourage community involvement and accountability with the ISPs. In addition, the DOD will work closely with ISPs to communicate to potential clients when access becomes available.

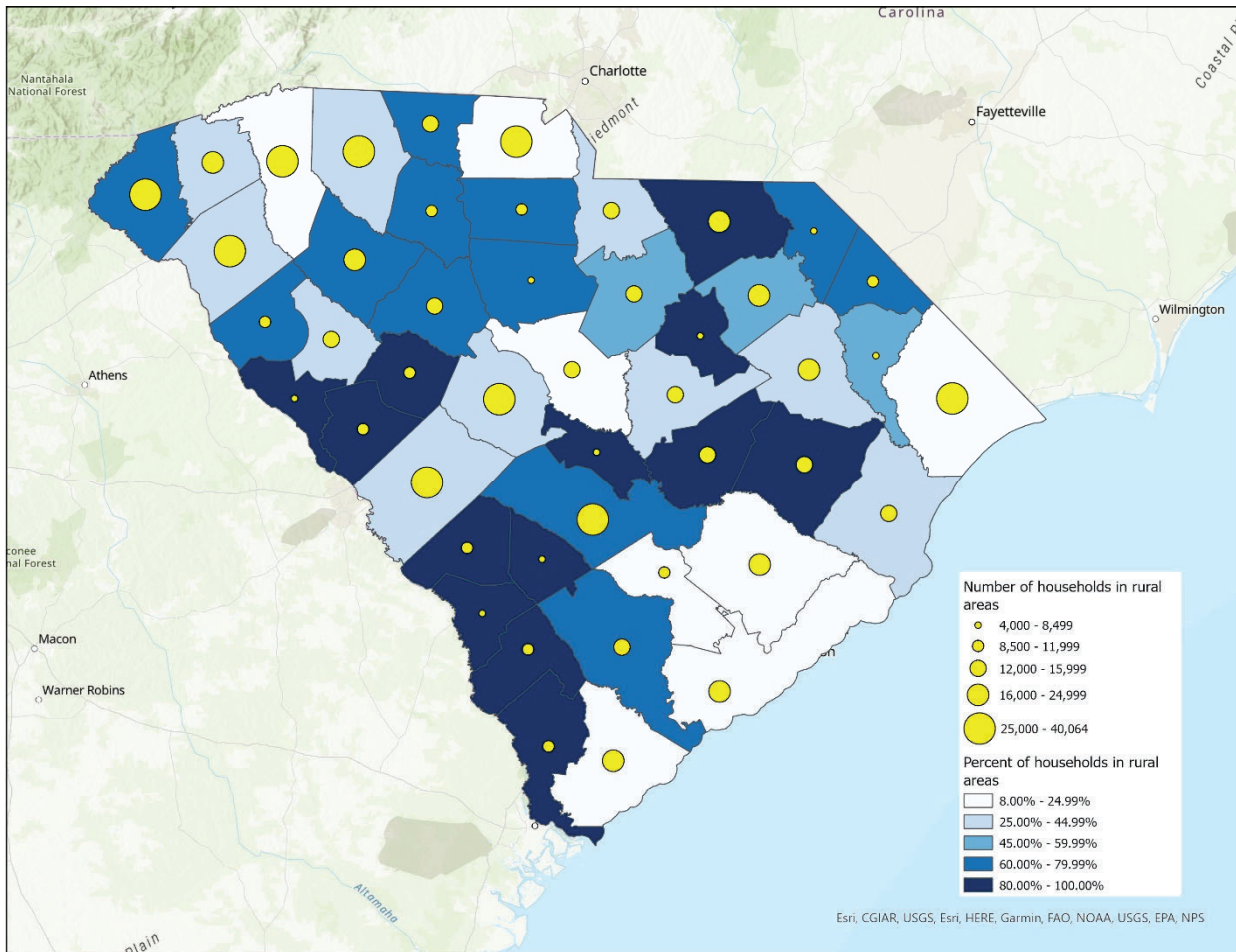


Figure 8. Number of rural residents by county, 2010 / Source: US Decennial Census.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

- Total population (2020): 1,640,556
- Households with no fixed Broadband (2021): 184,209 (estimate for majority rural counties)
- Share with no fixed Broadband (2021): 50%
- Households with no desktop or laptop (2021): 138,931 (estimate for majority rural counties)
- Share with no desktop or laptop (2021): 37%

Source: GetConnectedSC Survey

- Familiarity with ACP (2023): 26%
- Top reasons for no internet (2023):
 1. The cost is too high: 50%
 2. There is no ISP serving my home’s location: 46%
 3. We access internet outside the home: 19%

Top barriers to Digital Equity

Individuals living in rural areas appear to have less access to Broadband than those living in urban areas.

Those living in rural areas reported higher rates of no home internet use in their household (22.3%) compared with those living in urban areas (17.5%). Rates for urban areas are about 1% higher than the US average, while rural area rates of no home internet use by anyone in the household is 4% higher than average.



Interviewer: “We have heard that people living in rural areas don't want internet, they want to stay truly rural, in your experience do you find this statement true or false?”

Interviewee: “False - research shows that people want internet; it's just not there. Do people live in food deserts because they want to?”

Rural areas often lack the infrastructure to connect to Broadband; their home/business/property is not connected to a network.

In rural areas without existing connections to internet or Wi-Fi, technologies that are supposed to mitigate a lack of access, such as hotspots or MiFi devices, do not always work. There is demand for these access points, but stakeholders often reported that it is not profitable for ISPs to serve rural areas. To serve rural households, ISPs build new or expand existing infrastructure, but usually to only reach a few customers. As a result, ISPs often say they cannot justify the expense to serve an area with such a small customer base. These differences in the cost of serving a rural versus urban area often lead to less service in rural areas. This situation is currently creating a patchwork of service across the state with stakeholders reporting that it is not just that an ISP is serving one city and not another, but that ISPs will sometimes serve one neighborhood and not others, or even one side of the street and not the other. Rural stakeholders also felt that this lack of investment communicated to them that ISPs do not think they matter. One stakeholder reported that an ISP served one neighboring county, skipped over their rural county, and then served the more populous county on the opposite side, so their county doesn't have internet but neighboring counties do.

“To be able to live in a small town but have broadband and access to the greater world is what people want.” – Interviewee

Businesses in rural areas reported challenges connecting to the internet that were not as prevalent in urban areas.

Business in rural areas have a harder time connecting to the internet for various reasons, such as services being more expensive; they do not have good options from ISPs; and many reported unreliable connections. The lack of Broadband connections in rural areas places rural business owners at a disadvantage. This led many stakeholders to express frustration with ISPs because many individuals felt that rural customers have higher costs for services, receive poor customer service, experience unreliable connections, and that ISPs do not properly address their concerns and do not conduct timely repairs.

Rural areas are frustrated with their lack of access because they do not feel they should have fewer opportunities than individuals in urban areas just because of where they live.

Homeowners and property owners express frustration because of lack of access to adequate Broadband. Examples given were that homeowners cannot use smart devices, like home security systems or thermostats; they have more trouble connecting with others socially online, like attending a virtual religious service; have more trouble conducting telehealth visits; and more. This idea that rural areas will fall behind economically because of a lack of access also often came up regarding kids and education. Stakeholders felt that kids in rural areas might fall behind when it comes to education, career training, and job opportunities because many of these opportunities can be or are designed to be pursued online; without adequate access, adolescents in rural areas will not be able to get the education or career opportunities that adolescents in urban areas can.

“Part of what we do is equal access to information. That is super important to us so students in rural communities have access to the same information.” - Interviewee

Some small rural areas are afraid they will be left out of this initiative, even though funding is meant for unserved and underserved areas, which includes many rural areas. Many stakeholders felt that some promises made in the past about new economic opportunities or services were not kept. Stakeholders expressed concern that funding will not actually go to unserved and underserved rural communities.



"[My internet service provider] does not care about rural areas as much as they care about the denser, urban areas" – Roadshow attendee

Inadequate internet access can stymie the efforts of organizations trying to provide social or nonprofit services, especially in rural areas.

This idea was often mentioned by stakeholders in reference to digital or technology nonprofits, schools, and libraries. For example, a digital literacy nonprofit could be in a rural area seeking to teach Digital Literacy skills to residents, but if the organization cannot get on the internet, it cannot help others. As another example, a school that has implemented a 1-1 digital device policy might not see the positive outcomes they were hoping for because students cannot use the devices at home due to a lack of internet access.

3.2.1.5 Veterans

In 2021, 426,183 residents of South Carolina were veterans, making up 9% of the state's civilian adult population. Veterans are located across the state but tend to exist in higher numbers and concentrations in or near larger urban areas. In descending order, the counties with the largest number of veterans are Richland County (30,214 veterans), Greenville County (29,288), Horry County (28,320), Charleston County (28,273) and Lexington County (21,350). The counties with the highest concentration of veterans are Berkeley County (13% veteran share of the civilian adult population), Dorchester County (13%), Sumter County (13%), Beaufort County (12%), and Kershaw County (11%).

Among veterans in South Carolina, 90% are male, and 10% are female. Nearly half (48%) of veterans in South Carolina are over 65 years old, and a majority (72%) are white. South Carolina veterans have a median income of \$44,132 compared with \$30,086 for non-veterans. Veterans overall are more likely to be employed, less likely to be in poverty, and slightly better educated than the overall population. A higher percentage of veterans have a disability (30%) than non-veterans (16%).

Among Covered Populations, veterans appear to have the highest Broadband adoption rates and even perform better than the overall population of South Carolina. In 2021, only 31% of veterans lacked a fixed Broadband subscription, compared with 33% of the overall population, and only 21% of veterans lacked a desktop or laptop computer, compared with 26% overall. Similarly, in the Better Internet survey, only 8% of veteran respondents reported having no internet, compared with 25% of all responses. Although veterans appear to have fewer challenges when it comes to access and affording Broadband, there are still opportunities to provide greater connectivity and digital skill sets to veterans.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying covered populations the DOD is ensuring aging veterans with fixed income can afford a Broadband internet subscription. Devices can be made readily available through the computer recycling network the DOD will establish with their partners. The DOD also plans to work with other agencies, including the Department of Veterans Affairs, and non-profit partners to promote digital literacy and cybersecurity to increase confidence in Broadband within this covered population.

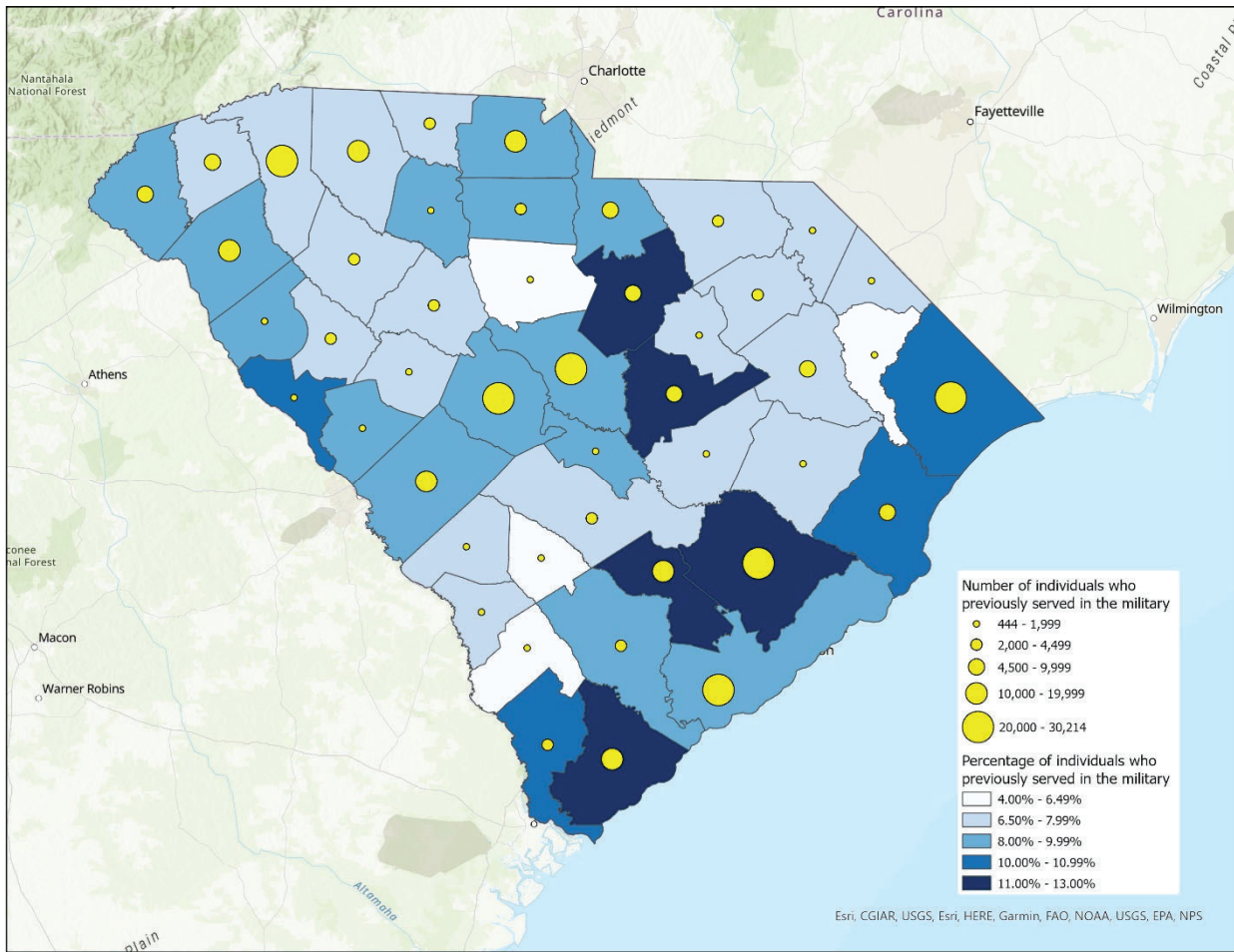


Figure 9. Number of veterans by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

- Total population (2021): 426,183
- Population with no fixed Broadband (2021): 131,238
- Share with no fixed Broadband (2021): 31%
- Population with no desktop or laptop (2021): 91,192
- Share with no desktop or laptop (2021): 21%

Source: GetConnectedSC Survey

- Familiarity with ACP (2023): 25%
- Top reasons for no internet (2023):
 1. The cost is too high: 61%
 2. There is no ISP serving my home’s location: 44%
 3. We access internet outside the home: 18%

Top barriers to Digital Equity

Veterans appear to have more issues with Broadband affordability Compared with the total population.

According to Better Internet resident survey, veterans face the same challenges as the overall population when it comes to being unable to access the internet but at higher rates. For both veterans and the overall



population, the number one reason for having no internet was that the cost is too high, but veterans reported that this was more of an issue, with 61% saying prices are too high compared with 57% of the total population. In addition to more affordability challenges, veterans were also less familiar with the ACP. Although in other metrics veterans generally perform well when it comes to Broadband and digital device access, higher rates of affordability issues and unfamiliarity with resources could mean veterans face additional cost barriers when trying to access Broadband.

“For large portions of the state, I may have iPhone or internet, but I don't have the money for the particular plan that's going to connect me to the internet in a meaningful way.” - Interviewee

Veterans have less access to an ISP's service at home compared with the total population.

Again, veterans noted the same reasons as the total population for having no internet but reported higher rates of not having internet because there is no ISP serving their home. The reasons for this disparity are unclear, but it further demonstrates that an inability to access an ISP's services is a major barrier for veterans.

Veterans with digital skills could boost the State's efforts to become a hub for cybersecurity businesses, but veterans often lack knowledge of this industry and how to pursue careers in this field.

Stakeholders from the Department of Veterans Affairs reported that they are interested in pursuing opportunities to grow the cybersecurity industry in South Carolina and that veterans are often great candidates for careers in cybersecurity. However, this is still a growing industry, and there is not enough alignment between industry, the military, and training providers to grow this industry in a way that could benefit veterans. Stakeholders felt that as veterans transition to civilian life, a job in cybersecurity could align with skills from the military, although it might need to be supplemented with additional training. Enhancing collaboration in the pursuit of opportunities within the cybersecurity sector while offering employment opportunities to veterans could potentially serve as a means to diversify the state's economy. Moreover, it could establish additional avenues for military veterans transitioning to civilian life and foster the development of advanced, high-skilled job opportunities within South Carolina.

“People that don't have access to internet, they don't have access to jobs - no newspaper listing, no phone number to call - no internet = no access to jobs.” – Interviewee

3.2.1.6 Individuals with disabilities

In 2021, there were 744,489 individuals with disabilities in South Carolina, comprising 15% of the state's population. In descending order, the largest number of individuals with disabilities reside in Greenville County (62,808 individuals), Horry County (59,951), Richland County (54,660), Spartanburg County (47,938) and Charleston County (40,091). The counties with the highest concentration of individuals with disabilities are Allendale County (27% of residents), Barnwell County (23%), Union County (22%), Clarendon County (22%), and Marlboro County (22%).

Among individuals with a disability, 51% are female and 49% are male. Members of a racial/ethnic minority group compose 35% of individuals with a disability. The largest share of individuals with a disability are over 65 years old (43%), followed by 35 to 64 years old (40%). Only 7% of individuals with a disability are under 18 years old.

The most common disabilities among South Carolinians are ambulatory difficulty (52% of individuals with a disability), cognitive difficulty (36%), independent-living difficulty (34%), hearing difficulty (27%), vision difficulty (21%) and self-care difficulty (19%).

Individuals with disabilities have much lower rates of Broadband adoption than the overall population. In



2021, 43% of individuals with a disability lacked a fixed Broadband subscription, and 37% lacked a desktop or laptop computer. This Covered Population faces similar challenges in accessing and affording service as other South Carolinians, but these challenges can cause greater impact on individuals with disabilities who may prefer remote job opportunities due to mobility restrictions and may require more frequent access to telehealth and other online services and resources.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying covered populations the DOD is ensuring individuals with a disability fixed can afford a Broadband internet subscription. Devices can be made readily available through the computer recycling network the DOD will establish with their partners. The DOD also plans to work with other agencies and non-profit partners to promote digital literacy and cybersecurity education locally, including within the home, to increase confidence in Broadband within this Covered Population.

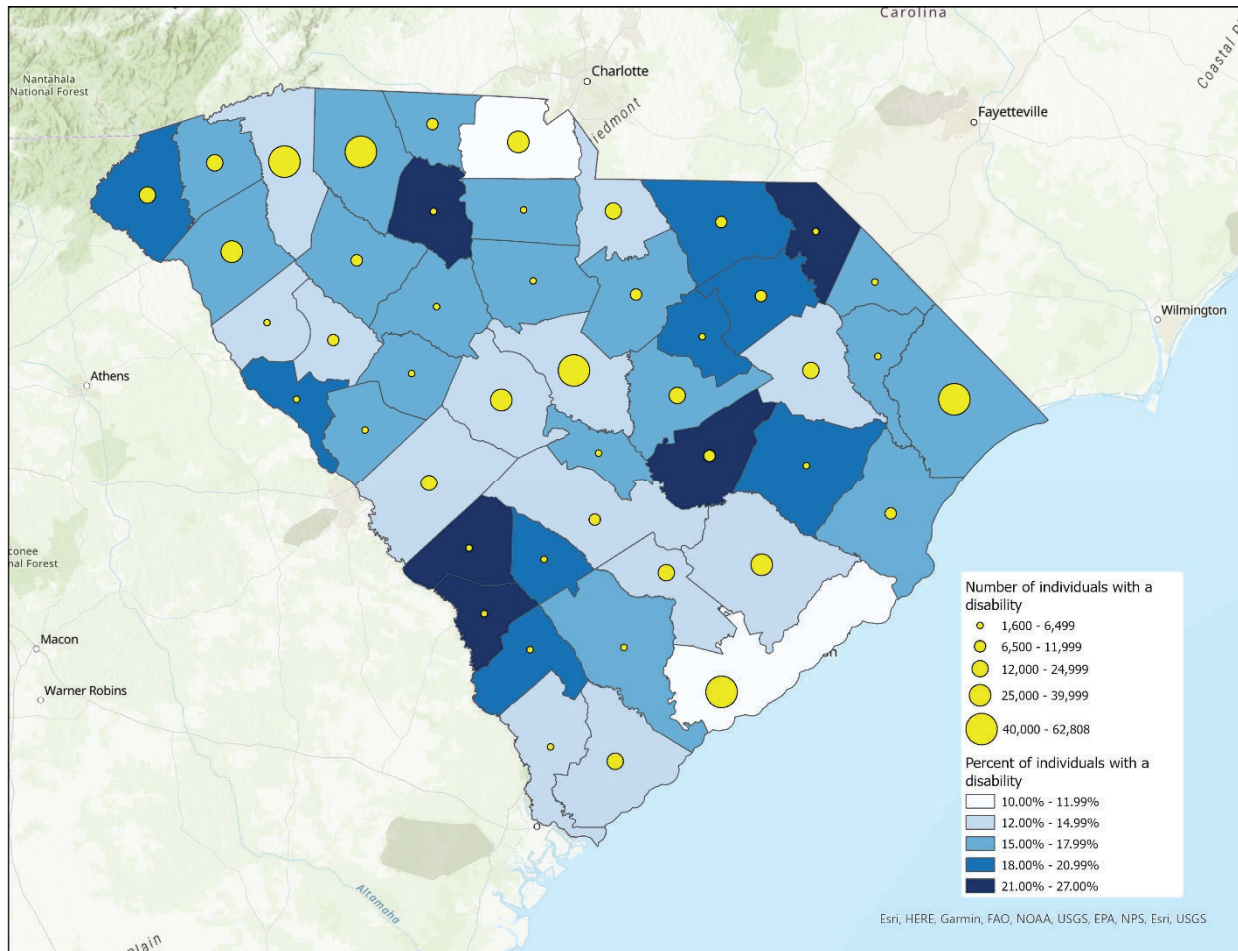


Figure 10. Number of individuals with a disability by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

Total population (2021): 744,489

Population with no fixed Broadband (2021): 319,192

Share with no fixed Broadband (2021): 43%

Population with no desktop or laptop (2021): 277,530

Share with no desktop or laptop (2021): 37%



Source: GetConnectedSC Survey

Familiarity with ACP (2023): 32%

Top reasons for no internet (2023):

1. The cost is too high: 62%
2. There is no ISP serving my home's location: 37%
3. We access internet outside the home: 18%

Top barriers to Digital Equity

Individuals with disabilities have less access to Broadband than the total population.

Individuals with disabilities could benefit from telehealth but have less access than the overall population. Not all healthcare services are available across the state; for example, one stakeholder mentioned that 14 counties in South Carolina do not have an OB/GYN office and several counties do not even have a hospital. [The Kaiser Family Foundation](#) also reports that there are 102 Health Professional Shortage Areas (HPSA) in the state, totaling a combined population of almost 2 million, demonstrating the challenges all residents — especially those with disabilities — face in accessing primary healthcare. Telehealth could enable individuals with disabilities to speak to medical professionals or specialists that might not be in their community or within easy driving distance, thus allowing them to access the care they need with significantly less effort.

Individuals with disabilities may face additional barriers to complete everyday tasks that could be mitigated with Broadband and digital device use; however, since they lack access, certain activities that could have been made easier may be impossible. In our Better Internet survey, those with disabilities also said that one of their primary reasons for not having internet at home was that they access it elsewhere; this practice indicates it might be easier or cheaper for those with disabilities to leave their home to access the internet, rather than being able to access and afford Broadband at home.

“Technology is not a luxury. It’s a survival instrument now. People need it for basic survival.” – Interviewee

Websites are not always accessible, and individuals with disabilities might need accommodations to properly access and utilize the internet, but this can mean more expensive software or equipment that makes it even more challenging to access Broadband.

Individuals with disabilities might need certain software or equipment to access and utilize the internet. Accommodations can include software that reads onscreen text out loud, making sure that videos have captions for those that are hard of hearing, and enabling both mouse and keyboard navigation for those with mobility challenges. Stakeholders from all backgrounds pointed out that many essential functions — like filing taxes, applying for jobs, enrolling in school, and accessing government benefits — are all online now. Individuals with disabilities could face additional barriers in accessing these important services if they cannot properly access and utilize the internet. Unfortunately, if a website or device is not already built to be accessible, the responsibility to make it accessible — by purchasing certain software or equipment to access Broadband — can fall on the individual with a disability. Without universally accessible websites or accessible and affordable accommodations, individuals with disabilities will face additional barriers to accessing Broadband. A primary reason that individuals with disabilities gave for not having internet was that they access internet outside the home, and the need for accommodations could contribute to this reasoning.

The State of South Carolina does have an Equipment Distribution Program (SCEDP), which is administered by the Office of Regulatory Staff (ORS) and is funded from the Dual-Party Relay Fund. Its focus is to serve South Carolina residents who have trouble hearing or speaking on the phone. The equipment available through the program includes specialized phones, cell phone accessories, alerting devices and a tablet. People who qualify for the program are provided equipment at no cost to use for as long as they remain in the state. To qualify for the program, you must be a permanent resident of South Carolina, have phone service, and have trouble hearing



or speaking over the phone. While the program does offer a tablet at no charge to citizens that qualify, it's focus is primarily geared toward assisting with telephonic communications and not accessibility for individuals with disabilities to access the Internet.

Individuals with disabilities struggle to afford Broadband.

Like all Covered Populations and the total South Carolina population, the primary reason that individuals with disabilities gave for having no internet is that the cost is too high. Individuals with disabilities gave this as their number one reason more often than the total South Carolina population, with 62% of individuals with disabilities listing cost as their primary reason for no internet compared with 57% of the total population. Despite this challenge, it appears that individuals with disabilities tend to be more aware of the ACP than the total South Carolina population by 5%. Nonetheless, with only 32% of individuals with disabilities that were familiar, there is a significant portion of the population that might struggle to afford broadband and be unaware of resources that could help them pay for Broadband. Affordability as a barrier could also contribute to other barriers for individual with disabilities, like lower rates of device ownership and the need for accommodations.

“If we truly want us to have meaningful access, we are going to have to find a way to make it affordable for everyone.” – Interviewee

Individuals with disabilities have lower rates of digital device ownership than the total population.

Not having a digital device such as a desktop, laptop, or tablet is a barrier to accessing Broadband. While some Broadband-related activities can be completed on a smartphone, there are many tasks that are much more difficult to complete on a smartphone because it involves writing a lot of text or moving files. If an individual lacks a digital device, — which was listed as a primary reason for individuals with disabilities not having internet —it means this population might access internet outside of their home, such as a library, where there might be a digital device, strong Broadband connections, and possibly accommodations or support from other individuals. While it could be considered a good sign that individuals with disabilities appear to be able to access Broadband and digital devices even if they don't have it at home, accessing Broadband outside the home can lead to additional travel or cost barriers that could be challenging for individuals with disabilities.

Individuals with disabilities may lack the resources and Digital Literacy to engage with healthcare online, which has already been described by many stakeholders as a difficult system to navigate.

Many stakeholders in the healthcare field pointed out that while telehealth offers a great many benefits, due to the private nature of the information being discussed on the call there are often greater security measures that can add steps and confusion to the process. Considering that individuals with disabilities tend to lack access at home more than the total population, they might be accessing their telehealth visit on a phone instead of a desktop or laptop, or they might need to visit a public place, like a library, to have a personal conversation with their healthcare provider. We also asked healthcare professionals if they were aware of resources that any patient could use to better understand and navigate their telehealth services, and many said “no.”

“[Telehealth] ups the stakes on digital literacy, healthcare doesn't have great strengths in user design and there's a lot of quality improvement efforts, regulatory compliance with billing, etc. So it's understandable that's it's frustrating; it can get so annoying people will give up.” – Interviewee

3.2.1.7 Individuals with a language barrier

Individuals with a language barrier, measured as those who speak English less than very well, are the smallest Covered Population in South Carolina. There are 134,020 individuals with a language barrier in the state, comprising 3% of the total population. The largest number and share of individuals with a language barrier appear to be in and near larger urban areas within South Carolina. The counties with the largest number of individuals with a language barrier (in descending order) are Greenville County (23,387 individuals),



Spartanburg County (12,841), Charleston County (11,772), Richland County (10,142), and Horry County (8,904). The counties with the highest concentration of individuals with a language barrier are Saluda County (6% of residents), Greenville County (5%), Jasper County (5%), Beaufort County (5%), and Newberry County (5%).

Based on available data, it appears that individuals with a language barrier, although the smallest Covered Population, have the second-lowest rate of Broadband adoption. In 2021, 44% of individuals with a language barrier lacked a fixed Broadband connection, and 40% lacked a desktop or laptop computer.

Unlike other Covered Populations, major barriers for this population are the language barrier itself and concerns around their immigration status. Some stakeholders were even hesitant to talk to representatives from our team at an event because they felt that providing any personal information to a government entity could lead to trouble, even if they were documented. In responses to the Better Internet survey, 22% of individuals with a language barrier reported that they couldn't get internet service due to lack of an ID, bank account, or credit history, compared with 7% of all respondents.

In addition to struggling to access and afford Broadband, this Covered Population also might be more hesitant than any other to access resources, like the ACP, that could help them access Broadband. According to the Better Internet survey, only 18% of individuals with a language barrier were familiar with ACP, compared with 27% of all respondents. This may partially be a result of a majority of ACP marketing efforts occurring in English.

The DOD has identified one particular barrier to adoption impacting all covered populations that was not addressed through surveys or listening sessions, which is poor reading and writing proficiency among adult populations. Low literacy has a direct correlation with health, economic, and educational outcomes. For example, in counties where at least a quarter of the population have below basic literacy levels, data suggests higher levels of unemployment, spikes in poverty, and less access to healthcare are prevalent which is coupled with an overall lower median household income, and fewer adults obtaining a high school degree.

According to the [Barbara Bush Foundation for Family Literacy](#); a non-profit organization focused on improving lives through literacy indicates 22.4% of adults in South Carolina have low literacy which ranks the State 38th overall in the nation. Below basic literacy is defined as a scoring level 1 or below on the Program for the [International Assessment of Adult Competencies \(PIAAC\) International Adult Literacy Survey](#). The National Center for Education Statistics describes this level of literacy as tasks that require the respondent to read brief texts on familiar topics to locate a single piece of specific information. There is seldom any competing information in the text, and the requested information is identical in form to information in the question or directive. The respondent may be required to locate information in short continuous texts; however, in this case, the information can be located as if the text were non-continuous in format. Only basic vocabulary knowledge is required, and the reader is not required to understand the structure of sentences or paragraphs or make use of other text features. Tasks below Level 1 do not make use of any features specific to digital texts.

According to a brief published by [the Ballard Center](#), there is a level of humiliation associated with low literacy which often prevents individuals from seeking the help they need to become literate. Many hide their illiteracy from employers, spouses, and their children citing feelings of shame and inadequacy which is likely why this barrier wasn't revealed as part of the State's outreach initiative.

By prioritizing ACP enrollment and encouraging ISPs to offer low-cost subscriptions to qualifying covered populations the DOD is ensuring individuals with a language barrier can afford a Broadband internet subscription. Devices can be made readily available through the computer recycling network the DOD will establish with their partners. The DOD also plans to work with other agencies, including school districts and adult education programs, and non-profit partners to promote digital literacy and cybersecurity to increase confidence in Broadband within this covered population.

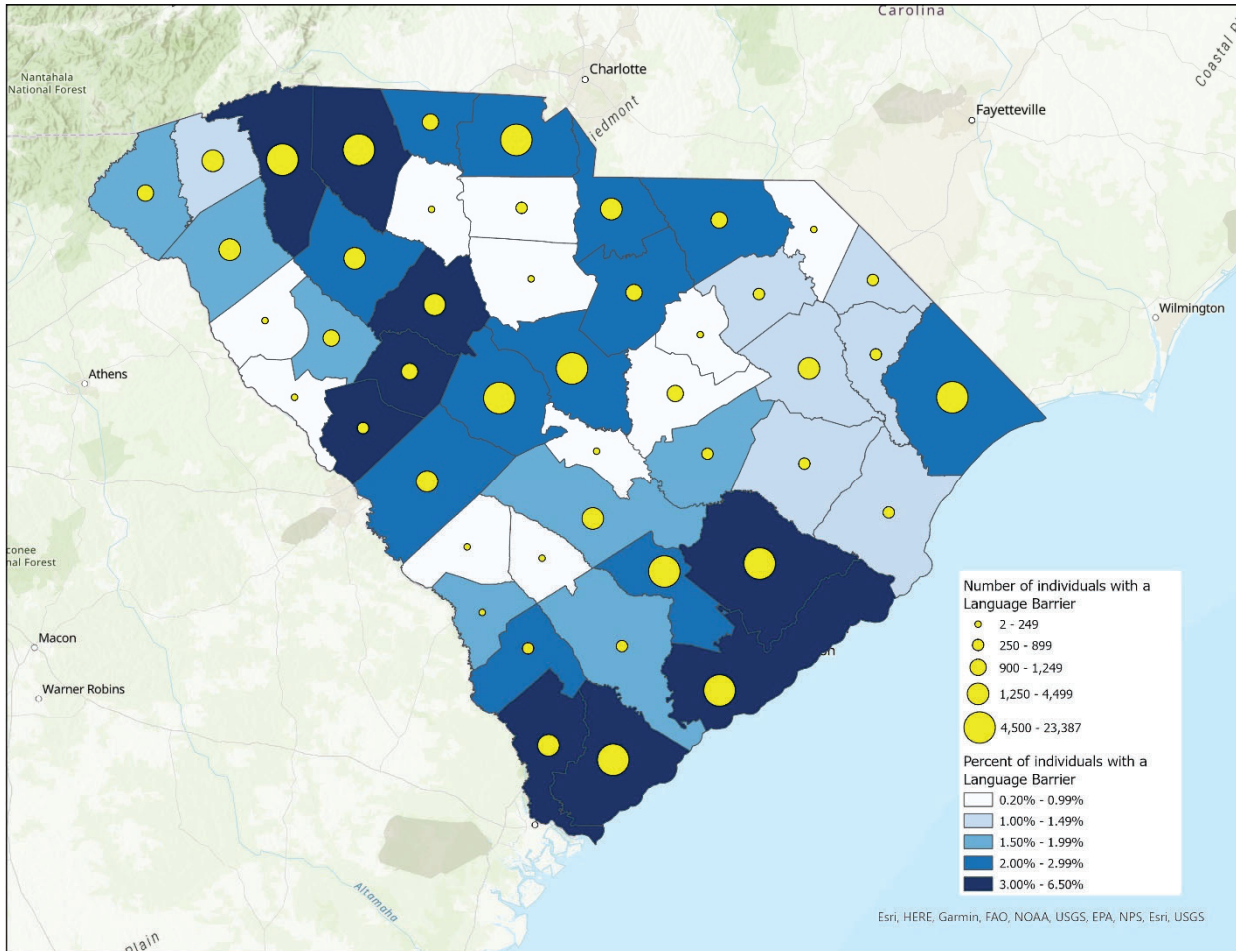


Figure 11. Number of Individuals with language barriers by county, 2021 / Source: US Census American Community Survey 5-Year Estimate.

Key statistics

Source: US Census American Community Survey 5-Year Estimates

Total population (2021): 134,020
 Population with no fixed Broadband (2021): 58,711
 Share with no fixed Broadband (2021): 44%
 Population with no desktop or laptop (2021): 53,547

Source: GetConnectedSC Survey

Share with no desktop or laptop (2021): 40%
 Familiarity with ACP (2023): 18%
 Top reasons for no internet (2023):

1. The cost is too high: 63%
2. There is no ISP serving my home's location: 36%
3. We cannot get internet service due to lack of an ID, bank account, or credit history 22%



Top barriers to Digital Equity

Individuals with a language barrier have less access to digital devices than the total population.

Forty percent of those with a language barrier also do not have access to a desktop or laptop. As mentioned in previous sections, many important services are moving online and without adequate Broadband access, including a digital device, utilizing these services can be more challenging. While many organizations, including government entities and nonprofits, try to make their services as mobile-friendly as possible, there are still challenges to depending on a smartphone for Broadband access.

“The gap gets wider every time we create something that requires internet without addressing the broadband access issue.” – Interviewee

Individuals with language barriers might not seek out or utilize resources that require personal information because of their immigration status.

Individuals with language barriers were the only Covered Population that reported that “we cannot get service due to a lack of ID, bank account or credit history” as one of their top three reasons for not having internet. This suggests that documentation status is a primary concern for this Covered Population. This group appears more hesitant than other covered populations to access internet service resources. This could also be related to this population’s lack of familiarity with the ACP, with only 18% of survey respondents saying they were aware of this program compared with 25% of overall respondents that were familiar with ACP.

“If we want help with employment services, if there is an office in (a lot of rural offices closed their offices) your county, but it’s not a place of trust. If you’re trying to apply for something and you’re an immigrant, you might be afraid that you’ll be questioned about your status.” - Interviewee

Individuals with language barriers struggle to afford internet.

Like many other Covered Populations, individuals with language barriers also list costs being too high as the number one reason they do not have internet. Like some other populations, individuals with language barriers reported this as their primary reason for having no internet more often than the total population, 63% and 57% respectively. The affordability barrier this population faces could be exacerbated by their lack of familiarity with ACP (18% of survey respondents reported being familiar with ACP, while most other covered populations had at least 20% of respondents reporting familiarity) and hesitancy to provide personal information to programs like ACP due to immigration-status fears for themselves or friends and family.

3.2.1.8 Incarcerated individuals

Detailed about incarcerated individuals, especially related to Digital Equity, is difficult to attain. As a result, the discussion in this section may appear different from others. According to the U.S. Decennial Census, in 2020 there were 31,693 adults in South Carolina correctional facilities and 1,537 in juvenile facilities. In descending order, the largest number of these incarcerated individuals were in Richland County (5,906 individuals), Marlboro County (2,619), Spartanburg County (2,086), Edgefield County (2,043) and Greenville County (1,974).

Data from the Bureau of Justice Statistics’ annual National Prisoner Statistics survey showed that from 2010 to 2019, South Carolina had an average annual prison population of 21,176 with an average of 7,068 individuals being released each year. Over the same time period, an average of 69% of the incarcerated population had less than a high school diploma, 22% held a high school diploma, and 9% had some level of college. Correctional facilities and nonprofits that serve incarcerated individuals have reported ramping up efforts to connect incarcerated individuals, like improving Broadband accessibility at correctional facilities and providing digital devices. Improved access can allow incarcerated individuals to pursue further education, like earning a GED or learning new skill sets, and staying connected with friends and family. Gaining digital skills can also help them navigate the world upon their release. Having access to Broadband and the resources it

provides can also reduce recidivism, according to stakeholders.

Through the computer recycling programs, this covered population could have increased access to devices. The DOD plans to work with Department of Corrections, local sheriffs, Pardons, Probation, and Parole, and non-profits to promote digital literacy, workforce skills, and cybersecurity education.

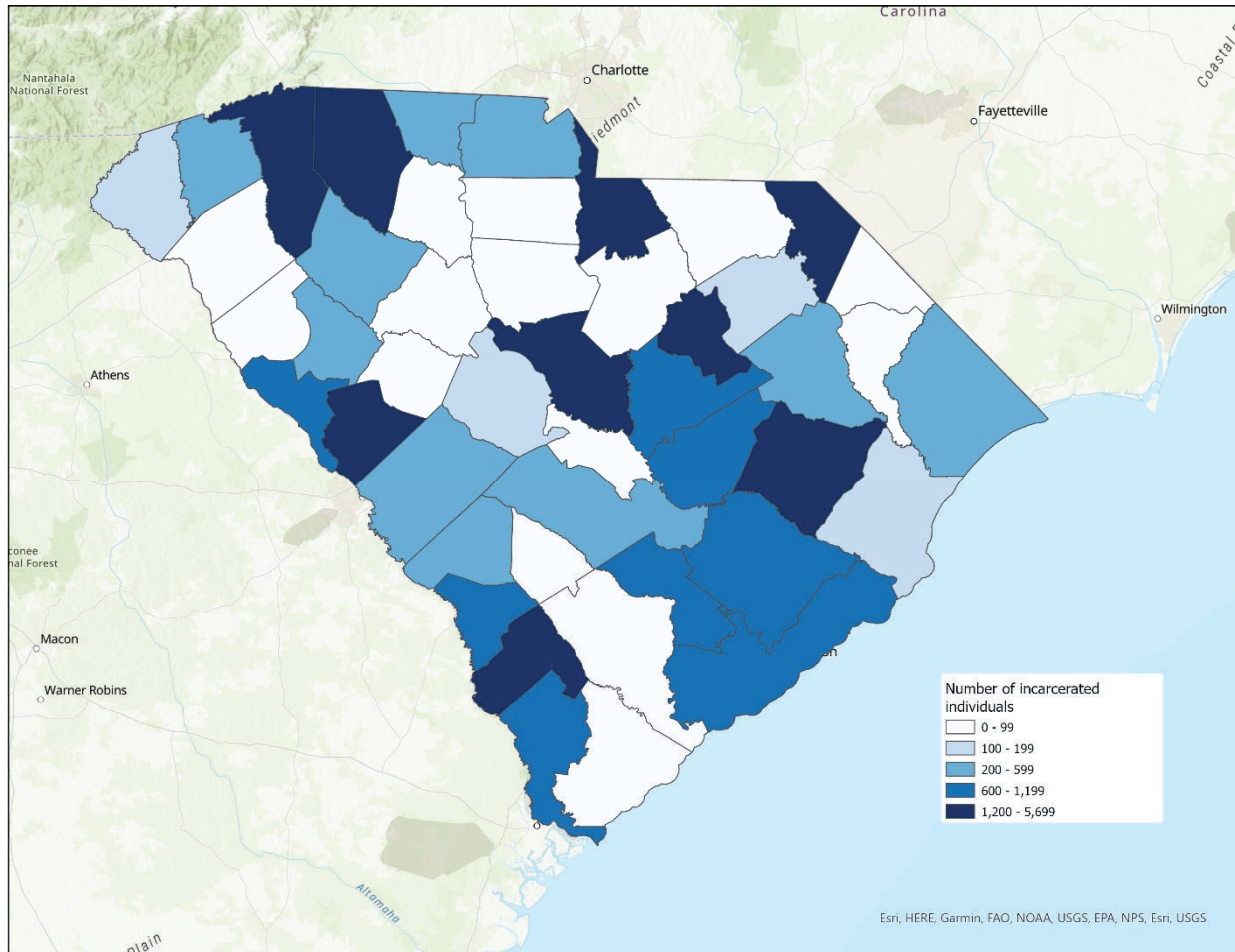


Figure 12. Number of incarcerated individuals by county, 2020 / Source: US Decennial Census.

Key statistics

Source: US Census Decennial Census

Total adult population (2020): 31,693

Total juvenile population (2020): 1,537

Source: GetConnectedSC Survey

Familiarity with ACP (2023): 32%

Top barriers to Digital Equity

Incarcerated individuals can benefit from Broadband access, but providing Broadband services in correctional facilities can be challenging.

Stakeholders reported that while all state correctional facilities have internet access, ensuring that incarcerated individuals can access the internet is more challenging. Correctional facilities are connected but have more



security concerns and special needs than a private business or other government facility. Stakeholders from these organizations reported that accessing these services can reduce recidivism rates, but that challenges in finding a provider, getting enough tablets for all inmates, and ensuring broadband connections remain private and secure is preventing them from fully deploying digital devices and internet services to incarcerated individuals. Many prisons, which are in rural areas where access is already a challenge, reported that, due to additional security concerns, Broadband can be even more expensive to deploy.

“If you don’t have access to technology in the 21st century, you’re left behind – left behind in education, left behind in workforce, left behind in healthcare.” – Interviewee

An incarcerated individual’s ability to access the internet can be dependent on location.

While all correctional facilities have Broadband access, the availability of services and devices can depend on the specific facility. Not every facility has the same level of access to resources; as described above, these resources can reduce recidivism by allowing incarcerated individuals to pursue education and job opportunities prior to being released. Incarcerated individuals might have more or less access to these resources based on their location, which is not something an individual can control.

3.2.2 Broadband Adoption

Below are summaries of key overall needs and barriers to Broadband adoption identified in South Carolina.

There are some South Carolinians that will not adopt Broadband and related technology.

Throughout stakeholder engagement, the consulting team learned that there are some individuals who do not want Broadband and are unwilling to adopt it, even if they have access and the financial resources to afford a digital device and monthly internet service subscription. Some reasons given for a refusal to adopt Broadband included that some rural residents want their community to remain truly rural and disconnected, they think Broadband will bring unwanted growth to their community, or they just do not want infrastructure construction on their property. Broadband devices can include sharing personal information, and some individuals are unwilling to engage with these resources to connect to the internet or enhance digital literacy skills because they are undocumented. Even if documentation status is not a concern for the organization providing services, it is still a barrier that prevents residents from accessing these services in the first place.

Some residents are not given the option to adopt Broadband because it is not available in their community.

A major reason for a lack of access is that the infrastructure need for Broadband access is not present. The ISPs are not often interested in building out new infrastructure, especially in rural areas, because these types of infrastructure projects are often expensive and time-consuming, including the materials, labor, and maintenance. The response from ISPs when asked about expanding Broadband into rural areas is that it is too cost-prohibitive for their business to make that investment — specifically, that it costs a lot to build Broadband infrastructure in rural communities where there are fewer customers to pay for services to offset that investment. Last-mile connections tend to be especially expensive and were often mentioned as a barrier due to the cost of buildout. Stakeholders also mentioned that the cost of materials are rising, which is another factor that is keeping ISPs from building additional infrastructure.

There is a lack of understanding of how Broadband infrastructure is installed and maintained by the public.

Most general stakeholders or residents also do not understand when, where, and why Broadband infrastructure is or is not installed and feel that ISPs are not proactively communicating with stakeholders to explain where and why investments are being made. Many stakeholders made comments as follows:

- My neighbor has access, but I do not;



- fiber was just installed one mile away, but the provider says it cannot be expanded into my neighborhood;
- I have great internet and a family member a few streets away has no access, and more.

It was also reported that ISPs will not service outdated infrastructure, so if the individual or family will not let an ISP worker on their property to update the home's Broadband infrastructure then that family or individual has no option other than to go without internet. There might be less frustration with ISPs from the public if there were a better understanding of policies, and costs associated with this type of infrastructure.

Infrastructure policy has not always kept up with Broadband technology, and outdated policies and regulation can prevent ISPs from installing Broadband (or make the installation process slower and more expensive).

Infrastructure policies or regulations can make it challenging to install or expand Broadband. Certain activities like crossing a rail line, accessing poles, boring or digging can be expensive projects that are time-consuming to approve and time-consuming to complete. Many stakeholders advocated for a “dig once” policy, which encourages utilities and ISPs to coordinate and install buried infrastructure simultaneously to save time and money, but ISPs reported that this is not fast enough for internet providers. While “dig once” is generally considered a helpful way to go about installing infrastructure, ISPs have reported that the timeline required to properly coordinate and receive approval is too long to be reasonable.

While not infrastructure policy, a related topic is inaccurate or outdated maps. Many stakeholders noted that their area is considered “served” on current maps, even though they still lack service. If there is confusion about what areas do and do not have access, this uncertainty could cause challenges in deployment as ISPs continue to build out broadband infrastructure. In addition to inaccuracies regarding service, there was also concern from stakeholders that maps either might list more service providers than the number who actually serve the area or not accurately depict current prices and services available. Stakeholders also had concerns regarding the level of detail these maps have — specifically, that maps do not get granular enough to depict accurate representations of access in urban areas. While FCC Broadband Serviceable Location data reported by ISPs and integrated into tools like the FCC's National Broadband Map has made great strides to address these issues by allowing users to search availability of broadband for their home at an address level, it still takes time for awareness of these tools and resources to be considered mainstream and available for consumers' use.

Stakeholders are unhappy with the poor customer service or poor-quality product of their ISP, which may prevent people from upgrading their services or accessing Broadband services at all.

Many stakeholders reported being unhappy with their ISP in various ways. Common frustrations were that services are expensive, or customers do not feel that the amount they are paying translates into quality of service, customer service is poor, and that repairs or expansions to service are slow. Stakeholders often seemed frustrated when they demonstrated to their provider or the ISP in their area that they wanted service and were willing to pay for it, but still did not receive access. One stakeholder was told by an ISP serving their area that it would not be building more infrastructure or increasing access because not enough people in the stakeholder's neighborhood wanted internet, which this stakeholder found hard to believe because they had spoken to neighbors about seeking Broadband services. Another stakeholder mentioned that they were so desperate to get Broadband services that they offered to dig the ditch for the infrastructure for the ISP.

Even when residents pay for Broadband services, they are not always happy with the quality of service they get. Common issues included that internet connections can be slow and/or unreliable for a variety of reasons (examples given by stakeholders included that if it rained or was too windy, that too many people in the household are using broadband, or that too many people in the neighborhood are using broadband then they would experience service quality issues). Stakeholders were frustrated with ISPs when they felt like they were paying for Broadband services that were so easily disrupted, again feeling that the price they are paying is not worth the service they are receiving. Stakeholders also have concerns about local ISPs becoming a monopoly. Many stakeholders reported that they do not have multiple or high-quality options when it comes to internet services because there is only one provider that serves their home with a wired connection, so customers have



no flexibility in terms of types of services or prices other than what is offered by ISPs. This led many stakeholders to feel backed into a corner, because they felt their only options are to buy one of their local ISP's packages at whatever price they charge or not to have internet in their home. Many stakeholders said they wanted to see more options and greater competition among ISPs to drive prices down and offer a wider variety of services. Another source of frustration with ISPs is that many do not have a physical location in the communities they serve; therefore, customers who cannot access the internet also cannot go in person to get help with issues. With no physical location in the community and no way to contact the ISP through the internet, stakeholders must call the ISPs on a cellphone or landline. Some stakeholders reported they had tried this — either to seek an ISP's help to solve a problem with their current services or to ask about expanding services to their area — and often saw poor results. One stakeholder reported that the ISP's customer service line hung up on the stakeholder caller and another reported calling their ISP every day for a month and receiving no answer.

Stakeholders expressed skepticism that ISPs will be held accountable for reaching unserved and underserved communities.

Despite making it clear that federal guidelines require that BEAD and DE funds be targeted toward unserved and underserved communities, many stakeholders were still skeptical and asked questions about accountability. Some stakeholders were already skeptical regarding accountability because communications from ISPs might show their area as served when the individual still does not have access. These negative interactions in the past have led to current trust issues with BEAD and DE planning efforts. Another concern was that ISPs will not offer reasonable prices over a long period of time. Stakeholders hoped to see prices drop when ISPs receive federal funding but were not confident that consumers would see any difference. Stakeholders wanted to be sure that ISPs will not charge affordable amounts for a certain period to fulfill funding requirements but then either increase prices again or not offer any price discounts, despite the fact they are receiving financial support from federal funding.

Without adequate Broadband access around the state, it will be more difficult to attract or retain a remote workforce.

The lack of internet connections throughout the State limits South Carolinians' ability to work from home or for businesses to attract remote workers. Some stakeholders reported that the lack of adequate internet, especially in small towns or rural areas, is leading to workers leaving these areas or South Carolina in general. One stakeholder reported that her children came into town to watch over her after a major surgery, and her children had to take shifts going to the library to do work. She liked that they had the flexibility to visit and spend time with her without disrupting their jobs, but connections in her town were so poor that it was still a challenge for her kids to meet their work needs.

A lack of access to Broadband is holding back several industries and potential areas of growth for South Carolina, including agriculture and cybersecurity.

Many stakeholders, including some farmers, emphasized how important adequate Broadband is for the agricultural industry. Good Broadband connections allow them to monitor their farm or livestock more efficiently, more quickly respond to issues, and sometimes reduce labor needs. The agricultural industry has become significantly more technologically advanced over the last few decades, and sometimes existing agricultural tools can get software updates to be more useful, but stakeholders expressed that they cannot update the software without internet.

In terms of cybersecurity, South Carolina is looking to be more competitive in this industry and that cannot happen without internet. Some resources online that could support workforce development or creating more awareness in the cybersecurity industry are not available to the entire state because of a lack of access. Lacking adequate cybersecurity in the state can mean less industry opportunity but also that the public lacks the Digital Literacy skills and knowledge about how to identify and avoid online scams, avoid catfishing scams, protect their personal data, and more. Beyond these two specific industries, stakeholders were generally concerned that businesses will not locate in or serve some areas because of the lack of internet access, thereby making South Carolina less economically competitive overall.



Entrepreneurship and starting a small business is harder without adequate internet, and lack of access could prevent residents from exploring business or entrepreneurship opportunities.

Small-business owners and entrepreneurs working from home struggle without internet access, and many reported that lacking access or a poor quality and unreliable connection could negatively disrupt their business. Stakeholders gave examples like sending digital invoices or meeting virtually with customers or coworkers as necessary business functions that are dependent on high-speed Broadband access. Some businesses are unable to take advantage of some point-of-sale systems because they cannot connect to the internet, which means they are often unable to take credit or debit cards, which negatively affects their business and revenue.

3.2.3 Broadband Affordability

Many residents cannot afford internet access and/or a device to access the internet at home (excluding smartphones). This includes all age groups, racial backgrounds, rural and urban populations, and more.

Many stakeholders across all covered populations repeatedly emphasized that affordability was a major challenge when accessing Broadband. Even if their household was currently paying for Broadband services, they felt it was expensive, did not equate to the quality of services they received, or were forced to make decisions to pay for internet on a month-to-month basis based on their finances. According to the Better Internet survey, when respondents were asked to describe their current Broadband circumstances, 31% of respondents that did not have internet reported the cost was too high, while 16% of respondents with internet reported the cost is too high.

Affordability can be a particularly difficult challenge to address throughout the entire state of South Carolina because the definition of affordability can change based on the county, community, or individual. One household might consider a \$50 monthly Broadband bill affordable, while another household might consider \$25 per month affordable. Even though affordability is a major, if not the biggest, challenge facing South Carolinians struggling to access Broadband, further research to better understand affordable price points could be beneficial.

ACP could be a solution to affordability challenges, as it provides discounted Broadband services to households that meet certain criteria including a household-income threshold, participation in certain government assistance programs, and participation in Lifeline. However, when stakeholders were asked about ACP as an option to reduce affordability barriers, many stakeholders struggled with accessing ACP funds for a variety of reasons. A major reason is awareness, and many stakeholders felt that more outreach was necessary to educate residents about the ACP – what it is for and who is eligible. Seventy-three percent (73%) of respondents to the Better Internet Survey were unfamiliar with ACP, which indicates awareness issues for ACP in South Carolina. Sometimes stakeholders were familiar with the program but did not know how to access more information or sign up. Some stakeholders also reported feeling that the ACP sign-up process was too complicated or invasive to be worth the affordable Broadband access. This means that even though ACP could be an important tool in addressing affordability issues, participation is not as widespread as it could be. Only 42% of eligible households in South Carolina are participating in ACP, with 874,587 eligible households and 370,042 enrolled. It is important to help Covered Populations learn about ACP and ensure they can determine if they are eligible and follow up for services as necessary.

"[I] live in a household and split the internet bill 3 ways to be able to afford it. The house is within the city limits but has terrible internet." – Roadshow attendee

4 Collaboration and Stakeholder Engagement

4.1 Coordination and Outreach Strategy

The State focused on community collaboration and stakeholder engagement by actively meeting a variety of South Carolina residents and organizations. A series of community and organizational efforts was planned to ensure proper documentation of feedback was recorded for future implementation.



4.1.2 Statewide campaign

The DOD partnered with the ORS to create and launch the GetConnectedSC initiative, a high-speed internet access and adoption campaign to better understand the needs of South Carolina citizens. As part of the campaign, a website, GetConnectedSC.org, was created to house information for citizens who wished to take the “Better Internet Survey,” find resources such as information on the ACP, and learn about and register for the roadshow events described below. The South Carolina Department of Administration (referred to herein as DOA and which held responsibility for digital equity prior to October 1, 2023) and the ORS supported these efforts by promoting a public awareness campaign through billboards, social media, in-person advertisement, and local advertisements such as newspaper inserts.

4.1.3 Roadshow events

Starting in late March 2023, the State held 15 roadshow events and partnered with various institutions, including 10 regional COGs and local organizations, as well as county leaders to better understand the Broadband needs and challenges of South Carolinians. The team also partnered with other agencies, such as the Commission of Minority Affairs, to help provide guidance and feedback throughout the events. These events were hosted throughout major community locations such as local libraries, community colleges, multicultural centers, community centers, and churches. Easily accessible locations and dates and times were a focal point in planning to ensure all community members had the ability to attend and receive information. A week prior to roadshow events, team members conducted



in-person awareness in the communities with the hope of improve attendance.

The groups provided the state with a broader understanding of the barriers to access and adoption in each region of the state; feedback from residents was provided in nearly 18 counties. Some of the topics discussed included relationships with ISPs, digital literacy skills needed, devices needed, and the consequences of a lack of internet from a business/entrepreneurial, healthcare, and public safety perspective. With the discussion of these topics, residents felt empowered to examine the status of their counties and towns and communicate the needs and challenges of their community with respect to broadband and digital equity.

These roadshow events also enabled the State to amplify the reach of the surveys, as individuals were requested to complete them during the events. Feedback from participants at the events was documented and incorporated, primarily into Section 4 – Obstacles and Barriers. The roadshow events ended in early May, with over 300 residents reached. These events ensured that South Carolina residents throughout the state were given the opportunity to discuss the obstacles and barriers they or their communities face daily.

4.1.4 Organizational Interviews

In April 2023, the DOA and ORS team compiled a list of contacts at various organizations to interview and gather information for BEAD and digital equity planning efforts; they primarily focused on state agencies and nonprofit organizations. Prior to the interviews, the State requested if the contacts could also share strategic plans or other documents that could be helpful during our research. Over the course of six weeks, interviews were conducted with 68 individuals representing 33 organizations.

During these interviews, organizations were encouraged to discuss topics such as the target population that their organization serves, how Broadband affects their ability to serve their constituents, the challenges of their constituents, and their ideal vision for Broadband and Digital Equity efforts in the state. Throughout the interviews, efforts were made to ensure that the DOA and the ORS were hearing from individuals and organizations that represented covered populations. The DOA and the ORS were able to connect with organizations that represented individuals who live in covered households, aging individuals, incarcerated individuals, veterans, individuals who are members of a racial or ethnic minority group, and individuals who reside primarily in a rural area. Details are provided in the table below.

Individuals who live in covered households	<ul style="list-style-type: none"> • United Way Association of South Carolina
Aging individuals	<ul style="list-style-type: none"> • AARP
Incarcerated Individuals	<ul style="list-style-type: none"> • SC Appleseed Legal Justice Center • Department of Corrections
Veterans	<ul style="list-style-type: none"> • Department of Veterans Affairs
Individuals with disabilities	<ul style="list-style-type: none"> • Together SC
Individuals with a language barrier	<ul style="list-style-type: none"> • Mobile Mexican Consulate
Individuals who are members of a racial or ethnic minority group	<ul style="list-style-type: none"> • Commission for Minority Affairs • Urban League



Individuals who primarily reside in a rural area	<ul style="list-style-type: none"> • Palmetto Care Connections • Rural Infrastructure Authority • SC Office of Rural Health
--	--

4.1.5 Surveys

To further collect information from key stakeholders throughout this process, the ORS and DOA created and distributed three surveys in spring 2023: a residential survey, business and community anchor institution survey, and government and municipalities survey. Only the residential survey, branded the Better Internet survey, was made available to the public. Both the business and community anchor institution survey and the government and municipalities survey were shared directly with a distribution list developed by the DOA and the ORS.

4.1.6 Residential Survey

The residential survey opened in mid-February 2023 and was highly publicized. Residents were encouraged to take the survey at presentations. The survey was made available in digital and print form at roadshow events and was advertised on social media and print media. Printed copies were distributed to various organizations around the state, which resulted in over 10,000 completed residential surveys by the end of May. While residents were encouraged to take the survey online for ease of use, due to the nature of this survey the ORS and DOA teams recognized the importance of offering this survey in a printed format. The residential survey closed June 1, 2023.

4.1.7 Business and Community-Anchor Institution Surveys

The business and community-anchor institution Better Internet survey was open from March 28 to June 30, 2023, and gathered 334 completed responses. The business and community anchor institution survey were shared directly with a variety of organizations identified by the DOA and the ORS. This survey sought to understand how businesses and community-anchor institutions currently utilize Broadband services to identify opportunities to increase access or address challenges in the future.

Survey questions for businesses and community-anchor institutions focused on understanding how these organizations use Broadband including current online activities, challenges related to Broadband, and satisfaction with their current provider and services. Questions regarding the organization’s current internet service covered topics such as how many facilities the organization serves, the ISP it uses, and whether current services were sufficient for their needs. Organizations were then asked about their online presence, such as maintaining a website or social media pages, and what activities these organizations would do online if they had sufficient or improved Broadband access. The survey also included questions about challenges in accessing the internet services they need or challenges in conducting their business activities online. This survey sought to understand how businesses and community-anchor institutions currently utilize Broadband services to identify opportunities to increase access or address challenges in the future.

4.1.8 Government and Municipality Survey

The process involved developing a distribution list consisting of 271 municipalities and 46 counties asking local government officials within these counties or municipalities to share information about their Broadband access and services. The DOA and the ORS partnered with the Municipal Association of South Carolina (MASC) to distribute the survey to MASC’s contacts at the county and municipal level. The State also held an informational webinar in partnership with MASC to explain the importance of this survey to county- and municipal-



level government officials throughout South Carolina to help publicize the survey. The Government and Municipality survey was released on April 5, 2023, and is still open.

Current list of organizations involved in providing input/information:

- Department of Veterans Affairs;
- United Way Association of South Carolina;
- AARP;
- Department of Health and Environmental Control;
- SC Association of Counties;
- Commission for Minority Affairs;
- Palmetto Care Connections;
- Sisters of Charity Foundation;
- Department of Employment and Workforce;
- SC Appleseed Legal Justice Center;
- Urban League;
- Department of Commerce;
- Department of Social Services;
- Department of Education;
- Central Carolina Community Foundation;
- Rural Infrastructure Authority;
- SC Thrive;
- Department of Public Safety;
- Office of Economic Opportunity;
- Library Association;
- SC Telehealth Alliance;
- SC Chamber of Commerce;
- State Housing and Finance Development Authority;
- SC Council on Competitiveness;
- SC Office of Rural Health;
- Together SC;
- Department of Parks, Recreation & Tourism;
- Department of Corrections;
- Build Carolina; and
- South Carolina Hospital Association.

4.1.9 Future Engagement Plans

The collaboration and stakeholder engagement conducted through the DOA and the ORS has been successful in capturing feedback from South Carolina residents, businesses, and organizations throughout the state. Moving forward, the team hopes to continue this feedback loop by communicating with more organizations and residents, specifically within Covered Populations.

While stakeholder engagement as part of the outreach initiative included efforts to reach out to the Catawba Nation; the State's only federally recognized Tribe, the DOD initially was successful in coordinating alongside this Sovereign Nation. A formal letter was sent to the Catawba Nation inviting input into the State's planning process. No response was received, but the DOD is aware NTIA awarded \$900,578 in June of 2022 as part of the Tribal Broadband Connectivity (TBC) program to support broadband use and adoption activities. On December 7, 2023 the DOD, SCBBO, CMA and NTIA had an introductory meeting with the Director of Information Technology of the Nation. The DOD will continue to prioritize outreach efforts with the Catawba Nation to solicit input on the State's planning process while supporting their overall effort toward bolstering adoption and use.



Due to the coarse level of granularity associated with the data used to support analysis included in this plan, the DOD acknowledges it must also prioritize the formation of the proposed Digital Equity task force which will serve as a subcommittee on the Broadband Advisory Council. The data currently available for analysis does not provide insight beyond a county level and therefore limits the DOD’s ability to transform data in this plan into actionable intelligence with specific regard to identifying geographies where an economy of scale may exist supporting multiple covered populations simultaneously within the same localized environ. This is critical to ensuring the DOD can more accurately establish Digital Equity-related baseline indicators along with tracking progress toward addressing barriers pertaining to adoption and use among all covered populations throughout the State.

Additional future engagement may revolve around actions such as:

- identifying key insights (concerns, feelings, understanding, etc.) among Covered Populations in specific areas of the state. These insights would be extrapolated from both the Better Internet Surveys and Roadshow Events;
- acknowledging their feedback and developing ongoing communications tactics designed to address these insights;
- providing meaningful updates regarding the infrastructure process and Digital Equity resources; and
- conducting periodic short surveys or “pulse checks” among these same audiences to continually gauge the degree to which their awareness of the infrastructure process and the Digital Equity resources available to them is growing.

Supplementing this ongoing engagement process will be a mix of virtual and in-person conversations to ensure a broad representation of communities occurs. This baseline communications strategy will set the stage for expanded communications surrounding objectives such as ACP awareness and adoption, as well as Digital Equity resource and training experiences.

4.1.10 Public Comment Period

The DOD held a 30-day public comment period beginning 12/13/2023 and completed on 1/13/2024 where anyone in the state of South Carolina was invited to review planning materials and documents and provide feedback. ORS received X comments and the feedback was reviewed and included in the second round of plan editing as appropriate.



4.1.11 Grant Planning

The DOD continually engage stakeholders across South Carolina after the plans were complete and even while funding is being distributed throughout the state. One planned avenue of collecting stakeholder feedback is to make the Better Internet residential survey an annual survey. By making the Better Internet survey an annual survey, the DOD can compare survey responses to previous years' data to determine progress being made in increasing access to Broadband and how challenges are evolving from year to year. Future stakeholder engagement efforts could also include additional interviews and focus groups with covered populations or organizations that represent covered populations. Additional details pertaining to outreach engagement activities are provided in the table below.

Total # of people engaged	300+
----------------------------------	------

Total roadshow attendees	225+
Total Roadshow Events	15

Total Interviews	33
Total # of people interviewed	68

Total SC organizations engaged	33
---------------------------------------	----

Total # of surveys deployed	13,129
total # of survey responses	10,283



5 Implementation

5.1 Implementation Strategy & Key Activities

The road ahead for increasing Digital Equity and defeating the Digital Divide is being built by the voices of South Carolinians through careful identification of challenges and bolstering strategic activities and partnerships to position all South Carolinians in such a place that they have affordable access to Broadband. With the Vision statement always in mind -- all South Carolinians can access and safely utilize affordable high-speed Broadband to advance their personal economic, education and health goals --the Digital Opportunity Department is steadfast in achieving its goals through implementation of the following strategies and will continue to measure its performance through key performance indicators (KPIs) and evolve as necessary to ensure goals are met.

Goal 1: Broadband affordability

Objective: All households and businesses in South Carolina can subscribe to Broadband service at an affordable rate.

Potential Partners: South Carolina Commission for Minority Affairs, South Carolina Department on Aging, South Carolina Department of Disabilities and Special Needs, South Carolina Department of Veterans' Affairs, South Carolina Broadband Advisory Committee, other state government agencies, counties, non-profits and community organizations, ISPs

Covered Population: All Covered Populations

Strategies:

- Re-purpose the existing South Carolina Broadband Advisory Committee to serve as a combined advisory council for both BEAD and Digital Equity including ACP enrollment and outreach.
- Establish a Digital Equity task force representing Covered Population groups and regularly hold meetings with the task force and partner organizations to assess needs and progress made to tearing down the digital divide barriers.
- Continue to prioritize populations in need and approach addressing barriers as implementation progresses and conditions change.
- Partner with non-profits and other organizations to promote utilization of the ACP.
- Alternatively, explore options to create public and private affordability programs to replace ACP, should the program be discontinued.
- Encourage ISPs to offer low-cost subscription options to qualifying covered populations within their existing network.
- Message to all covered populations in funded areas that they have the ability to participate in ACP in addition to a participating in the ISPs low cost option.

Key performance indicators:

- Increase percentage of eligible households enrolled in the ACP (total and breakdown by covered population/geography if possible).
- Increase percentage of households with a fixed broadband subscription (total and breakdown by covered population/geography).



Percentage of eligible households enrolled in ACP

	Current (2023)	Short-term Target (2025)	Long-term Target (2029)
South Carolina overall	37%	50%	90%

Source: South Carolina Broadband Office

Survey respondents that respond “Yes” to the question, “[a]re you familiar with the Affordable Connectivity Program (ACP) program?”

	Current (2023)	Short-term Target (2025)	Long-term Target (2029)
South Carolina overall	27%	44%	60%
Low-income households	33%	64%	95%
Aging individuals	26%	53%	80%
Racial/ethnic minority	26%	43%	60%
Rural residents	26%	43%	60%
Individuals with disabilities	32%	63%	95%
Veterans	25%	42%	60%
Individuals with a language barrier	18%	39%	60%
Incarcerated	32%	46%	60%

Source: GetConnectedSC Survey



Percentage of populations with a fixed broadband subscription

	Current (2021)	Short-term Target (2025)	Long-term Target (2029)
South Carolina overall	67%	80%	95%
Low-income households	54%	70%	90%
Aging individuals	62%	73%	93%
Racial/ethnic minority	60%	72%	93%
Rural residents	n/a	n/a	n/a
Individuals with disabilities	57%	71%	90%
Veterans	69%	77%	97%
Individuals with a language barrier	56%	71%	90%
Incarcerated individuals	n/a ¹	n/a	n/a

Source: US Census American Community Survey

Goal 2: Online accessibility and inclusivity

Objective: Every resident of South Carolina has access to reliable high-speed Broadband service in their homes and businesses.

Potential Partners: South Carolina Broadband Office, South Carolina Commission for Minority Affairs, South Carolina Department on Aging, South Carolina Department of Disabilities and Special Needs, South Carolina Department of Veterans’ Affairs, other state government agencies, counties, ISPs

Covered Population: All Covered Populations

Strategies:

- Create new maps that combine South Carolina Broadband Office coverage data and Covered Population statistics to prioritize populations and geographies in need.
- Transparently communicate progress, encourage accountability, and community involvement by regularly updating maps, making speed tests available on state website, surveying residents/businesses to confirm services, and staying updated on needs and implementation progress.
- Support BEAD/SCBBO efforts to close broadband service gaps.
- Identify extremely high-cost remote, rural locations and leverage alternate technologies to reach them.
- Include hyper focused messaging to covered populations about existing broadband deployment projects and newly available access to broadband service in funded areas.

¹ Data for this information is not currently available. DOD intends to pursue data collection for this category with other partners.



Key performance indicators:

- Increase percentage of residents with access to high-speed broadband services (total and breakdown by covered population/geography).

Share of households with broadband service

	Current (2023)	Short-term Target (2025)	Long-term Target (2029)
South Carolina overall	92.3%	95%	100%
Low-income households	TBD	TBD	TBD
Aging individuals	TBD	TBD	TBD
Racial/ethnic minority	TBD	TBD	TBD
Rural residents	TBD	TBD	TBD
Individuals with disabilities	TBD	TBD	TBD
Veterans	TBD	TBD	TBD
Individuals with a language barrier	TBD	TBD	TBD
Incarcerated individuals	TBD	TBD	TBD

Source: South Carolina Broadband Office

Goal 3: Digital literacy

Objective: Every resident of South Carolina has access to education and training necessary to use the internet to advance their personal goals and increase South Carolina’s technology workforce competitiveness.

Potential Partners: South Carolina Commission for Minority Affairs, South Carolina Department on Aging, South Carolina Department of Disabilities and Special Needs, South Carolina Department of Veterans’ Affairs, South Carolina Department of Education, South Carolina Technical Colleges, South Carolina Department of Corrections, other state government agencies, school districts, non-profits and community organizations, ISPs, South Carolina Education Association

Covered Population: All Covered Populations

Strategies:

- Establish a statewide framework for Digital Literacy (test or another metric).
- Work with education and non-profit partners to develop Digital Literacy training curriculum with options tailored to prioritized covered populations and provide guidance for integration into public K-12 schools and existing education programs that are underperforming or underserved.
- Support existing public and private training programs – including apprenticeships – that aim to expand the telecommunications and cybersecurity workforce by bolstering digital skills and creating career opportunities.



- Identify Covered Populations and geographic areas with greatest Digital Literacy needs to prioritize in Digital Equity grant program scoring.
- Meet with state agencies and non-profit organizations that offer similar programs and serve covered populations to establish a network of potential implementation partners, share priorities for digital equity and raise awareness of upcoming digital equity grant program.
- Create digital training standards for partners and grant recipients to provide services that match established standards.

Key performance indicators:

- Increase share of population that feels confident in their ability to use the internet.

Survey respondents without internet that respond: “We don’t feel confident in our ability to use the internet.”

	Current (2023)	Short-term Target (2026)	Long-term Target (2029)
South Carolina overall	94.8%	96.7%	98.7%
Low-income households	94.7%	96.7%	98.7%
Aging individuals	94.3%	96.4%	98.6%
Racial/ethnic minority	92.6%	95.6%	98.2%
Rural residents	95.8%	97.4%	98.9%
Individuals with disabilities	91.2%	94.5%	97.8%
Veterans	92.9%	95.6%	98.2%
Individuals with a language barrier	82.4%	89.4%	96.3%
Incarcerated individuals	n/a	n/a	n/a

Source: GetConnectedSC Survey

Goal 4: Online privacy and cybersecurity

Objective: Every resident of South Carolina can safely and securely utilize Broadband services.

Potential Partners: South Carolina Department of Education, South Carolina Department of Motor Vehicles, South Carolina Department of Revenue, South Carolina Department of Administration, State Law Enforcement Division, school districts, county law enforcement, non-profits and community organizations, ISPs, South Carolina Commission for Minority Affairs, South Carolina Department on Aging, South Carolina Department of Disabilities and Special Needs, South Carolina Department of Veterans’ Affairs, South Carolina Education Association

Covered Population: All Covered Populations

Strategies:

- For underserved school districts, implement schoolwide digital safety and awareness training for K-12 students.
- Invest in a statewide digital safety campaign to ensure that all residents of SC can identify



malicious content on their devices.

- Coordinate with South Carolina Department of Administration’s Office of Technology and Information Services, the Division of Information Security (DIS) and community anchor intuitions to deliver training to covered populations.
- Organize a “Cybersecurity Awareness Week” to focus on internet safety and promote cybersecurity careers.
- Promote online privacy and cybersecurity efforts through SC.GOV, tax notices, DMV, SLED, and other notable statewide campaigning.

Key performance indicators:

- Increase share of surveyed population that feels safe using the internet.

Survey respondents without internet that respond: “We don’t feel safe using the internet.”

	Current (2023)	Short-term Target (2026)	Long-term Target (2029)
South Carolina overall	94.4%	96.5%	98.6%
Low-income households	96%	97.5%	99%
Aging individuals	93.5%	95.9%	98.4%
Racial/ethnic minority	92.9%	95.6%	98.2%
Rural residents	95.6%	97.2%	98.9%
Individuals with disabilities	91.7%	94.8%	97.9%
Veterans	89.7%	93.6%	97.4%
Individuals with a language barrier	92.4%	89.4%	96.3%
Incarcerated individuals	n/a	n/a	n/a

Source: GetConnectedSC Survey

Goal 5: Device availability and affordability

Objective: Every resident of South Carolina can access a desktop or laptop computer at home or in an accessible location.

Potential Partners: South Carolina Commission for Minority Affairs, South Carolina Department on Aging, South Carolina Department of Disabilities and Special Needs, South Carolina Department of Veterans’ Affairs, South Carolina Farm Bureau, South Carolina Department of Education, South Carolina Technical Schools, South Carolina Commission on Higher Education, South Carolina Department of Corrections, South Carolina Library System, county libraries, school districts, non-profits and community organizations, ISPs

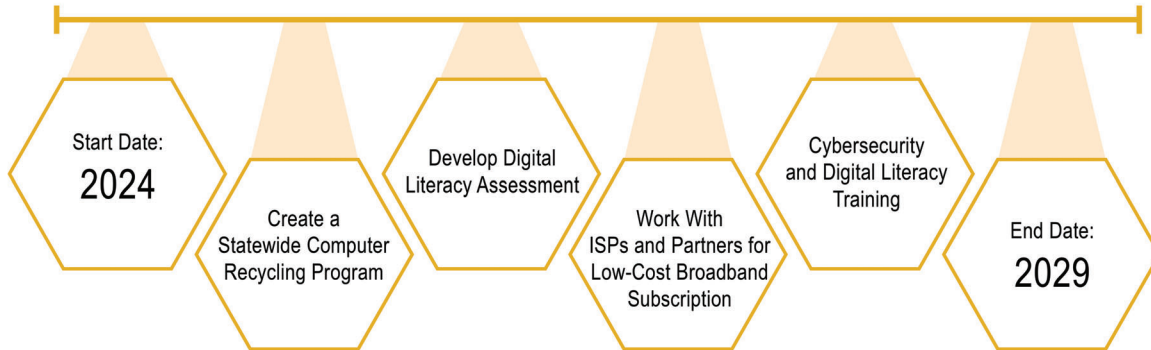
Covered Population: All Covered Populations

Strategies:

- Prioritize Digital Equity grant program scoring toward device programs that serve geographies and populations with highest identified needs.
- Support universal one-to-one programs throughout the complete public K-12 system,



many state agencies, non-profits, community organizations, ISPs, and, most importantly, the citizens of South Carolina. The eligible uses of BEAD – planning and research, deployment, adoption and use programs, and workforce development – are all considered and incorporated into this plan for the betterment of the citizens of South Carolina.





6 Conclusion

South Carolina, like all states, has challenges ahead in tearing down the Digital Divide. However, through the power of communication, collaboration, and cooperative, the DOD is ready and able to work with stakeholders and use the resources appropriated to it to make Digital Equity the reality for every South Carolinian. By repurposing the model created by the SCBBO to extend Broadband infrastructure through every corner of South Carolina, the DOD will reach every Covered Population to ensure that all South Carolina households and businesses can subscribe to Broadband service at an affordable rate. Moreover, in collaboration with the SCBBO, ISPs, and other State entities, and by communicating transparently and encouraging accountability and community involvement, the DOD aims to ensure that the Broadband services provided are reliable and enhance communities' economic development and prosperity. However, affordable and reliable Broadband service is nothing if the Covered Populations are digitally illiterate. Accordingly, the DOD plans to work with partners and establish a Statewide Digital Literacy training curriculum and cybersecurity awareness training. Finally, the DOD plans to work with the Digital Equity task force to raise awareness of the lack of digital devices for certain populations and support universal one-to-one programs throughout the entire public K-12 system. The road is full of challenges, but the South Carolina DOD, using lessons learned and experience gained in successfully standing up and implement the SCBBO, stands ready to work with its in-State partners and tear down the Digital Divide while ensuring Digital Equity for all South Carolinians.



7 Appendices

Appendices continued on following page.



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admin
THE SOUTH CAROLINA
DEPARTMENT of ADMINISTRATION

BETTER-INTERNET SURVEY

Report for the South Carolina BEAD Initiative
Prepared by the University of South Carolina Investigators
August 24, 2023



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is an initiative of the Office of Regulatory Staff, the Department of Administration, and community partners throughout the state. From education to healthcare, social interaction, work, and play, high-speed capability is critical to thrive in the modern world. So, we are identifying areas of greatest need, investing in broadband infrastructure, and providing support services to make that transformation possible for every home, business, and community organization in the state.

The University of South Carolina is one of the key partners that was tasked with contributing to the science of identifying areas of greatest need to help bring reliable, high-speed internet to every South Carolinian.



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EXECUTIVE SUMMARY

The **University of South Carolina (USC)** was tasked to identify areas of greatest need to help bring reliable, high-speed internet to every South Carolinian. Specifically, they were charged to: (i) oversee the “Better Internet” survey design in collaboration with Vizbii Technologies – creators of emotion-capture technology, Morphii®– team and project partners, (ii) contribute to data collection through outreach efforts to the USC network and connection, (iii) lead analysis of results, and (4) report on the main findings to SCBBO and SCDE.

Survey development was an iterative process with feedback and input from several partners, experts, and community stakeholders. Survey design focused on capturing: (i) barriers to high-speed internet access and adoption and (ii) how the lack of internet influences healthcare, education, and job stability, as well as community & social contexts. For this project, **a non-random sampling strategy** was employed. The focus of the sample was on two distinct groups: underserved individuals who have internet access but find it insufficient to meet their needs, and unserved individuals who do not have internet access at home. It is important to acknowledge that the use of a non-random sampling approach introduces certain biases that need to be **carefully considered when interpreting the results.**

“Having the internet is like having your own personal library, secretary, doctor, and directory of personal services [sic] in addition to 24/7 communication. It is the most important service we can access to navigate in this century. I wish you great success in your mission to enhance the availability for all.” --
Lexington County, 29072, woman

A total of **18,481 surveys** were attempted (representing approximately 94 households per 10,000 households in SC) and 13,024 were considered ‘Complete’ surveys. One-in-three (30%) surveys were from Lowcountry, 26% from Midlands, 27% from Pee Dee, and 17% from Upstate. While one-third (32%) of the survey zip codes were rural (based on RUCA codes), half of the respondents (50%) indicated that they live in a rural area. **The Under/Unserved Community represents 51% of the sample.** For the purposes of this report, we define the “Underserved Community” as those who have internet at home, but it does not meet their needs (27%) and the “Unserved Community” as those who do not have the internet at home or access the internet via cell only and wants it (24%).

The top two unserved counties in the sample were Allendale and Dillon. Oconee, Chester, Fairfield, Chesterfield, and Jasper were the top underserved counties. Half of the sample expressed negative feelings regarding internet options they have (35% were frustrated and 15% were stressed). For those without internet or those who only have cellphone access to the internet at home, **cost and lack of internet service provider** were by far the biggest barriers. For those who have internet, **cost** continues to be a barrier, but **stability and speed** were also more challenging. **Two-thirds (66.1%) of Hispanic/Latino households were unserved or underserved.** Similarly, 64% of those living in rural locations are unserved or underserved.

A noteworthy finding is that **75% of the underserved or unserved communities are NOT familiar with the ACP Program.** This points to the need to expand the outreach efforts aimed at promoting the ACP, particularly among those underserved and unserved communities, that need it most. **Two-thirds (67%) of those who are underserved or unserved indicated that they need the internet to access healthcare services** and 44% indicated that they need it to work from home while 39% need it for supporting their child(ren) in pre-K-12 education.



TABLE OF CONTENTS

Section	Sub-section	Page #
Background: What did we do?	Project Team	12-13
	Project Objectives and Deliverables	14
	Key Partners	15
Approach: How did we do it?	Survey Design and Launch	17-20
	Outreach and Data Collection	21-24
	Sampling Strategy and Data Analysis	25-29
Results: What did we find?	Survey Participation Rate	31-34
	Underserved and Unserved Community	35-45
	Household Demographics	46-60
	Those who HAVE Internet	61-66
	Barriers	67-78
	Critical Needs	79-99
Future Directions: What's next?		101
Appendices	Appendix I: Survey – Has Internet	103-107
	Appendix II: Survey – No Internet	108-112
	Appendix III: Survey Participation Rate by County	113-115
	Appendix IV: Feelings about Internet by County	116-117
	Appendix V: Household Composition	118-119

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Connected
Get SC
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Connected
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LIST OF TABLES

Table	Caption	Page #
Table 1	USC outreach activity	22
Table 2	List of variables required for designating a survey 'Complete'	27
Table 3	Survey participation rate by region	32
Table 4	Survey responses by rurality	34
Table 5	Distribution of Better Internet Survey by internet availability and need	36
Table 6	Feeling about options: open-ended questions (text responses) by theme and county	43
Table 7	Household race/ethnicity	47
Table 8	Household income level	49
Table 9	Household highest education level	51
Table 10	Household makeup I	53
Table 11	Household makeup II	54
Table 12	Respondents' gender	56
Table 13	Home type	57
Table 14	Household ownership	58
Table 15	Household size, adults	59
Table 16	Household size, children at home	59
Table 17	Individuals or households with no internet access by characteristic in South Carolina, BroadbandNow (2023)	60
Table 18	Percent of US adults who do not have a broadband connection at home by characteristics, USA Pew Research Center (2021)	61

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Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC



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South Carolina

LIST OF TABLES, CTD

Table	Caption	Page #
Table 19	Internet Service Providers (ISP)	62
Table 20	Feeling about ISP: open-ended questions (text responses) by theme and region	65
Table 21	Critical of households for using internet services by selected household categories	82
Table 22	Feeling about technology for health Services by selected household categories	84
Table 23	Feeling about telehealth: open-ended questions (text responses) by theme and region	85
Table 24	Feeling about child success: open-ended questions (text responses) by theme and region	88
Table 25	Feeling about job opportunities by selected household categories	91
Table 26	Feeling about job opportunities: open-ended questions (text responses) by theme and region	92
Table 27	Feeling about doing new things online: open-ended questions (text responses) by theme and region	96

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Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC



LIST OF APPENDICES TABLES

Table	Caption	Page #
Table A1	Survey participation rate by county [ALL survey responses, N=18,841]	114
Table A2	Survey participation rate by county [COMPLETE survey responses, N=13,024]	115
Table A3	Feelings about home internet by county	117
Table A4	Household composition	119

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC



LIST OF FIGURES

Figure	Caption	Page #
Figure 1	Better Internet Survey design process	17
Figure 2	Better Internet Survey domains	17
Figure 3a	Survey participation rate (per 10,000) of population per county	32
Figure 3b	Survey participation rate (per 100,000) of population per zip code	33
Figure 4	Geography of underserved communities: percentage (% out of all county responses) of underserved community per county	37
Figure 5	Geography of unserved communities: percentage (% out of all county responses) of unserved communities per county	38
Figure 6	Geography of under/Unserved communities: rate (per 10,000) of under/unserved community per county	39
Figure 7	Geography of served communities: percentage (% out of all county responses) of served community per county	40
Figure 8	Geography of negative feelings (frustrated and stressed) about home internet, percentage (% out of all county responses) by county	41
Figure 9	Feeling about current options for connecting to the Internet, by needs (met vs. unmet)	42
Figure 10	Internet needs by household race/ethnicity	48
Figure 11	Internet needs by household income	50
Figure 12	Internet needs by household highest education level	52
Figure 13	Internet needs by household makeup	55
Figure 14	Internet needs by gender	56
Figure 15	Internet needs by home type	57

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Get SC
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LIST OF FIGURES, CTD

Figure	Caption	Page #
Figure 16	Internet Needs by Household Ownership	58
Figure 17	Distribution of type of Internet technology available at home by needs (N=12,426)	63
Figure 18	Feeling about Internet Service Provider customer service, by needs (met vs. unmet)	64
Figure 19	Identified Barriers among those who has Internet, and their needs are not met	68
Figure 20	Identified Barriers among households with Veterans who has Internet, and their needs are not met	69
Figure 21	Identified Barriers among Rural households who has Internet and their needs are not met	70
Figure 22	Identified Barriers among households with Minority who has Internet, and their needs are not met	71
Figure 23	Identified Barriers among Low Income households who has Internet and their needs are not met	72
Figure 24	Identified Barriers among those who has No Internet (Or Cell Only) and wants it	73
Figure 25	Identified Barriers among Veteran Household who has No Internet (Or Cell Only) and wants it	74
Figure 26	Identified Barriers among Rural Household who has No Internet (Or Cell Only) and wants it	75
Figure 27	Identified Barriers among Household with Minority who has No Internet (Or Cell Only) and wants it	76
Figure 28	Identified Barriers among Low Income Household who has No Internet (Or Cell Only) and wants it	77
Figure 29	Familiarity with Affordable Care Connectivity Program (ACP) by Needs	78
Figure 30	Critical of Households for using Internet services	80

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Connected
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Get SC
Connected
Get SC
Connected
Get SC
Connected
SC



LIST OF FIGURES, CTD

Figure	Caption	Page #
Figure 31	Internet Needs by Critical Need	81
Figure 32	Feelings About Technology for Health Services by Internet Needs	83
Figure 33	Feelings About Child Success by Internet Needs	87
Figure 34	Feelings About Job Opportunities by Internet Needs	90
Figure 35	Feelings About Doing New Things Online by Internet Needs	95
Figure 36	Purposes of Internet Use	98

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Connected
SC



BACKGROUND

Get Connected Get Connected Get Connected Get Connected Get Connected
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USC INVESTIGATORS (1)

The USC Team included members from the Arnold School of Public Health, the College of Education, the School of Medicine Greenville, the Office of Undergraduate Research, and the Vice President for Research Office. All investigators contributed to the Better Internet Survey design, data collection, analyses, and interpretation of results.

Nabil Natafqi, Ph.D., MPH, CPH | **Principal Investigator** | *Assistant Professor of Health Services Policy & Management at the USC Arnold School of Public Health and Associate Director of the Patient Engagement Studio at USC School of Medicine.*

Dr. Natafqi's current work is focused on evaluating the effectiveness and impact of telehealth applications on care delivery and outcomes. His research encompasses a variety of methodological approaches including both quantitative and qualitative analyses, with emphasis on mixed-methods and a special interest in the engagement of patients and community stakeholders.

Jan Ostermann, Ph.D. | **Co-Investigator** | *Associate Professor in the Department of Health Services Policy & Management at the USC Arnold School of Public Health*

Dr. Ostermann is a health services and population health researcher who specializes in analytic techniques for longitudinal and complex survey designs. A key focus of Dr. Ostermann's work relates to characterizing individuals' preferences and decision-making around health and preventive behaviors.

Brad Wright, Ph.D. | **Co-Investigator** | *Professor and Chair in the Department of Health Services Policy and Management at the USC Arnold School of Public Health, with an adjunct appointment in the Department of Family Medicine at the University of North Carolina School of Medicine*

Dr. Wright is a health policy and health services researcher with expertise in disparities in health and health care for publicly insured populations and health care safety net providers.

Ann Blair Kennedy, DrPH | **Co-Investigator** | *Assistant Professor at the University of South Carolina School of Medicine Greenville and is the Director of the Patient Engagement Studio.*

Dr. Kennedy has expertise in patient and stakeholder engagement in research, communication skills, team building, integration of technology into groups, and governance and policy creation. She led stakeholder teams in the development and implementation of interventions, and training and expertise in survey development.

USC INVESTIGATORS (2)

Matthew Irvin, Ph.D. | Co-Investigator | *Associate Professor of Educational Psychology and Research in the Department of Educational Studies and the Director of Child Development Research Center.*

Dr. Irvin's research focuses on the academic, social, and behavioral development of adolescents from rural communities. Dr. Irvin has been an author of 30 peer-reviewed journal articles and book chapters as well as received federal grant funding from the Centers for Disease Control and Prevention (CDC) and the National Institute of Child Health and Human Development (NICHD).

Christine DiStefano, Ph.D. | Co-Investigator | *Professor of Educational Psychology and Research at the College of Education.*

Dr. Distefano's research interests include structural equation modeling, survey design, and latent class clustering/cluster analysis. She is also involved with the application of advanced statistics and measurement methods to issues related to school psychology.

Lumi Bakos, Ph.D. | Co-Investigator | *Associate Vice President for Research Operation, USC; Adjunct Assistant Professor, Health Services Policy and Management, USC Arnold School of Public Health*

Dr. Bakos serves as AVP for Research, where she spearheads the advancement of USC's mission to foster a vibrant and impactful research environment that addresses significant societal challenges and contributes to the advancement of knowledge and innovation.

Faith Albertson | Research Assistant | *Arnold School of Public Health; President of Phi Delta Epsilon Medical Fraternity*

Ms. Albertson is a Bachelor of Science (BS) in Biochemistry and Molecular Biology Candidate at USC's Honors College. She also works as an undergraduate research assistant at USC Arnold School of Public Health with Dr. Natafji and in the Neurodevelopmental Disorders Lab.



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**Child Development
Research Center**
UNIVERSITY OF SOUTH CAROLINA



**Arnold School of
Public Health**
UNIVERSITY OF SOUTH CAROLINA



**School of Medicine
Greenville**
UNIVERSITY OF SOUTH CAROLINA



**PATIENT
ENGAGEMENT
STUDIO**



UNIVERSITY OF
South Carolina

OUR OBJECTIVES

The USC was tasked **to identify areas of greatest need to help bring reliable, high-speed internet to every South Carolinian** through achieving the following charges:

- oversee the “Better Internet” survey design in collaboration with Vizbii Team and project partners
- contribute to data collection through outreach efforts to the USC network and connection
- lead analysis of results
- report on the main findings to SCBBO and SCDE



KEY PARTNERS

Several partners were instrumental in the survey development and outreach activities. Partners included the SC Commission for Minority Affairs (CMA), SC Councils of Governments (SC COGS), SC Association of Counties (SCAC), SC Municipal Association (SCMA), Clemson University, Medical University of South Carolina, USC Patient Engagement Studio (PES) Riggs, and Vizbii.



APPROACH

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SURVEY DESIGN



Figure 1: Better Internet Survey Design Process

Survey development was an iterative process starting with a review of past literature and similar initiatives followed by thematic analysis to develop a draft initial survey. Weekly meetings were held with the Vizbii team, USC team, and other partners and agencies including the SC Broadband Office, Vizbii, Clemson, and the Office of Minority Affairs to review and refine various stages of the survey. A larger team of partners and stakeholders provided expertise and community input through the Office of Minority Affairs and the Patient Engagement Studio (PES). Vizbii created the final version of the survey based on feedback. Survey design focused on capturing: (1) barriers to high-speed internet access and adoption whether related to geography, cost, device/service accessibility, or otherwise, and (2) how the lack of internet influences the healthcare system, economic stability, education, food, community & social contexts, and physical environment. The survey tool was pilot tested for quality assurance.

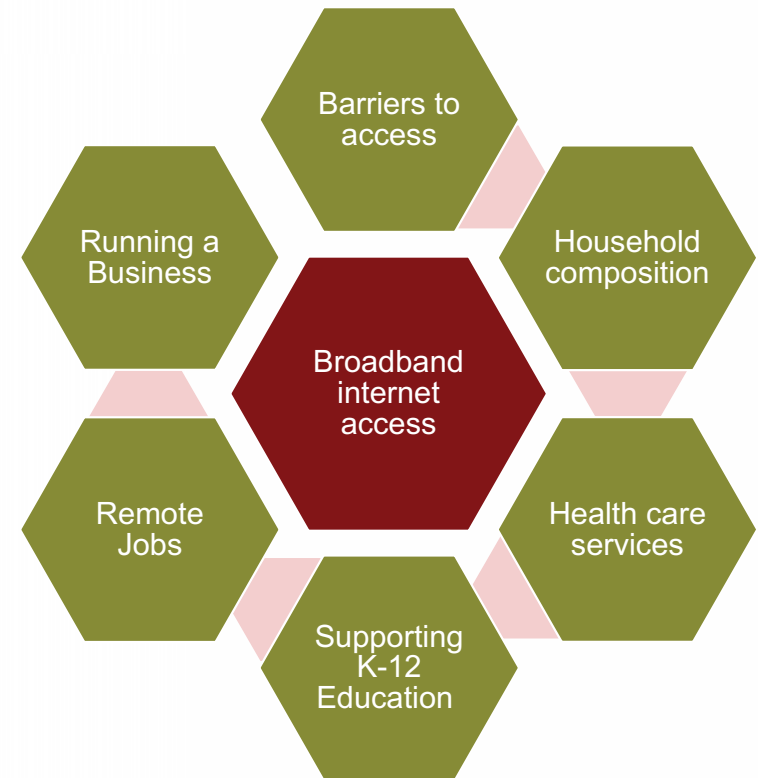


Figure 2: Better Internet Survey Domains



UNIVERSITY OF
South Carolina

The survey was built using the Morphii platform.

morphii® is a visual scale built to capture & quantify emotions & other human experiences in real-time using facial display science. It integrates seamlessly into digital touchpoints and allows people to express what they're feeling and how intensely in a way that's authentic and fun. See *Full Survey in Appendices I & II*.

Get Connected SC Better-Internet Survey

Keep going! You're approaching the halfway point and helping to build a better internet in South Carolina with each response.


People who participate in certain government programs might be eligible for \$30 per month financial assistance to pay for internet service through the [Affordable Connectivity Program \(ACP\)](#). Are you familiar with this program?

Yes
 No

[Previous](#) [Next](#)

Progress indicator: 20 green dots, 10 grey dots

How do you feel about the current options for connecting your home to the internet?



Frustrated Stressed Indifferent Delighted

Select the graphic above that best represents how you feel.

Want to explain that feeling?

[Next](#)

Progress indicator: 20 grey dots, 2 grey dots

THE FINAL **BETTER INTERNET SURVEY** INCLUDED FOUR PATHWAYS:

Have Internet

Do Not have Internet

Meet Needs

Do NOT
Meet Needs

Would like to
get internet

Would NOT
like to get
internet



SURVEY LAUNCH

The **Better Internet Survey** went live to the public on February 21st, 2023. The survey was formally launched by Governor McMaster and Congressman Clyburn at the SC State House. The survey was available in English and Spanish online in addition to the paper survey that can be requested by phone through Interactive Voice Response (IVR).



MARKETING CAMPAIGN AND OUTREACH

Riggs Partners, the marketing consulting firm in South Carolina, made a significant contribution to the USC team's success by providing the **GetConnectedSC Partner toolkit**. This Partner toolkit equipped the USC with a set of materials, including boilerplate language for newsletters, emails, and social media posts, along with visually engaging social media graphics and QR codes. The toolkit streamlined the USC's dissemination and outreach efforts, enhancing its ability to effectively promote the Better Internet Survey.



Scan QR to take the
"Better Internet Survey"



USC OUTREACH ACTIVITY

The USC helped spread awareness of the survey and gather survey responses using the USC-specific QR code and the paper version of the developed survey. The table below shows a selected list of outreach efforts by the USC:

Organization	Location
AID Upstate	Greenville
Alpha Epsilon Delta	Columbia
American Massage Therapy Association -SC Chapter	Statewide
Brennen Elementary School	Columbia
Center for Rural & Primary Healthcare	Columbia
Department of Social Services	Statewide
Department of Vocational Rehab	Statewide
Free Medical Clinic	Columbia
Lexington Medical Center	Columbia
MedEx Academy	Columbia
Office of Rural Health	Statewide
Phi Delta Epsilon	Columbia
Public Health Listserv	Columbia
Richland Library	Richland County
Rural and Minority Health Research Center	Statewide
Rural Interest Group	Columbia
SC Childcare Resource and Referral Network	Statewide
SC Department of Education	Statewide

Table 1: USC Outreach Activity

Organization	Location
SC Department of Health and Environmental Control (DHEC)	Statewide
SC Organization of Rural Schools (SCORS)	Statewide
Soda City Market	Columbia
South Carolina Primary Health Care Association	Statewide
Southeast School Behavioral Health Conference	Myrtle Beach
Stadium Suites GroupMe	Columbia
United Catalyst Corporation	Upstate
USC Arnold School of Public Health	Columbia
USC Center for Community Health Alignment	Statewide
USC Discover Day	Columbia
USC Honors College	Columbia
USC Pre-med list serve	Columbia
USC School of Medicine Greenville	Greenville
USC Schools Digital Displays	Columbia
USC Social Media Platforms	Statewide
USC Spring Game	Columbia
USC Student Government	Columbia
USC Today	Columbia
USC University Libraries	Columbia

DATA COLLECTION

The USC team set up tables to disseminate the **Better Internet Survey** and promote survey participation at several locations including the Soda City Saturday Market, Columbia, SC in addition to other local events or conferences.



DATA COLLECTION

In addition, the SC Digital Equity Office **GetConnectedSC** Team were instrumental in promoting the **Better Internet Survey** on their roadshow. Also, Vizbii coordinated the data entry of all collected paper surveys, with the help of a team of cadets.



GetConnectedSC is an initiative of The Office of Regulatory Staff and the Department of Administration



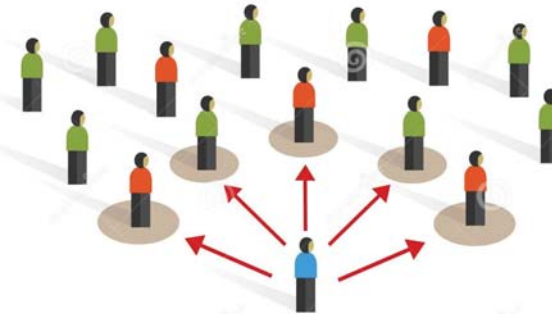
SAMPLING STRATEGY

For this project, a **non-random sampling strategy** was employed, specifically a combination of purposive and convenience sampling. The focus of the sample was on two distinct groups: underserved individuals who have internet access but find it insufficient to meet their needs, and unserved individuals who do not have internet access at home.

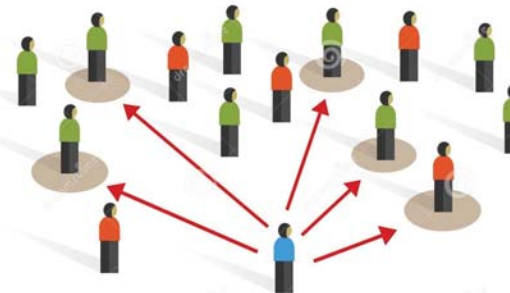
Potential Biases and Interpretation:

- It is important to acknowledge that the use of a non-random sampling approach introduces certain biases that can influence the interpretation of the results. In the case of purposive sampling, there may be a risk of selection bias, as the selection of participants is based on the researcher's judgment and knowledge of the population of interest. Additionally, convenience sampling could lead to self-selection bias, as individuals who choose to participate in the study may have different characteristics compared to those who do not participate.
- Given these potential biases, it is essential to exercise caution when interpreting the results. While the findings from this sampling approach can provide valuable insights into the experiences and perspectives of the underserved and unserved groups, the results may not be generalizable to the entire population. Therefore, any conclusions drawn from the data should be carefully qualified and considered in the context of the specific sample used.

Convenience sampling



Purposive sampling



QUANTITATIVE ANALYSES

The first step of quantitative analyses was data cleaning and management to ensure the accuracy and reliability of the dataset. Subsequently, a series of descriptive analyses were performed to gain insights into the basic characteristics and patterns within the data. Additionally, bivariate analyses were conducted to examine the relationships and associations between different variables of interest. These analyses collectively provided a comprehensive understanding of the data and laid the foundation for further advanced statistical modeling and interpretation of the results.



DEFINITION OF 'COMPLETE' SURVEYS

Prior to data collection, the USC in discussion with Vizbii analytic team and the SC Broadband Office determined a pre-identified set of information (questions) that were considered 'essential' and were critical to be captured. The Table below lists the variables that constituted what was defined a "Complete" record for analysis purposes:

Question Asked (Variable)	Have Internet: Needs Met	Have Internet: Needs NOT Met	No Internet or Cell Only: Want It	No Internet or Cell Only: Do NOT Want It
Zip Code*	✓	✓	✓	✓
Internet Availability: Do you currently have an internet connection at your home?	✓	✓	✓	✓
ISP Provider: Select your Internet Service Provider from the menu provided	✓	✓	N/A	N/A
Connection Type: What type of connection do you have at your home?	✓	✓	N/A	N/A
Needs: Does the internet connection at your home meet your needs?	✓	X	N/A	N/A
Barriers: Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection?	N/A	✓	N/A	N/A
Want: Would you like an internet connection at home?	N/A	N/A	✓	✓
Barriers: Based on your experience, which of the following statements describe your situation or circumstance(s)	N/A	N/A	✓	✓
Demographic – make up of household: Does any member of your household identify as one or more of the following?	✓	✓	✓	✓
Demographic – race/ethnicity: Does anyone living in your household identify as any of the following?	✓	✓	✓	✓
Demographic – rural, home-schooling, remote work, other: Select any of the following that apply to your household	✓	✓	✓	✓

Table 2: List of variables required for designating a survey 'Complete'

N/A: Question does not apply for this group of respondents → question was not asked to this group

✓ or X: Question applies and is asked → a response to the question is required to be counted as a 'Complete survey

27 **Zip Code was the only question that was required in the Better Internet Survey (i.e., a forced response was required to proceed). For all other questions in the survey, respondents were able to skip or proceed without answering a specific question.*



NOTE ON DATA USED FOR PRESENTATION OF RESULTS: 'COMPLETE' VS. ALL SURVEYS

The results presented in this report are based on the “FINAL dataset,” as provided by the Vizbii team on June 1, 2023, and include survey responses up to (inclusive of) May 31, 2023. A total of 18,481 surveys were attempted, 14,823 respondents reached (and answered) the last question, and 13,024 were considered ‘Complete’ surveys (see previous page).

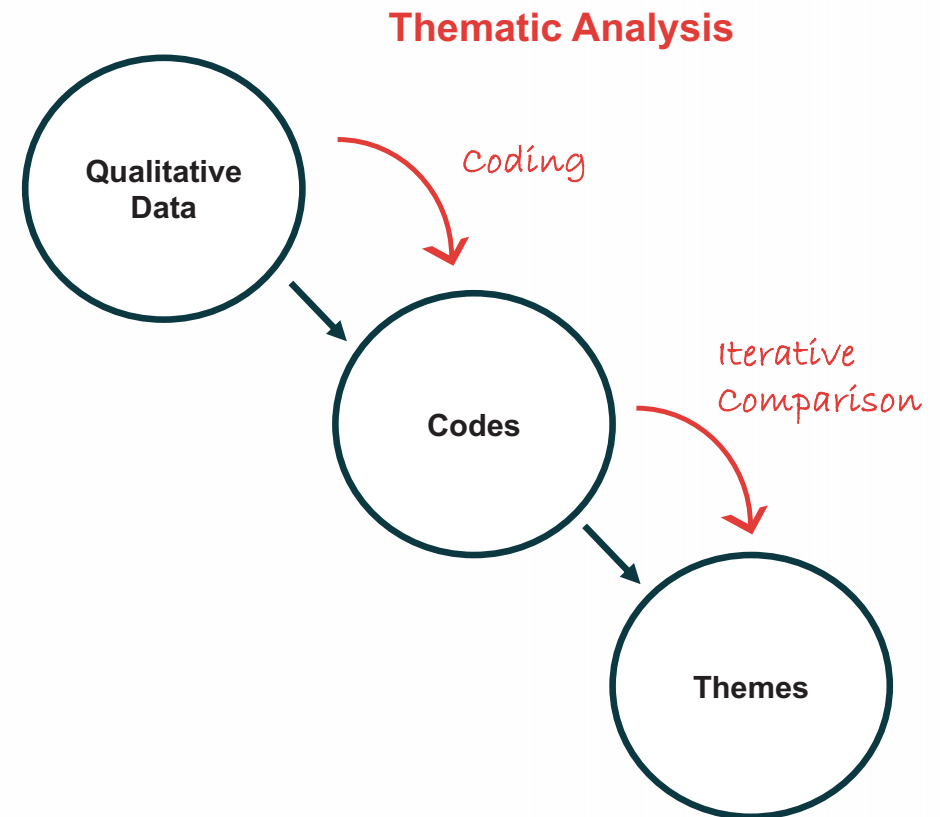
For the purposes of this report, the USC analytic team followed an approach of using ALL data, *whenever available*. We did not impute (i.e., replace missing data with substituted values) nor remove surveys that were not considered ‘Complete’ (i.e., dropout of all responses that miss one or more questions that were considered essential). That is, if John Doe responded to, say, 13 questions but missed household race (an essential question for ‘Complete’ purposes), John Doe’s response was not dropped from sample and Doe’s response to whether he wants internet, meeting his needs, etc. was still included in the sample. In other words, we attempted to be most inclusive in the data and analyze all responses available for each question, as applicable.

Restricting the analysis *only* to the ‘Complete’ dataset is another approach of analysis. Therefore, as sensitivity analyses (to understand the robustness and reliability of the conclusions drawn using a different subset of the data), we conducted the analyses on ‘Complete’ responses *only*, and the results are shared in the Excel sheets provided to SC BBO (Sheet 2; see appendix). Of note, the key findings did not seem to differ significantly across the two methods. Therefore, we opted for using all the available data because it just has more sample size (n) and a higher survey participation rate.



QUALITATIVE ANALYSES

The survey included 8 open-ended questions where respondents were allowed to use their own words to respond to specific prompts or questions. This qualitative data was analyzed using Microsoft Excel. Each response was read, and a thematic analysis was conducted for each question. Themes were color-coded and quantified using the color count function in Excel. Exemplary quotes were identified and listed for each question and grouped by pre-identified themes. Qualitative analysis was completed at the city, county, and regional levels. In order to further identify themes, word clouds were created for each question using Python, as a method of data cleaning, and Tableau, to create each word cloud.



RESULTS

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Participation Rate

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PARTICIPATION RATE, BY REGION

- All Survey Responses: **18,481**
 - Survey participation rate of 94 per 10,000 households in SC
 - Survey participation rate of 36 per 10,000 residents in SC
- % Reached last question: **14,823 (80.3%)^a**
- % Complete: **13,024 (70.5%)^b**
- Responses in Spanish: **657 (3.6%)**

SC Region	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	%	Count (n)	%
Lowcountry	5,534	30.0	3,998	30.7
Midlands	4,708	25.5	3,273	25.1
PeeDee	5,029	27.2	3,305	25.4
Upstate	3,200	17.3	2,448	18.8
Missing	10			

Table 3: Survey participation rate by Region

a: percentage of respondents who answered the last quantitative (not open-ended) question on the survey (i.e., gender identity)
 b: percentage of respondents who answered all 'essential' questions (see page 23)

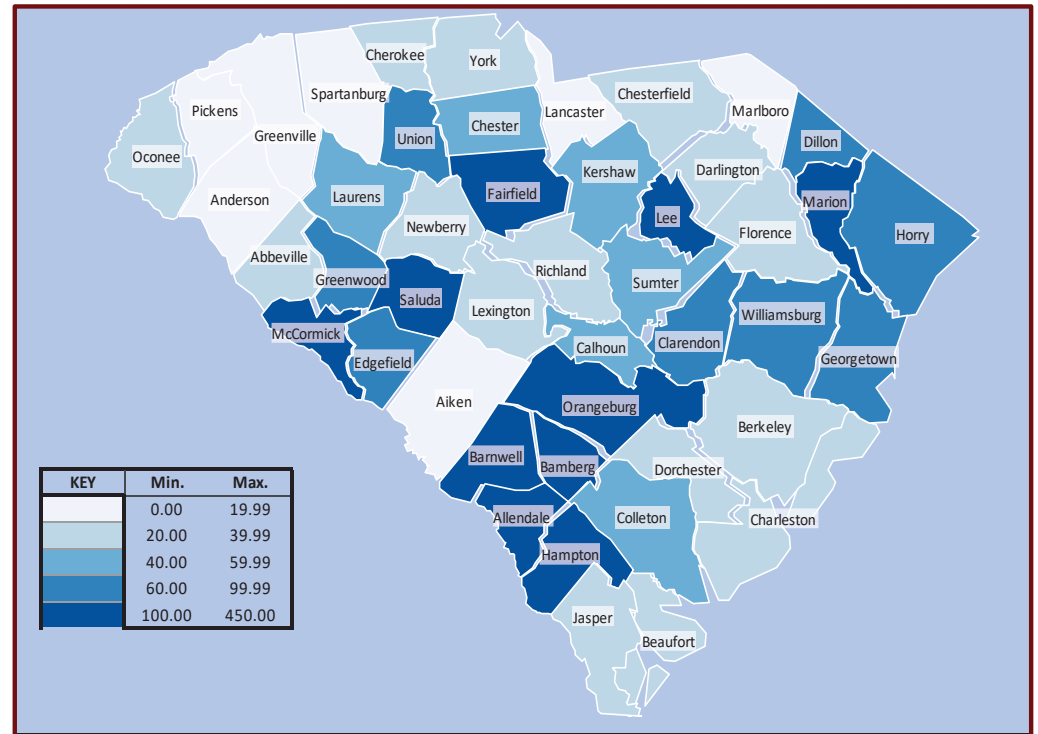


Figure 3a: Survey participation rate (per 10,000) of population per county

Survey participation rate indicates the proportion of people who actively engaged in the survey relative to the population. We calculated the survey participation rate for each county by comparing the number of completed surveys to the estimated county (or region or zip code) population.

PARTICIPATION RATE, BY ZIP CODE

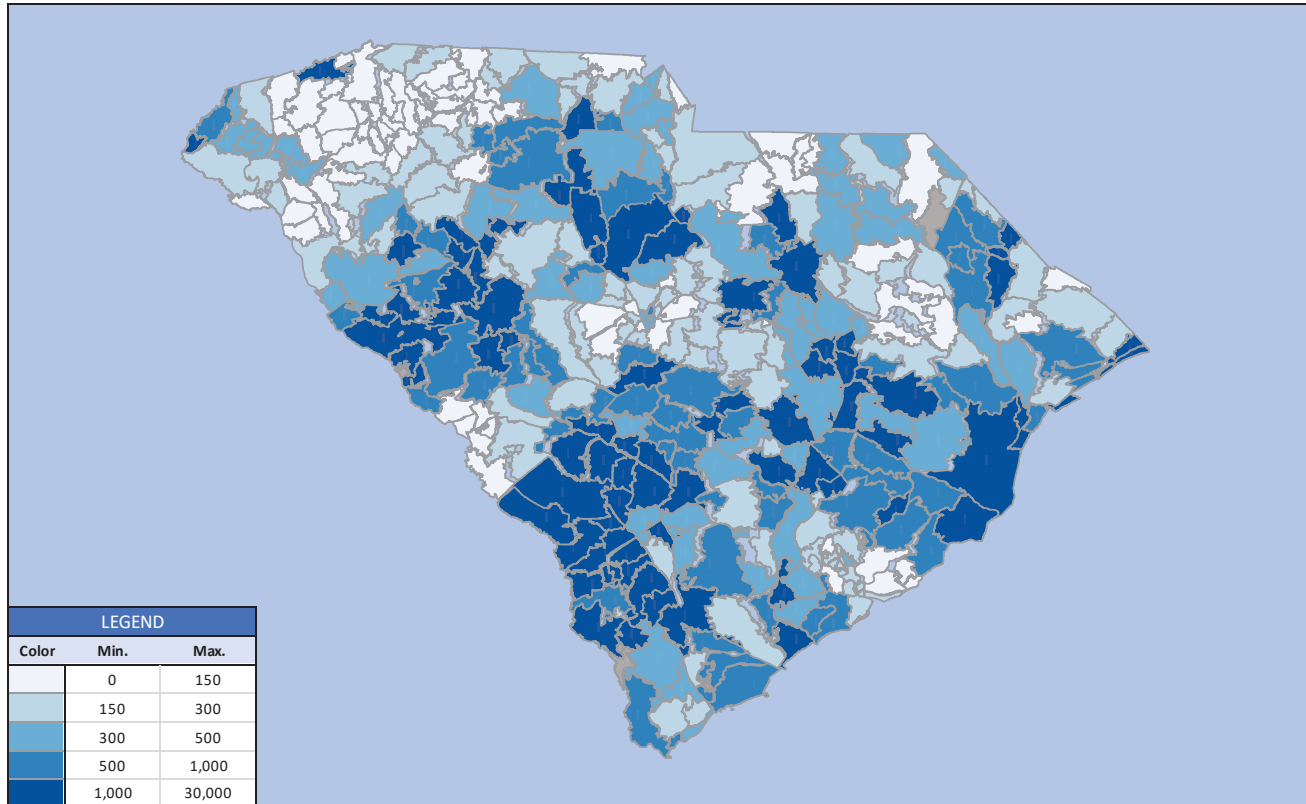


Figure 3b: Survey participation rate (per 100,000) of population per zip code



SURVEY RESPONSES BY RURALITY

RUCA Code	Rurality	All Surveys		Complete Surveys	
		County	Percent (%)	County	Percent (%)
1 Metropolitan area core: primary flow within an urbanized area (UA)	1 (Urban)	7,710	41.8	5,102	39.2
1.1 Secondary flow 30% to 50% to a larger UA	1.1 (Urban)	418	2.3	276	2.1
2 Metropolitan area high commuting: primary flow 30% or more to a UA	2 (Urban)	3,357	18.2	2,472	19
2.1 Secondary flow 30% to 50% to a larger UA	2.1 (Urban)	129	0.7	85	0.7
3 Metropolitan area low commuting: primary flow 10% to 30% to a UA	3 (Urban)	650	3.5	468	3.6
4 Micropolitan area core: primary flow within an Urban Cluster of 10,000 to 49,999 (large UC)	4 (Rural)	2,125	11.5	1,564	12
4.1 Secondary flow 30% to 50% to a UA	4.1 (Urban)	91	0.5	55	0.4
5 Micropolitan high commuting: primary flow 30% or more to a large UC	5 (Rural)	1,191	6.4	939	7.2
5.1 Secondary flow 30% to 50% to a UA	5.1 (Urban)	92	0.5	72	0.6
6 Micropolitan low commuting: primary flow 10% to 30% to a large UC	6 (Rural)	571	3.1	463	3.6
7 Small town core: primary flow within an Urban Cluster of 2,500 to 9,999 (small UC)	7 (Rural)	1,261	6.8	826	6.3
7.1 Secondary flow 30% to 50% to a UA	7.1 (Urban)	81	0.4	57	0.4
8 Small town high commuting: primary flow 30% or more to a small UC	8 (Rural)	233	1.3	186	1.4
9 Small town low commuting: primary flow 10% to 30% to a small UC	9 (Rural)	51	0.3	42	0.3
10 Rural areas: primary flow to a tract outside a UA or UC	10 (Rural)	375	2	304	2.3
10.1 Secondary flow 30% to 50% to a UA	10.1 (Urban)	82	0.4	72	0.6
10.3 Secondary flow 30% to 50% to a small UC	10.3 (Rural)	50	0.3	39	0.3
Missing		14			
Rural		5,857	31.7	4,363	33.5
Urban		12,610	68.2	8,659	66.5
Missing		14			

Table 4: Survey Responses by Rurality



Underserved and Unserved Community

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UNDER/UNSERVED COMMUNITY

The **Under/Unservd Community** represents 51% of the sample. For the purposes of this report, we define:

- **Underserved Community** as those who have Internet at home, but it does not meet their needs.
- **Unservd Community** as those who do not have Internet at home or access the Internet via cell only and wants it.

51%

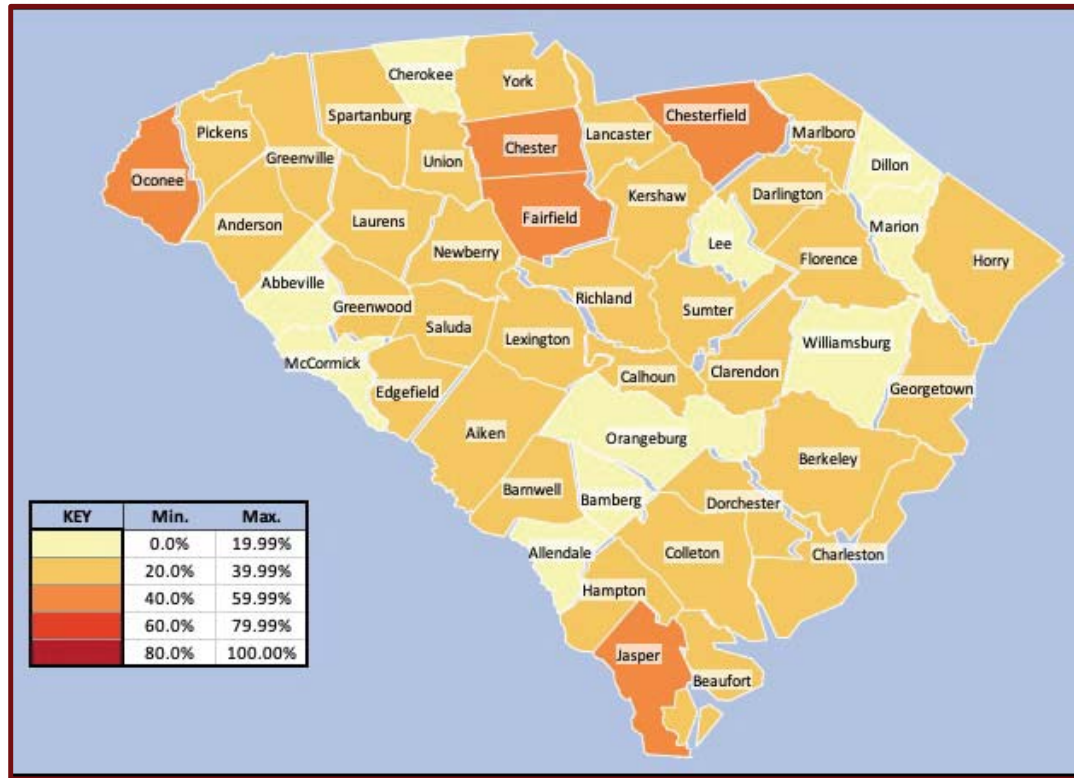
		Has Internet: Needs Met	Has Internet: Needs Not Met	No Internet or Cell Only: Wants It	No Internet or Cell Only: Does not want it
All Available Responses	Count (n) N=16,126*	7,355	4,341	3,874	556
	Percent (%)	45.6%	26.9%	24.0%	3.5%
'Complete' Surveys only	Count (n) N=13,024	5,656	3,382	3,494	492
	Percent (%)	43.4%	26.0%	26.8%	3.8%

Table 5: Distribution of Better Internet Survey by Internet Availability and Need

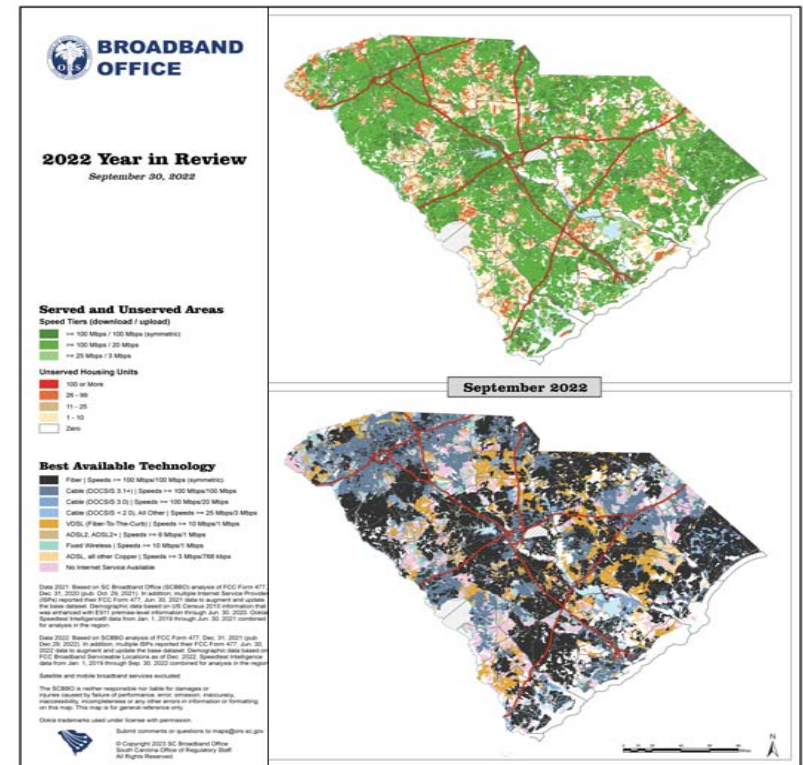
*A total of 16,126 surveys responded to three questions (1. Do you have internet? 2. And if they do – does it meet their needs? 3. And if they don't, do they want it?). Hence, it is less than 18,481 (because of missing answers to any of the three questions above but more than 13,024 because they may have answered those questions but missed other essential questions to be considered complete such as household characteristics)



GEOGRAPHY OF UNDERSERVED COMMUNITIES



Broadband Technology Map from SC BBO: <https://www.scdigitaldrive.org/>

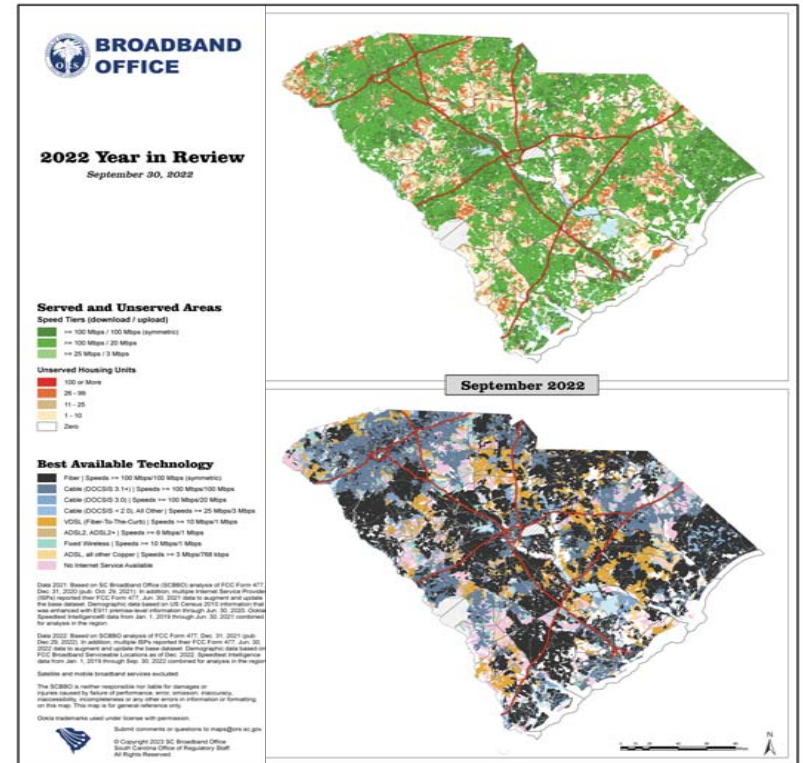
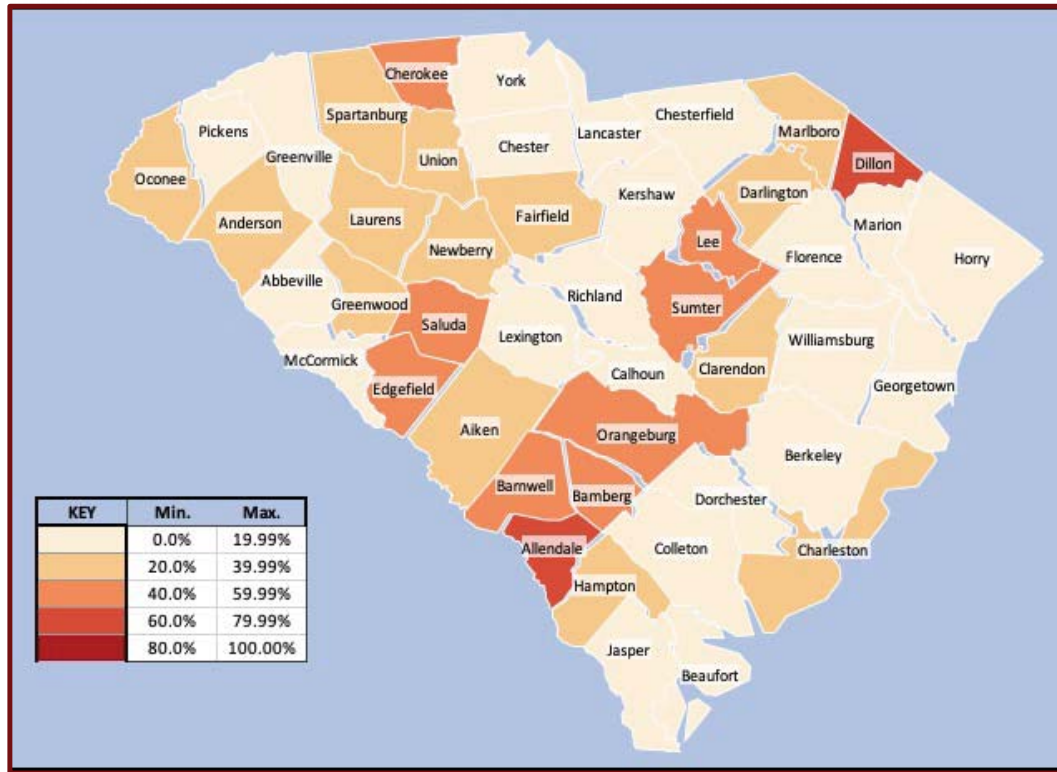


37

Figure 4: Geography of Underserved Communities: Percentage (% out of all county responses) of underserved communities per county

GEOGRAPHY OF UNSERVED COMMUNITIES

Broadband Technology Map from SC BBO: <https://www.scdigitaldrive.org/>



38 **Figure 5:** Geography of Unserved Communities: Percentage (% out of all county responses) of unserved communities per county

GEOGRAPHY OF UNDER/UNSERVED COMMUNITY

Broadband Technology Map from SC BBO: <https://www.scdigitaldrive.org/>

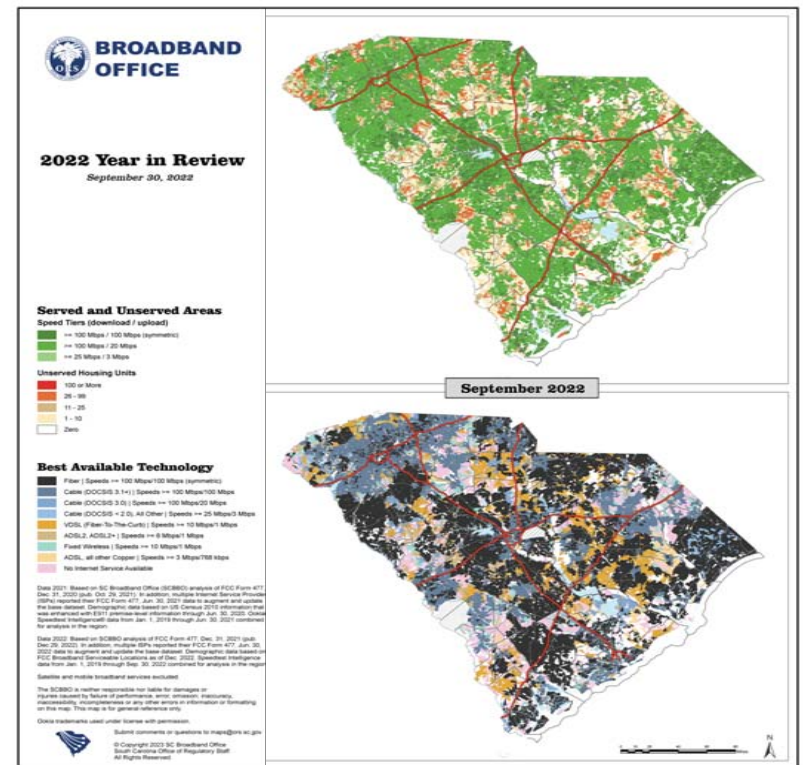
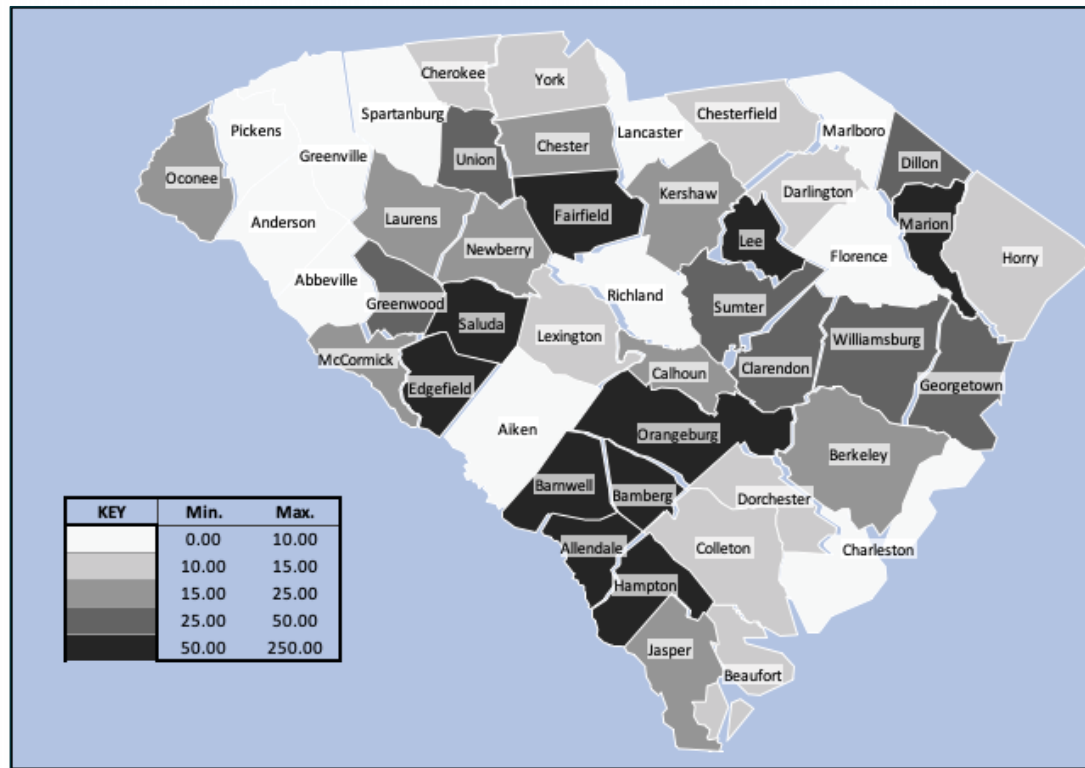


Figure 6: Geography of Under/Unserved Communities: Rate (per 10,000) of Under/ Unserved community per county

GEOGRAPHY OF SERVED COMMUNITIES

Broadband Technology Map from SC BBO: <https://www.scdigitaldrive.org/>

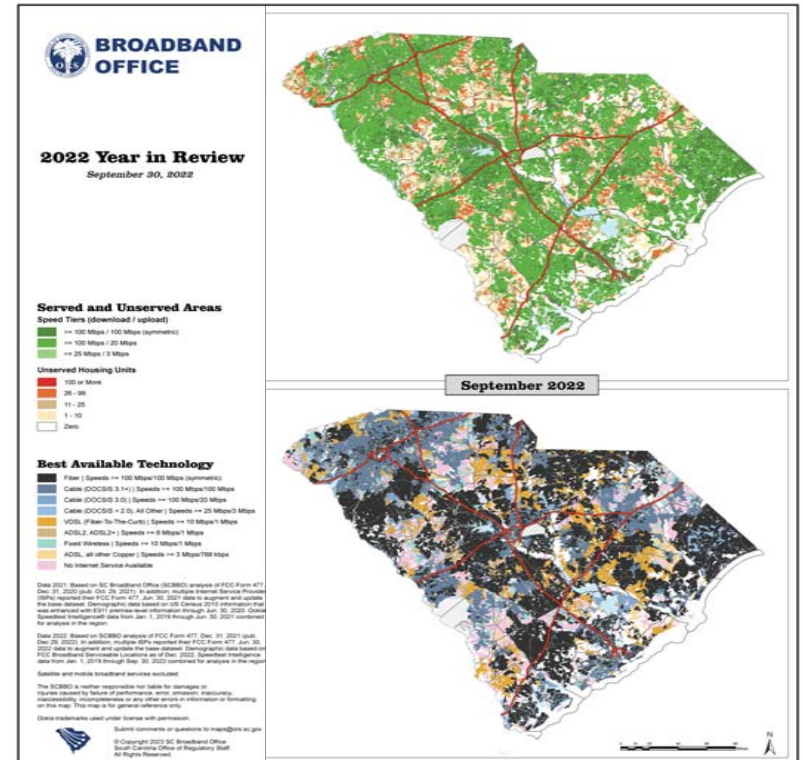
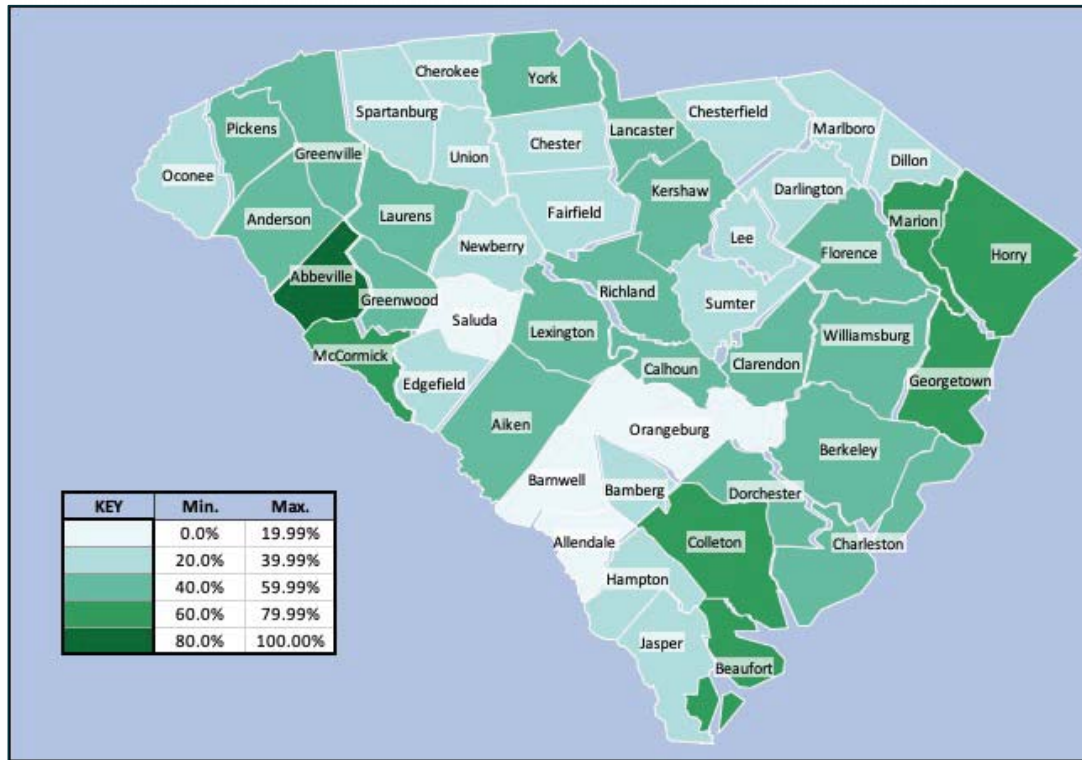


Figure 7: Geography of Served Communities: Percentage (% out of all county responses) of served community per county

FEELING ABOUT OPTIONS

Percentage of Negative Feelings by county

Frustrated



35.4%

Stressed



14.8%

50% expressed 'negative' feeling regarding their options

See Table A3 (Appendix III) for all results by county

How do you feel about the current options for connecting your home to the internet?

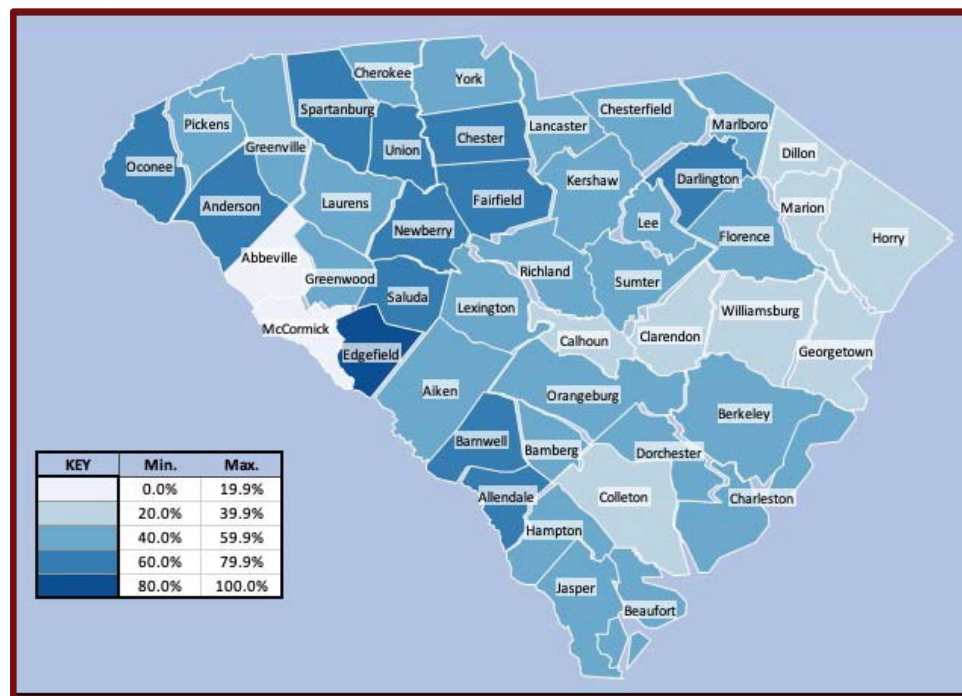


Figure 8: Geography of Negative Feelings (Frustrated and Stressed) about Home Internet, Percentage (% out of all county responses) by county

FEELING ABOUT OPTIONS

How do you feel about the current options for connecting your home to the internet?

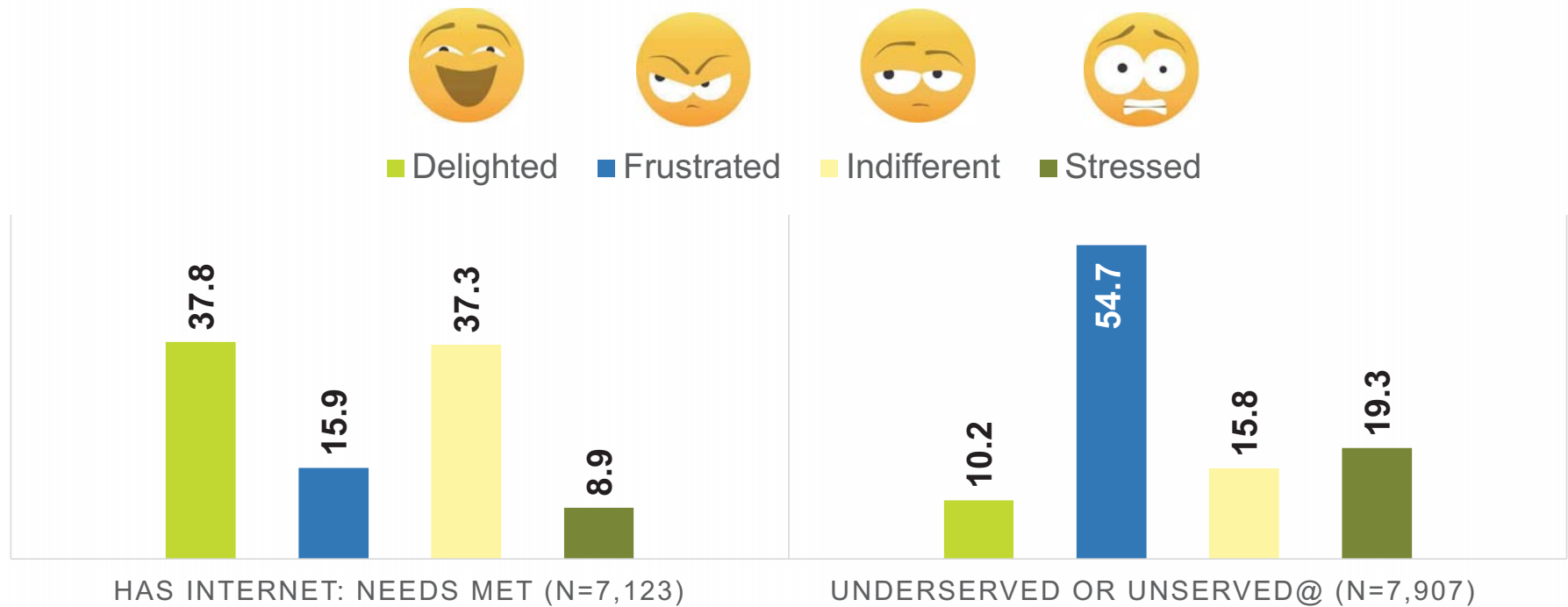
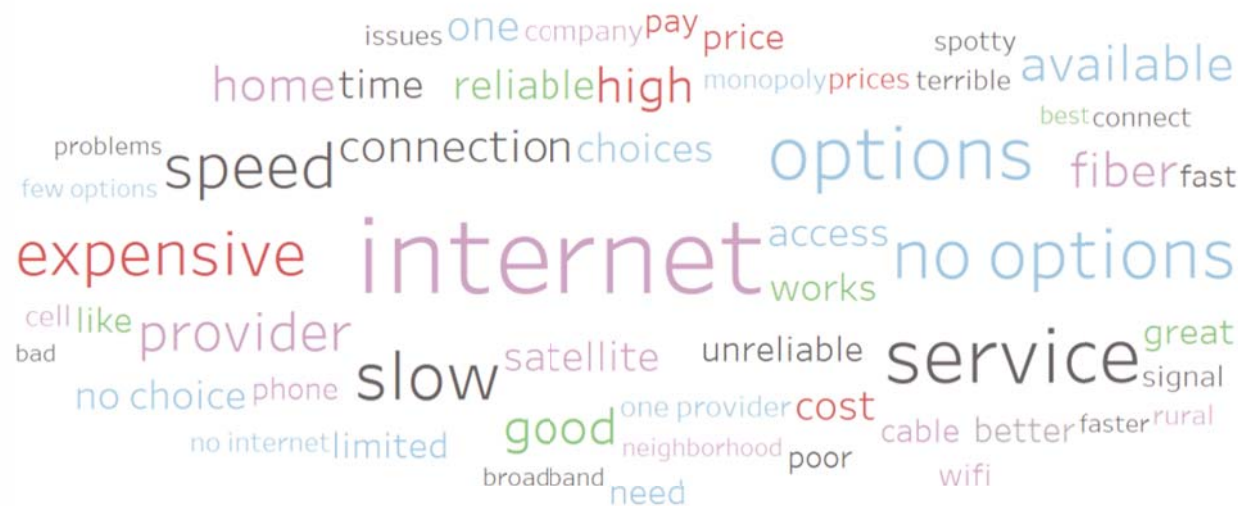


Figure 9: Feeling about current options for connecting to the Internet, by needs (met vs. unmet)

FEELING ABOUT OPTIONS

OPEN-ENDED TEXT, WORD CLOUD

*How do you feel about the current options for connecting your home to the internet?
{open-ended text}*



County	Cost	Options	Speed/Use	Total Responses
Lowcountry	17%	27%	34%	3293
Midlands	19%	32%	39%	2606
PeeDee	18%	27%	31%	2388
Upstate	18%	41%	35%	1785

Table 6: Feeling About Options: open-ended questions (text responses) by theme and county

	problems with internet service or speed
	problems with cost
	problems with options

	positive comments about internet
	other



FEELING ABOUT OPTIONS

OPEN-ENDED TEXT, THEMES

Speed and Cost

*How do you feel about the current options for connecting your home to the internet?
{open-ended text}*

"I am both frustrated and stressed because we are not afforded better connection options. It is embarrassing that in this era in time that we have inadequate internet access in our area." -- **29059, Orangeburg County**

"The internet we have is absolutely awful. Our internet provider says it's because we're too far from the satellite and there is nothing they can do. We can't get any other internet as there is no infrastructure so far out in the country." -- **29010, Lee County, NA**

"I need internet, but can barely afford my electric and water bills. Why should I have to choose between them?" -- **29210, Richland County**

"Poorer than poor connection. Satellite only option. Download speed is ridiculous and unable to perform my healthcare job duties unless I drive 30 miles back to my health care office site to order patient tests, meds and communicate tests results." -- **Spartanburg County, 29302, woman**

"Yes!! It's very slow and 98% of the time... we have to connect to our mobile hotspot or go to a relatives house with faster speed to download anything. If we are connected to the WiFi it won't budge and then it'll say weak signal connection lost!" -- **29848, Greenwood County, woman**

"The internet service stays out more than working." -- **29817, Barnwell County, woman**

"Signal is unreliable with untimely disruptions and costs too much!" -- **Orangeburg County, 29118**

"Slow connection. Stone age. May as well have dial up" -- **Berkely County, 29486, man**

"After introductory price for a short time the cost skyrockets. Some families have to make a choice. Food or wifi." -- 29527, Horry County



FEELING ABOUT OPTIONS

OPEN-ENDED TEXT, THEMES

*How do you feel about the current options for connecting your home to the internet?
{open-ended text}*

Options

"Very few options and what we have is not good. They don't care that they aren't good though, because they're all we've got. They price gouge, throttle speeds, and get away with it. -- **29585, Georgetown County, woman**

"The only access we have is using [ISP] hotspots. [There] are folks about 1/2 mile away with internet access on our road but not on our end of the road." -- **29070, Lexington County, woman**

"There are no options other than hot spot from phone and I never have more than one bar of service with that so there are times when I have no service on phone so I miss calls. My fear is we have an emergency and cannot call for help" -- **29621, Anderson County, NA**

"We have no options but an Hot spot from [ISP]. There is literally internet .03 miles from my driveway. We do not live far from town. I just don't understand." --**29805, Aiken County, woman**

"We don't have services and were promised them months ago. It has effected employment for my family" -- **29574, Marion County, NA**

"There are no internet service options available at my house. I'm a teacher. I need it." -- **29742, York County, woman**

"We live in an area that has never had any internet. It's a small community with a 2-3 mile range. Outside of this community internet is being provided. But we can't get any to bring us internet any further. It's FRUSTRATING AS HECK" -- **29006, Lexington County, woman**

"We have been told by several different internet providers that we are "out of range" even though we have someone less than half a mile away that has internet connectivity with one of those companies" -- **29379, Union County, woman**



Household Demographics

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC

HOUSEHOLD RACE/ETHNICITY

Does anyone living in your household identify as any of the following?
[Select all that apply to the people in your household]

Race/ethnicity	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)*	Percent (%)**	Count (n)*	Percent (%)**
Black or African American	4,930	30.6%	3,841	29.5%
White	8,842	54.9%	7,283	55.9%
American Indian or Alaska Native	276	1.7%	215	1.7%
Asian or Pacific Islander	317	2.0%	257	2.0%
Hispanic/Latino	1,572	9.8%	1,342	10.3%
Some other racial or ethnic identity	301	1.9%	251	1.9%
Prefer not to say	1,251	7.8%	983	7.5%
Missing (i.e., None of the 7 items selected)	2,382			

30% of households had someone who identify as Black or African American



Table 7: Household Race/Ethnicity

47 * Respondents can select multiple races/ethnicities as it applies to the people in their household. Therefore, the sum of count (n) can add up to more than N (survey responses).

**Percentage is calculated as: $n/(N-\text{missing}) \times 100$



UNIVERSITY OF
South Carolina

INTERNET NEEDS BY RACE/ETHNICITY

66.1% of Hispanic/Latino households are unserved or underserved in terms of home internet compared to 40% of Asian or Pacific Islanders; Hispanic/Latinos had the highest percentage of unserved (no internet).

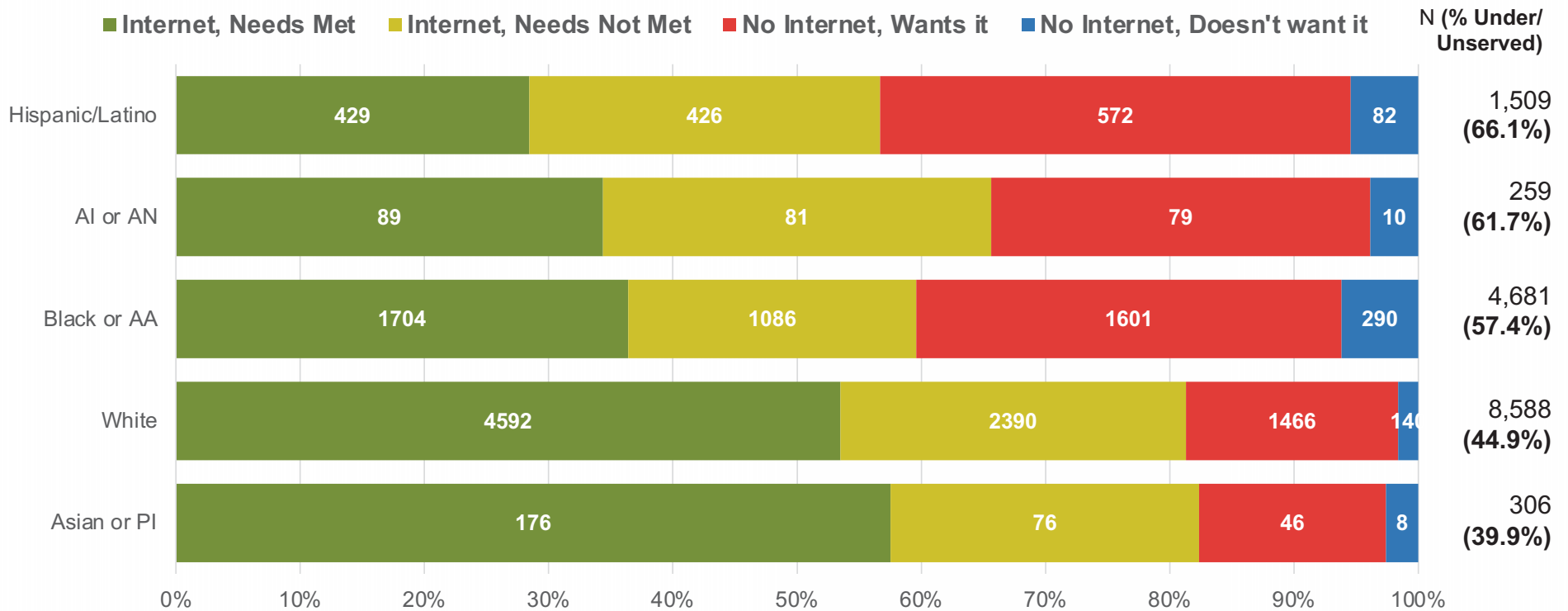


Figure 10: Internet Needs by household race/ethnicity

48 AI or AN = American Indian or Alaska Native | PI = Asian or Pacific Islander | AA: African American

HOUSEHOLD INCOME

What was your total household income, last year, before taxes?

16% of households' income was less than \$30K per year

Income Level	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%) [*]	Count (n)	Percent (%) [*]
Less than \$30,000	2350	16.6%	1855	16.2%
\$30,000 to \$79,999	5000	35.5%	4070	35.5%
More than \$80,000	3853	27.3%	3246	28.4%
I do not know	425	3%	290	2.5%
Prefer not to answer	2462	17.5%	2002	17.5%
Missing	4391		1561	

Table 8: Household Income Level



49 * Percentage shown is the 'valid percent', that is proportion of data that is considered valid or usable in relation to the total number of data points collected (i.e. exclude missing data).

INTERNET NEEDS BY HOUSEHOLD INCOME

61% of lowest income households are unserved or underserved in terms of home internet compared to 41% of highest income households

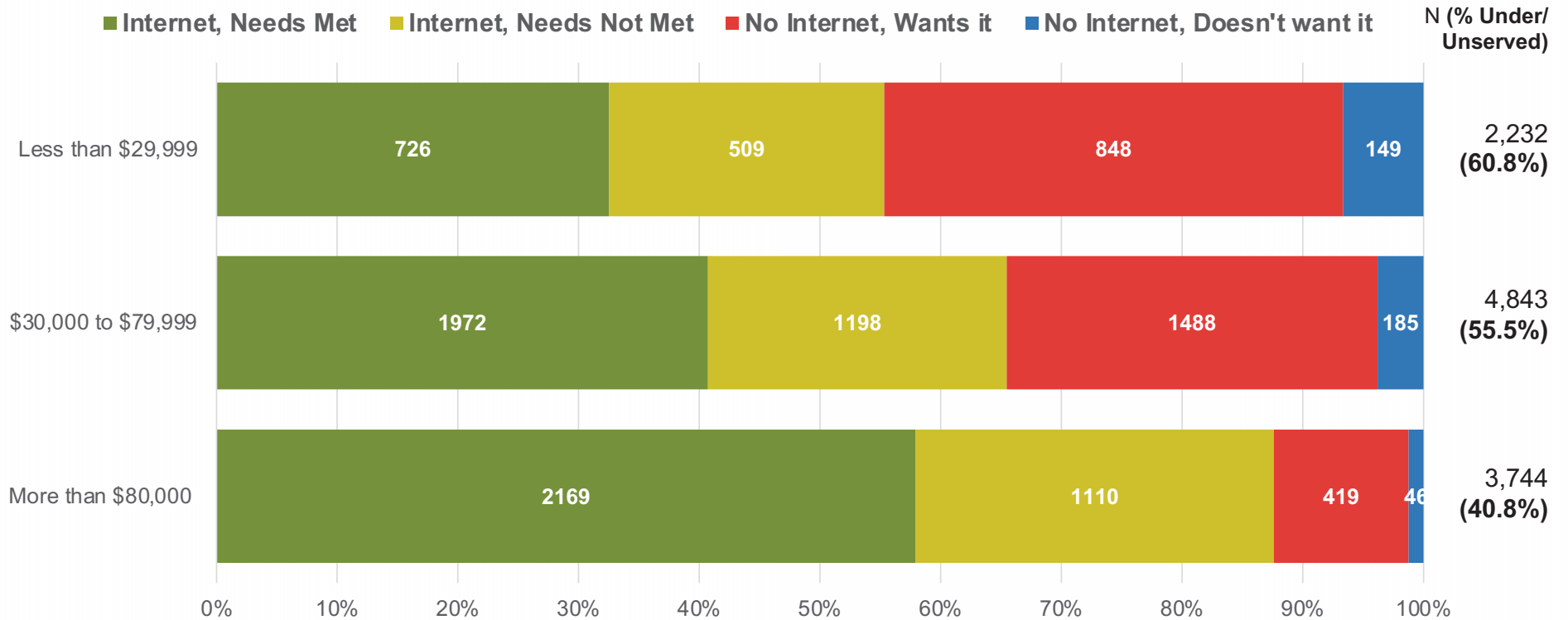


Figure 11: Internet Needs by household income

HOUSEHOLD HIGHEST EDUCATION

What is the highest level of education achieved by any member of your household?

35% of households' highest education level was less than an Associate or Bachelor degree



Highest Education	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%)*	Count (n)	Percent (%)*
High school diploma or equivalent certificate (GED) or less	2414	16.2%	1946	16.1%
Some college credit, no degree or Trade/Technical/Vocational training or certificate	2750	18.4%	2231	18.4%
Associate degree or Bachelor degree	5438	36.4%	4433	36.6%
Postgraduate degree	3420	22.9%	2768	22.9%
I don't know	155	1%	100	0.8%
Prefer not to say	745	5%	604	5%
Missing	3559		942	

Table 9: Household Highest Education Level

* Percentage shown is the 'valid percent', that is proportion of data that is considered valid or usable in relation to the total number of data points collected (i.e. exclude missing data).

INTERNET NEEDS BY EDUCATION LEVEL

65% of lowest education households are unserved or underserved in terms of home internet compared to 40% of highest education households

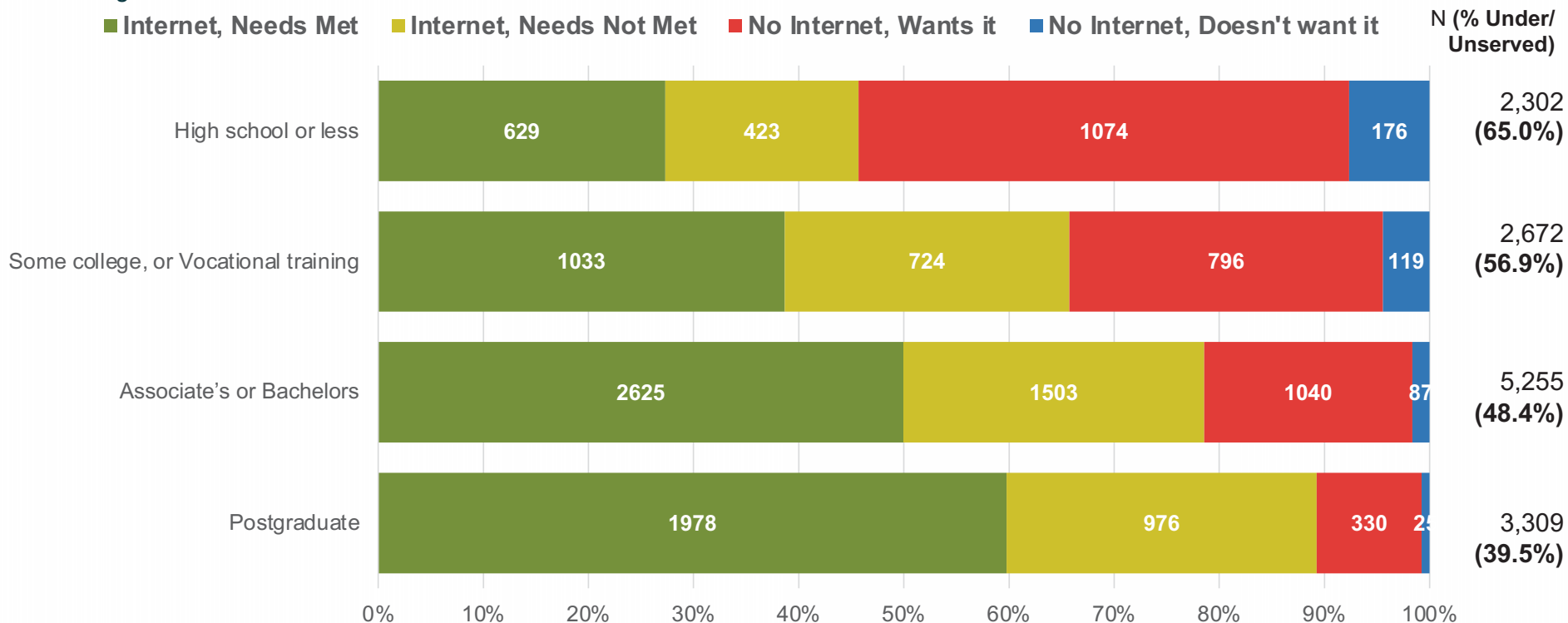


Figure 12: Internet Needs by household highest education level

HOUSEHOLD MAKEUP I

Select any of the following that apply to your household
[Select any that apply]

Household Makeup	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)*	Percent (%)**	Count (n)*	Percent (%)*
I/We live in a rural location	8046	50.5%	6768	52.0%
I/We homeschool my/our child(ren)	533	3.3%	454	3.5%
Someone in our household works remotely from home	3813	23.9%	3169	24.3%
I/We run a business (or farm) from home	1733	10.9%	1468	11.3%
None of these apply	5228	32.8%	4119	31.6%
Missing (i.e.. None of the 5 items selected)	2545			

51% of the households indicated they lived in a rural area



11% of the households run a business or a farm from home

Table 10: Household Makeup I

* Respondents can select multiple options as it applies to the people in their household. Therefore, the sum of count (n) can add up to more than N (survey responses).

**Percentage is calculated as: $n/(N-\text{missing}) \times 100$



HOUSEHOLD HOUSEHOLD MAKEUP II

Does any member of your household identify as one or more of the following? [Select any that apply]

Household Makeup	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)*	Percent (%)**	Count (n)*	Percent (%)**
School age child(ren) [pre-K - 12 student(s)]	5294	32.7%	4310	33.1%
College, vocational or other type of student(s)	2738	16.9%	2172	16.7%
Veteran(s)	2576	15.9%	2137	16.4%
Senior Citizen(s) (65+ years of age)	7148	44.1%	5698	43.8%
Person(s) with a physical disability	2074	12.8%	1666	12.8%
Person(s) with a chronic illness	2002	12.4%	1597	12.3%
Person(s) with a developmental or learning difficulty/disability	886	5.5%	716	5.5%
Person(s) who do(es) not speak English or has a language barrier	603	3.7%	493	3.8%
Person(s) who is (are), or has (have) been, incarcerated	275	1.7%	233	1.8%
Person(s) who is (are) unemployed and looking for work	1139	7.0%	937	7.2%
None of the above	2552	15.8%	2069	15.9%
Missing (i.e.. None of the 11 items selected)	2283			

Table 11: Household Makeup II

44% of the households had a senior citizen at home



33% of the households had a school-aged child(ren) at home

* Respondents can select multiple races/ethnicities as it applies to the people in their household. Therefore, the sum of count (n) can add up to more than N (survey responses).

**Percentage is calculated as: $n/(N-\text{missing}) \times 100$



INTERNET NEEDS BY HOUSEHOLD MAKEUP

64% of those living in Rural Location are unserved or underserved in terms of home internet

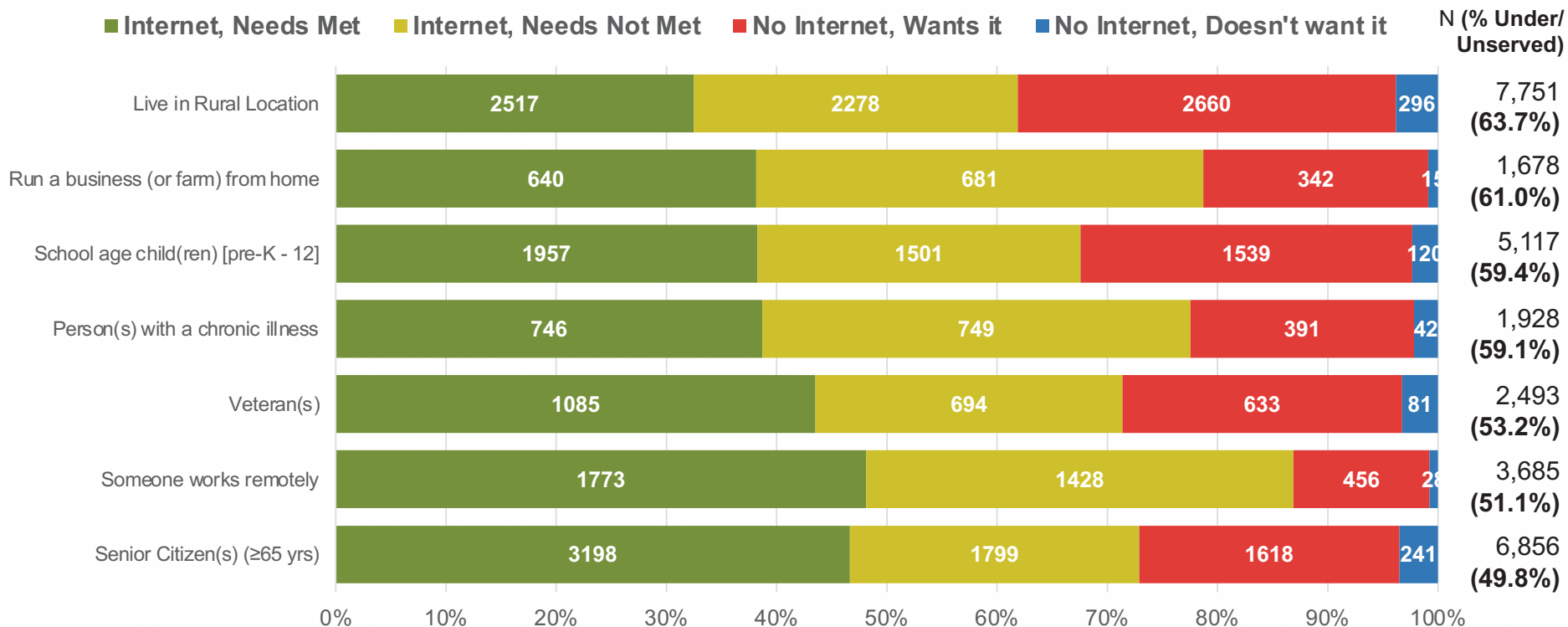


Figure 13: Internet Needs by household makeup

RESPONDENTS' GENDER

What is your gender?

58% of the respondents were women

60% of those who did not specify or self-identified their gender were unserved or underserved compared to **47%** for Men and **53%** for Women

Gender	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%)*	Count (n)	Percent (%)*
Woman	8643	58.3	6806	56.6
Man	5102	34.4	4328	36
Prefer to self-identify	51	0.3	40	0.3
Prefer not to say	1027	6.9	842	7
Missing	3658		1008	

Table 12: Respondents' Gender

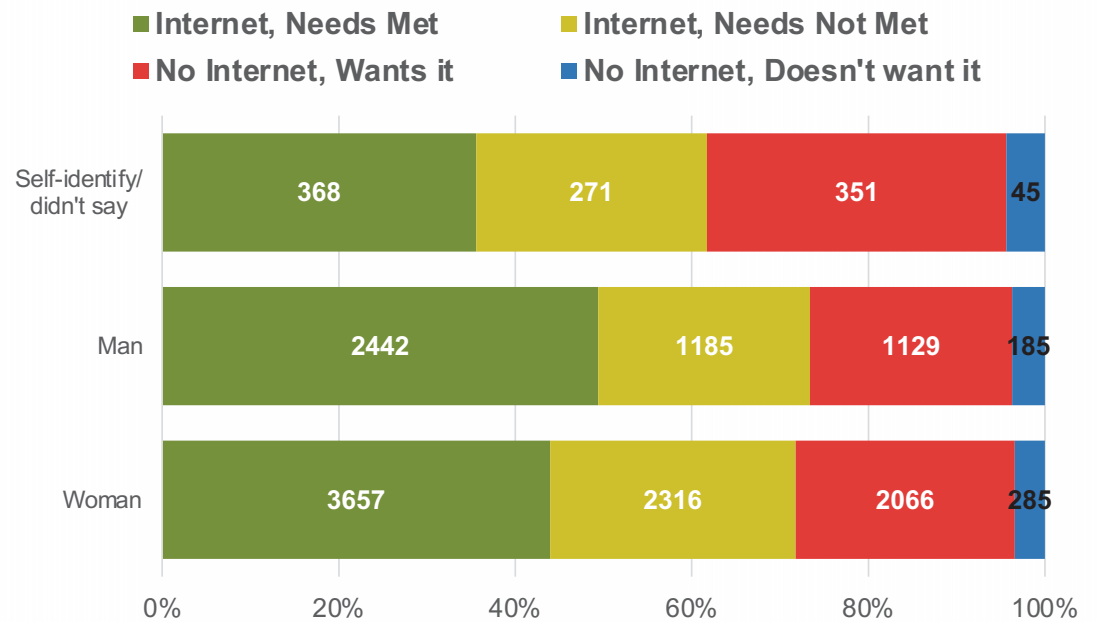


Figure 14: Internet Needs by Gender

* Percentage shown is the 'valid percent', that is proportion of data that is considered valid or usable in relation to the total number of data points collected (i.e. exclude missing data).

HOME TYPE

Which of the following best describes your home?

70% of the households were single family home

72% of those living in public housing are unserved or underserved compared to

45% in multi-unit dwellings and 48% in single family

Home Type	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%)	Count (n)	Percent (%)
Single Family Home (no shared walls)	11022	70.1	8945	70.4
Multi-Unit Dwelling (such as an apartment, townhome, or condo)	1744	11.1	1355	10.7
Public Housing or Housing Projects (government subsidized housing)	529	3.4	428	3.4
Mobile Home	2039	13	1671	13.2
Other	397	2.5	299	2.4
Missing	2750		326	

Table 13: Home Type

■ Internet, Needs Met ■ Internet, Needs Not Met
■ No Internet, Wants it ■ No Internet, Doesn't want it

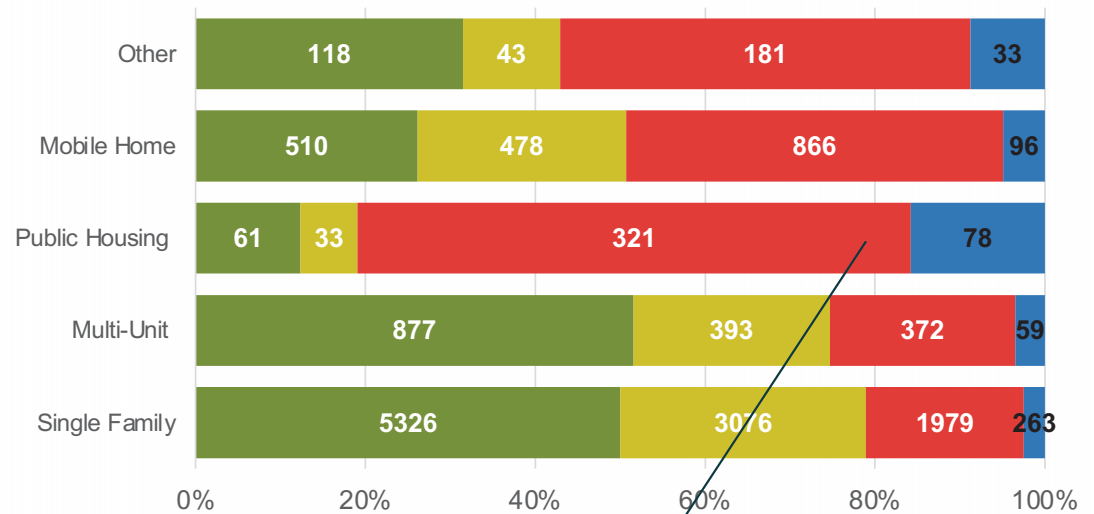


Figure 15: Internet Needs by Home Type

65% of those living in public housing do not have internet at home

HOUSEHOLD OWNERSHIP

Which of the following best describes your relationship to your home?

74% of the respondents owned their household

56% of those who rent are unserved or underserved compared to 48% of those who own

Ownership	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%) [*]	Count (n)	Percent (%) [*]
Owned by you or someone in this household	10934	74.2	8872	74.1
The home is rented by you or someone in this household	2231	15.1	1777	14.9
I/We own a mobile home on property that is rented	719	4.9	603	5
Some other relationship	859	5.8	714	6
Missing	3738		1058	

Table 14: Household Ownership

■ Internet, Needs Met ■ Internet, Needs Not Met
■ No Internet, Wants it ■ No Internet, Doesn't want it

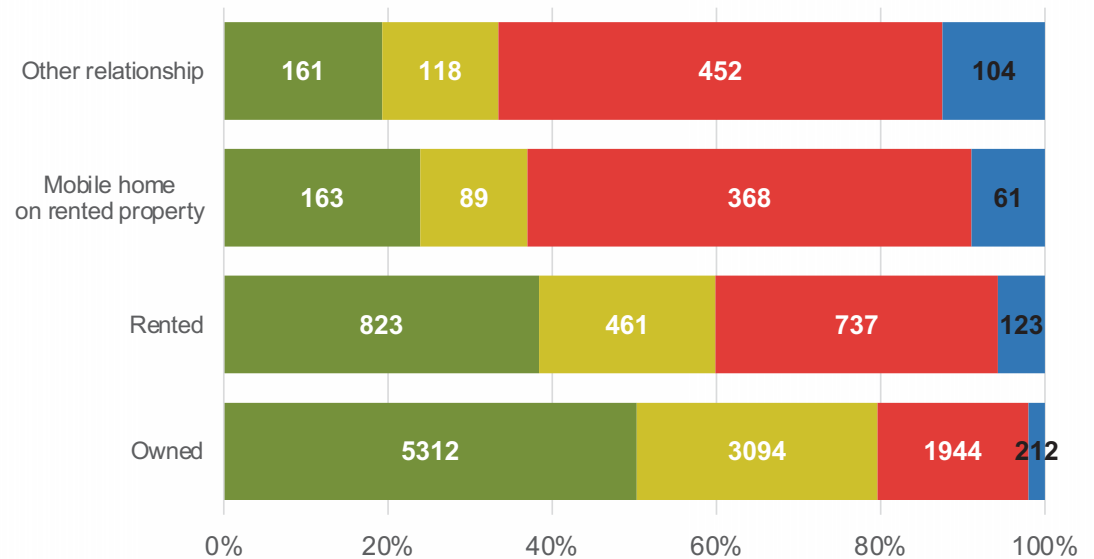


Figure 16: Internet Needs by Household Ownership

58 ^{*} Percentage shown is the 'valid percent', that is proportion of data that is considered valid or usable in relation to the total number of data points collected (i.e. exclude missing data).

HOUSEHOLD SIZE

Which of the following best describes your relationship to your home?

Including yourself, how many adults (18 years of age and older) live in your home?

How many children (17 years of age and younger) live in your home?

Household Size - Adults	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%)	Count (n)	Percent (%)
1	3020	21	2387	20.4
2	7810	54.2	6387	54.5
3	2311	16	1888	16.1
4	990	6.9	830	7.1
5+	275	1.9	227	1.9
Missing	4075		1305	

Table 15: Household Size, Adults

Household Size - Adults	All Surveys N=18,481		Complete Surveys N=13,024	
	Count (n)	Percent (%)	Count (n)	Percent (%)
0	7884	59.5	6386	59.2
1	2284	17.2	1873	17.4
2	2041	15.4	1690	15.7
3	726	5.5	599	5.6
4	227	1.7	174	1.6
5+	90	0.7	70	0.6
Missing	5229		2232	

Table 16: Household Size, Children at home

59 * Percentage shown is the 'valid percent', that is proportion of data that is considered valid or usable in relation to the total number of data points collected (i.e. exclude missing data).

HOW DOES BETTER INTERNET SURVEY DATA COMPARE TO SC AND USA?

Characteristic		SC
Age	<18	9%
	18-64	9%
	65+	9%
Household Income	<\$20,000	41%
	\$20,000-74,999	18%
	\$75,000+	6%
Race	Black	16%
	Native American / Alaska Native	17%
	Asian	5%
	Mixed race	9%
	Hispanic or Latino	17%
	White	6%
Employment Status	Employed	8%
	Unemployed	11%
Educational Attainment	Less than high school	16%
	Some college or associate degree	10%
	Bachelor degree	4%

Table 17: Individuals or households with no internet access by characteristic in South Carolina, Broadbandnow (2023)

Characteristic		USA
Age	18-29	30%
	30-49	14%
	50-64	21%
	65+	36%
Household Income	Less than \$30,000	43%
	\$30,000-\$49,999	26%
	\$50,000-\$74,999	13%
	\$75,000+	8%
Race	White	20%
	Black	29%
	Hispanic	35%
Gender	Men	23%
	Women	23%
Educational Attainment	Highschool or less	41%
	Some college	20%
	College graduate	6%
Community	Urban	23%
	Rural	28%

Table 18: Percent of US adults who do not have a broadband connection at home by characteristics, USA | Pew Research Center (2021)

Those who HAVE Internet

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC

INTERNET SERVICE PROVIDERS (ISP)

Internet Service Provider (ISP)	All Surveys N=12,426		Complete Surveys N=9,038	
	Count (n)	Percent (%)	Count (n)	Percent (%)
Spectrum	3,301	27.5%	2,338	25.9%
AT&T	1,410	11.7%	1,011	11.2%
HTC	938	7.8%	669	7.4%
Comporium	716	6%	471	5.2%
Hargray	519	4.3%	385	4.3%
Home Telecom	475	4%	360	4%
Comcast	472	3.9%	403	4.5%
WCTEL	430	3.6%	367	4.1%
I don't know	416	3.5%	365	4%
FTC	357	3%	280	3.1%
Brightspeed	325	2.7%	247	2.7%
HughesNet	326	2.7%	275	3%
T-Mobile	308	2.6%	247	2.7%
Other Internet Service Provider	293	2.4%	265	2.9%
Truvista	241	2%	179	2%
Verizon	212	1.8%	170	1.9%
Frontier	152	1.3%	97	1.1%
Vyve	159	1.3%	138	1.5%
Breezeline formerly Atlantic Broadband	125	1%	103	1.1%
Palmetto Rural	116	1%	107	1.2%
Other ISP	1009	8.3%	826	9.1%
Missing	419			

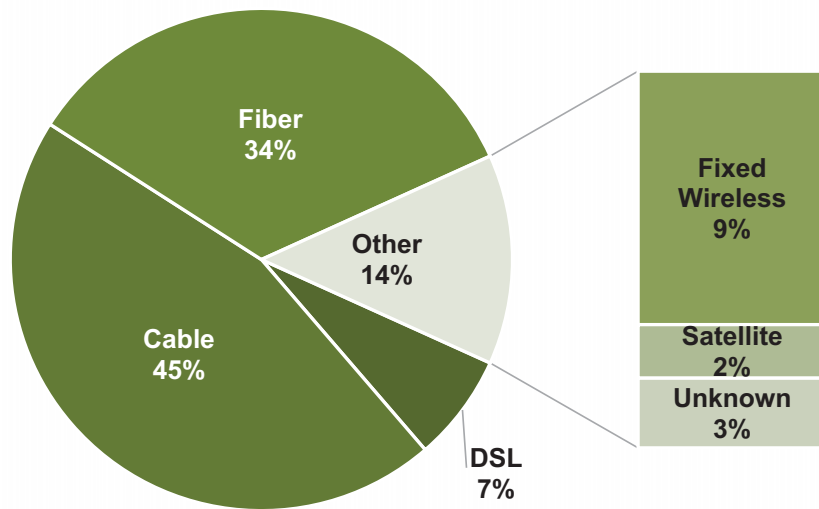
Table 19: Internet Service Providers

39% of those who have internet at home were receiving it from Spectrum or AT&T.



TECHNOLOGY TYPE BY NEED

Has Internet; Meets Needs



Has Internet; Doesn't Meet Needs

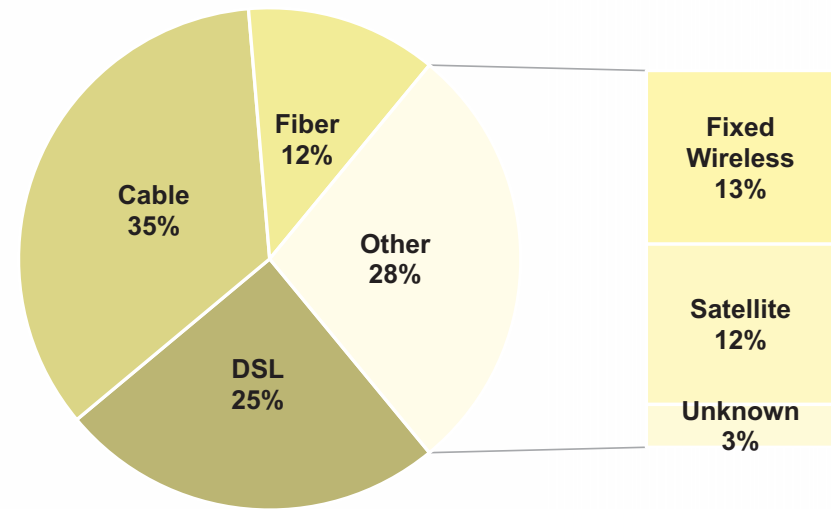


Figure 17: Distribution of type of Internet technology available at home by needs (N=12,426)

FEELING ABOUT ISP

When it comes to **Customer Service**, how do you feel about your Internet Service Provider (ISP)?

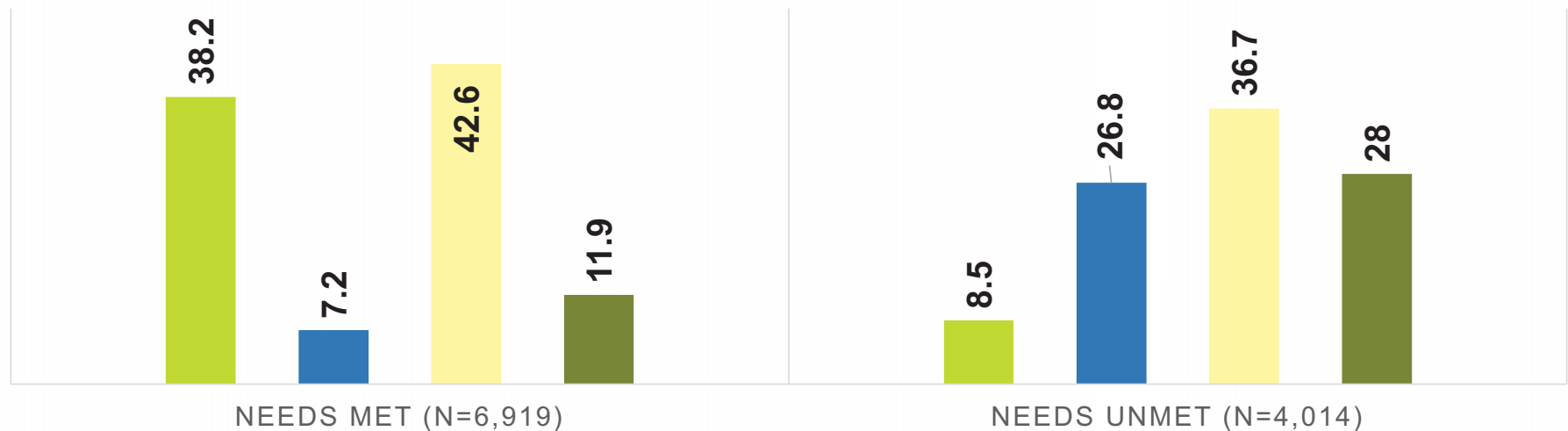
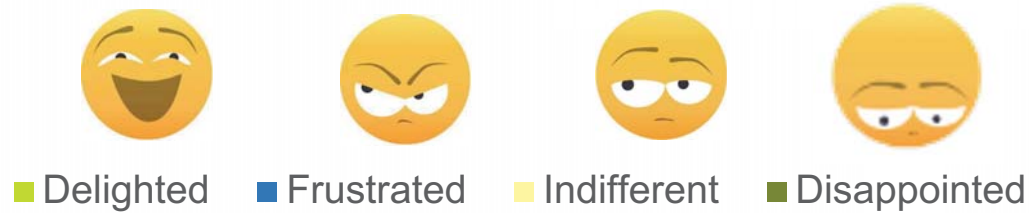


Figure 18: Feeling about Internet Service Provider customer service, by needs (met vs. unmet)

[among those who have Internet]

FEELING ABOUT ISP

OPEN-ENDED TEXT, WORD CLOUD

When it comes to **Customer Service**, how do you feel about your Internet Service Provider (ISP)?
 {open-ended text}



Region	good customer service	bad customer service	Total Responses
Lowcountry	19%	39%	1239
Midlands	8%	39%	1095
PeeDee	14%	27%	1151
Upstate	11%	36%	818

Table 20: Feeling About ISP: open-ended questions (text responses) by theme and region

	poor customer service
	good customer service
	other

FEELING ABOUT ISP

OPEN-ENDED TEXT, THEMES

Good and Bad Customer Service

When it comes to Customer Service, how do you feel about your Internet Service Provider (ISP)?
{open-ended text}

"They always are courteous and professional and take care of problems quickly." -- **29649, Greenwood County, woman**

"Agents seem to be very uneducated on the services they offer. They quote one price then billed another. Often short and rude during interactions" -- **29053, Lexington County, man**

"Excellent customer service, on time, friendly." -- **29306, Spartanburg County, woman**

"[ISP] made big promises and advertises of reliable high speed service. What we get is many outages throughout our neighborhood and slower speeds in the evening no matter which plan you pay for!" -- **Dorchester County, 29485, woman**

"As a retired senior on fixed income, they could care less in making it more affordable. Especially the number of years that we have used their services." -- **Dorchester, 29483, man**

"Extremely poor customer service, 5x as expensive as it should be." -- **Pickens County, 29642**

"have to travel 25+ miles if you need to return or exchange equipment" -- **Union County, 29379, NA**

"Their customer service does not work well with people. I am a teacher, and I am gone from my home the majority of my day. And every time I have Internet issues, they are unwilling to help me because I cannot be at my home waiting on them to show up" -- **Chester County, 29706, woman**

"When we call they are not polite, and they are not helpful. We have had someone hang up on us when we called about the internet being down. If a line gets cut then it takes them almost 2 weeks to send someone out. It is very frustrating to speak with them" -- **York County, 29742, woman**

"Have to drive to a location to use phone internet to report home internet issues" -- **Beaufort County, 29940, man**

"After introductory price for a short time the cost skyrockets. Some families have to make a choice. Food or wifi." -- **29527, Horry County**

"It has nothing to do with customer service . It is the broad band offered, monopoly , fees going up and customer not getting service needed in return. Even this survey takes 1 minute per question to load up" -- **Horry County, 29579, NA**

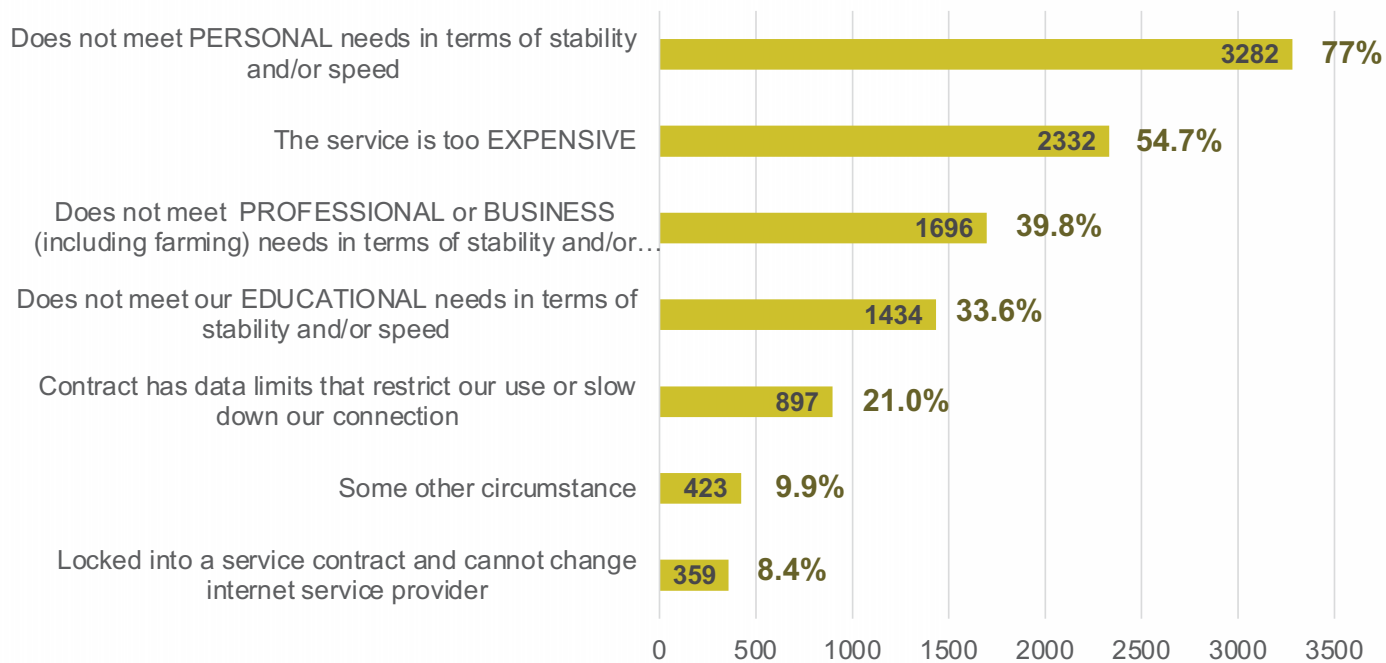


Barriers

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC

BARRIERS – HAS INTERNET, NEEDS NOT MET

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply.

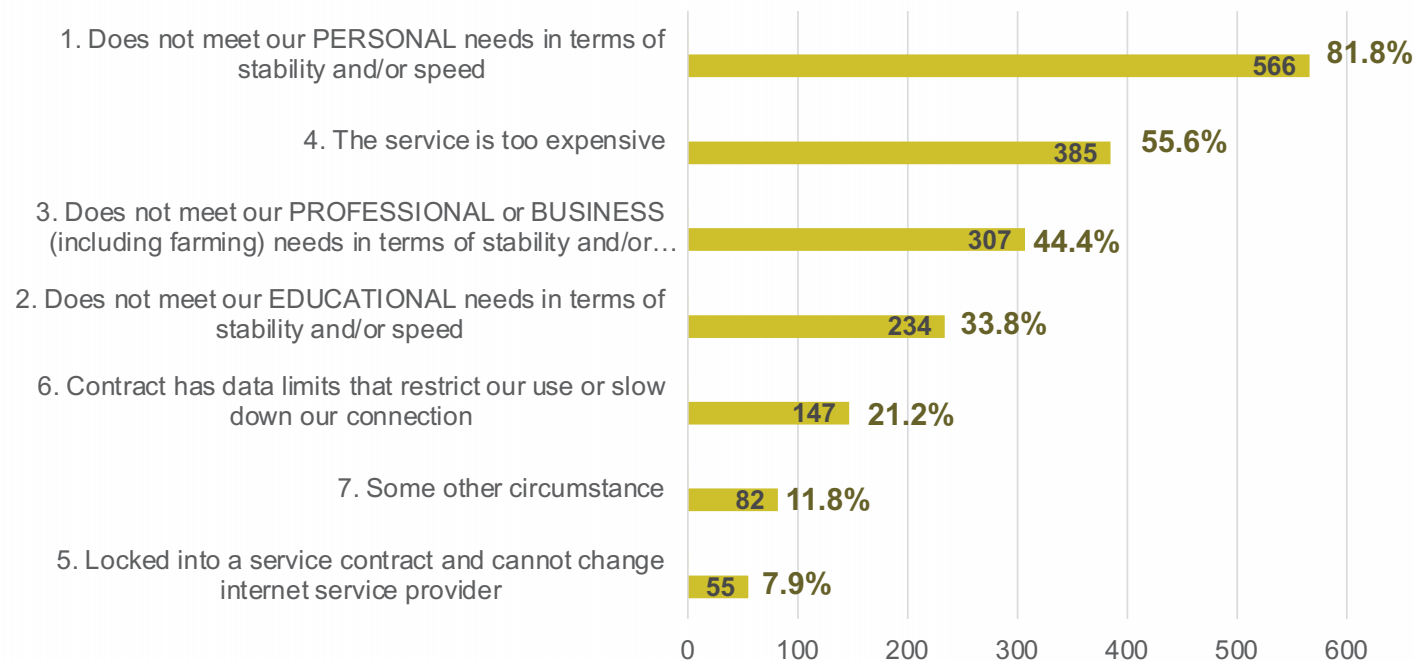


“Because I live in a rural area, the only option I have is for a Wi-Fi box but I am paying \$125 for a month that doesn’t work half the time with very slow speed. My daughter is in high-school and needs fast internet and I’m obtaining a BS degree online.”
Barnwell County Resident

Figure 19: Identified Barriers among those who has Internet, and their needs are not met

BARRIERS – HAS INTERNET, NEEDS NOT MET: VETERANS HOUSEHOLDS

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply.



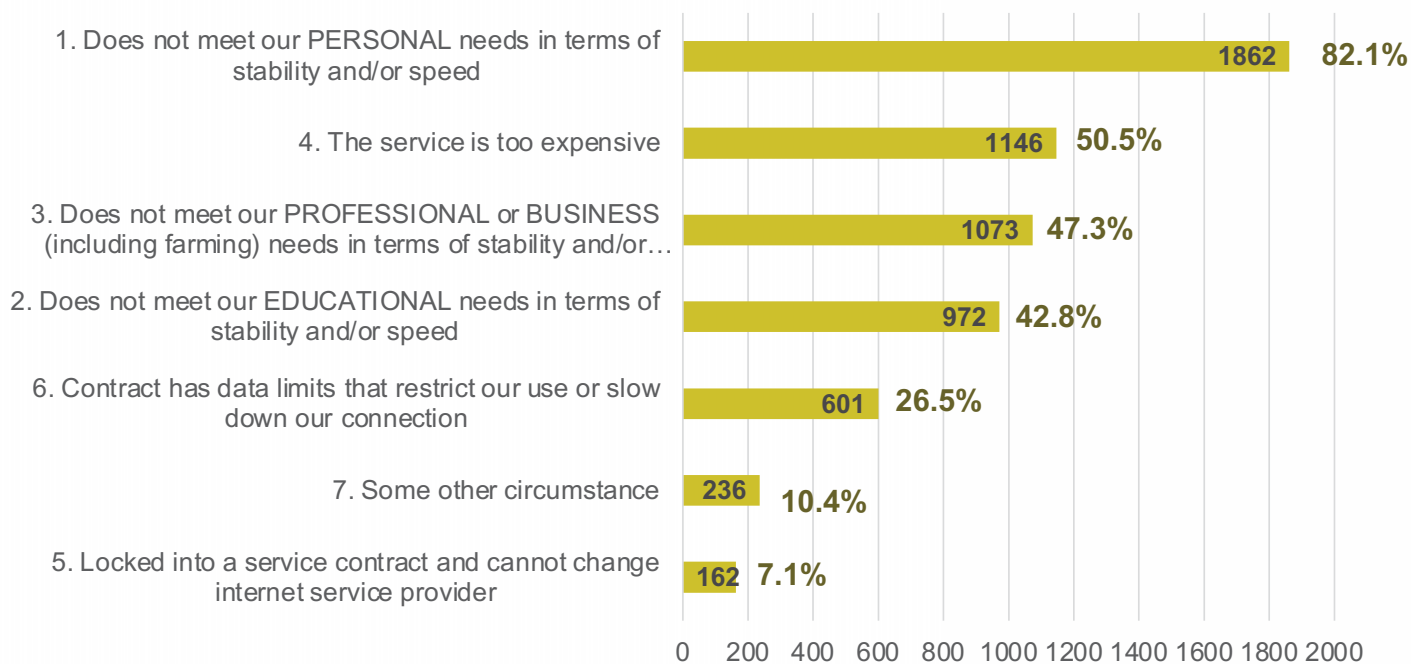
“Most carriers don’t have internet my side of town and when they do it’s crazy how expensive it is makes things harder for school work”
Lexington County Household with Veteran

Figure 20: Identified Barriers among households with Veterans who has Internet, and their needs are not met



BARRIERS – HAS INTERNET, NEEDS NOT MET: RURAL HOUSEHOLDS

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply.



“Can’t afford it and connections are very slow (poor)”
Rural Household in Greenwood County

“Reception is poor and spotty. Cost is high as compared to the benefits we receive from it.”
Rural Household in Edgefield County

Figure 21: Identified Barriers among Rural households who has Internet, and their needs are not met



BARRIERS – HAS INTERNET, NEEDS NOT MET: MINORITY HOUSEHOLDS

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply.

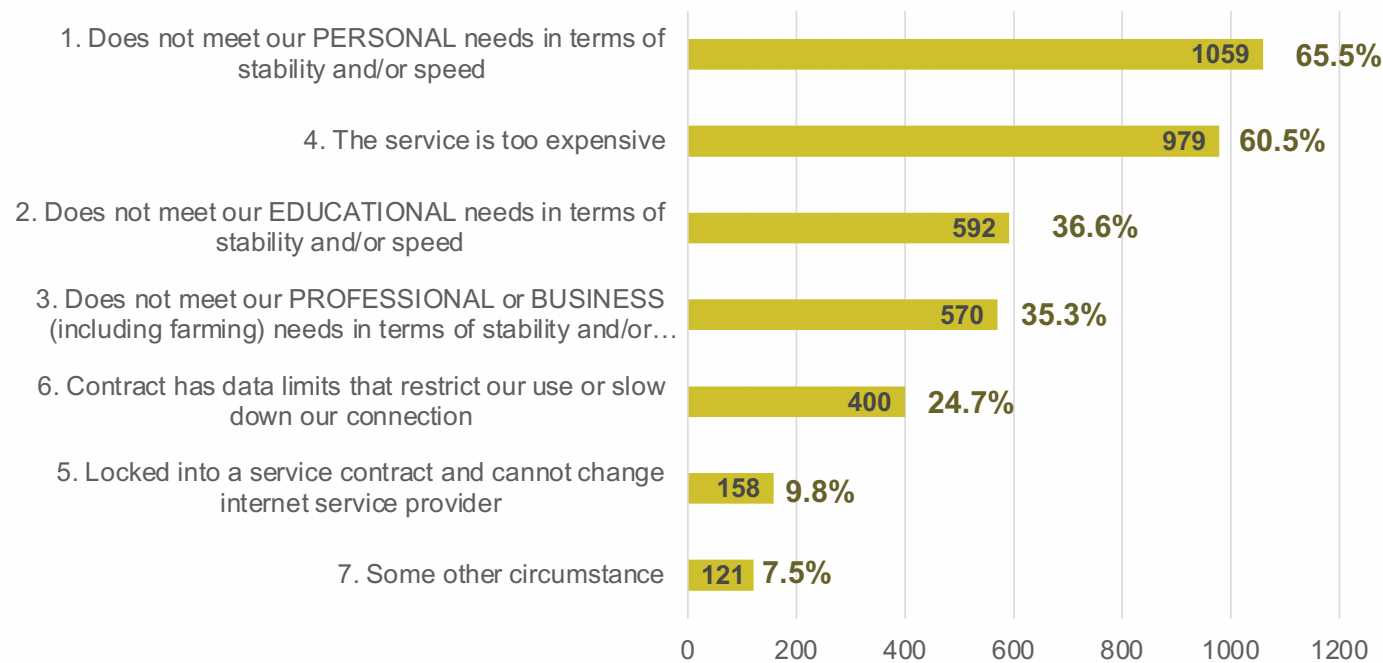


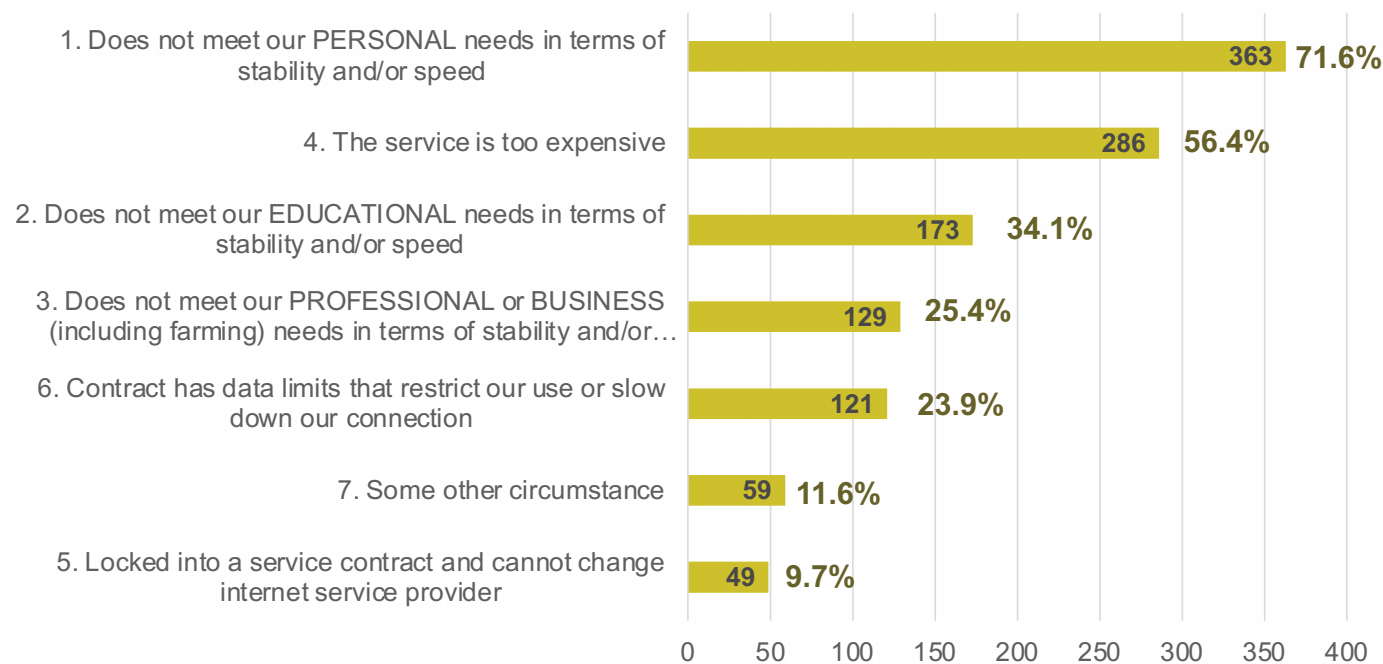
Figure 22: Identified Barriers among households with Minority who has Internet, and their needs are not met

“My options for internet service are extremely limited and often are double to triple the monthly service price due to overage fees. My \$60 fixed wireless bill is often \$120 - \$200 which is ridiculous, because pay half of that for better”
Household with Black or African American in Union County



BARRIERS – HAS INTERNET, NEEDS NOT MET: LOW INCOME HOUSEHOLDS

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply.



“Only DSL is available and only 1mbps connection speed. No other land-based options even though broadband companies have told the FCC they provide service to my address with access greater than 25 MBPS.... [Having better internet] allows son to work remotely to help us with daily task so when he is here, he has to take time off”

Low Income Household in Oconee County

Figure 23: Identified Barriers among Low Income households who has Internet, and their needs are not met



BARRIERS – NO INTERNET OR CELL ONLY, WANTS IT

Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

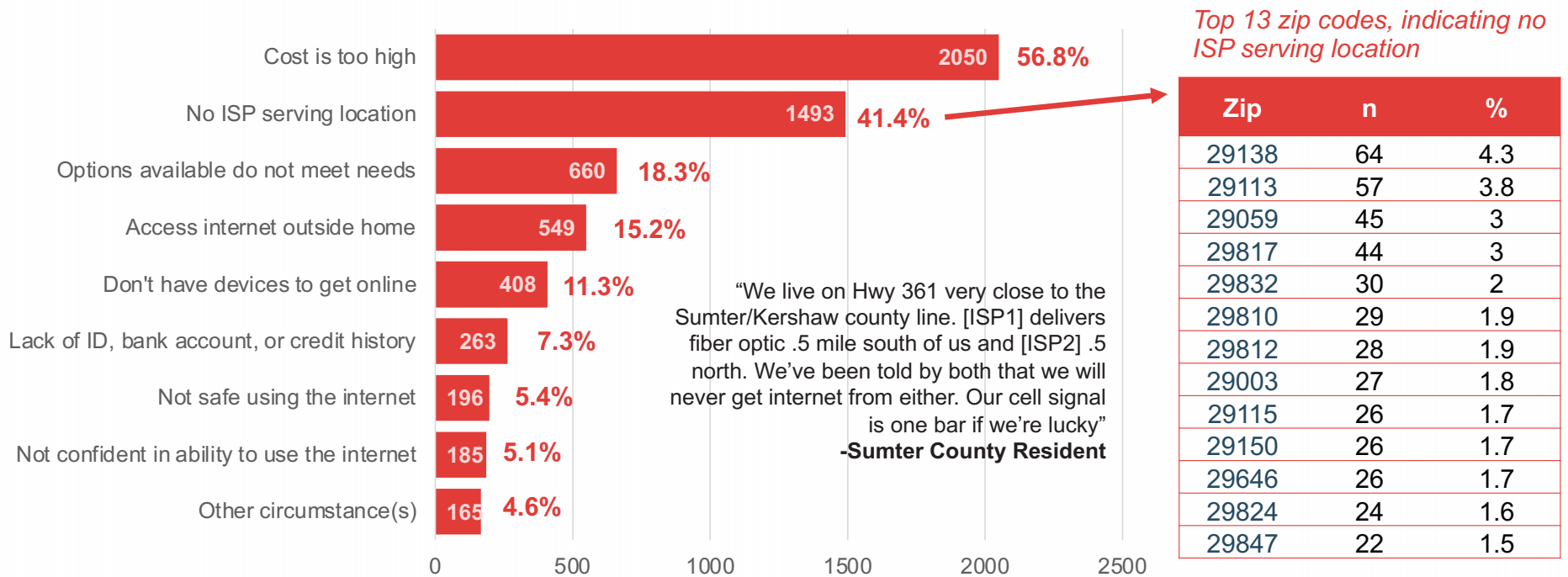
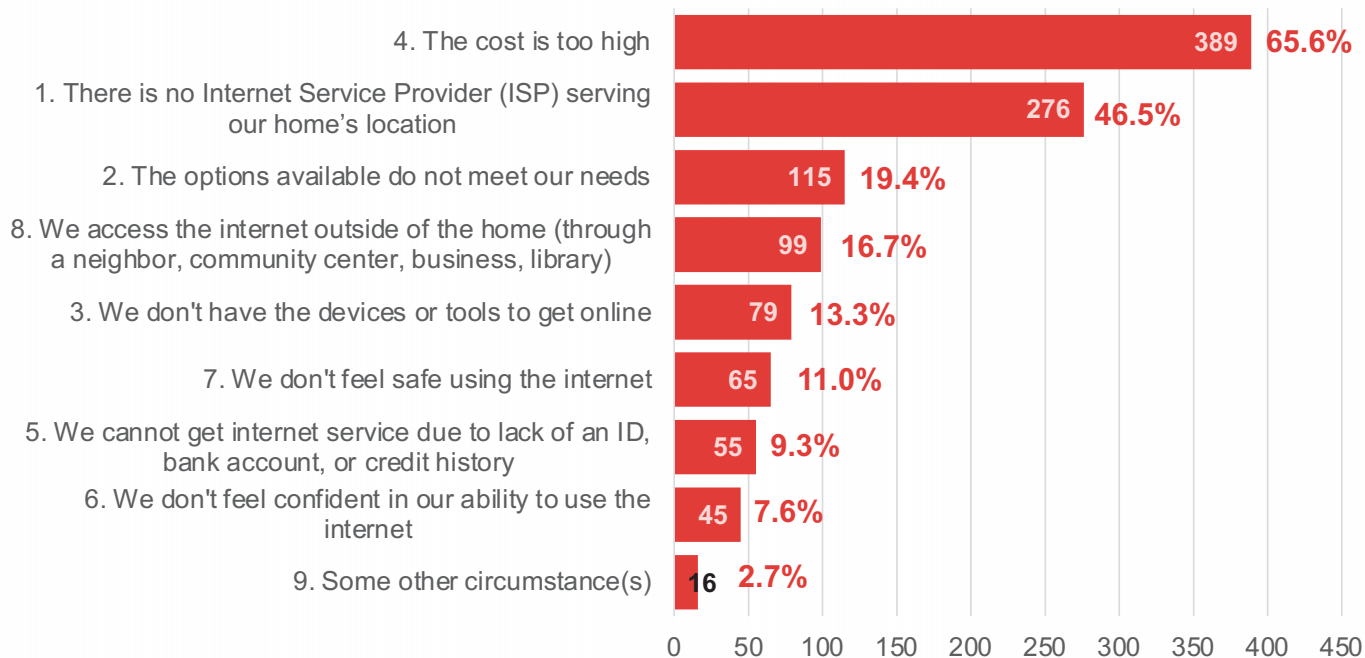


Figure 24: Identified Barriers among those who has No Internet (Or Cell Only) and wants it

BARRIERS – NO INTERNET OR CELL ONLY, WANTS IT | VETERANS HOUSEHOLDS

Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

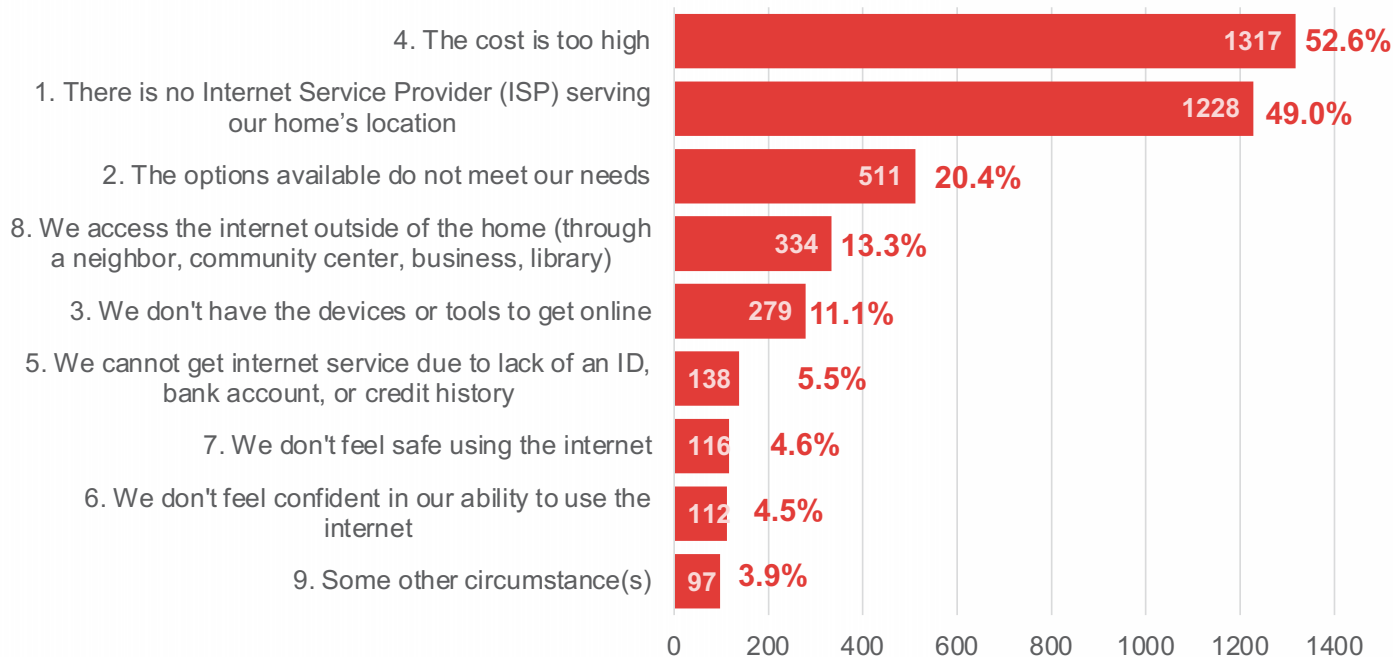


“Internet is available across the street but would cost more than \$5,000 to run cable to my elderly parents home and wireless isn't steady enough for cameras to watch for safety or health reasons.”
-Veteran Household in Lee County

Figure 25: Identified Barriers among Veteran Household who has No Internet (Or Cell Only) and wants it

BARRIERS – NO INTERNET OR CELL ONLY, WANTS IT | RURAL HOUSEHOLDS

Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.



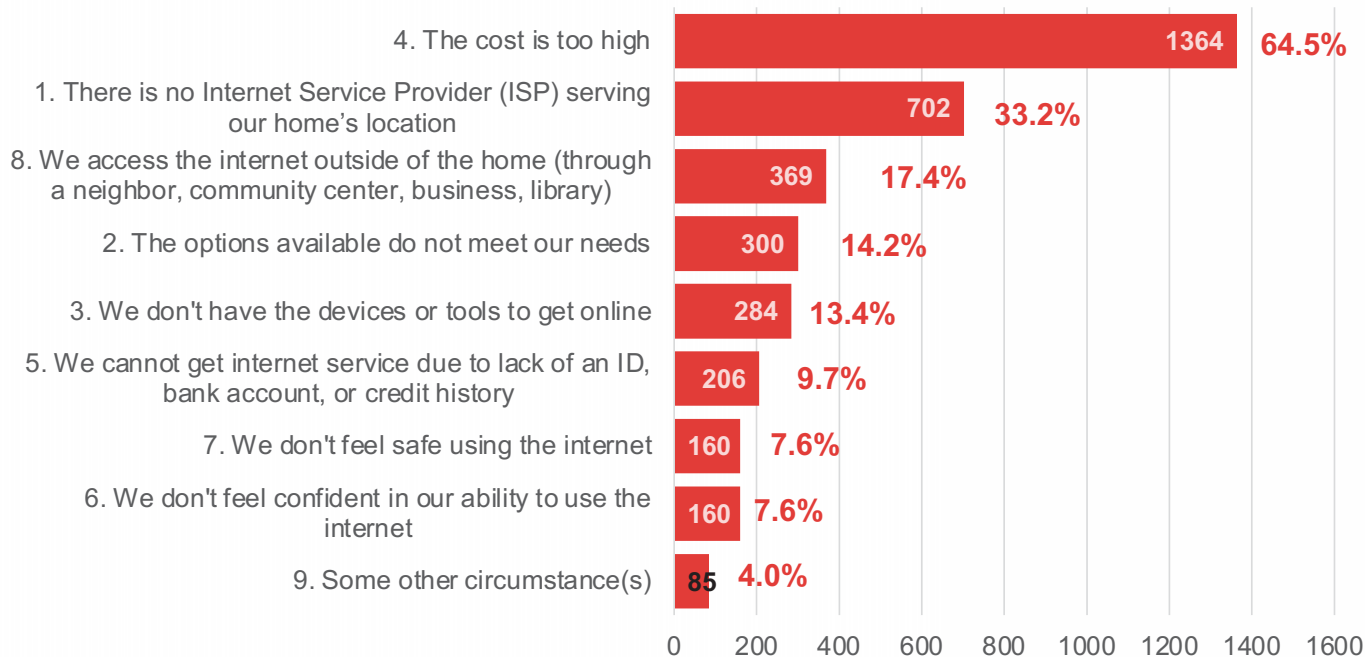
**“We don't have the more affordable options that others have who are not living in a rural area”
-Rural Household in Kershaw County**

Figure 26: Identified Barriers among Rural Household who has No Internet (Or Cell Only) and wants it



BARRIERS – NO INTERNET OR CELL ONLY, WANTS IT | MINORITY HOUSEHOLD

Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.



“Mis hijo y yo tenemos que estar afuera de la biblioteca agarrando la señal del wifi,, pasando frío o calor para entregar tareas?”

“Me and my son have to be outside the library, catching the Wi-Fi signal, enduring cold or heat, just to submit our assignments?”

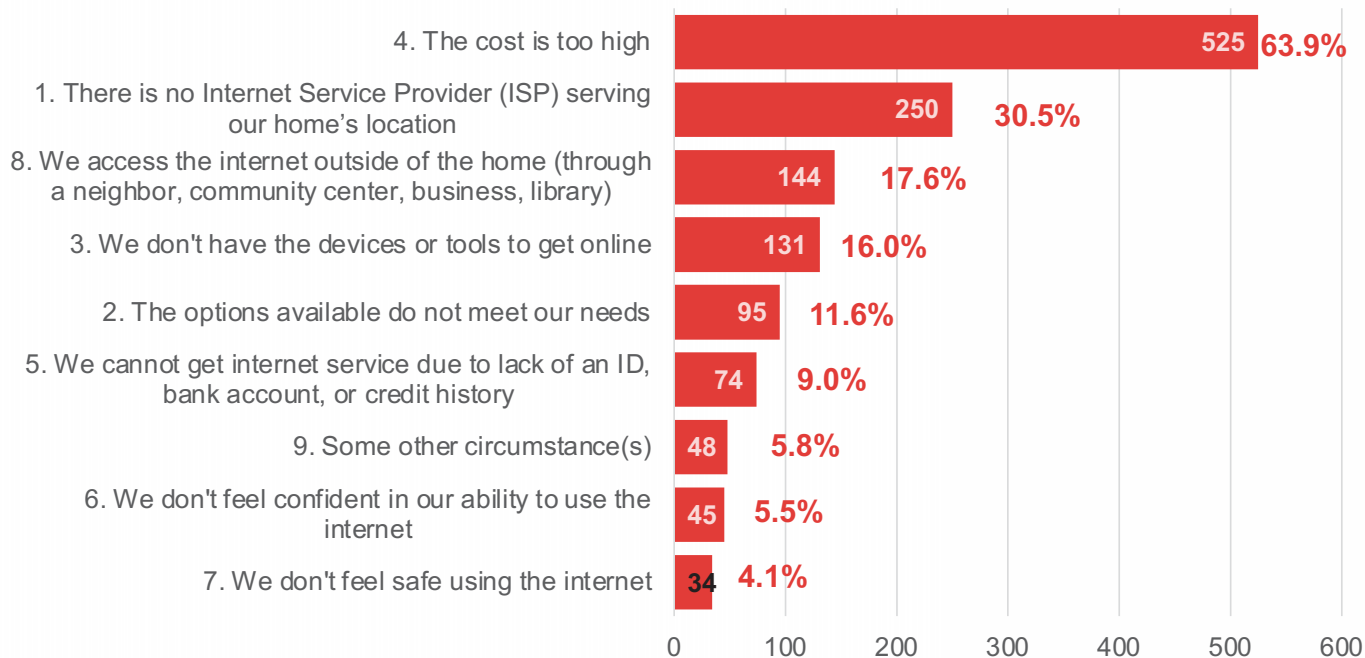
-Hispanic/Latino Resident in Oconee County

Figure 27: Identified Barriers among Household with Minority who has No Internet (Or Cell Only) and wants it

76 [among household with Minority who has (No Internet Or Cell Only) AND WANT Internet = 2,253]

BARRIERS – NO INTERNET OR CELL ONLY, WANTS IT | LOW INCOME HOUSEHOLD

Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.



“There is absolutely no connection. [Electric Utility Company] is holding us hostage from internet service. They do not do this in more affluent areas.”
-Low Income Household in York County

Figure 28: Identified Barriers among Low Income Household who has No Internet (Or Cell Only) and wants it

77 [among Low Income household who has (No Internet Or Cell Only) AND WANT Internet = 848]

ACP FAMILIARITY

People who participate in certain government programs might be eligible for \$30 per month of financial assistance to pay for internet service through the Affordable Connectivity Program (ACP).

75% of the underserved or unserved communities are **NOT** familiar with the ACP Program

Are you familiar with the Affordable Connectivity Program (ACP) program?

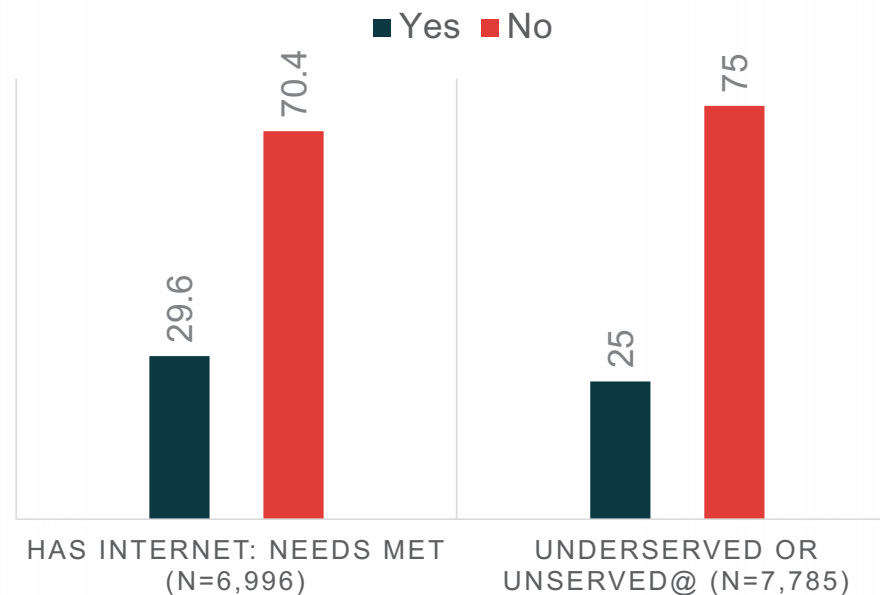


Figure 29: Familiarity with Affordable Care Connectivity Program (ACP) by Needs

Critical Needs

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
SC

CRITICAL NEEDS

Whether you have the internet at home or not, complete the following statement by selecting ALL options that apply to members of your household. I/We NEED reliable internet access at home for:

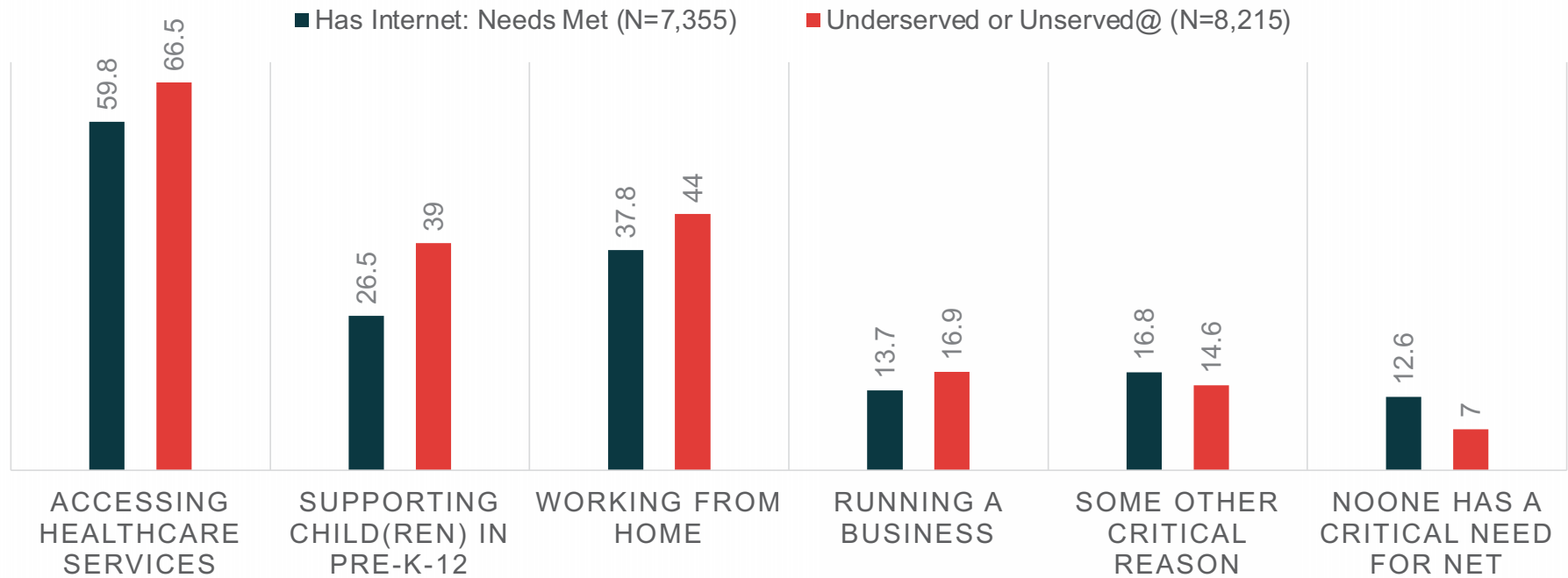
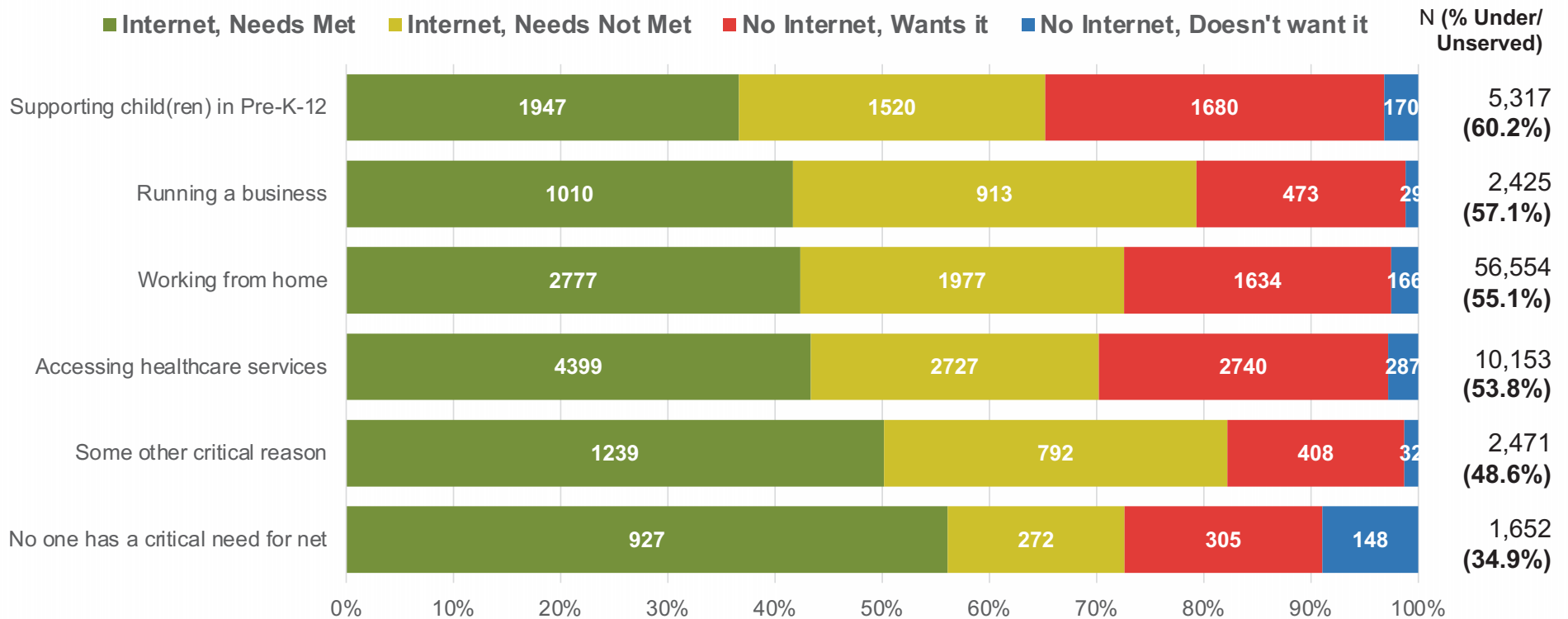


Figure 30: Critical of Households for using Internet services



INTERNET NEEDS BY CRITICAL NEED



81 **Figure 31:** Internet Needs by Critical Need

CRITICAL NEED BY HOUSEHOLD CATEGORIES

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household. I/We NEED reliable internet access at home for:

	Veterans			Seniors			Rural			Minority			Low Income			Disability		
	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %
Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	2,002	77.7	77.7%	5,447	76.2	76.2%	5,534	68.8	68.8%	4,130	59.6%	51.3%	1,546	65.8%	65.8%	2,152	80.4%	80.4%
Supporting child(ren) in Pre-Kindergarten through 12th grade education	732	28.4	28.4%	1,342	18.8	18.8%	3,128	38.9	38.9%	3,042	43.9%	37.8%	863	36.7%	36.7%	1,006	37.6%	37.6%
Performing job functions as a remote employee (i.e., working from home)	996	38.7	38.7%	2,026	28.3	28.3%	3,356	41.7	41.7%	2,716	39.2%	33.8%	629	26.8%	26.8%	1,080	40.4%	40.4%
Running a business	403	15.6	15.6%	864	12.1	12.1%	1,384	17.2	17.2%	932	13.4%	11.6%	215	9.1%	9.1%	440	16.4%	16.4%
Some other critical reason	450	17.5	17.5%	1,146	16	16.0%	1,221	15.2	15.2%	923	13.3%	11.5%	434	18.5%	18.5%	566	21.2%	21.2%
Nobody in the home has a critical need for the internet	220	8.5	8.5%	841	11.8	11.8%	709	8.8	8.8%	781	11.3%	9.7%	278	11.8%	11.8%	134	5.0%	5.7%
Missing (i.e.. None of the 6 items selected)	70	3.1		237	3.3		215	2.7		257	3.7%		42	1.8%		89	3.3%	

Table 21: Critical of Households for using Internet services by selected household categories

FEELING ABOUT TECHNOLOGY FOR HEALTH SERVICES

How do you feel about using technology to access healthcare services?



■ Comfortable ■ Indifferent ■ Nervous ■ Skeptical

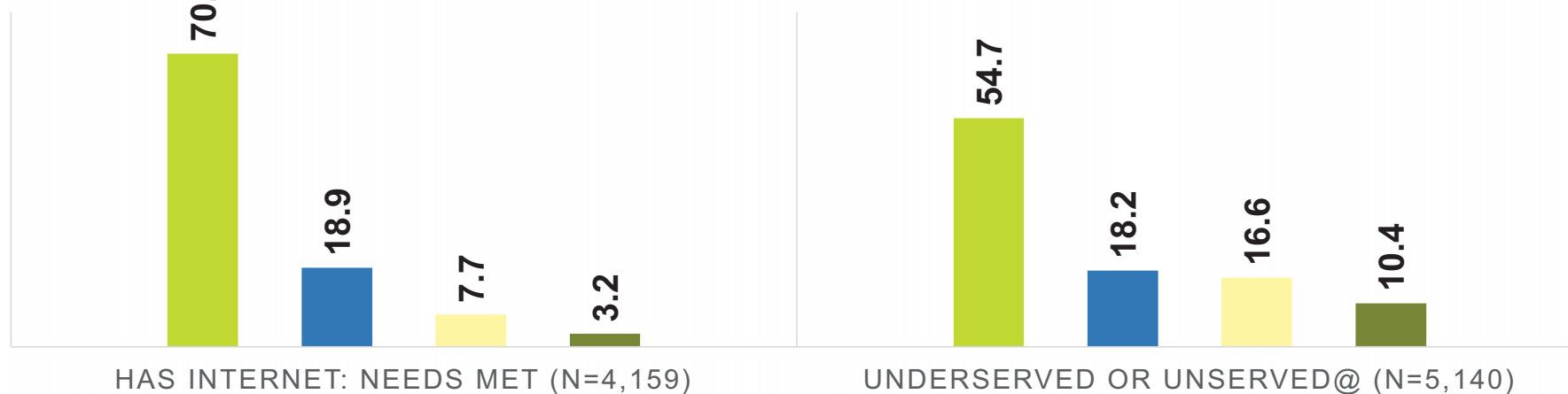


Figure 32: Feelings About Technology for Health Services by Internet Needs



TELEHEALTH FEELINGS BY HOUSEHOLD CATEGORIES

How do you feel about using technology to access healthcare services?

	Veterans			Seniors			Rural			Minority			Low Income			Disability		
	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %	Count (n)	%	Valid %
Skeptical	156	7.8	8.2	398	7.3	7.7	470	8.5	9.0	373	9.0	9.7	109	7.1	7.4	181	8.4	9.0
Nervous	294	14.7	15.4	850	15.6	16.5	825	14.9	15.8	696	16.9	18.1	287	18.6	19.6	332	15.4	16.6
Indifferent	354	17.7	18.5	904	16.6	17.6	935	16.9	17.9	745	18.0	19.4	261	16.9	17.8	363	16.9	18.1
Comfortable	1,105	55.2	57.9	2,984	54.8	58.1	3,004	54.3	57.4	2,026	49.1	52.8	810	52.4	55.2	1,127	52.4	56.3
Missing	93	4.6		311	5.7		300	5.4		290	7.0		79	5.1		149	6.9	

Table 22: Feeling About Technology for Health Services by selected household categories

FEELING ABOUT TELEHEALTH

OPEN-ENDED TEXT, WORD CLOUD

How do you feel about using technology to access healthcare services?



	comfortable
	uncomfortable
	other

Region	comfortable	not comfortable	prefer in person	positive feedbacks	Total Response
Lowcountry	21%	19%	4%	25%	689
Midlands	25%	13%	2%	27%	574
PeeDee	23%	15%	3%	27%	581
Upstate	26%	11%	3%	26%	476

Table 23: Feeling About Telehealth: open-ended questions (text responses) by theme and region

FEELING ABOUT TELEHEALTH

OPEN-ENDED TEXT, THEMES

"We are senior citizens and there are times we have questions [sic] about a diagnosis we are given and having access to internet, we can research those questions to have a better understanding of our condition. With the information obtain, we can adjust our living habits to accommodate our health issues for more quality of life." -- **Lexington County, 29073, NA**

"Transportation, unable to drive due to medical condition" -- **Union County, 29379, man**

"My mother is deaf and needs to be able to work with her audiologist to set and change her new cochlear implant." -- **Allendale County, 29810, woman**

"Access provides convenience, however, concerns over security regarding hacking." -- **Marion County, 29574, man**

"I feel I have a certain amount of control of my healthcare and a better understanding of my health issues. This allow me to be a better advocate for myself and my loved ones." -- **Lexington County, 29073, NA**

I'm extremely comfortable with the technology. I just don't have the internet or cell service to do it. -- **York County, 29742, woman**

"I could benefit bc [sic] I have a pace maker defibrillator and my machine sends the doctor info via the internet" -- **Chesterfield County, 29709, man**

"I use the internet for therapy sessions, accessing my chart and scheduling appointments, ordering prescriptions and I have used Teledoc" -- **York County, 29745, woman**

"We live 3 hrs [sic] from our drs [sic] so getting treatment by video helps make appointments easier." -- **Lexington County, 29160**

"Saves on travel time and expense since I am in a rural area" -- **Hampton County, 29924, woman**



FEELING ABOUT CHILD SUCCESS

Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education?



■ Comfortable ■ Indifferent ■ Nervous ■ Skeptical

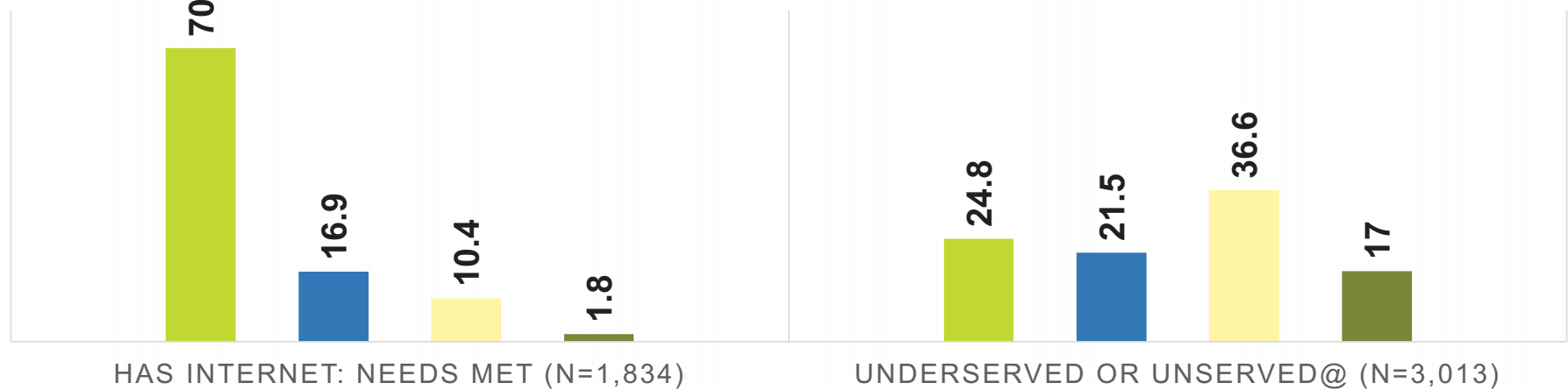


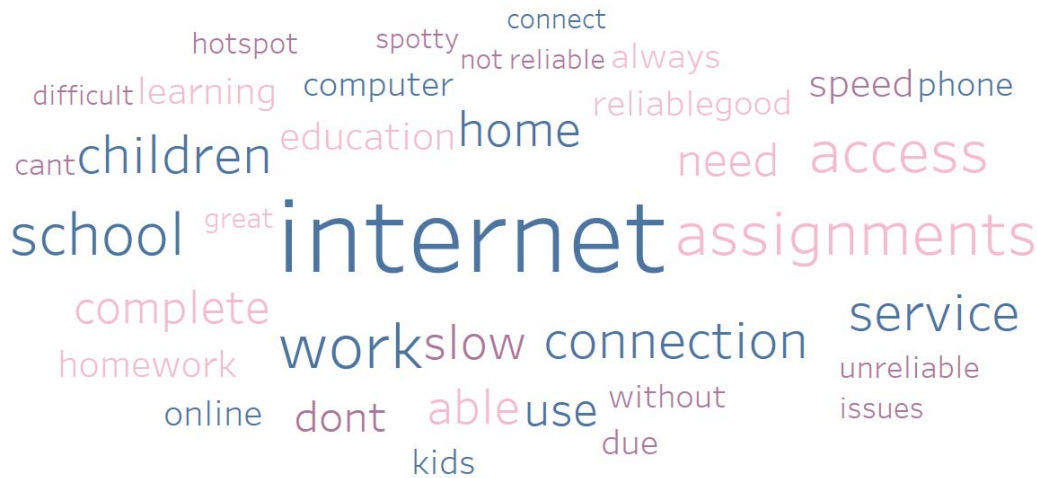
Figure 33: Feelings About Child Success by Internet Needs



FEELING ABOUT CHILD SUCCESS

OPEN-ENDED TEXT, WORD CLOUD

Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education?



Region	Negative impact	Positive impact
Lowcountry	66%	16%
Midlands	56%	20%
PeeDee	46%	23%
Upstate	69%	10%

Table 24: Feeling About Child Success: open-ended questions (text responses) by theme and region

	negative impact on education
	positive impact on education
	other

FEELING ABOUT CHILD SUCCESS

OPEN-ENDED TEXT, THEMES

"I am do [sic] upset that my grandchildren can't stay here to prepare homework assignments because our internet is so unreliable. When I have to babysit, I have to go to their home. This is 2023 and we are without reliable internet service." -- **Marion County, 29574, woman**

I am nervous every time he gets an assignment that requires internet access because I now have to figure out how I will make it happen. Will I have to drive into town or Summerville to my mother's apartment so he can connect. When we could be in our home – **Orangeburg County, 29059, woman**

"The internet allows them to have all the tools they need for completing schoolwork" --**29420, Dorchester County, man**

"I am worried with more distance learning implementation, especially with unforeseen closures, that my two children could get behind on their education due to lack of access and an inability to receive or return assignments." -- **Spartanburg County, 29388, man**

"The school district isn't the best as it is and on top of that we don't have internet to help with assignments- I feel they may drop out or fail at this rate" – **Colleton County, 29435, woman**

"Because we have to take them to family and friends houses that have internet" – **Orangeburg County, 29059**

"My child attends online school. Every day it's a toss up if we're going to have internet or not. If we can't get the internet working or it goes out in the middle of the lesson, he's marked absent. Too many absences and he'll be kicked out" – **Beaufort County, 29906, woman**

"I feel this way because I make it work. I pay a fortune in data to make sure that my kids are able to complete their work without excuse. If data runs out, we drive to the library or somewhere we can get free wifi (is not ideal or cost effective for us)." --**29469, Berkely County, woman**



FEELING ABOUT JOB OPPORTUNITIES

How does your ability (or inability) to work remotely make you feel about your job opportunities?

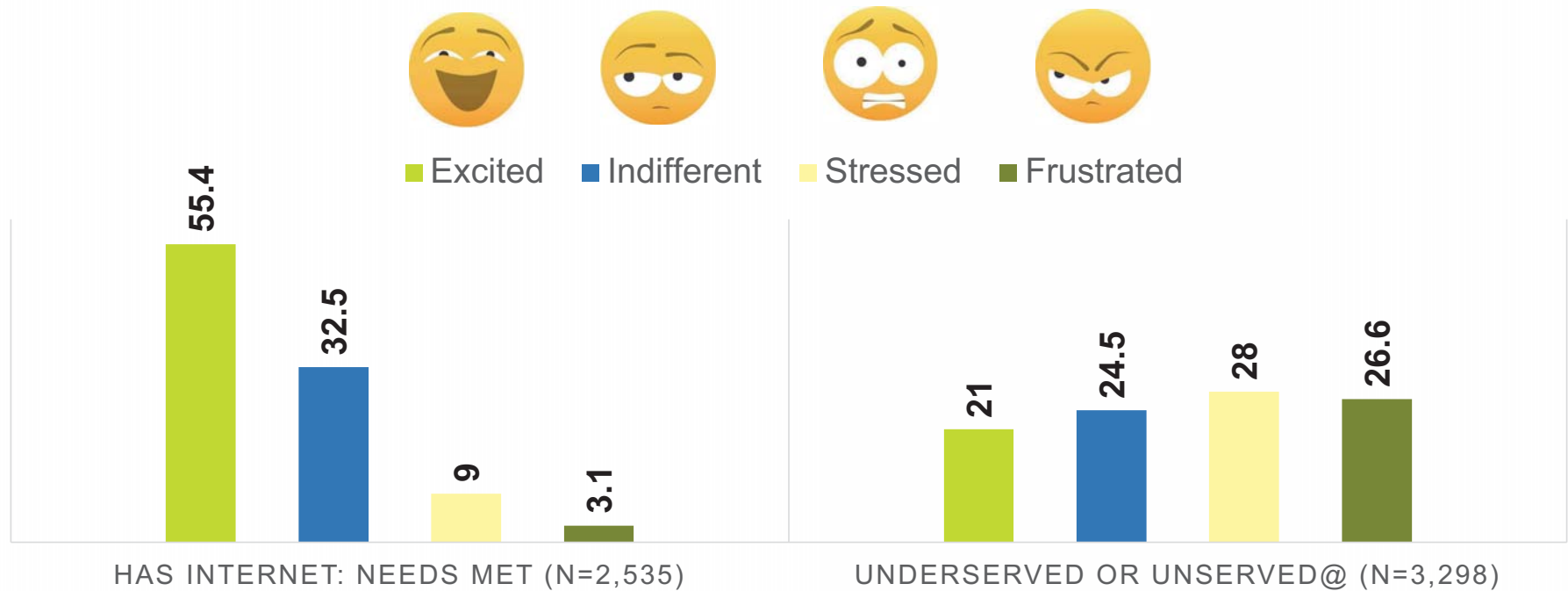


Figure 34: Feelings About Job Opportunities by Internet Needs

JOB OPPORTUNITIES BY HOUSEHOLD CATEGORIES

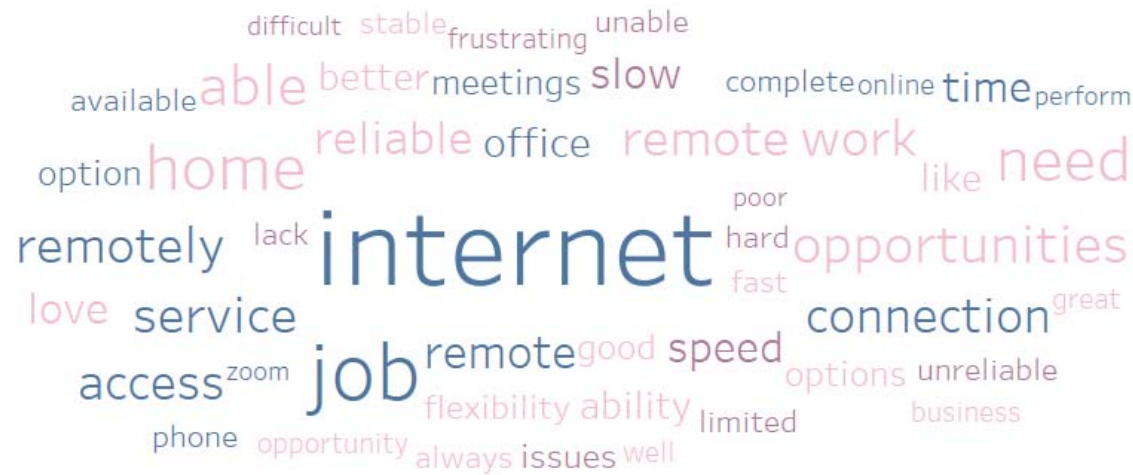
How do you feel about using technology to access healthcare services?

	Veterans			Seniors			Rural			Minority			Low Income			Disability		
	Count (n)	(%)	Valid %	Count (n)	(%)	Valid %	Count (n)	(%)	Valid %	Count (n)	(%)	Valid %	Count (n)	(%)	Valid %	Count (n)	(%)	Valid %
My/Our household income is dependent on having internet access at home	512	51.4	51.4%	1,021	50.4	50.4%	1,647	50.9	49.1%	1,328	48.9%	48.9%	321	51.0%	51.0%	611	56.6%	56.6%
An employer requires the ability to perform some or all job functions from home	618	62.0	62.0%	1,099	54.2	54.2%	1,961	58.4	58.4%	1,454	53.5%	53.5%	250	39.7%	39.7%	650	60.2%	60.2%
My/Our career options are currently restricted due to inefficient internet stability or speed	246	24.7	24.7%	409	20.2	20.2%	900	26.8	26.8%	620	22.8%	22.8%	206	32.8%	32.8%	318	29.4%	29.4%
My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	264	26.5	26.5%	452	22.3	22.3%	977	29.1	29.1%	603	22.2%	22.2%	196	31.2%	31.2%	349	32.3%	32.3%
I/We would be willing to pay more for internet that is faster or more stable	240	24.1	24.1%	388	19.2	19.2%	902	26.9	26.9%	500	18.4%	18.4%	90	14.3%	14.3%	271	25.1%	25.1%
Some other situation or circumstance	59	5.9	5.9%	131	6.5	6.5%	156	4.6	4.6%	124	4.6%	4.6%	62	9.9%	9.9%	55	5.1%	5.1%
Missing (i.e.. None of the 6 items selected)	70	7.0		189	9.3		260	7.7		238	8.8%		48	7.6%		54	5.0%	

Table 25: Feeling About Job Opportunities by selected household categories

FEELING ABOUT JOB OPPORTUNITIES

OPEN-ENDED TEXT, WORD CLOUD



	negative impact on job
	positive impact on job
	other

How does your ability (or inability) to work remotely make you feel about your job opportunities?

Region	Positive Impact	Negative Impact	Crucial	Total Responses
Lowcountry	29%	40%	8%	404
Midlands	24%	44%	10%	391
PeeDee	36%	28%	9%	250
Upstate	25%	49%	8%	328

Table 26: Feeling About Job Opportunities: open-ended questions (text responses) by theme and region

FEELING ABOUT JOB OPPORTUNITIES

OPEN-ENDED TEXT, THEMES | POSITIVE

“Absolutely LOVE the flexibility of being able to work from home, especially when it comes to balancing family/children’s schedules” – **Greenville County, 29617, woman**

Having fast, reliable internet definitely helps me enhance my job opportunities – **Horry County, 29577, man**

“Remote work is an excellent business model that should be used whenever possible. Helps with quality of life, traffic, pollution - manifold societal benefits.” -- **York County, 29715, man**

“Being able to WFH gives me back 5 hours every day and has a positive impact on both my physical and mental health.” -- **Greenville County, 29661, woman**

“Have to have good internet to allow better opportunities” – **Charleston County, 29418, man**

Remote work gives a sense of freedom and as if the whole world is open to me. -- **Dorchester County, 29456, woman**

“Working remotely has been a life changer” – **Lancaster County, 29720, man**



FEELING ABOUT JOB OPPORTUNITIES

OPEN-ENDED TEXT, THEMES | NEGATIVE

"During summer months when kids are out of school and playing on the Internet all day the speed slows way down due to congestion on cell-based Internet. I wake up at 4 am to get the bulk of my work done by 10 when it becomes a barrier to completing work." -- **Spartanburg County, 29388, woman**

"I had to turn down a promotion at work because the job was mostly remote and I don't have internet service!!" -- **Barnwell County, 29812, man**

"I frequently have to go to a cafe for reliable internet to complete work tasks. This adds to the cost. The local library is not open during my work hours." -- **Newberry County, 29037, woman**

"I am a teacher and often (several nights per week & weekends) prepare my lessons and teaching materials from home. Loss of connection and slow speeds makes this difficult at times." -- **Greenwood County, 29666, woman**

"I have missed important calls, am unable to appear by video on any calls. People do not believe that I have no access to internet in the United States, when they have received emails from me from Antarctica and Africa." - **Spartanburg County, 29301, woman**

"For one job interview I was turned down as our internet didn't pass the speed test." - **Anderson County, 29654, woman**

"Having an unstable connection can potentially get you fired" - **Beaufort County, 29935, woman**

"Totally frustrated!! I am going to school ad [sic] have 2 boys. I need to be able to work from home. I have been offered jobs but didn't have the internet speed needed." -- **Aiken county, 29129, woman**

"My wife loves her job and working from home however our internet connection is putting that in risk" - **Kershaw County, 29032, man**



FEELING ABOUT DOING NEW THINGS ONLINE

When you're doing new things online that you would usually do in person, how do you feel?



■ Comfortable ■ Indifferent ■ Stressed ■ Confused

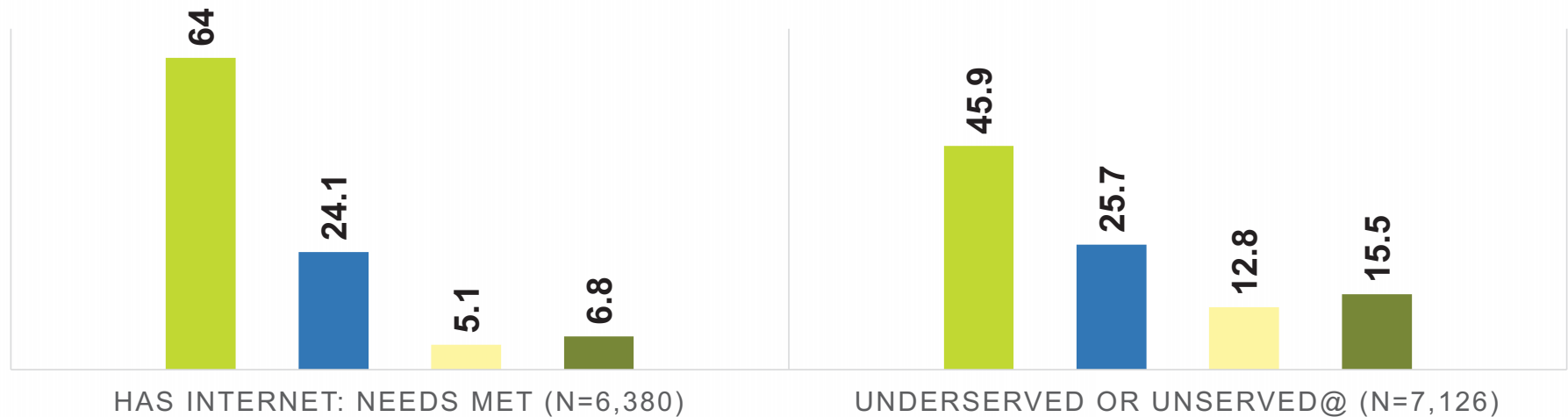


Figure 35: Feelings About Doing New Things Online by Internet Needs

FEELING ABOUT DOING NEW THINGS ONLINE

OPEN-ENDED TEXT, THEMES | COMFORTABLE VS. UNCOMFORTABLE

"I am comfortable doing new things online but it is also dependent on the ease of access and user friendliness of the platform." -- **Colleton County, 29475, woman**

"Technology vocabulary is confusing, most businesses ASSUME elderly understand and are competent with technology--WRONG!" -- **Sumpter county, 29150, woman**

The Internet has become an integral part of my daily life. Can not visualize coping without it. -- **Horry County, 29526, man**

"I never know when the Internet is going to freeze or drop right in the middle of completing an application or a survey or in the middle of making a purchase and then I have to start over again" -- **Bamberg county, 29042, woman**

"I am very used to the internet. Since moving to South Carolina, I am bewildered to find that everyone does not have access to the precious internet. Now I am one of them!" -- **Newberry County, 29108, woman**

"I never know if the internet is out or just taking to long to load or is if we met the speed limit and its slow. It feels unreliable." -- **Greenville county, 29644**



INTERNET USE

In general, how do you use the internet today? Select ALL that apply, regardless of how or where you connect to the internet.

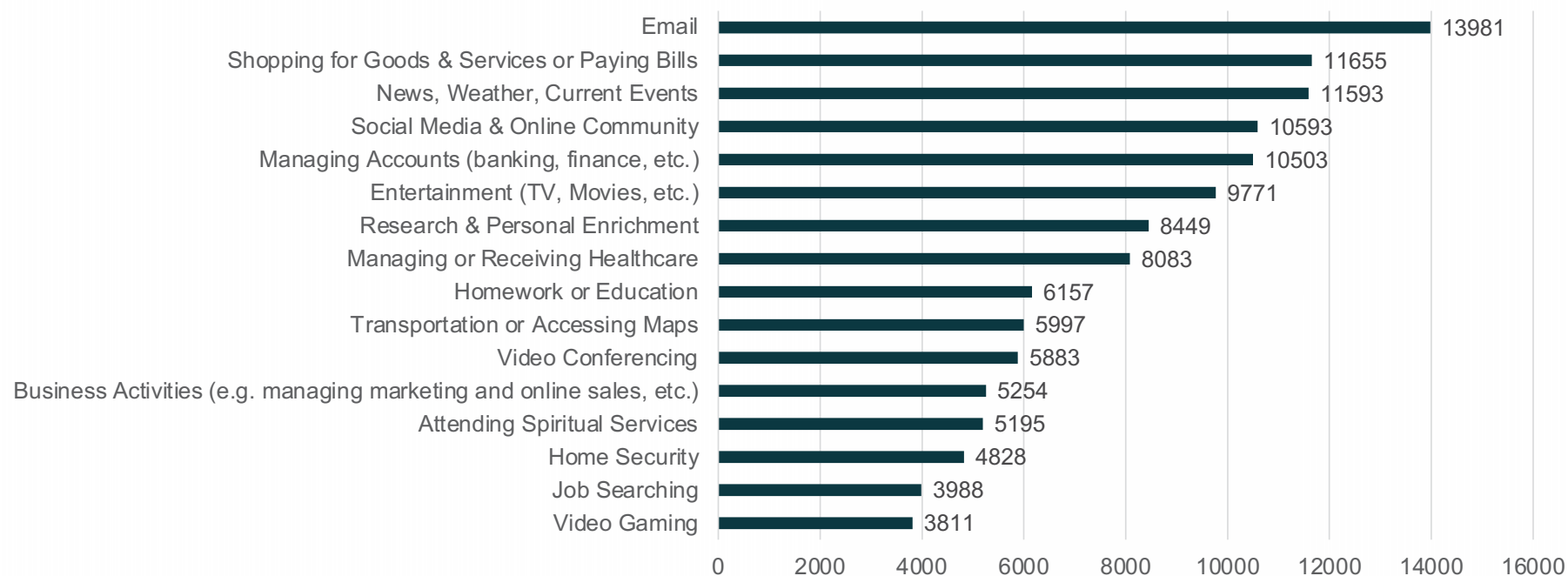


Figure 36: Purposes of Internet Use



OPEN-ENDED TEXT, THEMES OTHER COMMENTS

Have we missed anything? We're on a mission to ensure everyone has access to better internet across South Carolina, and we're here to listen. Please take this opportunity to share more about your personal experiences and needs.

"Having the internet is like having your own personal library, secretary, Doctor and directory of personal services [sic] in addition to 24/7 communication. It is the most important service we can access to navigate in this century. I wish you great success in your mission to enhance the availability for all." -- **Lexington County, 29072, woman**

"Internet is very important to our everyday life. We really need other internet options that best serve us. It's terrible that we can't do our graduate work along with our kids school work and another kid watch tv at the same time. I have had to go up town at 12pm [sic] to post assignments to the fiber optic internet at the public library outside before. That's unsafe." --**Chesterfield County, 29709, woman**

"I think it is incomprehensible that some rural areas of the state do not have adequate internet and wifi service. The state should allow the electric co-ops to offer internet and wifi to their customers. This technology is needed by everyone and should be shared equally, especially if schools are requiring students to use a laptop for schoolwork. They shouldn't have to do their homework in a parking lot or fast food establishment because they don't have access to or cannot afford the service." -- **Charleston County, 29418, woman**

"Internet connectivity is, more and more, the way the world works. If you don't have it, you are cut off from much of the world. It may be possible to work around the absence of connectivity in an urban area. But nothing can replace it in rural or remote parts of the state." -- **Charleston County, 29407, man**

"I have lived here for 20+ years and it is frustrating to see how SC is growing in other areas but when it comes to internet services we are falling short. It is so expensive paying for Satellite internet. We need and deserve something better. I thank the governor for the initiative". -- **Edgefield County, 29847, woman**

"Yes! Just do it. Get the people what they need and that is TRUE HIGH SPEED INTERNET THROUGH FIBER" -- **Kershaw County, 29078, woman**



FUTURE DIRECTIONS

Get Connected Get Connected Get Connected Get Connected Get Connected
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WHAT'S NEXT?

- **5-year Action Plan** – SC BBO
- **Research** – Answer Policy-Relevant Research Questions.
- **Dissemination** – To: Academics, Policymakers, Community, other Stakeholders.

As we acknowledge the study's vast potential, further advanced analyses, including statistical regression modeling, will be conducted to gain deeper insights. Our focus will also extend to generating community-centered research questions in partnership with SC BBO, facilitating impactful dissemination of findings to academics (publication in peer-reviewed journals and academic conferences), policymakers, communities, and other stakeholders. By maximizing the potential of this study, we endeavor to contribute significantly to broadband equity, access, and deployment efforts in South Carolina.

