

South Carolina
Broadband Equity, Access, and
Deployment Program
(BEAD)



**BROADBAND
OFFICE**

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1 Executive Summary

In the past several years, South Carolina has made great strides in improving access to high-speed broadband across the state. It has achieved this through the creation of key broadband strategic planning offices, including the South Carolina Broadband Office in 2021 and the Digital Equity Office in 2022, and through committing significant resources to expanding access for high-speed broadband, \$400m coming from American Rescue Plan Act (ARPA) funds alone. South Carolina is excited to utilize the approximately \$551m of its allocated BEAD funding to take the next steps and has articulated its vision, goals, strategies, and other relevant information in this Five-Year Action Plan to describe both what the State of South Carolina (the State) intends to accomplish and how it intends to do so.

The development of this Five-Year Action Plan involved extensive stakeholder outreach and feedback from residents, businesses, and organizations across the State, including:

- Digital and hard-copy surveys to residents (18,491 started / 13,024 completed), businesses and organizations (453 started / 334 completed), and local governments and municipalities (46 started / 21 completed for counties and 271 started / 28 completed for municipalities)
- A statewide marketing campaign, the GetConnectedSC initiative, which included the development of the [GetConnectedSC.org](https://www.getconnectedsc.org) website
- Interviews with 33 organizations representing broadband and digital equity-related nonprofits and governmental agencies, some of which focus on serving Covered Populations
- Interviews with 46 diverse internet service providers and member organizations, ranging from rural local telephone companies and electric cooperatives to large cable providers
- 23 roadshow events across the state resulting in over 1500 face-to-face engagements
- Outreach to tribal communities

Feedback from the above stakeholders went into identifying needs, gaps and barriers and informing the goals and strategies needed to overcome these challenges. In addition, while the State is continuing to finalize its Digital Equity Plan, outreach was also undertaken to organizations representing Covered Populations. Key digital equity-related observations are included in this plan, with further insights and details to be shared in the Digital Equity Plan.

In recognition of how far South Carolina has come and the size of the BEAD opportunity, the State has set a variety of ambitious goals, most notably that South Carolinians have access to reliable, resilient, high-speed broadband infrastructure at 25/3 Mbps by 2026 and 100/20 Mbps by 2028. Other key goals center on expanding digital opportunities, providing device support, and continuing training to communities and internet providers to facilitate a smooth expansion of broadband internet in light of some of the barriers identified.



Given that there are 61,249 unserved¹ and 68,782 underserved² locations remaining in the state³, there will likely be a surplus of BEAD funding after reaching these locations. The State is, therefore, conducting planning on other eligible uses, such as workforce development and non-deployment activities related to expanding digital opportunities, which will be articulated in more detail in the Initial Proposal.

In developing this Five-Year Action Plan, the Broadband and Digital Equity offices endeavored to ensure all voices in the State were heard. This plan represents the challenges, aspirations and actions needed such that South Carolinians have access to reliable, affordable high-speed internet so they can use it to benefit their lives and reach their full potential.

¹ Defined as broadband-serviceable locations that lack access to reliable broadband service at speeds of at least 25 Mbps downstream/3 Mbps upstream.

² Defined as those without broadband service offering speeds of 100 Mbps downstream/20 Mbps upstream.

³ Utilizing December 2022 FCC fabric (V2)



2 Overview of the Five-Year Action Plan

2.1 Vision

South Carolina’s vision for broadband deployment and digital equity is as follows:

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.

2.2 Goals and Objectives

The goals and objectives for broadband deployment and digital equity for the State are described below. The South Carolina Broadband Office formalized its goals and strategies to advance reliable and affordable high-speed internet in November 2021. These were revisited in June 2023 to reflect information obtained as part of the development of both this Broadband Equity, Access, and Deployment Five-Year Action Plan (the Plan) and the Digital Equity Plan. For additional information on Digital Equity Goals, please see the Digital Equity Plan.

Table 1: Broadband Deployment Goals and Objectives

Goals	Objectives
Expand Access	<ul style="list-style-type: none"> Efficiently coordinate the rapid deployment of broadband infrastructure. Identify extremely high-cost remote, rural locations and leverage alternative technologies. Address accessibility and connectivity challenges at multi-dwelling units (MDUs). Expand public Wi-Fi networks. South Carolinians have access to reliable, resilient high-speed broadband infrastructure at 25/3 Mbps by 2026 and 100/20 Mbps by 2028.
Model, Map and Plan	<ul style="list-style-type: none"> Assemble relevant data, perform analysis and develop maps to support access, adoption and use of broadband infrastructure. Maintain metrics for all federal and State-designated Covered Populations. Provide actionable intelligence and outreach to county administrators. Leverage the Broadband Advisory Council to engage stakeholders and continuously look to identify barriers to adoption and use.
Measure Affordability	<ul style="list-style-type: none"> Encourage the provision of affordable broadband services for a variety of consumer needs. Establish a framework for affordability. Support Affordable Connectivity Program (ACP) awareness campaigns to help increase enrollment and broadband adoption.
Expand Digital Opportunities	<ul style="list-style-type: none"> Enhance digital equity for all federal and State-designated Covered Populations. 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.



Goals	Objectives
	<ul style="list-style-type: none">• Leverage raw BEAD survey information to inspire academic research and uncover opportunities for advancing South Carolina.
Device Support	<ul style="list-style-type: none">• Support universal one-to-one programs throughout the complete public K–12 system.• Leverage device support subsidy from ACP program.• Partner to establish a statewide computer recycling network.
Support Broadband Providers	<ul style="list-style-type: none">• Provide technical support, on an as-needed basis as available, to all internet service providers (ISPs) that conduct business in South Carolina so they can perform at optimal levels, complete projects on time and on budget, and maintain compliance with all federal and State grant programs.
Provide Community Support and Technical Assistance	<ul style="list-style-type: none">• Through efficient, competitive grant programs, convene, collaborate, train and support communities in their efforts to expand broadband access, adoption and use.



3 Current State of Broadband and Digital Inclusion

3.1 Existing Programs

3.1.1 The South Carolina Broadband Office

The Office of Broadband Coordinator, also referred to as the South Carolina Broadband Office (SCBBO or the Office) within the South Carolina Office of Regulatory Staff (ORS) was created July 1, 2021, under the FY 2021–2022 Appropriation Act establishing the basis for broadband expansion in South Carolina.

3.1.1.1 The Digital Equity Office

The South Carolina Department of Administration (Admin) was tasked with administering the Digital Equity Act (DEA) Program Award via a letter from Governor Henry McMaster to Assistant Secretary Alan Davidson on July 12, 2022. The South Carolina Digital Equity Office was created from this assignment and will be working closely with the SCBBO and ORS in the creation of this Plan and the Digital Equity Plan.

3.1.2 Current Activities

The Office has administered, developed, and guided advancements in the State through conducting the specific and coordinated activities outlined in Table 2, which include setting and reviewing the goals described in Section 2.2, *Goals and Objectives*, and awarding and administering broadband deployment grants described in Table 5.

The SCBBO’s current activities are focused on the goal of expanding broadband access and adoption throughout South Carolina by undertaking the following types of activities:

- Statewide broadband expansion planning, management, and coordination
- Broadband mapping and data collection
- Community and stakeholder engagement through surveys and technical assistance/training
- Grant management, including the awarding of some of the broadband deployment grants described in Table 5

Table 2: Current Activities that the Broadband Program/Office Conducts

Activity Name	Description	Intended Outcome(s)
Statewide Broadband Expansion Planning, Management and Coordination		
Broadband Advisory Council (BBAC)	<p>The SCBBO established the BBAC with a cross-section of industry leaders to help guide broadband planning in South Carolina. The BBAC includes a diverse group of stakeholders (public, private, higher education, and nonprofit organizations).</p> <p>The Director of the SCBBO serves as Co-Chair. The 21-member advisory council meets quarterly, and meetings are open to the public.</p>	<p>The BBAC undertakes strategic planning, stakeholder coordination and consensus building.</p> <p>The BBAC also provides help identifying challenges and barriers to broadband access, adoption, and use.</p>



Activity Name	Description	Intended Outcome(s)
Production of the SCBBO Annual Report	<p>The SCBBO Annual Report summarizes SCBBO activities and work products developed during the fiscal year.</p> <p>A new SCBBO Annual Report is planned for release in October 2023.</p>	<p>Information from the SCBBO Annual Report will inform the <i>Obstacles and Barriers</i> section, as it includes recommendations to the General Assembly for legislative, regulatory, or other governmental actions that will help promote broadband access throughout the state.</p>
Identification of Broadband Goals	<p>The SCBBO, in coordination with the BBAC, helped set goals for the state, which can be found in Section 2.2.</p>	<p>The SCBBO supports the identification of goals, strategies, and priorities for the state, which are refined as more broadband projects are deployed and completed over time.</p>
Promotion and Monitoring of Broadband Assistance Programs	<p>The SCBBO promotes and monitors several important programs, such as the Federal Communications Commission (FCC) Affordable Connectivity Program, which provides eligible applicants discounts on internet service and devices.</p> <p>The Office encourages counties interested in grant funding to partner with ISPs that can apply for grants to support deployment.</p>	<p>These activities will increase citizen awareness of important federal broadband assistance programs, such as the ACP, and increase funding opportunities throughout the state.</p>
Pilot Programs	<p>The SCBBO tests new initiatives through pilot programs. The following are examples of such programs:</p> <ul style="list-style-type: none"> • One program involved a partnership between the SC Department of Education and SpaceX’s Starlink for students and teachers in remote rural locations throughout the State. • In 2021, during the COVID-19 pandemic, the Office partnered with organizations such as SC Educational TV, the SC Department of Education, the University of South Carolina and others, to create a fixed wireless broadband pilot project. This project focused on advancing deployment of broadband to unserved areas by creating free Wi-Fi for students and the public. Equipment was installed on towers to provide residents with access to fixed wireless via citizen broadband radio service. • The Last Mile Grant Program (LMGP) is a pilot grant program focused on reaching consumers who are in an area that is generally considered 	<p>Pilot programs are a way for the SCBBO to commit a relatively small amount of resources to test the financial and technical viability of new initiatives, which, if successful, can be expanded. For example:</p> <ul style="list-style-type: none"> • Preliminary findings suggest Starlink is a suitable technology that is capable of exceeding 25/3 Mbps connection speeds in remote rural areas where wired connections to reliable broadband do not currently exist or are extremely expensive. • The fixed wireless pilot project expanded broadband technology in rural areas. • The LMGP helps residential homes with students receive access to broadband and highlights the impact of residents’ completing the “I Need Internet” survey and identifying themselves as needing but lacking



Activity Name	Description	Intended Outcome(s)
	<p>“served” but are without access to broadband due to the cost of delivering service to the home. The funding is used in support of last-mile deployment to address these gaps.</p>	<p>internet service in areas considered “served.”</p>
Technology Analysis	<p>The SCBBO performed analysis heavily focused on the type of technology being deployed by ISPs. The Office issued the “Is DSL still a broadband technology?” report in 2022, which concluded that digital subscriber line (DSL) technology was at the end of its useful lifespan and no longer capable of reliably delivering 25/3 Mbps in the state.</p>	<p>Analysis on available broadband technologies will help inform an understanding of the cost and time to reach Universal Service.</p>
Intergovernmental Coordination and Partnership	<p>The SCBBO coordinates broadband data collection efforts with the SC Department of Education, SC Revenue and Fiscal Affairs Office, and the SC Department of Social Services.</p> <p>The SCBBO also engages with several State and federal agencies to foster streamlined review processes for broadband project permitting. See Section 3.2, <i>Partnerships</i>, for more information on the specific partnerships the SCBBO is leveraging for broadband deployment and adoption in the state.</p>	<p>Coordination and partnership with state agencies, nonprofits and other entities allows the SCBBO to obtain data that can be used for improving broadband access. As one example, the SCBBO worked with the SC Department of Education to obtain several hundred thousand public K–12 student addresses, which helped identify unserved students during COVID-19.</p> <p>Informational sessions increased awareness of permitting workflows for ISPs, which decreased wait times for permit authorizations while ensuring compliance with laws and regulations.</p>
Broadband Mapping and Data Collection		
Broadband Mapping	<p>The SCBBO collects information reported from ISPs and other entities to analyze and update statewide broadband maps twice a year. Analysis includes data from Ookla speed tests conducted by consumers and technicians.</p> <p>The SCBBO has developed tools such as the Upload a Broadband Project Form, which has allowed counties and local governments to provide data on broadband construction projects they are funding. Projects are only shown as funded and complete if the Office has visibility into the actual construction conducted.</p> <p>The Office also produces a geographic information systems (GIS)-based web map service allowing ISPs to view and interact with census blocks eligible for state funds.</p>	<p>This activity has enabled public broadband maps to document needs and progress made. These up-to-date maps further broadband access and adoption. They also facilitate investment in priority areas and prevent overbuilding or duplication of efforts. The SCBBO investment strategy is closely linked to this mapping activity, which involves an iterative process that considers organic growth and funded projects.</p> <p>Additionally, SCBBO maps have supported Broadband Serviceable Location Fabric data in becoming more refined as South Carolina data addresses residents with more precision, including with data on:</p>



Activity Name	Description	Intended Outcome(s)
		<ul style="list-style-type: none"> • Areas of need • Planning • Best available technology • Statewide eligibility • Statewide investments • ISP service coverage areas
<p>Creation of Public-Facing Websites</p>	<p>The Office has created websites to allow users to become better informed about the State’s accomplishments and future plans. The two most prominent are the SC Digital Drive and GetConnectedSC websites.</p> <p>SC Digital Drive is a digital platform for disseminating GIS-based web applications, dashboards, data, maps, and surveys. Broadband data is available for download by ISPs and other interested stakeholders, such as county planning professionals and academic researchers.</p> <p>In 2023, the SCBBO launched the GetConnectedSC website, which highlights the State’s GetConnectedSC initiative, a high-speed internet access and adoption campaign to transform how South Carolinian citizens engage with the online world. The initiative aims to help identify the areas of greatest need, areas for investment and support services for every home, business, and community organization. The site also features the Better-Internet Survey, dates and locations of upcoming listening tours/community engagement events across the state, and additional resources.</p>	<p>The SC Digital Drive website enables the public to engage with the data through dashboards and to view predominant service levels by census block.</p> <p>This facilitates direct interaction with stakeholders and consumers, thereby supporting residents’ and organizations’ ability to challenge and provide data strengthening the datasets and resulting maps.</p> <p>The GetConnectedSC site and initiative is an important tool for increasing stakeholder awareness of broadband events and for incorporating local community feedback in the State’s efforts to make high-speed internet service accessible and affordable for every South Carolinian.</p>
<p>Community and Stakeholder Engagement, Technical Assistance and Training</p>		
<p>Administers Surveys</p>	<p>The SCBBO has previously administered surveys, such as the “I Need Internet” survey to connect ISPs with citizens without residential broadband service, a “Challenges and Barriers” survey to identify constraints facing stakeholders with accessing broadband, and a “Yes to Connect” survey to inform perspectives on broadband adoption and use.</p> <p>In March 2023, the SCBBO launched the Better-Internet Survey in English and Spanish. The Better-Internet Survey was designed to identify areas of greatest need and capture the barriers to high-</p>	<p>The surveys provide critical information into needs, gaps, obstacles and barriers, and will inform the activities described during the implementation section of this Plan.</p> <p>In addition, previous surveys, such as the “Challenges and Barriers” and “Yes to Connect” survey results, provided input for SCBBO recommendations to the General Assembly in support of broadband expansion planning.</p>



Activity Name	Description	Intended Outcome(s)
	<p>speed internet access and adoption of unserved, underserved, and underrepresented communities statewide. The Better-Internet Survey was developed for 1) residents, 2) businesses and organizations and 3) municipalities and counties to capture specific broadband service needs.</p>	
<p>Broadband Community Champion Program</p>	<p>The SCBBO designed programs and delivered instructor-led content through a series of webinars to existing community leaders. It is a train-the-trainer program, and the three sessions — Understanding Internet Infrastructure, Eliminating Gaps in K–12 Education, and Identifying Healthcare Opportunities — are designed to take an existing community leader (e.g., school superintendent, hospital administrator or county administrator) from novice to knowledgeable advocate for successful broadband deployment in their local area.</p>	<p>This activity empowers attendees to gain an understanding of broadband technologies and share challenges and barriers that can exist for broadband access, adoption, and use.</p> <p>Attendees also become trainers to share broadband knowledge and relevant skills with their community, acting as Digital Navigators to help facilitate broadband adoption.</p>
<p>Technical Assistance for ISPs and Community Institutions</p>	<p>The SCBBO provides webinars and technical assistance on topics such as community engagement and applying for grants to both ISPs and community institutions. As one example, the Office supported Voorhees University, a Historically Black College in Denmark, SC, with an application for a \$3m grant from the National Telecommunications and Information Administration (NTIA)'s Connecting Minority Communities program.</p>	<p>Providing technical assistance for ISPs helps improve the accuracy of the broadband maps.</p> <p>The grant assistance helps ISPs and community institutions apply for and obtain relevant state and federal funding.</p>
<p>Conducting Public Events and Community Engagement Activities</p>	<p>The SCBBO has conducted public events and community engagement activities, including road shows, alongside governmental, nonprofit and private organizations to support statewide promotion of broadband expansion efforts, such as surveying community groups and stakeholders, programs, and deployment initiatives.</p> <p>A list of completed events from 2023 is on the GetConnectedSC website.</p>	<p>These SCBBO activities have increased community engagement, access to information/data, understanding of needs and barriers, and adoption efforts across the State.</p>



Activity Name	Description	Intended Outcome(s)
Grant Award and Management		
Process Development	To comply with the requirements of new federal and State sources of broadband funding such as CARES and ARPA, the Office developed, with input from professional resources retained by the State, significant grant management capabilities, including internal control procedures for each step in the grant selection and management process.	<p>The development of these capabilities allowed SCBBO to allocate funds and empower counties and local governments in partnership with ISPs to complete priority broadband deployment and other capital projects to expand service across the state.</p> <p>The processes and procedures developed inform and can be updated as needed to comply with BEAD funding requirements.</p>
Management of Grants and Compliance	<p>The SCBBO managed grant programs and processes and awarded grants to ISPs to deliver broadband service in specific areas of need.</p> <p>Select grant programs include the Coronavirus Aid, Relief, and Economic Security Act (CARES Act I and II); Rural Broadband Grant Program (RBGP); and ARPA. For the full list, please see Table 5.</p> <p>The SCBBO also verifies projects that are completed, using a self-service verification process to approve the payment of funds.</p>	<p>Managing this large influx of funding for prior programs will inform the administration of the BEAD funds.</p> <p>These previous rounds of funding provided experience in managing fund matching protocol, coordinating large efforts, evaluating grantees, and prioritizing uses of funds, which resulted in helping reduce the number of unserved homes in South Carolina.</p>

3.1.3 Current and Planned Employees and Contractors

As the central broadband planning body for South Carolina, SCBBO employees (full-time and part-time), contractors and associated governmental staff will be core State representatives implementing and administering the BEAD program. The Office currently has six full-time employees with the remaining four positions allocated for work performed by the Agency (in legal, admin, HR). Additional State government agencies and offices contribute shared resources to the statewide efforts to expand broadband, which are included in the table below. Please note that key employees from the Department of Administration, which is focused on the Digital Equity aspects of the BEAD program, have also been included in Table 3.

Table 3: Current and Planned Full-Time and Part-Time Employees

Current/Planned	Full-Time/Part-time	Position	Description of Role
South Carolina Broadband Office (SCBBO) Staff			
Current	Full-time	Director	Serves as head of SCBBO and coordinates with federal, state, regional, local, and private entities to encourage the continued development of access to broadband.



Current/Planned	Full-Time/Part-time	Position	Description of Role
Current	Full-time	Deputy Director	Program management and grant administration lead. Also provides technical and project management expertise and support.
Current	Full-time	Sr. Geospatial Data Scientist	Responsible for the implementation and oversight of all analytic analysis performed by the SCBBO. Provides project management and grant administration support.
Current	Full-time	Program Coordinator	Coordinates broadband program administrative activities.
Current	Full-time	GIS Specialist/Project Manager	Supports a dualized role with the SCBBO conducting GIS analysis, project management and associated grant administration.
Current	Full-time	GIS Specialist/Project Manager 2	Supports a dualized role with the SCBBO conducting GIS analysis, project management and associated grant administration.
Current	Part-time	Shared ORS Staff	Finance, Legal, IT, Stakeholder Engagement and Admin from the wider ORS team provide shared functional support to the SCBBO.
South Carolina Office of Regulatory (ORS) Staff			
Current	Full-time	Executive Director	Serves as the head of ORS and executive manager of the agency including the SCBBO.
Current	Full-time	Director, Broadband, Communications, and Safety	Oversees and manages the SCBBO in addition to the Communications and Safety offices within ORS. Provides civil engineering oversight on all SCBBO-funded projects.
Current	Full-time	Manager, Finance and Administration	Manages finance and administrative activities for ORS and the SCBBO, including the financial management of grants.
Current	Full-time	Broadband Grant Manager	Manages finance and administrative activities for ORS and the SCBBO, including the financial management of grants.
Current	Full-time	Public Information Officer	Serves as legislative affairs liaison and supports State General Assembly engagement. Responsible for content updates on the SCBBO/ORS website.



Current/Planned	Full-Time/Part-time	Position	Description of Role
Current	Full-time	Chief of Broadband, Communications, and Safety	Oversees and manages the SCBBO, the Communications and Safety offices within ORS, and emergency management response.
South Carolina Department of Administration			
Current (Vacant)	Full-time	Director, Statewide Leadership Development	Directs the development of the Digital Equity Plan as well as the Digital Equity component of the BEAD plan, including setting stakeholder outreach strategy.
Current	Full-time	Project Coordinator, Office of the Executive Director	Facilitates the development of the Digital Equity Plan as well as the Digital Equity component of the BEAD plan, including supporting stakeholder outreach strategy.
Current	Full-time	Program Director, Executive Budget Office, and Capital Planning	Administers Digital Equity component of BEAD plan.

The State has also hired contractors with specific skill sets to complement the work of the employees described above in implementing and administering the BEAD program. Please see Table 4 below for current contractors and potentially new contractors being considered. Funds for these resources were provided through the Infrastructure Investment and Jobs Act (IIJA)'s Internet for All Planning Grant awarded to South Carolina.

Table 4: Current and Planned Contractor Support

Current/Planned	Full-time/Part-time	Position	Description of Role
Current	Full-time	Strategic Marketing Consultant	Designs a comprehensive marketing campaign and consistent brand strategy to support stakeholder outreach efforts as part of the BEAD plan.
Current	Full-time	Lead Survey Consultant	Develops, hosts and administers surveys, and provides the strategy behind the design, distribution and collection of surveys to identify needs, gaps, obstacles and barriers.
Current	Full-time	Strategy, Planning and Stakeholder Engagement Consultant	Assists in activities to support the development of the BEAD and Digital Equity Plans in addition to the BEAD Initial Proposal.



Current/Planned	Full-time/Part-time	Position	Description of Role
Current	Part-time	Better-Internet Survey Distribution and Collection Partners (for a full list, please see Section 3.2, <i>Partnerships</i> , which includes state agencies, such as the SC Department on Aging; State university systems, such as the University of South Carolina (USC); and associations, such as the SC Councils of Government (COGs)	Supports survey distribution and collection activities. In addition, Clemson University and the Commission for Minority Affairs (CMA) support asset mapping activities.
Current	Part-time	Survey Data Analysis and Reporting (USC)	In addition to being a Survey Distribution and Collection Partner, USC provides data analysis and reporting to identify conclusions from the surveys.
Current	Part-time	Mapping Software and Software Maintenance	Manages GIS mapping software, location intelligence and spatial analytics tool, which provides the foundation for state broadband mapping and maintenance of maps.
Current	Part-time	Network Data Analytics Provider	Provides comprehensive raw data for both fixed and cellular networks.
Current	Part-time	Community Technical Support	On-Call support for Capital Project Funds plan, including Main Streets grant program engineering as needed.
Current	Part-time	Federal Reporting Consultant	Supports compliance with disbursement of ARPA funds.
Planned	Full-time	Stakeholder Engagement Consultant	Provides stakeholder engagement expertise and guidance, including a commitment to transparency and local coordination. Develops plan to meet stakeholder outreach requirements, community anchor institution (CAI) engagement and stakeholder-based framework for workforce development planning.
Planned	Full-time	Strategy and Procurement Consultant	Assists in all activities to support the development of the BEAD Initial and Final proposals, including supporting the procurement process for selecting subgrantee projects.



Current/Planned	Full-time/Part-time	Position	Description of Role
Planned	Full-time	Strategic Marketing and Communications Consultant	Designs a comprehensive marketing campaign and consistent brand strategy to support continued stakeholder outreach efforts and a detailed plan to market and conduct a challenge process.
Planned	Full-time	Environmental Consultant	Provides an assessment of climate threats and proposed mitigation methods as well as documentation associated with any construction and/or ground-disturbing activities and compliance with environmental and national historical preservation requirements.
Planned	Full-time	Grant Administration and Compliance Consultant	Provides grant administration support for BEAD program funds in line with eligible uses, requirements and priorities, including subgrantee selection criteria and program outcomes related to broadband deployment and digital inclusion programming. Also, provides federal grant compliance procedures and ensures monitoring/oversight controls are in place for proper use of funds.
Planned	Full-time	Software Developer	Supports administering challenge process, especially for optional modifications, such as those related to speed tests.

3.1.4 Existing Efforts Funded by the Federal Government/Eligible Entity

To date, the SCBBO has administered multiple grant programs that have funded broadband expansion efforts, including for planning, deployment, and other eligible uses. This section describes the following federal and state grant and funding programs available in South Carolina for broadband deployment and other broadband-related activities.

- Federally funded programs administered by the State
 - Coronavirus Aid, Relief, and Economic Security Act (CARES Act)
 - American Rescue Plan Act (ARPA)
 - State and Local Fiscal Recovery Fund (SLFRF)
 - SLFRF 1.0 and Accelerated Deployment Grant Program (ADGP)
 - Capital Projects Fund (CPF)
- State-funded program administered by the State



- Rural Broadband Grant Program (RBGP)
- CARES Act II (CARES II)
 - Last Mile Pilot Grant Program (LMGP)
- Federally funded programs administered by federal agencies
 - FCC Affordable Connectivity Program
 - FCC Rural Digital Opportunity Fund
 - FCC Universal Service Fund (USF) – E-Rate Program
 - FCC Universal Service Administrative Co. (USAC) – Healthcare Connect Fund Program
 - US Department of Agriculture (USDA) ReConnect Loan and Grant Program
 - NTIA Broadband Infrastructure Program
 - NTIA Connecting Minority Communities
 - NTIA Tribal Broadband Connectivity (TBC)
 - NTIA Enabling Middle Mile Broadband Infrastructure Program
 - NTIA Infrastructure Investment and Jobs Act (IIJA)

3.1.4.1 Federally Funded Programs Administered by the State

3.1.4.1.1 Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

The CARES Act was passed by the US Congress to help provide relief to the US economy from the COVID-19 pandemic. The CARES Act included funding for broadband infrastructure deployment to enhance distance learning, telehealth services and other needs under the Coronavirus Relief Fund (CRF).

The South Carolina General Assembly passed Act 142 authorizing the ORS to expend up to \$50m of CARES Act funds, through the CRF, for broadband initiatives related to COVID-19. These funds were allocated to the ORS prior to the creation of the SCBBO and served as the foundation from which other grant programs were developed.

The funding supported the following activities and initiatives:

- Launched a South Carolina Online Learning Initiative that distributed devices and procured over 100,000 mobile hotspots and wired internet service for qualifying student households.
- Launched the State’s broadband map in December 2020, which created a public platform showing broadband availability in the state; procured GIS work that included ISPs’ address-specific data.
- Developed the Broadband Infrastructure Program that helped expand broadband access to around 18,000 structures in the state and enabled ORS to fund approximately 76 applications for projects in 28 counties. Fourteen companies completed infrastructure projects in December 2020, helping to expand broadband availability to homes, businesses, educational institutions, and healthcare facilities in the state, with an emphasis on service to rural communities and communities with a high prevalence of COVID-19.



3.1.4.1.2 American Rescue Plan Act (ARPA) - SLFRF, CPF

ARPA went into effect March 15, 2021. HB 4408, or Act 244 (2022), was signed and enacted by Governor McMaster on May 13, 2022. This legislation allocated \$400m for South Carolina Broadband infrastructure, including \$214,234,345 from the SLFRF and \$185,765,655 from the CPF.

- **SLFRF:** The \$214m from the SLFRF is targeted to be spent, depending on the number of qualified applicants. Pursuant to HB 4408, the SLFRF shall prioritize:
 - Unserved areas with no current ISP
 - “Difficult Development Areas” as identified by the US Department of Housing and Urban Development (HUD)
 - Census blocks that have a high concentration of unserved public K–12 student households

SCBBO’s first grant program under SLFRF (SLFRF 1.0) is targeted for completion by the end of 2024. An additional component of ARPA SLFRF funding includes the ADGP. ADGP grants are focused on broadband construction undertaken by ISPs to unserved areas initiated on or after March 15, 2021, and operational by June 30, 2022. ORS has awarded \$25.2m of ARPA SLFRF funds to the ADGP. The ADGP application period closed February 28, 2023; application selection was completed by June 30, 2023, with grant awards occurring throughout August 2023.

- **CPF:** The US Treasury requires a written plan outlining strategy and overall approach toward leveraging CPF funds. The SCBBO drafted a plan that incorporated feedback from the BBAC and other stakeholders. The plan was then submitted to the US Treasury for approval and funding on September 22, 2022.
 - On March 7, 2023, the US Treasury announced approval of South Carolina’s written plan and released the \$185.8m in CPF funds (100% of South Carolina’s CPF allocation). SCBBO will administer the CPF funds through its new Main Street South Carolina Grant Program (Main St.). Main St. is a competitive last-mile broadband grant program designed to provide affordable, reliable broadband service to rural areas that currently have no internet service. Within those eligible areas, the Main St. program prioritizes projects that will deliver broadband to rural town centers and the surrounding residential areas.
 - The program is designed to provide internet service with speeds of 100/100 Mbps symmetrical to households and businesses upon project completion. Each of the ISPs funded by the program will participate in the FCC’s Affordable Connectivity Program (ACP). It is anticipated an estimated 31,650 locations will be served.

3.1.4.2 State-Funded Program Administered by the State

3.1.4.2.1 Rural Broadband Grant Program (RBGP)

In March 2021, the SC Joint Bond Review Committee approved the allocation of \$30m from the SC Department of Commerce (SCDOC) to the ORS to administer the RBGP. RBGP investments were restricted to 14 eligible counties and 15 contiguous counties. By July 2021, the SCBBO issued Notices to Proceed to 15 ISPs in 18 counties for almost \$30m in projects to expand broadband availability in rural areas of need in South Carolina.



Most RBGP projects were completed by October 31, 2022. As of June 30, 2023 1,777 miles of fiber and access to 18,245 housing units. Upon completion of the remaining projects, approximately \$27.7m of the \$30m will be expended. The SCBBO discussed several options with the SCDOC to reallocate the remaining \$2,310,137 to support other broadband projects.

3.1.4.2.2 Coronavirus Aid, Relief, and Economic Security Act II (CARES II)

CARES II funds, administered through the State Fiscal Year 21–22 Appropriations Act, expanded mapping efforts, and extended funding opportunities to companies that deploy broadband in specific areas of need. The CARES II funds reflect an additional \$10m allocation helping to complete projects that began under the CARES Act. CARES II projects were to be complete by March 31, 2022. Upon completion, of the \$10m, the SCBBO invested \$8,629,961 in 17 projects, from nine different ISPs, resulting in 6,185 additional locations with access to broadband service. Approximately \$30,000 is related to the Starlink Pilot Program.

- **Last Mile Pilot Grant Program (LMGP):** The LMGP is an ORS pilot grant program, funded from remaining CARES II funds. LMGP is focused on reaching consumers who are in an area that is generally considered “served” but are without access to broadband due to the cost of delivering service to the home (e.g., a home on the other side of railroad tracks that is not in reach of a nearby broadband provider). The program focused on citizens that completed the “I Need Internet” survey. Approximately \$1.2m was committed to the LMGP in May 2022, and by December 31, 2022, approximately 569 residential homes received service.

3.1.4.3 Federally Funded Programs Administered by Federal Agencies

3.1.4.3.1 FCC Affordable Connectivity Program

This program provides a discount of up to \$30 per month toward internet service for eligible households and up to \$75 per month for households on qualifying tribal lands. 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. According to the USAC, as of August 7, 2023, South Carolina has 370,042 households enrolled in the program, out of an estimated 874,587 eligible households (the number of eligible households, according to the national nonprofit [EducationSuperHighway](#)).

On August 21, 2023, the SCBBO and Palmetto Care Connectors (PCC) were awarded \$400,000 and \$374,947 respectively to conduct a multi-faceted ACP outreach and enrollment strategy.

3.1.4.3.2 FCC Rural Digital Opportunity Fund

This fund supports FCC efforts to bridge the digital divide. On August 1, 2019, the FCC adopted a Notice of Proposed Rulemaking (NPRM) proposing to establish the \$20.4b Rural Digital Opportunity Fund to bring high-speed fixed broadband service to rural homes and small businesses that lack it.

\$121,245,987 will go to South Carolina over 10 years with 108,833 locations assigned.

3.1.4.3.3 FCC USF – E-Rate Program

The FCC’s E-Rate program makes telecommunications and information services more affordable for schools and libraries. With funding from the Universal Service Fund, E-Rate provides discounts for telecommunications, internet access and internal connections to eligible schools and libraries.



3.1.4.3.4 FCC USF – Healthcare Connect Fund Program

The Healthcare Connect Fund Program provides subsidy reimbursements for up to 65% of eligible broadband expenses for eligible healthcare providers. In January 2021, Palmetto Care Connections (PCC) received more than \$17m in broadband subsidies for the period of 2019 through 2022. These funds represent actual savings for healthcare providers. PCC is currently providing subsidies for 1,944 circuits.

PCC helps healthcare providers receive broadband savings through the FCC's Healthcare Connect Fund Program by assisting them with the internet service provider bidding process and filing the appropriate information, invoices and supporting documentation to the USAC.

3.1.4.3.5 FCC Emergency Connectivity Fund (ECF)

The FCC's Emergency Connectivity Fund (ECF) is an over \$7 billion program aimed at helping schools and libraries provide services to their communities to support remote learning. The program covers reasonable costs of devices including laptops, tablets, Wi-Fi hotspots, modems and routers.

In South Carolina, the School District of Pickens County (SDPC) was awarded almost \$4m in equipment and \$2.8m in services. As part of this investment, SDPC selected WCTEL in a competitive procurement and awarded them \$1.3m to construct high-speed internet to 462 residential homes in Pickens County South Carolina.

3.1.4.3.6 USDA ReConnect Loan and Grant Program

The ReConnect Program offers loans, grants, and loan-grant combinations to facilitate broadband deployment in areas of rural America that currently do not have sufficient access to broadband. In facilitating the expansion of broadband services and infrastructure, the program will fuel long-term rural economic development and opportunities in rural America.

As of October 27, 2022, \$759m in loans and grants were awarded nationally. On August 21, 2023, South Carolina received \$24m, \$12m each in Bamberg and Orangeburg Counties, to deploy high-speed internet service to rural homes, businesses and essential community facilities.

3.1.4.3.7 NTIA Broadband Infrastructure Program

The NTIA announced the availability of \$288m in grant funding for the deployment of broadband infrastructure. Grants will be awarded to partnerships between a state, or political subdivisions of a state, and providers of fixed broadband service.

South Carolina was unsuccessful in obtaining these funds, but the State used the work in developing that grant request to develop the CPF plan, which was filed in September 2022.

3.1.4.3.8 NTIA Connecting Minority Communities

Announced February 27, 2023, more than \$175m in Internet for All Grants have been awarded to 61 minority-serving colleges and universities across the country. Grant program recipients include Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-Serving Institutions (MSIs) for the purchase of broadband internet access and eligible equipment or to hire and train IT personnel.



In South Carolina, Benedict College has been awarded \$2,893,457, and Claflin University has been awarded \$2,999,450.

3.1.4.3.9 NTIA Tribal Broadband Connectivity (TBC) program

As part of the TBC program, South Carolina’s Catawba Indian Nation was awarded \$900,578 on June 23, 2022, for a broadband use and adoption project that will provide free or reduced-cost broadband service to 1,790 Native American tribal households in Rock Hill, SC. The project will also enhance tribal operations and programs through improvements to tribal electrical and audio/video (AV) systems, as well as the provision of Zoom-enabled laptops to staff engaged in telehealth- and e-commerce-related activities.

3.1.4.3.10 NTIA Enabling Middle Mile Grant Program

NTIA establishes and funds a \$1b program for the construction, improvement, or acquisition of middle-mile infrastructure. The purpose of the grant program is to expand middle-mile infrastructure to reduce the cost of connecting unserved and underserved areas to the internet backbone. The State participated in this program but was unsuccessful in receiving funds.

3.1.4.3.11 NTIA Broadband Infrastructure Program

NTIA established \$288m in grant funding for the deployment of broadband infrastructure. Grants will be awarded to partnerships between a state, or political subdivisions of a state, and providers of fixed broadband service.

3.1.4.3.12 NTIA Infrastructure Investment and Jobs Act (IIJA)

The US Department of Commerce NTIA awarded an IIJA Internet for All Planning Grant of \$5,953,478 for South Carolina to support a BEAD connectivity grant and DEA planning.

3.1.5 Current Funding Available

Table 5: Broadband Funding

Source	Purpose	Total	Expended	Available
Federally Funded Programs Administered by the State				
US Department of Treasury: CARES Act, including CRF (Administered via State Broadband Act 142)	2020: Helped expand broadband access by initiating mapping, providing hot spots to students and through projects providing access to reliable high-speed broadband internet to enhance distance learning, telehealth, and other needs during the COVID-19 pandemic.	\$50,000,000	\$38,369,124	\$0 ⁴

⁴ \$11,630,867 in remaining funds were reallocated to other agencies.



Source	Purpose	Total	Expended	Available
US Department of the Treasury: ARPA – State and Local Fiscal Recovery Fund (SLFRF) and Capital Projects Fund (CPF)	2022: ARPA broadband funds shall be used to expand broadband infrastructure to households, businesses and communities in the state that are unserved or underserved and must be awarded through competitive grants.	\$400,000,000 SLFRF: \$214,234,345 CPF: \$185,765,655	\$154,574,520 SLFRF Misc: \$24,122 SLFRF ADGP: \$25,193,087 CPF \$143,994	SLFRF \$34,442,616 CPF \$185,621,661
State-Funded Program				
SC Department of Commerce: Rural Broadband Grant Program (RBGP)	2021: South Carolina Joint Bond Review Committee approved \$30m to be allocated by a competitive grant program to expand broadband availability in rural areas of need.	\$30,000,000	\$27,689,863 (includes internal ORS expenses)	\$2,310,137
State Fiscal Year 21–22 Appropriations Act: CARES II	2021: Funding created the SCBBO, expanded mapping efforts and extended funding opportunities to companies that deployed broadband in specific areas of need, with priority given to unserved homes, businesses, schools, healthcare facilities and other institutions in rural communities and communities across SC with a lack of access to broadband. Some of these funds were also used towards the Starlink Pilot Program which introduced 20 devices in rural areas across the state in collaboration with the SCDE.	\$8,794,869	\$8,629,961 (includes internal ORS expenses)	\$164,908
State Fiscal Year 21–22 Appropriations Act: CARES II, LMGP	2021: A pilot project, for residential homes with students, that focused on reaching consumers in areas that are generally considered served but are still without access due to the cost of delivering service to the home.	\$1,205,131	\$1,205,131	\$0



Source	Purpose	Total	Expended	Available
Federally Funded Programs Administered by Federal Agencies				
FCC – Affordable Connectivity Program and Outreach Program	Provides a discount of up to \$30 per month toward internet service for eligible households and up to \$75 per month for households on qualifying tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer or tablet. As of August 7, 2023, South Carolina has 370,042 subscribed households.	\$400,000 for ACP outreach and enrollment activities to the SCBBO \$374,947 to Palmetto Care Connections	\$0	\$400,000 – SCBBO; \$374,947 – Palmetto Care Connections
FCC – Rural Digital Opportunity Fund Phase I	Fund supports FCC efforts in bridging the digital divide. On August 1, 2019, the FCC adopted an NPRM proposing to establish the \$20.4b Rural Digital Opportunity Fund to bring high-speed fixed broadband service to rural homes and small businesses that lack it.	\$121,245,987 (over 10 years)	Unknown	Unknown
FCC USF – E-Rate Universal Service Program for Schools and Libraries	Makes telecommunications and information services more affordable for schools and libraries. E-Rate provides discounts for telecommunications, internet access and internal connections to eligible schools and libraries.	Varies	Varies	Varies
FCC USF – Healthcare Connect Fund Program	The Healthcare Connect Fund Program provides subsidy reimbursements for up to 65% of eligible broadband expenses for eligible healthcare providers. In January 2021, Palmetto Care Connections (PCC) received more than \$17m in broadband subsidies for the period of 2019 through 2022.	\$23,327,368	\$23,327,368	\$0



Source	Purpose	Total	Expended	Available
FCC – Emergency Connectivity Fund (ECF)	<p>The FCC's Emergency Connectivity Fund (ECF) is an over \$7 billion program aimed at helping schools and libraries provide services to their communities to support remote learning and costs of devices and services. reasonable costs of devices including laptops, tablets, Wi-Fi hotspots, modems and routers.</p> <p>In South Carolina, the School District of Pickens County (SDPC) was awarded almost \$4m in equipment and \$2.8m in services.</p>	<p>\$6,774,653 to Pickens County School District</p> <p>\$3,988,550 (Equipment)</p> <p>\$2,786,103 (Services)</p>	Unknown	Unknown
USDA – ReConnect Loan and Grant Program	Furnishes loans and grants to provide funds for the costs of construction, improvement or acquisition of facilities and equipment needed to provide broadband service in eligible rural areas.	\$24,000,000 (\$12,000,000 each for Bamberg and Orangeburg Counties).	\$0	\$24,000,000
NTIA – Connecting Minority Communities	Announced February 27, 2023, more than \$175m in Internet for All Grants have been awarded to 61 minority-serving colleges and universities across the US.	<p>\$5,892,907</p> <p>Benedict College has been awarded \$2,893,457.</p> <p>Clafin University has been awarded \$2,999,450.</p>	N/A	N/A
NTIA – TBC	South Carolina's Catawba Indian Nation was awarded \$900,578 on June 23, 2022, for a broadband use and adoption project that will provide free or reduced-cost broadband service to 1,790 Native American tribal households in Rock Hill, SC.	\$900,578	\$900,578	\$0
NTIA – Enabling Middle Mile Grant Program	Establishes and funds a \$1b program for the construction, improvement, or acquisition of middle-mile infrastructure to reduce the cost of connecting unserved and underserved areas	\$0	\$0	\$0



Source	Purpose	Total	Expended	Available
	to the internet backbone. The State participated in this program but was unsuccessful in receiving funds.			
NTIA – Broadband Infrastructure Program	The NTIA announced the availability of \$288m in grant funding for the deployment of broadband infrastructure. Grants will be awarded to partnerships between a state, or political subdivisions of a state, and providers of fixed broadband service. South Carolina was not a recipient of these funds.	\$0	\$0	\$0
IJJA – Internet for All Planning Grant	Preparing BEAD and DEA plans for the deployment and adoption of affordable, equitable and reliable high-speed internet service throughout the state.	\$5,953,479 \$5,000,000 BEAD \$953,479 DEA	Fully committed to contractors and ORS internal staff	\$0
Total Funding Available				\$247,314,269

3.2 Partnerships

Partnership, coordination, and engagement across all sectors of government, academic institutions, nonprofits, and private industry are vital to connecting residents and businesses to affordable, reliable broadband. The SCBBO has leveraged many important partnerships with various organizations throughout the state to achieve the goals outlined in Section 2.2, *Goals and Objectives*, by conducting relevant activities and programs.

Table 6 describes such partnerships and the role these partners play in broadband deployment and adoption in the state.

Table 6: Partners

Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
State and Local Government	
SC Department of Social Services (DSS)	Through its Division of Economic Services, DSS administers economic assistance programs, including the federal Temporary Assistance for Needy Families (TANF) program, which provides employment and training for people receiving cash assistance, and the Supplemental Nutrition Assistance Program (SNAP). SCBBO partners with DSS to gain data regarding social service program recipients eligible for the FCC’s ACP.



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
SC Department of Transportation (SCDOT)	The SCDOT supports permitting and coordination on construction, particularly with “Star” initiatives. The SCBBO has worked with the SCDOT to develop a utility right-of-way guidance document that evaluated permitting workflows to enable a more seamless integration of broadband infrastructure along state-owned roadway easements. The SCBBO plans to continue coordinating with the SCDOT and other entities, such as the Department of Health and Environmental Control (DHEC), to ensure a streamlined and compliant permitting process for future broadband projects.
SC Office of Resilience	SCBBO plans to partner and coordinate with the Office of Resilience, which oversees federal funds provided for damage due to natural disasters. The Office plans to leverage the Office of Resilience’s flood vulnerability modeling and other resources to support long-term planning, including the resiliency planning efforts required as part of the Initial and Final Proposal.
SC Emergency Management Division	SCBBO plans to partner with the Emergency Management Division, which manages recovery and response efforts, to support resilient broadband expansion and planning.
SC Department of Education (SCDE)*	The SCDE supports initiatives expanding broadband access and adoption for students in the state. The SCDE collaborates with SCBBO by sharing data on schools and households with K–12 students, ensuring broadband expansion efforts and programs reach students who rely on access to broadband. The SCCBO will work with the SCDE to identify opportunities to pair BEAD dollars with the FCC’s E-Rate dollars to strengthen broadband options for schools across the state.
SC Department of Commerce (SCDOC)*	The SCDOC promotes economic development, workforce development and SC attractiveness to industry. As part of those efforts, the SCDOC supports the development of a ubiquitous highly reliable world-class communications network designed and engineered to meet the requirements of industry for wireless high-speed internet access and voice service. This is best exemplified by SCDOC’s collaboration with SCBBO in deploying grants under the RBGP.
SC Rural Infrastructure Authority (RIA)	The RIA assists communities with financing for qualified infrastructure projects for water and wastewater systems as well as storm water drainage facilities. RIA was initially offered grants for projects in rural and distressed counties, but the programs have expanded to make grant and loan assistance available statewide. RIA will oversee ARPA SLFRF funds (\$1.3b) and will be a key partner with the SCBBO. In particular, the offices will work together in identifying “dig-once” opportunities for broadband deployment.
Commission for Minority Affairs (CMA)	<p>CMA provides constructive solutions and approaches to support the policy and socioeconomic development of ethnic minority communities in SC through activities such as community engagement and awareness; collecting data; and acting as a liaison between communities, government agencies and other organizations.</p> <p>CMA serves as the single point-of-contact for tribal broadband issues. CMA supported survey development, distribution, and collection, as well as asset mapping activities.</p>



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
SC Department on Aging (SCDOA)	<p>SCDOA focuses on enhancing the quality of life for seniors in South Carolina. The SCDOA works with a network of regional and local organizations to develop and manage services that help seniors remain independent in their homes and in their communities, which includes facilitating access to broadband and broadband-enabled services like telehealth. To achieve this, the SCDOA partners with community-based organizations and CAIs from healthcare providers to hospitals.</p>
Santee Cooper*	<p>Santee Cooper, the state-owned electric and water utility, has developed a broadband program in accordance with the Broadband Accessibility Act that will enable broadband providers to improve statewide accessibility quicker and cheaper. As one example, on April 26, 2021, the Santee Cooper Board of Directors approved rates and terms that allow broadband providers to build out retail service to unserved areas of South Carolina by accessing Santee Cooper’s transmission infrastructure and 1,200 miles of excess fiber. The program began the following month, when the new rates for transmission pole attachments and the leasing of excess dark fiber went into effect.</p>
SC State Library System*	<p>The South Carolina State Library System is the primary administrator of federal and state support for the state’s libraries. Many libraries throughout SC support access to broadband as well as adoption and use through digital literacy resources. For example, students rely on their SC public libraries to keep them connected while attending virtual classes. SC libraries provide technological resources, including Wi-Fi, laptops, and Chromebooks, to keep students connected. SC libraries also use Wi-Fi extenders to share their Wi-Fi in more public spaces, like parks and community centers.</p> <p>During the height of the pandemic, many libraries in South Carolina expanded broadband access by extending Wi-Fi. Library parking lots were often full of families, students and workers logging on to use the free internet available. Examples include Florence Library, which had two SmartBus hotspots parked in public spots to provide internet access. Marlboro, Colleton, Chester, Berkeley, and Dillon Libraries used bookmobiles as roving hotspots, visiting housing sites and rural locations.</p> <p>Many libraries check out hotspots to help bridge the digital divide. Additional examples include Union Library, which has partnered with the Union County Detention Center to expand Wi-Fi reach, and Richland Library, which placed Wi-Fi devices in all of the Columbia Housing Authority areas.</p>
South Carolina Department of Agriculture (SCDA)	<p>SCDA will support SCBBO’s ability to understand broadband needs related to the SC agriculture ecosystem and farming communities.</p> <p>According to the American Farm Bureau Federation, access to broadband is essential for farmers and ranchers for accessing commodity markets, communicating with their customers, gaining access to new markets around the world and increasingly for regulatory compliance.</p> <p>SCDA and SCBBO will work to support economic development related to precision agriculture and practices supported by access to broadband.</p>
SC Housing Authority (SCHA)	<p>SCBBO plans to partner with SCHA on targeting and expanding broadband coverage in MDUs throughout the state.</p>



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
SC Department of Veteran Affairs (SCVA)	The SCVA works with SCBBO to improve broadband access and skills for veterans. SCVA supported survey distribution and collection.
SC Department of Employment and Workforce (DEW), Office of Statewide Workforce Development (OSWD)	<p>DEW’s mission is to promote and support an effective, customer-driven workforce system that facilitates financial stability and economic prosperity for employers, individuals and communities. The agency’s primary goal is to match jobseekers with employers quickly, efficiently, and effectively, and offers a variety of services to assist both groups.</p> <p>As of June 2023, under the Statewide Education and Workforce Development Law, DEW is responsible for the Coordinating Council for Workforce Development (CCWD) and the Regional Workforce Advisors (RWAs), two initiatives formerly with the S.C. Department of Commerce. CCWD duties include engaging in discussions, collaboration, and information sharing concerning the ability of the State to prepare and train workers to meet current and future workforce needs. RWA duties include coordinating and facilitating the delivery of information, resources, and services to students, educators, employers, and the community regarding opportunities available to students in industries and businesses across the State. Additionally, the law creates the Office of Statewide Workforce Development (OSWD) within DEW that will provide management and oversight for these new functions of the agency.</p> <p>These new responsibilities allow the agency to improve accountability, broaden its efforts in addressing obstacles unique to rural areas, and enhance responsiveness to industry needs. In partnership with DEW and OSWD, SCBBO will work to implement workforce development programs and initiatives strengthening the positive economic impact of BEAD funding and broadband expansion across the State.</p>
SC Department of Public Safety (SCDPS)	SCDPS includes Highway Patrol, State Transport Police, Bureau of Protective Services, and Office of Highway Safety and Justice Programs. SCBBO plans to work with SCDPS to expand broadband to connect emergency services providers and to help target broadband along emergency corridors and facilities.
Colleges, Universities and School Systems	
Allen University	Allen University is an HBCU and supported SCBBO with survey distribution and collection.
Benedict College	Benedict College is an HBCU recipient of NTIA Connecting Minority Communities grant funding for the purchase of broadband internet access and eligible equipment or to hire and train IT personnel. Benedict College supported SCBBO with survey distribution and collection.
Claflin University	Claflin University is an HBCU recipient of NTIA Connecting Minority Communities grant funding for the purchase of broadband internet access and eligible equipment or to hire and train IT personnel. Claflin University supported SCBBO with survey distribution and collection.
Clemson University*	Clemson supported CBBO with asset mapping as well as survey distribution and collection.



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
Clinton College	Clinton College is an HBCU and supported SCBBO with survey distribution and collection.
Denmark Technical College	Denmark Technical College is an HBCU and supported SCBBO with survey distribution and collection.
Morris College	Morris College is an HBCU and supported SCBBO with survey distribution and collection.
The Medical University of South Carolina Medical Center (MUSC)	<p>MUSC is a health sciences university comprising four hospitals and a National Cancer Institute-designated cancer center. It is home to South Carolina’s only solid organ transplant center, as well as one of only two National Telehealth Centers of Excellence. As a patient care provider throughout South Carolina, its reach and increasing reliance on patients with reliable high-speed broadband aligns MUSC with SCBBO’s broadband expansion goals.</p> <p>MUSC supported SCBBO with broadband survey distribution and collection.</p>
South Carolina State University	SC State University is an HBCU and supported SCBBO with survey distribution and collection.
SC Technical College System	<p>The SC Technical College System consists of 16 technical colleges offering industry-specific training and education to more than a quarter million South Carolinians each year.</p> <p>ReadySC is a division of the SC Technical College System with a mission to promote economic development in South Carolina by providing customized recruiting and training solutions to companies bringing new jobs to the state through relocation or expansion. SCBBO works with ReadySC in advancing broadband-related workforce development efforts.</p> <p>Apprenticeship Carolina is a division of the SC Technical College System that works to ensure all employers in South Carolina have access to the information and technical assistance they need to create demand-driven registered apprenticeship programs, including in IT and other sectors that require digital skills. The SCBBO will work with the Apprenticeship Carolina program to help expand offerings related to the broadband sector to help ensure that South Carolina citizens have opportunities to gain the skills needed to explore a career in this industry.</p>
University of South Carolina (USC)*	USC supported survey development, distribution, collection, and data analysis. In addition, the SCBBO worked with USC to host career fairs and serve as an intermediary between students looking to gain experience in the broadband sector through internships and jobs.
Voorhees College	Voorhees College is an HBCU and supported SCBBO with survey distribution and collection.



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
Nonprofits, Associations and Other Organizations	
SC Association of Counties (SCAC)*	SCAC is the only statewide organization representing county government in South Carolina and works to empower county officials through advocacy, education and collaboration. SCAC supported SCBBO with survey distribution and collection.
TogetherSC*	<p>TogetherSC serves the thousands of South Carolinians dedicated to community service, leadership, and caring through nonprofit and philanthropic organizations. It comprises 700+ member organizations.</p> <p>TogetherSC is a broadband expansion advocate that convenes and aligns community leaders in support of broadband expansion. On March 15, 2023, TogetherSC joined with the SCBBO to host a conference with community members and nonprofits that are working to aid communities with broadband adoption. The event supported broadband survey distribution and knowledge sharing with residents regarding broadband expansion programs.</p>
Councils of Governments (COGs)	<p>SC COGs are a network of 10 councils working to positively influence quality of life and economic development in South Carolina, including increasing access to broadband. They supported distribution of broadband surveys and act as key coordinators of broadband resources, advocacy and programs in communities throughout the state.</p> <p>COGs are partnerships of – and provide resources to – the local counties, cities and towns in their regions. In addition to local and regional partnerships, COGs partner with numerous federal and state agencies, obtaining and administering grants for a variety of community-based programs and economic development initiatives.</p> <p>COGs’ focus on workforce development, economic development, transportation planning and other government services will provide connection across state and local activities where broadband deployment and digital inclusion are core components.</p>
Municipal Association of SC (MASC)*	MASC represents and serves the state’s 271 incorporated municipalities and is dedicated to empowering municipal officials with the knowledge, experience and tools to enable the most efficient and effective operation of their municipalities. For example, MASC advocated for a law to enable cities and towns to not only lay but also to light the fiber to expand broadband service.
Palmetto Care Connections (PCC)*	<p>PCC is a telehealth network that assists healthcare providers in connecting rural and underserved South Carolinians to quality services through broadband, technology, and telehealth programs.</p> <p>PCC helps healthcare providers receive broadband savings through the FCC’s Healthcare Connect Fund Program by assisting them with the internet service provider bidding process and filing the appropriate information, invoices and supporting documentation to the USAC.</p>
SC Institutes of Innovation and Information (SCIII)	<p>SCIII is a nonprofit that provides resources and support for the Institutes of Innovation and Information established at South Carolina’s eight HBCUs.</p> <p>SCIII supported SCBBO with survey distribution and collection.</p>



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
<p>SC Cable Television Association (SCCTA)*</p>	<p>SCCTA was formed in 1997 to support educational opportunities in communications and communication technology. SCCTA’s membership comprises South Carolina’s major cable companies, including Time Warner Cable, Charter Communications, Comcast Cable Communications and Atlantic Broadband, which collectively serve over 1m cable households in the state.</p> <p>The SCCTA foundation has sponsored seminars and forums that bring together leaders in education and technology to advance the use of technology in education. With ISPs as members, the SCCTA supports broadband expansion initiatives throughout the state and can provide direct support to SCBBO broadband data and programming activities.</p>
<p>SC Association for Community Economic Development (SCACED)*</p>	<p>SCACED is a coalition of individuals and organizations that support the development of healthy and economically sustainable communities throughout South Carolina. The members work collaboratively to create economic opportunity for all SC residents, with many efforts focused on minority communities and other groups that have been left out of the economic mainstream. SCACED will support broadband expansion efforts by providing advocacy and specific assistance with digital equity and inclusion activities.</p>
<p>SC Council on Competitiveness*</p>	<p>The SC Council on Competitiveness manages multiple industry clusters in South Carolina, including tech, cybersecurity, aerospace, and other broadband-enabled industries. Clusters are economic ecosystems of linked industries and other entities important to competition, like suppliers of components, machinery, and services.</p> <p>The Council’s priorities are to 1) provide actionable research, 2) support industry clusters, and 3) provide education and workforce development.</p> <p>The Council works in developing science, technology, engineering, and mathematics (STEM) education and workforce pipelines to strengthen South Carolina’s economic competitiveness. This work also supports SCBBO’s economic and workforce development strategy and planning.</p>
<p>Electric Cooperatives of SC (ECSC)*</p>	<p>ECSC is the statewide service and trade association for electric cooperatives. The consumer-owned electric cooperatives operate the largest electric distribution system in the state, serving more than 1.5m South Carolinians.</p> <p>ECSC actively supports broadband expansion initiatives and activities through advocacy and deployment. Several cooperatives string fiber optic cable for high-speed services, connecting electricity substations and control rooms to provide real-time communications, which helps to improve the electricity delivery system.</p> <p>Some electric cooperatives have internet businesses, while others have partnered with ISPs to deliver broadband service. The cooperatives provide electricity to many rural areas, and the existing power poles in those areas can also hold the fiber optic cable.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Central Electric Power Cooperative, Inc. (Central) owns over 800 miles of electric transmission lines in the state. Pursuant to the South Carolina Broadband Accessibility Act, Central is authorized to lease its excess fiber and license certain facilities, including its transmission poles, to communications service providers



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
	<p>for the purpose of facilitating the provision of retail broadband services. Central is not a retail broadband provider. Rather, Central has been developing a broadband program in accordance with the Act that will enable broadband providers to improve statewide accessibility quicker and cheaper.</p> <ul style="list-style-type: none"> In 2021, Aiken Electric announced a three-year broadband work plan to install 350 miles of 288-strand fiber optic cable to connect its four offices, 27 substations and all down-line devices. Through the partnership with the ISP CarolinaConnect, Aiken Electric will bring affordable high-speed internet to the unserved and underserved in its service territory.
<p>South Carolina Telecommunications and Broadband Association (SCTBA)*</p>	<p>SCTBA is an association of telecommunications companies helping connect SC regions, such as the Lowcountry, Upstate and Midlands. Founded in 1934, the purpose of the organization is to pursue statewide strategies that encourage the deployment of technologies that will enable SCTBA members to be the best providers of telecommunication and broadband products and services to South Carolina.</p> <p>Each month the SCTBA hosts conferences and educational seminars to help prepare small businesses for success in telecommunications.</p>
<p>Palmetto Agribusiness Council</p>	<p>The Palmetto Agribusiness Council supports broadband deployment, adoption and use related to agribusiness economic development, workforce development and precision farming.</p> <p>The Council is an influential voice for agribusiness in South Carolina promoting sustainability and the advancement of the agribusiness industry through collaboration of the diversified partners within the agribusiness community. The Council provides legislative support and advocacy on behalf of its community and develops studies and strategic economic impact assessments that can contribute to the SCBBO economic and workforce development planning.</p>
<p>SC Educational TV (SCETV)*</p>	<p>SCETV is the state’s public educational broadcasting network. It provides national and local content to classrooms via internet services. SCETV also provides teacher training and re-certification through in-person and online settings. The network comprises 11 TV stations, eight radio stations and a statewide tower network that serves schools, hospitals and emergency management teams.</p>
<p>Individual Private Sector Companies</p>	
<p>Technology and mapping partners</p>	<p>IBM, Esri and Ookla are private companies that provide SCBBO technology services to support broadband expansion activities, including tracking, compliance and controls systems, mapping, and speed test capabilities.</p>
<p>SpaceX/Starlink Pilot Program</p>	<p>The SCBBO coordinated with the SCDE to acquire 10 angel (sponsored) subscriptions for Starlink as part of a pilot program to be installed in 10 locations throughout the state. The subscriptions included all equipment, professional installation, and 12 months of service for each household.</p>



Partnerships*	Description of Current or Planned Role in Broadband Deployment and Adoption
Dominion Energy South Carolina*	Dominion is a power utility servicing South Carolina. It is working to help close the digital divide through delivering reliable power.
ISPs in SC	ISPs deploy broadband-enabling technology and services to businesses and residents across the state. They work with SCBBO as well as county and municipal governments to implement projects and programs supporting increased broadband access and adoption. From providing information to customers on the federal ACP to supplying devices and affordable service options to communities, ISPs are a primary private partner in broadband expansion and in bridging the digital divide in South Carolina. ISPs will continue to leverage grant opportunities, match funding, and partner with SCBBO and others to provide reliable high-speed internet throughout the state. Feedback on BEAD planning was provided in and documented in Section 5.1.
Federal Partners	
USDA SC	USDA SC managed the ReConnect Loan and Grant Program for SC.
Savannah River Site	Savannah River National Laboratory and related facilities offer opportunities for planning future collaboration and broadband-related expansion support.
US Department of Defense (USDoD)	USDoD SC assets and facilities, such as Naval Information Warfare Systems Command (NAVWAR), US Army Fort Jackson and Shaw Air Force Base, represent opportunities for broadband deployment and expansion to surrounding areas, as well as opportunities for additional broadband-related technologies (e.g., sensitive compartmented information facility (SCIF)) supporting economic development by attracting government and defense industry companies and contractors to the State.

*Member of the BBAC.

3.3 Asset Inventory

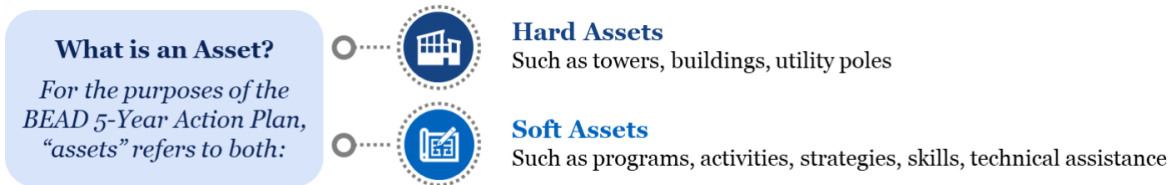
South Carolina has worked to identify a list of its existing assets, both hard and soft, that can be leveraged to implement this Plan to expand high-speed broadband and assist in closing the digital divide. This asset inventory development process included the following outreach activities:

- Questionnaires distributed by Clemson University to 72 school districts, public libraries across 46 counties, 77 institutions of higher education and other organizations
- Market outreach to individual ISPs and organizations representing groups of providers, such as SCTBA, SCCTA and ECSC
- Data sourcing and discussion on hard assets, particularly from partners such as SCBBO and Santee Cooper
- Results from the three Better-Internet Surveys: Residential, Business and Organizations, and Government and Municipality
- Interviews with organizations, such as the Office of Rural Health and AmeriCorps
- Review of existing plans, organizational websites, and general research



The BEAD program represents assets as follows:

Figure 1:



The following subsections break out South Carolina’s asset inventory into five categories, two primarily addressing hard assets and three primarily addressing soft assets, including:

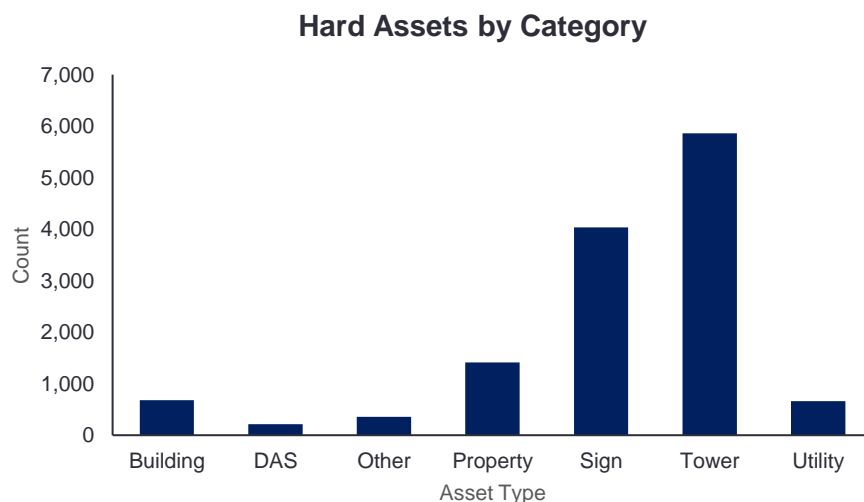
- Deployment (hard asset)
- Adoption (soft asset)
- Affordability (soft asset)
- Access (hard asset)
- Digital Equity (soft asset)

3.3.1 Broadband Deployment

3.3.1.1 SC Structures and Utility Infrastructure

The State has compiled a list of hard assets, including buildings, distributed antenna systems (DAS), signs, towers, utilities, and other property that may support broadband deployment. Across the State’s 46 counties, 13,217 assets have been cataloged. The State plans to share details on these assets during the BEAD grant process with ISPs for specific deployment projects. The State will continue to identify where there may be gaps or a need for towers or cellular service. The following chart provides a high-level overview of these assets.

Figure 2:





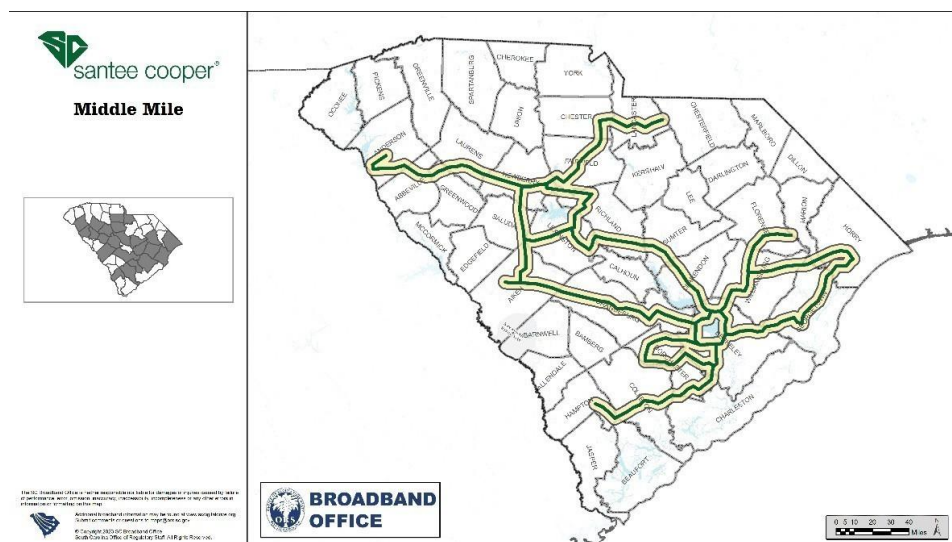
3.3.1.2 SC Land and Existing Rights of Way

Like the structure and utility infrastructure section above, the State will be developing these assets as part of the planning process and will be sharing with providers as necessary for specific deployment projects.

3.3.1.3 Conduits or Dark Fiber Deployed by the State/Territory or Other Government Entities

Santee Cooper, the state-owned electric and water utility, established a program on May 26, 2021, that allows broadband providers to build out retail service to unserved areas by accessing Santee Cooper’s transmission infrastructure and 1,200 miles of excess fiber. For additional information, please see the application process, key terms and other information [here](#).

Figure 3:



3.3.1.4 Current or Forthcoming Capital Projects, Which Would Allow Providers to Lay New Fiber at Lower Costs (e.g., Road Construction, Water, or Sewer Projects)

SCDOT documents current and planned projects [on its website](#). There are currently 319 projects under development. Given the evolving nature of these projects, the State plans to share details on these capital projects during the BEAD grant process with ISPs for specific deployment projects.

3.3.1.5 Highly Skilled Workforce Available to Deploy Broadband

As described in the *Obstacles and Barriers* section, of the 20 occupations that make up the majority of the wired telecommunications industry, South Carolina has an equal to or higher concentration of workers than the US average in nine categories, including five labor categories related to the telecommunications and broadband sectors. These categories include telecom equipment installers and repairers, telecom line installers and repairers, first-line supervisors, computer support specialists, and computer systems analysts. Given these assets, the increase in broadband expansion projects is not anticipated to unduly strain the broadband deployment-related labor market in South Carolina.



3.3.2 Broadband Adoption

Broadband adoption has traditionally been defined as residential subscribership to high-speed internet access, but as the essentiality of broadband and the need to increase the digital capacity of communities has become more apparent and urgent, broadband adoption is daily access to the internet:

- At speeds, quality and capacity necessary to accomplish common tasks
- With the digital skills necessary to participate online
- On a personal device and a secure, convenient network⁵

The following sections document assets that support the adoption of broadband, including organizations offering digital literacy programs, low-cost device programs, ISP adoption initiatives and others.

3.3.2.1 *Percentage of Residents Within the State/Territory that Have Adopted Broadband*

According to the [Census 2021 American Community Survey \(ACS\)](#), South Carolina has an estimated 1.64 million out of an estimated 1.98 million households, or 83.2%, with a “broadband of any type” subscription. For adoption of high-speed fixed broadband (defined as “broadband such as cable, fiber optic, or DSL”), this figure drops to 1.33 million, or 67.2%.

3.3.2.2 *Programs that Provide Digital Literacy and Digital Skills Training*

Public schools and libraries are the primary providers of digital literacy and digital skills training in South Carolina through their basic core services. As described in the *Obstacles and Barriers* section, there are some agencies and organizations, such as Palmetto Care Connections, that provide more explicit digital training for targeted groups, but many local communities lack well-developed programs explicitly focused on digital literacy and digital skills outside those traditionally offered by schools and libraries. The main sources for related programs are:

- Libraries
- K–12 schools
- Healthcare organizations
- Nonprofits and government organizations
- ISPs

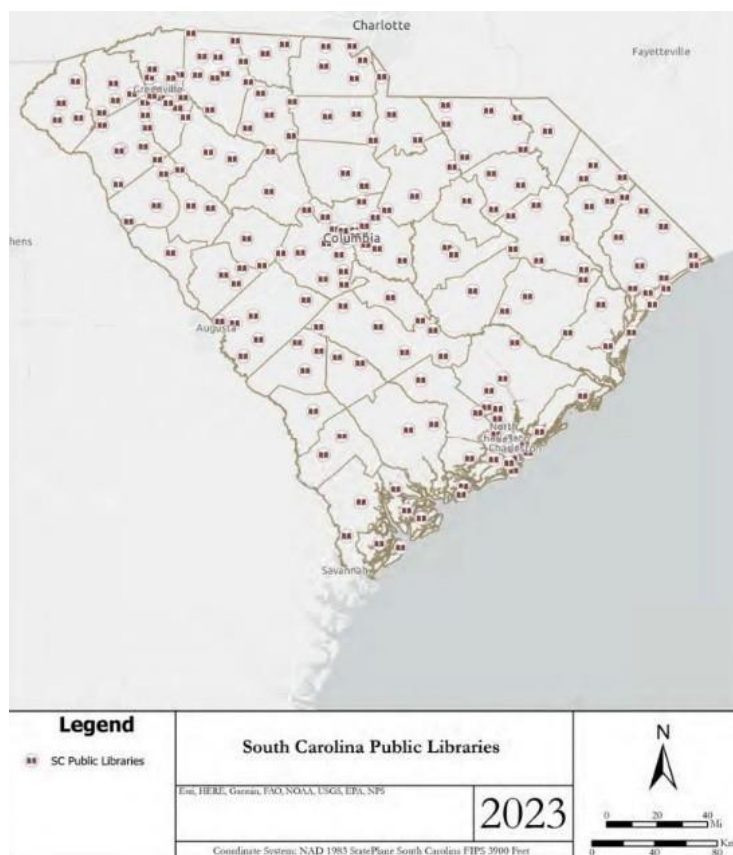
3.3.2.2.1 **Libraries**

All 239 identified public libraries and bookmobiles across 41 county systems in the State provide access to in-library public computers and assistance for users. In addition, public library systems are an existing network for expanding broadband adoption in communities in every SC county. The following is a map of public libraries across the State:

⁵ Benton Foundation, [Digital Inclusion and Meaningful Broadband Adoption Initiatives | Benton Institute for Broadband & Society](#), 2016



Figure 4:



Surveys to South Carolina public and academic libraries indicated the following:

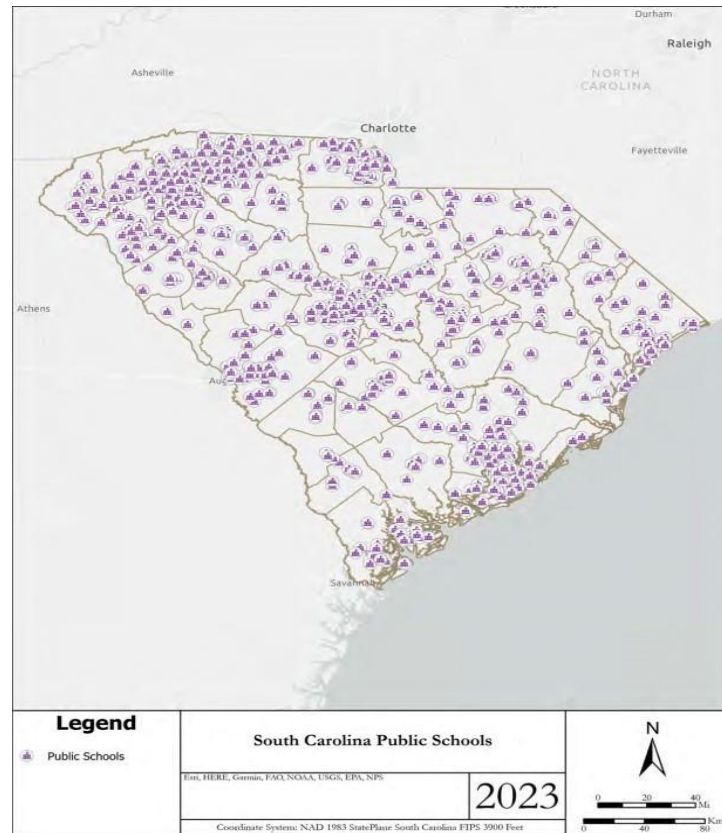
- 68% of public library respondents provide digital literacy services. Of these respondents, only 50% of town systems provide digital literacy programs as opposed to 100% of urban systems. Computer classes at the library are the most common type of program.
- 48% of public library respondents indicated at least one other organization in the county providing digital literacy programs, the most common of which were higher education and adult education organizations. Adult education in nearly every county is part of the school district. Other common organizations listed were Goodwill, United Way, public schools and the SC Department of Employment and Workforce.
- Survey responses from academic libraries indicate that less than 50% of respondents have digital literacy programs, and if they do, programs are generally through library instructional classes that are offered for credit.

3.3.2.2.2 K–12 Schools

Digital literacy programs were less consistently found across K–12 schools in the state. In addition, there wasn't consistency between whether digital literacy was provided for both staff and students. Common Sense and Learning.com were platforms listed by school districts. SC's 1,374 identified public schools are included in the map below. An additional 291 private schools were also identified.



Figure 5:



Surveys to K–12 schools indicated the following:

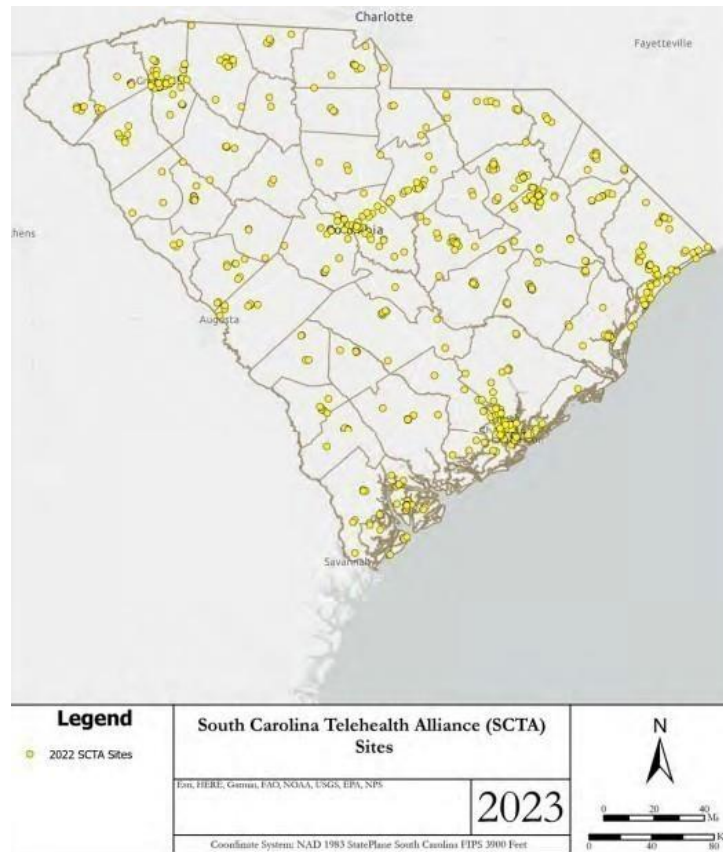
- Less than 50% of K–12 school respondents provide digital literacy programs. No pattern was observed between rural and urban respondents.

3.3.2.2.3 Healthcare Organizations

Healthcare organizations rely on consistent availability of digital literacy programs to assist with telemedicine and healthcare access for patients, families/caregivers, and medical providers/staff. **The South Carolina Telehealth Alliance (SCTA)** is a prominent statewide collaboration of many organizations that have joined forces to expand telehealth services. Led by the SCTA Advisory Council, it provides guidance, assists with strategic development, and advises on technology and standards. SCTA members include hospitals, universities, state agencies and more, and because of its broad membership base, SCTA sites are represented throughout the state, including at medical facilities and schools that use school-based telehealth services. The following is a map of the 615 SCTA sites, displaying the potential reach of healthcare-based digital skills training:



Figure 6:



In response to SCTA members⁶ surveys, 33% of respondents stated that they provide primarily patient-focused digital literacy programs.

3.3.2.2.4 Nonprofit and Government

A handful of the 30,169 nonprofits identified in the state play an important role in providing digital literacy programming. Select nonprofits are presented below.

Goodwill South Carolina (Goodwill) is a nonprofit that offers programs tailored to workforce development. These programs involve teaching basic computer skills to those who desire to learn them. There are several different regional Goodwills in the state, and these Goodwills do not provide a consistent offering at the regional or state level. In 2022, Goodwill launched Mission Mobile, a renovated bus that travels through rural areas and conducts workforce development workshops. Mission Mobile 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.

⁶ SCTA members had a small response rate (12 responses); therefore, findings may not be representative.



Fast Forward is a nonprofit dedicated to digital literacy and 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 that meet the program's eligibility requirements.

Palmetto Care Connections (PCC) is a nonprofit 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. PCC hosts the Annual Telehealth Summit of South Carolina and provides network connections for healthcare, technology, and broadband. In addition to the summit, PCC 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. PCC has trained over 1,000 senior citizens and low-income residents and also conducts cybersecurity training.

Tri-County Cradle to Career Collaborative (TCCC) is a nonprofit organization dedicated to bridging the digital divide in racial and ethnic minority communities in Berkeley, Charleston, and Dorchester counties. TCCC created the Lowcountry Connect! Digital Inclusion Pledge that focuses on providing children in the Lowcountry community with:

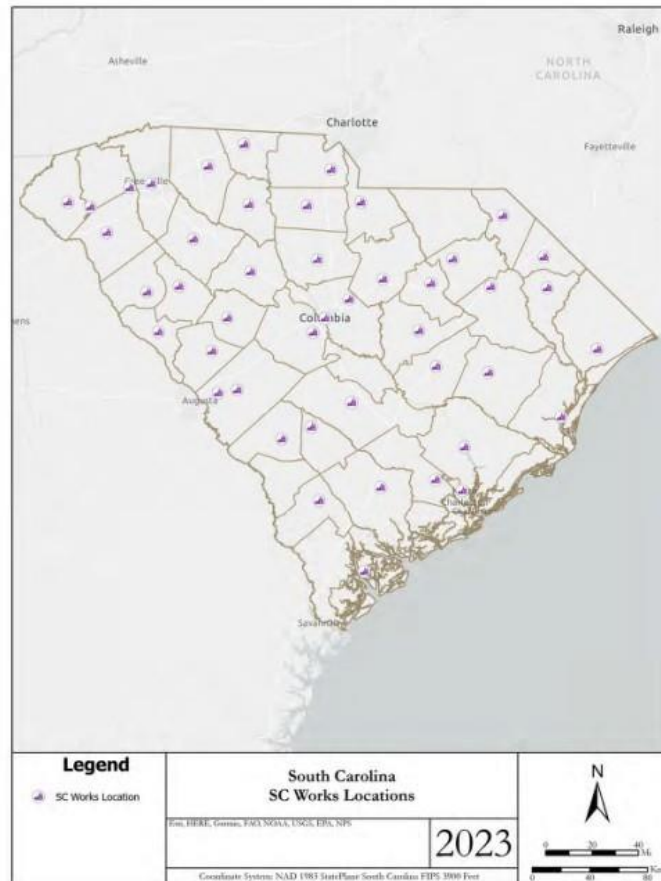
- Adequate hardware and software for online learning
- Adequate access to high-speed internet at home
- Digital skills needed to “learn, work and prosper in academic learning”
- An advocate in each county to ensure awareness of broadband access and adoption in “all rural and (sub)urban communities”

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

The **South Carolina Department of Employment and Workforce** has several programs through its **SC Work Centers** that provide digital literacy workshops. Many SC Works Centers in rural areas are not open every day. The agency created a skill certificate to demonstrate digital literacy.



Figure 7:



3.3.2.2.5 ISPs

Several of the 40 identified ISPs that operate in South Carolina have indicated they support digital literacy and training initiatives largely through sponsorship, marketing and partnership with libraries, schools, nonprofits, and government organizations. These ISPs had diverse backgrounds, offering technology ranging from satellite to fiber and also consisted of electric and rural cooperatives. Initiatives are offered generally nationwide and through online sites, and without local partnerships offerings, may not be directed toward or tailored to specific communities or groups.

Some ISPs with prominence in a particular area may direct programming at their specific subscriber or potential subscriber populations, while others, in partnership with community centers and schools, may offer community-based programming open to the public covering basic computer skills and cybersecurity. These efforts may be beneficial to broadband adoption but do not offer a comprehensive statewide programmatic approach. See Section 3.3.2.6 for additional information on ISP programs that promote adoption.



3.3.2.3 Programs that Provide Subsidized or Low-cost Devices (e.g., Computers, Tablets)

Programs that provide subsidized or low-cost devices are limited. Some are provided by libraries, healthcare organizations, nonprofits, and ISPs, and are expanded upon below.

- **Libraries:** All public libraries in the state provide access to in-library public computers. Only one public library survey respondent noted providing low-cost laptops, providing laptops specifically to seniors, which was in partnership with PCC. Academic libraries do not provide subsidized or low-cost devices.
 - **K–12 schools:** These schools generally do not provide subsidized or low-cost devices, but they loan devices to students as they aim to meet one-to-one device standards (detailed further in Section 3.3.2.11).
 - **Healthcare organizations:** 42% of healthcare organization survey respondents said they provide devices or connect patients with third-party resources or a State broadband discount program. PCC is the only healthcare organization that says it provides free devices, such as hotspots, laptops, Chromebooks and tablets, to patients.
 - **ISPs:** Some ISPs have noted specific device programs, such as Comcast’s Internet Essentials and Project UP programs (detailed in section 3.3.2.6). Other ISPs may occasionally provide low-cost devices or incentives for specified initiatives or periods. For example, Farmers Telephone Cooperative (FTC) donated 11 desktop computers for use in an established training session at a community library. Another ISP highlighted that its customers mostly use wireless in their homes and provides up to two Wi-Fi extenders to customers.

3.3.2.4 Digital Navigator Programs

Digital navigator programs were limited in the state.

Libraries: Only two of the state’s public library system survey respondents indicated they have formal digital navigator programs, the Charleston library system, and Calhoun County library.

Nonprofits: PCC and TCCC both have staff and digital inclusion programming that enable them to function as more informal digital navigator programs (detailed further in section 3.3.2.2.4).

Other: The SCBBO and its GetConnectedSC, an initiative to bring reliable and high-speed internet to every South Carolinian, connects SC residents to broadband news and resources like the ACP and Ookla speed tests. With this initiative and additional efforts to support individuals and communities across SC, SCBBO functions as a digital navigator, with the Director of SCBBO acting as a broadband community champion in conducting digital skills workshops.

3.3.2.5 Programs that Conduct Awareness and Outreach Activities of Digital Inclusion Programming and Resources (e.g., Marketing and Awareness Campaigns)

As discussed above, libraries, nonprofits, governmental organizations, and ISPs are some of the primary organizations across the state that conduct awareness and outreach activities for digital inclusion programming and resources. Less than half of libraries and healthcare organizations offer awareness and outreach campaigns. Examples of those conducting these activities are SCBBO’s GetConnectedSC, PCC and TCCC.



Surveys to libraries and healthcare organizations indicated:

- a) 43% of public library respondents conduct awareness and outreach campaigns. These library respondents are mostly in urban areas.
- b) 42% of healthcare organization respondents conduct awareness and outreach about digital inclusion and related resources.

Additionally, ISPs conduct marketing and customer education to promote broadband adoption. Beyond traditional advertising, ISPs promote awareness of low-cost internet options and the ACP to eligible populations. Some ISPs partner with local government organizations and community groups to raise awareness and encourage adoption by providing promotional information for their communications with their constituencies (e.g., coordinated media events, newsletters, social media, flyers).

3.3.2.6 Existing ISP Programs that Promote Adoption (e.g., Low-cost Plans, Adoption Campaigns, Digital Inclusion Initiatives)

The BEAD program requires participating ISPs to offer a low-cost plan, and such plans enable increased adoption throughout the state. Therefore, the majority of ISPs in South Carolina offer this low-cost option. The following is a selection of such ISPs and their associated programs:

Table 7:

ISP	Low-cost Plan	Description
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/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.
Comcast	Internet Essentials	Comcast has the Internet Essentials offer for low-cost internet (\$9.95/month) to eligible families.
Charter	Spectrum Internet Assist and Spectrum Internet 100	Spectrum Internet Assist, initiated in 2016, is Charter’s first high-speed, low-cost broadband service for low-income consumers that offers a 30/4 Mbps low-cost service product for seniors and households with families of school-aged children that qualify for certain low-income programs. Spectrum Internet 100 is a high-speed, low-cost broadband service with 100 Mbps download speeds, which is currently available to all existing and new subscribers enrolled in the ACP program.
T-Mobile	Project 10Million Program	Project 10Million offers eligible households 100 gigabytes (GB) of data per year and a free mobile hotspot for five years.

Some ISPs, including traditional telecom providers and electric cooperatives, have digital inclusion initiatives and adoption campaigns to promote high-speed broadband adoption and usage. The following is a selection of such programs:



Table 8:

ISP	Initiative/Program
AT&T	<p>AT&T collaborates with national and community organizations, including the Local Initiatives Support Corporation (LISC), Digitunity, the Public Library Association and others.</p> <p>With the Public Library Association, AT&T launched digital literacy courses in a curated series to help newly connected parents and families build skills and confidence using computers and mobile devices. These courses will be offered at ISP Connected Learning Centers and in public libraries nationwide and are available online. Through this partnership, the PLA Digital Literacy Workshop Incentive, supported by AT&T, will use online digital literacy courses available through AT&T ScreenReady® and PLA DigitalLearn.</p>
Charter	<p>The Spectrum Digital Education Grant Program provides computers, digital education classes and technology labs for thousands across the country. Spectrum Digital Education grants have contributed \$76,000 in South Carolina.</p> <p>Launched in 2021, Spectrum Community Center Assist is a strategic philanthropic program that aims to improve the physical condition of community centers in underserved rural and urban communities throughout Charter’s 41-state footprint, including South Carolina, as well as to support programs that provide job skills training for the people in those local communities. The goal of this \$30 million philanthropic initiative is to improve one hundred community centers, impacting an estimated 50,000 residents. To meet this goal, Charter partners with national and local nonprofit organizations to identify and improve community centers. Additionally, because broadband is a critical component of community center’s infrastructure, the program provides each community center with advanced 1 Gigabits per second (“Gbps”) Internet service.</p>
Comcast	<p>Through its Internet Essentials Learning Center program, Comcast has partnered with hundreds of libraries, schools, and nonprofits to deliver digital literacy training through a combination of classroom-style instruction and a portfolio of online training materials, including curricula to engage the senior population.</p> <p>Comcast launched Project UP in 2021, backed by a \$1b investment over the next decade. Project UP aims to provide tens of millions of Americans, including residents within South Carolina, with access to digital technology, tools, and resources. Through Project UP, the company committed \$8.3m to a broadband network expansion in Hampton County (2,150 homes and businesses received high-speed internet), and 690 laptops were donated to high school students at Estill and Wade Hampton High Schools.</p> <p>Comcast’s Lift Zone initiative, which is part of Project UP, provides free internet connectivity and access to hundreds of hours of educational and digital skills content to help families and site coordinators navigate online learning and increase digital literacy.</p>
Tri-County Electric Cooperative Inc. (TriCoLink)	<p>Tri-County Electric Cooperative Inc. serves the rural areas of South Carolina. TriCoLink is its ISP subsidiary. TriCoLink partners with civic organizations, faith communities and governmental bodies to promote the value of fiber to the home service. TriCoLink also conducts public sign-up days in local communities, and employees become fiber ambassadors who provide information and assistance through the sign-up process.</p>
Others (including FTC Diversified Services, PBT)	<p>Other ISPs have stated they have developed informational/training videos hosted online and conducted digital literacy training events. Some partner with chambers of commerce, community</p>



ISP	Initiative/Program
Telecom and more)	<p>centers and libraries in multiple counties, where they provide discounted internet and free managed Wi-Fi to assist with digital training.</p> <p>Another ISP has developed computer literacy classes working through the local school district’s adult education programs in multiple counties. These classes are open to the public, and you do not have to be a customer to attend. The courses cover basic computer skills, streaming and cybersecurity.</p>

3.3.2.7 Incentives (e.g., Subsidies, Tax Benefits) for Incorporation of Broadband Across Different Sectors (e.g., Education, Agriculture, Economic Development, Telemedicine)

The State offers funding and investment programs dedicated to broadband expansion designed in response to federal funding (sections 3.1.4 and 3.1.5 above provide details of these existing programs). The State does not currently offer any statewide broadband adoption incentive programs focused on particular sectors; however, State agencies publicize federal broadband programs via the GetConnectedSC website, the South Carolina Digital Drive website and other media sources that enable the promotion of broadband expansion and adoption broadly. Sectors such as education, agriculture, telemedicine and overall economic development are State priorities; therefore, incorporation of broadband in these areas is critical. The following are select examples of programs that incentivize broadband adoption in some of these priority areas:

- [E-Rate](#) – The FCC’s E-Rate program makes telecommunications and information services more affordable for schools and libraries. With funding from the SC Universal Service Fund, E-Rate provides discounts for telecommunications, internet access and internal connections to eligible schools and libraries.
- [Healthcare Connect Fund Program](#) (HCF) – HCF, an FCC-USAC program, provides subsidy reimbursements for up to 65% of eligible broadband expenses for eligible healthcare providers.
 - PCC was a recipient of HCF subsidies, and the funds represent actual savings for healthcare providers. PCC helps healthcare providers learn more about and connect 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. PCC works with the HCF, which provides subsidy reimbursements for up to 65% of broadband charges for rural healthcare providers.
- [USDA’s Community Connect Program](#) – The USDA’s Community Connect Program provides financial assistance in the form of grants to eligible applicants that will provide, on a “community-oriented connectivity” basis, broadband service that fosters economic growth and delivers enhanced educational, healthcare, and public safety benefits. Funds can be used for infrastructure and the cost of providing broadband service free of charge to critical community facilities for two years.

3.3.2.8 Public Computing Labs

All public libraries in the state provide access to in-library public computers and assistance for users. In addition to the South Carolina Library System, the Abbeville and Greenwood Telemedicine Centers also provide access to public computing labs.



Some ISPs and nonprofits partner with libraries and community centers to support access to Wi-Fi and public computing sites (see section 3.3.2.6 above for additional details).

Through the South Carolina Department of Employment and Workforce (DEW), Connection Points are computer labs that provide information on how to file for unemployment insurance through DEW and career services offered through SC Works. More than [150](#) libraries, faith-based organizations and nonprofits across the state connect the public with access to computers and resources for unemployment and reemployment services.

3.3.2.9 *Loaner Computer/Hotspot Programs*

About 40%–60% of libraries and healthcare organizations surveyed indicated that they provided loaner computers or hotspots. In some instances, hotspots have been cost-prohibitive, and some counties do not have adequate cell coverage for hotspots.

Surveys to libraries, K–12 schools and healthcare organizations indicated:

- a) 60% of public library respondents loaned hotspots. 19% of public library respondents have laptops available to loan, but most are only loaned for in-library use. Some libraries also loan launchpads and tablets.
- b) 78% of surveyed libraries loan out at least one kind of device, such as tablets, hotspots and computers, in addition to providing computers for in-library use, free of charge. The percentage is slightly lower among rural systems, at 69%, compared to 100% of all urban libraries loaning devices.
- c) 64% of academic library survey respondents loan devices. One specified that laptops are loaned based on faculty/staff referral and based on need. Only one respondent noted lending hotspots. Academic libraries mentioned lending webcams and other types of technology for coursework, like calculators, DVD players, etc.
- d) 40% of K–12 survey respondents lend hotspots, with some specifying MiFi or Kajeet devices.
- e) 42% of healthcare organization survey respondents provide devices, but only one healthcare provider loans devices to patients. PCC provides a variety of devices to medical professionals. Medical equipment, some requiring broadband access, is the most common type of device loaned.

3.3.2.10 *Programs that Offer Discounted or Low-cost Devices with Affordable Maintenance Costs*

Details on low-cost device programs can be found above in section 3.3.2.3. No program or survey respondent indicated providing device maintenance.

3.3.2.11 *K–12 School System One-to-one Computer Programs*

Not all K–12 school systems have one-to-one computer programs, and Chromebooks, which have less functionality or use cases than laptops, are more commonly distributed than laptops.

Surveys to K–12 schools indicated the following:

- a) A few school system survey respondents noted Chromebooks/tablets are provided for their lower grades and their middle/high schools receive laptops.



- b) Most devices provided through one-to-one programs are loans, and younger grades often do not get to take these devices home.

3.3.2.12 Computer Refurbishing Programs

No program or survey respondent indicated providing computer refurbishing programs.

3.3.2.13 Digital Equity/Inclusion Coalitions

The following organizations described in section 3.3.2.2.4 above have been identified as digital equity/inclusion coalitions in South Carolina:

- PCC
- The South Carolina Office of Rural Health Digital Equity Collaborative
- TCCC
- Fast Forward
- LowCounty Digital Equity Coalition

3.3.3 Broadband Affordability

3.3.3.1 The Number of Residents Eligible for the ACP, the Percentage of Eligible Residents that has accessed the ACP and the Steps Taken to Increase Enrollment in the ACP

Some residents rely on ACP to access affordable high-speed broadband services, and many others are eligible and in need of the program's benefits. According to the national nonprofit [EducationSuperHighway](https://www.educationsuperhighway.org), there are an estimated 874,587 eligible households in South Carolina. As of August 7, 2023, South Carolina had 42% enrollment, consisting of 370,042 enrolled,⁷ and 504,545 not enrolled. From a device standpoint, 7,442 devices have been provided at a cost of \$723,012.⁸ Increasing enrollment in the ACP is an important strategy for addressing affordability in the State, which is outlined in Section 5.4, *Key Execution Strategies*.

3.3.3.2 Discount or Subsidized Broadband Service and Equipment Programs

The following discount and subsidized programs were identified. In addition, a selection of ISP programs described during the provider outreach interviews are presented below.

⁷ <https://www.educationsuperhighway.org/no-home-left-offline/acp-data/>

⁸ <https://south-carolina-broadband-scors.hub.arcgis.com/documents/403f7023ac114998baccdbda7e66657/about>



Table 9:

Program	Description
ACP	The ACP provides up to \$30/month toward internet service for eligible households and a one-time discount of up to \$100 toward an internet-capable connected device like a tablet, laptop or desktop computer.
Federal Lifeline Support	Lifeline supports communication services, including internet, for households in certain federal assistance programs, including SNAP, Medicaid, Supplemental Security Income, Federal Public Housing Assistance, and the Veterans Pension and Survivor Program. The program provides a monthly discount of up to \$9.25 to qualifying households.
PCC	PCC provides low-cost medical devices and phones to hospitals.
EveryoneOn	EveryoneOn compiles low-cost internet offers, including those specially created during the pandemic.

Please see section 3.3.2.6 for the list of identified low-cost plans offered by ISPs.

3.3.3.3 Utility Assistance Programs for Consumers with Limited Incomes and/or Provider Agreements and Contracts that Are Near Expiration (i.e., Provide the Opportunity for New Agreements and Contracts that Provide More Affordable Broadband Services)

Surveys were sent to utilities and other organizations to better understand utility assistance programs and awareness of them within communities. Several noted that increased availability of state-level utility assistance programs would be beneficial, as well as additional awareness efforts.

Surveys also indicated the following:

- Surveys to public libraries indicated that 51% of respondents had availability of programs in their counties, with lower availability in suburbs and rural systems. These programs were most commonly provided through local community action and faith-based organizations.
 - Several noted that previous state and federal programs are no longer funded, such as the SC Stay program and services offered by the National Association for the Advancement of Colored People (NAACP).
- From the three completed surveys to public utilities, not all provided utility assistance, and none conducted awareness efforts related to digital inclusion.

3.3.4 Broadband Access

3.3.4.1 Public Wi-Fi, Networks and Access Points

Cost was identified as a primary barrier to providing public hotspots, and some counties do not have adequate cell coverage for providing hotspots. To identify public Wi-Fi and networks, surveys and questionnaires were sent by Clemson to public libraries, academic libraries, schools, healthcare organizations and utilities. As will be detailed in the *Needs and Gaps Assessment* section, documenting public Wi-Fi gaps and coverage in a more comprehensive way is an important goal for increasing access across the state.



Surveys to these organizations indicated the following:

- 38% of libraries indicated awareness/availability of public Wi-Fi outside of library facilities, with parks being the most common public locations and restaurants being the most common private locations.
- More than 1/3rd of K–12 school respondents noted that they did not have public Wi-Fi, the majority of which were in rural and low-income counties. Few schools had public Wi-Fi on buses. It was noted that public schools wanted to create a controlled, safe environment and felt that keeping these networks private for students and staff was a good way to achieve that.

3.3.4.2 Cellular Connectivity (Mobile Broadband)

About 75% of South Carolina households subscribe to a cellular data plan. The Better-Internet Survey – Residential results indicate that over 20% of respondents access home internet using a cell phone only. The Better-Internet Survey – Business and Organizations indicates that 67% of the under/unserved respondents reported spotty or unstable cell service.

3.3.4.3 Open Access Middle Mile Networks.

Santee Cooper will allow providers access to its 1,200 miles of excess fiber and transmission poles on the nearly statewide system to enable a faster and less expensive expansion into unserved areas. SCBBO plans to partner with Santee Cooper with respect to coordinating its open access middle mile network for BEAD deployment projects.

3.3.5 Digital Equity

3.3.5.1 Workforce Development Training and Employment Services Related to Broadband Adoption (e.g., Computer/Digital Skills Training, Apprenticeships)

South Carolina is recognized nationally for its strong workforce development system, SC Works, which brings together the South Carolina Department of Employment and Workforce, the South Carolina Department of Social Services, the Commission for the Blind, adult education, and the South Carolina Department of Vocational Rehabilitation to provide services such as career guidance, job referrals, and testing and training to meet the needs of jobseekers, employers and those looking to further their careers. Through their SC Works Centers, which are located across the state, the Department of Employment and Workforce offers several digital literacy workshops and access to computers. As part of its program, the agency created skill certificates to demonstrate digital literacy to potential employers.

South Carolina’s State Workforce Development Board also awarded grants to three organizations in 2018 that targeted workforce development related to digital skills training:

South Carolina Office of Rural Health Digital Economy Ecosystem (DEE) 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 USDA funding for DEE projects in five communities – Barnwell, Williamsburg, Orangeburg, Greenwood, and Newberry counties.



Epworth Children’s Home received grant funding to develop programs that focused 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.

MUSC used its grant funding toward the Project Rex initiative. Project Rex provides digital literacy skills and job readiness training for individuals with autism.

As mentioned in section 3.3.2.2.4, Goodwill SC offers workforce development programs that teach basic computer skills. The organization also developed a mobile workforce development program for low-income individuals to access digital literacy resources.

3.3.5.2 Technical Assistance to Support Digital Inclusion (i.e., Digital Navigators who Provide Community Members with Support to Access and Utilize Home Internet Connectivity, Devices, Digital Skills, etc.)

Outside of the public library system, South Carolina has a limited number of organizations and programs that explicitly offer technical assistance to support digital inclusion. Most that do exist are targeted to very specific users and population groups.

Libraries have been paramount in offering technical assistance to their respective communities. Libraries throughout the state are usually equipped with individuals to help community members operate devices and perform basic-level computer skills. Examples of other organizations and programs that provide technical assistance include:

Telehealth organizations, such as PCC, provide technical assistance via their digital device training and education for program participants.

The Non-fungible Token (NFT) Museum of Newberry received Digital Equity Innovations Grant funding from the SC Office of Rural Health for their Digital Literacy Mural Initiative. Part of the funding was used to construct a free, digital literacy computer workstation installed in the museum library for the community to learn how to create digital assets and gain familiarity with blockchain technology. Section 3.1.4 in the South Carolina Digital Equity Plan will provide more information on this topic.

3.3.5.3 Civic and Volunteer Organizations that Provide Volunteer and Advocacy Assistance for Digital Equity Programs and/or Taskforces or Place-based Coalitions that Work Toward Digital Equity and Include a Diverse Group of Stakeholders in the State or Territory (e.g., Engagement with ISPs, State Agencies, Local Community Champions, Local Governments, Tribal Leaders, Community-based Organizations, Libraries, Educational Institutions, Local Businesses, Federal Landowners, Residents, etc.)

Through the outreach and research process, no civic or volunteer-based organizations with specific programming and efforts dedicated to digital equity were identified. However, this does not indicate that civic and volunteer organizations are not open to serving digital equity efforts. South Carolina is home to many robust civic and volunteer organizations, from chapters of the Urban League to the National Pan-Hellenic Council (NPHC). These and other organizations provide key connections to many underserved communities and could be mobilized to assist with the creation and implementation of digital equity programs as they are developed.

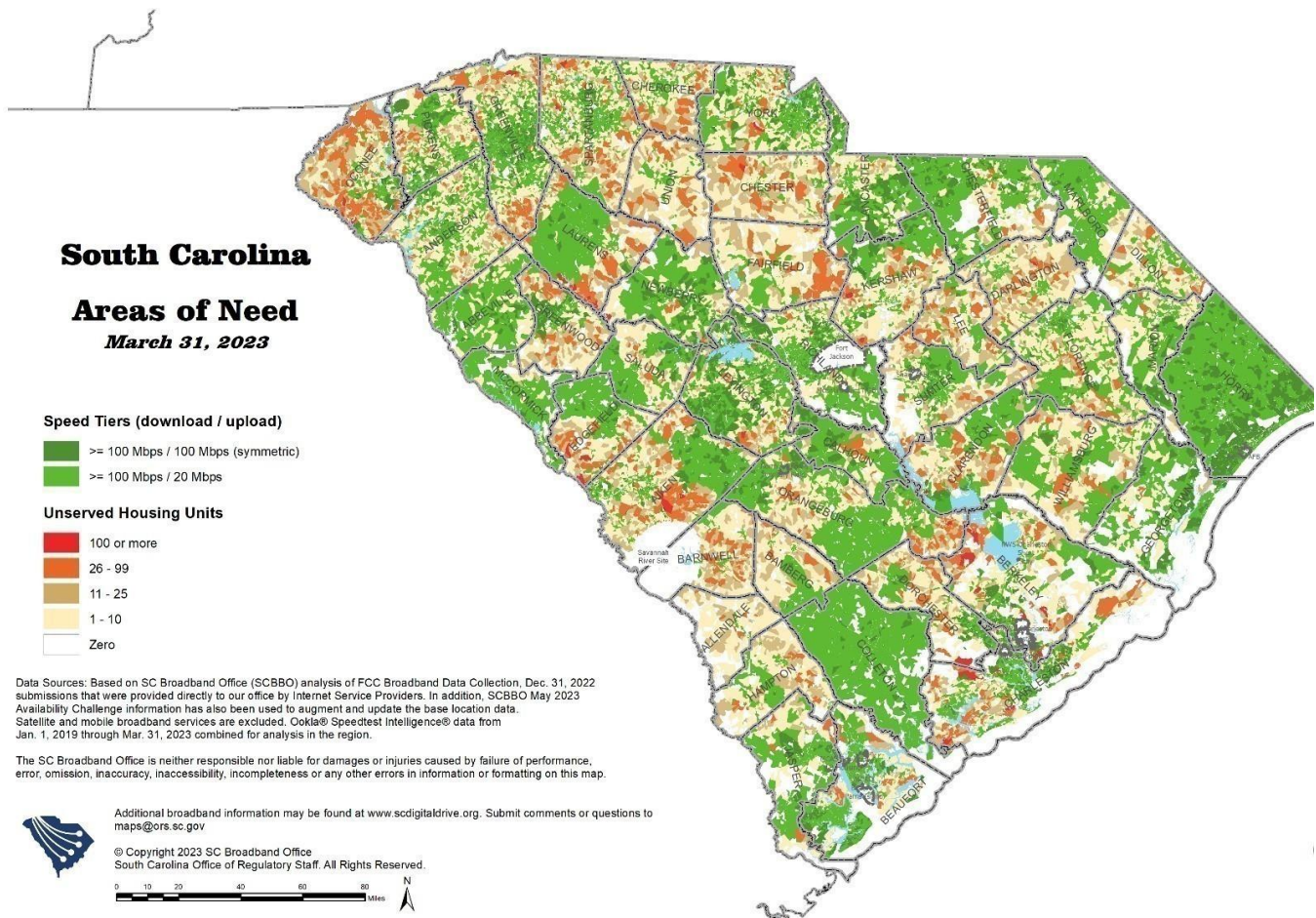


As mentioned in section 3.3.2.2.4, TCCC is also bringing community entities such as colleges and universities, nonprofit organizations, public and private organizations, local government entities, and chambers of commerce together to bridge the digital gap in education for students in the Lowcountry area. PCC and Fast Forward are also community-based coalitions dedicated to digital equity and fulfill the State’s goals toward digital equity. Section 3.1.4 in the South Carolina Digital Equity Plan will provide additional information on this topic.

3.4 Needs and Gaps Assessment

As of March 31, 2023, South Carolina had 61,249 unserved locations, 68,782 underserved locations. In addition, 6,235 CAIs were identified, a figure which will be refined as part of the Initial Proposal process. As can be seen in the map below, these locations are distributed throughout the state, with pockets of unserved units, such as in the northwest (Oconee County), north (Chester and Fairfield counties) and central region (Aiken County).

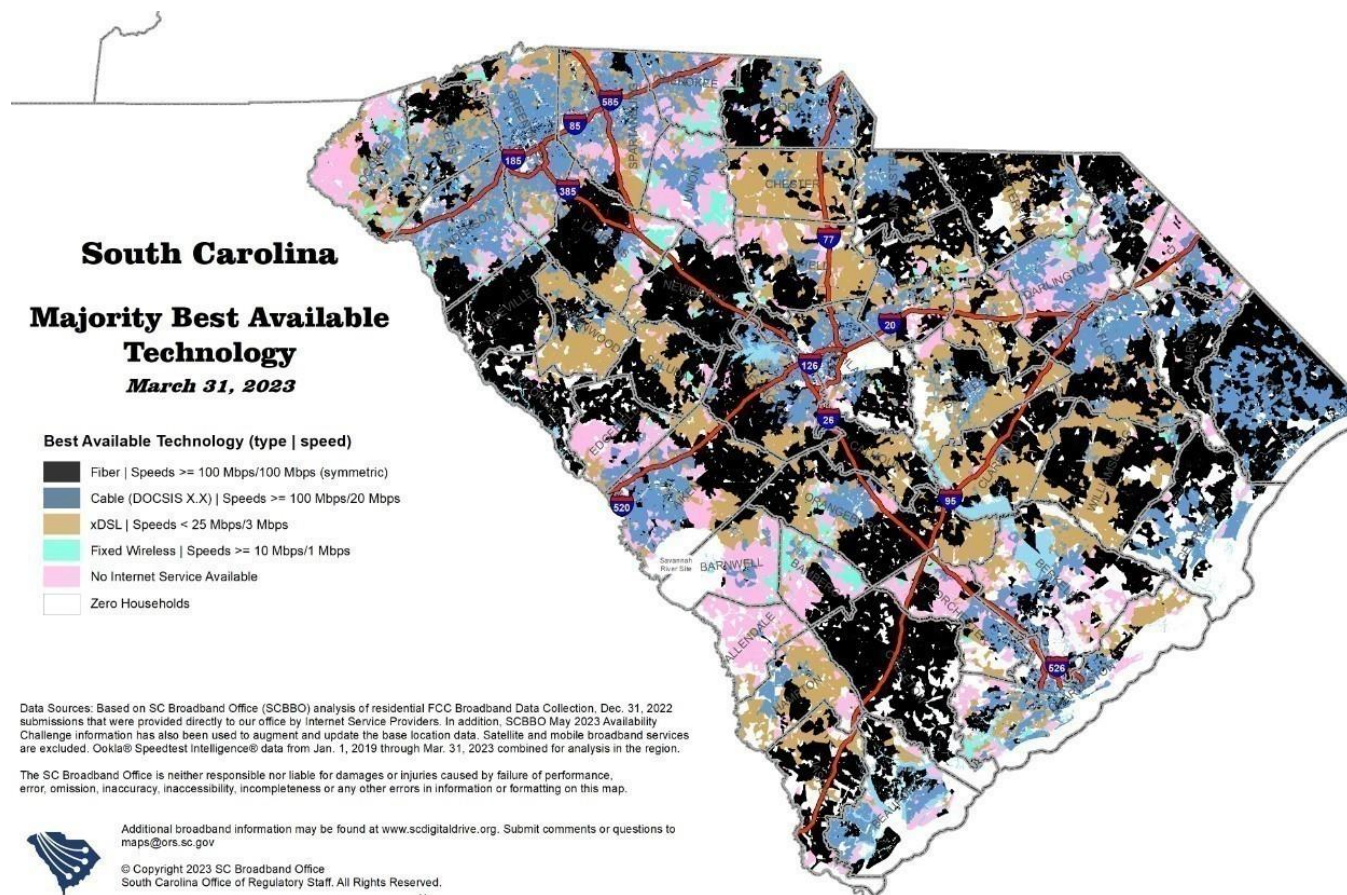
Figure 8:





The SCBBO also develops a map that overlays the types of technology that are being deployed by ISPs to help inform future needs in the state. The SCBBO performed analysis in 2022 and concluded that DSL technology was at the end of its useful lifespan and no longer capable of reliably delivering 25/3 Mbps in the state. Understanding what technologies are currently available and how they are performing enables the SCBBO to better understand how to meet the BEAD goals of delivering reliable broadband service and the other technical requirements in a cost-effective manner both now and into the future.

Figure 9:

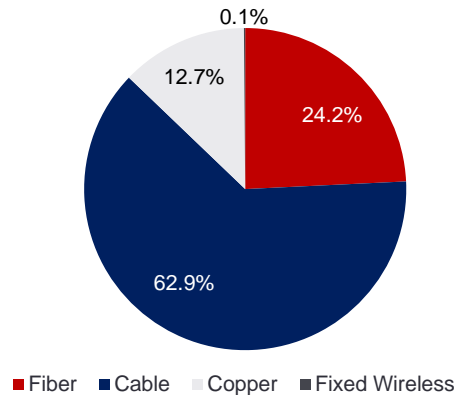


As of March 31, 2023, the following technology types had been adopted in the state. Cable technology remains the highest adoption category, at almost 1.2 million residential broadband-serviceable locations (BSLs). Fiber technology is the second highest at 461,307, followed by copper at 241,831. Only 2,428 residential BSLs adopt fixed wireless technology.



Figure 10:

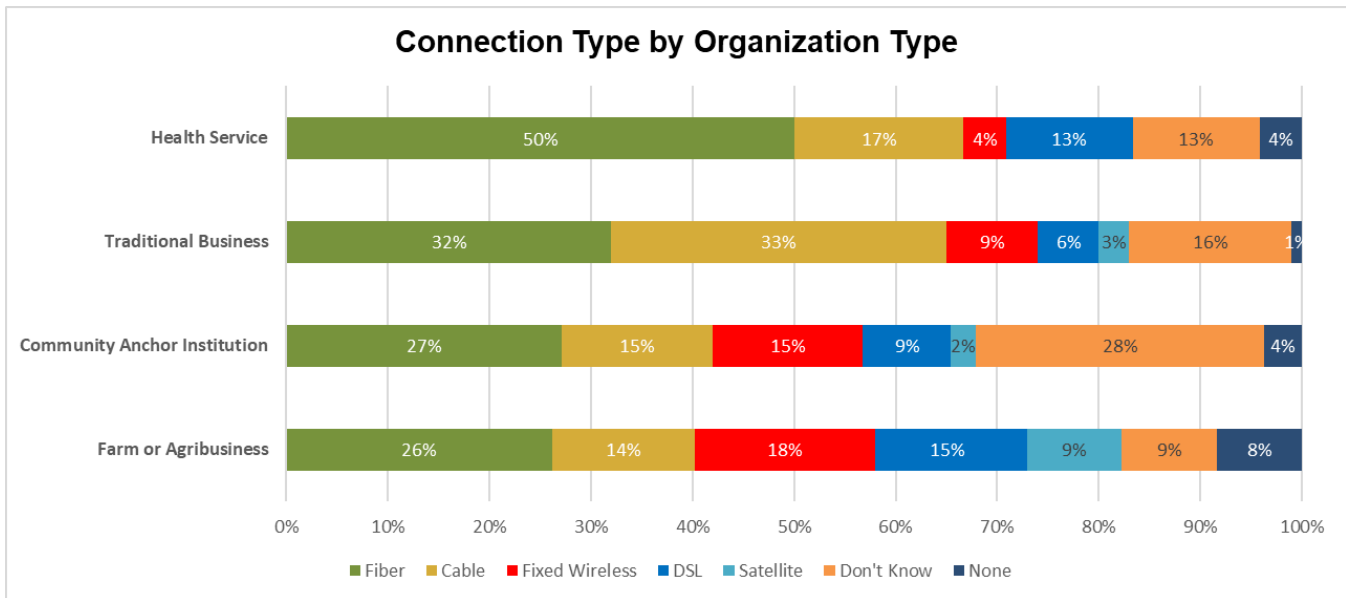
Adoption by Technology



Businesses as identified from the Better-Internet Survey – Business and Organizations results were more likely to have adopted fiber than cable, with health service organizations having the highest figure at 50%.

Figure 11:

Connection Type by Organization Type



This is an important consideration because fiber customers were not just more likely to feel positively about their ability to grow/compete, they were at least three times as likely to have a high-intensity positive feeling than organizations with other known connection types.

3.4.1 Broadband Deployment

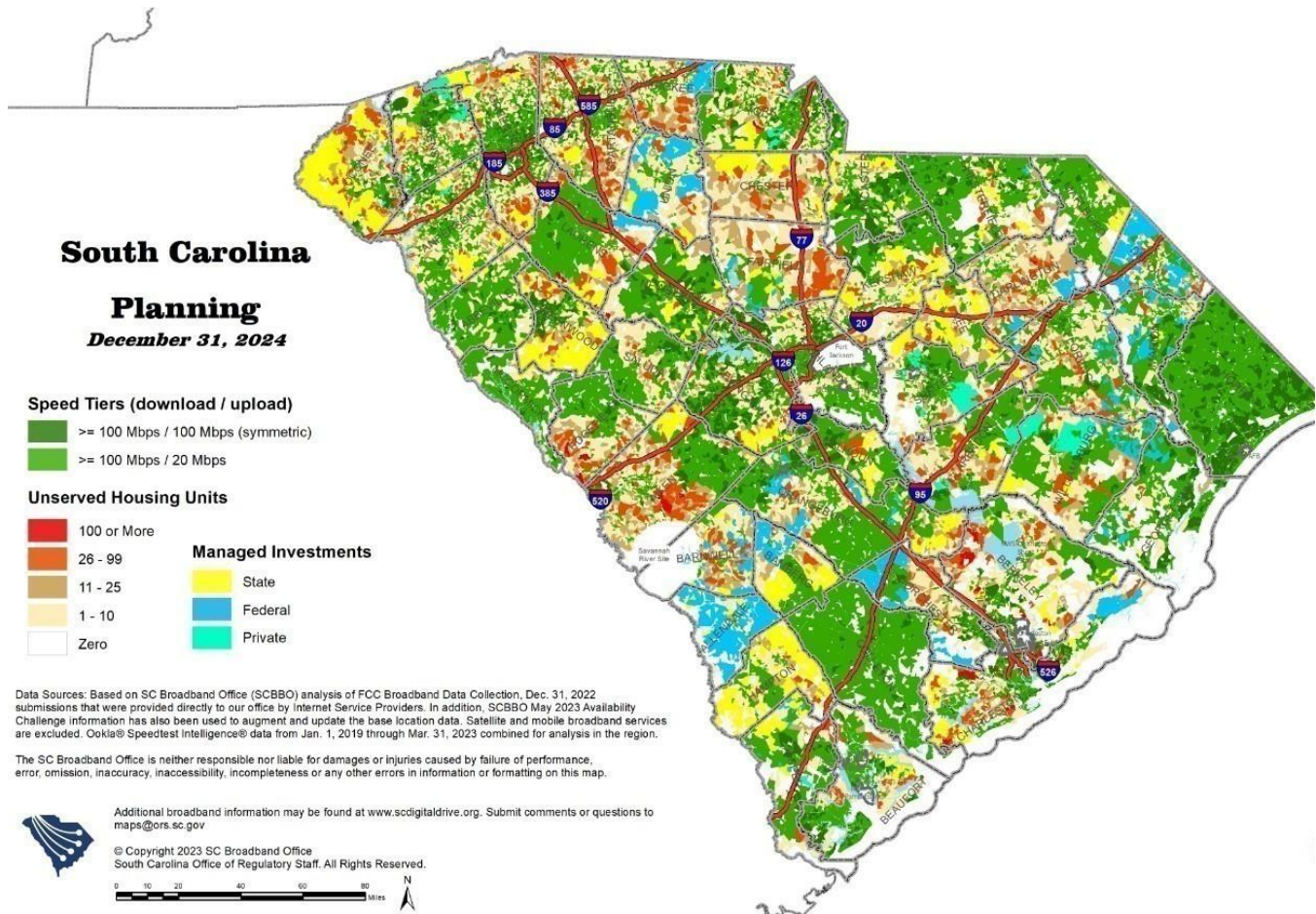
3.4.1.1 Service to Unserved, Underserved and CAIs

To enhance broadband deployment in South Carolina, the SCBBO will adopt a variety of approaches, the primary one being the “Model, Map and Plan” approach involving leveraging the SCBBO’s comprehensive GIS specialists and mapping capabilities to update broadband coverage maps twice a



year until all BSLs are served. BEAD funds will additionally be tracked on a granular level to ensure no duplication of federal sources. Already committed and managed State, federal and private investments are added to the current service map below to demonstrate how existing investments are already closing the gaps and addressing coverage.

Figure 12:



In terms of the process for identifying CAIs, SCBBO has partnered with Clemson University to help develop an initial list of CAIs in the state. In terms of the validation process, it is envisioned that SCBBO will undertake a marketing and outreach campaign to have potential CAIs self-identify and also to identify any missing locations. SCBBO is currently reviewing and discussing how to apply the statutory definition of the term “community anchor institution” to ensure expanded deployment of gigabit service to organizations providing critical community support services. This definition and process will be more fully described in the Initial Proposal.

3.4.1.2 *Legislative or Regulatory Solutions to Overcome Barriers or to Accelerate Infrastructure Deployment*

In consultation with the SCBBO and stakeholders such as ISPs, the following legislative and regulatory barriers and solutions were identified. For additional discussion on these barriers, please see Section 4, *Obstacles and Barriers*.



Table 10:

Barrier	Legislative or Regulatory Solution
ACP funding depletion	Through the BEAD program in coordination with NTIA, SCBBO will require applicable subgrantees to develop a “low-cost broadband service option” and may consider direct subsidy strategies for mitigating the risk and uncertainty of the ACP.
Municipal broadband limitations	SC State law (S.C. Code Ann. § 58-9-2600 et seq.) establishes various procedural requirements, limitations and additional tax considerations for the provision of municipal broadband service. To address this issue, waivers and/or state legislation that relax the requirements could be considered where appropriate and no other ISP can provide service. As one example, the removal of service area restrictions on electric cooperatives limiting service to within two miles of an existing electric service area could potentially enable broader participation in the BEAD program.
Permitting requirements	SCBBO will continue to support trainings that facilitate coordination among various relevant government entities and could require subgrantees to take permitting training by potentially including such a requirement in procurement documents. To further support coordination, programmatic agreements could be developed between SCBBO and utilities to better define certain processes. Additionally, other agencies could support SCBBO by detailing personnel to create and staff a new permitting and monitoring department focused on streamlining efforts for BEAD projects. Finally, conversations with ISPs indicated that there are still real issues with the timing and expense associated with railroad permits. Suggestions included offering a bulk permit approval process, providing BEAD funding for a pool of permitting resources across agencies and attempting to obtain federal support with expediting railroad permits.
Federal regulatory requirements for grants – “subrecipient” vs. “contractor”	SCBBO may seek an exception or clarification to identify certain grant recipients as contractors, similar to determinations made under the ARPA program, where SCBBO used a questionnaire to help analyze the substance of each relationship to determine whether grant recipients should be classified as subrecipients or contractors.
Federal general reporting and compliance requirements	The different sources of federal funding may also have different reporting requirements and timelines, in addition to the compliance requirements. This could present a challenge for municipalities without a robust tracking plan to meet grant requirements of multiple sources. While NTIA will provide guidance regarding the deduplication process, the number of issues and overall complexity that derives from multiple federal funding sources is potentially a major barrier that will require strong systems and coordination among state and local offices.
Dig Once	SCBBO will work to strengthen coordination across stakeholder groups and conduct permit trainings to continue to build a foundation for cooperation among private partners and public agencies, including the SCDOT, 811 DIG, and the Department of Health and Environmental Control. In addition, to reduce administrative requirements, the State is continually looking to streamline activities, for example SCDOT’s development of a “multi-district encroachment permit” to eliminate prior requirements for applying for permits in multiple counties.
Buy America	ISPs have raised questions pertaining to preexisting inventory, as many companies sought to prepare for an increase in demand and ordered build material, fiber and equipment prior to the enactment of the Buy America policy. Consideration of an exception for preexisting inventory and



Barrier	Legislative or Regulatory Solution
	a forward-looking application of the policy could enable the industry to transition more seamlessly and mitigate the potential shock of a stricter implementation.

3.4.1.3 Solutions to Funding Barriers in Designated “High-cost Areas”

South Carolina was not identified as having any “high-cost areas” as part of the Notice of Available Amount funding from NTIA. However, an important strategy for expanding access and deployment involves reaching extremely high-cost locations, particularly in rural areas. This will involve selecting cost-effective technologies, including leveraging alternative technologies to fiber, such as satellite internet. SCBBO looks forward to setting this threshold during the Initial Proposal.

3.4.1.4 Improved Databases and/or Systems that Enhance Use of Information

Key priorities identified from surveys completed by public and academic libraries were having more standardized technology available, both in-house and for loaned devices, as well as having additional trained IT professionals.

3.4.1.5 Increased Workforce Available to Deploy Broadband

Conversations with stakeholders and employment data have indicated that certain jobs in the software and IT workforce sector, such as computer network architects and software developers, are less robust than in other states. SCBBO plans to support and encourage implementation of workforce training programs, employer-based apprenticeship programs and tailored educational opportunities to help build workforce capacity. Please see Section 4, *Obstacles and Barriers*, for more information on labor shortages and future workforce challenges, and Section 5.4, *Key Execution Strategies*, for more information on how South Carolina plans to address these issues.

3.4.2 Broadband Adoption

3.4.2.1 Improved Digital Literacy

South Carolina lacks a common definition of digital literacy and a shared curriculum aimed at increasing digital skills. Many communities also lack well-developed programs focused on digital literacy and digital skills outside those traditionally offered by schools and libraries. Surveys from libraries and organizations like AmeriCorps reiterated this need for statewide standards and services for digital literacy programs. K–12 schools identified digital literacy for students, staff and caregivers as a priority, with less than 50% providing some form of digital literacy. Healthcare organizations also identified the consistent availability of digital literacy programs to assist with healthcare access for patients, families/caregivers and medical providers/staff. These dual issues of lack of availability and lack of consistency in digital literacy programs are two areas to focus on, and they could pay particular dividends if addressed in schools and telehealth organizations.

3.4.2.2 Increased Household Broadband Subscription

As addressed in more detail in the affordability section below, “the cost is too high” was the most frequently identified barrier by the Better-Internet Survey – Residential respondents without an internet subscription, followed by “there is no ISP serving our location.” Addressing these two issues, which are key objectives of the BEAD program and this Plan, should yield strong results for increasing



household broadband subscriptions. Approximately 5% of Better-Internet Survey – Residential respondents without internet or cell phone service indicated that they “don’t have an interest in a home internet connection.”

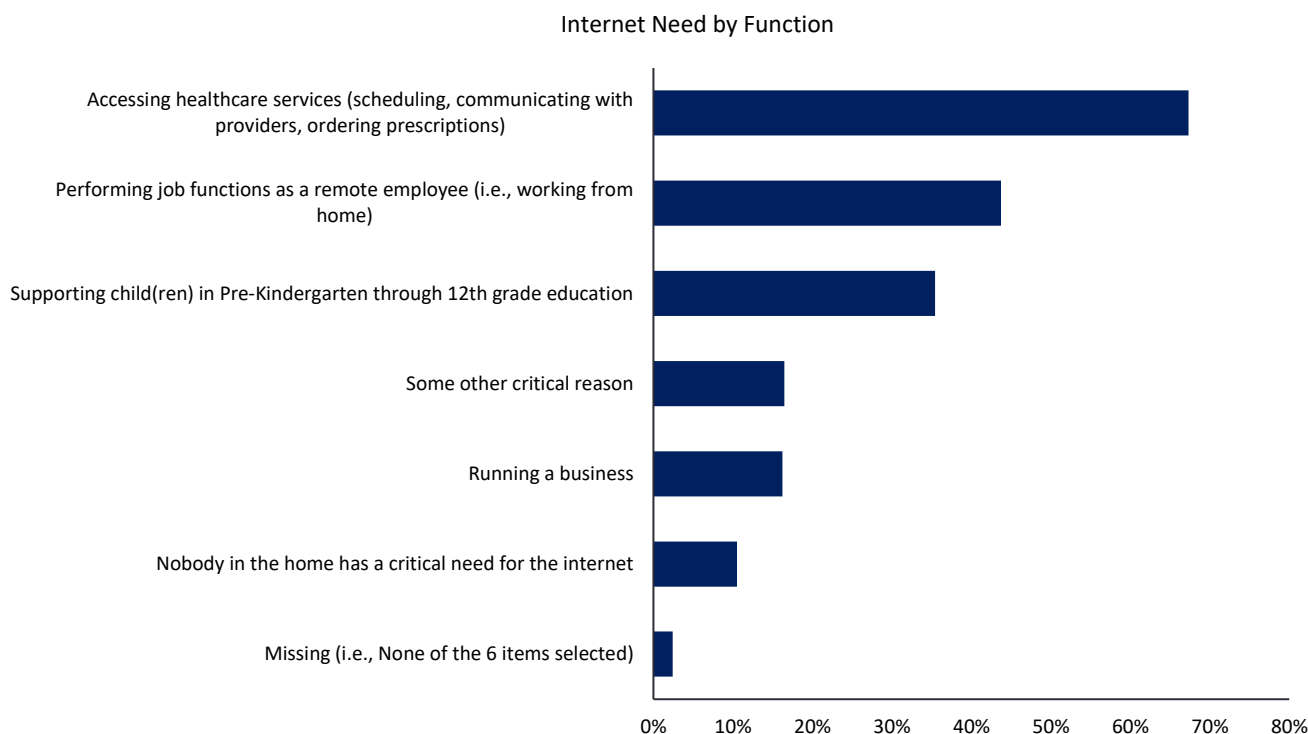
“There are no internet service options available at my house. I’m a teacher. I need it.” — York County Resident

In terms of what households use broadband for, the Better-Internet Survey – Residential responses from all respondents (regardless of whether respondents have internet) identified the top needs as 1) accessing healthcare services, 2) working from home and 3) supporting children with K–12

“For one job interview I was turned down as our internet didn’t pass the speed test.” — Anderson County Resident

education. These needs align with the Section 5.2, *Priorities*, emphasis on initiatives that support economic development, healthcare and K–12, with focus on increasing access, adoption and use.

Figure 13:



3.4.2.3 Increase Households, Businesses and CAIs with Access to Internet-capable Devices

While some devices are provided by libraries, healthcare organizations, nonprofits and ISPs, programs that provide subsidized or low-cost devices are limited. 14.3% of Better-Internet Survey – Residential respondents that don’t have internet but want internet indicated that they don’t have the devices or tools to get online. Consistent access to high-quality devices, as well as the training to use these devices, was a priority identified by survey responses from public libraries, academic libraries and K–12 schools.



Given these needs, the State has identified device support as a key goal and objective for this Plan, and has identified creating a statewide computer recycling network, among other activities in Section 5.4, *Key Execution Strategies*, to meet these goals.

3.4.2.4 Increased Emphasis on Multi-sector Strategies to Broadband Adoption (i.e., Educational, Agricultural, Economic Development, and Telemedicine Perspectives)

Broadband adoption and digital literacy and skills are foundational to all future economic growth in the State, but many organizations lack explicit broadband strategies and discussions around this topic. SCBBO and the Digital Equity Office plan to work closely with other groups, such as the Department of Commerce, Department of Agriculture, Department of Education, and Department of Employment and Workforce to integrate broadband planning into their future strategies, in particular the findings and recommendations of the Digital Equity Plan. For those organizations identified with existing strategies (i.e., the City of Orangeburg’s Digital Access Infrastructure Plan), the SCBBO and Digital Equity Office would like to review these strategies together and develop a digital opportunity update chapter that summarizes how the BEAD/DE Plans are aligned and will help move these plans forward.

3.4.3 Broadband Affordability

3.4.3.1 Increased Support for Enrollment Programs (i.e., ACP) for Low-income Consumers

Results from the Better-Internet Survey – Residential indicate that, in line with national data, the vast majority (73%) of the respondents were not familiar with the ACP. Through discussions at roadshow events, individuals indicated there isn’t enough outreach or marketing to let people know the ACP is available. Many individuals or families don’t know about the ACP or if they qualify, and if they do, they are unsure of next steps.

3.4.3.2 Increased Financial Assistance for Low-income Consumers

Low-income residents (defined as those who indicated that their household income is less than \$29,999) were less likely to have access to the internet than all respondents. 69% of all respondents said they had internet, while only 56% of low-income residents said they had internet. Low-income respondents were also more likely to say they accessed the internet through their phone (18% vs. 10%).

Figure 14:

Are you familiar with the ACP program?

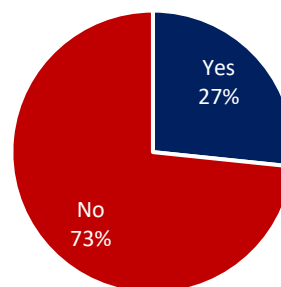




Figure 15:

Do you currently have an internet connection in your home? (All Respondents)

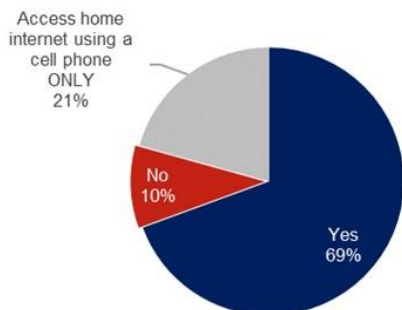
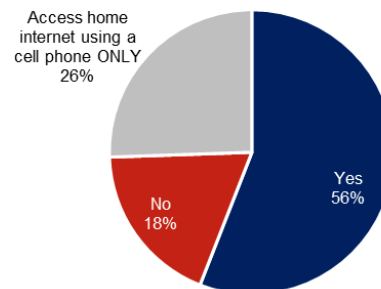


Figure 16:

Do you currently have an internet connection in your home? (Low-Income Residents)

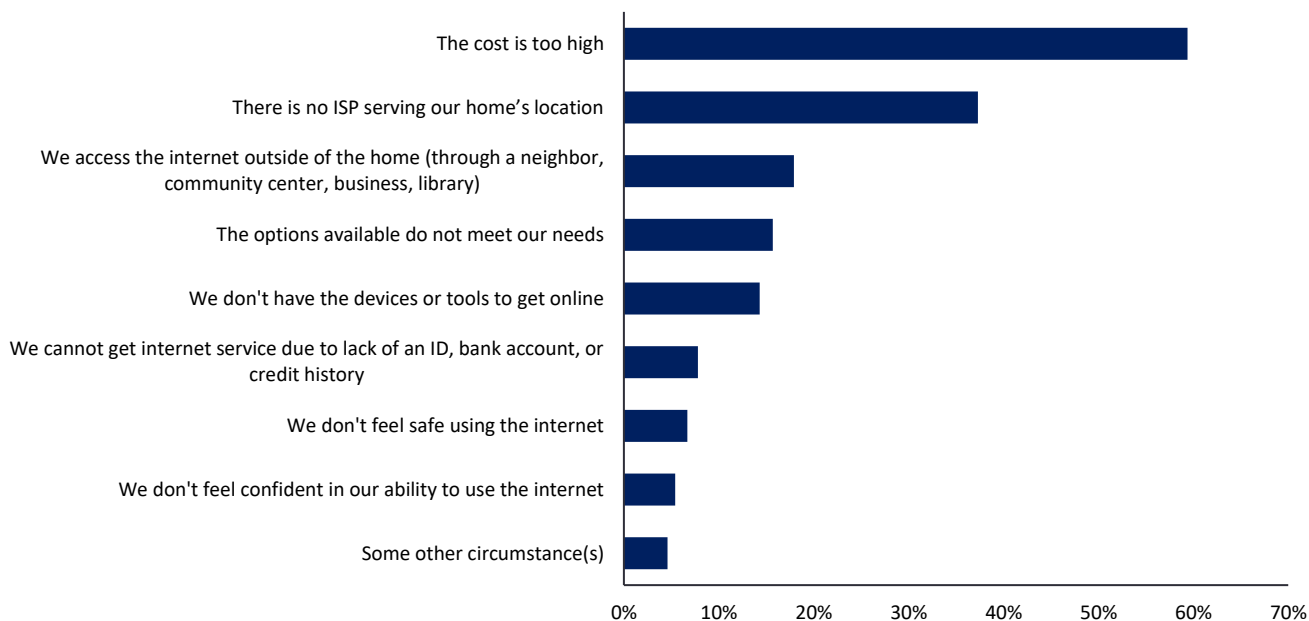


Among all respondents without internet, “the cost is too high” was the most frequently identified reason for not having internet. For those respondents who identified themselves as not having internet and wanting internet, almost 60% of respondents said that the cost being too high was a factor (note that respondents could choose more than one situation that applied).

“I need internet but can barely afford my electric and water bills. Why should I have to choose between them?” — Richland County Resident

Figure 17:

Among “No Internet or Cell Only and Want Internet,” which of the following statements describes your situation or circumstance(s)?





3.4.3.3 Increased Options for Broadband Services, Including a Wider Range of Low-cost Services

As mentioned above, “the cost is too high” was the most frequently identified reason for respondents to the Better-Internet Survey – Residential for not having internet. The second highest among those residential respondents with no internet who wanted it was “there is no ISP serving our home’s location” or “the options available do not meet our needs,” with 53% of respondents selecting these options. The Better-Internet Survey – Business and Organizations also indicated that for the under/unserved⁹ the primary barriers were lack of options and cost, with 76% of respondents saying that “the options for ISPs do not meet our needs in terms of speed, reliability or coverage” and 38% saying that “the cost of internet service is too high.” Given these responses, it is evident that residents of South Carolina would benefit from greater availability, particularly of low-cost services, from ISPs.

“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

3.4.4 Broadband Access

3.4.4.1 Increase in Public Wi-Fi, Networks and Public Access Points

While the State has conducted a higher-level assessment of Wi-Fi needs, documenting public Wi-Fi gaps and coverage in a more comprehensive way is an important goal for increasing access. Surveys to organizations have identified the following Wi-Fi-related priorities:

Table 11:

Organization	Priority Need
Public libraries	Consistent access to Children’s Internet Protection Act (CIPA)-compliant public Wi-Fi at all government and community facilities
K–12 schools	Public Wi-Fi at all school facilities and on buses, with sports complexes as potential additional sites

Given these gaps, the State is exploring the following strategies:

- **Including Wi-Fi coverage in BEAD Grant Scoring:** As part of the ARPA grant program, potential ISP grantees were asked whether they would be willing to provide public Wi-Fi in a central or community location to improve access. Given positive responses to these requests, the State is considering requiring ISPs to provide free public Wi-Fi as part of the grant process for BEAD funds.
- **Creation of a Wi-Fi Finder App:** Starting with public libraries and known partners with safe, CIPA-compliant public Wi-Fi, the State would like to explore developing an app that identifies and disseminates these locations. Additional outreach could be done to identify partners in new towns across the state that would be able to supplement this initial list.

⁹ The Better-Internet Survey – Businesses/CAIs focused on hearing from under/unserved respondents (i.e., those that indicated they either had no access or insufficient reliability, stability or speed of existing connection, which was 47% of the total “completes”).



While recognizing the complexity of the undertaking, the State recognizes the importance of public Wi-Fi for access and is exploring the use of BEAD funds to identify additional needs, expand coverage and disseminate information about currently available locations.

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

3.4.5 Digital Equity

The digital equity concepts in this section and prior sections will be expanded upon in the Digital Equity Plan. For an initial set of observations of needs and goals, please see below.

3.4.5.1 Increased Workforce Development Training and Employment Services

South Carolina has a robust workforce development training system with some classes tailored toward digital literacy. There are, however, no specific programs explicitly geared toward digital equity. South Carolina also lacks a shared curriculum aimed at increasing digital skills and an agreed-upon test to evaluate literacy, skills and program training success. Based on the needs that will be identified in the South Carolina Digital Equity Plan, the State could benefit from developing a shared, statewide definition of digital literacy, a related education and training curriculum that builds identified skills for participants, and a common test to evaluate individual skill levels and training program success. In addition, it would be beneficial to ensure equitable access to programs. For example, programs in rural communities are often conducted under reduced hours, and there is less focus on accessibility issues for people with disabilities.

In addition to digital literacy training is the need for additional support professionals, such as IT staff in libraries; training to use devices; and other maintenance assistance. These could be addressed through efforts that focus on increasing the number of computer programming degree graduates across the state and addressing other general digital technology education needs.

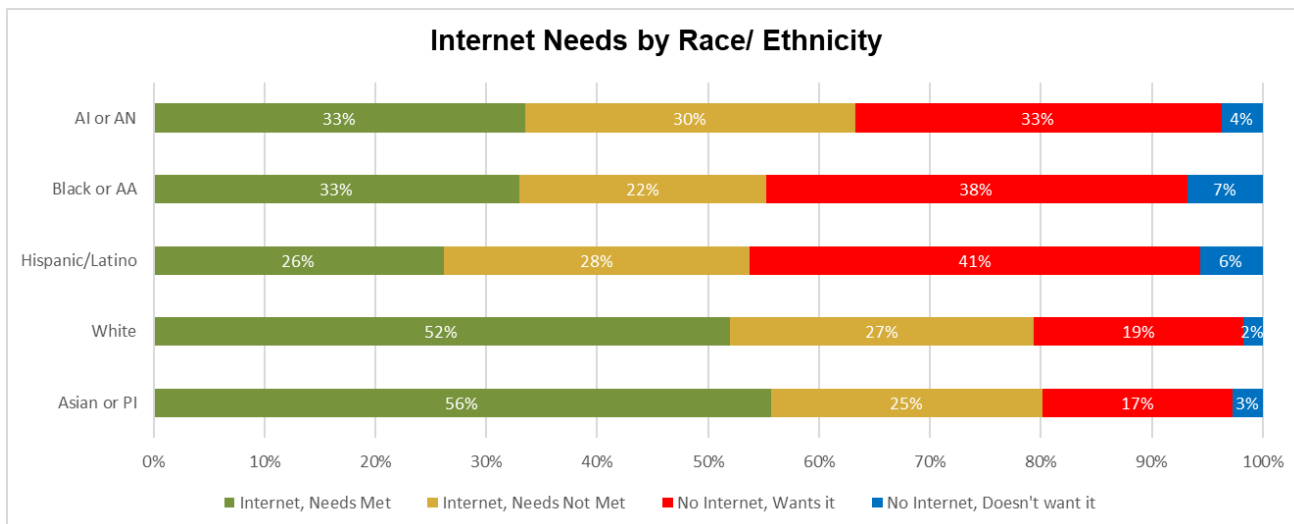
3.4.5.2 Increased Participation in the Digital Economy by Communities Traditionally Disengaged

While there are organizations that target participation from some of the identified Covered Populations, these are not offered in all geographic areas of South Carolina, and many population groups lack specific programs targeted to their unique needs. Covered Populations with the greatest identified digital equity needs include rural residents, low-income individuals and racial/ethnic minorities.

In particular, internet needs by race/ethnicity indicated that Hispanic/Latino respondents had the highest percentage of “No Internet, Wants It” responses, over 40%. White and Asian or Pacific Islander respondents were both below 20% at this metric, at 19% and 17%, respectively.

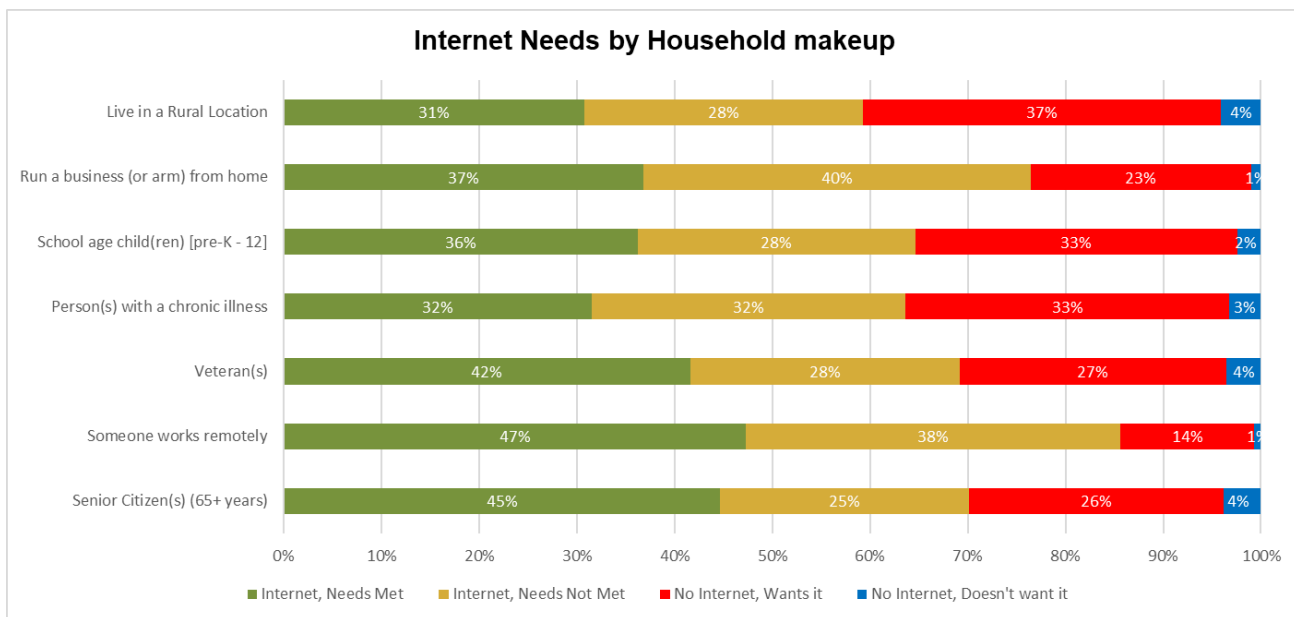


Figure 18:



By household makeup, rural location respondents had the highest percentage of “No Internet, Want It” responses, at 37%. Remote workers had the lowest rates for this metric, at 14%.

Figure 19:



Each of these populations may require tailored approaches to increasing participation in the digital economy, which is further complicated by the intersectionality between many Covered Populations (e.g., individuals who are aging, low-income, racial/ethnic minorities living in rural areas). To increase accessibility and utilization of existing and new resources, South Carolina may need to develop more programs focused specifically on outreach and connectivity to historically disengaged communities, especially urban, low-income, rural and racial/ethnic minority populations. Working with existing nonprofit, civic and volunteer organizations to provide more explicit digital equity services may be a way to more effectively connect with these communities in a trust-building manner.



The South Carolina Digital Equity Plan will provide more information on the needs of these communities and populations.

3.4.5.3 *Greater Resources to Support Digital Inclusion (i.e., Organizations and/or Funding for Digital Navigators) and Increased Engagement with Community-based Organizations, CAIs and Other Digital Equity Groups*

South Carolina has few statewide organizations that offer clearly labeled, integrated digital inclusion programs, although many recognize digital skills as an important priority for advancing economic and health opportunities for South Carolinians. The South Carolina Office of Rural Health does offer funding for digital navigator programs, and through its Digital Equity Collaborative, works with multisector organizations across the state to advance digital equity objectives.

Organizations mentioned in section 3.3.2.2.4 are a few examples of resources that support digital equity efforts within their respective communities. However, these organizations cover specific populations and are concentrated in select areas of the state. The South Carolina Digital Equity Plan will provide more details on these organizations.

Most funding offered by the State is usually dedicated to physical broadband infrastructure development. Organizations such as PCC could benefit from grants dedicated to their digital inclusion efforts. As the Digital Equity Plan is developed and implemented, efforts should focus on connecting with existing organizations to develop and expand digital inclusion programs that address the needs and goals identified. Increased engagement by the Digital Equity Office with community-based organizations, CAIs, digital equity coalitions, state agencies, local community champions and tribal organizations to raise awareness of the Digital Equity Plan's objectives and grant programs may help encourage the formation of new programs to fill gaps. Greater use of digital equity coalitions in each county and building stronger connection to the business community, such as working with Beaufort and Charleston Digital Corridors to develop statewide technology corridors, are also promising areas of exploration.

The South Carolina Digital Equity Plan will provide the needs assessed by community service organizations.



4 Obstacles or Barriers

4.1 Overview of Obstacles and Barriers Faced in South Carolina

The purpose of this section is to identify the obstacles or barriers that South Carolina may encounter as it implements the BEAD program — and more generally, as it addresses issues related to broadband deployment and digital inclusion.

The following list describes various categories of obstacles and barriers faced in South Carolina that will be explored in greater detail in the following subsections:

- Labor shortages
- Supply chain issues
- Materials availability
- Industry participation
- Lack of local digital inclusion programs/expertise
- Digital literacy
- Topography
- Procurement or contracting issues
- Policy objectives
- Demographic trends
- Key issues resulting from insufficient broadband access and resources
- Legislative or regulatory barriers

4.2 Labor Shortages

In South Carolina and nationwide, there is a historic level of infrastructure funding with a focus on broadband expansion that will require an unprecedented number of telecommunications and related industry skilled labor.

Over the last 10 years, unemployment in South Carolina has continuously decreased (except during the COVID-19 pandemic) from 8.4% to 3.2% [Bureau of Labor Statistics Data \(bls.gov\)](https://www.bls.gov).

This trend is also true of the US and neighboring states, like North Carolina and Georgia. These low unemployment rates could suggest that labor may be limited in South Carolina and across the country for the implementation of the BEAD program.

Figure 20:

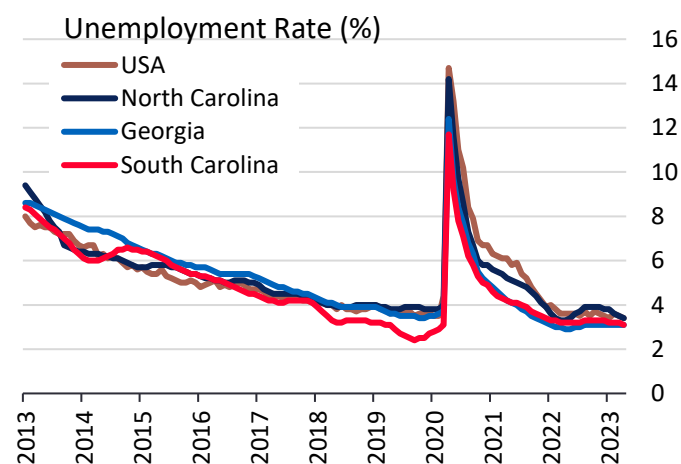
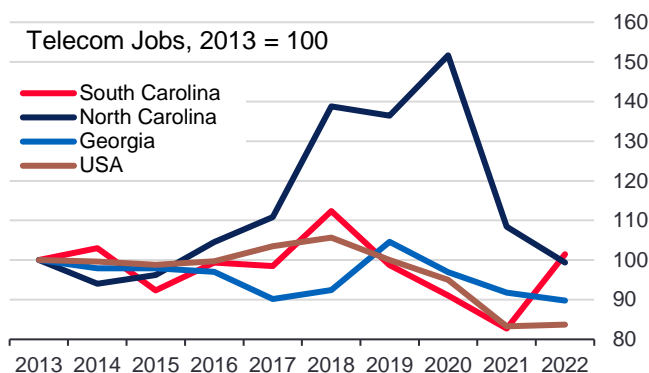




Figure 21:



While unemployment has decreased over the last 10 years, jobs in telecommunications over the same period have largely remained unchanged in South Carolina [Bureau of Labor Statistics Data \(bls.gov\)](https://www.bls.gov). The same is true for neighboring states, like Georgia, and across the US. Although the telecommunications market seems to have stabilized over the last decade, high growth in short periods of time in recent years, such as in North Carolina, suggests that the labor force could react to large shocks in the market. Notably, all occupations are forecast to grow across South Carolina from 2023 to 2028 and will

likely be able to match expanded demand for services during BEAD implementation.

Location Quotients (LQs) compare the concentration of an industry within a specific area, i.e., South Carolina, to the concentration of that industry nationwide. If an LQ is equal to one (1.0), then the industry has the same share of its area employment as it does in the nation. Of the 20 occupations that make up the majority of the wired telecommunications industry, South Carolina has an almost equal to or higher concentration of workers than the US average in nine categories, including five labor categories highly relevant to the telecommunications and broadband sectors. The following table lists these five categories:

Table 12:

#	Labor Category	Location Quotient (LQ)
1	Telecom equipment installers and repairers	1.0
2	Telecom line installers and repairers	0.9
3	First-line supervisors of mechanics, installers and repairers	1.1
4	Computer support specialists	0.9
5	Computer systems analysts	1.1

Additional sources for insight on relevant labor trends in South Carolina include conversations with stakeholders and examination of South Carolina occupational trends data. Both have not indicated that labor shortages will limit BEAD implementation activities more significantly than expected due to the current conditions of a tight labor market with low unemployment. This means the increase in broadband expansion projects is not anticipated to strain the broadband deployment-related labor market in South Carolina.



However, broadband expansion could enable an environment more conducive to a software and IT workforce, and while broadband deployment labor may not be strained, employment data shows that computer network architects (LQ of 0.4) and software developers (LQ of 0.4) are the two primary areas where South Carolina has a much lower than average concentration of workers. This data is consistent with perspectives shared by numerous stakeholders that South Carolina’s software and IT workforce could benefit from development efforts.

Generally, software development and IT work are considered skilled labor. 40% of SCBBO Better-Internet Survey – Businesses and Organizations respondents indicated skilled labor as having an impact on their organization’s ability to sustain, grow and compete. As discussed in Section 4.2.1, this dynamic — a need for skilled labor in conjunction with decreased labor participation rates among an increasing working population — could present an opportunity to grow workforce skills related to telecommunications in software development and IT to potentially address the elevated demand, which would, in turn, boost South Carolina’s economy.

4.2.1 Future Workforce Challenges

Stakeholders engaged through the planning process often expressed concern that without broad access to broadband there will be future workforce challenges because workers will not have the digital skill set to meet the needs of a modern economy. This is true for both urban and rural areas, but urban areas tend to have better coverage and more proximity to resources like libraries, educational institutions and community centers. Stakeholders were especially concerned about rural areas, noting that if workers or students do not have access to broadband or the technology to use it, they will not have the opportunity to develop the digital skills required of most jobs. Throughout the process, SCBBO consulted with stakeholders, such as the Communications Works of America Union (CWA) to gather different perspectives on workforce issues. CWA did not express any issues or concerns with workforce in State.

Stakeholders have emphasized that a lack of digital skills could lead to labor shortages in non-technology industries, such as agriculture, where a digital skill set is increasingly required for precision agriculture. It has also been noted that a lack of broadband access can make it challenging for entrepreneurs or small business owners to start or run a business, which could lead to fewer employment opportunities in the future.

The graphs below depict working population and labor force participation rates over the last 10 years or available data since 2013 [Bureau of Labor Statistics Data \(bls.gov\)](https://www.bls.gov). The working population in South Carolina and neighboring states has been growing faster than the larger US working population. However, despite this increase in the working population, the labor force participation rate has declined over the 10-year period, with South Carolina at the lowest, below 57%. A growing working population and a low labor participation rate could present an opportunity for more South Carolinians to join the workforce, highlighting the importance of planned workforce development initiatives.



Figure 22:

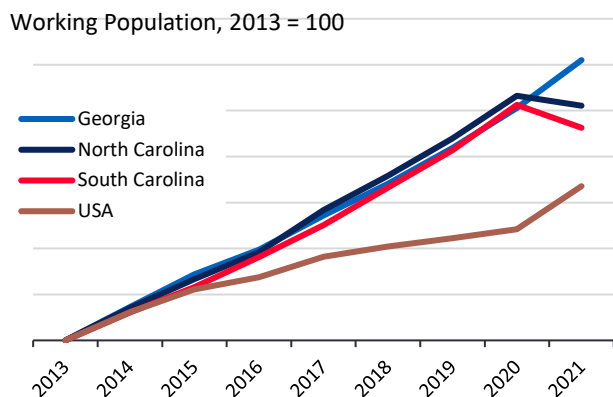
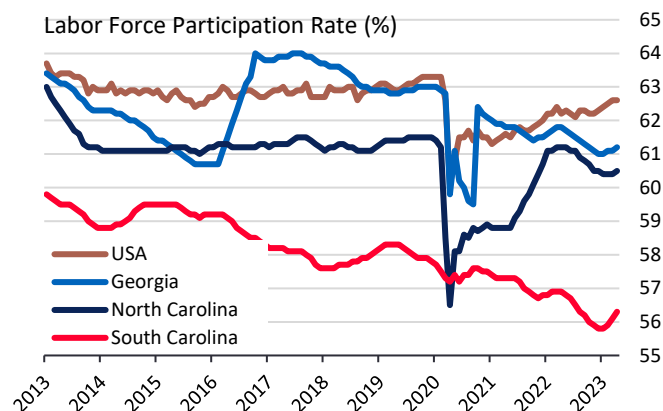


Figure 23:

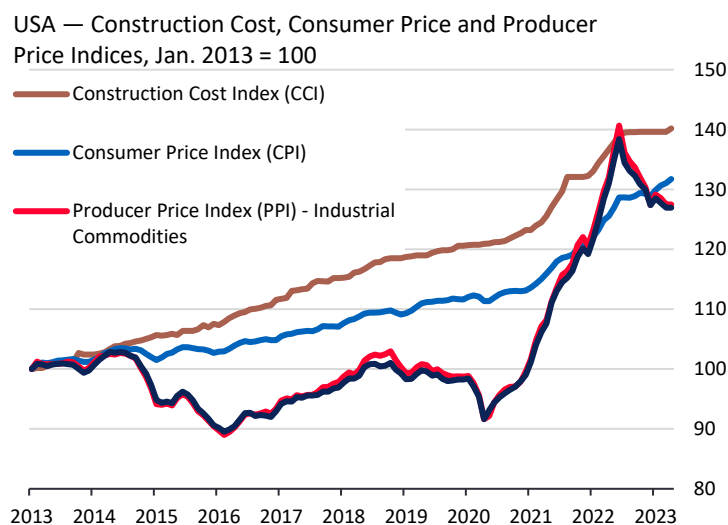


SCBBO plans to support and encourage implementation of workforce training programs, employer-based apprenticeship programs and tailored educational opportunities to help build workforce capacity. ISPs and other companies in the broadband supply chain have begun considering the future of work in the telecommunications industry. These companies have and will continue to increase partnerships with technical colleges throughout South Carolina and develop certifications for workers to ensure a sustainable workforce capable of handling increasing demand.

4.3 Supply Chain Issues

In recent years, rising costs and backlogs for several key fiber broadband components have caused delays in fiber builds across the country. Causes have been linked to gas price increases, inflation, labor shortages and shortages of chipsets among other potential contributing factors. The graph in this section shows that the costs of consumer goods and services, commodity costs, and the cost of construction in the US have increased 31%, 27% and 40%, respectively, over the last 10 years (BLS). Moreover, from 2021 to 2023, commodity prices increased nearly 21% and constructions costs increased 14%, reflecting the market pressures of the industry.

Figure 24:





However, in 2023, an increase in US manufacturing of fiber optic cable and related components and other industry modernizations may have helped to remedy some of the fiber broadband supply chain challenges identified in prior years. To maintain the improvements in the supply chain, project planning and deployment efforts must be diligent in project design optimization and sourcing management. The SCBBO anticipates the fiber broadband supply chain is not likely to have negative impacts on broadband expansion in South Carolina.

Essential to supply chain matters is material availability, which is discussed in the following section.

4.4 Materials Availability

In May 2023, the Fiber Broadband Association announced findings from its research that significant improvements have occurred in industry supply chain materials and component-sourcing lead times, including data showing up to 92% faster lead times in some fiber broadband equipment categories ([Fiber Broadband Association](#)). The latest analysis shows improved lead times in several key fiber broadband categories, including fiber optic cables, fiber cabinets and splitters, fiber multiport terminals, conduit, hand holes, and home equipment.

While improvement in material availability is being assessed throughout the industry, the anticipated increase in demand could present a potential obstacle across the newly recovered fiber component categories. To prepare for an increase in demand, project design and labor planning, communication across supply chains and forecasting will be critical, especially for any subgrant applicants without existing supplier contracts (e.g., smaller or nontraditional providers). SCBBO aims to develop effective project development and grantee processes that can support and make considerations regarding the management of market risks for the timely build out of high-speed broadband throughout the state.

4.5 Industry Participation

In South Carolina, some ISP's may have limited capacity for construction. For example, the State has already faced a limited pool of ISPs for certain deployment projects under ARPA, due to project size, complexity, or existing construction projects. In some cases, the smaller organizations only have up to 30 total employees and may not be eligible or able to match and manage large grant awards for broadband deployment.

In contrast, larger ISPs may find project areas that are defined or predetermined by the State less economical and lack the scale necessary to cover costs not eligible for grant funding. In these instances, larger ISPs may not participate, limiting competition for such projects.

Additionally, some ISPs have asserted the importance of ISPs of all sizes, traditional and non-traditional, having the opportunity to participate in grant processes and in furthering broadband expansion, therefore the State's fair and open policies and processes will likely garner strong industry participation.

The amount of compliance requirements attached to grant recipients may be the most limiting factor for ISP participation, large and small. As one example, GIS capabilities for some ISPs are limited, which inhibits reporting capabilities and effective coordination with the SCBBO. As a result, competition may be reduced, and the pool of eligible BEAD subgrantees may potentially constrain broadband deployment. (Capacity and compliance constraints, including from the State's perspective, are discussed in more detail below in Section 4.13.5.)



4.6 Lack of Local Digital Inclusion Programs/Expertise

There are a number of agencies and organizations addressing digital inclusion in South Carolina through a variety of programs, such as efforts to increase access to computer labs for unemployed individuals and libraries offering access and training. With that said, many local communities lack well-developed digital inclusion programs, expertise and capacity. Partially, this may be because many geographies, especially rural areas, lack adequate access to high-speed broadband, which is recognized as a necessary precursor to digital inclusion programming.

For those organizations that are dedicated to enhancing digital inclusion in South Carolina, limited capacity is a common issue. For an individual to be considered adequately connected, there are several things that need to be addressed: access to broadband (ideally through a connection on their property), reliability and affordability of service, availability of a desktop or laptop computer, and the skills required to use their device to navigate the internet safely and effectively. It is challenging for a single organization to address all these issues at once, so many organizations focus on one facet, such as digital literacy training or providing low-cost devices. This can lead to a patchwork approach of closing the digital divide across the state.

The creation of the Digital Equity Plan, and eventually the Digital Equity Grant Program, will help to establish more digital inclusion programs, in particular programs focused on digital literacy and device access. Additionally, the State will focus on SCDE partnerships and other partners to establish some baselines regarding expectations and requirements (e.g., establishing what a digital literacy training program should cover and how it will measure success). Developing this framework will help address barriers to digital inclusion and bridging the digital divide. The following section discusses digital literacy in more detail.

4.7 Digital Literacy

Digital literacy is a challenge for many individuals, of all ages, backgrounds and geographic location. Below are some common themes that present an obstacle for the BEAD program in South Carolina:

- Many stakeholders noted that residents of South Carolina often have assumptions about digital literacy that make it challenging to provide services. For example, some stakeholders express that aging residents often do not want access to the internet or that residents think that investing in digital literacy training for children is not necessary because they already know how to use phones and computers. Those groups that offer digital literacy training express that these perceptions may sometimes prevent individuals from seeking out and utilizing available training.
- Because digital literacy training is most effective when provided in person, this often requires significant time and resources, making it hard for providers to serve all individuals and geographies in need. Access, a common barrier to training, takes on a variety of forms, including access to people in need of training, access to devices, and transportation access to computer centers and training facilities.

Developing BEAD programmatic grants that seek to expand digital literacy programs and education as well as focus on initiatives to address these challenges and barriers will serve South Carolinians well. Additionally, as stated above, the South Carolina Digital Equity Plan will create strategies and implementation activities to further address digital literacy and related challenges.



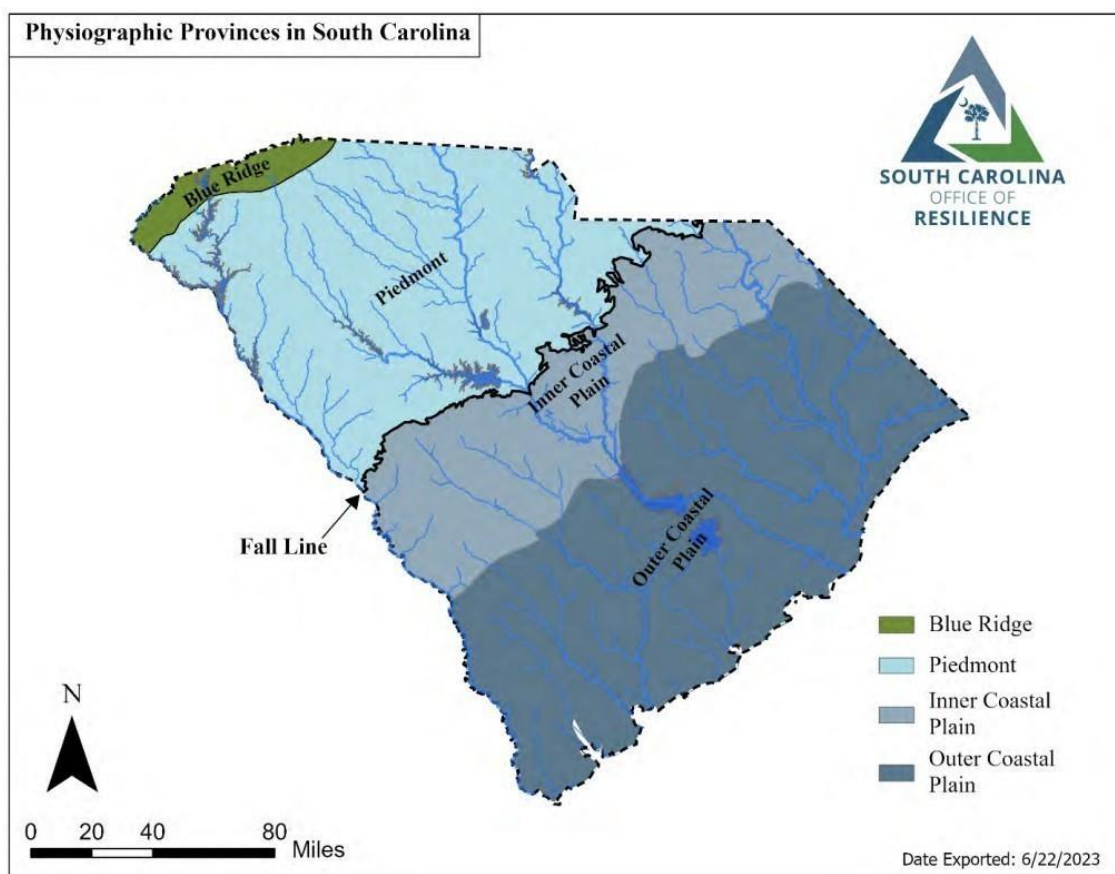
4.8 Topography / Geography

The topography of South Carolina can have a significant impact on the deployment of fiber broadband networks in the State. South Carolina is a topographically and environmentally diverse state, which can create challenges for laying fiber optic cable.

The following image of South Carolina details the State's three major physiographic provinces, the Blue Ridge, Piedmont and Coastal Plain. The South Carolina Office of Resilience's 2023 [Strategic Statewide Resilience and Risk Reduction Plan](#) describes the provinces as follows:

- The Blue Ridge is a small area in the northwestern portion of the state including mountainous terrain with elevations ranging from 1,000 feet to 3,300 feet and high slope.
- The Piedmont is in the central western portion of the state 450 feet to 1,000 feet above sea level with undulating terrains. The Fall Line, almost diagonally dividing the middle of the State, is the transitional boundary for the Coastal Plain, located in the eastern portion of the state.
- The Coastal Plain has low slope with topographic relief between sea level and 450 feet above sea level. South Carolina has eight major river basins, whose main rivers and numerous tributaries comprise 30,000 miles of waterways that drain water from 20 million acres of land into the Atlantic Ocean.

Figure 25:





Some of the ways that topography and urban/rural areas can impact fiber laying in the State include:

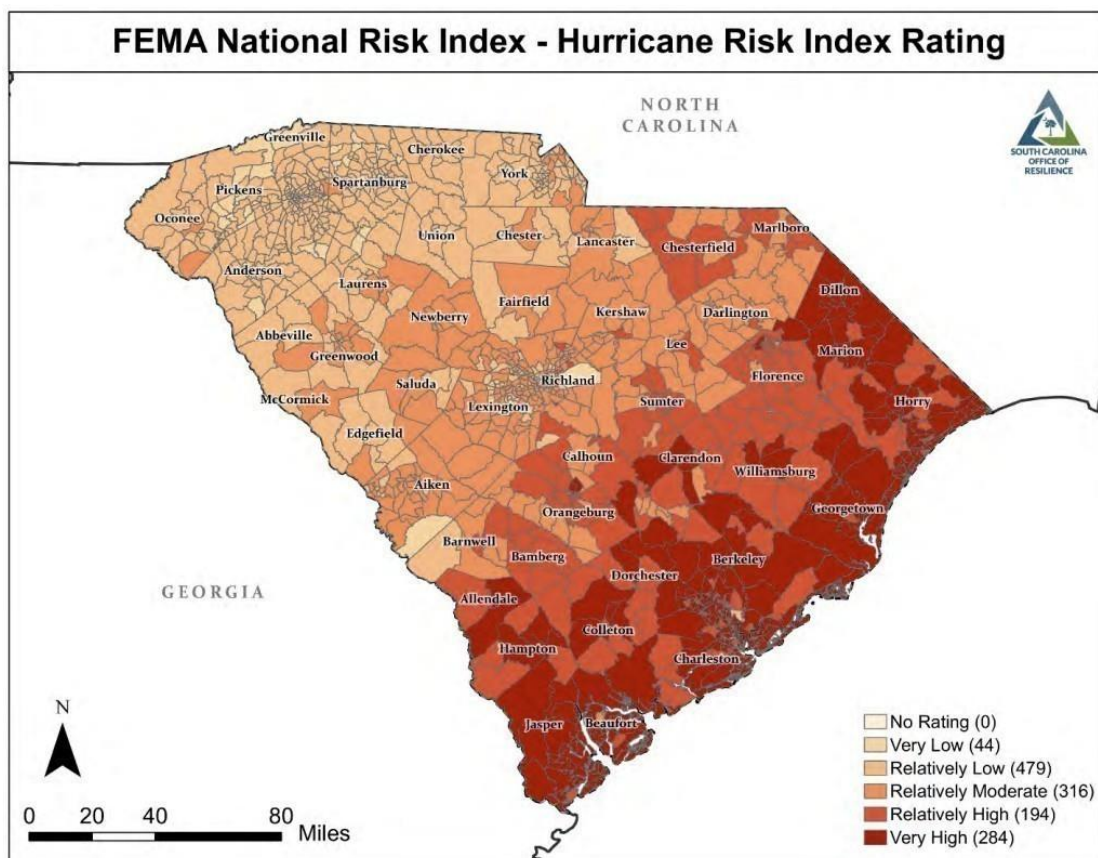
- **Mountainous terrain:** The western part of the state, including the Blue Ridge Mountains, is characterized by steep slopes and rugged terrain. Laying fiber optic cables in this area can be challenging due to the difficulty of accessing the terrain and the need to navigate rocky slopes and uneven ground. The Upstate's hilly terrain poses challenges for both Wi-Fi connections and wired connections. Internet connectivity also changes with seasons. Building an all-weather broadband infrastructure is important to the delivery of high-speed connectivity in the state.
- **Coastal regions:** The coastal regions of South Carolina are characterized by low-lying land and wetlands, which can be challenging to navigate when laying fiber optic cables. Coastal areas are also prone to flooding and other coastal environmental hazards that can damage fiber optic cables and disrupt service, which is discussed further below.
- **Urban areas:** Urban areas, such as Columbia and Charleston, can also create challenges for fiber laying due to the density of buildings and underground utilities. Laying fiber optic cables in urban areas may require special equipment and techniques to avoid disrupting existing infrastructure.
- **Rural areas:** Some parts of South Carolina, particularly in the rural areas, are characterized by low population density and long distances between properties. Laying fiber optic cables in these areas can have higher costs (at cost per mile of fiber optic cable) due to the need to cover longer distances.

The topography of South Carolina can also create challenges for the operation and maintenance of fiber optic networks in the State. Some of the challenges that can arise due to the state's topography include:

- **Extreme weather conditions:** South Carolina is prone to severe weather events, such as tropical cyclones, hurricanes, floods and thunderstorms. According to the SC Office of Resilience (SCOR), flooding in South Carolina is caused by prolonged rain events, short intense rain, overflowing rivers, dam or levee failure, storm surge, and tidal process. Flooding can be river flooding (fluvial), overland flooding (pluvial) or coastal flooding. These weather events can cause significant physical damage to fiber optic cables and other network components. Water can seep into the protective casing surrounding cables and cause damage to the wires inside. This can lead to electrical shorts, corrosion and even complete failure of the cables, resulting in service disruptions that can be challenging to repair in rugged or hard-to-reach terrain.
- In the Federal Emergency Management Agency (FEMA) National Risk index, a Hurricane Risk Index Rating, shown in the following SCOR map, represents the potential impact to people, buildings and agricultural value compared to the rest of the US.



Figure 26:



- Soil and erosion issues: In mountainous regions, soil erosion can be a significant issue that can affect the stability of fiber optic cables and other infrastructure. This can cause damage to the cables and increase the risk of service disruptions.
- Difficulty in accessing remote areas: Some parts of South Carolina, particularly in rural and mountainous regions, can be difficult to access for maintenance and repair work. This can result in longer lead times for repairs and higher costs for network operators.
- Potential for wildlife damage: In some areas of the state, wildlife such as rodents and birds can damage fiber optic cables and other infrastructure. This can lead to service disruptions and additional maintenance and repair costs.

Additionally, South Carolina has a fault line through the middle of the state. According to the US Geological Survey, South Carolina has experienced 229 earthquakes since 2001, with 46 events larger than a magnitude 2.5. The largest event since 2001 reached a magnitude 4.1 in Parksville, SC, on November 11, 2014. Annual seismic activity in the Lowcountry results in the state typically experiencing [five to 15 earthquakes per year](#). This can cause damage to fiber optic cables and increase the risk of service disruptions.

The topographical and environmental diversity of the state may present obstacles for broadband deployment due to potential cost increases to ensure resilient builds and due to the need for additional interagency and intergovernmental coordination, especially between state, local and tribal



emergency management departments, SCBBO and potentially FEMA to support preparedness, security and resilience efforts in hazard-prone areas. Impacts from three presidentially declared disasters in less than four years led, in part, to the creation of the SCOR. Future coordination between SCBBO and SCOR will be essential for resilient broadband expansion.

The BEAD program will require resiliency planning and risk mitigation. SCBBO intends to utilize BEAD funding to enhance resiliency and reliability of broadband infrastructure. These efforts will support the development of a long-term infrastructure fit for the topographical and environmental area. Given the complexity of these issues, the state will continue to utilize any NTIA guidance and technical assistance available regarding resilient design and build to mitigate these issues.

4.9 Procurement or Contracting Issues

4.9.1 Challenges to Eligible Subgrantees

The complexity and number of potentially smaller-value grants to nonprofit organizations for digital literacy or device distribution-related programming could stretch the State's capacity. These potential challenges create obstacles to broadband expansion and to meeting key digital inclusion goals and objectives. (Sections 3.1.3 above and 5.8 suggest the use of technical assistance consultants and continued guidance from NTIA may help support SCBBO in overcoming these potential challenges.)

4.10 Policy Objectives

4.10.1 "Dig-Once"

Dig-once policies aim to leverage planned construction or repairs to roads or water pipes to simultaneously install fiber conduit. While bringing efficiency to deployment efforts, the complexity of underground systems and resources with multiple owners can also create obstacles due to a lack of process and coordination among the stakeholders attached to the dig efforts.

Some contractors or subcontractors have not consistently provided notice before they dig, which damages fiber and other utilities and results in higher operational costs and creates a burden for multiple parties. SC 811 is a free one-call system funded by participating utility companies that can help prevent hitting underground utility lines while digging. The volume of comments and requests can be difficult for agencies to manage, with SC 811 noting over 10,000 active tickets in the system and some operators calling in when they are not ready to work.

To mitigate these challenges, SCBBO will work to strengthen coordination across stakeholder groups and conduct permit trainings to continue to build a foundation for cooperation among private partners and public agencies, including the SCDOT, SC 811 and the Department of Health and Environmental Control. In addition, to reduce administrative requirements, SCBBO is continually looking to streamline activities to eliminate prior requirements for applying for permits in multiple counties.

4.10.2 Buy America Policy

The Buy America policy is an obstacle for broadband deployment given the challenges of sourcing certain essential elements of broadband networks, at least in the near term, from American manufacturers.



In consideration of its Middle Mile Grant Program requirements, NTIA identified certain critical components, including broadband switching equipment, routing equipment, dense wave division multiplexing transport equipment, and access equipment, which are generally sourced exclusively from Asia. Even though these components represent less than 10% of costs in developing a network, strict application of the Buy America policy would create obstacles for BEAD broadband deployment.

NTIA has clarified there should not be a need for a waiver for Buy America requirements for fiber optic glass or cable due to a substantial supply of these materials from American manufacturers; however, additional guidance from NTIA on the policy is anticipated. If the Buy America requirements are enforced for all the components necessary to deploy and operate the networks, it may cause cost premiums and significant delays in deploying broadband networks if US manufacturers are not able to meet the heightened demand resulting from the BEAD program for certain supplies.

ISPs have also raised questions pertaining to preexisting inventory, as many companies sought to prepare for an increase in demand and ordered build material, fiber and equipment prior to the enactment of the Buy America policy. Consideration of an exception for preexisting inventory and a forward-looking application of the policy could enable the industry to transition more seamlessly and mitigate the potential shock of a stricter implementation. (For additional discussion on the impact of supply chain and materials availability, see Sections 4.3 and 4.4, respectively, above.)

4.11 Demographic Trends

Examination of data and engagement with stakeholders has identified the largest populations in need as low-income residents, rural residents, racial/ethnic minority populations and aging individuals. There is intersectionality between many of these populations, especially as many rural communities in South Carolina tend to be older, lower-income and majority non-white.

Notably, stakeholders point to rural communities as having the greatest needs, largely because they are seen as having the least access to high-speed broadband. This is true on a per-capita basis; however, urban areas also tend to have the greatest number of residents without a subscription to fixed broadband on an aggregate basis. These two population groups face similar barriers, such as lack of access and unaffordable service, but will likely require different approaches to increase adoption. For example, serving rural areas' lower population density creates transportation issues in accessing digital services and higher costs in delivering high-speed broadband to homes.

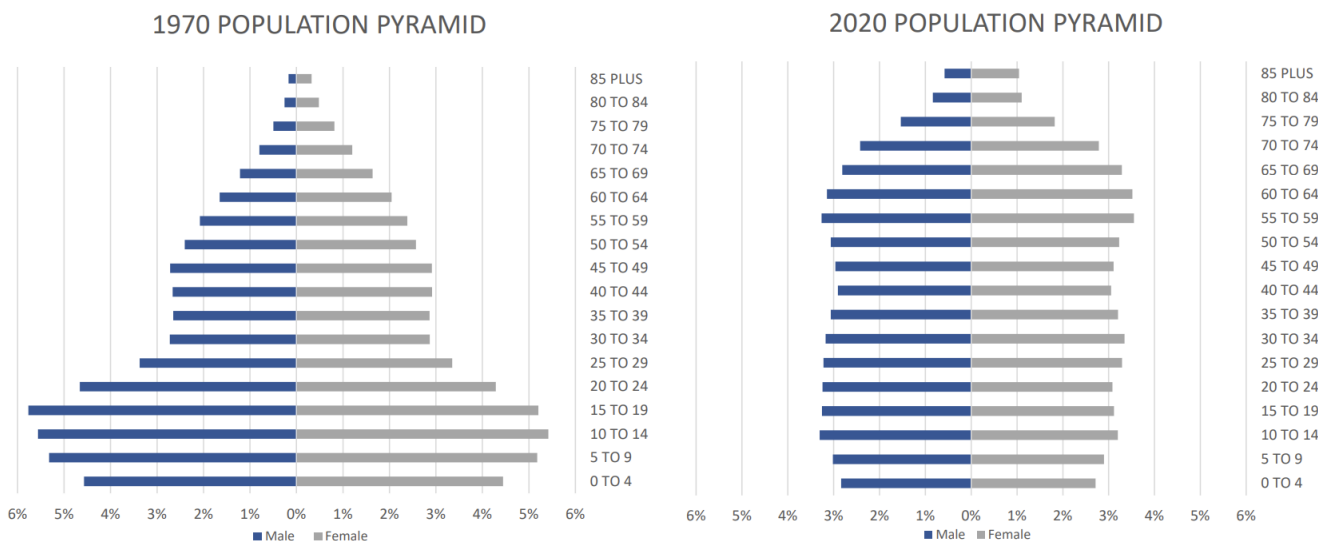
Additional demographic trends include an aging state trend across counties, as South Carolina, like the rest of the country, is getting older. As evidenced in the below [SC Population Pyramid](#) developed by the South Carolina Revenue and Fiscal Affairs Office, the 65+ population expected to surpass the 0–17 population by 2027.



Figure 27:

SC Population Pyramid

The age distribution of South Carolina’s population has shifted dramatically since 1970; the median age has increased from 24 in 1970 to 40 in 2020



Source: S.C. Revenue and Fiscal Affairs Office 320 /08/25/2020

Organizations such as PCC and initiatives focused on improving access to telehealth often have a specific focus on supporting seniors while also achieving broader goals. Additionally, initiatives enabling younger family members and students to help seniors develop more comfortability with digital skills and technology may be impactful strategies for supporting the aging demographic.

Most counties in the state have growing populations, but a few are declining. Allendale County, for example, saw population decline 23% from 2010 to 2020, and the total population in seven rural counties is expected to decline by 15% to 30% over the next decade. This could potentially create reductions in economies of scale and network effects for long-term investment and maintenance of the broadband assets once the BEAD program has concluded.

Stakeholders also often mentioned a significant need to improve digital literacy training for adolescents in schools. They emphasize that children are the future workers and leaders of South Carolina and that they need access to broadband to support K–12 education, pursue post-secondary educational or career opportunities, and develop their digital skill set. Some stakeholders fear that children in rural areas are more likely to be left behind. Most stakeholders expressed that regardless of demographics or location, all children should be able to access healthcare, a quality education and other resources. SCBBO has aligned its BEAD program goals and objectives with addressing these challenges.



4.12 Key Issues Resulting from Insufficient Broadband Access and Resources

4.12.1 Confidence in ISPs

SCBBO conducted a series of roadshow events in communities throughout the State to engage residents directly for input on their broadband needs. Throughout these roadshow events, the general public expressed a lack of trust in ISPs. This was a running theme throughout roadshow events and was the most commonly raised issue by participants after expressing that they had a poor connection or no connection to high-speed broadband. In particular:

- Residents expressed a lack of confidence in their service providers due to the perception that their actual broadband speeds are substantially less than those advertised by ISPs.
- Some residents additionally expressed a lack of confidence in the privacy and security of using the internet to conduct personal matters (e.g., telehealth visits, banking) online.

Of those surveyed, many South Carolinians do not feel that ISPs are taking their concerns seriously. Common themes are that 1) ISPs are not interested in expanding internet service if it is not profitable, which can result in lack of access or spotty service in an area; 2) that ISPs are creating monopolies and customers are beholden to the prices and services they offer, regardless of the quality of services; and 3) that ISPs are difficult to contact, are not helpful with repairs and provide confusing information about service offerings and costs. Some direct quotes include:

- “Will ISPs be held accountable to high-priority areas that have no internet, like schools, low-income areas and homes with no service?”
- “What is being done to stop companies from becoming a monopoly due to the contracts that they make you sign to be able to use their services?”
- “[Our] current service does not match the amount of money [we] are spending.”
- “There is a monopoly — why don’t we have an array of ISPs to choose from?”

Some organizations have also stressed that trust is an important factor when teaching digital literacy. Multiple organizations have said that they find digital literacy training is more effective when taught by someone representative of the population they are teaching. Learning more about digital literacy can touch on sensitive topics, like healthcare, or personal information, like taxes or private communications. If South Carolinians who need these services do not trust the person or entity teaching them, they might not use these services altogether. Stakeholders said that South Carolinians will likely be more receptive and comfortable using these services if they can see that someone like themselves is also accessing and benefitting from these services.

Some specific pain points that have been mentioned when it comes to trusting these resources are immigration status, geographic location, and free or low-cost services. Rural areas seem skeptical that services offered in bigger cities are relevant or apply to them, and do not always feel that teachers or resources from urban areas truly understand the dynamics of their community.

Finally, there is general skepticism about free or low-cost services because most people assume that free services will have strings attached, or that low-cost services will not remain low-cost and that they might be stuck in a contract with a service provider that they will not be able to afford long-term.



4.12.2 ACP Enrollment Complexity and Complications

ACP enrollment is a multistep process that places the responsibility on the potential participant to navigate and presents challenges and complications for all levels of internet users.

Applicants must qualify by meeting a complex income determination or through participation in certain eligible programs under a National Verifier system. The applicant must then find the participating ISP program and apply the subsidy to the qualifying internet plan. If the verification cannot be automatically processed, then an applicant can face logistical challenges involved in a manual review process, where several errors or documentation challenges may ensue.

According to [Pew research](#), this process can be time consuming, with 45% of applicants being rejected. Many abandon their applications before submitting them. The continuation of an error-prone process creates a barrier for households to sign up and to South Carolina's objective of increasing ACP users.

In a streamlined process not available in South Carolina (but available in other states), households in federally subsidized housing or beneficiaries of other housing programs could automatically qualify for ACP, and a data-sharing agreement between HUD and the FCC administrating entity could easily confirm any necessary ACP verification information. Because this process is not available in South Carolina, the State is further inhibited in its goal of expeditiously increasing enrollment in the ACP.

SCBBO aims to address these challenges through its ongoing work with NTIA and the relevant federal agencies by raising awareness of the effects on South Carolinians and strengthening its coordination with the agencies. For example, in South Carolina, DSS signed a data-share agreement in 2019 with Lifeline, and this National Verifier helped facilitate with sharing information. SCBBO intends to explore working with SCDE and community-eligible schools (500,000 K–12 students meet the required definition) to advance SNAP program-related automatic verification.

4.13 Legislative or Regulatory Barriers

4.13.1 ACP Funding Depletion

Increasing ACP adoption is important to the South Carolina BEAD implementation strategy, specifically toward addressing broadband affordability for residents throughout the state. Currently, ACP funding is limited and on pace to be depleted, potentially in 2024. According to the [USAC](#), a nonprofit entity that administers ACP on behalf of the FCC, ACP enrollment in South Carolina from January through April 2023 included approximately \$122m in claims. Over that same period, national enrollment included approximately \$6.4b in claims ([USAC ACP Funding Summary by Geography](#)). As of May 2023, remaining funds for the program are \$8.65 billion (according to the [USAC ACP Enrollment and Claims Tracker](#)). If ACP funding is not continued, expansion goals of broadband adoption for low-income households could be affected.

Some residents rely on ACP to access affordable high-speed broadband services, and many others are eligible and in need of the program's benefits. According to the national nonprofit [EducationSuperHighway](#), there are 874,587 eligible households in South Carolina. As of August 7, 2023, South Carolina had 370,042 enrolled households.



If the ACP funding is not continued, existing participants and other eligible low-income households may lose access to affordable service options. An extension of federal funding for the ACP would strengthen South Carolina and its partners' ability to promote the program and, in turn, the residents' ability to sign up and access high-speed internet service.

Through the BEAD program in coordination with NTIA, SCBBO will require applicable subgrantees to develop a "low-cost broadband service option" and may consider direct subsidy strategies for mitigating the risk and uncertainty of the ACP.

4.13.2 South Carolina Municipal Broadband Limitations

Under the BEAD program, municipal entities are eligible to apply for BEAD grants supporting broadband deployment and service. SC State law ([S.C. Code Ann. § 58-9-2600 et seq.](#)) ensures that government resources are not used in an unfair, anticompetitive manner and requires various procedural requirements, limitations and additional tax considerations that some may consider to be barriers to the provision of municipal retail broadband service.

With the exception of Orangeburg and Oconee Counties, local government-owned communications service providers or municipal broadband networks have to first show that there is no ISP or internet service available in an area prior to offering retail broadband services (service directly to residents). State law intends to ensure that government resources are not duplicative of the market, are efficiently utilized and are not used in an anticompetitive manner. No government entity has chosen to make a filing at the Public Service Commission of South Carolina to declare an area is unserved and that the government entity seeks to provide retail internet service in that unserved area. Government-owned communications service providers may operate broadband networks as wholesale suppliers, leasing its infrastructure to private ISPs that can then offer broadband service to residents. There are examples of a government entity, i.e., Orangeburg County, offering retail broadband and of wholesale municipal networks, such as Newberry.

In South Carolina, electric cooperatives can provide retail broadband service in their electric service areas to their members and within two miles of its authorized electric service area. In addition, electric cooperatives may go anywhere in the State if provided a state or federal grant. In effect, an electric cooperative can decide to provide service outside of its electric service area if it is approved for a grant under the BEAD program.

The BEAD program encourages states to address laws that may restrict BEAD participation from nontraditional applicants, such as municipal broadband providers, by encouraging states to grant waivers or modifications to existing state laws that may limit the participation of nontraditional applicants and to disclose any unsuccessful applications for grant funding that may have been impacted by such laws. In its annual report, SCBBO may raise any concerns for the consideration of the State General Assembly.



4.13.3 Permitting

It is a subgrantee's responsibility to obtain certain federal, state and local governmental permits and approvals necessary for proposed work to be conducted. Obtaining permits and right-of-way (ROW) for network deployment can oftentimes be a time-consuming and challenging process.

The following is a list of permits and authorizations that are generally required or considered for installing fiber in South Carolina:

- 811 dig excavation ticket
- Department of Health and Environmental Control (DHEC) soil erosion sediment control permit
- DHEC wetlands and waterways permit
- US Army Corps of Engineers (USACE) permit
- FEMA Letter of Map Amendment (LOMA)/Letter of Map Revision (LOMR) permit
- SCDOT permits (Fiber Optic Broadband (FOB) Encroachment Permit and/or standard utility permits)
- Rail Crossing Permit
- County/municipal permits
- South Carolina Department of Natural Resources (SCDNR) authorizations
- US Fish and Wildlife Service (USFWS) authorizations
- ROW easements from private or public landowners
- State Historic Preservation Office (SHPO) authorizations
- National Environmental Policy Act (NEPA) process

The number of permitting processes required may present an obstacle to deployment by extending project delivery timelines. For example, a USACE permit can take 6–12 months, and the potentially lengthy federal NEPA process is also required for each deployment project.

Furthermore, the BEAD program may cause additional burden on agencies managing permits. As BEAD accelerates the number of projects, the number of permits will increase substantially, and agencies may not be prepared for the influx. (Additional obstacles related to capacity constraints are discussed in Section 4.13.5.)

SCBBO will continue to support trainings that facilitate coordination among various relevant government entities. In addition, as part of the BEAD program, SCBBO could potentially include a requirement for subgrantees to take permitting training. SCBBO will also continue coordination with SCDOT, which has developed a Multi-County, Same-District, Fiber Optic Broadband Encroachment Application and [Help Guide](#) intended to streamline certain permitting by helping applicants wishing to construct longer segments of fiber optic broadband cable that spans multiple counties within the same district along SCDOT's ROW, without the need for multiple permits.



To further support coordination, programmatic agreements could be developed between SCBBO and utilities to better define certain processes. Finally, other agencies could support SCBBO by detailing personnel to create and staff a new permitting and monitoring department focused on streamlining efforts for BEAD projects.

4.13.4 Federal Regulatory Requirements for Grant “Subrecipients” versus “Contractors”

In the Notice of Funding Opportunity (NOFO) for the BEAD program (Section IV.B.7.a.iii (pg. 40)), NTIA reminds eligible entities that federal grant regulations “flow through” to subrecipients (i.e., subgrantees), and subrecipients are responsible for adherence to applicable federal program requirements specified in the federal award. Although these responsibilities are passed to the subrecipient to perform, the State will retain ultimate responsibility for ensuring the federal funds are expended appropriately and will be required to monitor the subrecipients.

Labeling BEAD grant recipients as a “subrecipient” presents administrative obstacles given the federal regulatory compliance and monitoring requirements that result from such designation. These requirements then transfer to grant recipients, including ISPs of all sizes, local government/municipalities and counties, and nonprofits that generally do not have the capabilities and resources to meet such requirements.

The subrecipient relationship will require the State to monitor each subrecipient as described in 2 CFR 200.332 ([Requirements for pass-through entities](#)), which would include:

- Clearly defining the subaward in an agreement
- Evaluations of each subrecipient’s risk of noncompliance
- Designing specific monitoring steps based on the risks identified in the evaluation of subrecipient risks of noncompliance
- Consideration of specific supplemental conditions for the subaward
- Monitoring the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes
- Ensuring that every subrecipient (including nonprofit entities) completes a Single Audit, when applicable, and considers the results of those audits

The most significant barrier/challenge in the subrecipient relationship is associated with monitoring the compliance risks, controls and capacity of many local governments, ISPs and/or nonprofits. Conducting the activities above may be a challenge for smaller communities that lack the controls, systems and experienced resources to carry out the federal requirements in an acceptable manner, though community foundations, counties and COGs with prior federal program experience may be able to support compliance and reporting for certain smaller ISPs, nonprofits, etc., by receiving and managing certain grant dollars. Ultimately, this will place a greater burden on the State to ensure those subrecipients are equipped with the knowledge and resources to deliver on the grant program to ensure funds are appropriately spent on eligible activities.



A “contractor,” on the other hand, is characterized for the purpose of obtaining goods and services for the non-federal entity’s own use and creates a procurement relationship that is satisfied once the agreed-upon work is completed. Contractors are not subject to compliance requirements of the federal program because of the agreement, though similar requirements may apply for other reasons. Contractors are subject to the contract provisions as listed in Appendix II of 2 CFR 200 ([Contract Provisions for Non-Federal Entity Contracts Under Federal Awards](#)).

In determining whether an agreement between a pass-through entity and another non-federal entity casts the latter as a subrecipient or a contractor, the substance of the relationship is more important than the form of the agreement.

SCBBO may seek an exception or clarification to identify certain grant recipients as contractors. This was utilized for the ARPA program, when SCBBO used a questionnaire to help analyze the substance of each relationship to determine whether grant recipients should be classified as subrecipients or contractors.

4.13.5 Multiple Federal Funding Programs — Capacity and Compliance Constraints

The historic nature of the broadband funding programs over the past several years, particularly the \$400m of ARPA funds that South Carolina elected to allocate to broadband uses, has created huge opportunities in the State, but also some constraints, including:

Administrative capacity: ARPA programs require funds allocated to South Carolina to be expended by December 31, 2026. The implementation timeline for BEAD overlaps with ARPA, challenging administrative capacity for the State and local offices to manage and coordinate multiple broadband programs, ARPA, BEAD and DEA concurrently. Meeting this short-term need could pose challenges for hiring qualified personnel on a time-limited basis.

Compliance: Federal grant and other funding regulations require compliance and monitoring processes that recipients, such as local government entities, electric cooperatives, nonprofits or ISPs, may not be prepared to perform. The influx of federal funds from ARPA and other sources may add complexity that slows, limits or constrains the State and grant recipients’ ability to use the funding, potentially creating a barrier for broadband deployment and digital inclusion.

Multiple funding sources present several challenges associated with the administration of different funding streams and specific federal requirements that may be required from each program. The accounting systems of the State and subrecipients must ensure that agency funds are not commingled with funds from other federal agencies to ensure compliance with eligible and ineligible uses of funds.

The different sources of federal funding may also have different reporting requirements and timelines, in addition to the compliance requirements. This could present a challenge for municipalities without a robust tracking plan to meet grant requirements of multiple sources. Compliance issues associated with one of the funding sources could jeopardize the entire project.



Another challenge that will be present when navigating multiple sources of federal funding is the risk of duplication of benefits, which is one of the top causes for clawbacks or deobligations. Similarly, supplanting, which is when a state or local government reduces state or local funds for an activity specifically because federal funds are available (or expected to be available) to fund that same activity, is not allowed and would also be a potential concern when municipalities are receiving funding from multiple sources.

While NTIA will provide guidance regarding the deduplication process, the number of issues and overall complexity that derives from multiple federal funding sources is potentially a major barrier that will require strong systems and coordination among State and local offices.

4.13.6 Proposed Federal Regulatory Emissions Requirements for Power Generation

The ORS continuously monitors potential changes that may affect the regulatory landscape. Looming large in this area is the proposed Environmental Protection Agency (EPA) 111(d) rule, which the ORS believes could have significant negative impacts on South Carolina and its citizens.

In this proposed rule, published by the EPA on May 23, 2023, the technologies the EPA expects South Carolina to rely on are what it has characterized as the best system of emission reduction (BSER) technologies. According to this rule, the BSER technologies include Low GHG hydrogen, carbon capture and storage (CCS), and co-firing using natural gas. The proposed rule would require EGUs to reduce GHG emissions based on threshold size, utilization, and fuel type. Existing coal units would be expected to reduce utilization to a capacity factor less than 20%, co-fire with 40% natural gas, or install CCS technologies. Existing gas and new-source units would be required to co-fire with Low-GHG hydrogen or install CCS. EPA 111(b) contains the standards for new combustion turbine generation units, and EPA 111(d) contains the emission guidelines for existing fossil fuel-fired EGUs.

The proposed new standards impact 24 out of the 62 electrical generation plants in South Carolina, and any newly constructed base-load plant would have to be operating on low-GHG hydrogen gas within nine years.

In line with the ORS mission to represent the concerns of the using and consuming public with respect to public utility services, the ORS provided comments stating its position to the EPA. Based on the information and technology currently available, the ORS concluded that the EPA's proposed rule dangerously undermines the reliability of the grid, places an unreasonable financial burden on consumers, and causes immediate and irreparable harm to South Carolina consumers and the state economy.

A whole-of-government approach requires consideration of this proposed rule and its potential impact on South Carolinians, coherence across sectors and an efficient use of resources. If power is not available or unreliable, broadband access is compromised. There is no broadband access without reliable, affordable power.



5 Implementation Plan

5.1 Stakeholder Engagement Process

The State has developed and implemented a thorough and expansive stakeholder outreach process to gather input in the development of this Plan. The stakeholder engagement process has included outreach to residents, businesses, nonprofits, local government entities, the Communications Workers of America, diverse groups of ISPs, and electric and rural cooperatives. Two letters were sent to the Catawba Nation inviting input into the Plan. No response was received, but SCBBO will continue outreach efforts to solicit feedback. For the specific surveys, interview questions, roadshow agendas and other outreach tools utilized, please see the appendix.

This section describes how these diverse groups were engaged to solicit input into the Plan and how they will continue to be engaged in future phases of the BEAD process.

5.1.1 Coordination and Outreach Strategy – Five-Year Action Plan and Digital Equity Plan Stakeholder Engagement

Engaging the stakeholders above required a variety of tools and approaches to ensure a broad perspective was taken into account. Some of those methods included setting up a website to share resources and information; conducting roadshow events in communities across the State; directly interviewing organizations that included Covered Populations; and sending out both digital and hard-copy surveys to thousands of residents, businesses and local government entities. The information from the below activities was incorporated into both this Plan and the Digital Equity Plan and used particularly for identifying obstacles and barriers and informing the activities required to address them.

5.1.1.1 *Statewide Campaign*

Admin partnered with ORS to create and launch the GetConnected SC 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. Admin and ORS supported these efforts by promoting a public awareness campaign through billboards, social media, in-person advertisement and local advertisements (e.g., newspaper inserts).

5.1.1.2 *Roadshow Events*

Starting in late March 2023, the State held 23 roadshow events, partnering with various institutions, including 10 regional COGs, local organizations and county leaders, to better understand the broadband needs and challenges of South Carolinians. The team also partnered with other agencies, like 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 appropriate 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 to hopefully improve attendance.



The groups provided the State with a broader understanding of the barriers to access and adoption in each region of the state, as 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 business/entrepreneurial, healthcare and public safety perspectives. With the discussion of these topics, residents felt empowered to examine the state of their counties and towns and communicate the needs and challenges of their community with respect to broadband and digital equity.

This 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*, in this Plan. The roadshow events ended in early May, with over 250 residents given the opportunity to discuss the obstacles and barriers they or their communities face on a daily basis.

Figure 28:



Figure 29:



5.1.1.3 Organizational Interviews

In April 2023, the Admin and ORS team compiled a list of contacts at various organizations to interview and gather information for BEAD and Digital Equity Planning efforts, focusing on state agencies and nonprofit organizations. Prior to the interviews, the State requested the contacts to also share strategic plans or other documents that could be helpful during research for the Plan. Over the course of six weeks, interviews were conducted with 68 individuals representing 33 different 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 affecting their constituents, and their ideal vision for broadband and digital equity efforts in the State. Feedback was incorporated primarily into Section 3.4, *Needs and Gaps*, and Section 4, *Obstacles and Barriers*, and plans were reviewed for alignment to State priorities and objectives in Section 5.7, *Alignment*.



The list of organizations involved in providing input included:

- Department of Veterans Affairs
- United Way Association of South Carolina
- AARP
- Department of Health and Environmental Control
- SC Association of Counties
- Goodwill SC
- 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 and Tourism
- Department of Corrections



- Build Carolina
- South Carolina Hospital Association

5.1.1.3.1 Results/Conclusions from Outreach to Covered Populations

Many of the organizations above aligned and focused on Covered Populations, as defined in the State Digital Equity Planning Grant Program (SDEPG) NOFO Section 1.C.g. The organizations above align with these Covered Populations in the following ways:

Table 13:

Covered Population Group	Organization
Individuals who live in covered households	United Way Association of South Carolina
Aging individuals	AARP
Incarcerated Individuals	SC Appleseed Legal Justice Center Department of Corrections
Veterans	Department of Veterans Affairs
Individuals with disabilities	Pending Outreach
Individuals with a language barrier	Pending Outreach
Individuals who are members of a racial or ethnic minority group	Commission for Minority Affairs Urban League
Individuals who primarily reside in a rural area	Palmetto Care Connections Rural Infrastructure Authority SC Office of Rural Health

In discussions with organizations that targeted Covered Populations, many people shared that they face similar challenges and have similar needs when it comes to increasing access and use of broadband services and devices. This could be because some challenges are pervasive across the State as well as overlaps among Covered Populations.

Rural populations provided the most feedback. The biggest issues identified were a lack of access and affordability of broadband services. If a rural resident could access and afford broadband service, they reported poor and unreliable connections and customer service issues that prevented them from having an adequate broadband connection.

For additional details on insights by specific Covered Population groups, please see the Digital Equity Plan.



5.1.1.4 *Broadband Provider Interviews*

Interviews with diverse ISPs across the state, including organizations representing groups of providers such as the electric cooperatives, SCTBA and the SCCTA, were held to understand obstacles and barriers, thoughts on South Carolina’s needs and gaps, and affordability and other digital equity offerings. Key themes heard from multiple entities included the following:

- There was strong interest in the BEAD program and desire to apply.
- Groups shared low-cost options and digital literacy offerings, which can be found in more detail in Section 3.3, *Asset Inventory*.
- Labor and supply chain issues were not viewed as obstacles, but there is desire to focus on the future generation and support workforce development tactically through the technical college system.
- While ORS has been helpful in clearing some impediments, permitting is still an issue, particularly with the timing and expense associated with railroad permits. Suggestions included offering a bulk permit approval process, creating a pool of permitting resources across agencies and attempting to obtain federal support with expediting railroad permits.
- There is some concern about BEAD compliance requirements, particularly with respect to understanding Buy America, prevailing wage and NEPA rules.

5.1.1.5 *Surveys*

To further broaden its feedback from individuals and organizations, ORS, Admin, a survey design consultant and USC created three surveys, including a residential survey, business and community anchor institution survey, and a government and municipalities survey. These surveys were distributed across a variety of channels, including via partners: SC COGS, SC Association of Counties (SCAC), SC Municipal Association (SCMA), Clemson University, MUSC, USC Patient Engagement Studio and the SC CMA. The survey design consultant coordinated the data entry of all collected paper surveys through the help of a team of Citadel cadets.

Figure 30:





Higher-level observations from the surveys are included below. See Sections 3.3, *Asset Inventory*, and 3.4, *Needs and Gaps Assessments*, for additional insights.

5.1.1.5.1 Better-Internet Survey – Residential

The residential survey opened mid-February 2023 and was highly publicized across a variety of channels, including a formal announcement by Governor McMaster and Congressman Clyburn at the SC State House. Residents were encouraged to take the survey during various presentations and events, particularly roadshow events. The surveys were made available in digital and print form at roadshow events, advertised on social media and print media, and distributed to various organizations around the State.

Figure 31:



Key questions in the residential survey included how residents felt about their internet service, what the barriers were to having their internet needs met, how respondents use the internet and what their critical internet needs are. The surveys also included demographic questions that aided in understanding these topics by Covered Population, the results of which can be found in the Digital Equity Plan.

As a result of these efforts, 18,481 surveys were attempted, with 13,024 residential surveys considered completed¹⁰ by the time of closing on May 31, 2023. To obtain a more nuanced understanding of needs, respondents were asked to self-identify whether they have or did not have internet, whether

¹⁰ Those who responded to a set of questions that were deemed essential, including ZIP code, whether they have internet, ISP provider, barriers, etc.



their needs were met and whether they wanted it. The breakdown of four categories is presented below.

Table 14:

N = 13,024	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
Count (n)	5,656	3,382	3,494	492
Percentage (%)	43.4%	26.0%	26.8%	3.8%

Almost 50% of the completed surveys were from key target groups representing individuals that either A) have internet that does not meet their needs, or B) do not have internet and want internet.

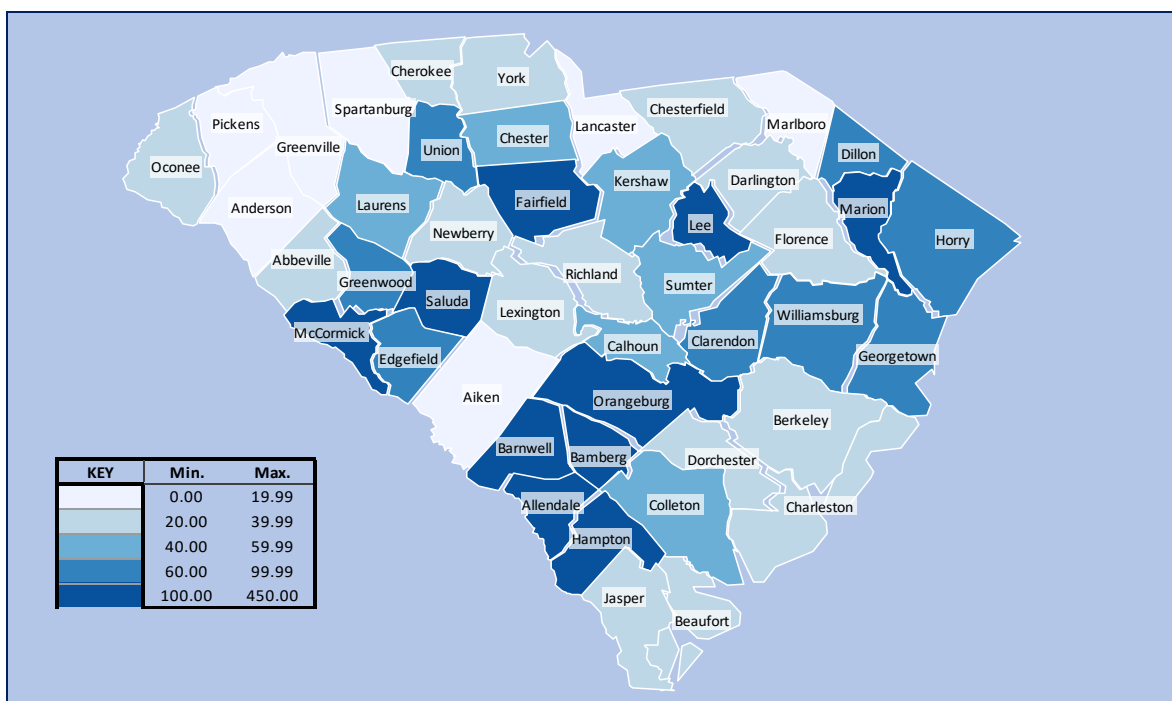
Key observations from the residential survey are as follows:

- The majority of respondents (51%) identified as either having internet that does not meet their needs or not having internet and wanting it.
- Over 20% of respondents access home internet using a cell phone only.
- The top two barriers identified were “the cost is too high” followed by “there is no ISP serving our location.”
- The vast majority (73%) of the respondents were not familiar with the ACP program.
- In terms of what households use broadband for, surveys from all respondents (regardless of whether one has internet) identified the top needs as 1) accessing healthcare services, 2) working from home, and 3) supporting children with K–12 education.

Strong response rates were observed from across the state, as evidenced by the map below, which shows the response rate per 10,000 of population by county.



Figure 32:



5.1.1.5.2 Better-Internet Survey – Businesses and Organizations

These surveys targeted chambers of commerce around the State, which were then asked to share the survey with businesses and organizations in their community. Clemson, CMA and South Carolina Institute of Innovation and Information (SCII) supported the outreach efforts. These surveys were open from March 28 to June 30, 2023, and gathered 334 complete responses.

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 like 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 needed and in conducting their business activities online. This survey sought to understand how businesses and CAIs currently use broadband services to identify opportunities to increase access or address challenges in the future.

Key observations from the businesses and organizations survey are as follows:

- Like the residential survey, the most frequently cited barriers relate to lack of options and costs, with 76% of respondents citing “the options for ISP do not meet our needs in terms of speed, reliability or coverage,” and 38% saying that “the cost of internet service is too high.”
- 67% of respondents with insufficient or no internet service reported spotty or unstable cell service as well.



- Fiber customers are not just more likely to feel positively about their ability to grow/compete. They are at least 3x as likely to have a high-intensity positive feeling than organizations with other known connection types.
- There are unique barriers for farms/agribusiness respondents, including:
 - Despite having comparable ratios of sufficient/insufficient internet service, “traditional businesses” are more than 3x more likely than their farm/agribusiness counterparts to have some form of IT support.
 - For agribusinesses, 61% report that they do not currently use precision farming technologies, with the largest barrier cited as cost, followed by “there is no interest.”

5.1.1.5.3 Better-Internet Survey – Government and Municipality

The Government and Municipality survey targeted local governmental/municipality entities. 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. Admin and ORS partnered with the Municipal Association of South Carolina to distribute the survey to its contacts at the county and municipal level. The State also held an informational webinar in partnership with the Municipal Association 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 opened April 5 and is still open.

Both municipalities and counties were asked similar questions in their surveys, with minor differences depending on the types of services offered at the county versus municipal level. Questions pertained to the county or municipality’s level of IT support, cybersecurity concerns, challenges in accessing or delivering online services, and the digital skills of employees. Another key component of the survey was understanding how different counties and municipalities use broadband, with questions about what services the county or municipality currently offers or plans to offer online. These questions sought to better understand how counties and municipalities use broadband to serve their constituents and what challenges these organizations are facing that could prevent them from serving constituents in the future.

5.1.2 Future Engagement Plans

The collaboration and stakeholder engagement conducted through Admin and 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.

For example, initial strategies may revolve around:

- Identifying key insights (concerns, feelings, misperceptions, 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



- 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 is documented.

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.

5.2 Priorities

The State identified the following priorities that will enable it to accomplish the goals stated in Section 2.2. These priorities represent key principles that the State followed in developing this Plan and that will help guide implementation of the BEAD program.

Table 15: Priorities for Broadband Deployment and Digital Inclusion

Priority	Description
Fund Prioritization	Follow BEAD prioritization framework of reaching unserved and underserved, followed by CAIs. Develop robust definition of CAIs to build on framework offered by NTIA and explore prioritizing CAIs into tiers (1–3).
Workforce Investment	Evaluate workforce investment up front and potentially invest part of initial 20% of deployment funds to ensure appropriate long-term workforce for BEAD investment.
Economic Development/ Healthcare/K–12 ¹¹	Focus on initiatives that support economic development, healthcare and K–12, with focus on increasing access, adoption and use.
Dig Once	Promote and adopt dig-once policies.
Affordability	Reduce the cost of broadband service for consumers.

¹¹ Note that among all residential survey respondents, accessing healthcare services, performing job functions as a remote employee and supporting children in K–12 with education were the top three answers to the prompt, “We need reliable internet access at home for the following reason.”



5.3 Planned Activities

South Carolina intends to pursue the following activities to meet its seven strategic goals identified in Section 2.2. The following tables also reflect the key implementation players, potential funding sources and expected outcomes.

5.3.1 Expand Access

Table 16:

Key Activities	Key Players	Funding Source	Expected Outcomes
Identify extremely high-cost remote, rural locations and leverage alternate technologies to reach them.	SCBBO	Internal Sources	Identify appropriate, cost-effective technology for reaching Universal Service through analysis of BSL data.
Address accessibility and connectivity challenges at MDUs.	SCBBO	Internal Sources; BEAD Funds	Identify cost-effective technologies and services to provide access to vulnerable populations.
Explore opportunities for leveraging South Carolina E-Rate funds to lift up schools and public libraries.	SCBBO	Internal Sources	Enhance resiliency for schools and public libraries.

5.3.2 Model, Map and Plan

Table 17:

Key Activities	Key Players	Funding Source	Expected Outcomes
Regularly update maps, encourage speed tests, perform analysis, and survey residents/businesses to confirm services and stay updated on needs and implementation progress.	SCBBO	Internal Sources	Refine public-facing maps documenting progress made in addressing unserved, underserved and CAI locations, with consideration of Covered Populations.
Track data on more granular level, including by maintaining careful metrics for all federal and state-designated Covered Populations	SCBBO	Internal Sources; BEAD	Improve understanding of impact of broadband investment for all South Carolinians.



5.3.3 Measure Affordability

Table 18:

Key Activities	Key Players	Funding Source	Expected Outcomes
Establish middle-class affordability plan.	SCBBO	Internal Sources	Ensure consumers have access to affordable high-speed internet in coordination with defining a low-cost broadband service option.
Address ACP depletion in annual report.	SCBBO	Internal Sources	Communicate importance of ACP for addressing affordability issues.
Work to address ACP enrollment issues through exploring additional automatic verification partnerships, such as with the SCDE and community-eligible schools.	SCBBO, SCDE	Internal Sources	Address barriers to ACP enrollment.
Partner with nonprofits and other organizations to promote utilization of the ACP.	SCBBO, nonprofits such as TogetherSC and PCC	Internal Sources	Raise awareness of ACP to increase enrollment.

5.3.4 Expand Digital Opportunities

Table 19:

Key Activities	Key Players	Funding Source	Expected Outcomes
Work with technical college system to support existing training and apprenticeship programs to advance current and future workforce needs.	SCBBO, Technical College System (ReadySC and Apprenticeship Carolina)	Internal Sources	Support workforce development and career opportunities in the broadband sector.
Work with education and nonprofit partners to develop digital literacy training curriculum, with options tailored to prioritize Covered Populations and provide guidance for integration into public K–12 schools and existing education programs.	SCBBO, SCDE	Internal Sources	Improve digital literacy for Covered Populations in the state.
Work with nonprofit partners to expand digital literacy training for rural populations.	SCBBO, PCC and SC Codes	Internal Sources	Improve digital literacy for rural populations in the state.
Leverage raw BEAD survey information to inspire academic research and uncover opportunities for advancing South Carolina.	SCBBO; USC, Clemson and MUSC and HBCU's	Internal Sources	Facilitate development of academic research in relation to broadband to uncover new needs and opportunities.



Key Activities	Key Players	Funding Source	Expected Outcomes
Support telehealth initiatives, such as helping to develop partnerships that extend care between larger, urban hospitals and community hospitals throughout the state.	SCBBO, major healthcare systems, Dept. of Health and Environmental Control, SC Telehealth Alliance, SC Office of Rural Health, SC Hospital Association, AARP	Internal Sources	Increased usage of telehealth services and better health outcomes (e.g., life expectancy, infant mortality, etc.).
Enhance and modify the broadband community champion program curriculum for implementation partners and grant recipients.	SCBBO;	Internal Sources	Expand and coordinate with digital navigators to give new potential subrecipients the skills they need to be BEAD partners.

5.3.5 Device Support

Table 20:

Key Activities	Key Players	Funding Source	Expected Outcomes
Encourage schools, libraries and other organizations offering computer labs to consider ways to increase accessibility by expanding hours of operation and transportation options.	SCBBO, SCDE	Internal Sources	Expand device accessibility across the state.
Give subrecipients the option to offer devices and potentially evaluate device support for communities as a criterion for selection evaluation.	SCBBO, ISPs and subrecipients	ISPs	Encourage ISPs to expand device offerings.
Explore opportunities to expand the South Carolina Equipment Distribution Program (SCEDP) and similar programs.	SCBBO, SCEDP	Internal Sources	Consider leveraging existing program operations to support expansion of device accessibility across the state.
Partner with nonprofit organizations to establish a statewide computer recycling network.	SCBBO, nonprofit organizations	Internal Sources	Enhance device offerings across the state.



5.3.6 Support Broadband Providers

Table 21:

Key Activities	Key Players	Funding Source	Expected Outcomes
Continue to support trainings that facilitate coordination among various relevant government entities. Work with other agencies to identify staff across common broadband-oriented permitting and monitoring departments to focus on streamlining efforts for BEAD projects.	SCBBO, SCDOT	Internal Sources	Expedite permitting process; strengthen coordination across stakeholder groups to build a foundation for cooperation among private partners and public agencies, including the SCDOT, 811 DIG and DHEC.
Offer additional webinar-based trainings for ISPs to increase compliance and technical capabilities on key topics, such as complying with the NEPA and National Historic Preservation Act (NHPA).	SCBBO	Internal Sources	Enhance ISP understanding of new BEAD requirements.
Offer trainings to ISPs on GIS technology.	SCBBO	Internal Sources	Enhance ISP understanding of GIS and reporting capabilities.

5.3.7 Provide Community Support and Technical Assistance

Table 22:

Key Activities	Key Players	Funding Source	Expected Outcomes
Target education campaigns and unique trainings for CAIs to reduce barriers to adoption.	SCBBO	Internal Sources, BEAD and Digital Equity funds	Increase digital literacy within populations with history of low digital engagement at trusted community centers.
Reduce monthly recurring costs for counties and municipalities.	SCBBO	BEAD funding	Support one-time investment for dark fiber to increase long-term affordability for communities.
Meet with South Carolina school districts to implement schoolwide cybersecurity trainings for K–12 students.	SCBBO	BEAD funding	Enhance cybersecurity and online privacy skills.
Consolidate existing www.SCdigitaldrive.org , broadband mapping site together with GetConnectedSC.org to present a single consumer-facing communications platform for all interested stakeholders.	SCBBO	BEAD funding	Facilitate better engagement and support for stakeholders.



5.4 Key Execution Strategies

The following key execution strategies will help to ensure reliable, affordable high-speed internet service throughout South Carolina. These strategies expand on the goals, objectives and planned activities described in previous sections. The sequencing of these activities is described further below in Section 5.5, *Estimated Timeline for Universal Service*.

5.4.1 Expand Access

The State has set the ambitious goal of ensuring that South Carolinians have access to reliable, resilient high-speed broadband infrastructure at 25/3 Mbps by 2026 and 100/20 Mbps by 2028, which will require efficiently coordinating the rapid deployment of broadband infrastructure. An important strategy for reaching this objective involves selecting the right technology, including leveraging alternative technologies to fiber to reach extremely high-cost, remote rural locations. It also involves exploring creative solutions to complex challenges, such as the issue of connectivity at MDUs.

5.4.1.1 Consideration of P3s or Cooperatives

From a national perspective, the FCC National Broadband Map considers many MDUs to be a single location, leading to a potential overreporting of the number of residents with access to high-speed internet, particularly from a vertical perspective, if only certain floors of an MDU have access. The SCBBO would like to explore partnering with ISPs, cooperatives and research organizations to screen on a more granular level whether individuals have access, especially vulnerable populations in federally subsidized public housing buildings. Once screening is complete, consideration would then focus on selecting the right technology, such as Wi-Fi infrastructure, to meet the needs of those individuals. Given the mixture of economic, technological and commercial factors that will need to be considered to address this complex issue, a partnership between private, public and nonprofit entities could be an ideal approach.

5.4.2 Model, Map and Plan

The SCBBO has invested in comprehensive mapping capabilities, including the development of a team of GIS specialists to update broadband coverage maps twice a year. This information has been primarily focused on updating unserved and underserved access information when utilizing prior federal funding rounds, but as BEAD funds are deployed, there is a desire to begin tracking data on a more granular level, including by maintaining careful metrics for all federal and state-designated Covered Populations.

In addition, there is the desire to continue to use this data to identify barriers to adoption and use, and to provide this actionable intelligence to county administrators to harness local support in addressing them. As BEAD funds shift to more non-deployment uses focused on digital literacy, affordability and other issues, the SCBBO wishes to meet these challenges armed with greater insights from a tested model, map and plan approach.



5.4.3 Measure Affordability

Affordability was identified as the biggest barrier for residents in the State who lacked internet, a finding reiterated throughout the surveys, roadshows and other stakeholder outreach events. The SCBBO has articulated a key goal as measuring affordability and developed numerous planned activities to help address affordability issues. The State’s affordability strategy will include establishing a framework for affordability that will explore ways to enhance the utilization of the ACP in the state.

5.4.3.1 Establishing a Framework for Affordability

As part of development of the asset inventory, which included outreach to ISPs, the SCBBO gathered insights into the low-cost options available in the State. While ISPs have a range of low-cost plans available, price is still a key barrier for residents. Greater emphasis needs to be placed on defining affordability in the state, as perspectives on affordability differ depending on the socioeconomic backgrounds of residents.

The State is continuing to work on defining affordability and looks forward to consulting with NTIA and prospective subgrantees regarding a proposed definition of “low-cost broadband service option,” a key BEAD requirement. In addition, the SCBBO is also still evaluating how to best develop the required middle-class affordability plan. Both these activities are in development and will be included in the Initial Proposal, and will constitute key building blocks in establishing this framework for affordability and encouraging the provision of affordable broadband services for a variety of consumer needs.

5.4.3.2 Enhancing the ACP

Given the important role the ACP plays in addressing affordability, the SCBBO is including several planned activities below to enhance the program:

- Address ACP depletion in the SCBBO Annual Report to the General Assembly
- Work to address ACP enrollment issues through exploring additional automatic verification partnerships, such as with the SCDE and community-eligible schools.
- Partner with nonprofits and other organizations to promote utilization of the ACP.

The Plan also identified the barrier that the ACP is on pace to be depleted, potentially in 2024. Given this, the SCBBO is exploring setting up ways to supplement funding, including potential uses of BEAD funds as direct subsidies given the uncertainty surrounding the ACP. Finally, South Carolina received an ACP Outreach grant opportunity in August of 2023, and identified counties that are particularly underperforming in ACP adoption. South Carolina will use these funds to conduct outreach to expand awareness across the state.

5.4.4 Expand Digital Opportunities

The BEAD investments will create new opportunities in the digital sector, and the State wishes to position South Carolinians to be at the forefront of these career opportunities. To do so, the SCBBO has identified an objective of supporting existing public and private training programs, including apprenticeships, to expand the State workforce, particularly in the telecommunications and cybersecurity fields. In addition, the State wants to ensure that all benefit, by enhancing digital equity for all, as more fully described in the Digital Equity Plan.



5.4.4.1 Ensuring an Available and Highly Skilled Workforce Through Supporting Public and Private Training Programs

As discussed in Section 4, *Obstacles and Barriers*, while South Carolina unemployment is at historic lows, the increase in broadband expansion activity is not anticipated to broadly strain the broadband deployment-related labor market in the state. With that said, certain jobs, such as computer network architects and software developers, are areas that are less robust than other states, and that workforce potentially will need to be supported.

To ensure an available and highly skilled workforce going forward, the SCBBO's workforce development strategy rests on supporting existing public and private training programs and includes investing BEAD funds up front to support this endeavor. This priority of using up-front funding was identified in recognition that certain broadband-related jobs, such as those mentioned above, could benefit from targeted investment to ensure South Carolina's workforce is well positioned for the long-term. In addition, South Carolina desires to be at the forefront of developing its cybersecurity and telecommunications workforce, in alignment with the goals of the South Carolina Cybersecurity Ecosystem Study commissioned by Governor McMaster and the Department of Commerce.

The SCBBO believes that apprenticeship programs, such as ReadySC and ApprenticeshipCarolina in partnership with the technical college system, are strong initiatives toward realizing these goals. Conversations with ISPs and cooperatives uncovered similar programs that these organizations are supporting. Recognizing that these companies have a vested interest in understanding evolving workforce trends and have committed investments to support these endeavors, the SCBBO desires to support these efforts and partner where possible.

5.4.4.2 Enhancing Digital Equity

The SCBBO plans to enhance digital equity throughout the State for all federal and State-designated Covered Populations through the following key activities. (Please see the Digital Equity Plan for additional information.)

- Work with education and nonprofit partners to develop a 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.
- Work with nonprofit partners to expand digital literacy training for rural populations.
- Leverage raw BEAD survey information to inspire academic research and uncover opportunities for advancing South Carolina.
- Support telehealth initiatives, such as helping to develop partnerships that extend care between larger, urban hospitals and community hospitals throughout the State.
- Scale the Broadband Community Champion program curriculum for community leaders

5.4.5 Device Support

Stakeholder outreach identified access to devices as an area of improvement. The residential surveys identified that 14.3% of respondents who described themselves as “having no internet and wanting it” did not have a device or tools to go online.



The SCBBO has identified creating a statewide computer recycling network and supporting universal one-to-one programs throughout the complete public K–12 system as key objectives. The strategy to achieve these objectives relies on developing strategic partnerships with nonprofits to develop the computer recycling network, schools and libraries to encourage the expansion of hours of operations and transportation options, and finally BEAD grant subrecipients by potentially including a device support criterion as a factor in selection.

Additionally, SCBBO will explore opportunities to expand the South Carolina Equipment Distribution Program (SCEDP) and similar programs. Currently, the SCEDP provides equipment at no cost, such as specialized phone devices, accessories and tablets, to South Carolina permanent residents who have phone service and have trouble hearing or speaking on the phone. Equipment is provided for use as long as residents remain in the State. Considerations to leverage and scale SCEDP operations could support access to devices across the State.

5.4.6 Support Broadband Providers

Broadband providers play a critical role in addressing the digital divide and will need to be further supported in navigating the BEAD program, which introduces new requirements. The SCBBO has developed trainings and outreach materials to address topics such as permitting and plans to offer additional webinar-based trainings for ISPs to increase technical capabilities on key topics such as complying with NEPA and NHPA and GIS capabilities.

Where possible, SCBBO will work to identify common broadband-oriented permitting and monitoring departments to focus on streamlining efforts for BEAD projects.

5.4.7 Provide Community Support and Technical Assistance

Like with ISPs, communities across the state will play an important role in expanding broadband access, adoption and use. The key strategy will center on education and include activities such as:

- Targeting education campaigns and unique trainings for CAIs to reduce barriers to adoption.
- Meeting with South Carolina school districts to implement schoolwide cybersecurity trainings for K–12 students.
- Consolidating existing websites to present a single, unified communications platform.

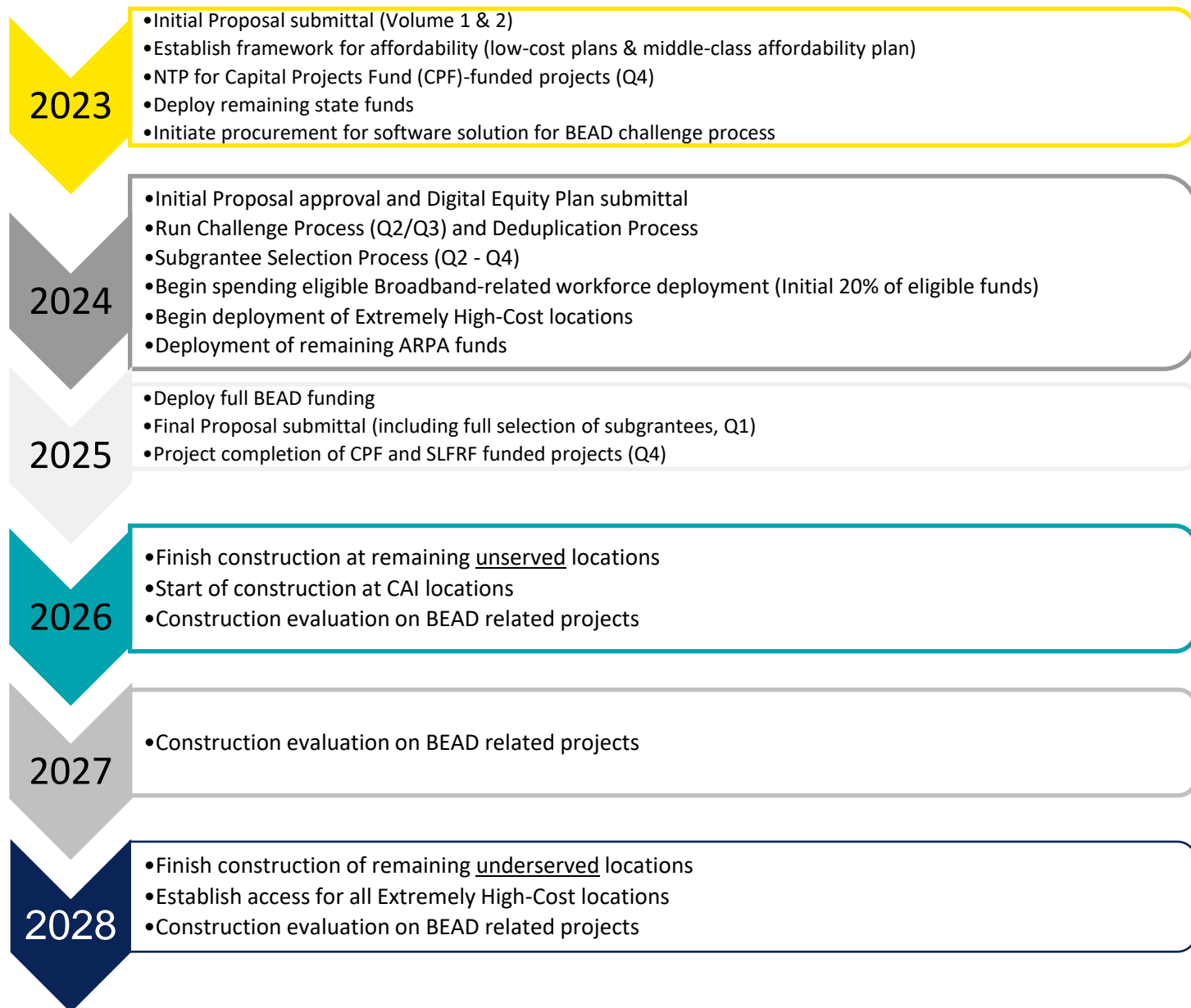
5.5 Estimated Timeline for Universal Service

The State has made great strides in bringing high-speed internet service to South Carolinians. In the past few years, the State has allocated and disbursed significant funding from programs such as the ARPA and RBGP aimed at expanding broadband access across the state. Given the desire to keep up this momentum, the State has set an ambitious goal that South Carolinians have access to reliable, resilient high-speed infrastructure at 25/3 Mbps by 2026 and 100/20 Mbps by 2028.



With respect to affordability, South Carolina has developed a key goal of establishing a framework for affordability and encouraging the provision of affordable broadband services for a variety of consumer needs. As part of the Initial Proposal submittal, SCBBO will establish a middle-class affordability plan to ensure that all consumers have access to affordable high-speed internet. In addition, it is a requirement for BEAD funding that each subgrantee receiving funding to deploy network infrastructure must offer at least one “low-cost broadband service option.” SCCBO looks forward to consulting with NTIA and prospective subgrantees regarding the development of a proposed definition for this term.

Key activities by year for achieving Universal Service are articulated below:





5.6 Estimated Cost for Universal Service

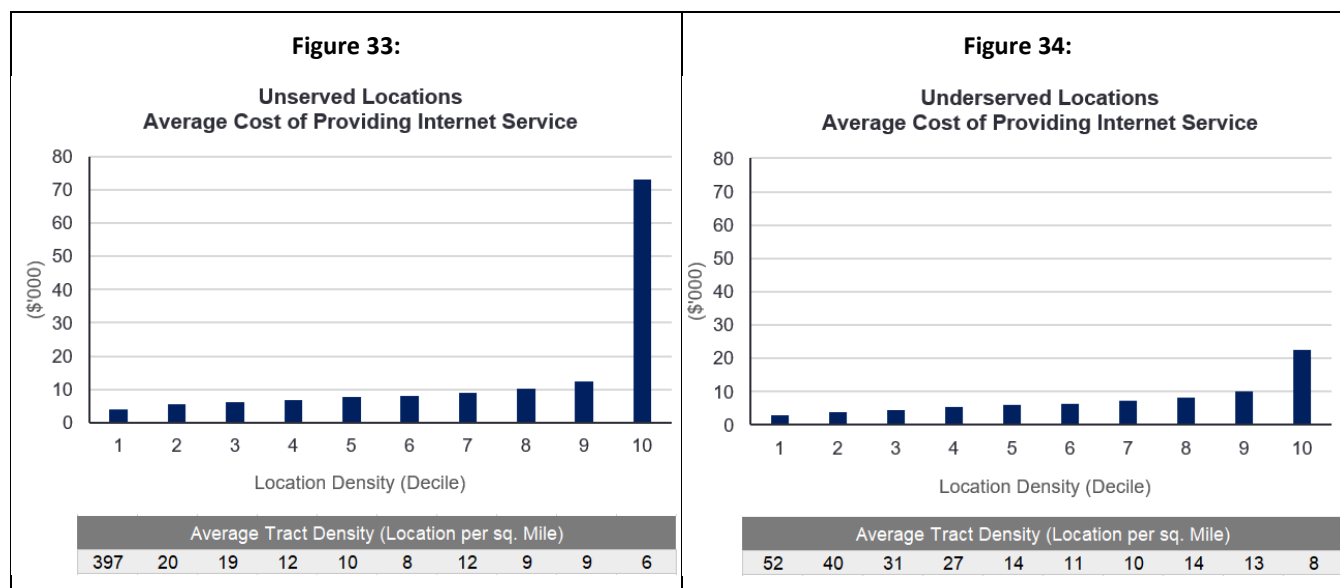
This section provides an overview of the frameworks developed and the assumptions used to estimate the cost for Universal Service. The SCBBO utilized two approaches: 1) a location density-based cost framework and 2) an internal SCBBO estimate based on historical data of applications received and final cost reporting at project closeout. A key driver in developing the cost estimate relates to how many unserved and underserved eligible locations there are remaining in the state, which is continually being refined. For purposes of the Plan, the State is utilizing data from December 2022 FCC fabric (V2), and December 31, 2022 FCC Broadband Data Collection (BDC) information reported directly to the SCBBO, which indicates there are 61,249 unserved and 68,782 underserved BSLs remaining.

Later sections use these frameworks to estimate the cost, based on factors such as the number of unserved and underserved locations, and detail the sources of program funding to reach Universal Service in South Carolina.

5.6.1 Location Density-based Cost Framework

The location density-based cost approach, developed by Cartesian, a communications and digital media consulting firm, uses a framework that divides BSLs into 1) unserved and underserved locations and 2) BSL density deciles. Specifically, it estimates the overall average cost by first estimating the average cost of providing internet to a density decile.

The left figure below reflects the average cost of providing internet per unserved location per each density decile, ranging from the most densely populated decile, with 397 BSLs per square mile, to the least densely populated decile, with six BSLs per square mile. As expected, the cost of providing internet increases as the density falls, from \$3,900 to over \$73,200.



This same methodology is applied to the underserved locations on the right, which are slightly less expensive than the unserved locations, likely given the lower incremental infrastructure improvement required to bridge a location from underserved to served compared to unserved to served.



This framework yields an overall average cost of \$9,762 per unserved location and \$7,304 per underserved location.

5.6.2 SCBBO Approach

The SCBBO analyzed historical data from prior grant rounds after the CARES Act, including the ADGP, RBGP, ARPA and CPF. Based on actual expenses incurred and validated by ORS finance, the SCBBO estimates the average cost per structure will be between \$7,000 and \$9,000. Importantly, these figures do not differentiate between underserved and unserved, as the historical projects involved deployment to both location types. The following current 130,031 BSL figure, representing the sum of the current unserved and underserved locations, can be reduced in the following ways:

- **Current federal funding:** An estimated 23,978 BSLs are estimated as current projects with allocated federal funds.
- **Extremely High-Cost Locations:** The remaining 106,053 BSLs can be further reduced by an estimated 5,000 to account for designations as Extremely High-Cost locations, which will be served by alternative, non-wireline technology.
- **Private sector investment:** Based on historical experience with the rapid pace of ISPs serving new customers even without federal funding, an additional 10% is estimated to be covered by private investment.

This leaves **91,191** remaining eligible BSLs for BEAD funding.

5.6.3 Estimated Cost

The total locations multiplied by the cost per location yields a total cost for each methodology. Note that the low and high costs per location correspond to underserved and unserved locations, respectively, for the Cartesian method.

Table 23:

Method	Locations			Cost Per Location		Total Cost
	Unserved	Underserved	Total BSL	Low	High	
Cartesian	61,249	68,782	130,031	\$7,304	\$9,762	\$1,118,812,580 ¹²
SCBBO			91,191	\$7,000	\$9,000	\$638,334,900–\$820,716,300

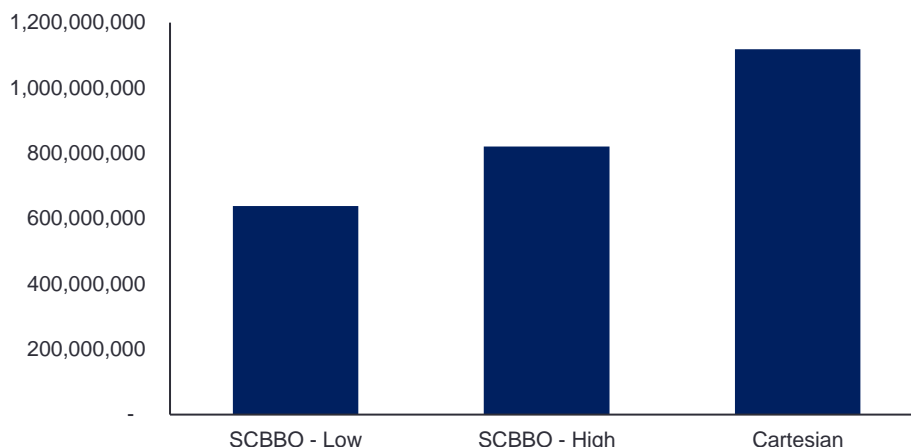
The total costs range from approximately \$638m to \$1.1b for South Carolina.

¹² This figure does not correspond with or reflect an estimated figure from Cartesian. Rather, this figure was derived using simplified assumptions and their average cost per location figures.



Figure 35:

Total Cost - Range



5.6.4 Funding

The \$551.5m of BEAD funds allocated to South Carolina will be the primary source for meeting the cost of providing Universal Service in the state, inclusive of matching funds from ISPs and other eligible providers. South Carolina has deployed the funding sources identified in Table 5 from Section 3.1.5, *Current Funding Available*. ARPA funds, including \$214m of SLFRF and \$186m of CPF funds, are currently being used and are expected to be deployed by the end of 2024.

5.7 Alignment

As part of the stakeholder outreach process, the SCBBO spoke to a wide array of organizations, including those focused on economic development, telehealth, workforce development and other related connectivity efforts. Those conversations included discussions on their respective strategic plans, which helped inform and align efforts already underway in the state and the goals and priorities described in this Plan.

Many identified access to broadband as a key tactic for achieving their goals. Some were already tracking broadband metrics, such as the Appalachian Development Plan, which identified upload and download speeds (Mbps) as a key KPI to measure success.

The following plans were identified and evaluated for relevant insights to align with the priorities identified in this Five-Year Action Plan.

5.7.1 Telehealth

5.7.1.1 SCTA Strategic Plan

The [2023 SCTA Strategic Plan](#) was produced by the South Carolina Telehealth Alliance (SCTA), a statewide collaboration of organizations (such as PCC) joining forces to expand telehealth services across the state. The SCTA provides guidance, assists with strategic development, and advises on technology and standards to develop an open-access network.

The Statewide strategic plan focuses on five service-oriented strategy domains with cross-cutting support tactics to implement these strategies.



- **Service Extension:** All citizens of South Carolina will have equitable access to ambulatory care. This strategy focuses on extending the reach of services that would otherwise be limited by travel. A key progress metric is “growth in percent of ambulatory care delivered virtually.”
- **Hospital Support:** Every community hospital in the State will have access to telehealth partnerships that enhance its services and its finances. These services represent partnerships that extend care between hospitals using telehealth with a focus of connecting resources from larger urban hospitals to community hospitals throughout the state. Examples include inpatient tele-consultations on specialist topics, such as infectious diseases and cardiology.
- **Convenient Care:** All citizens in South Carolina will have affordable and immediately available patient-initiated virtual urgent and other health system-entry level care from an in-state provider. Progress metrics include the increase in the percentage of the population with affordable access to rapid virtual urgent care. A key tactic is to evaluate barriers to use of virtual urgent care telehealth programs in underserved regions.
- **Primary Care Support:** All primary care clinics in the state, with emphasis on Health Professional Shortage Areas (HPSAs), will have access to integrated services through telehealth partnerships. This will be evaluated through an increase in the number of primary care practices accessing telehealth partnerships and an increase in multidisciplinary and specialty-advised care occurring through primary care.
- **Health Equity:** Targeted, novel initiatives will close the gap in access to healthcare services for high-priority health disparities. These are services whose primary intent is to reduce a health disparity and make progress toward achievement of health equity across the state (i.e., maternal fetal medicine, healthcare for the homeless, pediatric intensive care telehealth).

Alignment with the Plan: South Carolina is focused on expanding access to unserved and underserved locations and encouraging the provision of affordable services. Reaching these goals will help facilitate the above SCTA strategies, particularly with respect to service extension and convenient care. In addition, a focus on hospitals as CAIs will bolster the hospital support network and facilitate the connection of resources between larger urban hospitals and community hospitals.

In addition, the tactics described in the SCTA strategic plan, led by partners such as PCC, include such examples as “focusing on broadband & technology infrastructure” by “continu[ing] to provide technology, broadband, and telehealth solutions to healthcare providers and patients in rural and underserved areas of South Carolina,” which is well aligned with the Five-Year Action Plan.

5.7.2 Economic Development

5.7.2.1 Appalachian Development Plan

The [Appalachian Development Plan](#) identifies SC Appalachian Region’s targeted investment priorities (including economic development, education and workforce development). The purpose of the plan is to set forth a strategic agenda for Appalachian South Carolina. The South Carolina Appalachian Council of Governments (SCACOG) is a local development district (LDD) to administer the Applied Research Center (ARC) program. The SCACOG provides functions including regional planning, local administration of programs and workforce development, among other responsibilities. In addition, the SCACOG gets local input for preparing plans and recommending projects.



The Appalachian region in South Carolina includes about 1.3m people living in six counties, representing about a quarter of the state’s population. The plan has identified five strategic investment goals over the next five years, all of which connect to expanding broadband use and affordability.

- **Economic Opportunities:** Invest in entrepreneurial and business development strategies that strengthen Appalachia’s economy. Example — assist small and medium-sized businesses to locate and access markets for their products that will enable them to participate in the global market. Another example — increase the number of business startups and expansions.
- **Ready Workforce:** Improve the education, knowledge, skills and health of residents to work and succeed in Appalachia. This includes a focus on increasing access for telemedicine in medically underserved or health professional shortage areas.
- **Critical Infrastructure:** Invest in critical infrastructure — especially broadband; transportation, including the Appalachian Development Highway System; and water/wastewater systems. A KPI to measure success includes upload and download speeds of broadband access (Mbps).
- **Natural and Cultural Assets:** Strengthen Appalachia’s community and economic development potential by leveraging the region’s natural and cultural heritage assets. Objective — develop programs to encourage revitalization of declining downtowns.
- **Leadership and Community Capacity:** Build the capacity and skills of current and next-generation leaders and organizations to innovate, collaborate and advance community and economic development.

Plan priorities include:

- Economic development that increases income levels (including projects that encourage the revitalization of declining downtowns, among others)
- Education and workforce development
- Critical infrastructure

Alignment with the Plan: The Plan’s focus on reaching unserved and underserved businesses aligns with the ADP’s priority of economic development and revitalizing declining downtowns, as well as the strategic goal of helping small and medium-sized businesses to participate in the global market. In addition, the workforce goal of improving the education, knowledge, skills and health of residents in Appalachia, including a focus on increasing access for telemedicine, will be well supported with the implementation of the Five-Year Action Plan.

5.7.2.2 One Region Roadmap

The 2022 [One Region Roadmap](#) is an economic recovery and resiliency plan for the Berkeley-Charleston-Dorchester region. Input was provided by stakeholder groups including COGs, the Charleston Metro Chamber of Commerce, the Charleston Regional Development Alliance, focus groups, surveys and a public webpage.



The One Region roadmap solicited feedback from diverse stakeholder groups. Key insights are as follows:

- “Broadband [is] a limiting factor to connectivity regionwide.” Household surveys indicated broadband affordability is also a pressing challenge, with nearly 50% of respondents indicating they have internet access, but it is difficult to afford. In-home connectivity is also limited by access to computing devices. In 2019, over 8% of households reported no computing devices (desktop, tablet, smartphone) within their home. Access to reliable, affordable broadband is not only important for personal use but for businesses. The majority of business survey respondents indicated access to broadband is a limiting factor for continuing work-from-home policies long-term, particularly for employees living in the region’s rural areas.
- Business survey respondents opposed to providing work-from-home policies indicated concerns over access to reliable employee internet at home as a key consideration.
- There is a lack of coordination among organizations working on the digital divide.
- Broadband should be tackled on a regional level rather than piecemeal by every city and county.

Recommendations for improvements centered on equity, economic momentum, affordability, global fluency, infrastructure, innovation and entrepreneurship, talent, and quality of place.

Alignment with the Plan: Four of the five infrastructure recommendations centered on improving broadband:

- Develop a regional broadband council to coordinate existing pilot programs and initiatives to increase broadband coverage.
- Work with broadband providers to ensure total geographic coverage for high-speed broadband throughout the region.
- Create a coordinated network of publicly available broadband locations through partnerships with libraries, schools, hospitals, businesses and government entities.
- Encourage government entities to adopt dig-once policies to reduce the cost of broadband expansion.

These four recommendations are very much aligned with the current Plan’s priorities.

5.7.2.3 Lower Savannah Region 2022–2027 Comprehensive Economic Development Strategy

[The Lower Savannah Region 2022–2027 Comprehensive Economic Development Strategy](#) produced in 2022 by the Lower Savannah Economic Development District (EDD) — consisting of Aiken, Allendale, Bamberg, Barnwell, Calhoun and Orangeburg Counties, which comprise the Lower Savannah Council of Governments (LSCOG) — supports the lead efforts of state, regional and local economic development organizations in this six-county area of South Carolina.

Broadband access was identified as a weakness across the region, and according to ESRI Business Analyst Online and the SC Department of Employment and Workforce, only 59% of people use a computer. The lack of a skilled labor market was another important identified weakness. As a result, a regional goal is to improve the quality of life to attract a skilled workforce.



The Lower Savannah Region has worked to support identified clusters that have a significant impact on the regional economy, including the Savannah River Site (SRS), cybersecurity at Fort Gordon, advanced manufacturing and logistics. Enhancing support services and businesses for these clusters will allow the region to grow efficiently and strengthen employment (SRS is one of the largest employers in the region and state). It was noted that it is critical for the Lower Savannah region to take advantage of these identified clusters to improve competitiveness of the region and become more regionally resilient.

Aiken County developed a strategy to capitalize emerging clusters that can benefit from the available scientific expertise, technology transfer, potential suppliers, federal laboratories and regional research universities at SRS. As part of their efforts, Aiken County developed the 422-acre Carrol H. Warner Savannah River Research Campus that hosts a wide range of technology-based business ventures.

The Economic Development Partnership (EDP) established the Applied Research Center (ARC) in the Research Campus as a center for research and development for hydrogen and fuel cell technology. ARC has become an international leader in hydrogen, renewables, microwave and ceramics research. ARC works closely with the Savannah River National Laboratory (SRNL), smaller research and development companies, and the National Science Foundation Fuel Cell Center of Excellence at the University of South Carolina. These relationships have produced several hydrogen innovations and attract companies wanting to work closely with ARC on new technology. The transfer of technology between the public and private sector revolving around SRS will continue to contribute to the regional economy.

There are 12 total goals, the most relevant of which are as follows:

- Infrastructure and Growth leadership, which includes “modernizing the region’s transportation, broadband, energy, water, and wastewater systems to meet future demands and respond to changing business needs.”
- Quality of Life, Goal 9.1, is to create and sustain vibrant, healthy communities that attract businesses, residents and visitors to the region.
- Goal 12 is to establish steady-state economic resilience initiatives, such as diversifying the regional economy, adopting programs to aid in business retention, building a robust regional workforce, and improving infrastructure and transportation networks. This includes goal 12.4, which is to identify infrastructure needed for economic development and optimize funding to improve that infrastructure with a special focus on rural broadband internet.

Alignment with the Plan: The Five-Year Action Plan implementation will help address the identified weakness of broadband access and support the goal of building a robust regional workforce needed at these emerging innovative technology clusters.

5.7.3 Workforce Development

5.7.3.1 SC Department of Employment and Workforce (SCDEW) Strategic Plan

[The 2018 Strategic Plan](#) outlines strategies to support and promote South Carolina’s workforce system. Goals cover five topics: 1) data security, 2) fostering economic prosperity and stability, 3) becoming an employer of choice in South Carolina, 4) providing excellent customer service, and 5) achieving value from funding to increase public trust.



Alignment with the Plan: The Five-Year Action Plan is aligned in particular with SCDEW's strategy of fostering and participating in partnerships across the state to maximize effective relationships and leverage resources. Meeting the future workforce needs of the state will require coordination across agencies beyond just SCDEW, including the SC Technical College system. Please see Section 5.4, *Key Execution Strategies*, for additional information on how South Carolina is approaching workforce development.

5.7.4 Other

5.7.4.1 South Carolina Cybersecurity Ecosystem Study

The 2022 South Carolina Cybersecurity Ecosystem study was developed when Governor McMaster partnered with the SCDOC and USC to explore opportunities to improve the state's cybersecurity ecosystem. This involved conducting outreach (75+ individuals), research and surveys (225+ stakeholders).

The resulting study is an important step toward developing a coordinated strategic plan that will align and build upon existing initiatives, identify and address gaps in the ecosystem, and strengthen the state's competitiveness as a leading destination for cybersecurity investors, executives and professionals.

Key insights from the study are as follows:

- Stakeholders believe SC is viewed as the leader of the southeastern US cyber region.
- The economic impact of SC's cybersecurity industry is \$1.42b.
- Organizations ranging from the SC Council on Competitiveness to the SC Manufacturing Extension Partnership have established cybersecurity-specific initiatives; research universities and technical colleges alike have rapidly developed cybersecurity academic programs; communities such as Aiken and Beaufort have initiated multi-pronged efforts to develop local cybersecurity ecosystems; and defense assets from Charleston have been increasingly engaged for partnership opportunities.

The study had three goals:

- Align ecosystem organizations to ensure resources and initiatives are optimized.
- Augment state and regional capacity to create a secure and vibrant cyberspace for residents, business and the public sector.
- Attract investors, executives and professionals to catalyze economic growth and develop a world-class workforce.

Alignment with the Plan: This study is aligned with the Five-Year Action Plan's goal of expanding digital opportunities, particularly with respect to expanding the cybersecurity workforce, which is a key industry in the state.

5.8 Technical Assistance

This section provides an overview of the support and technical assistance SCBBO may use to ensure that the Initial and Final Proposals fully meet the requirements of the statute and the goals of the BEAD Program, including technical assistance consultants and continued technical support from NTIA.



5.8.1 Technical Assistance Consultants

Based on NOFO requirements for the Initial and Final Proposals, SCBBO has identified areas where it may seek additional support and technical assistance. As mentioned in Section 3.1 above, SCBBO plans to explore the possibility of leveraging technical assistant consultants to provide additional support and skill sets.

The following chart includes select requirements from the Initial Proposal (IP) and Final Proposal (FP), matched up to indicative technical assistant (TA) consultant positions, with descriptions of the work they will conduct in coordination with the SCBBO.

Table 24:

IP & FP Requirements	TA Consultant Position	Description
IP – 4, 13 FP – 4, 7, 9	Stakeholder Engagement Consultant	Provides stakeholder engagement expertise and guidance, including a commitment to transparency and local coordination. Develops a plan to meet stakeholder outreach requirements, CAI engagement and a stakeholder-based framework for workforce development planning.
IP – 9, 8, 14 FP – 2, 4, 7, 8, 9, 11	Strategy and Procurement Consultant	Assists in all activities to support the development of the BEAD Initial and Final Proposals, including supporting the procurement process for selecting subgrantee projects.
IP – 7 FP – 5	Strategic Marketing and Communications Consultant	Designs a comprehensive marketing campaign and consistent brand strategy to support continued stakeholder outreach efforts and a detailed plan to market and conduct a challenge process.
IP – 15 FP – 13	Environmental Consultant	Provides an assessment of climate threats and proposed mitigation methods as well as documentation associated with any construction and/or ground-disturbing activities and compliance with environmental and NHPA requirements.
IP – 9 FP – 1, 3, 7, 8, 9	Grant Administration and Compliance Consultant	Provides grants administration support for BEAD program funds in line with eligible uses, requirements and priorities, including subgrantee selection criteria and program outcomes related to broadband deployment and digital inclusion programming. Also, provides federal grant compliance procedures and ensures monitoring/oversight controls are in place for proper use of funds.
IP – 6 FP – 7	Software Consultant	Support administering challenge process, especially for optional modifications, such as those related to speed tests.

5.8.2 NTIA Technical Support

In working to ensure South Carolinians receive the full benefit of the BEAD program and that the requirements of the Initial and Final Proposals are met, SCBBO will also look to NTIA for technical assistance in two primary areas (1) environmental and (2) grant administration and compliance.



5.8.2.1 Environmental

To meet key requirements of the Initial and Final Proposals related to climate resiliency, SCBBO may seek to coordinate with NTIA to fulfill the environmental assessment, project documentation and other applicable environmental requirements necessary to ensure the establishment of resilient broadband deployment projects.

NTIA support could involve providing additional guidance on environmental assessment standards, and preferred tools and resources, including from the organizations described in the NOFO, such as NOAA. In particular, additional insight is welcome regarding certain broadband technologies and methods used to address threats, including developing trainings for continued maintenance and monitoring to support the long-term needs of broadband infrastructure.

SCBBO anticipates and is looking forward to NTIA releasing further details on the applicable environmental requirements, tools and processes.

5.8.2.2 Grant Administration and Compliance

Technical assistance in the form of continued guidance from NTIA and the federal program officer assigned from NTIA could benefit SCBBO in meeting the ongoing requirements for grant administration and compliance activities.

Competing proposals between traditional and nontraditional broadband providers may require particular attention and nuanced considerations. Technical assistance for grant administration could be beneficial, in particular guidance that validates approaches to balancing the objectives of subgrantee selection criteria. This includes objectives such as enabling nontraditional ISPs, nonprofits and municipalities/counties to compete for grant funding, as well as attracting traditional ISPs with select technical and financial capabilities for both deployment and non-deployment grant opportunities.

Compliance and oversight technical assistance could be used in determining and managing contractor and subgrantee requirements, especially concerning subgrantee flow-through requirements that may apply to nontraditional providers, such as nonprofits and other applicants with minimal capacity to build and manage full-scale grant compliance and monitoring systems. It is foreseeable that certain selected subgrantees of smaller non-deployment programmatic grants may warrant additional support or require exclusions from the same level of administrative requirements expected of deployment project subgrantees or larger subgrantees. Clarification and continued guidance from NTIA regarding certain subgrantee requirements would support participation from the broad pool of potential applicants that the BEAD program encourages.

It is requested that NTIA will continue to support information sharing, enabling eligible entities to quickly leverage best practices for both meeting program requirements and producing outcomes aligned with established goals, objectives and priorities.



6 Conclusion

Since formation in July 2021, the SCBBO has developed a strong technical team and has completed five grant rounds (CARES, RBGP, ARPA, LMGP and ADGP). In addition, the SCBBO has remapped the State six times and completely re-designed mapping efforts around the FCC's BSL fabric. Further, the number of unserved and underserved residential homes has fallen dramatically.

Building on this momentum, throughout the development of this Plan, the SBBO emphasized conducting thorough outreach and meeting South Carolinians where they are to ensure diverse perspectives were heard. This took the form of roadshow events, digital and hard copy surveys, interviews and other approaches.

In addition, extensive data analysis and research was conducted to supplement qualitative feedback, which served to identify unserved and underserved locations and broader barriers, including those related to demographics, supply chains and labor. Given the importance of setting the most impactful goals, objectives and strategies for this critical BEAD program, the SCBBO used all tools at its disposal.

In developing this Plan, the SCBBO learned a great deal about the needs of South Carolinians and ways to multiply impact. There are real strengths in the State, starting with having a very capable SCBBO with technical skills related to mapping, educating stakeholders and inter-agency coordination. There is additionally strong leadership and commitment to broadband across the State; the understanding of the criticality of high-speed internet and the vision to reach every individual was not something that was developed overnight. Rather, this capability has been developed over a number of years and was only made more urgent during COVID-19, as evidenced by the \$400m state commitment of ARPA funds toward broadband internet.

There are strong partners in the State, including state and local government entities, colleges, universities, non-profits and other organizations, many of which provided critical input into this Plan. While a variety of needs were identified, the two most commonly raised issues related to affordability and access. Addressing these issues requires thoughtful and multi-pronged approaches, which are articulated in Section 5.4, *Key Execution Strategies*.

The State supports the expansion of digital opportunities such as tackling digital literacy and advancing workforce development. Stakeholder outreach uncovered the need for more standardized and expanded approaches to these services. The SCBBO plans to partner with certain non-profits, schools libraries and state agencies to address these issues.

The SCBBO is pleased to submit this Plan and would like to thank the many individuals and organizations that took time to contribute to its development. The BEAD program represents a tremendous opportunity to deliver affordable, reliable high-speed internet to every individual, but also requires extensive planning to maximize the efficacy of the funding.

The planning process continues, and further tactics and details will be shared in the BEAD Initial Proposal which will be completed by December 27th, 2023. With this plan as a roadmap, the SCBBO is excited to accelerate South Carolina's broadband implementation and achieve the state's ambitious goals and objectives.



7 Appendices

7.1 Roadshows

7.1.1 High Priority Questions

The following topics are the primary areas of the focus for the BEAD and Digital Equity plans and asking questions that provide more insight into these topics should be the highest priority.

Obstacles or barriers

1. **What is preventing South Carolinians from accessing broadband or devices? Barriers tend to fall into the following categories:**
 - a) Access – Can the individual or family connect to the internet from their home or business?
 - b) Affordability – Can the individual or family afford internet services and/or devices if they do have internet access? Is the individual aware of assistance programs like the ACP if not?
 - c) Digital literacy – Can the individual or family safely and effectively navigate the internet, services, and software?
 - d) Adoption – If people are able to access, afford, and navigate the internet and devices, what other barriers exist that are preventing people from getting connected?

Assets

1. **What's happening in the community that is helping close the digital divide? Assets is a broad term and includes both tangible and intangible assets like physical infrastructure, community spaces, digital equity plans, nonprofit support, and much more. Assets to note include:**
 - a) Existing programs to expand broadband access to close the digital divide
 - b) Partnerships to address broadband and digital equity
 - c) Existing plans to expand broadband or address digital equity

Needs

1. **What is missing in communities that could help close the digital divide? Like assets, needs are broadly defined and can be related to anything that an individual, family or community lacks that could support efforts to close the digital divide.**

High-Priority Questions

1. **Who lacks broadband access or adoption today?**
2. **What activities do you NEED internet access or devices for?**
3. **What is preventing you or members of your community from accessing the internet services you need?**
4. **What do you think is needed to increase access to internet services and/or devices in your community (e.g. infrastructure, financing, affordability, adoption)?**



5. Are you aware of any plans, initiatives, projects or other efforts in your community to close the digital divide? What is the status of those efforts?

7.1.2 Get Connected SC Presentation

Broadband and Construction

Figure 36:





Broadband Usage

- Staying connected with friends and family
- Conducting business
- Homework
- Staying informed
- Watching online videos
- Watching TV shows

Figure 37:



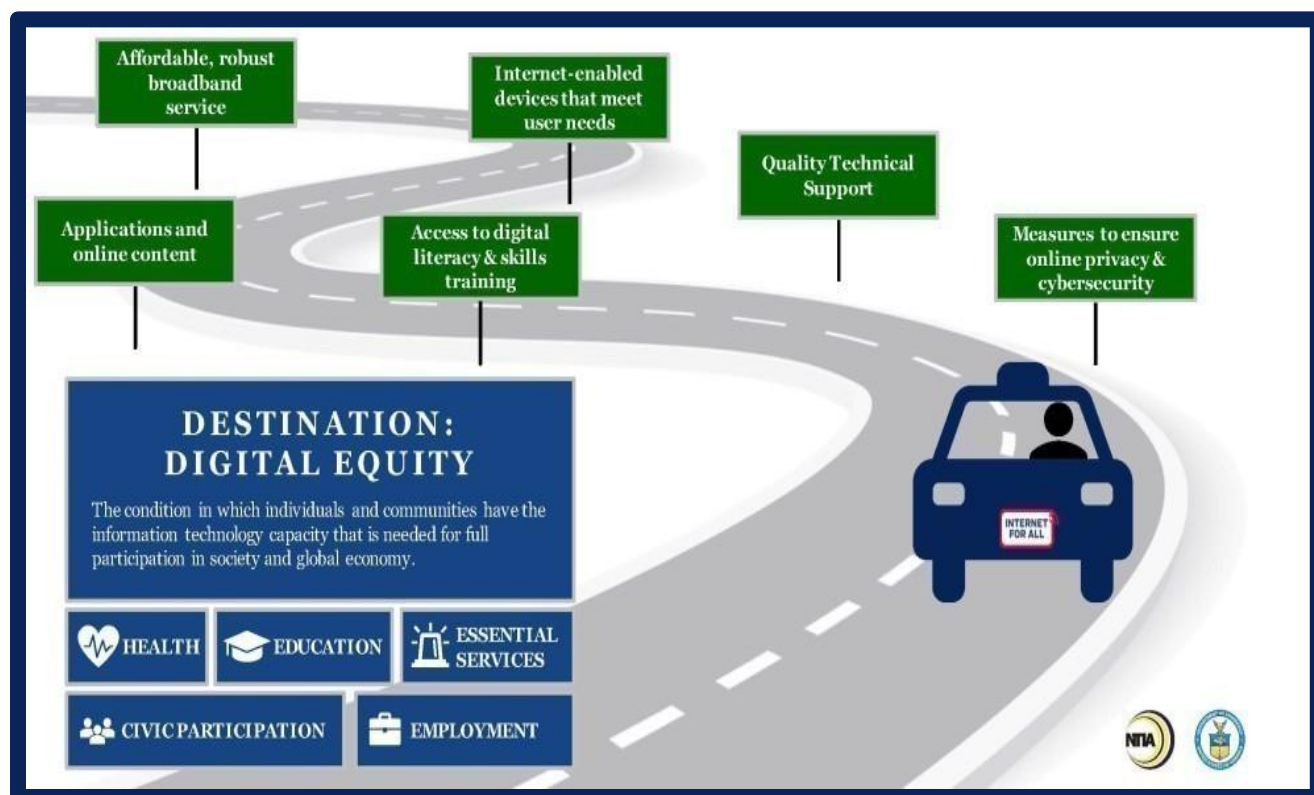
What's Happening Now

- Currently there is money being given to Internet Service Providers by Competitive Grant programs to build in areas that have a lot of K-12 Students, rural areas and areas currently without Internet.
- A once in a lifetime opportunity to close the digital divide
- Once a community has Internet, its citizens may need help with resources to learn how to use the Internet or to help pay for it.

Digital Equity

Digital inclusion activities collectively build to advance and ensure digital equity & improve outcomes for unconnected communities.

Figure 38:





The Digital Equity Program Assist

- Low-income households
- Aging populations
- Incarcerated individuals
- Veterans
- People with disabilities
- People with language barriers
- Racial and ethnic minorities
- Rural inhabitants

Figure 39:



Better Internet Survey

Figure 40:





Figure 41:



Figure 42:





Figure 43:



Figure 44:





Figure 45:





7.2 Asset Inventory – Details by Table

7.2.1 Assets related to broadband deployment

Table 25:

Asset Type	Organization Name	Asset Name	Description
State Program	South Carolina Office of Regulatory Staff (ORS) - Broadband Office	Santee Cooper	State public service authority that works to help ISPs increase access and affordability to unserved residents.

7.2.2 Assets related to broadband adoption

Table 26:

Asset Type	Organization Name	Asset Name	Description
Workforce Development	ManuFirst SC	ManuFirst Denmark Technical College	Provides free high-tech manufacturing training and certification for entry level manufacturing employment positions.
Workforce Development	ManuFirst SC	ManuFirst Aiken Technical College	Provides free high-tech manufacturing training and certification for entry level manufacturing employment positions.
Public Information	South Carolina Telecommunications and Broadband Association	Telecommunication and broadband products	Promotes implementation strategies and awareness of telecommunication and broadband products and services statewide.
Plan	Student Freedom Initiative (SFI), Orangeburg Department of Public Utilities (DPU), and Connect Humanity	Digital Access Infrastructure Plan	Digital Equity Plan for the City of Orangeburg that focuses on providing recommendations for making digital access more affordable and available
Plan	South Carolina Department of Education	2020-2024 SC Educational Technology Plan	Plan from the SC DOE describing how the state plans to leverage technology to improve students' learning experience.
Plan	South Carolina Lowcountry Promise Zone Broadband Team	Community Technology Action Plan	Action plan developed to align with goals of leveraging technology to improve quality of life and community and economic development.
Initiative	Comcast	Comcast Project UP	\$1B national commitment to promote digital equity through increased internet access.



Asset Type	Organization Name	Asset Name	Description
Plan	Williamsburg County School District	Williamsburg District Technology Plan	Written district-wide plan to expand technology resources and to implement these resources into students' curriculum.
Initiative	S.C. Department of Administration, S.C. Department of Education, S.C. Educational Television, S.C. State Library, S.C. Education Oversight Committee and the private sector, represented by AT&T and the S.C. Telecommunications and Broadband Association	South Carolina K-12 School Technology Initiative	Committee that oversees allocation of funds directed towards the implementation and advancement of technology in K-12 education.
Program	SC General Assembly	Palmetto Digital Literacy Program	Digital literacy program in coordination with learning.com that serves impoverished communities across the state.
Plan	Digital Learning Plan Study Committee	South Carolina Digital Learning Plan Report	Report on the status of digital learning across South Carolina and recommendations for improvement.
Plan	South Carolina Department of Education	2014-2016 State Educational Technology Plan	Previous plan from the SC DOE documenting how to leverage technology to improve students' learning experience.
Workforce Development	Aiken County School District	Aiken County Career and Technology Center	Vocational Center that provides career training, including requisite technological skills.
Plan	Allendale School District	Allendale Forward: Technology Plan (2016-2019)	Written district wide plan to expand technology resources and implement it into students' curriculum.
Plan	Anderson School District 1	Anderson School District 1 District Strategic Plan (2022-2027)	Written district wide strategic plan that heavily incorporates translating technology to educational benefits.
Plan	Anderson School District 1	Anderson School District One Technology Plan (2009-2012)	Written district wide plan to expand technology resources and to implement them into students' curriculum.
Plan	Bamberg School District	Final Plan for Consolidation, Timeline,	Document outlining the consolidation of two school districts. One of the major



Asset Type	Organization Name	Asset Name	Description
		and Application for Proviso 1.88(A) Funding	benefits of consolidating resources is the expansion of technological resources in each classroom.
Plan	Cherokee School District	A Future Ready Blueprint for Technology Use in the Cherokee County School District (2021-2022)	Written district wide plan to expand technology resources and implement it into students' curriculum.
Plan	Calhoun School District	5-Year Technology Plan	Written district wide plan to expand technology resources and implement it into students' curriculum.
Technical assistance	Beaufort School District	BCSD Technology Support for Students & Families	Suite of resources for families of Beaufort School District to receive assistance in accessing technological tools necessary for education.
Plan	Barnwell School District 45	Technology Plan Barnwell School District 45	Written district wide plan to expand technology resources and implement it into students' curriculum.
Plan	Charleston School District	Charleston County School District Strategic Plan	Written district wide strategic plan that heavily incorporates implementing technology to help leverage its educational benefits.
Plan	Colleton County School District	Colleton County School District Technology Plan	Written district wide plan to expand technology resources and implement it into students' curriculum.
Plan	Dorchester School District Four	Dorchester School District Four Technology Plan 2016-2020	Written district wide plan to expand technology resources and implement it into students' curriculum.
Plan	Georgetown County School District	Georgetown County School Strategic Plan	Written district wide strategic plan that heavily incorporates implementing technology to help leverage its educational benefits.
Technical assistance	WCFIBER; South Carolina Department of Veterans' Affairs (SCDVA); Greenwood County Veterans Center; Foundation for Rural Service; Abbeville County Library system	Abbeville and Greenwood Telemedicine Centers	Telehealth centers available to Veterans. Each center provides a high speed connection and a private space for Veterans to engage in telehealth calls.



Asset Type	Organization Name	Asset Name	Description
Nonprofit/ Civic/ volunteer organization	Fast Forward	Fast Forward	Provides technology education and computer access to those who have been under-served through traditional programs.
Nonprofit/ Civic/ volunteer organization	TriCounty Cradle to Career	TriCounty Cradle to Career	Promotes a digital inclusion pledge to provide high speed broadband internet access to all residents of Berkely, Charleston, and Dorchester counties.
Technical assistance	Calhoun County Library	Adult Computer Class with Lauren	Weekly computer class held to teach adults about computer basics, the internet, and certain software.
Taskforce/coalition (SCTA)	South Carolina Telehealth Alliance	SCTA Training & Education	Provides statewide training and awareness to promote the adoption of telehealth for both users and providers.
Workforce Development	Goodwill South Carolina	Mission Mobile	Renovated bus that travels through rural areas to conduct workforce development programs.
Program	Charleston Library System	Tech Team Trainings	The library system provides a variety of program options, including both classes and 1 on 1 trainings. Classes and trainings cover topics ranging from how to use a computer to photo editing to job hunting.
Program	USDA	Community Connect Program	Provides financial assistance in the form of grants to eligible applicants that will provide, on a “community-oriented connectivity” basis, broadband service that fosters economic growth and delivers enhanced educational, health care, and public safety benefits.
Program	Federal Communications Commission	E-Rate	Eligible schools and libraries may receive discounts on telecommunications, telecommunications services, and internet access, as well as internal connections, managed internal broadband services, and basic maintenance of internal connections.
Initiative	Comcast	Project UP	Project UP aims to provide tens of millions of Americans, including residents within South Carolina, with access to digital technology, tools, and resources.
Program	Comcast	Lift Zones	A part of Project UP, provides free internet connectivity and access to hundreds of



Asset Type	Organization Name	Asset Name	Description
			hours of educational and digital skills content to help families and site coordinators navigate online learning and increase digital literacy.
Technical assistance	Comcast	Internet Essentials Learning Center Program	Through their Internet Essentials Learning Center program, Comcast has partnered with hundreds of libraries, schools, and non-profits to deliver digital literacy training through a combination of classroom-style instruction and a portfolio of online training materials, including curricula to engage the senior population.
Technical assistance	AT&T	ScreenReady	Through a partnership with the Public Library Association, AT&T provides a number of classes on digital literacy, cyber safety, and digital parenting.
Program	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 also choose a higher internet speed under the program and apply the \$30 credit
Program	T-Mobile	Project 10Million	Project 10Million offers eligible households 100GB of data per year and a FREE mobile hotspot for 5 years.
Program	Charter	Spectrum Community Center Assist	The Spectrum Community Center Assist is a strategic philanthropic program that aims to improve the physical condition of community centers in underserved rural and urban communities throughout Charter's 41-state footprint, including South Carolina, as well as to support programs that provide job skills training for the people in those local communities.
Program	Charter	Spectrum Digital Education Grant	Grant program that provides computers, digital education classes, and technology labs for thousands across the country.
Initiative	Tri-County Electric COOP	TriCoLink	Partners with civic organizations, faith communities, and governmental bodies to promote the value of fiber to the home



Asset Type	Organization Name	Asset Name	Description
			service. TriCoLink also conducts public sign-up days in local communities and employees become fiber ambassadors who provide information and assistance through the sign-up process.

7.2.3 Assets related to broadband affordability

Table 27:

Asset Type	Organization Name	Asset Name	Description
Federal Program	Federal Communications Commission	Affordable Connectivity Program	Federal program designed to promote long term broadband affordability.
Federal Program	Federal Communications Commission	Lifeline	Federal program providing monthly discounts on telephone and broadband services.
Program	Universal Service Administration Co.	Healthcare Connect Fund Program	The HCF program provides a 65% discount on eligible broadband connectivity expenses for eligible rural health care providers.
Program	Comcast	Internet Essentials	Comcast Internet Essentials plan offers low-cost internet (\$9.95/month) to eligible families.
Program	AT&T	Access Program	AT&T offers the Access Program for \$10/month or less to eligible families
Program	Charter	Affordable Connectivity Program (ACP) - Spectrum Internet 100	Spectrum Internet 100 is a high-speed, low-cost broadband service with 100 Mbps download speeds, which is currently available to all existing and new subscribers enrolled in the ACP program.

7.2.4 Assets related to broadband access

Table 28:

Asset Type	Organization Name	Asset Name	Description
Government Entity	Broadband Advisory Council	Broadband Advisory Council	Government council tasked with guiding broadband planning in South Carolina. Stakeholder emphasis on access, adoption, and use of broadband.



Asset Type	Organization Name	Asset Name	Description
Government Entity	South Carolina Office of Regulatory Staff (ORS) - Broadband Office	South Carolina Office of Regulatory Staff (ORS) - Broadband Office	Office which encompasses the Broadband Advisory Council and BEAD planning.

7.2.5 Assets related to broadband digital equity

Table 29:

Asset Type	Organization Name	Asset Name	Description
Workforce Development	SC Works	Aiken SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Abbeville SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Anderson SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Barnwell SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Beaufort SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Berkeley SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Charleston SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Cherokee SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.



Asset Type	Organization Name	Asset Name	Description
Workforce Development	SC Works	Chester SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Manning SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Colleton SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Hartsville SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Dillon SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Dorchester SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Edgefield SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Winnsboro SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Florence SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Georgetown SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.



Asset Type	Organization Name	Asset Name	Description
Workforce Development	SC Works	McAlister Square SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Greenwood SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Hampton SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Coastal SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Camden SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Lancaster SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Laurens County SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Bishopville SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Lexington SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Marion SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.



Asset Type	Organization Name	Asset Name	Description
Workforce Development	SC Works	Bennettsville SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	McCormick SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Newberry SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Seneca SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Orangeburg SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Clemson SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Easley SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Columbia SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Richland County School District 2	School district that provides on the job training.
Workforce Development	SC Works	Saluda SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.



Asset Type	Organization Name	Asset Name	Description
Workforce Development	SC Works	Spartanburg SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Sumter SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Union SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Kingstree SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
Workforce Development	SC Works	Rock Hill SC Works Center	Workforce development organization that helps employers find qualified employees and prospective employees with workforce guidance and training.
State Program	South Carolina Office of Regulatory Staff (ORS) - Broadband Office	Broadband Community Champion Program	Program that gives attendees a basic understanding of broadband technologies and shares challenges and barriers that can exist for broadband access, adoption, and use.
Nonprofit/ Civic/ volunteer organization	Palmetto Care Connections	Digital Literacy Training for Seniors	Program that teaches senior citizens in rural and underserved areas how to use tablets, with an emphasis on telehealth. Provides tablets and ensures internet service.
Technical assistance	South Carolina Office of Rural Health	Digital Equity Collaborative	Collaborative organization of rural stakeholders working to ensure equitable broadband access statewide.
Workforce Development	South Carolina Office of Rural Health	Digital Economy Ecosystem Project	Series of projects in 5 communities designed to educate, train, and provide opportunities for jobs in the digital realm.
Initiative	NFT Museum of Newberry	Digital Literacy & Mural Initiative	Workshop to teach patrons how to create digital assets and interact with blockchain technology.



Asset Type	Organization Name	Asset Name	Description
Initiative / Workforce Development	Beaufort Digital Corridor	Digital Corridor Technical Talent Training (Cybersecurity Certification)	BDC offers networking opportunities, continuing education, and member-driven programs to help grow the tech economy in the Lowcountry. BDC expands Beaufort's technical talent pool through mentorship and training including cybersecurity bootcamps and certificate programs (for middle school through adult age students).
Initiative / Workforce Development	Charleston Digital Corridor	Digital Corridor Talent Development Strategy	The Charleston Digital Corridor (CDC) is a community-sourced initiative to attract, nurture and promote the region's tech economy through an array of impactful programs, products and events. One focus of the CDC is talent development where it provides training and mentorship to develop the technical talent pool in Charleston and match career seekers with jobs.
Civic/ volunteer organization	Epworth's Children's Home; State Workforce Development Board	Digital literacy skills development for job seekers	Two programs to support foster youth: 1) series of workshops to provide basic digital and technical competencies; 2) Professional trainings.
Initiative	Greenville County Schools Lifelong Learning; State Workforce Development Board	Incorporate digital literacy program for job readiness classes offered at Greenville's SC Vocational Rehabilitation Office	Class to provide digital literacy skills prior to enrollment in a broader job readiness course.
Initiative	Medical University of South Carolina; State Workforce Development	Project Rex building digital skills and job readiness training	Advanced digital literacy and job skills program to build digital literacy skills and job readiness through the Autism News NetWORK, an online series of videos that participants will produce featuring interviews of participants discussing their experiences living with autism.
Program	AARP	Older Adults Technology Services	Series of programs and services provided by AARP to instruct and empower older adults to learn basic computer skills and access other programs that can provide financial assistance.
Website	EveryoneOn	ConnectHomeUSA	Program aiming to bridge the digital divide among public housing residents. Additional programs provide digital literacy training,



Asset Type	Organization Name	Asset Name	Description
			reduced cost internet service, and discounted computers.

7.3 Interview Scripts

7.3.1 Broadband Providers

Outreach in the coming weeks to help inform the 5-Year Action Plan and discuss the following:

1. **Could you please provide a brief overview of your organization and your role in South Carolina?**
2. **How do you view the BEAD program and how is your organization preparing for this opportunity?**
 - a) Are you or entities you represent likely to apply for a BEAD grant? Why or why not?
3. **What obstacles or barriers do you see to the successful implementation of the BEAD program? How have these obstacles and barriers been identified (i.e. trade groups, research reports, surveys, etc.)? Examples include:**
 - a) Legislative or Regulatory (i.e. permitting, recent policy shifts, interaction with other federal broadband programs)
 - b) Labor
 - c) Supply Chain and Materials availability
 - d) Digital Literacy
 - e) Other (Procurement or contracting, topography, affordability issues)
4. **What do you see as South Carolina’s key broadband needs and gaps and what do you think South Carolina’s priority investments should be for the BEAD program?**
5. **Digital Equity is an important consideration for the BEAD program. Do you currently, or plan to offer, any programs that promote adoption (e.g., adoption campaigns, low-cost plans, digital inclusion initiatives)? Are you a part of any coalitions that promote digital equity?**
6. **Do you offer any subsidies or affordability programs? Are you considering one as part of the BEAD program? Do you have any thoughts about how your organization could support this effort?**
7. **Does your organization have any existing training programs that could be leveraged to scale-up South Carolina’s telecommunications workforce?**
8. **Any other topics you would like to raise, particularly with respect to opportunities or challenges? Do you have any suggestions for how the state should be thinking about maximizing BEAD funding to meet the objectives of the program?**

7.3.2 Organizational Interviews

General



- 1. What role does broadband play in your organization's operations and mission?**
- 2. How does it affect your constituents?**
 - a) Your employees?
 - b) Your business?
- 3. What are the biggest concerns?**
 - a) Infrastructure?
 - b) Accessibility?
 - c) Cost?
 - d) Devices?
 - e) Skills / literacy?
 - f) Safety?
- 4. What types of barriers do your constituents face in addressing these needs?**
- 5. What would improved broadband service and adoption do for your organization?**
- 6. What is your ideal vision for broadband / digital equity in South Carolina?**
- 7. What work are you currently doing around broadband / digital equity?**
 - a) Are you coordinating with any other organizations / agencies?
 - b) What types of investments could better support this work?

Additional Items

- 1. Do you have additional strategy plans or other broadband/digital equity documents that you would like to share?**
 - a) Note that this is a requirement for the plans
- 2. Are you aware of any plans, initiatives, projects or other efforts in your community to close the digital divide or for broadband accessibility? If so, what is the status of those efforts?**
- 3. If you're not aware of any such initiative, what kinds of initiatives would you like to see in your community? What kinds of programs or projects would be most helpful in closing the digital divide?**

Education and Workforce

- 1. How does access to broadband and related tools affect your ability to educate students?**
- 2. What types of barriers to students face in accessing broadband?**
- 3. Which students (demographics, location, etc.) face the greatest barriers?**
- 4. What programs do you offer to help address devices / digital literacy / security, etc.?**
- 5. What types of programs do you offer to prepare people for careers related to broadband?**



- a) Installation and maintenance of telecom networks?
- b) Utilization of digital skills?

Accessibility

1. Does your agency currently face any broadband accessibility issues? Poor connection? Lack thereof?
2. Do employees face connection issues daily? Monthly?
3. What about your customers/the individuals your organization serves, do they experience any accessibility issues?
4. If you're not getting the broadband service you would prefer, do you know what's preventing that service from being available to you? Like is the service you'd prefer isn't available locally, it is available but is too expensive, etc.?
5. Are there any policies or regulations that support your organizations efforts to be better connected? Any policies or regulations that are preventing your organization from accessing the internet services or devices you need?

Infrastructure

1. Do you know if your community has the infrastructure necessary to support expanded broadband access?
2. How would expanded access to internet and/or devices help your organization, if at all? How would expanded access help your community, if at all?

Digital Equity

1. Does your department/organization offer laptops or other to employees? Does your organization let customers or individuals use or borrow devices in any way?
2. Does your department/organization offer any training to improve the digital skillsets of employees (or otherwise support increasing digital skillsets, like paying for an employee to take a course through a third-party).
3. Does your department/organization offer digital literacy courses or training for employees? Do these courses include internet safety? Phishing?
4. Do your employees have the digital skillset necessary to be effective? Do your customers/individuals you serve have enough knowledge about how to use the internet and devices to engage with your organization effectively? What issues (if any) have you run into?



7.4 Glossary

Table 30:

Glossary	
ACP	Affordable Connectivity Program
ACS	American Community Survey
ADGP	Accelerated Deployment Grant Program
Admin	South Carolina Department of Administration
ARC	Applied Research Center
ARPA	American Rescue Plan Act
BBAC	Broadband Advisory Council
BEAD	Broadband Equity, Access , and Deployment Program
BLS	Bureau of Labor Statistics
BSL	Broadband Serviceable Location
CAI	Community Anchor Institution
CARES	Coronavirus Aid, Relief, and Economic Security Act
CFR	Code of Federal Regulations
CIPA	Children’s Internet Protection Act
CMA	Commission for Minority Affairs
COGs	South Carolina Councils of Governments
COLRs	Carriers of Last Resort
CPF	Capital Projects Fund
CRF	Coronavirus Relief Fund
DAS	Distributed Antenna System
DE	Digital Equity
DEA	Digital Equity Act
DHEC	South Carolina Department of Health and Environmental Control



Glossary	
DOD	United States Department of Defense
DSL	Digital Subscriber Line
DSS	South Carolina Department of Social Services
ECSC	Electric Cooperatives of South Carolina
EDD	Economic Development District
EDP	Economic Development Partnership
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FTC	Farmers Telephone Cooperative
GIS	Geographic Information System
HCF	Healthcare Connect Fund Program
HBCU	Historically Black Colleges and Universities
HPSA	Health Professional Shortage Area
HUD	United States Department of Housing and Urban Development
IJA	Infrastructure Investment and Jobs Act
ISP	Internet Service Provider
LDD	Local Development District
LISC	Local Initiatives Support Corporation
LMGP	Last Mile Grant Program
LOMA	Letter of Map Amendment
LOMR	Letter of Map Revision
LQ	Location Quotient
LSCOG	Lower Savannah Council of Governments
MASC	Municipal Association of South Carolina
MBPS	Megabits Per Second



Glossary	
MDU	Multi-Dwelling Units
MSI	Minority-Serving Institution
MUSC	Medical University of South Carolina
NAACP	National Association for the Advancement of Colored People
NCI	National Cancer Institute
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOFO	Notice of Funding Opportunities
NPHC	National Pan-Hellenic Council
NPRM	Notice of Proposed Rulemaking
NTIA	National Telecommunications and Information Administration
ORS	South Carolina Office of Regulatory Staff
PCC	Palmetto-Care-Connections
PLA	Public Library Association
P3s	Public-Private Partnerships
RBGP	Rural Broadband Grant Program
RIA	South Carolina Rural Infrastructure Authority
SCAC	South Carolina Association of Counties
SCACED	South Carolina Association for Community Economic Development
SCBBO	South Carolina Broadband Office
SCCTA	South Carolina Cable Television Foundation
SCDA	South Carolina Department of Agriculture
SCDNR	South Carolina Department of Natural Resources
SCDOA	South Carolina Department of Aging
SCDOC	South Carolina Department of Commerce



Glossary	
SCDE	South Carolina Department of Education
SCDOT	South Carolina Department of Transportation
SCDPS	South Carolina Department of Public Safety
SCETV	South Carolina Educational TV
SCHA	South Carolina Housing Authority
SCIF	Sensitive Compartmented Information Facility
SCII	South Carolina Institutes of Innovation and Information
SCTA	South Carolina Telehealth Alliance
SCTBA	South Carolina Telecommunications and Broadband Association
SCUSF	South Carolina Universal Services Fund
SCVA	South Carolina Department of Veteran Affairs
SDEPG	State Digital Equity Planning Grant Program
SHPO	State Historic Preservation Office
SLFRF	State and Local Fiscal Recovery Fund
SNAP	Supplemental Nutrition Assistance Program
SPAWAR	Space and Naval Warfare Systems Command
SRNL	Savannah River National Laboratory
SSI	Supplemental Security Income
SRS	Savannah River Site
STEM	Science, Technology Engineering, and Mathematics
TANF	Temporary Assistance for Needy Families
TBC	Tribal Broadband Connectivity
TCCC	Tri-County Cradle to Career Collaborative
TCUs	Tribal Colleges and Universities
USAC	Universal Service Administrative Company



Glossary	
USACE	United States Army Corps of Engineers
USC	University of South Carolina
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service



7.5 Surveys

7.5.1 Residential

Please select your home zip code for your physical address: (Dropdown Menu)

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

Figure 46:

Frustrated Stressed Indifferent Delighted

Move the slider to show how intense your feeling is.

Want to explain that feeling?

2. Do you currently have an internet connection at your home?

- a) Yes
- b) No
- c) I/We can ONLY access the internet at home using a cell phone with a data plan

3. [If 2 is a)] Please select your Internet Service Provider from the menu provided:

- a) AT&T
- b) Breezeline (formerly Atlantic Broadband)
- c) Brightspeed
- d) CarolinaConnect
- e) Cherokee Broadband
- f) Comcast
- g) Comporium
- h) DirectTV
- i) Frontier
- j) FTC
- k) GCI Communications
- l) Hargray



- m) Home Telecom
- n) HTC
- o) HughesNet
- p) Net Doctors
- q) NTInet
- r) Open Broadband
- s) Orangeburg County Broadband
- t) Palmetto Rural
- u) Piedmont Rural
- v) Redfi Broadband
- w) RiverNet Connect
- x) Sandhill Telephone
- y) Skyrunner
- z) Spectrum
- aa) Starlink
- bb) TDS
- cc) T-Mobile
- dd) TriCoLink
- ee) Truvista
- ff) Upcountry Fiber
- gg) Verizon
- hh) Viasat
- ii) Vyve
- jj) WCTEL
- kk) Windstream
- ll) WOW
- mm) Other Internet Service Provider
- nn) I don't know



4. **[If 3 is a)] AT&T offers the following connection types. What type of connection do you have at your home?**
 - a) DSL (using a telephone line)
 - b) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
 - c) Fiber
 - d) do not know
5. **[If 3 is c)] Brightspeed offers the following connection types. What type of connection do you have at your home?**
 - a) DSL (using a telephone line)
 - b) Fiber
 - c) do not know
6. **[If 3 is g)] Comporium offers the following connection types. What type of connection do you have at your home?**
 - a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) do not know
7. **[If 3 is i)] Frontier offers the following connection types. What type of connection do you have at your home?**
 - a) DSL (using a telephone line)
 - b) Fiber
 - c) do not know
8. **[If 3 is j)] FTC offers the following connection types. What type of connection do you have at your home?**
 - a) DSL (using a telephone line)
 - b) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
 - c) Fiber
 - d) I do not know



- 9. [If 3 is l)] Hargray offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) do not know
- 10. [If 3 is m)] Home Telecom offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) I do not know
- 11. [If 3 is n)] HTC offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) I do not know
- 12. [If 3 is p)] Net Doctors offers the following connection types. What type of connection do you have at your home?**
- a) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
 - b) Fiber
 - c) I do not know
- 13. [If 3 is r)] Open Broadband offers the following connection types. What type of connection do you have at your home?**
- a) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
 - b) Fiber
 - c) I do not know
- 14. [If 3 is u)] Piedmont Rural offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Fiber
 - c) I do not know



- 15. [If 3 is x]] Sandhill Telephone offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) I do not know
- 16. [If 3 is z]] Spectrum offers the following connection types. What type of connection do you have at your home?**
- a) Cable (using a black coax television cable)
 - b) Fiber
 - c) I do not know
- 17. [If 3 is bb]] TDS offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Fiber
 - c) I do not know
- 18. [If 3 is ee]] Truvista offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) I do not know
- 19. [If 3 is jj]] WCTEL offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Cable (using a black coax television cable)
 - c) Fiber
 - d) I do not know
- 20. [If 3 is kk]] Windstream offers the following connection types. What type of connection do you have at your home?**
- a) DSL (using a telephone line)
 - b) Fiber
 - c) I do not know



21. [If 3 is II]] WOW offers the following connection types. What type of connection do you have at your home?

- a) Cable (using a black coax television cable)
- b) Fiber
- c) I do not know

22. [If 3 is mm]] What type of connection do you have at your home?

- a) DSL (using a telephone line)
- b) Cable (using a black coax television cable)
- c) Fiber
- d) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
- e) Satellite (satellite dish attached to the home or in the yard)
- f) I do not know

23. [If 3 is nn]] What type of connection do you have at your home?

- a) DSL (using a telephone line)
- b) Cable (using a black coax television cable)
- c) Fiber
- d) Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
- e) Satellite (satellite dish attached to the home or in the yard)
- f) I do not know

(NOTE: ISPs that offer a single/known connection type automatically infer connection type in data, respondent is not asked to provide)

24. [If 2 is a]] Does the internet connection at your home meet your needs?

- a) Yes
- b) No

25. [If 24 is b]] Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select ALL that apply.

- a) Does not meet our PERSONAL needs in terms of stability and/or speed
- b) Does not meet our EDUCATIONAL needs in terms of stability and/or speed
- c) Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed
- d) The service is too expensive
- e) Locked into a service contract and cannot change internet service provider

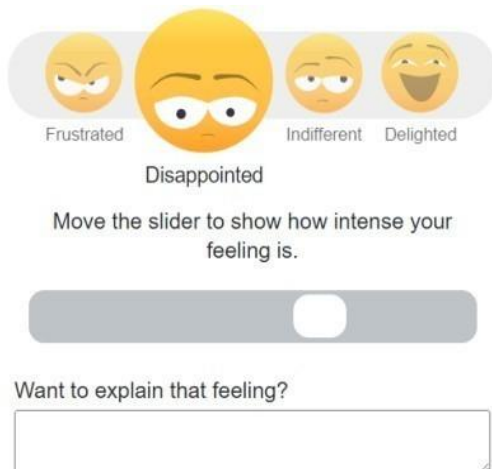


- f) Contract has data limits that restrict our use or slow down our connection
- g) Some other circumstance

26. [If 25 includes g)] Please describe the ways in which your home internet connection does not meet your needs:

27. [If 2 is a)] When it comes to Customer Service, how do you feel about your Internet Service Provider (ISP)?

Figure 47:



28. [If 2 is b)] Would you like an internet connection at home?

- a) Yes
- b) No

29. [If 2 is c)] Would you like an internet connection at home?

- a) Yes
- b) No

30. [If 28 is a)] Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

- a) There is no Internet Service Provider (ISP) serving our home's location
- b) The options available do not meet our needs
- c) We don't have the devices or tools to get online
- d) The cost is too high
- e) We cannot get internet service due to lack of an ID, bank account, or credit history
- f) We don't feel confident in our ability to use the internet
- g) We don't feel safe using the internet



- h) We access the internet outside of the home (through a neighbor, community center, business, library)
- i) Some other circumstance(s)

31. [If 24 is b)] You selected “The options available do not meet our needs” would you be willing to pay more to get the level of service needed?

- a) Yes
- b) No

32. [If 30 includes h)] Please list the places where you intentionally go to access the internet outside of the home:

33. [If 30 includes i)] You selected “some other circumstances.” Please describe what keeps you from using the internet or obtaining your own home internet connection:

34. [If 28 is b)] Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

- a) We don't have interest in a home internet connection
- b) There is no Internet Service Provider serving our home's location
- c) The options available do not meet our needs
- d) We don't have the devices or tools to get online
- e) The cost is too high
- f) We cannot get internet service due to lack of an ID, bank account, or credit history
- g) We don't feel confident in our ability to use the internet
- h) We don't feel safe using the internet
- i) We access the internet outside of the home (through a neighbor, community center, business, library)
- j) Some other circumstance(s)

35. [If 34 includes i)] Please list the places where you intentionally go to access the internet outside of the home:

36. [If 34 includes j)] You selected “some other circumstances” Please describe what keeps you from using the internet or obtaining your own home internet connection.

37. [If 29 is a)] Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

- a) There is no Internet Service Provider (ISP) serving our home's location
- b) The options available do not meet our needs
- c) We don't have the devices or tools to get online
- d) The cost is too high



- e) We cannot get internet service due to lack of an ID, bank account, or credit history
- f) We don't feel confident in our ability to use the internet
- g) We don't feel safe using the internet
- h) We access the internet outside of the home (through a neighbor, community center, business, library)
- i) Some other circumstance(s)

38. [If 24 is b)] You selected “The options available do not meet our needs” would you be willing to pay more to get the level of service needed?

- a) Yes
- b) No

39. [If 27 includes h)] Please list the places where you intentionally go to access the internet outside of the home:

40. [If 27 includes i)] You selected “some other circumstances” Please describe what keeps you from using the internet or obtaining your own home internet connection.

41. [If 29 is b)] Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply.

- a) We don't have interest in a home internet connection
- b) There is no Internet Service Provider serving our home's location
- c) The options available do not meet our needs
- d) We don't have the devices or tools to get online
- e) The cost is too high
- f) We cannot get internet service due to lack of an ID, bank account, or credit history
- g) We don't feel confident in our ability to use the internet
- h) We don't feel safe using the internet
- i) We access the internet outside of the home (through a neighbor, community center, business, library)
- j) Some other circumstance(s)

42. [If 41 includes i)] Please list the places where you intentionally go to access the internet outside of the home:

43. [If 41 includes j)] You selected “some other circumstances” Please describe what keeps you from using the internet or obtaining your own home internet connection.



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

- a) School age child(ren) [pre-K - 12 student(s)]
- b) College, vocational or other type of student(s)
- c) Veteran(s)
- d) Senior Citizen(s) (65+ years of age)
- e) Person(s) with a physical disability
- f) Person(s) with a chronic illness
- g) Person(s) with a developmental or learning difficulty/disability
- h) Person(s) who do(es) not speak English or has a language barrier
- i) Person(s) who is (are), or has (have) been, incarcerated
- j) Person(s) who is (are) unemployed and looking for work
- k) None of the above

45. Does anyone living in your household identify as any of the following? Select ALL that apply to the people in your household.

- a) Black or African American
- b) White
- c) American Indian or Alaska Native
- d) Asian or Pacific Islander
- e) Hispanic/Latino
- f) Some other racial or ethnic identity
- g) Prefer not to say

46. Select any of the following that apply to your household:

- a) I/We live in a rural location
- b) I/We homeschool my/our child(ren)
- c) Someone in our household works remotely from home
- d) I/We run a business (or farm) from home
- e) None of these apply



47. Which of the following best describes your home?

- a) Single Family Home (no shared walls)
- b) Multi-Unit Dwelling (such as an apartment, townhome, or condo)
- c) Public Housing or Housing Projects (government subsidized housing)
- d) Mobile Home
- e) Other

48. 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?

- a) Yes
- b) No

49. 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:

- a) Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)
- b) Supporting child(ren) in Pre-Kindergarten through 12th grade education
- c) Performing job functions as a remote employee (i.e. working from home)
- d) Running a business
- e) Some other critical reason
- f) Nobody in the home has a critical need for the internet

50. [If 49 includes a)] For what purposes do members of your household need to be able to access healthcare services from home? Select ALL that apply.

- a) Urgent care
- b) Primary care
- c) Mental health care
- d) VA services
- e) Prescription Refills and or Referrals
- f) Appointment scheduling
- g) Patient portal access (such as MyChart)
- h) Some other purpose

51. [If 50 includes h)] You selected “some other purpose” for wanting to access healthcare from home. Please explain in your own words:



52. [If 49 includes a)] What reasons contribute to your need to access healthcare from home?

- a) Convenience
- b) Costs
- c) Mobility issues make leaving home difficult
- d) Transportation is unreliable, expensive, or difficult to obtain
- e) Some other reason

53. [If 52 includes e)] You selected “some other reason” that contributed to your desire to access healthcare from home. Please explain in your own words:

54. [If 49 includes a)] How do you feel about using technology to access healthcare services?

Figure 48:

Skeptical Nervous Indifferent Comfortable

Move the slider to show how intense your feeling is.

Want to explain that feeling?

55. [If 49 includes b)] Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments?

- a) Yes
- b) No

56. [If 49 includes b)] Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities?

- a) Yes, we own a computer that is dedicated to school activities
- b) Yes, our child(ren)'s computer is provided through their school
- c) No



57. [If 49 includes b)] Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education?

Figure 49:

Skeptical Nervous Indifferent Comfortable

Move the slider to show how intense your feeling is.

Want to explain that feeling?

58. [If 49 includes c)] Which statement(s) best describe your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee? Select ALL that apply.

- a) My/Our household income is dependent on having internet access at home
- b) An employer requires the ability to perform some or all job functions from home
- c) My/Our career options are currently restricted due to inefficient internet stability or speed
- d) My/Our professional development/learning is currently restricted due to inefficient internet stability or speed
- e) I/We would be willing to pay more for internet that is faster or more stable
- f) Some other situation or circumstance

59. [If 58 includes f)] You selected “some other situation or circumstance” when it comes to needing a home internet connection for completing job functions as a remote employee. Please explain:



60. [If 49 includes c)] How does your ability (or inability) to work remotely make you feel about your job opportunities?

Figure 50:

Move the slider to show how intense your feeling is.

Want to explain that feeling?

61. [If 58 includes f)] You selected “Some other critical reason” for needing a reliable home internet connection. Please tell us more about your specific needs:

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

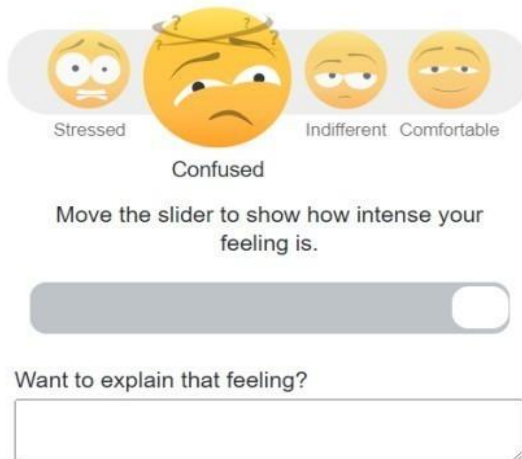
- a) Email
- b) News, Weather, Current Events
- c) Social Media & Online Community
- d) Attending Spiritual Services
- e) Shopping for Goods & Services or Paying Bills
- f) Streaming Entertainment (TV, Movies, Music, etc.)
- g) Video Gaming
- h) Video Conferencing
- i) Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.)
- j) Research & Personal Enrichment
- k) Job Searching
- l) Homework or Education
- m) Home Security
- n) Managing Accounts (related to banking, finance, or employment benefits, etc.)
- o) Organizing Transportation or Accessing Maps



p) Managing or Receiving Healthcare

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

Figure 51:



64. Review the following list and select ALL of the internet-connected devices you currently use:

- a) Computer (desktop or laptop)
- b) Tablet
- c) Smart Phone
- d) Smart Security (Doorbell Cams, Door Locks, Lighting etc.)
- e) Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)
- f) There are no Smart Devices in the home

65. [If 64 includes a)] How many computers are there in the home?

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5+

66. [If 64 includes b)] How many tablets are there in the home?

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5+



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

- a) \$0 to \$9,999
- b) \$10,000 to \$19,999
- c) \$20,000 to \$29,999
- d) \$30,000 to \$39,999
- e) \$40,000 to \$49,999
- f) \$50,000 to \$59,999
- g) \$60,000 to \$69,999
- h) \$70,000 to \$79,999
- i) \$80,000 to \$89,999
- j) \$90,000 to \$99,999
- k) \$100,000 to \$129,000
- l) \$130,000 to \$159,000
- m) More than \$160,000
- n) I do not know
- o) Prefer not to answer

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

- a) The home is owned by you or someone in this household
- b) The home is rented by you or someone in this household
- c) I/We own a mobile home on property that is rented
- d) Some other relationship

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

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5+

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

- a) 0
- b) 1
- c) 2



- d) 3
- e) 4
- f) 5+

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

- a) No formal education
- b) Some high school (no diploma)
- c) High school diploma or equivalent certificate (GED)
- d) Some college credit, no degree
- e) Trade/Technical/Vocational training or certificate
- f) Associate's degree
- g) Bachelor's degree
- h) Postgraduate degree
- i) I don't know
- j) Prefer not to say

72. What is your gender?

- a) Woman
- b) Man
- c) Prefer to self-identify
- d) Prefer not to say

73. [If 72 includes c)] You selected "Prefer to self-identify." Please indicate your gender:

74. 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.

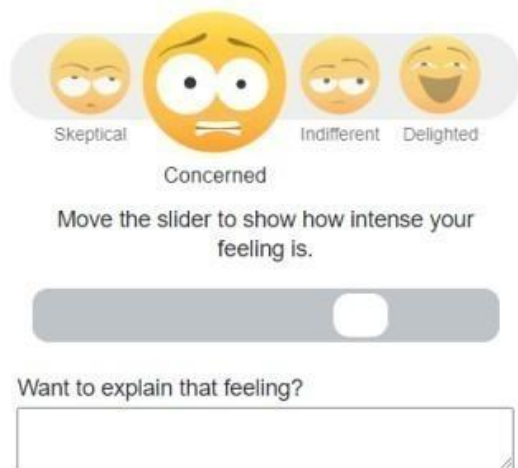
7.5.2 Businesses and Organizations

The Better-Internet Survey is intended to help us understand the needs and experiences of businesses and organizations operating in South Carolina. If your business or organization does not operate in South Carolina, please exit the survey now. PLEASE NOTE: Question numbering in this PDF does not align with the data file. For a complete list of corresponding Questions/Question IDs, please see the tab marked "Full List of Questions" in the .XLSX file provided.



1. **Given your organization’s current access to the internet, how do you feel about its ability to grow and compete?**

Figure 52:



2. **Which statement best describes your organization and its internet connectivity? Please note: If you are operating a business from your home, or you don’t have a physical location, select the “Single location” response that best describes your internet service.**
 - a) Single location with SUFFICIENT internet connection
 - b) Single location with INSUFFICIENT internet connection (slow, unstable, or limited to certain spaces within the location)
 - c) Single location with NO legitimate options for connecting to the internet
 - d) Multiple locations with SUFFICIENT internet connection
 - e) Multiple locations with INSUFFICIENT internet connection (slow, unstable, or limited to certain spaces or locations across the organization)
 - f) Multiple locations with NO legitimate options for connecting to the internet across the organization
3. **[If 2 is d) e), or f)] How many locations do you operate in South Carolina?**
 - a) 2-3
 - b) 4-5
 - c) 6-10
 - d) More than 10
4. **[If 2 is a), b), d), or e)] Please select the Internet Service Provider for your organization from the list below:**
 - a) AT&T
 - b) Breezeline (formerly Atlantic Broadband)



- c) Brightspeed
- d) CarolinaConnect
- e) Cherokee Broadband
- f) Comcast
- g) Comporium
- h) DirectTV
- i) Frontier
- j) FTC
- k) GCI Communications
- l) Hargray
- m) Home Telecom
- n) HTC
- o) HughesNet
- p) Level 3
- q) NetDoctors
- r) NTInet
- s) Open Broadband
- t) Orangeburg County Broadband
- u) Palmeto Rural
- v) Piedmont Rural
- w) Redfi Broadband
- x) RiverNet Connect
- y) Sandhill Telephone
- z) Segra
- aa) Skyrunner
- bb) Spectrum
- cc) Starlink
- dd) TDS
- ee) T-Mobile
- ff) TriCoLink
- gg) Truvista



- hh) Upcountry Fiber
- ii) Verizon
- jj) Viasat
- kk) Vyve
- ll) WCTEL
- mm) Windstream
- nn) WOW
- oo) Other Internet Service Provider
- pp) I do not know

5. [If 2 is a), b), or d)] [ISP SELECTED] offers the following connection types. (and/or) What type of connection do you have at your organization?

- a) DSL (using a telephone line)
- b) Cable (using a black coax television cable)
- c) Fiber
- d) Fixed Wireless
- e) Satellite
- f) I do not know

6. *[If 2 is e)] What type of connection do you have at your most problematic location?

- a) DSL (using a telephone line)
- b) Cable (using a black coax television cable)
- c) Fiber
- d) Fixed Wireless
- e) Satellite
- f) I do not know

7. [If 2 is a) or d)] Please enter the zip code for the main physical location of your organization:

8. [If 2 is b) or e)] Please enter the zip code for the physical location where your organization is experiencing the most negative impact due to poor internet connectivity: (Enter ONLY ONE)

9. [If 2 is c) or f)] Please enter the zip code for the physical location where your organization is experiencing a negative impact due to a lack of internet access:



- 10. [If 2 is a), b), d), or e)] How do you use the internet to run your organization today? Select ALL that apply.**
- a) Operating a website
 - b) Managing our social media presence (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.)
 - c) Conducting marketing and advertising online
 - d) Collecting payments for goods and/or services
 - e) Making payments to vendors and service providers
 - f) Communicating with team members (staff, volunteers, etc.)
 - g) Some other purpose
- 11. [If 10 includes a)] Where can we find your organization online? Please tell us the web address for your organization's website:**
- 12. [If 10 includes b)] Please list any URLs or handles for finding your organization on social media sites (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.)**
- 13. [If 10 includes g)] Please explain other ways in which or organization uses or relies on internet connectivity:**
- 14. [If 2 is b), c), e), or f)] IF you had sufficient internet service, in what ways could or organization benefit? Select ALL that apply.**
- a) Operating a website
 - b) Growing social media presence (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.)
 - c) Participating in or expanding marketing and advertising online
 - d) Collecting payments for goods and/or services
 - e) Making payments to vendors and service providers
 - f) Communicating with team members (staff, volunteers, etc.)
 - g) Some other benefit
- 15. [If 14 is g)] Please explain the other ways in which your organization could benefit from improved internet connectivity:**
- 16. [If 2 is b) or e)] Which statements best summarize your organization's challenges with internet service? Select ALL that apply.**
- a) The options for Internet Service Providers do not meet our needs in terms of speed, reliability or coverage
 - b) We do not have the skillset or knowledge to grow our organization online
 - c) We do not have the device or tools needed to grow our organization online
 - d) The cost of internet service is too high



- e) We are locked into a service contract and cannot change Internet Service Providers
- f) Our contract has data limits that restrict our use or slow down our connection
- g) Some other challenge

17. [If 16 is g)] Please explain the other challenges your organization experiences with internet connectivity:

18. [If 2 is c) or f)] Which statements best summarize your organization's challenges with internet service? Select ALL that apply.

- a) The organization has to manage online assets like our website and social media pages, off-site
- b) There is not Internet Service Provider serving our location
- c) The options for Internet Service Providers do not meet our needs in terms of speed, reliability or coverage
- d) We do not have the skill set or knowledge to grow our organization online
- e) We do not have the device or tools needed to grow our organization online
- f) The cost of internet service is too high
- g) Some other challenge

19. [If 18 includes a)] Where can we find your organization online? Please tell us the web address for your organization's website or list any URLs or handles for finding your organization on social media sites (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.)

20. [If 18 includes g)] Please explain the other challenges your organization experiences as a result of internet connectivity:

21. In general, what do people say about the cell service (reception or reliability) at your organization?

- a) No cell services
- b) Spotty or unstable cell service
- c) Good cell service

22. [if 21 is b), or c)] Please share whatever details you can about cell reception at this location. For example, does poor reception occur in a specific area of the premises? Is it more problematic with certain mobile carriers (e.g., Verizon, AT&T, T-Mobile, etc.)?



23. In what capacity do you serve your organization?

- a) Executive leadership or owner
- b) Leadership for a department or function
- c) Leadership over a particular location run by the organization
- d) Paid team member or employee
- e) Volunteer
- f) Some other roles

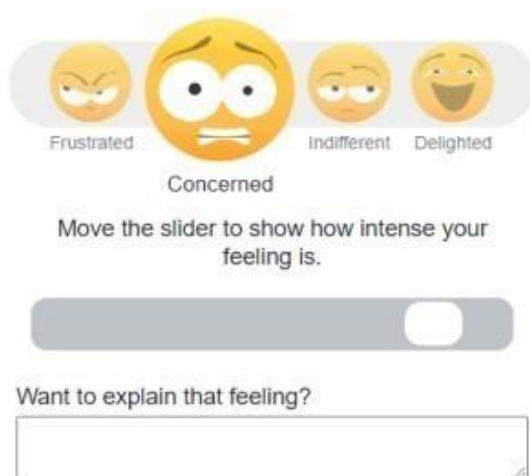
24. [if 23 is f)] Please describe your role or relationship to the organization:

25. Are you a decision-maker when it comes to choosing or renewing your organization's Internet Service Provider?

- a) Yes
- b) No

26. [If 23 is a), b), or c), and 25 is Yes] How do you feel about the amount your organization on pays for its internet service?

Figure 53:



27. Which of the following categories most closely aligns with your organization?

- a) Traditional business (Manufacturing, Retail, Farming or Agribusiness, Insurance, Technology, Transportation, Accommodation, Food Service, etc.)
- b) Community Anchor (Educational Institution, Library, Community Center, Senior Center, Faith Community or Religious Organization, Community Activism Organization, etc.)
- c) Healthcare Service provider (Hospital, Health Clinic or Practice, Mental Health Service, etc.)
- d) Public Safety Department (Police, Fire, EMT, etc.)



28. [If 27 is a)] Is the business a part of a chain or franchise?

- a) No
- b) Yes, the business is part of a CHAIN, but not a franchise
- c) Yes, the business is part of a Franchise and licenses a brand and business model that produces market goods and services

29. [If 27 is a)] Is your business a farm or agribusiness?

- a) Yes
- b) No

30. [If 29 is a)] On the farm, or as a part of the agribusiness, do you utilize any of the following precision farming technologies?

- a) Sensor-based technologies
- b) Satellite-based technologies (e.g., GPS or GNSS)
- c) Farm automation and robotics
- d) Drone technologies
- e) Internet of Things (e.g., Smart irrigation, livestock monitoring, etc.)
- f) Other
- g) None of the above

31. [If 30 is f)] Please list any other precision farming technologies you utilize at the farm or agribusiness:

32. [If 30 is g)] What has kept you from utilizing precision farming technology? Select All that apply.

- a) A lack of dependable internet throughout the farm
- b) The expense of new technology/equipment
- c) The challenge of onboarding new technology and educating the workforce
- d) Some other reason
- e) There is no interest

33. [If 32 includes d)] Please explain what has kept your farm or agribusiness from pursuing precision farming technologies:

34. [If 32 includes a)] If dependable internet access throughout the farm were NOT an issue, which precision farming technologies would you be interested in adopting? Select ALL that apply.

- a) Sensor-based technologies
- b) Satellite-based technologies (e.g., GPS or GNSS)
- c) Farm automation and robotics
- d) Drone technologies



- e) Internet of Things (e.g., Smart irrigation, livestock monitoring, etc.)
- f) Other
- g) None of the above

35. [If 34 includes f)] Please list any other technologies you would be interested in using at the farm or agribusiness:

36. From your perspective, which of the following impact your organization's ability to sustain, grow, and compete? Select ALL that apply.

- a) Skilled Labor
- b) Technology
- c) Supply Chain
- d) Funding
- e) Government Regulation
- f) Other
- g) I do not know

37. [If 36 includes f)] Please identify what other influences are impacting your organization's ability to sustain, grow, and compete:

38. Is your organization focused on serving any of the following?

- a) Individuals who primarily reside in rural areas
- b) Veterans
- c) Students
- d) Racial or ethnic minority group(s)
- e) Individuals living in poverty
- f) Senior citizens (65 years of age and older)
- g) Youth (under 18 years of age)
- h) Individuals with disabilities
- i) Individuals who experience a language barrier
- j) Individuals who are, or have been, incarcerated
- k) Some other group
- l) I do not know
- m) None of the above

39. [If 38 includes k)] Please describe any other groups that your organization is focused on serving:



40. Does the organization allow or require any team members to work remotely?

- a) Yes, CERTAIN ROLES are permitted to work hybrid or fully remote
- b) Yes, ALL employees are permitted to work hybrid or fully remote
- c) No, we require that all employees work on-site
- d) Some other remote-work scenario
- e) I do not know

41. [If 40 is d)] Please describe how your organization approaches remote work:

42. Has your organization's approach to remote work impacted your ability to recruit or retain to talent?

- a) Yes
- b) No
- c) I do not know

43. Does the organization require that any team members have access to the internet (either through their mobile phone plan or a home internet connection) to perform work functions outside of your location?

- a) Yes
- b) No
- c) I do not know

44. Does your organization have dedicated IT staff or a professional services contract for IT support?

- a) Yes, we have dedicated IT staff
- b) Yes, we have a professional services contract for IT support
- c) No, we do not have dedicated IT staff or contracted services for support
- d) Some other solution for IT support
- e) I do not know

45. [If 44 is d)] Please explain how your organization handles its IT support needs:

46. How would you categorize the size of your organization?

47. Fewer than 10 people on staff



48. Fewer than 10 people on staff

- a) Fewer than 10 people on staff
- b) 10-49 people on staff
- c) 50-249 people on staff
- d) 250 or more people on staff
- e) I do not know

49. How long has your organization been in existence?

- a) Less than 1 year
- b) 1-3 years
- c) 4-6 years
- d) 7-9 years
- e) 10 years or more
- f) I do not know

50. Is your organization any of the following? Select ALL that apply.

- a) Veteran-owned or run
- b) Racial or ethnic minority- owned or run
- c) Woman- owned or run
- d) I do not know
- e) None of the above

51. Does your organization provide publicly accessible Wi-Fi and/or internet-ready devices for public use on-site?

- a) Public Wi-Fi
- b) Computers
- c) Tables
- d) Other
- e) I do not know
- f) None of the above

52. Does your organization open your facility for activities NOT related to the regular business of the organization? (E.g., after school programs, community meetings, or otherwise)

- a) Yes
- b) No
- c) I do not know



53. 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 organization's internet experiences and needs.

7.5.3 Government and Municipality

Please select the municipality where you work from the menu provided:

1. As the municipal representative filling out this survey, please supply your contact information on:

- a) Name:
- b) Email:
- c) Job Title:
- d) Telephone:
- e) Telephone Extension:

2. Please provide contact information for the personnel best equipped to answer additional questions pertaining to technical infrastructure at the municipality:

- a) Name:
- b) Email:
- c) Telephone:
- d) Telephone Extension:

3. How many facilities does the municipality operate? Examples of facilities include buildings, structures, parks, recreation facilities, and waste sites.

- a) 1
- b) 2-4
- c) 5-10
- d) 11-20
- e) 20 or more

4. How would you characterize IT Support at the municipality?

- a) The municipality has a dedicated IT DEPARTMENT
- b) The municipality has some dedicated IT STAFF
- c) The municipality has CONTRACTED IT SUPPORT
- d) Some OTHER IT solution
- e) NONE of the above
- f) I do not know



5. (IF 4 is d)) You indicated that the municipality uses “Some Other IT Solution.” Please explain:
6. When you think about cybersecurity, how do you feel about the municipality’s ability to protected sensitive data? (E.g., personally identifiable information, account, and payment method information, etc.)

Figure 54:

Frustrated Concerned Indifferent Comfortable

Move the slider to show how intense your feeling is.

Want to explain that feeling?

7. What challenges negatively impact the municipality’s ability to connect with, and deliver online services to your community? Select ALL that apply.
 - a) Infrastructure
 - b) Budget
 - c) Awareness
 - d) IT Staff
 - e) Other Staff (Communications, Administrative, Social Media, Design, etc.)
 - f) Not Applicable
 - g) OTHER
8. [If 8 is g]] You selected some “OTHER” challenge impacting the municipality’s ability to improve connectivity and functionality for delivering online services to communities. Please explain:



9. In terms of skill-building for municipal staff, what kind of training would help you better serve your citizens? Select ALL that apply.

- a) Operating or Maintaining Office Equipment
- b) Using Common Software Programs
- c) Visual Branding (Graphic and Web Design)
- d) Driving Communications and Social Media
- e) Building or Managing Cybersecurity Protocols
- f) OTHER

10. [If 10 is f)] You indicated a need for “OTHER” skill-building and training opportunities for municipal staff. Please explain:

11. What online services does your municipality currently offer on your website? Select ALL that apply.

- a) Utility Bill-Pay
- b) Document Search (deeds, mortgages, liens, plats, etc.)
- c) Solid Waste Collection Bill-Pay
- d) Stormwater Fees Bill-Pay
- e) Business License Renewal and Bill-Pay
- f) Hospitality Tax Bill-Pay
- g) Local Accommodations Tax Bill-Pay
- h) Traffic Ticket Bill-Pay
- i) Parking Ticket Bill-Pay
- j) Court Fines Bill-Pay
- k) Building and Zoning Permits and Inspections
- l) Property Tax Bill-Pay
- m) Personal Property Tax Bill-Pay (vehicles, campers, boats, and motors)
- n) Parks and Recreation (program reservations, sign-ups, fees, and other programming)
- o) City or Town Council Livestream
- p) City or Town Council District Lists or Maps
- q) Voting Districts and Precinct Locations
- r) Calendar of Meetings and Events
- s) Bid Opportunities
- t) Citizen Alert System



- u) FOIA Requests
- v) Online Service Requests
- w) Online Problem or Complaint Reporting
- x) OTHER

12. [If 12 includes x)] You indicated the municipality provides “OTHER” online services. Please explain:

13. What online services would the municipality like to add to your website in the future? Select ALL that apply.

- a) Utility Bill-Pay
- b) Document Search (deeds, mortgages, liens, plats, etc.)
- c) Solid Waste Collection Bill-Pay
- d) Stormwater Fees Bill-Pay
- e) Business License Renewal and Bill-Pay
- f) Hospitality Tax Bill-Pay
- g) Local Accommodations Tax Bill-Pay
- h) Traffic Ticket Bill-Pay
- i) Parking Ticket Bill-Pay
- j) Court Fines Bill-Pay
- k) Building and Zoning Permits and Inspections
- l) Property Tax Bill-Pay
- m) Personal Property Tax Bill-Pay (vehicles, campers, boats, and motors)
- n) Parks and Recreation (program reservations, sign-ups, fees, and other programming)
- o) City or Town Council Livestream
- p) City or Town Council District Lists or Maps
- q) Voting Districts and Precinct Locations
- r) Calendar of Meetings and Events
- s) Bid Opportunities
- t) Citizen Alert System
- u) FOIA Requests
- v) Online Service Requests
- w) Online Problem or Complaint Reporting
- x) OTHER



- 14. [If 14 is x]] You indicated the municipality would like to provide “OTHER” online services. Please explain:**
- 15. Does the municipality currently have any additional online services planned or under development? If so, please explain:**
- 16. In terms of constituent usage, what are the most popular services the municipality offers on your website? Select up to 3.**
- a) Utility Bill-Pay
 - b) Document Search (deeds, mortgages, liens, plats, etc.)
 - c) Solid Waste Collection Bill-Pay
 - d) Stormwater Fees Bill-Pay
 - e) Business License Renewal and Bill-Pay
 - f) Hospitality Tax Bill-Pay
 - g) Local Accommodations Tax Bill-Pay
 - h) Traffic Ticket Bill-Pay
 - i) Parking Ticket Bill-Pay
 - j) Court Fines Bill-Pay
 - k) Building and Zoning Permits and Inspections
 - l) Property Tax Bill-Pay
 - m) Personal Property Tax Bill-Pay (vehicles, campers, boats and motors)
 - n) Parks and Recreation (program reservations, sign-ups, fees and other programming)
 - o) County/City or Town Council Livestream
 - p) County/City or Town Council District Lists or Maps
 - q) Voting Districts and Precinct Locations
 - r) Calendar of Meetings and Events
 - s) Bid Opportunities
 - t) Citizen Alert System
 - u) FOIA Requests
 - v) Online Service Requests
 - w) Online Problem or Complaint Reporting
 - x) OTHER
- 17. [If 17 is x]] You indicated some “OTHER” online service provided by the municipality is the most popular. Please explain:**



18. When you think about emergency preparedness, how do you feel about the municipality’s ability to respond using current technology?

Figure 55:

Frustrated Concerned Indifferent Comfortable

Move the slider to show how intense your feeling is.

Want to explain that feeling?

19. Have we missed anything? We’re on a mission to ensure that municipalities across the state have equitable access to the tools and resources needed to serve South Carolina residents. We’re here to listen. Please take this opportunity to share more about your experiences and needs at the municipality:

7.5.4 Public Libraries

Figure 56:

Broadband Asset Inventory Survey - Public Libraries

The survey will take approximately 6 minutes to complete.

As part of statewide broadband efforts, Clemson University is assisting with identifying assets relating to broadband and internet connectivity.

Please take a few minutes to complete this short survey to help guide the broadband investments being planned across South Carolina.

Additional information about this initiative can be found at www.getconnectedsc.org



* Required

1. County *

Enter your answer

2. Email address of person filling out form *

Enter your answer

3. Please list digital literacy and skills programs provided by organization (put N/A if none) *

Enter your answer

4. Please list other organizations providing digital literacy and skills programs in your county (put N/A if none) *

Enter your answer



5. Please list all types of devices loaned (Examples: hotspots, laptops, chromebooks, tablets, etc.) (put N/A if none) *

Enter your answer

6. If organization provides subsidized or low-cost devices, please list all types of devices (Examples: computers, tablets, etc.) (put N/A if none) *

Enter your answer

7. Does the organization have a Digital Navigators program? *

Yes

No



8. Does the organization conduct awareness and outreach activities of digital inclusion programming and resources (e.g., marketing and awareness campaigns)? *

Yes

No

9. Please list any broadband or digital equity coalitions in your county (put N/A if not aware of any) *

Enter your answer

10. Please specify role in any broadband or digital equity coalitions (put N/A if not involved) *

Enter your answer



11. Please list any utility assistance programs for consumers with limited incomes in your county (put N/A if not aware of any) *

Enter your answer

12. Please list any public wifi networks available in your county other than those provided by the library and public schools (put N/A if not aware of any) *

Enter your answer

Submit

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7.5.5 Public Schools

Figure 57:

Broadband Asset Inventory Survey - Education System

The survey will take approximately 6 minutes to complete.

As part of statewide broadband efforts, Clemson University is assisting with identifying assets relating to broadband and internet connectivity.

Please take a few minutes to complete this short survey to help guide the broadband investments being planned across South Carolina.

Additional information about this initiative can be found at www.getconnectedsc.org



* Required

1. District name *

Enter your answer

2. Email address of person filling out form *

Enter your answer

3. Please list digital literacy and skills training programs provided by organization (put N/A if none)

*

Enter your answer

4. If the organization provides one-to-one computer program, please provide details, including grade levels. (Put N/A if none) *

Enter your answer

5. If organization loans devices, please list all types of devices loaned by grade level (Examples: hotspots, laptops, chromebooks, tablets, etc.) (put N/A if none) *

Enter your answer

6. If organization provides subsidized or low-cost devices, please list all types of devices (Examples: computers, tablets, etc.) *

Enter your answer



7. If the organization provides access to Wi-Fi, networks and public access points, please provide details of access. (Example: public wifi on school grounds, hotspots on school buses, etc.) (Put N/A if none) *

Enter your answer

8. If the organization provides public access to computing labs, please provide details. (Put N/A if none) *

Enter your answer

9. Please list any software/equipment access provided for accessibility. (Examples: screen reading, large print keyboards, adaptive mice, etc.) (Put N/A if none) *

Enter your answer

Submit

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8 Appendices (PDF)

8.1 Survey Analysis (USC)



**BROADBAND
OFFICE**

**Get
Connected
SC**

BETTER
INTERNET
FOR A
BETTER
SOUTH
CAROLINA



BETTER-INTERNET SURVEY

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



UNIVERSITY OF
South Carolina

**Get
Connected
SC**

BETTER
INTERNET
FOR A
BETTER
SOUTH
CAROLINA

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.



UNIVERSITY OF
South Carolina

Get
Connected
Get SC
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Get SC
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SC

BETTER
INTERNET
FOR A
BETTER
SOUTH
CAROLINA

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.



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BACKGROUND

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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 Natafji, 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. Natafji'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. Natafqi 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**
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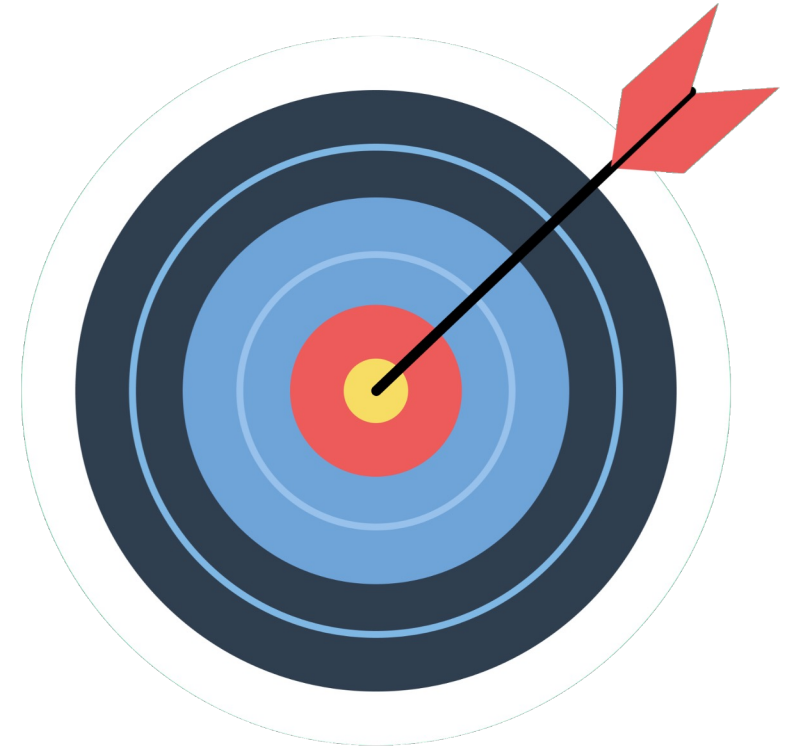


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OUR OBJECTIVES

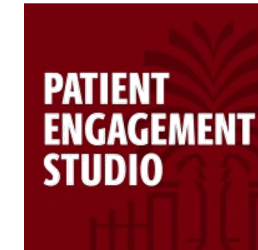
The USC was tasked **to identify areas of greatest need to help bring reliable, high-speed internet to every South Carolinian** through achieving the following charges:

- 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

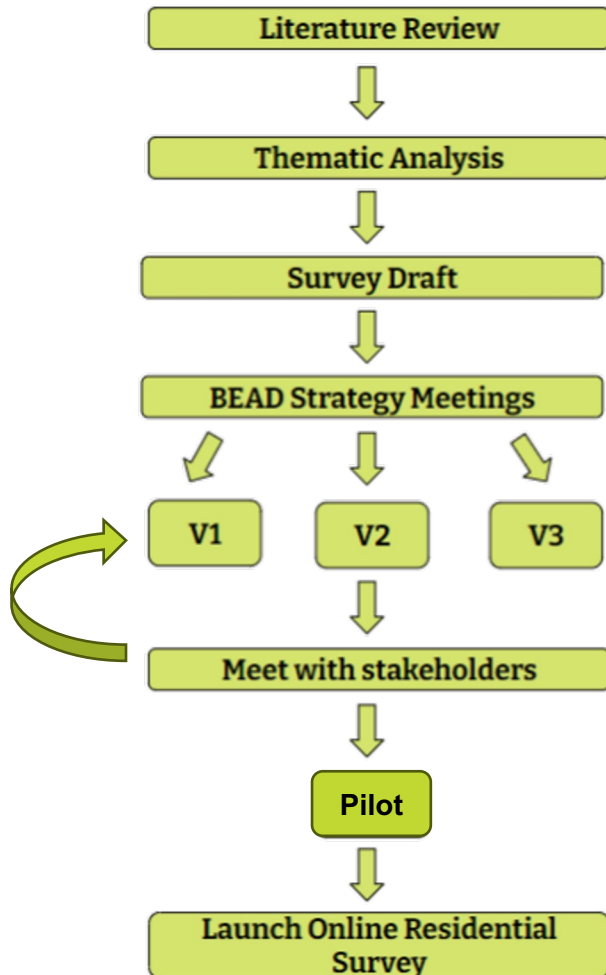


Figure 1: Better Internet Survey Design Process

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.

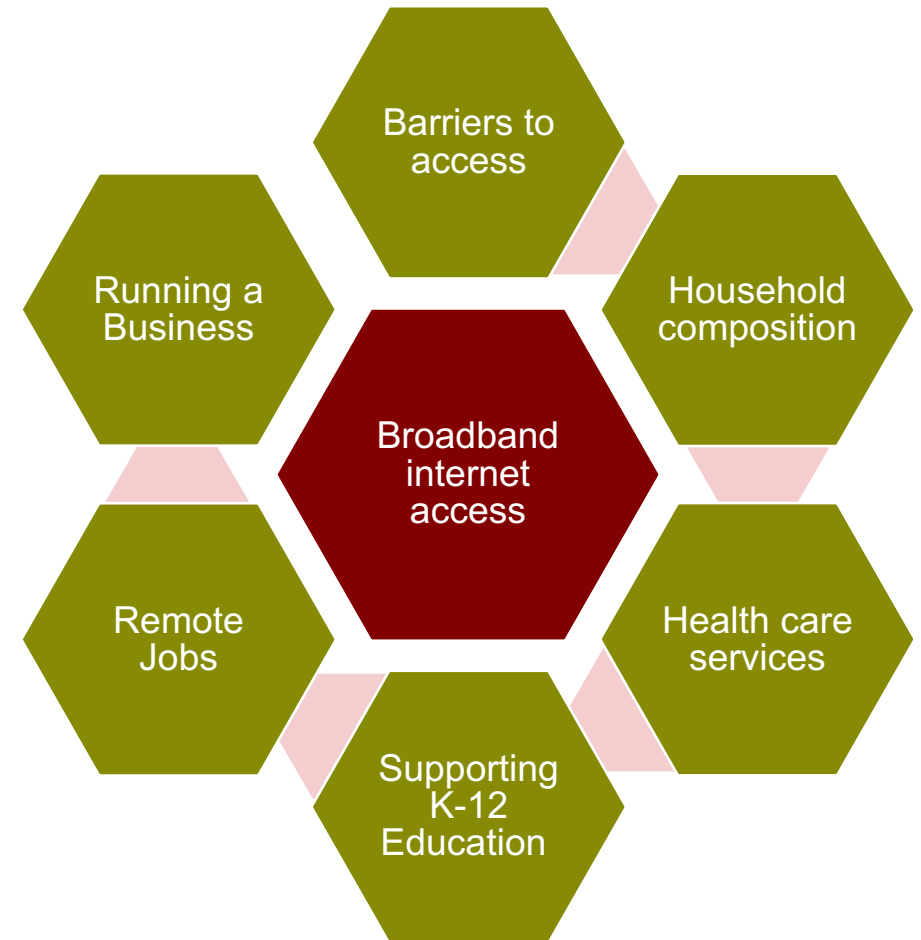


Figure 2: Better Internet Survey Domains



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
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



UNIVERSITY OF South Carolina

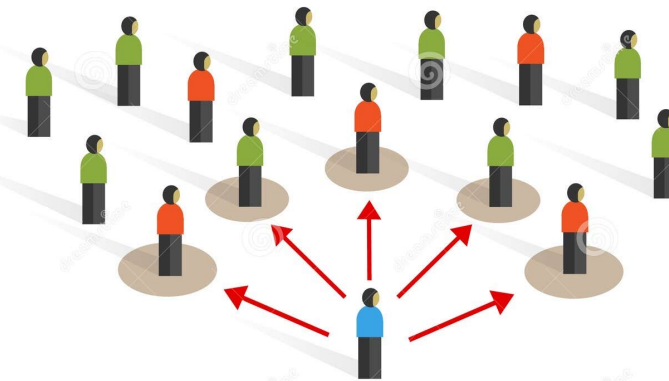
SAMPLING STRATEGY

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.

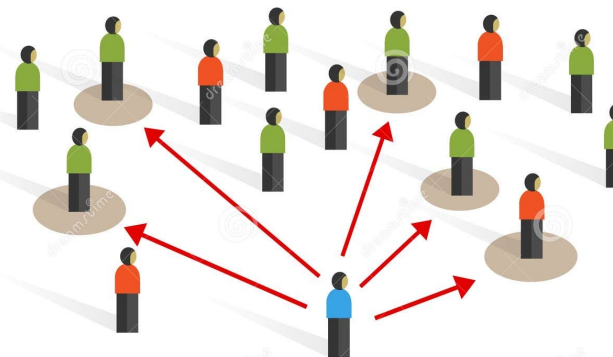
Potential Biases and Interpretation:

- 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).

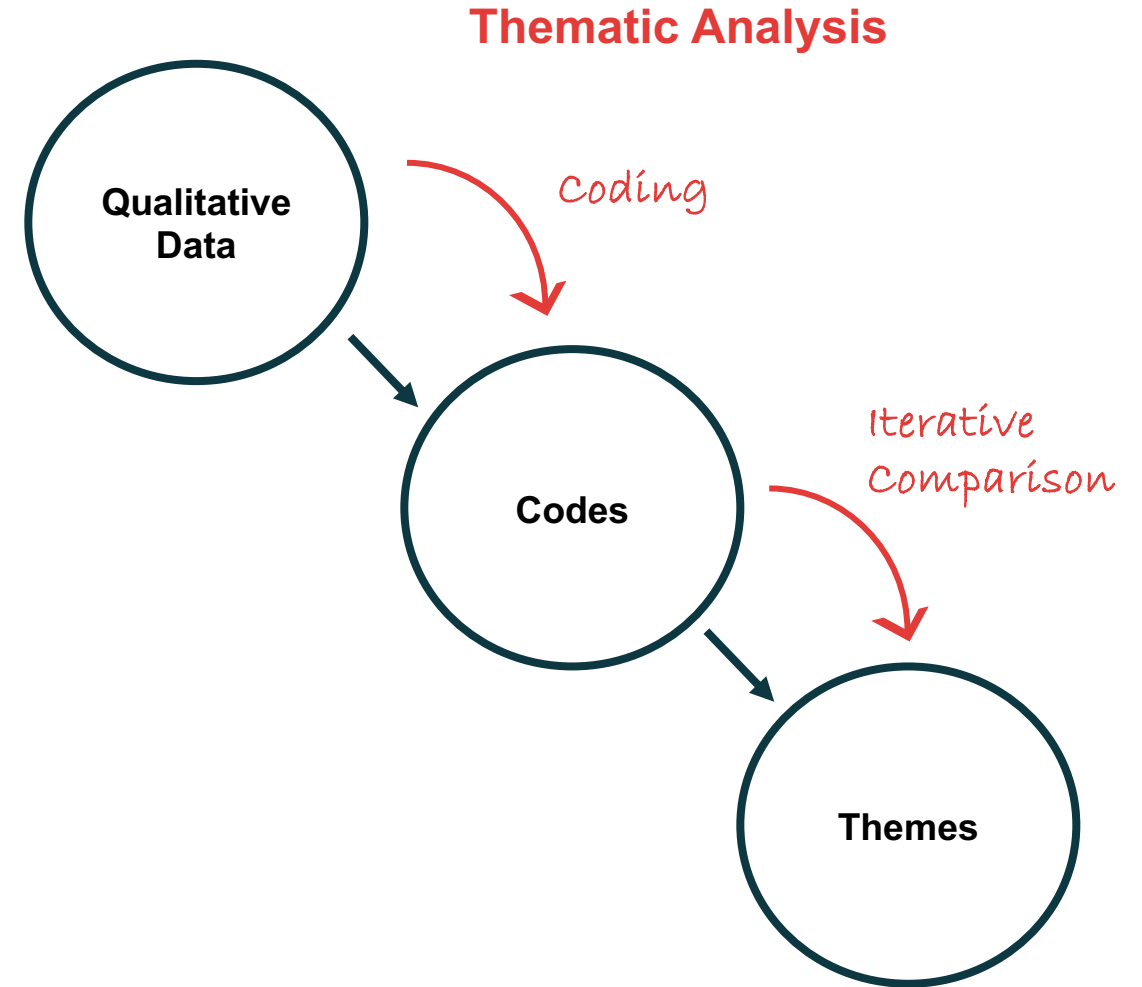
For the purposes of this report, the USC analytic team followed an approach of using ALL data, *whenever available*. We did not impute (i.e., replace missing data with substituted values) nor remove surveys that were not considered ‘Complete’ (i.e., dropout of all responses that miss one or more questions 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)

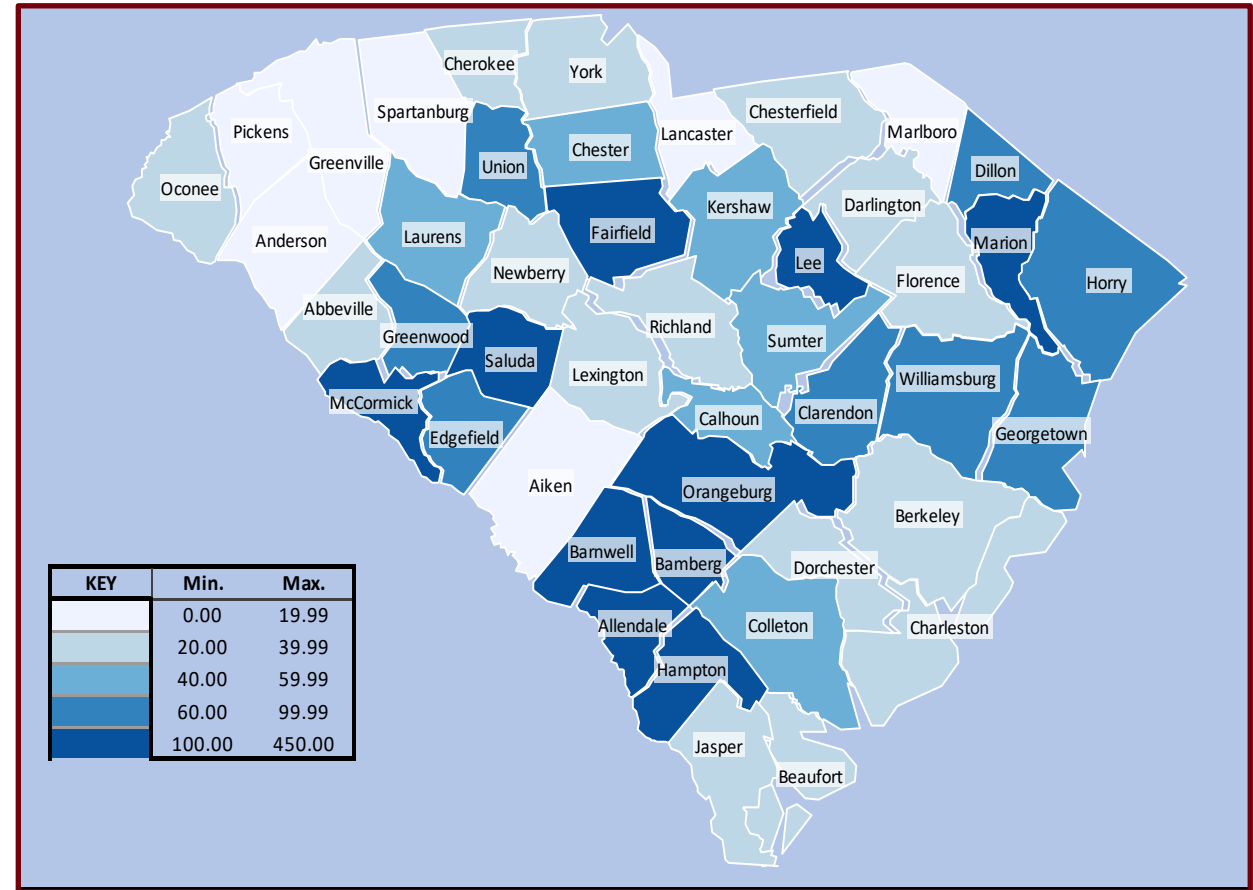


Figure 3a: Survey participation rate (per 10,000) of population per county

PARTICIPATION RATE, BY ZIP CODE

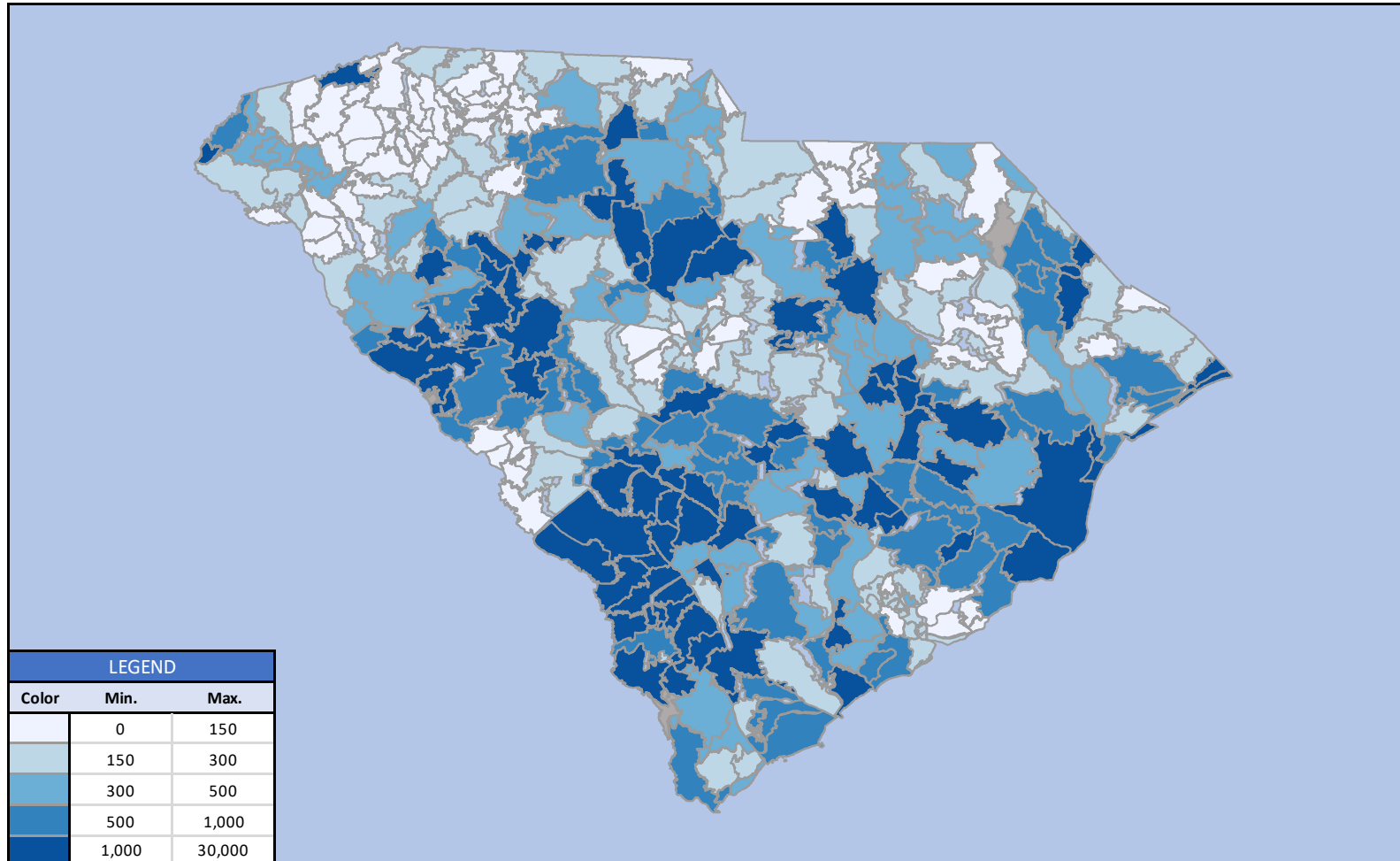


Figure 3b: Survey participation rate (per 100,000) of population per zip code



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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SC

UNDER/UNSERVED COMMUNITY

The **Under/Unserviced 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.
- **Unserviced Community** as those who do not have Internet at home or access the Internet via cell only and wants it.

51%

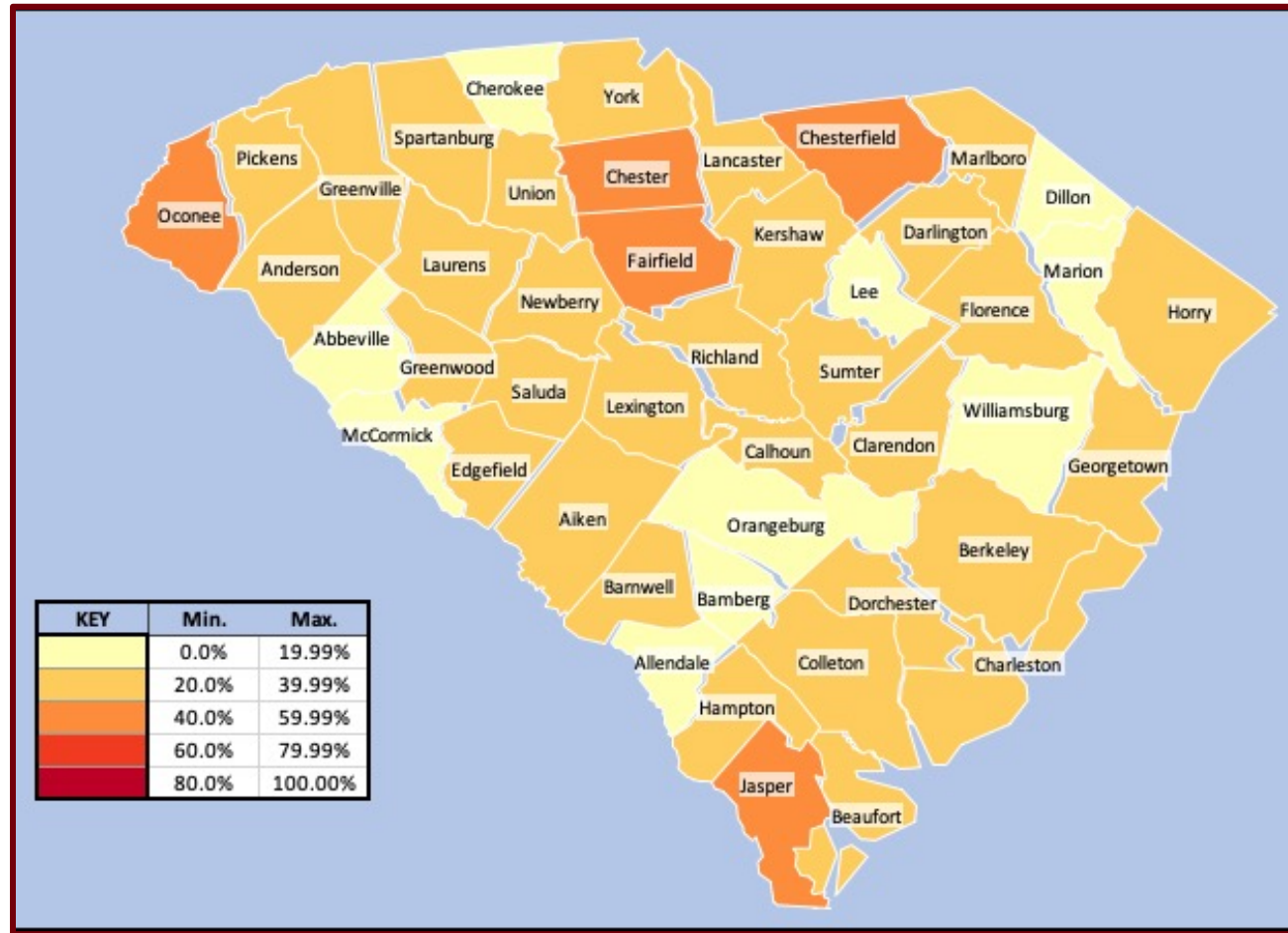
		Has Internet: Needs Met	Has Internet: Needs Not Met	No Internet or Cell Only: Wants It	No Internet or Cell Only: Does not want it
All Available Responses	Count (n) N=16,126*	7,355	4,341	3,874	556
	Percent (%)	45.6%	26.9%	24.0%	3.5%
'Complete' Surveys only	Count (n) N=13,024	5,656	3,382	3,494	492
	Percent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

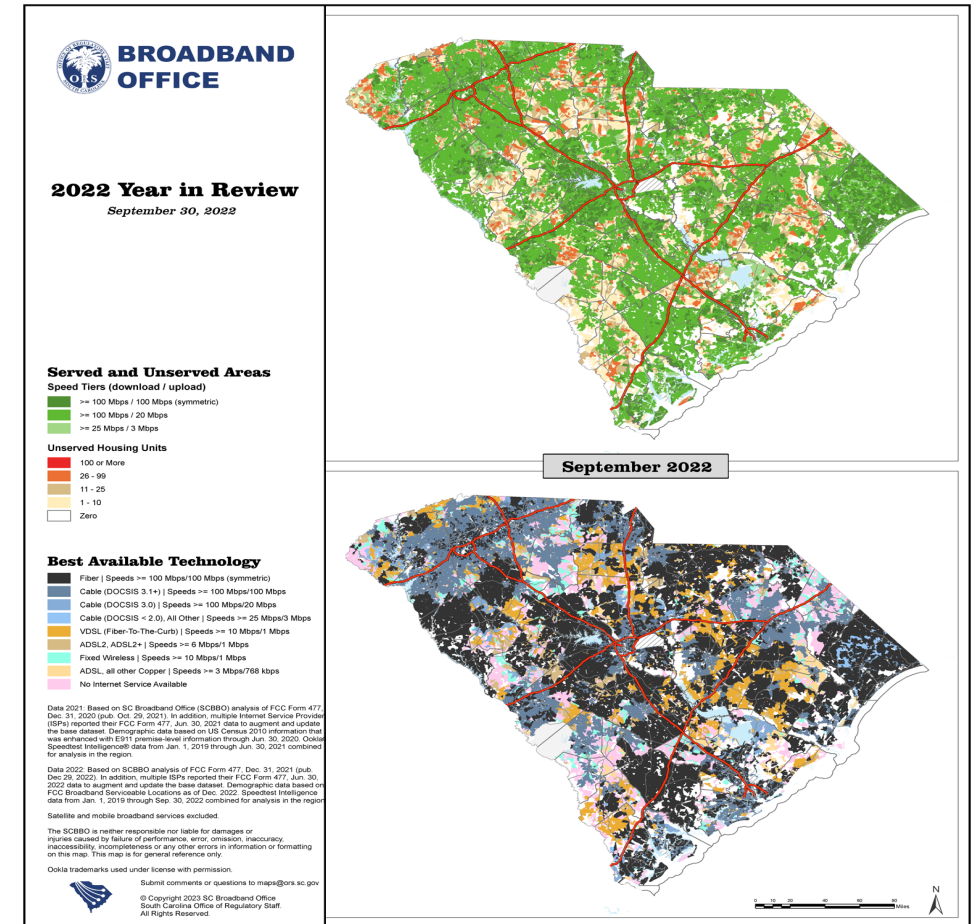
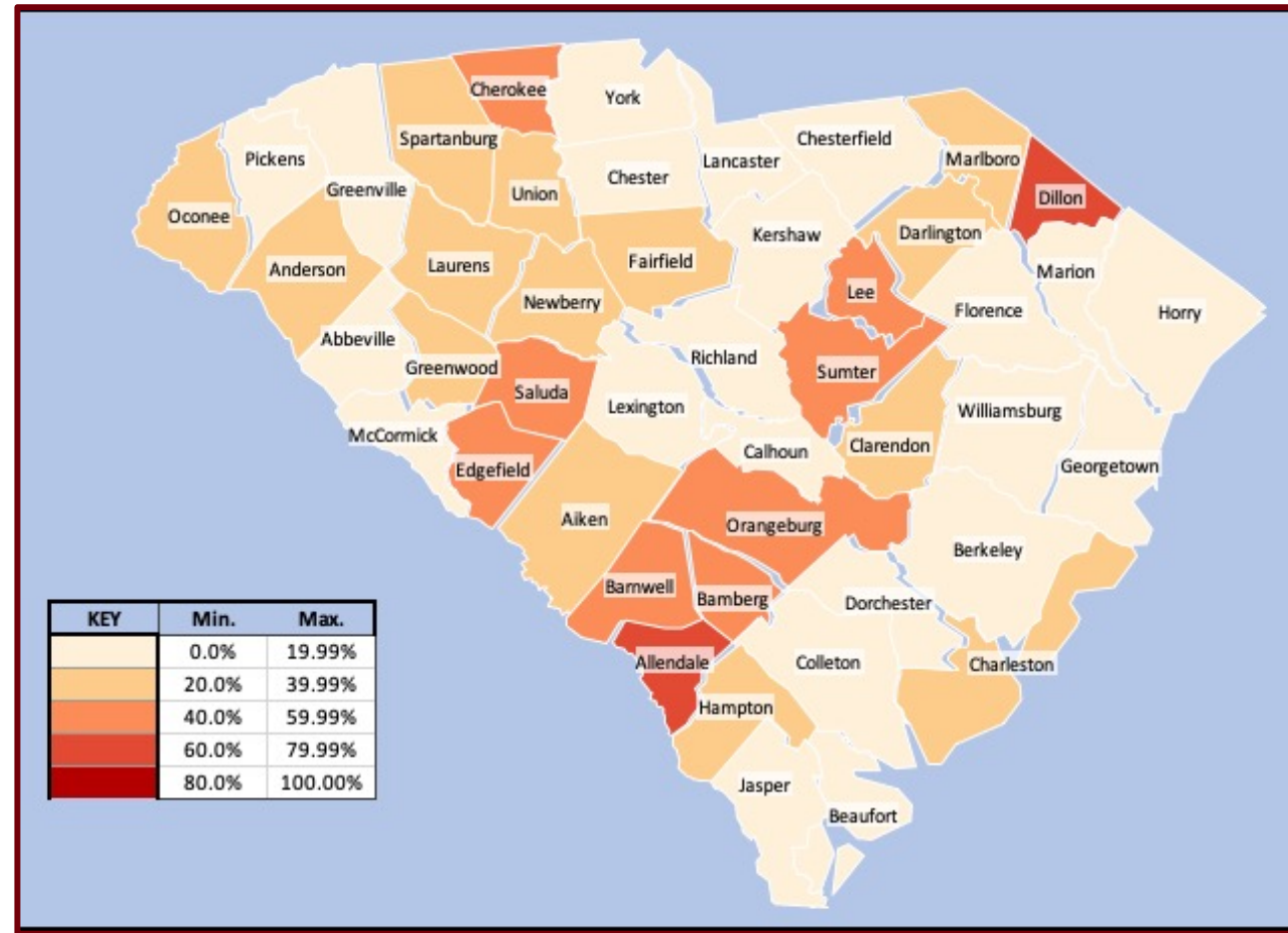
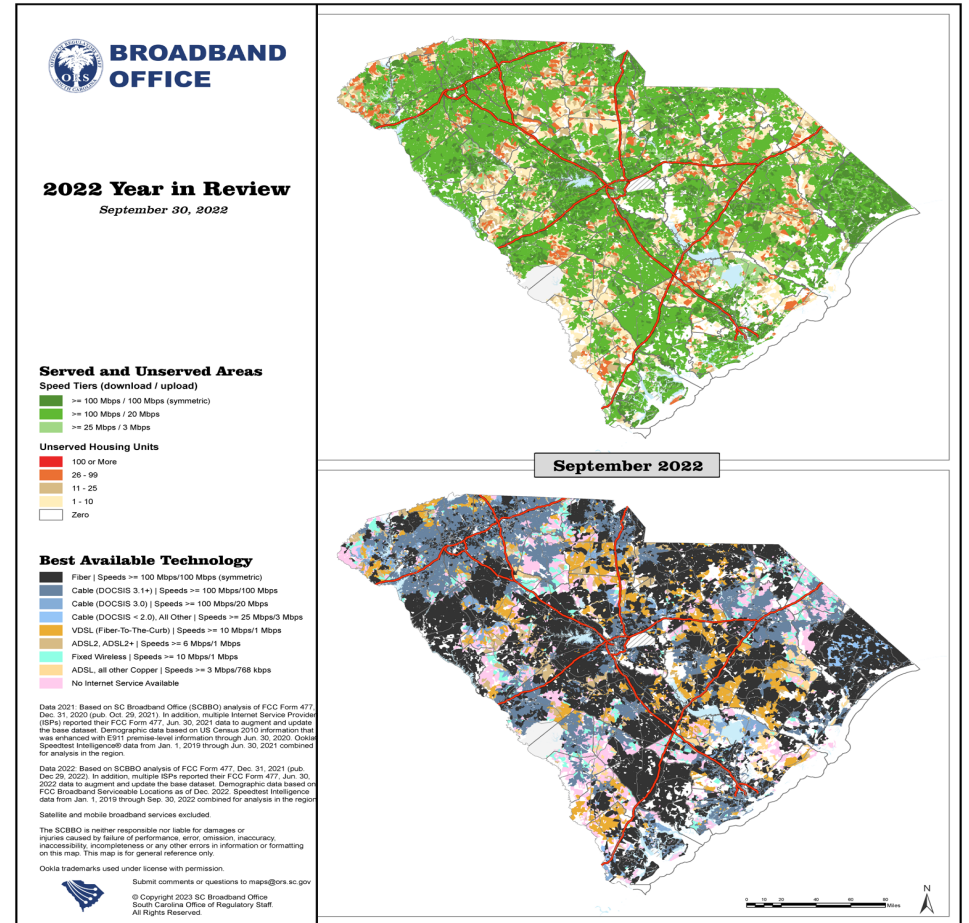


Figure 4: Geography of Underserved Communities: Percentage (% out of all county responses) of underserved communities per county

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/>

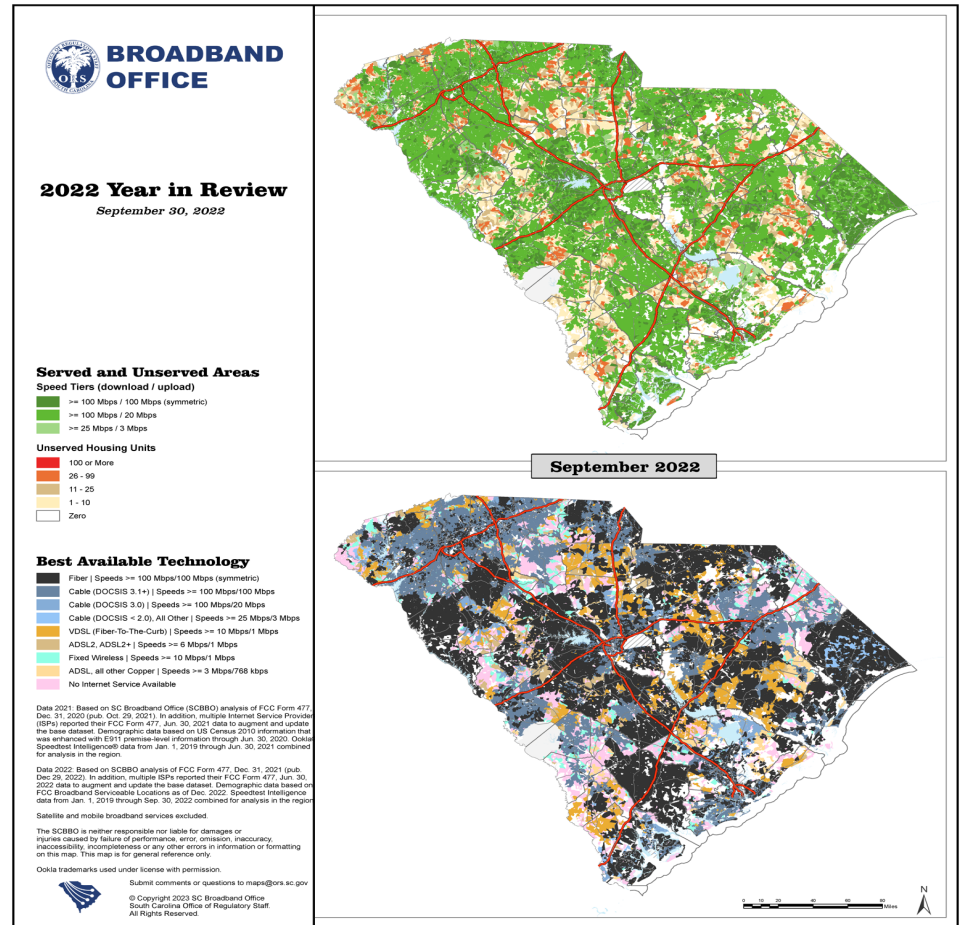
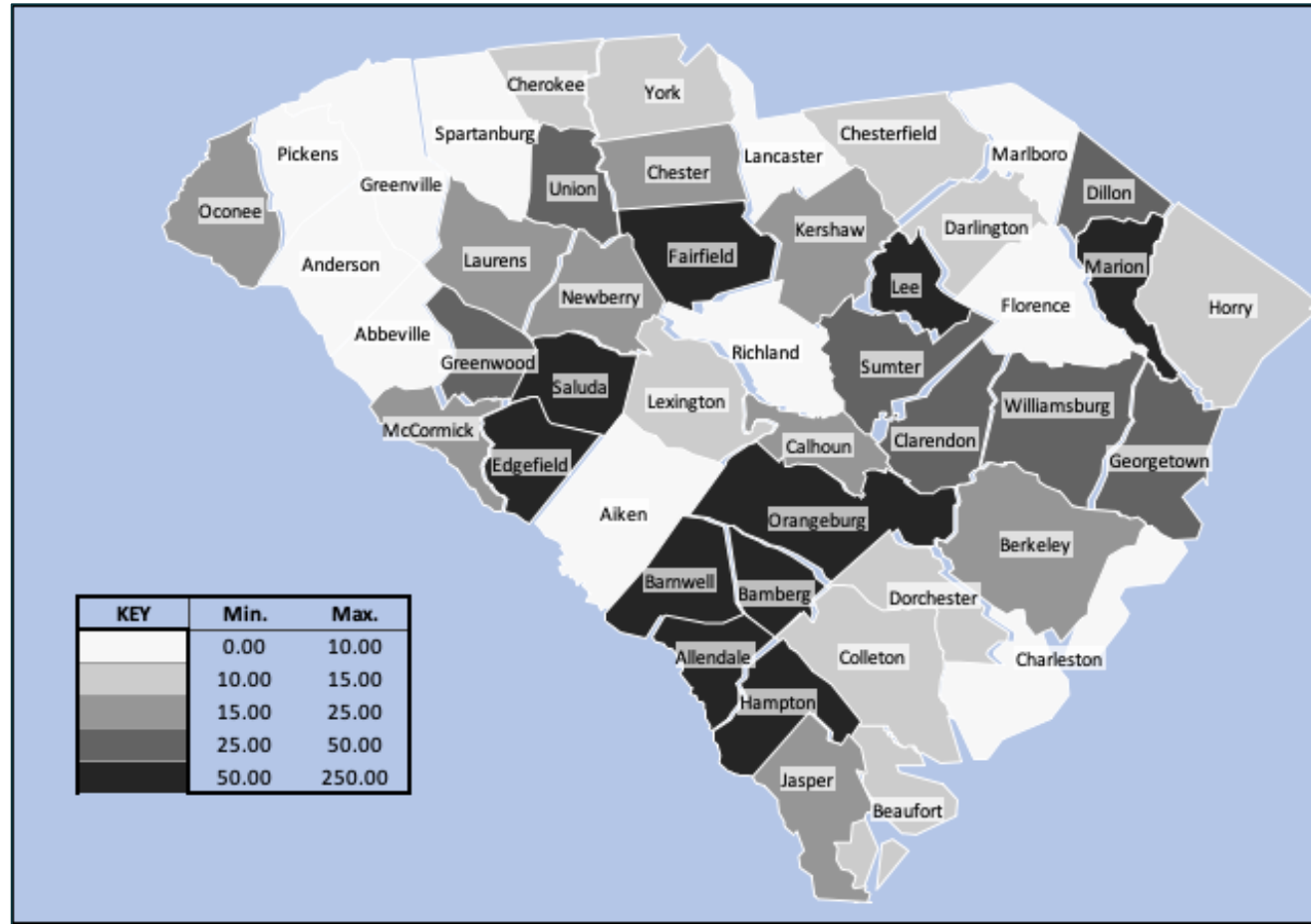


Figure 6: Geography of Under/Unserved Communities: Rate (per 10,000) of Under/ Unserved community per county

GEOGRAPHY OF SERVED COMMUNITIES

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

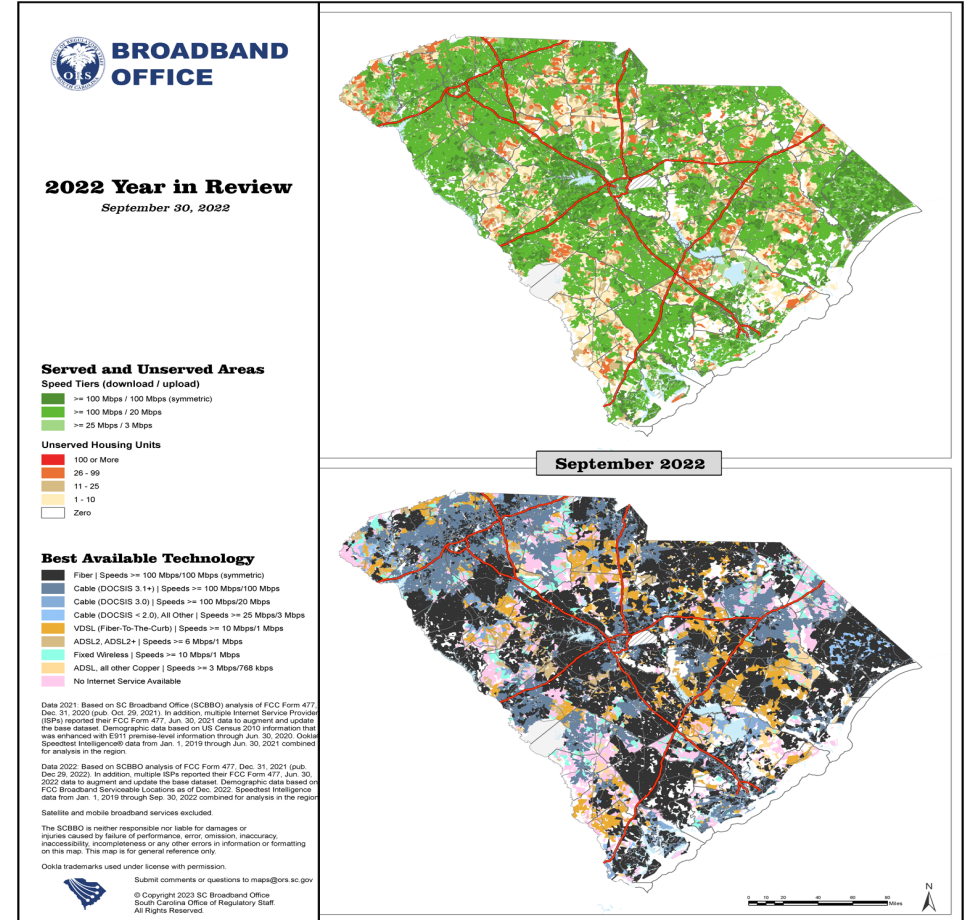
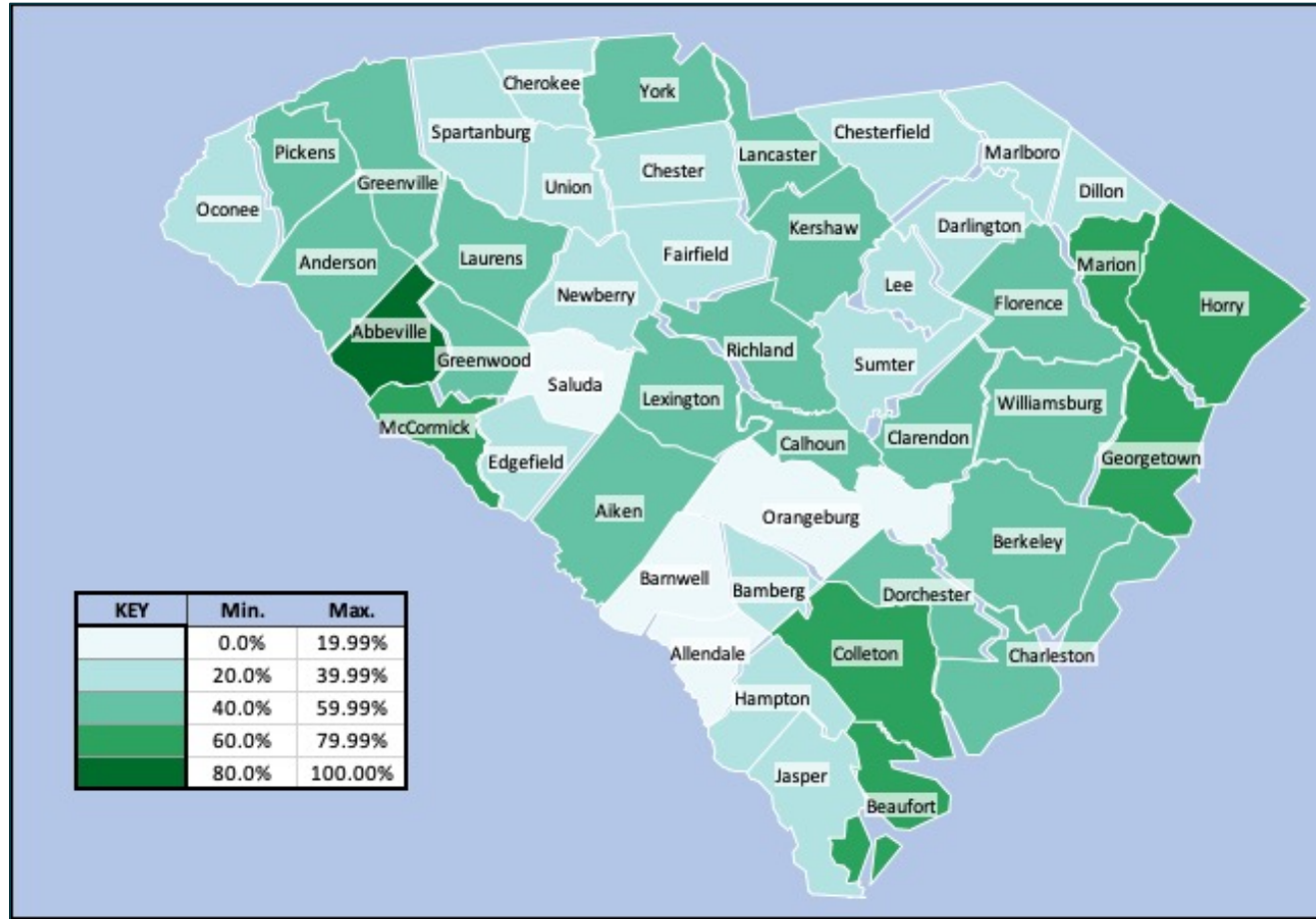


Figure 7: Geography of **Served** Communities: Percentage (% out of all county responses) of served community per county

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?

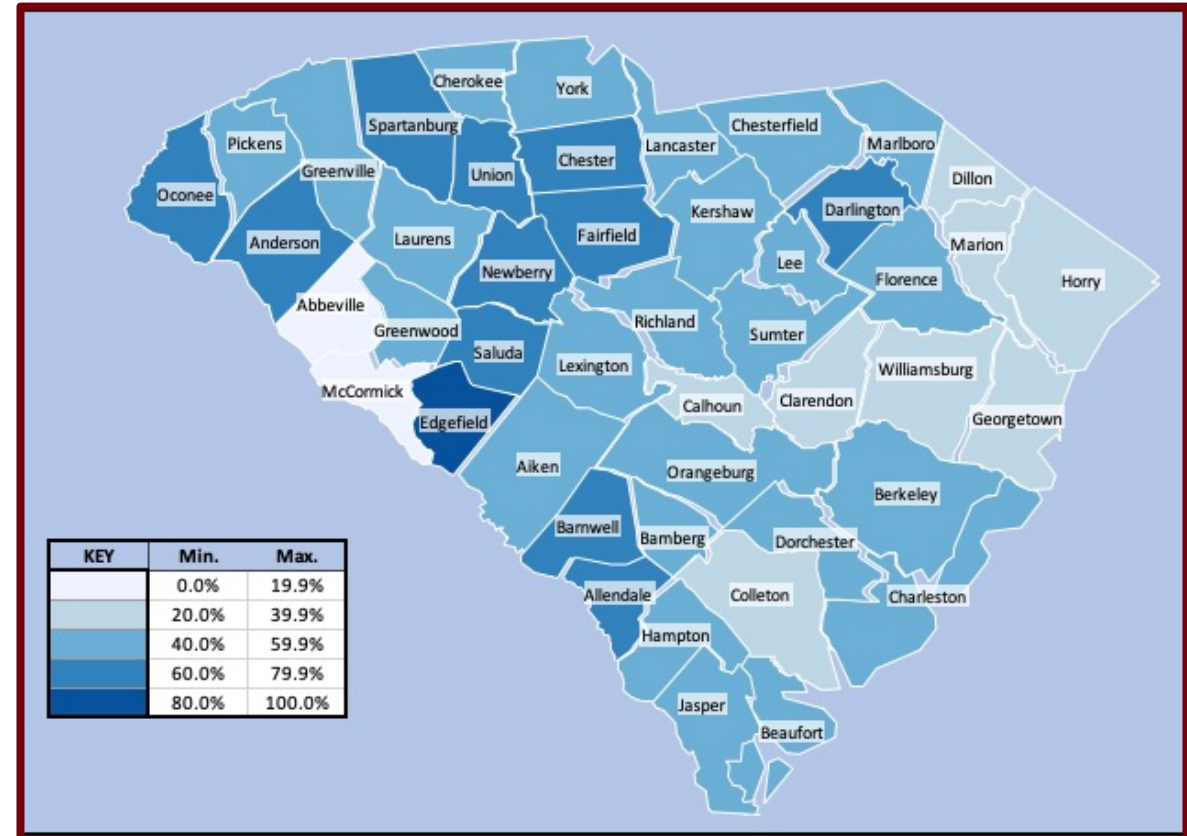


Figure 8: Geography of Negative Feelings (Frustrated and Stressed) about Home Internet, Percentage (% out of all county responses) by county



FEELING ABOUT OPTIONS

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



■ Delighted

■ Frustrated

■ Indifferent

■ Stressed

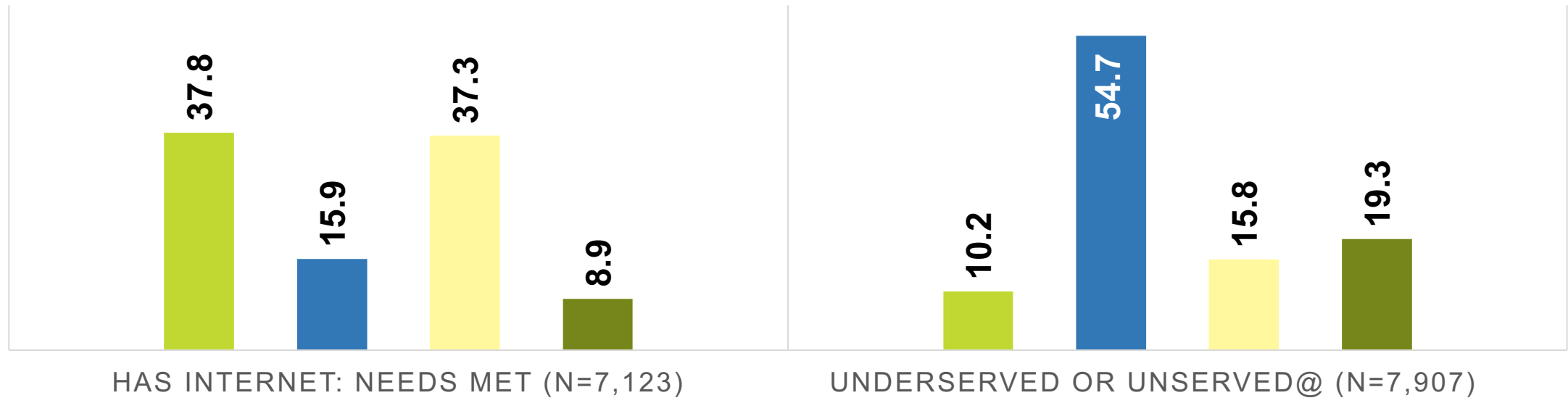


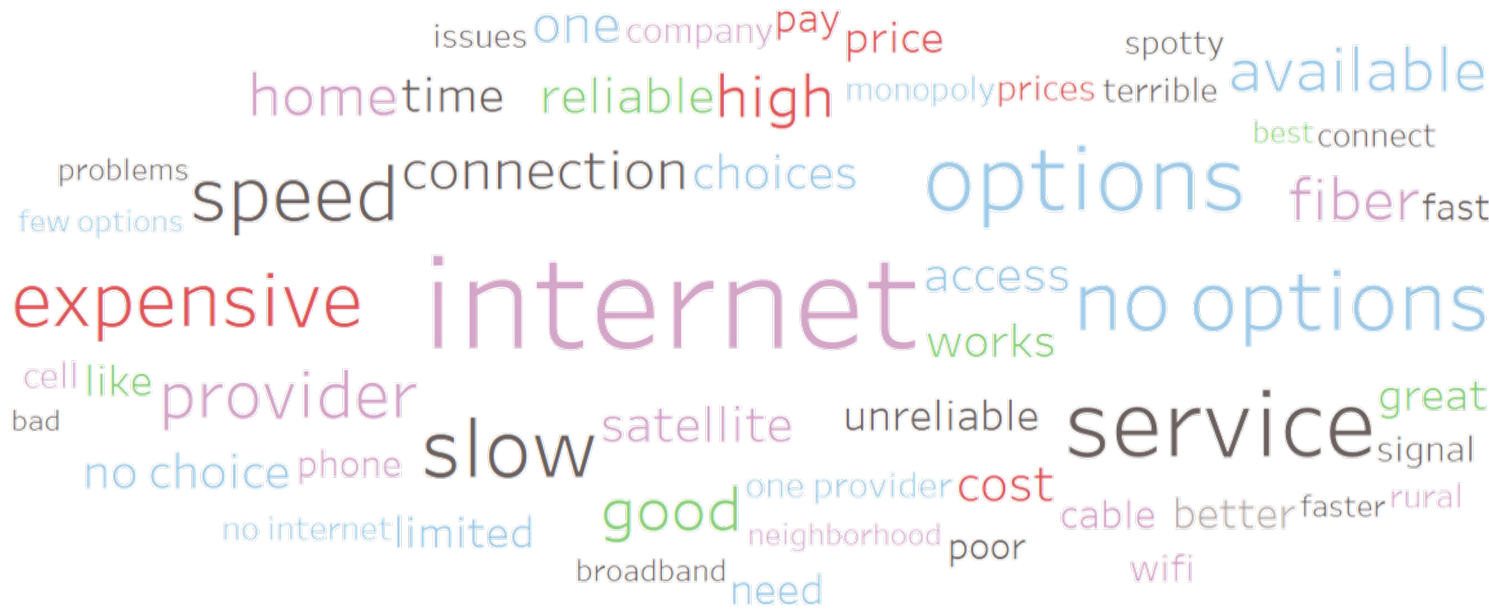
Figure 9: Feeling about current options for connecting to the Internet, by needs (met vs. unmet)



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}



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

	positive comments about internet
	other

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



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
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: $n/(N-\text{missing}) \times 100$



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; Hispanics/Latinos had the highest percentage of unserved (no internet).

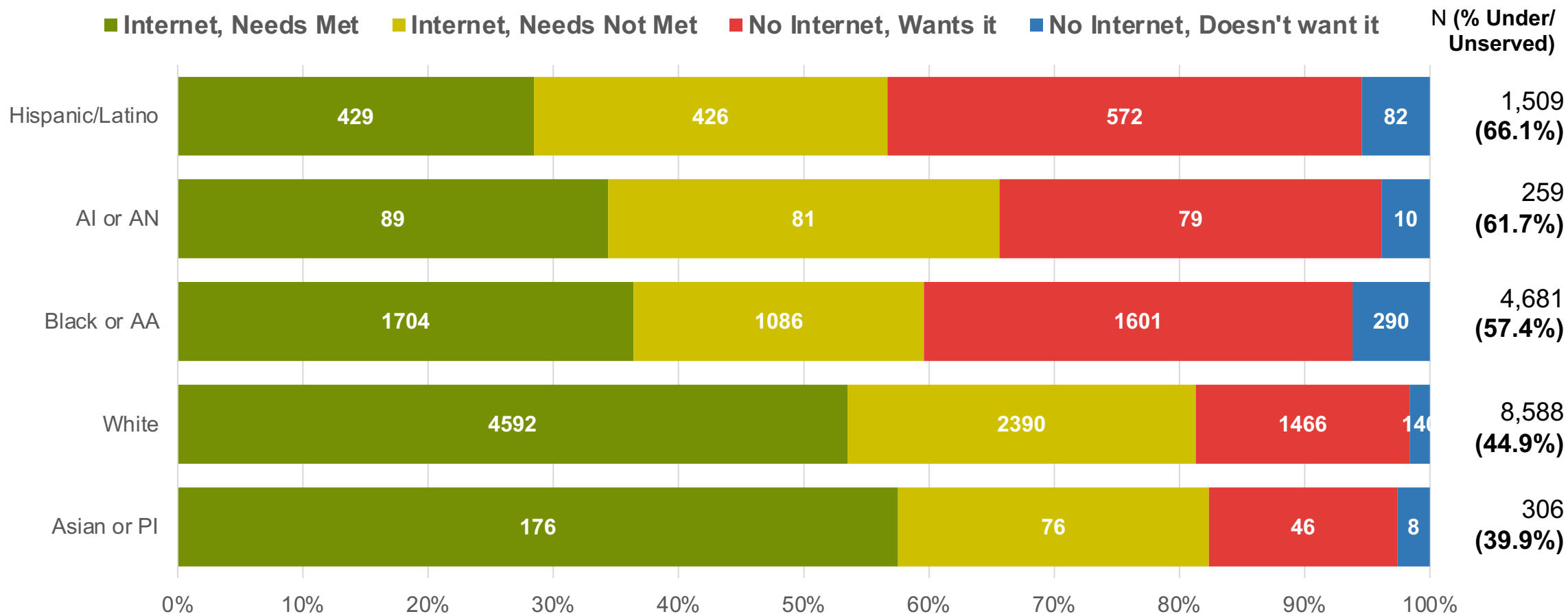


Figure 10: Internet Needs by household race/ethnicity



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

^{*} 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

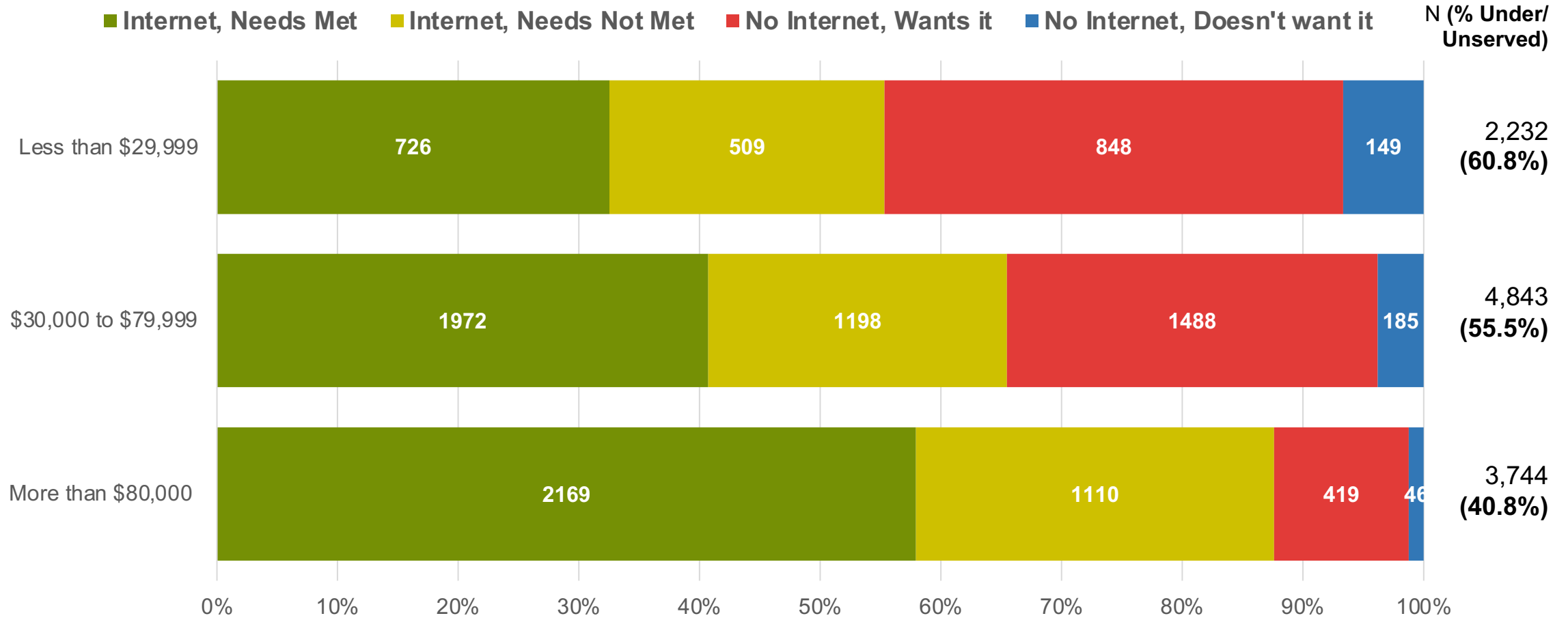


Figure 11: Internet Needs by household income



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

51 * 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

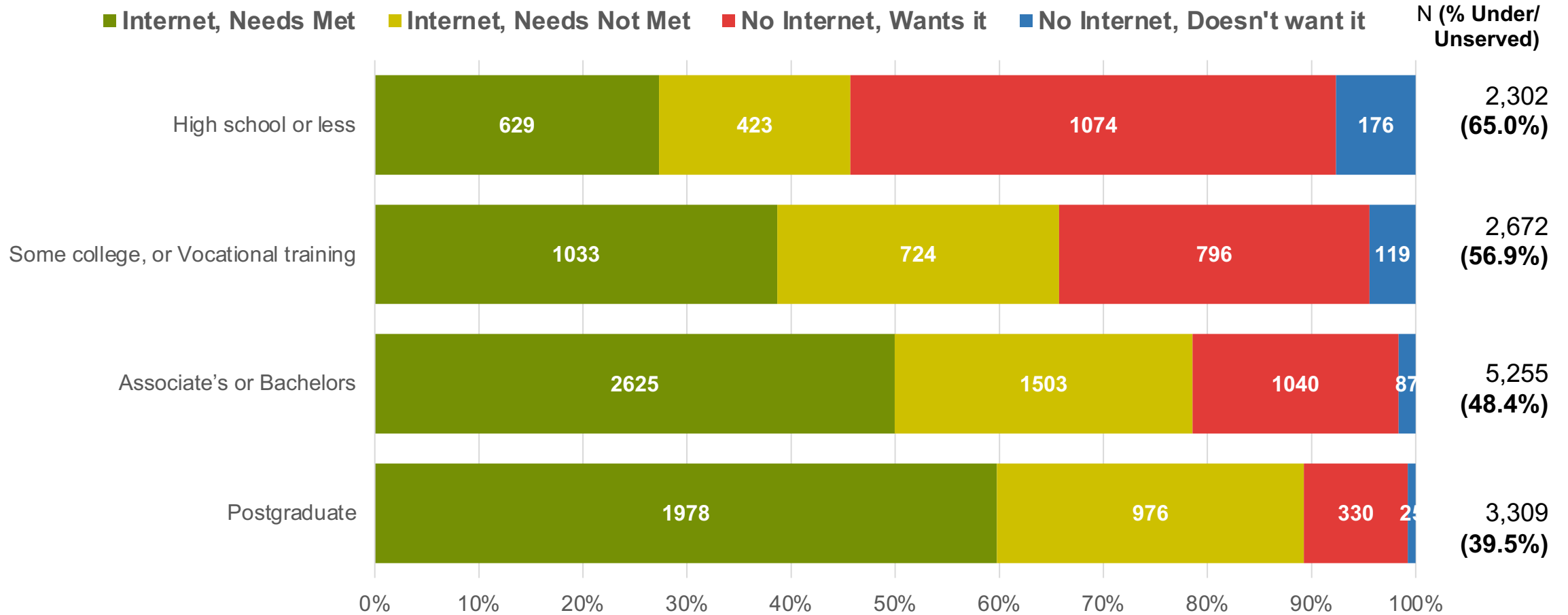


Figure 12: Internet Needs by household highest education level



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

53 * 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 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

54 * 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

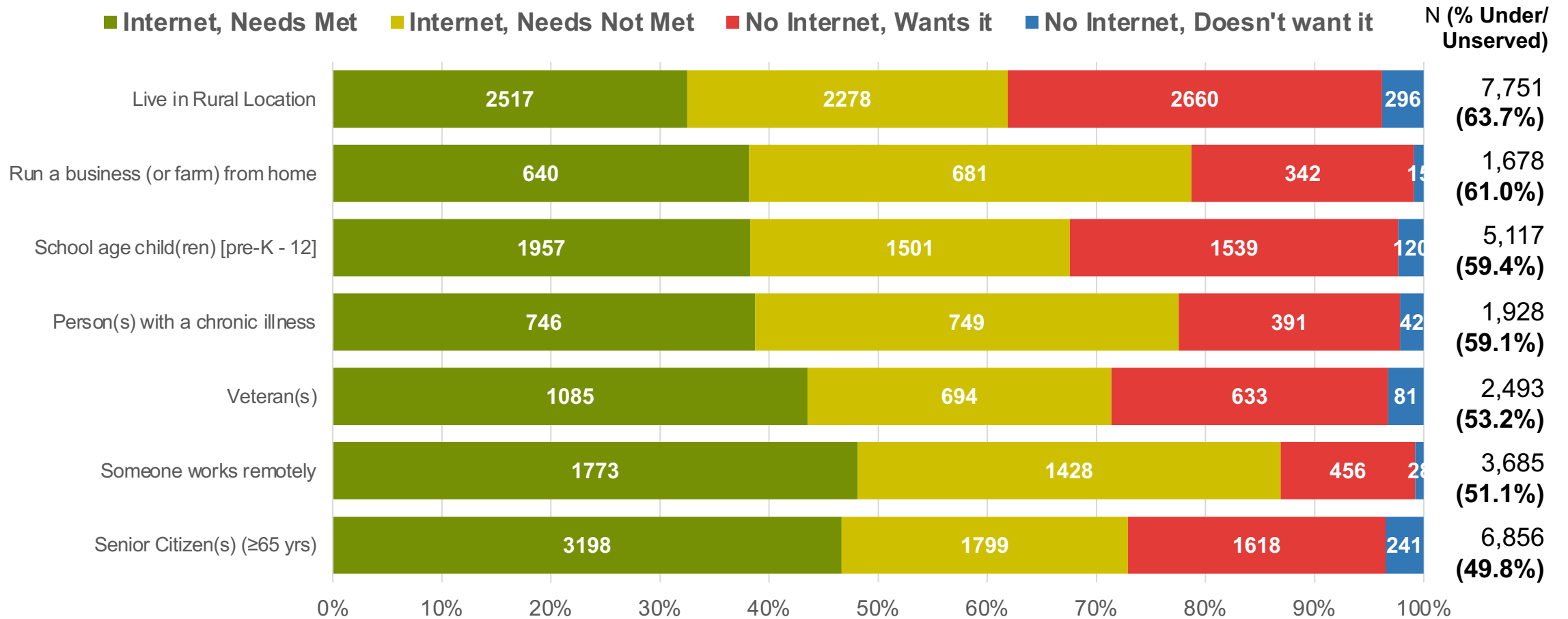


Figure 13: Internet Needs by household makeup

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

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

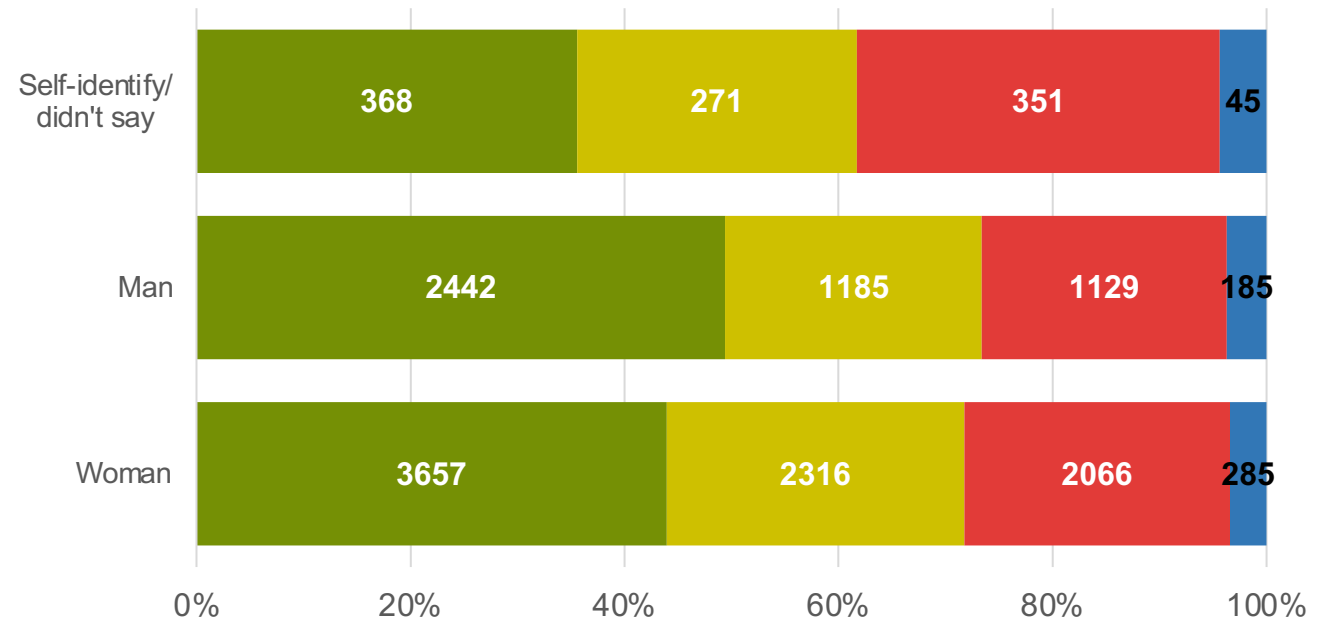


Figure 14: Internet Needs by Gender

56 * 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

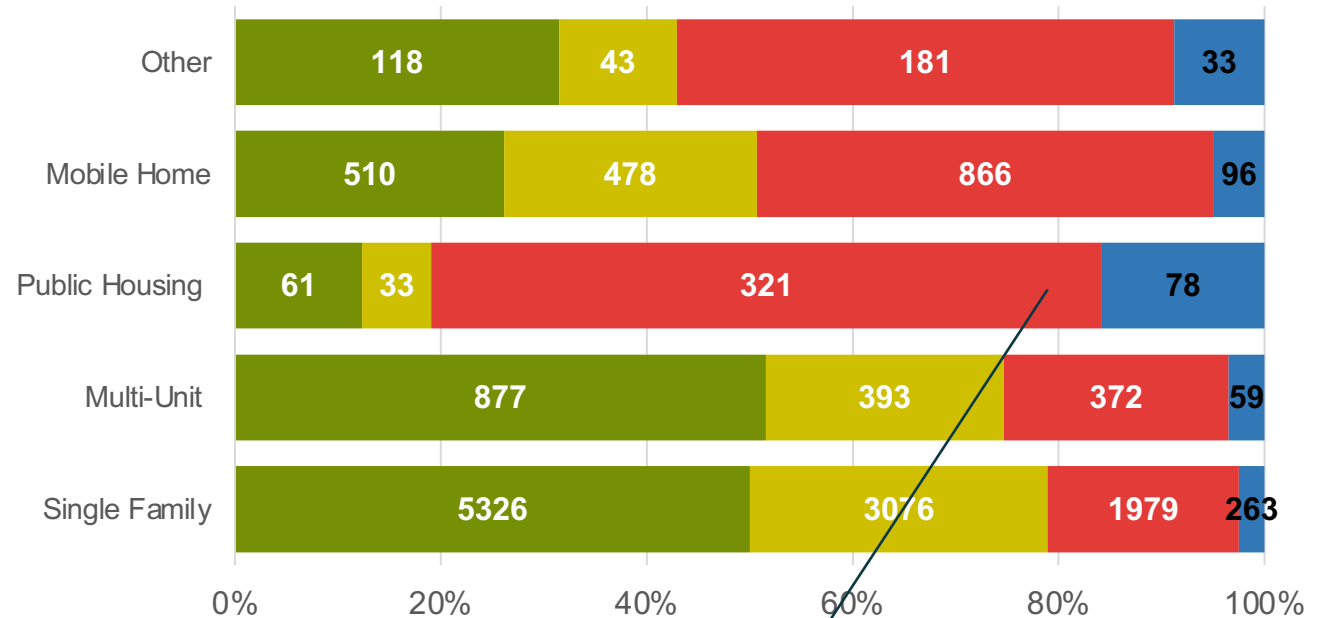


Figure 15: Internet Needs by Home Type

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

^{*} 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).

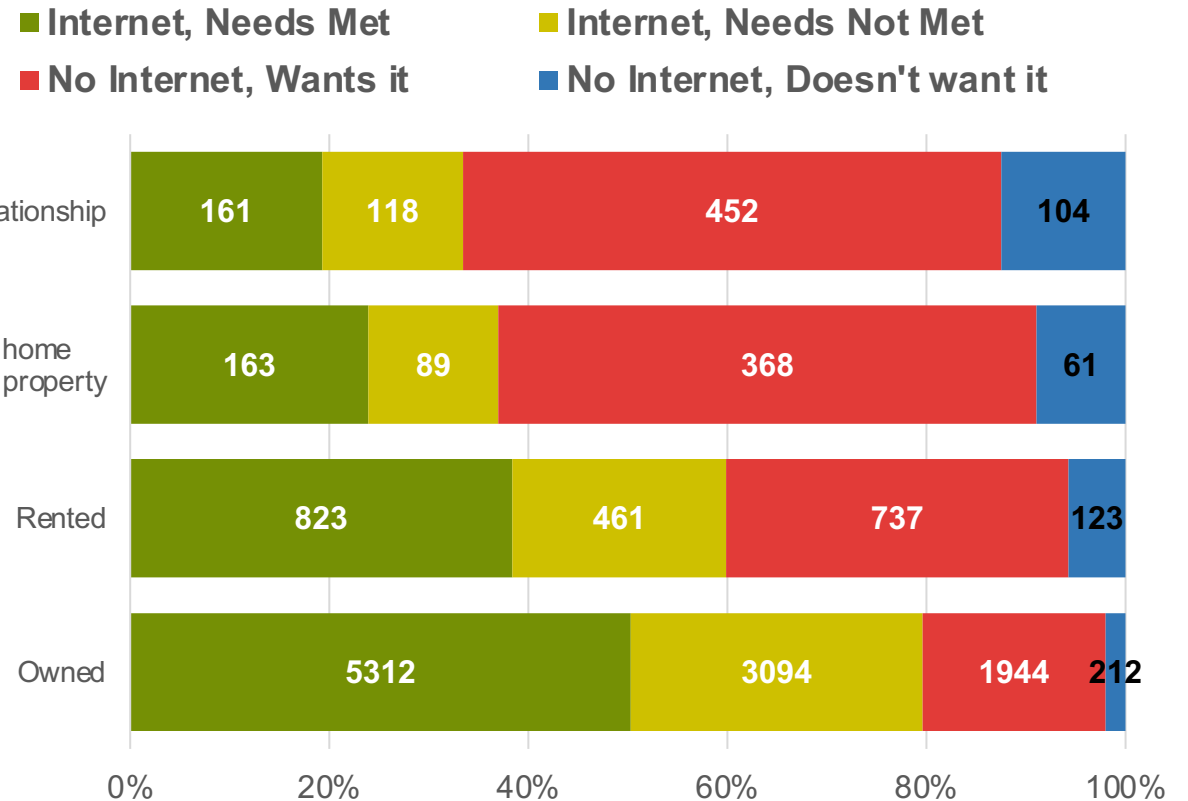


Figure 16: Internet Needs by Household Ownership

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
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			

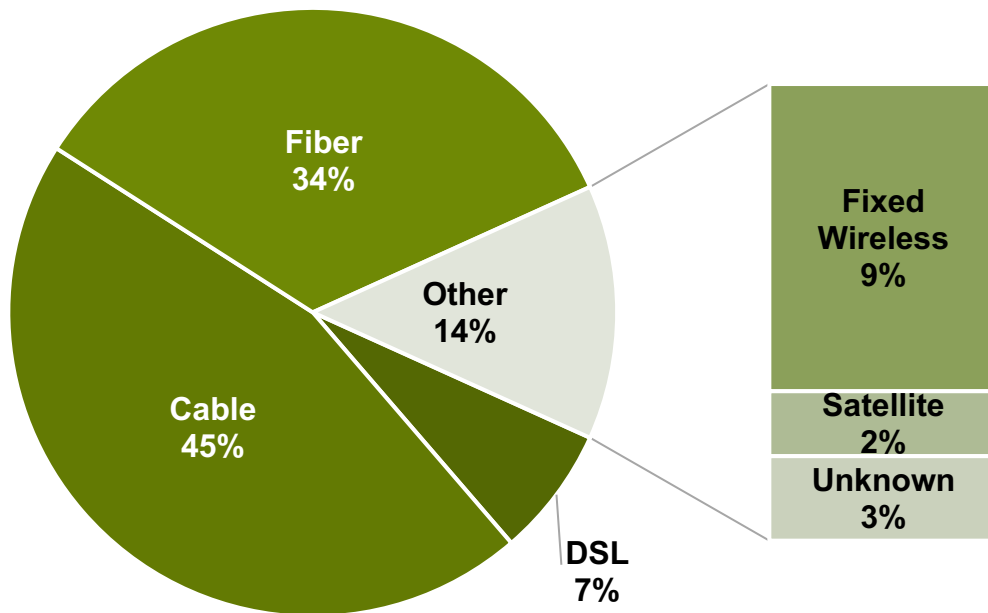
Table 19: Internet Service Providers

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

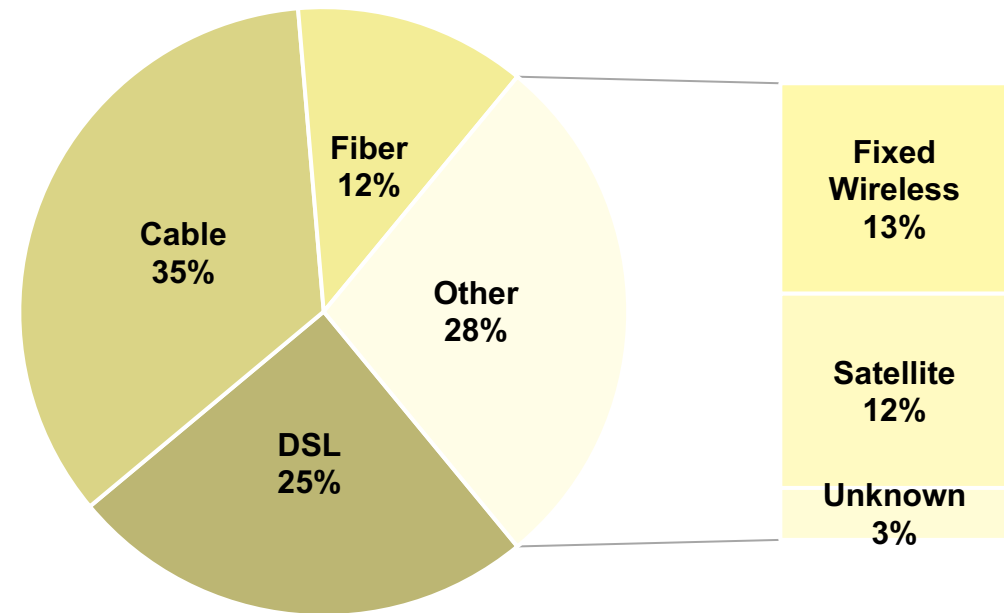


Figure 17: Distribution of type of Internet technology available at home by needs (N=12,426)

FEELING ABOUT ISP

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



■ Delighted

■ Frustrated

■ Indifferent

■ Disappointed

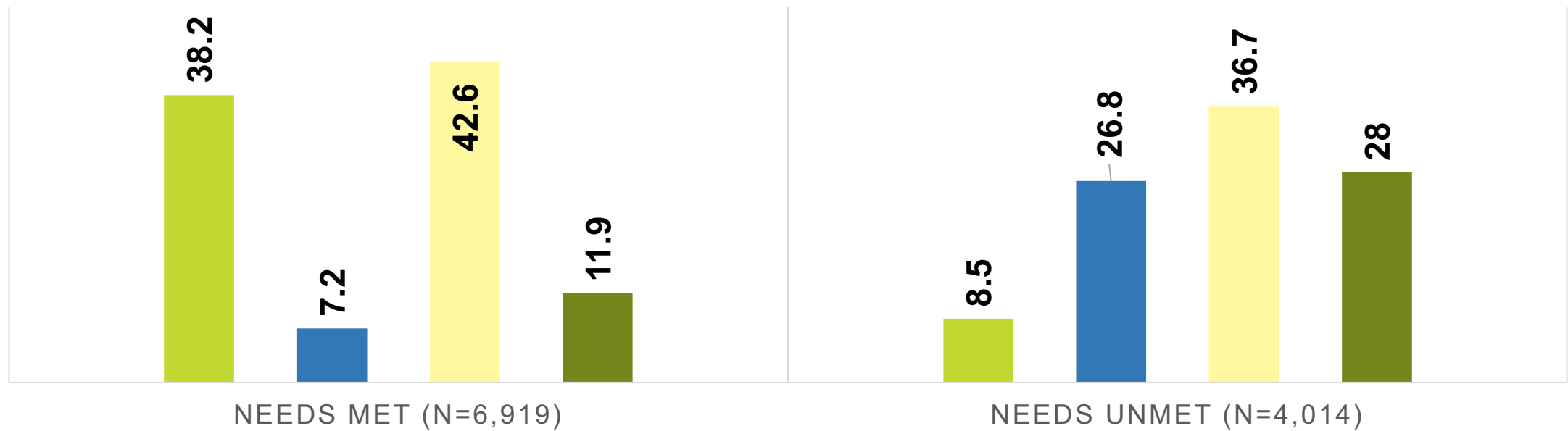


Figure 18: Feeling about Internet Service Provider customer service, by needs (met vs. unmet)

[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**

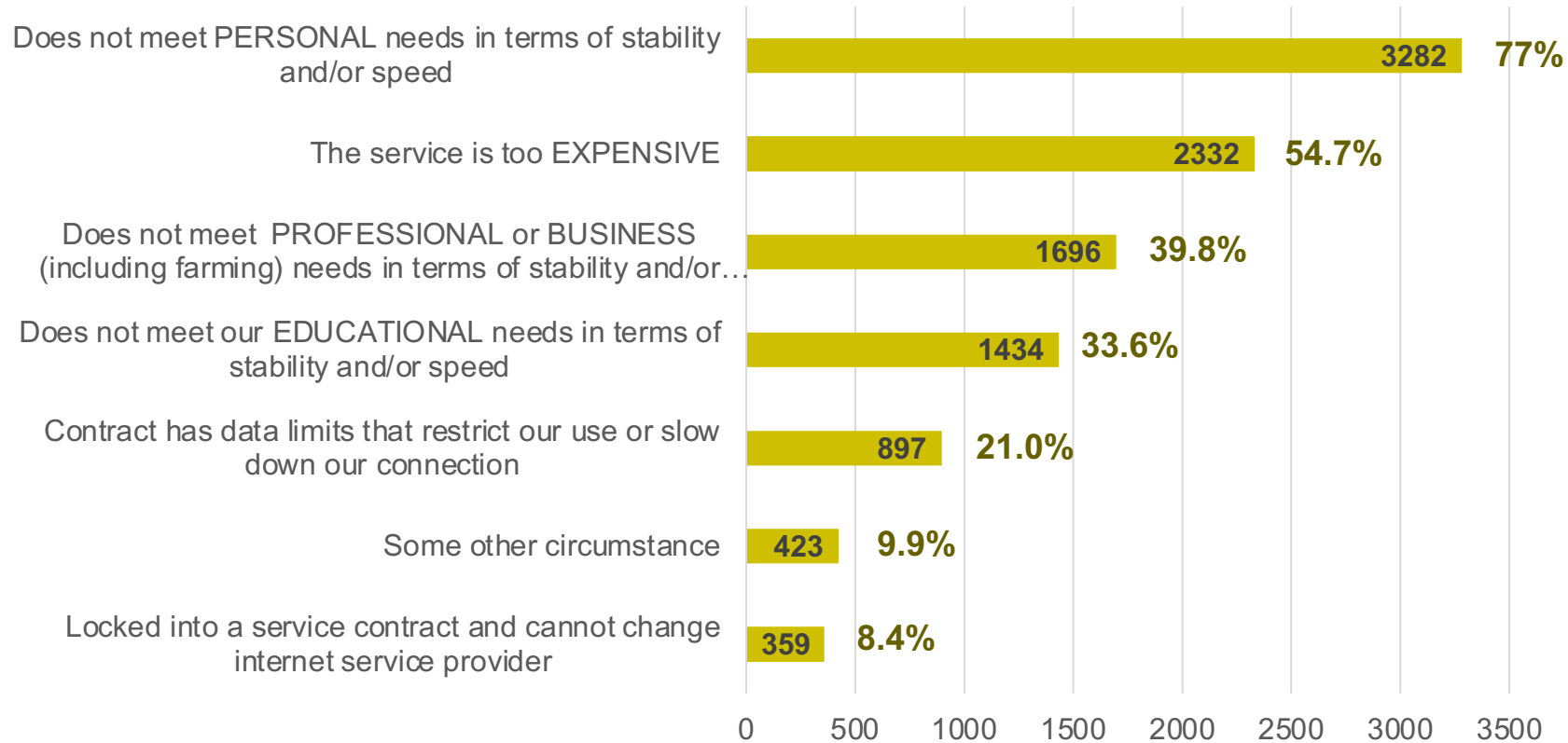


Barriers

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
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.



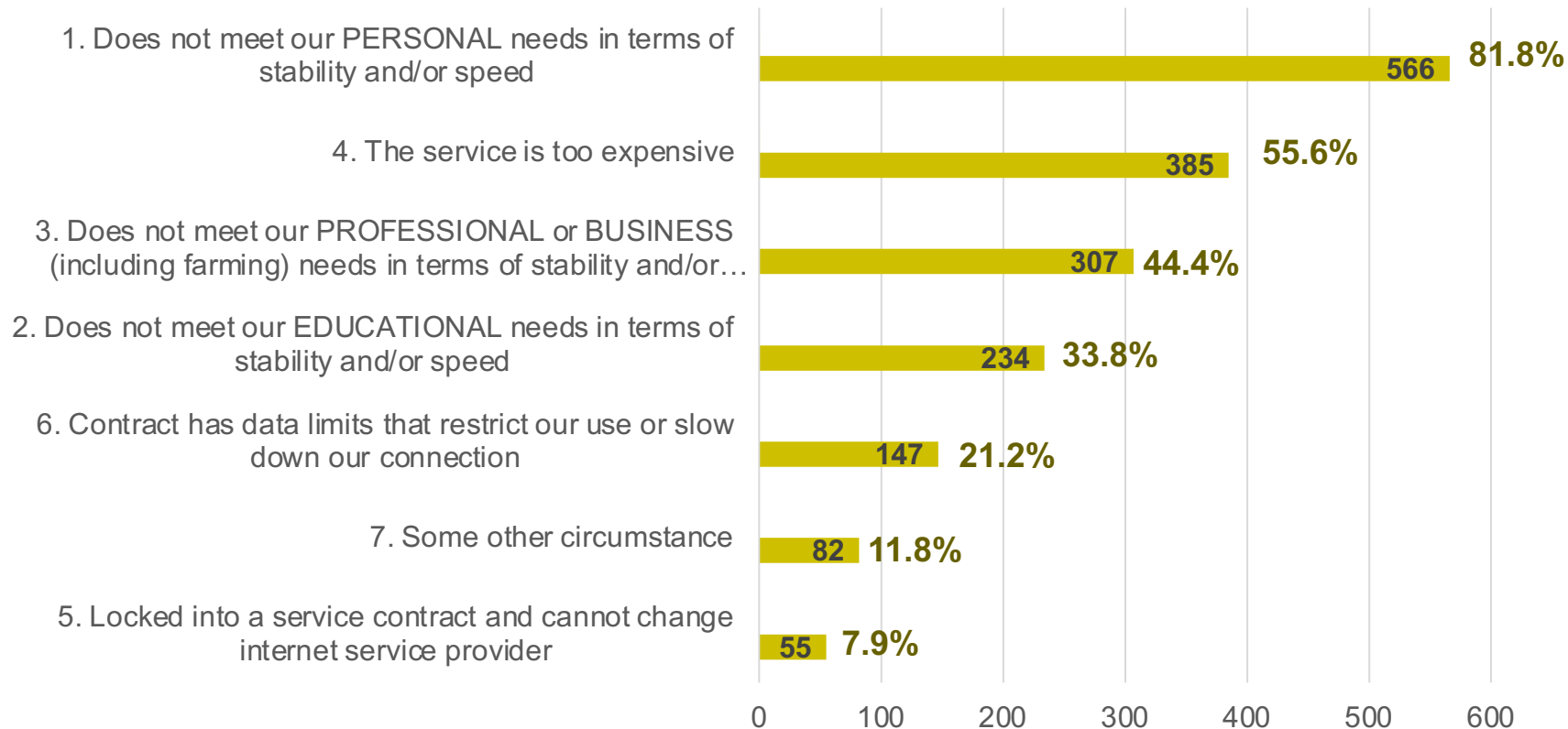
“Because I live in a rural area, the only option I have is for a Wi-Fi box but I am paying \$125 for a month that doesn’t work half the time with very slow speed. My daughter is in high-school and needs fast internet and I’m obtaining a BS degree online.”
Barnwell County Resident

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.



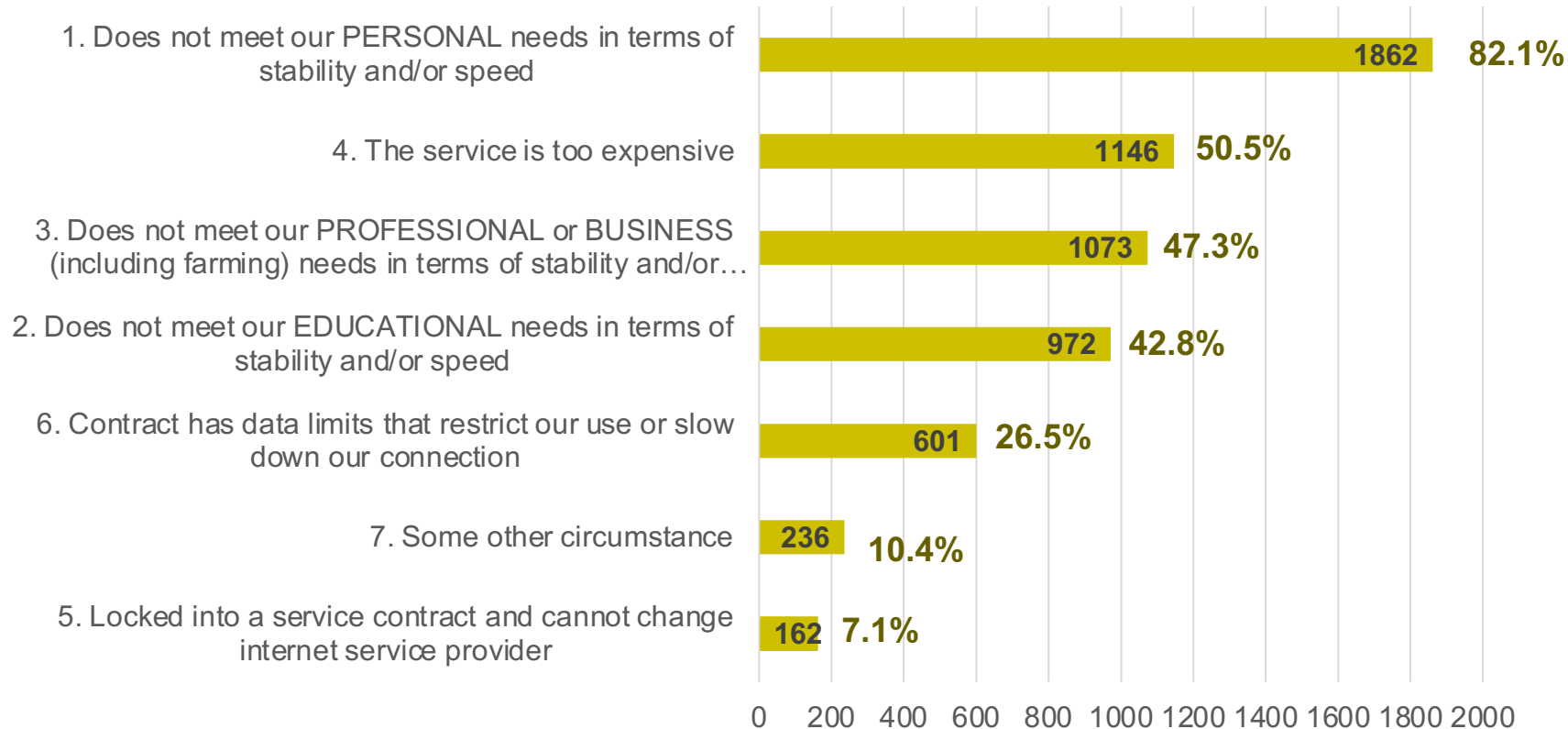
“Most carriers don’t have internet my side of town and when they do it’s crazy how expensive it is makes things harder for school work”
Lexington County Household with Veteran

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

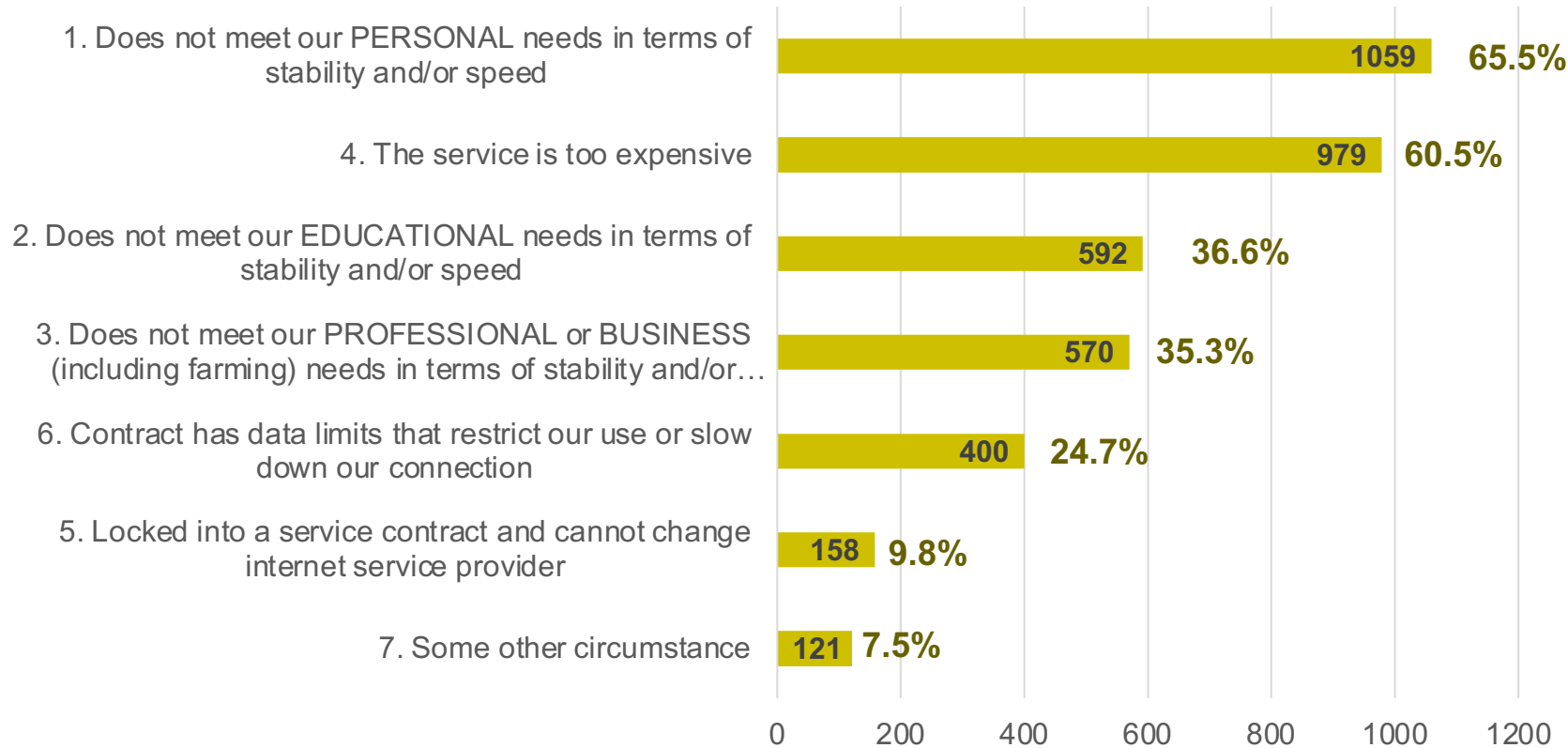
Figure 21: Identified Barriers among Rural households who has Internet, and their needs are not met

[among rural household who have Internet and Needs Not Met, N=2,278]



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.



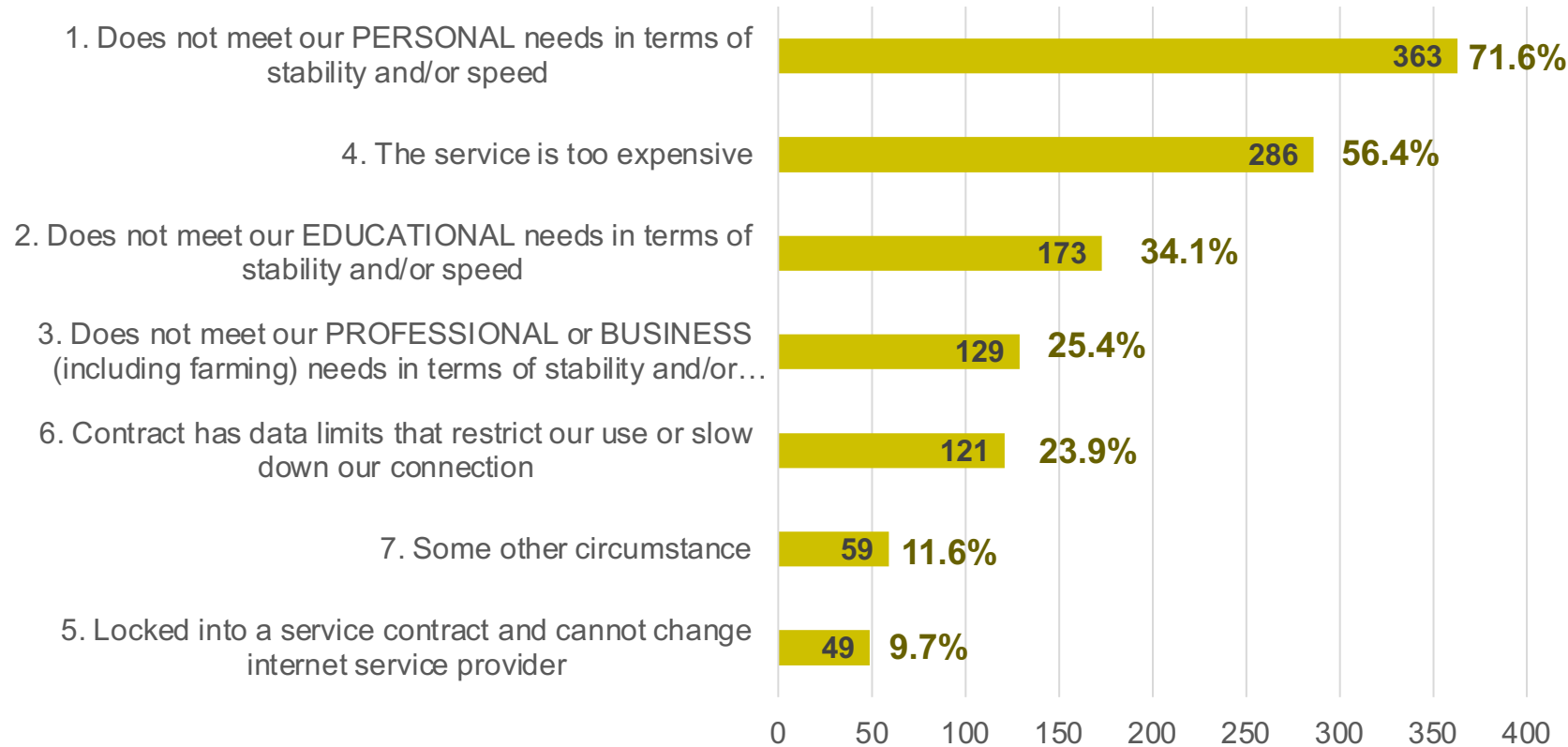
“My options for internet service are extremely limited and often are double to triple the monthly service price due to overage fees. My \$60 fixed wireless bill is often \$120 - \$200 which is ridiculous, because pay half of that for better”
Household with Black or African American in Union County

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



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.

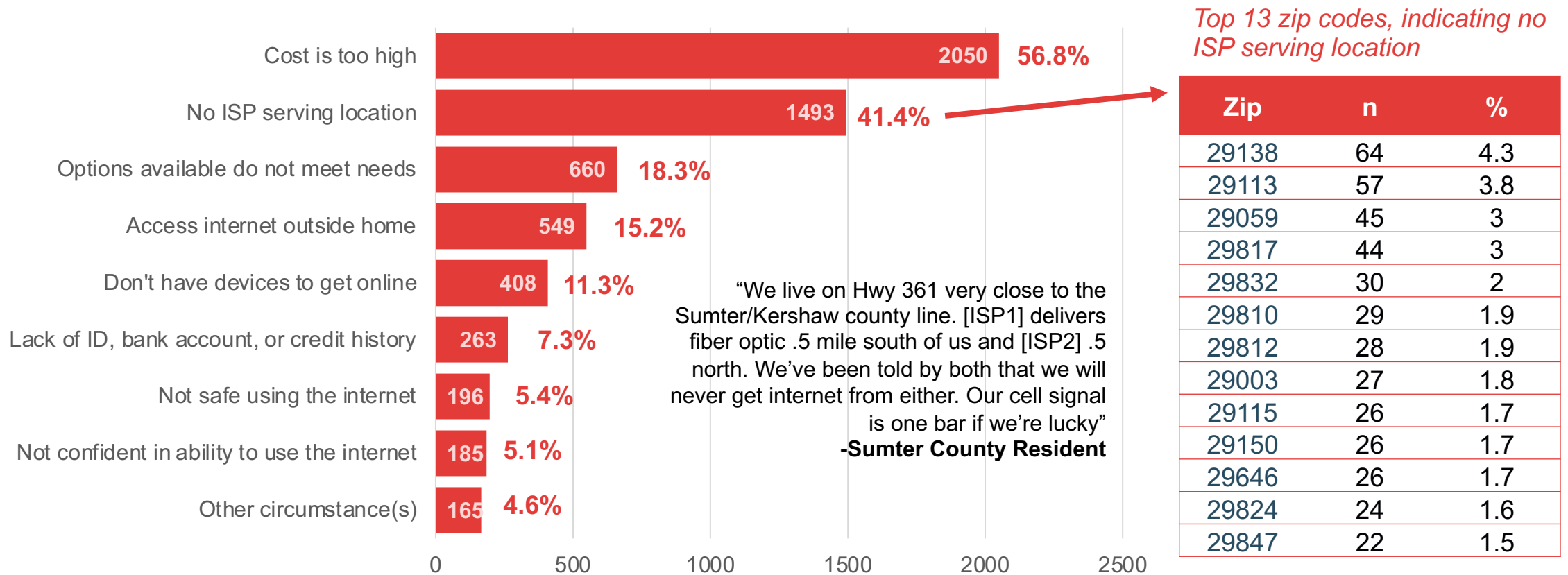
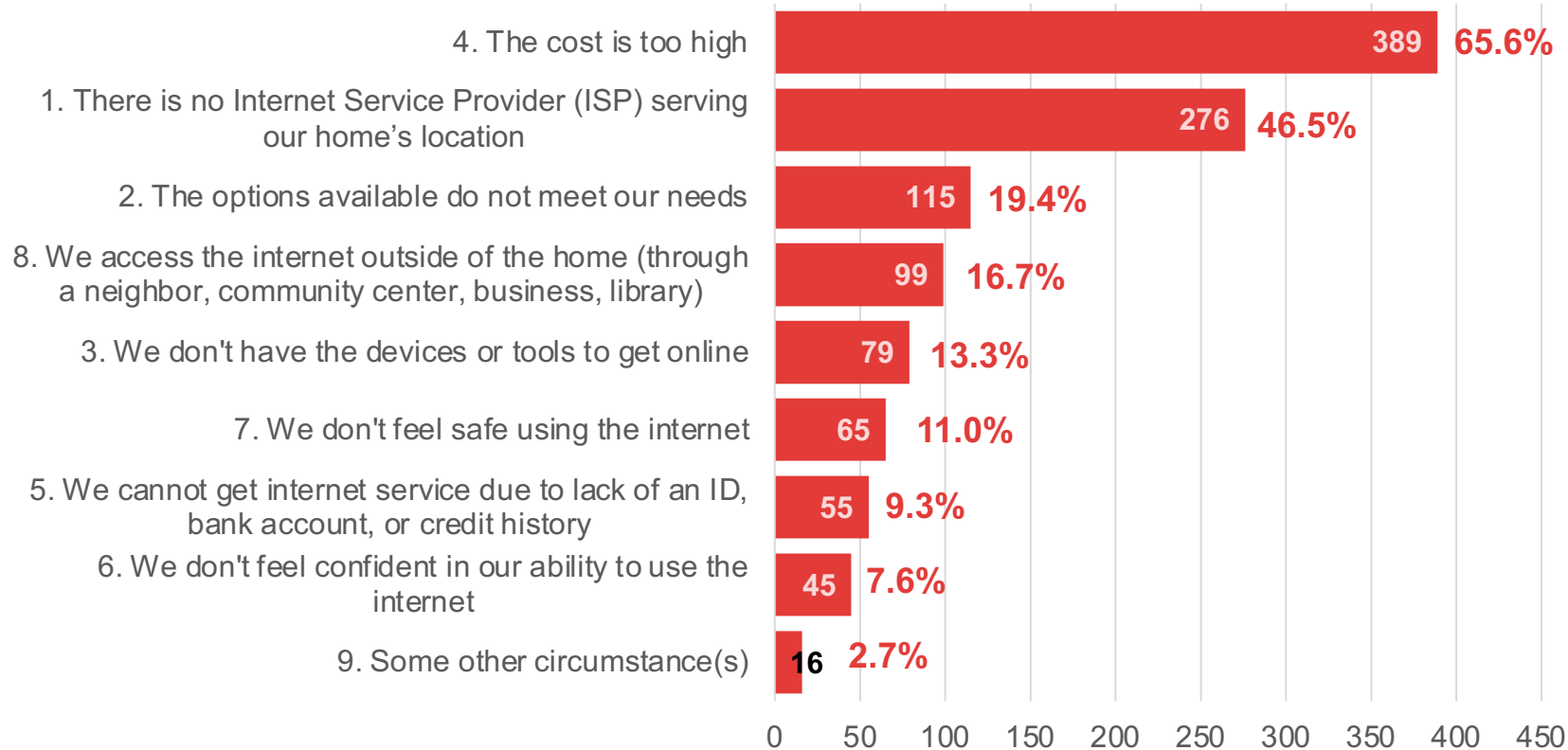


Figure 24: Identified Barriers among those who has No Internet (Or Cell Only) and wants it

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.

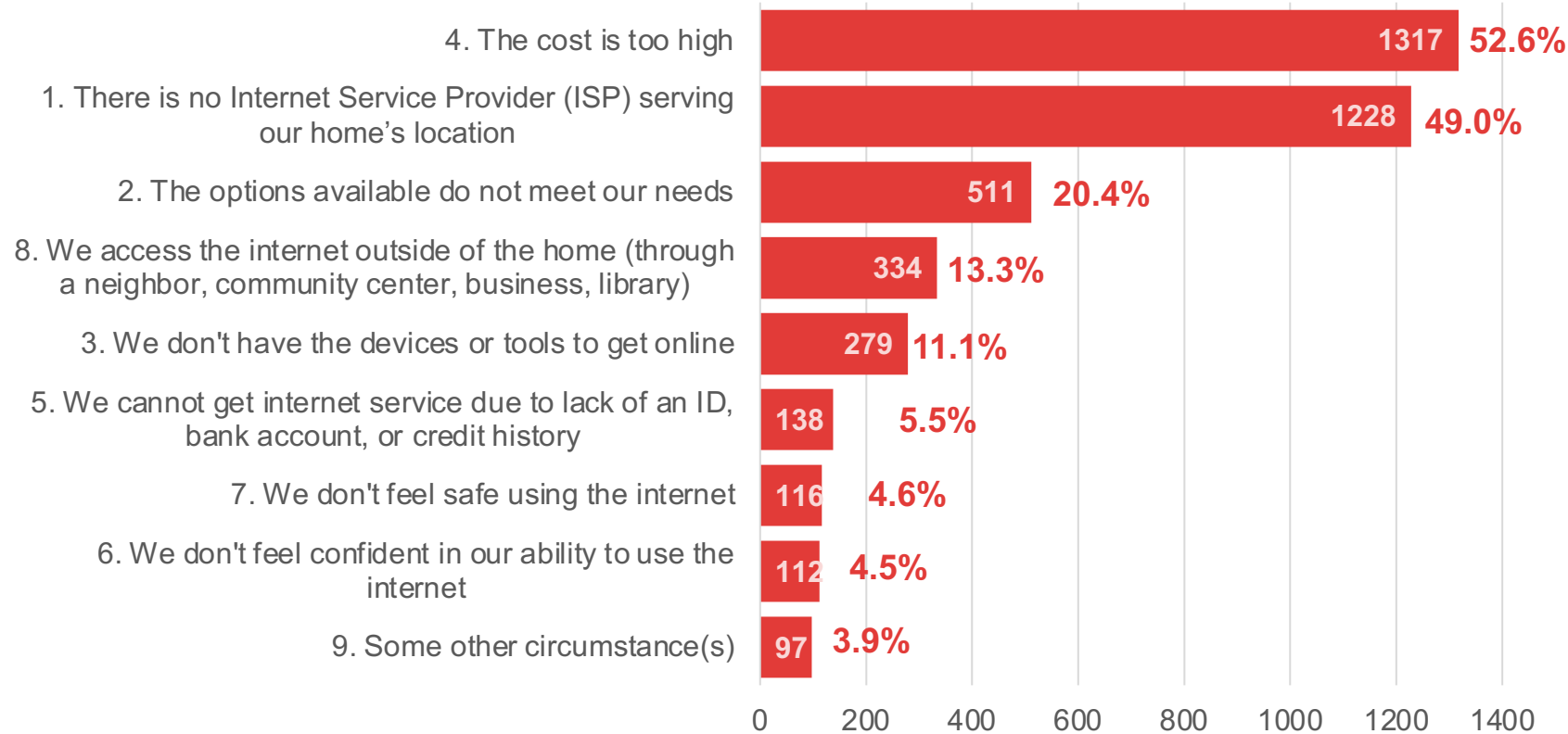


“Internet is available across the street but would cost more than \$5,000 to run cable to my elderly parents home and wireless isn't steady enough for cameras to watch for safety or health reasons.”
-Veteran Household in Lee County

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.



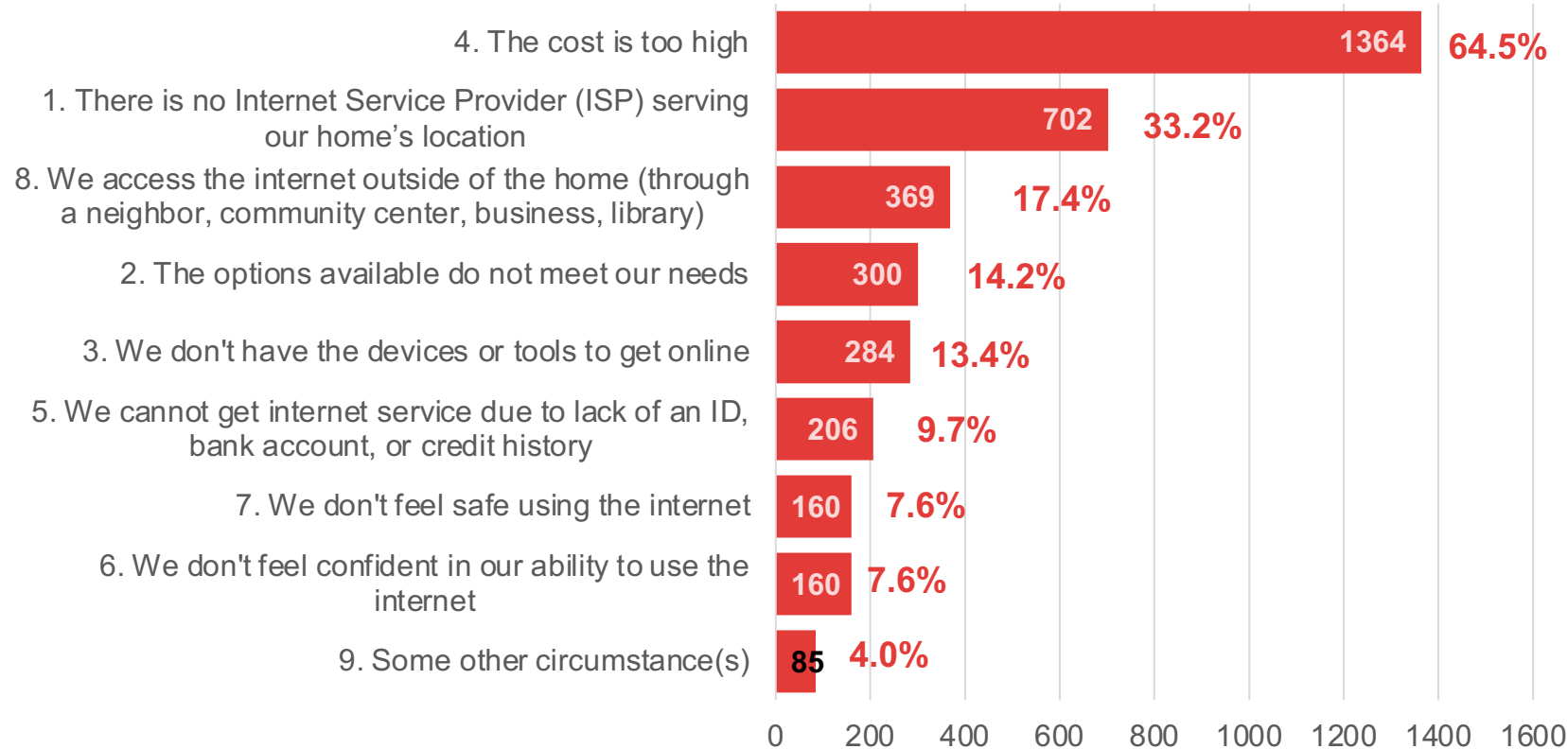
“We don't have the more affordable options that others have who are not living in a rural area”
-Rural Household in Kershaw County

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.



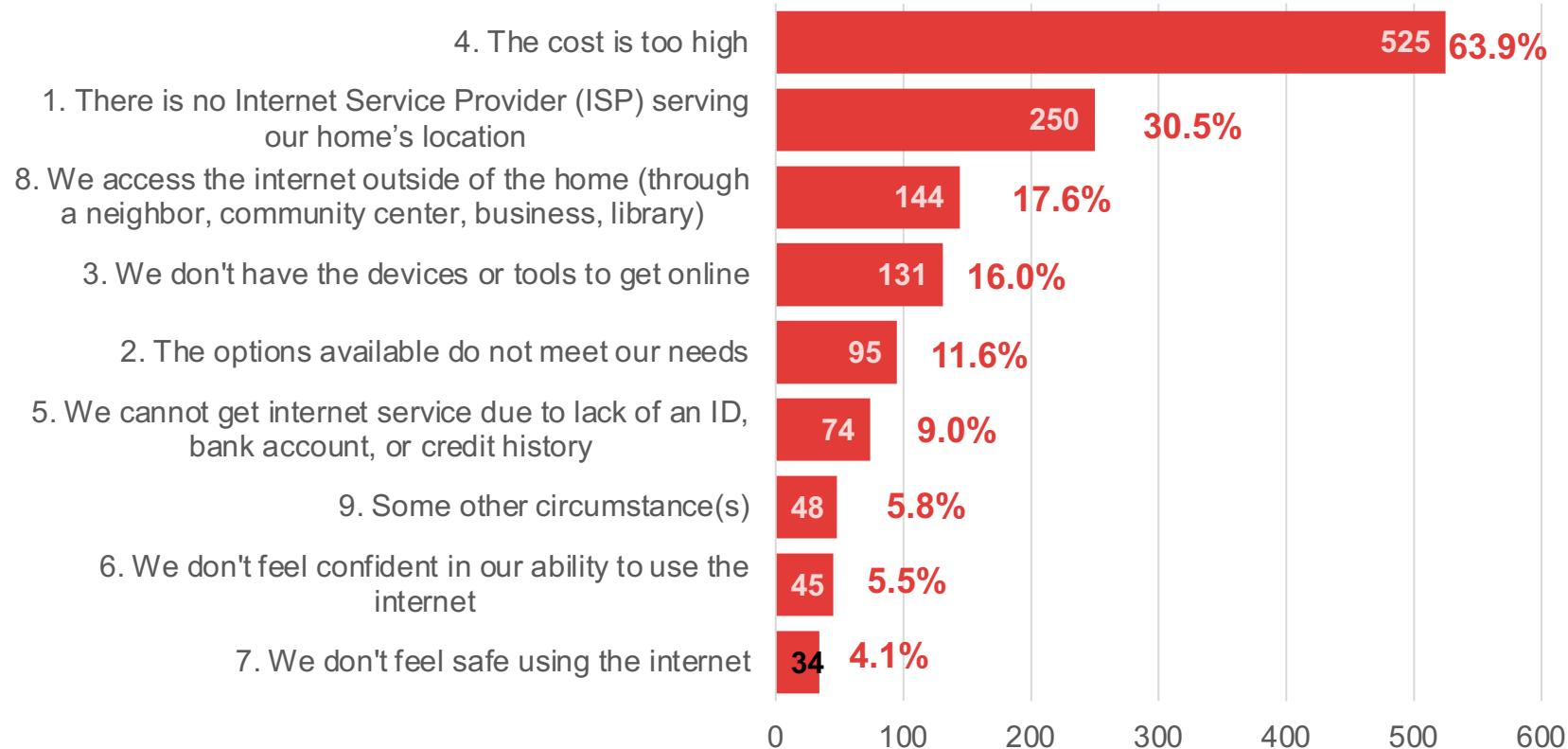
“Mis hijo y yo tenemos que estar afuera de la biblioteca agarrando la señal del wifi,,, pasando frío o calor para entregar tareas?”

“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

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]



UNIVERSITY OF
South Carolina

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?

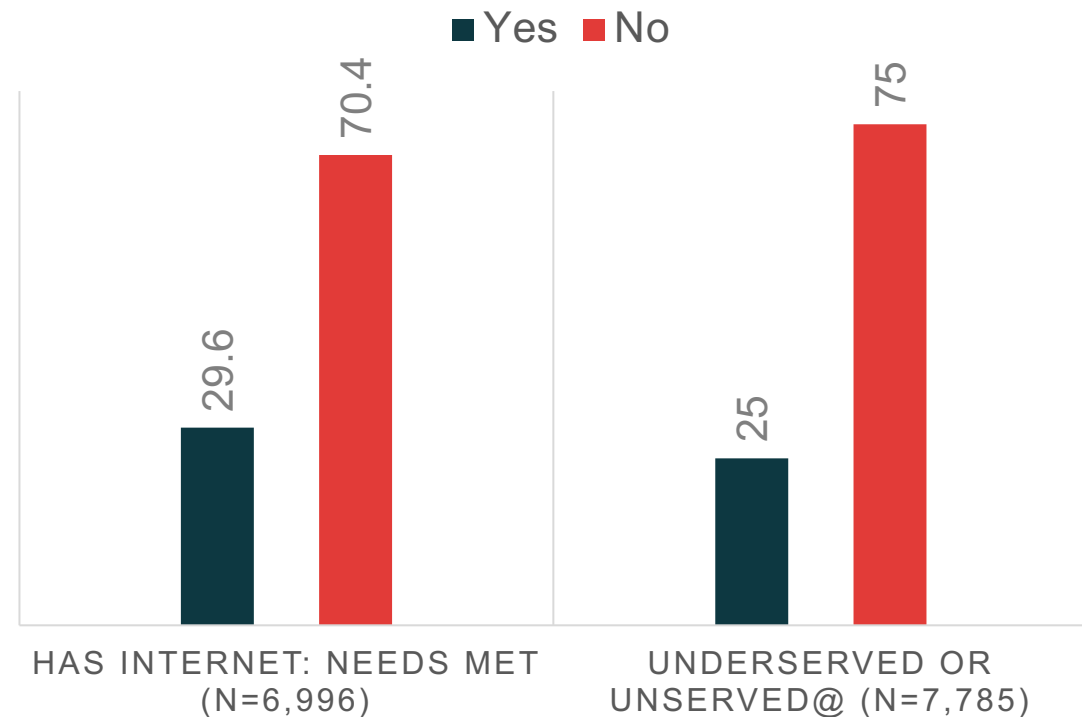


Figure 29: Familiarity with Affordable Care Connectivity Program (ACP) by Needs

Critical Needs

Get
Connected
Get SC
Connected
Get SC
Connected
Get SC
Connected
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:

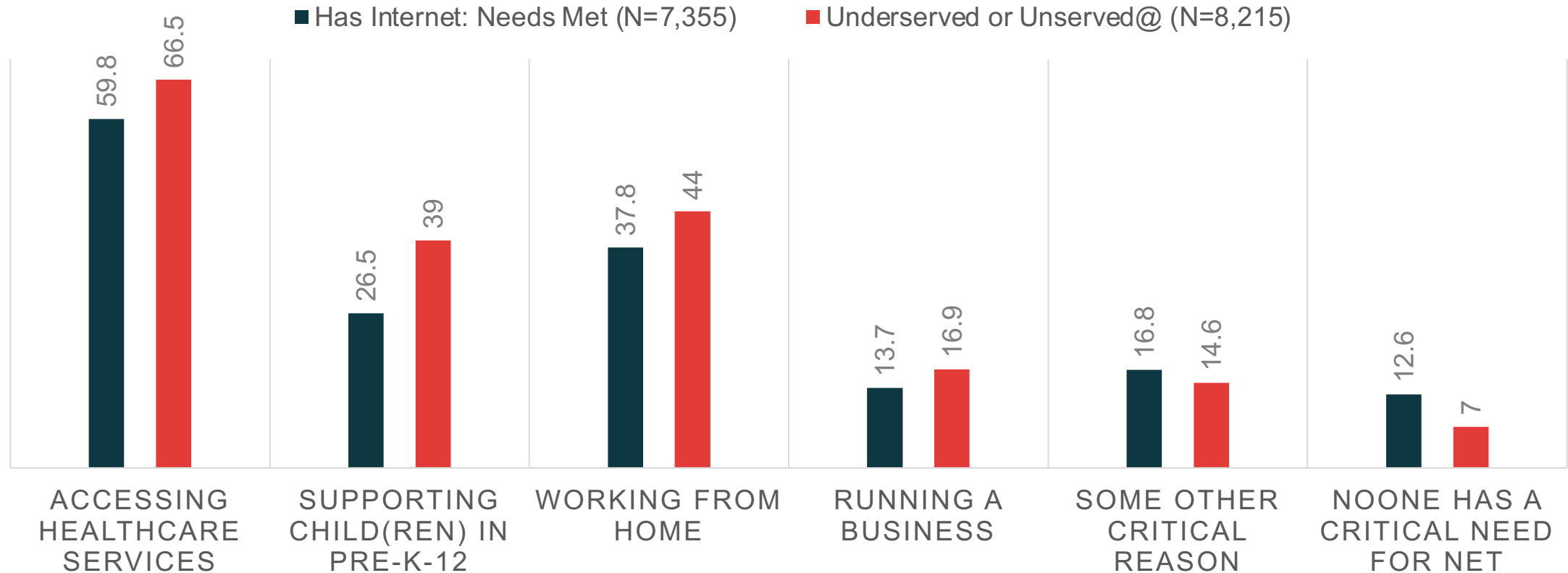
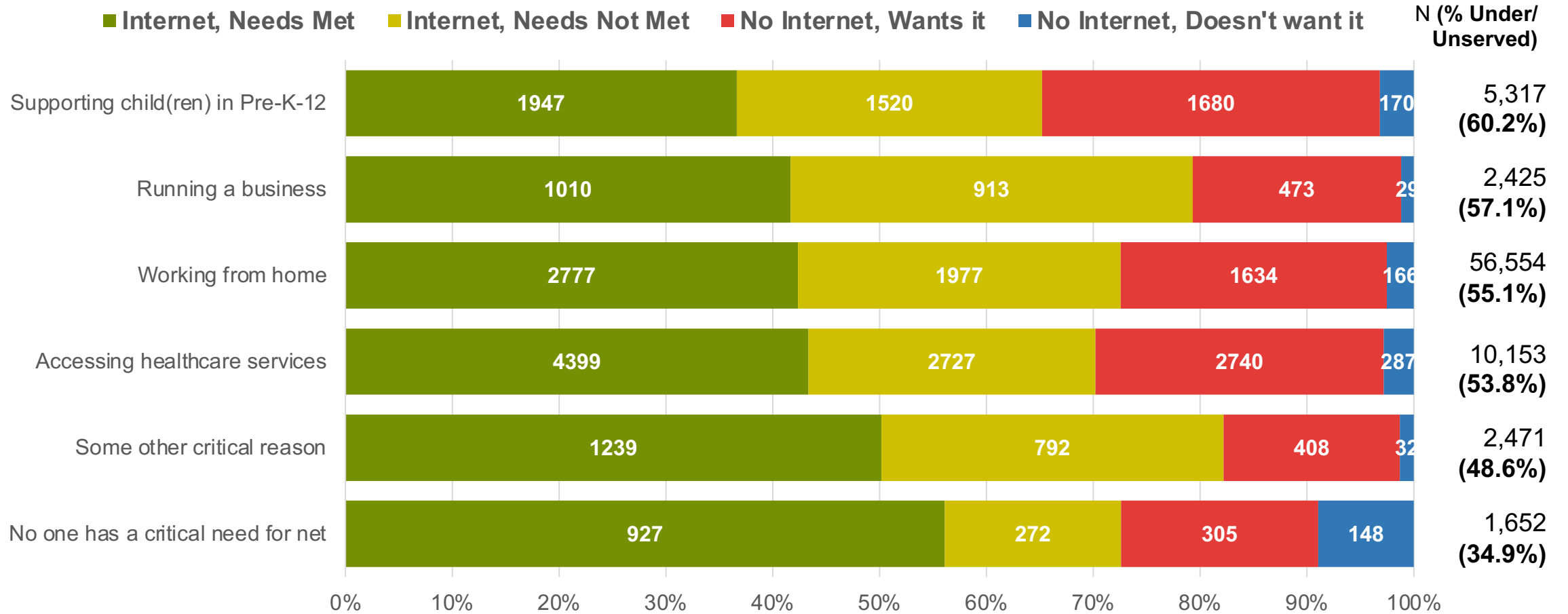


Figure 30: Critical of Households for using Internet services



INTERNET NEEDS BY CRITICAL NEED



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

CRITICAL NEED BY HOUSEHOLD CATEGORIES

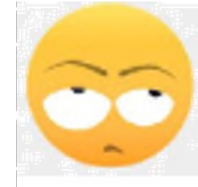
Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household. I/We NEED reliable internet access at home for:

	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

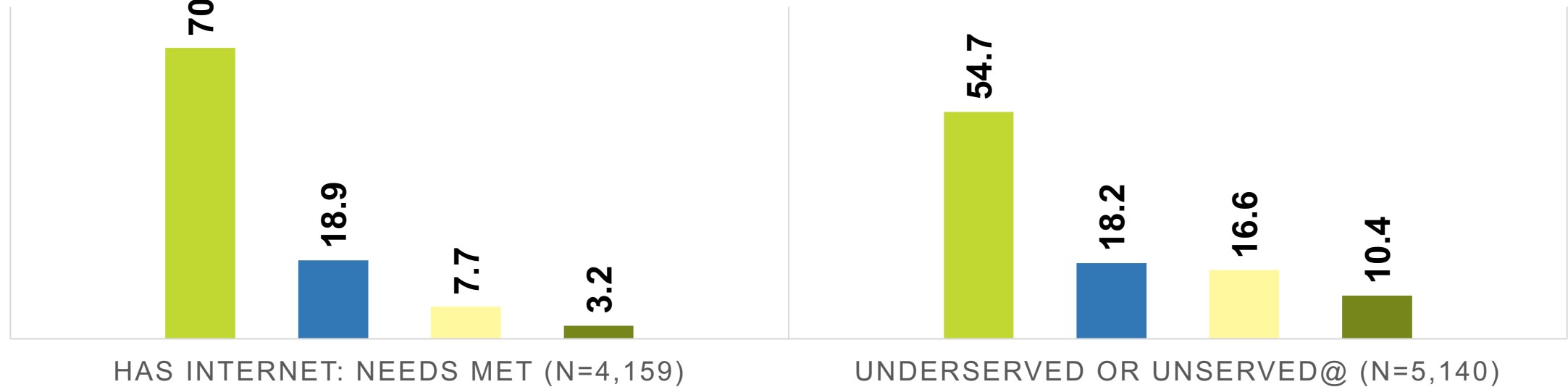


Figure 32: Feelings About Technology for Health Services by Internet Needs



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 feedback	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**

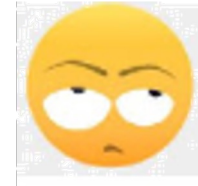
"We live 3 hrs [sic] from our drs [sic] so getting treatment by video helps make appointments easier." -- **Lexington County, 29160**

"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

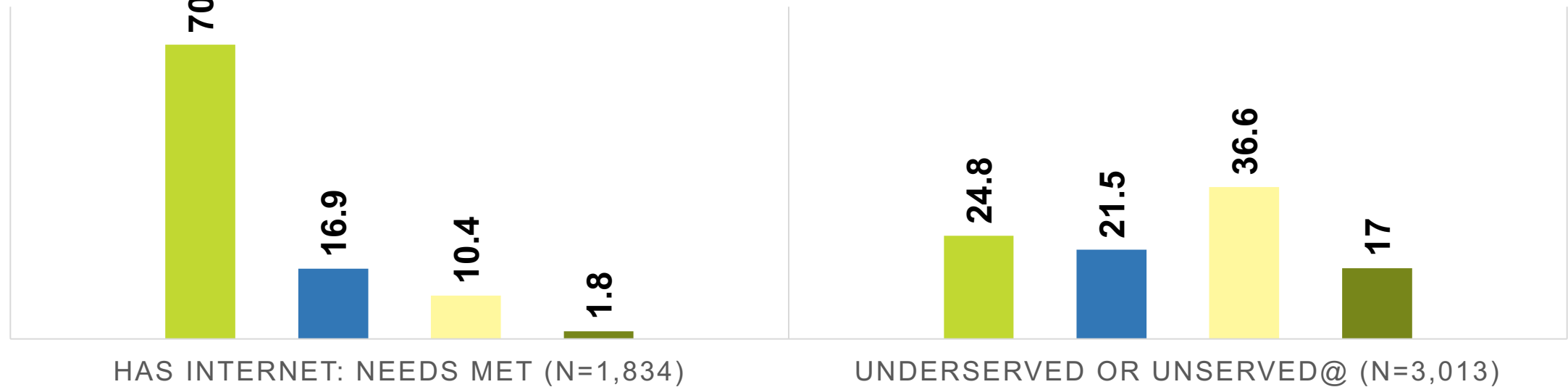
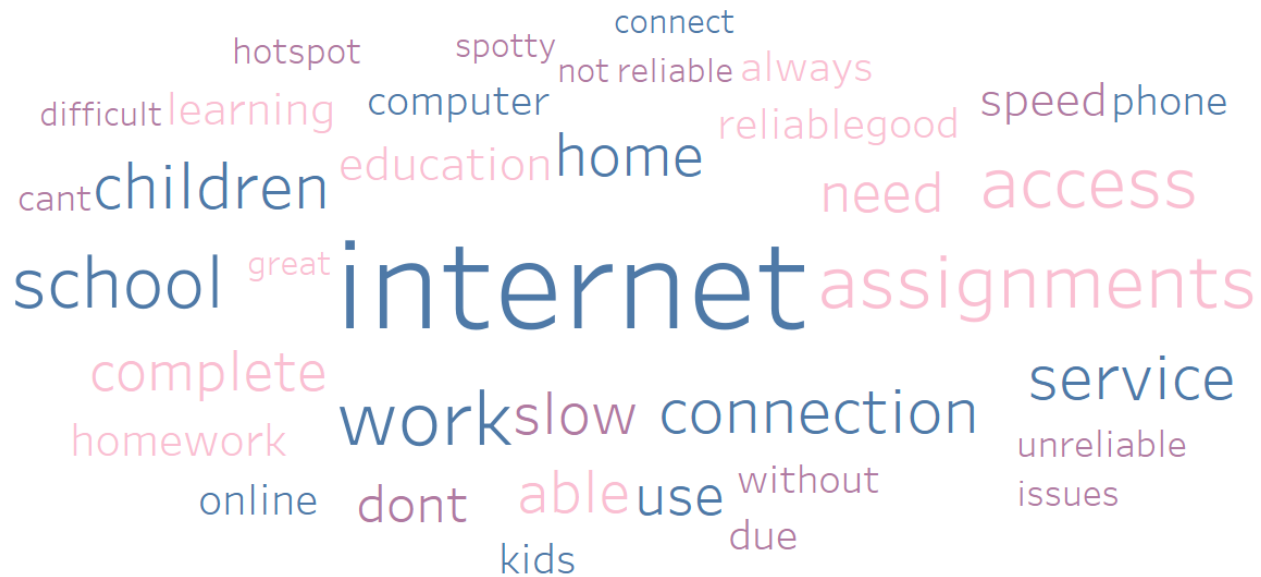


Figure 33: Feelings About Child Success by Internet Needs



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?



■ Excited ■ Indifferent ■ Stressed ■ Frustrated

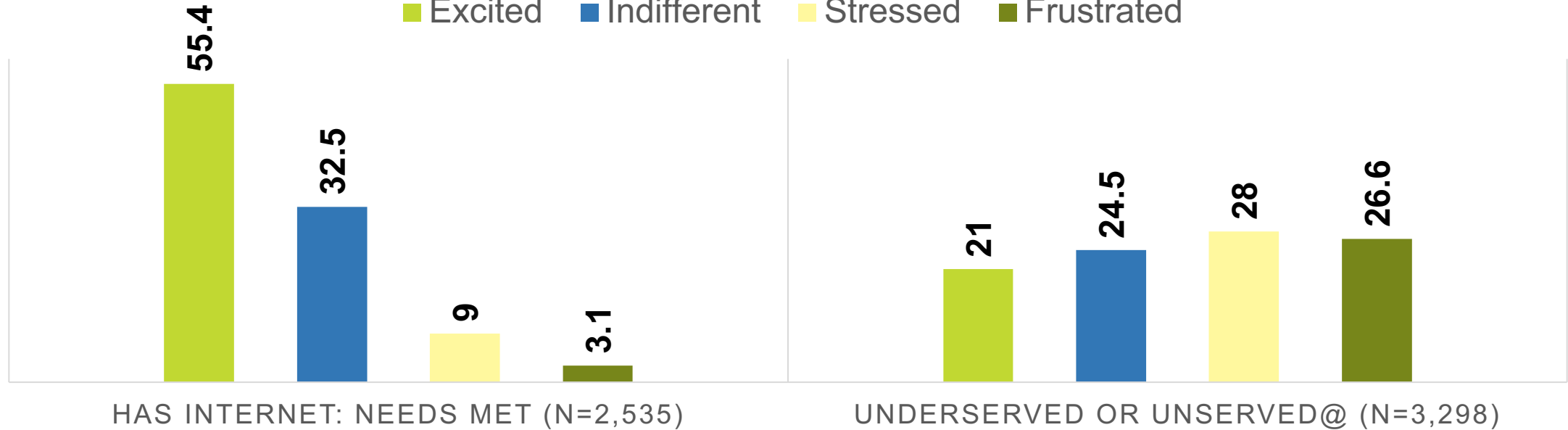


Figure 34: Feelings About Job Opportunities by Internet Needs



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%	



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**

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

“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**

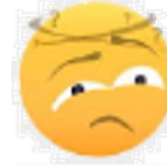
“My wife loves her job and working from home however our internet connection is putting that in risk” -- **Kershaw County, 29032, man**

“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**



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

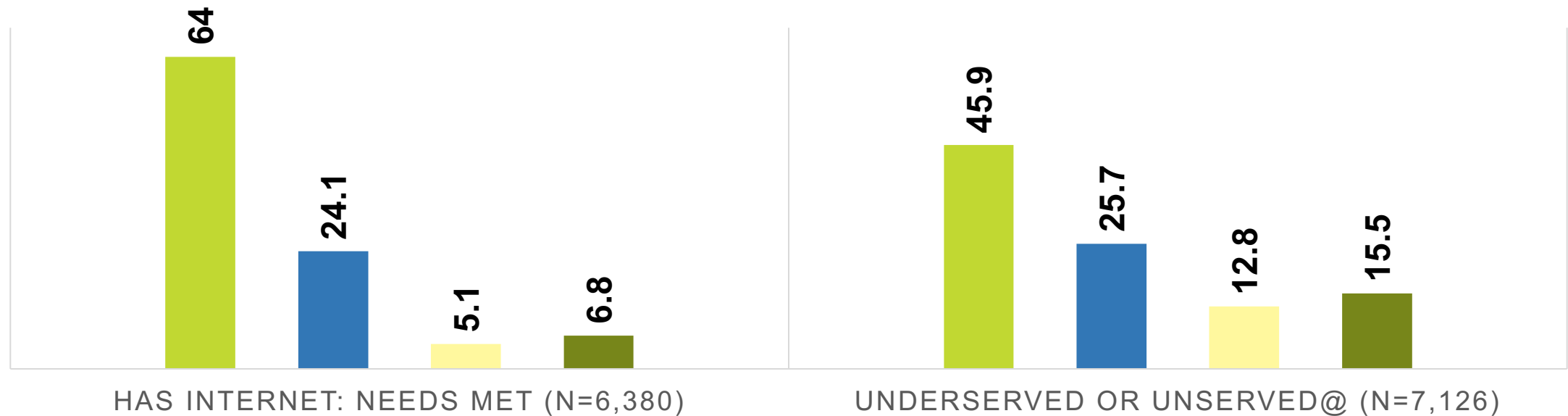


Figure 35: Feelings About Doing New Things Online by Internet Needs



FEELING ABOUT DOING NEW THINGS ONLINE

OPEN-ENDED TEXT, WORD CLOUD

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



Region	comfortable	uncomfortable	convenient	Total Responses
Lowcountry	26%	23%	23%	743
Midlands	27%	21%	26%	647
PeeDee	30%	19%	20%	672
Upstate	28%	17%	26%	544

Table 27: Feeling About Doing New Things Online: open-ended questions (text responses) by theme and region

	comfortable
	uncomfortable
	other



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.

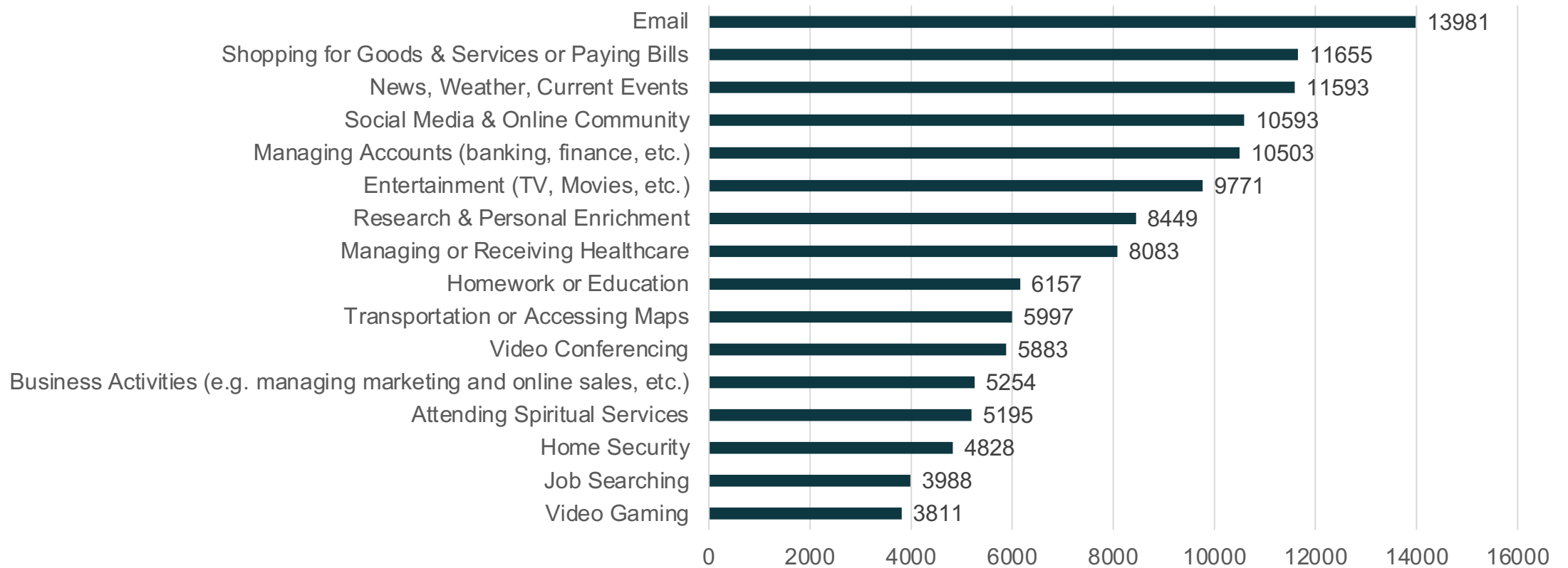


Figure 36: Purposes of Internet Use



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**



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.



APPENDICES

Get Connected Get Connected Get Connected Get Connected Get Connected Get Connected
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APPENDIX I

Better Internet Survey [No Internet or Cell Only]

Get
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Better-Internet Survey

(NO INTERNET OR CELL ONLY)

Welcome to the Better-Internet Survey. It won't take long. (Most people finish in under five minutes). But, letting your voice be heard can go a long way in improving internet connections for you and your community.

Your participation is completely voluntary, and you are under no obligation to participate. All questions are optional and anonymous as you will NOT be asked for any personal identifying information like your name, phone number or email address. When requesting the paper survey, you agreed to the terms and conditions.

If you have any questions or concerns, you can find more information at:

Get Connected SC

getconnectedsc.org/terms-conditions

INSTRUCTIONS

Answer button questions with a single X:

- Yes
- No

Answer checkbox questions with as many check marks as necessary:

- Option 1
- Option 2
- Option 3

START HERE...

Please write-in the Zip Code for the physical address of your home (Not a P.O. Box):

How do you feel about the current options for connecting your home to the internet?
(Mark with an X to SELECT ONLY ONE)

Frustrated Stressed Indifferent Delighted

How intense is the feeling you just expressed?
(Mark with an X to SELECT ONLY ONE)

Very low Low High Very high

Do you want to explain that feeling?

Which statement best describes your situation when it comes to the internet?

(Mark with an X to SELECT ONLY ONE)

- At home, I only have access to the internet using my cell phone with a data plan
- I have no access to the internet at home

Would you like an internet connection at your home?

- Yes
- No

Based on your experience, which of the following statements describe your situation or circumstance(s)?

√ ANY THAT APPLY

- We don't have interest in a home internet connection
- There is no Internet Service Provider serving our home's location
- The options available do not meet our needs
- We don't have the devices or tools to get online
- The cost is too high
- We cannot get internet service due to a lack of an ID, bank account, or credit history
- We don't feel confident in our ability to use the internet
- We don't feel safe using the internet
- We access the internet outside of the home* (through a neighbor, community center, business, library)
- Some other circumstance(s) - Please explain:

*If you selected "We access the internet outside of the home," please list the places where you intentionally go to get online:

Does any member of your household identify as one of more of the following?

√ ANY THAT APPLY

- School age child(ren) [pre-k - 12 student(s)]
- College, vocational or other type of student(s)
- Veteran(s)
- Senior Citizen(s) (65+ years of age)
- Person(s) with a physical disability
- Person(s) with a chronic illness
- Person(s) with a developmental or learning difficulty/disability
- Person(s) who do(es) not speak English or has a language barrier
- Person(s) who is (are), or has (have) been, incarcerated
- Person(s) who is (are) unemployed and looking for work
- None of the above

Does anyone living in your household identify as any of the following?

√ ANY THAT APPLY

- Black or African American
- White
- American Indian or Alaska Native
- Asian or Pacific Islander
- Hispanic/Latino
- Some other racial or ethnic identity
- Prefer not to say

Which of the following best describes your home?

(Mark with an **X** to **SELECT ONLY ONE**)

- Single Family Home (no shared walls)
- Multi-Unit Dwelling (such as an apartment, townhome, or condo)
- Public Housing or Housing Projects (government subsidized housing)
- Mobile Home
- Other

Thanks for providing this valuable information! Next, we'll be asking about the critical reasons your household needs better internet.

Whether you have internet at home or not, complete the following statement by selecting **ALL** options that apply to members of your household.

√ ANY THAT APPLY

I/We NEED reliable internet access at home for:

- Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)*
- Supporting child(ren) in Pre-Kindergarten through 12th grade education**
- Performing job functions as a remote employee (i.e., working from home)***
- Running a business
- Some other critical reason - Please explain:

- Nobody in the home has a critical need for the internet

IF your household **NEEDS reliable internet to access healthcare services, please fill out the following (IF NOT, please SKIP ahead).*

For what purposes do members of your household need to be able to access healthcare services from home?

√ ANY THAT APPLY

- Urgent care
- Primary care
- Mental health care
- VA services
- Prescription refills and or referrals
- Appointment scheduling
- Patient portal access (such as MyChart)
- Some other purpose - Please explain:

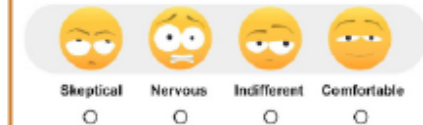
What reasons contribute to your need to access healthcare from home?

√ ANY THAT APPLY

- Convenience
- Costs
- Mobility issues make leaving home difficult
- Transportation is unreliable, expensive, or difficult to obtain
- Some other reason - Please explain:

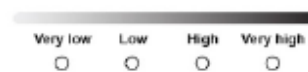
How do you feel about using technology to access healthcare services?

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

****IF your household *NEEDS* reliable internet to support child(ren) in their PreK-12 education, please fill out the following (IF NOT, please SKIP ahead).**

Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments?

- Yes
- No

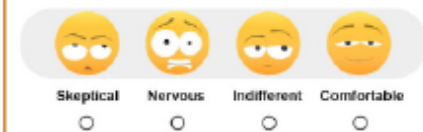
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities?

(Mark with an **X** to **SELECT ONLY ONE**)

- Yes, we own a computer that is dedicated to school activities
- Yes, our child(ren)'s computer is provided through their school
- No

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

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

*****IF your household *NEEDS* reliable internet to perform job functions, please fill out the following (IF NOT, please SKIP ahead).**

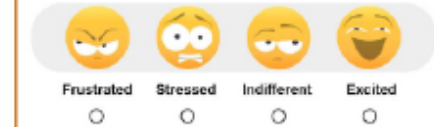
Which statement(s) best describes your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee?

√ **ANY THAT APPLY**

- My/Our household income is dependent on having internet access at home
- An employer requires the ability to perform some or all job functions from home
- My/Our career options are currently restricted due to inefficient internet stability or speed
- My/Our professional development/learning is currently restricted due to inefficient internet stability or speed
- I/We would be willing to pay more for internet that is faster or more stable
- Some other situation or circumstance - Please explain:

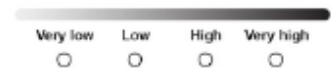
How does your ability (or inability) to work remotely make you feel about your job opportunities?

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

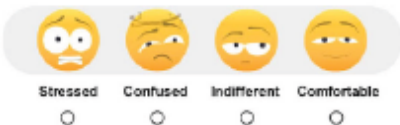
In general, how do you use the internet today?

√ **ANY THAT APPLY, REGARDLESS OF HOW OR WHERE YOU CONNECT TO THE INTERNET**

- | | |
|---|--|
| <input type="checkbox"/> Email | <input type="checkbox"/> Research & Personal Enrichment |
| <input type="checkbox"/> News, Weather, Current Events | <input type="checkbox"/> Job Searching |
| <input type="checkbox"/> Social Media & Online Community | <input type="checkbox"/> Homework or Education |
| <input type="checkbox"/> Attending Spiritual Services | <input type="checkbox"/> Home Security |
| <input type="checkbox"/> Shopping for Goods & Services or Paying Bills | <input type="checkbox"/> Managing Accounts (related to banking, finance, or employment benefits, etc.) |
| <input type="checkbox"/> Streaming Entertainment (TV, Movies, Music, etc.) | <input type="checkbox"/> Organizing Transportation or Accessing Maps |
| <input type="checkbox"/> Video Gaming | <input type="checkbox"/> Managing or Receiving Healthcare |
| <input type="checkbox"/> Video Conferencing | |
| <input type="checkbox"/> Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.) | |

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

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

Review the following list and select all of the internet-connected devices you currently use:

ANY THAT APPLY

- Computer (desktop or laptop) - How many?
- Tablet - How many?
- Smart Phone
- Smart Security (Doorbell Cams, Door Locks, Lighting, etc.)
- Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)
- There are no Smart Devices in the 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? _____

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

(Mark with an **X** to **SELECT ONLY ONE**)

- \$0-\$9,999
- \$10,000-\$19,999
- \$20,000-\$29,999
- \$30,000-\$39,999
- \$40,000-\$49,999
- \$50,000-\$59,999
- \$60,000-\$69,999
- \$70,000-\$79,999
- \$80,000-\$89,999
- \$90,000-\$99,999
- \$100,000-\$129,999
- \$130,000-\$159,999
- More than \$160,000
- I don't know
- Prefer not to answer

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

(Mark with an **X** to **SELECT ONLY ONE**)

- The home is owned by you or someone in this household
- The home is rented by you or someone in this household
- I/We own a mobile home on property that is rented
- Some other relationship

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

(Mark with an **X** to **SELECT ONLY ONE**)

- No formal education
- Some high school (no diploma)
- High school diploma or equivalent certificate (GED)
- Some college credit, no degree
- Trade/Technical/Vocational training or certificate
- Associate's Degree
- Bachelor's Degree
- Postgraduate Degree
- I don't know
- Prefer not to say

What is your gender?

(Mark with an **X** to **SELECT ONLY ONE**)

- Woman
- Man
- Prefer to self-identify - Please indicate: _____
- Prefer not to say

Thank you for completing the survey. Your voice matters. Your input will be shared with Internet Service Providers as they determine where to expand and enhance internet access in your area. While this is a multi-year process with several stages, your participation will help build a better internet for a better South Carolina.

If you lack access to the internet or your current service is inadequate, please let us know by completing this form online: ors.sc.gov/broadband/mapping/ineedinternet

Find more resources for financial assistance by visiting:

AffordableConnectivity.gov
and
GetConnectedSC.org

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:

Get
Connected
SC

APPENDIX II

Better Internet Survey [Has Home Internet]

Get
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Get SC
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Better-Internet Survey

(HAS HOME INTERNET)

Welcome to the Better-Internet Survey. It won't take long. (Most people finish in under five minutes). But, letting your voice be heard can go a long way in improving internet connections for you and your community.

Your participation is completely voluntary, and you are under no obligation to participate. All questions are optional and anonymous as you will NOT be asked for any personal identifying information like your name, phone number or email address. When requesting the paper survey, you agreed to the terms and conditions.

If you have any questions or concerns, you can find more information at:

Get Connected SC

getconnectedsc.org/terms-conditions

INSTRUCTIONS

Answer button questions with a single X:

- Yes
- No

Answer checkbox questions with as many check marks as necessary:

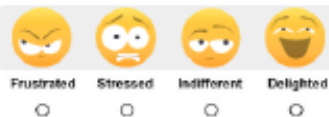
- Option 1
- Option 2
- Option 3

START HERE...

Please write-in the Zip Code for the physical address of your home (Not a P.O. Box):

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

(Mark with an X to SELECT ONLY ONE)



How intense is the feeling you just expressed?

(Mark with an X to SELECT ONLY ONE)



Do you want to explain that feeling?

Please identify your Internet Service Provider or state "I do not know":

What type of connection do you have at your home? (Mark with an X to SELECT ONLY ONE)

- DSL (using a telephone line)
- Cable (using a black coax television cable)
- Fiber
- Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
- Satellite (satellite dish attached to the home or in the yard)
- I do not know

1

Does the internet connection at your home meet your needs?

- Yes
- No

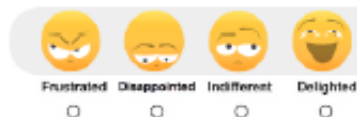
If NO, which statement(s) best describe(s) your situation or circumstances when it comes to your current home internet connection?

√ ANY THAT APPLY

- Does not meet our PERSONAL needs in terms of stability and/or speed
 - Does not meet our EDUCATIONAL needs in terms of stability and/or speed
 - Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed
 - The service is too expensive
 - Locked into a service contract and cannot change Internet Service Provider
 - Contract has data limits that restrict our use or slow down our connection
 - Some other circumstance - Please explain:
-
-

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

(Mark with an X to SELECT ONLY ONE)



How intense is the feeling you just expressed?

(Mark with an X to SELECT ONLY ONE)



Do you want to explain that feeling?

Does any member of your household identify as one of more of the following?

√ ANY THAT APPLY

- School age child(ren) [pre-k - 12 student(s)]
- College, vocational or other type of student(s)
- Veteran(s)
- Senior Citizen(s) (65+ years of age)
- Person(s) with a physical disability
- Person(s) with a chronic illness
- Person(s) with a developmental or learning difficulty/disability
- Person(s) who do(es) not speak English or has a language barrier
- Person(s) who is (are), or has (have) been, incarcerated
- Person(s) who is (are) unemployed and looking for work
- None of the above

2

Does anyone living in your household identify as any of the following?

√ ANY THAT APPLY

- Black or African American
- White
- American Indian or Alaska Native
- Asian or Pacific Islander
- Hispanic/Latino
- Some other racial or ethnic identity
- Prefer not to say

Which of the following best describes your home?

(Mark with an **X** to SELECT ONLY ONE)

- Single Family Home (no shared walls)
- Multi-Unit Dwelling (such as an apartment, townhome, or condo)
- Public Housing or Housing Projects (government subsidized housing)
- Mobile Home
- Other

Thanks for providing this valuable information! Next, we'll be asking about the critical reasons your household needs better internet.

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.

√ ANY THAT APPLY

I/We NEED reliable internet access at home for:

- Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)*
- Supporting child(ren) in Pre-Kindergarten through 12th grade education**
- Performing job functions as a remote employee (i.e., working from home)***
- Running a business
- Some other critical reason - Please explain:

- Nobody in the home has a critical need for the internet

Do any of the following apply to your household?

√ ANY THAT APPLY

- I/We live in a rural location
- I/We homeschool my/our children
- Someone in our household works remotely from home
- I/We run a business (or farm) from home
- None of these apply

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

IF your household **NEEDS reliable internet to access healthcare services, please fill out the following (IF NOT, please SKIP ahead).*

For what purposes do members of your household need to be able to access healthcare services from home?

√ ANY THAT APPLY

- Urgent care
- Primary care
- Mental health care
- VA services
- Prescription refills and/or referrals
- Appointment scheduling
- Patient portal access (such as MyChart)
- Some other purpose - Please explain:

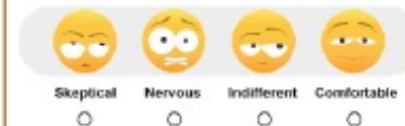
What reasons contribute to your need to access healthcare from home?

√ ANY THAT APPLY

- Convenience
- Costs
- Mobility issues make leaving home difficult
- Transportation is unreliable, expensive, or difficult to obtain
- Some other reason - Please explain:

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

(Mark with an **X** to SELECT ONLY ONE)



How intense is the feeling you just expressed?

(Mark with an **X** to SELECT ONLY ONE)



Do you want to explain that feeling?

****IF your household NEEDS reliable internet to support child(ren) in their PreK–12 education, please fill out the following (IF NOT, please SKIP ahead).**

Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments?

- Yes
- No

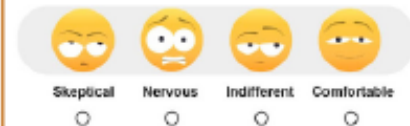
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities?

(Mark with an **X** to **SELECT ONLY ONE**)

- Yes, we own a computer that is dedicated to school activities
- Yes, our child(ren)'s computer is provided through their school
- No

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

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

*****IF your household NEEDS reliable internet to perform job functions, please fill out the following (IF NOT, please SKIP ahead).**

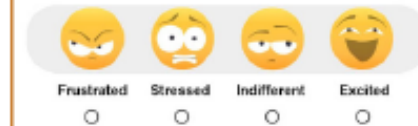
Which statement(s) best describes your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee?

√ **ANY THAT APPLY**

- My/Our household income is dependent on having internet access at home
- An employer requires the ability to perform some or all job functions from home
- My/Our career options are currently restricted due to inefficient internet stability or speed
- My/Our professional development/learning is currently restricted due to inefficient internet stability or speed
- I/We would be willing to pay more for internet that is faster or more stable
- Some other situation or circumstance - Please explain:

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

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

In general, how do you use the internet today?

√ **ANY THAT APPLY, REGARDLESS OF HOW OR WHERE YOU CONNECT TO THE INTERNET**

- | | |
|---|--|
| <input type="checkbox"/> Email | <input type="checkbox"/> Research & Personal Enrichment |
| <input type="checkbox"/> News, Weather, Current Events | <input type="checkbox"/> Job Searching |
| <input type="checkbox"/> Social Media & Online Community | <input type="checkbox"/> Homework or Education |
| <input type="checkbox"/> Attending Spiritual Services | <input type="checkbox"/> Home Security |
| <input type="checkbox"/> Shopping for Goods & Services or Paying Bills | <input type="checkbox"/> Managing Accounts (related to banking, finance, or employment benefits, etc.) |
| <input type="checkbox"/> Streaming Entertainment (TV, Movies, Music, etc.) | <input type="checkbox"/> Organizing Transportation or Accessing Maps |
| <input type="checkbox"/> Video Gaming | <input type="checkbox"/> Managing or Receiving Healthcare |
| <input type="checkbox"/> Video Conferencing | |
| <input type="checkbox"/> Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.) | |

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

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

Review the following list and select all of the internet-connected devices you currently use:

ANY THAT APPLY

- Computer (desktop or laptop) - How many?
- Tablet - How many?
- Smart Phone
- Smart Security (Doorbell Cams, Door Locks, Lighting, etc.)
- Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)
- There are no Smart Devices in the 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? _____

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

(Mark with an **X** to **SELECT ONLY ONE**)

- \$0-\$9,999
- \$10,000-\$19,999
- \$20,000-\$29,999
- \$30,000-\$39,999
- \$40,000-\$49,999
- \$50,000-\$59,999
- \$60,000-\$69,999
- \$70,000-\$79,999
- \$80,000-\$89,999
- \$90,000-\$99,999
- \$100,000-\$129,999
- \$130,000-\$159,999
- More than \$160,000
- I don't know
- Prefer not to answer

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

(Mark with an **X** to **SELECT ONLY ONE**)

- The home is owned by you or someone in this household
- The home is rented by you or someone in this household
- I/We own a mobile home on property that is rented
- Some other relationship

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

(Mark with an **X** to **SELECT ONLY ONE**)

- No formal education
- Some high school (no diploma)
- High school diploma or equivalent certificate (GED)
- Some college credit, no degree
- Trade/Technical/Vocational training or certificate
- Associate's Degree
- Bachelor's Degree
- Postgraduate Degree
- I don't know
- Prefer not to say

What is your gender?

(Mark with an **X** to **SELECT ONLY ONE**)

- Woman
- Man
- Prefer to self-identify - Please indicate: _____
- Prefer not to say

Thank you for completing the survey. Your voice matters. Your input will be shared with Internet Service Providers as they determine where to expand and enhance internet access in your area. While this is a multi-year process with several stages, your participation will help build a better internet for a better South Carolina.

If you lack access to the internet or your current service is inadequate, please let us know by completing this form online: ors.sc.gov/broadband/mapping/ineedinternet

Find more resources for financial assistance by visiting:

AffordableConnectivity.gov
and
GetConnectedSC.org

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:

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APPENDIX III

Survey Participation Rate by County

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PARTICIPATION RATE BY COUNTY

County	Count (n)	Percent (%)	Valid Prcnt (%)	County Population	Rate (per 10,000)
Abbeville County	61	0.3	0.3	24,404	25.0
Aiken County	305	1.7	1.7	172,895	17.6
Allendale County	231	1.2	1.3	8,331	277.3
Anderson County	279	1.5	1.5	204,353	13.7
Bamberg County	560	3	3	13,906	402.7
Barnwell County	363	2	2	20,805	174.5
Beaufort County	680	3.7	3.7	195,656	34.8
Berkeley County	892	4.8	4.8	235,987	37.8
Calhoun County	77	0.4	0.4	14,554	52.9
Charleston County	970	5.2	5.3	417,981	23.2
Cherokee County	137	0.7	0.7	57,316	23.9
Chester County	137	0.7	0.7	32,232	42.5
Chesterfield County	94	0.5	0.5	45,606	20.6
Clarendon County	279	1.5	1.5	33,415	83.5
Colleton County	167	0.9	0.9	37,481	44.6
Darlington County	159	0.9	0.9	66,509	23.9
Dillon County	192	1	1	30,367	63.2
Dorchester County	458	2.5	2.5	165,737	27.6
Edgefield County	185	1	1	27,120	68.2
Fairfield County	338	1.8	1.8	22,059	153.2
Florence County	285	1.5	1.5	137,588	20.7
Georgetown County	580	3.1	3.1	63,353	91.6
Greenville County	517	2.8	2.8	532,486	9.7
Greenwood County	588	3.2	3.2	71,074	82.7

County	Count (n)	Percent (%)	Valid Prcnt (%)	County Population	Rate (per 10,000)
Hampton County	386	2.1	2.1	18,053	213.8
Horry County	2,234	12.1	12.1	365,449	61.1
Jasper County	116	0.6	0.6	31,588	36.7
Kershaw County	283	1.5	1.5	67,472	41.9
Lancaster County	162	0.9	0.9	100,926	16.1
Laurens County	272	1.5	1.5	67,883	40.1
Lee County	176	1	1	16,701	105.4
Lexington County	805	4.4	4.4	303,946	26.5
Marion County	242	1.3	1.3	9,430	256.6
Marlboro County	46	0.2	0.2	30,158	15.3
McCormick County	294	1.6	1.6	25,581	114.9
Newberry County	122	0.7	0.7	38,445	31.7
Oconee County	267	1.4	1.4	80,015	33.4
Orangeburg County	997	5.4	5.4	85,343	116.8
Pickens County	200	1.1	1.1	127,983	15.6
Richland County	948	5.1	5.1	419,051	22.6
Saluda County	223	1.2	1.2	20,315	109.8
Spartanburg County	375	2	2	326,205	11.5
Sumter County	456	2.5	2.5	106,360	42.9
Union County	210	1.1	1.1	26,991	77.8
Williamsburg County	286	1.5	1.5	29,825	95.9
York County	837	4.5	4.5	289,105	29.0
Missing	10	0.1			

Table A1: Survey participation rate by county [ALL survey responses, N=18,841]



PARTICIPATION RATE BY COUNTY, COMPLETE SURVEYS

County	Count (n)	Percent (%)	Valid Prcnt (%)	County Population	Rate (per 10,000)
Abbeville County	51	0.4	0.4	24,404	20.9
Aiken County	240	1.8	1.8	172,895	13.9
Allendale County	205	1.6	1.6	8,331	246.1
Anderson County	220	1.7	1.7	204,353	10.8
Bamberg County	391	3	3	13,906	281.2
Barnwell County	279	2.1	2.1	20,805	134.1
Beaufort County	482	3.7	3.7	195,656	24.6
Berkeley County	605	4.6	4.6	235,987	25.6
Calhoun County	55	0.4	0.4	14,554	37.8
Charleston County	689	5.3	5.3	417,981	16.5
Cherokee County	87	0.7	0.7	57,316	15.2
Chester County	95	0.7	0.7	32,232	29.5
Chesterfield County	62	0.5	0.5	45,606	13.6
Clarendon County	202	1.6	1.6	33,415	60.5
Colleton County	128	1	1	37,481	34.2
Darlington County	128	1	1	66,509	19.2
Dillon County	158	1.2	1.2	30,367	52.0
Dorchester County	342	2.6	2.6	165,737	20.6
Edgefield County	159	1.2	1.2	27,120	58.6
Fairfield County	257	2	2	22,059	116.5
Florence County	195	1.5	1.5	137,588	14.2
Georgetown County	396	3	3	63,353	62.5
Greenville County	353	2.7	2.7	532,486	6.6
Greenwood County	484	3.7	3.7	71,074	68.1

County	Count (n)	Percent (%)	Valid Prcnt (%)	County Population	Rate (per 10,000)
Hampton County	291	2.2	2.2	18,053	161.2
Horry County	1,369	10.5	10.5	365,449	37.5
Jasper County	71	0.5	0.5	31,588	22.5
Kershaw County	168	1.3	1.3	67,472	24.9
Lancaster County	106	0.8	0.8	100,926	10.5
Laurens County	210	1.6	1.6	67,883	30.9
Lee County	132	1	1	16,701	79.0
Lexington County	546	4.2	4.2	303,946	18.0
Marion County	110	0.8	0.8	9,430	116.6
Marlboro County	30	0.2	0.2	30,158	9.9
McCormick County	238	1.8	1.8	25,581	93.0
Newberry County	95	0.7	0.7	38,445	24.7
Oconee County	218	1.7	1.7	80,015	27.2
Orangeburg County	739	5.7	5.7	85,343	86.6
Pickens County	133	1	1	127,983	10.4
Richland County	607	4.7	4.7	419,051	14.5
Saluda County	190	1.5	1.5	20,315	93.5
Spartanburg County	297	2.3	2.3	326,205	9.1
Sumter County	344	2.6	2.6	106,360	32.3
Union County	157	1.2	1.2	26,991	58.2
Williamsburg County	179	1.4	1.4	29,825	60.0
York County	531	4.1	4.1	289,105	18.4

Table A2: Survey participation rate by county [COMPLETE survey responses, N=13,024]



APPENDIX IV

Feelings about Home Internet by County

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FEELINGS ABOUT HOME INTERNET BY COUNTY

County	Positive Feelings (n)	Row Percent (%)	Negative Feelings (n)	Row Percent (%)	Total Count (n)
Abbeville County	36	61.0%	11	18.6%	59
Aiken County	69	24.0%	146	50.9%	287
Allendale County	37	18.0%	128	62.4%	205
Anderson County	47	17.8%	178	67.4%	264
Bamberg County	119	24.5%	254	52.3%	486
Barnwell County	74	21.8%	217	64.0%	339
Beaufort County	102	16.3%	352	56.2%	626
Berkeley County	138	17.1%	440	54.6%	806
Calhoun County	33	49.3%	17	25.4%	67
Charleston County	181	20.6%	445	50.6%	879
Cherokee County	43	35.5%	62	51.2%	121
Chester County	8	6.5%	97	78.9%	123
Chesterfield County	26	31.7%	42	51.2%	82
Clarendon County	69	36.1%	56	29.3%	191
Colleton County	52	34.9%	56	37.6%	149
Darlington County	17	12.0%	90	63.4%	142
Dillon County	81	58.7%	28	20.3%	138
Dorchester County	80	19.3%	204	49.2%	415
Edgefield County	18	10.1%	144	80.4%	179
Fairfield County	78	24.6%	196	61.8%	317
Florence County	78	30.2%	107	41.5%	258
Georgetown County	157	29.5%	185	34.8%	532
Greenville County	92	19.7%	228	48.7%	468
Greenwood County	141	25.0%	314	55.8%	563

County	Positive Feelings (n)	Row Percent (%)	Negative Feelings (n)	Row Percent (%)	Total Count (n)
Hampton County	76	22.1%	204	59.3%	344
Horry County	470	24.8%	713	37.6%	1898
Jasper County	35	31.3%	53	47.3%	112
Kershaw County	58	23.1%	128	51.0%	251
Lancaster County	34	22.4%	77	50.7%	152
Laurens County	36	13.7%	156	59.5%	262
Lee County	48	29.8%	72	44.7%	161
Lexington County	152	21.3%	356	49.9%	714
Marion County	92	44.9%	73	35.6%	205
Marlboro County	14	33.3%	18	42.9%	42
McCormick County	144	50.5%	55	19.3%	285
Newberry County	22	18.6%	83	70.3%	118
Oconee County	38	15.4%	172	69.6%	247
Orangeburg County	238	25.6%	544	58.6%	928
Pickens County	35	19.8%	88	49.7%	177
Richland County	212	25.2%	365	43.3%	842
Saluda County	13	6.0%	164	75.9%	216
Spartanburg County	42	11.7%	254	70.9%	358
Sumter County	103	26.1%	189	47.8%	395
Union County	27	14.1%	135	70.3%	192
Williamsburg County	128	47.4%	54	20.0%	270
York County	152	19.3%	412	52.4%	786
Total	3945	23.7%	8362	50.2%	16651

Table A3: Feelings about Home Internet by County
 [Positive Feelings include Delighted and Negative Feelings include Stressed and Frustrated]

APPENDIX V

Household composition

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HOUSEHOLD COMPOSITION

Variable	All Surveys (N=18,481)			Complete Surveys (N=13,024)	
	Count (n)	Percent (%)	Valid Percent (%)	Count (n)	Percent (%)
School age child(ren) [pre-K - 12 student(s)]	5,294	28.6%	32.7%	4,310	33.1%
College, vocational or other type of student(s)	2,738	14.8%	16.9%	2,172	16.7%
Veteran(s)	2,576	13.9%	15.9%	2,137	16.4%
Senior Citizen(s) (65+ years of age)	7,148	38.7%	44.1%	5,698	43.8%
Person(s) with a physical disability	2,074	11.2%	12.8%	1,666	12.8%
Person(s) with a chronic illness	2,002	10.8%	12.4%	1,597	12.3%
Person(s) with a developmental or learning difficulty/disability	886	4.8%	5.5%	716	5.5%
Person(s) who do(es) not speak English or has a language barrier	603	3.3%	3.7%	493	3.8%
Person(s) who is (are), or has (have) been, incarcerated	275	1.5%	1.7%	233	1.8%
Person(s) who is (are) unemployed and looking for work	1,139	6.2%	7.0%	937	7.2%
None of the above	2,552	13.8%	15.8%	2,069	15.9%
Missing (i.e., None of the 11 items selected)	2,283	12.4%			

Table A4: Household Composition

THANK YOU!

For any inquires please contact:

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Associate Director, Patient Engagement Studio

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ALL SURVEY RESPONSES (N=18,481)

	Variable	Count (n) or Mean	Percent (%) or SD	Valid Percent (%)	County Population	Rate (per 10,000)
Survey Language	English	17,824	96.4	96.4		
	Spanish	657	3.6	3.6		
*County	Abbeville County	61	0.3	0.3	24,404	25.0
	Aiken County	305	1.7	1.7	172,895	17.6
	Allendale County	231	1.2	1.3	8,331	277.3
	Anderson County	279	1.5	1.5	204,353	13.7
	Bamberg County	560	3	3	13,906	402.7
	Barnwell County	363	2	2	20,805	174.5
	Beaufort County	680	3.7	3.7	195,656	34.8
	Berkeley County	892	4.8	4.8	235,987	37.8
	Calhoun County	77	0.4	0.4	14,554	52.9
	Charleston County	970	5.2	5.3	417,981	23.2
	Cherokee County	137	0.7	0.7	57,316	23.9
	Chester County	137	0.7	0.7	32,232	42.5
	Chesterfield County	94	0.5	0.5	45,606	20.6
	Clarendon County	279	1.5	1.5	33,415	83.5
	Colleton County	167	0.9	0.9	37,481	44.6
	Darlington County	159	0.9	0.9	66,509	23.9
	Dillon County	192	1	1	30,367	63.2
	Dorchester County	458	2.5	2.5	165,737	27.6
	Edgefield County	185	1	1	27,120	68.2
	Fairfield County	338	1.8	1.8	22,059	153.2
	Florence County	285	1.5	1.5	137,588	20.7
	Georgetown County	580	3.1	3.1	63,353	91.6
	Greenville County	517	2.8	2.8	532,486	9.7
	Greenwood County	588	3.2	3.2	71,074	82.7
	Hampton County	386	2.1	2.1	18,053	213.8
	Horry County	2,234	12.1	12.1	365,449	61.1
	Jasper County	116	0.6	0.6	31,588	36.7
	Kershaw County	283	1.5	1.5	67,472	41.9
	Lancaster County	162	0.9	0.9	100,926	16.1
	Laurens County	272	1.5	1.5	67,883	40.1
	Lee County	176	1	1	16,701	105.4
	Lexington County	805	4.4	4.4	303,946	26.5
Marion County	242	1.3	1.3	9,430	256.6	
Marlboro County	46	0.2	0.2	30,158	15.3	
McCormick County	294	1.6	1.6	25,581	114.9	
Newberry County	122	0.7	0.7	38,445	31.7	
Oconee County	267	1.4	1.4	80,015	33.4	

	Orangeburg County	997	5.4	5.4	85,343	116.8
	Pickens County	200	1.1	1.1	127,983	15.6
	Richland County	948	5.1	5.1	419,051	22.6
	Saluda County	223	1.2	1.2	20,315	109.8
	Spartanburg County	375	2	2	326,205	11.5
	Sumter County	456	2.5	2.5	106,360	42.9
	Union County	210	1.1	1.1	26,991	77.8
	Williamsburg County	286	1.5	1.5	29,825	95.9
	York County	837	4.5	4.5	289,105	29.0
	Missing	10				
	Lowcountry	5,534	29.9	30		
	Midlands	4,708	25.5	25.5		
	PeeDee	5,029	27.2	27.2		
	Upstate	3,200	17.3	17.3		
SC Region	Missing	10				
	Large-in a metro area with at least 1 million residents or more	1,367	7.4	7.4		
	Small-in a metro area with fewer than 1 million residents	11,267	61	61		
	Noncore adjacent to a large metro area	94	0.5	0.5		
Urban Influence Code (UIC) 2013	Micropolitan adjacent to a small metro area	3,046	16.5	16.5		
	Noncore adjacent to a small metro with town of at least 2,500 residents	2,137	11.6	11.6		
	Noncore adjacent to micro area and contains a town of 2,500-19,999 residents	560	3	3		
	Missing	10				
	1 (Urban)	7,710	41.7	41.8		
	1.1 (Urban)	418	2.3	2.3		
	2 (Urban)	3,357	18.2	18.2		
	2.1 (Urban)	129	0.7	0.7		
	3 (Urban)	650	3.5	3.5		
	4 (Rural)	2,125	11.5	11.5		
	4.1 (Urban)	91	0.5	0.5		
	5 (Rural)	1,191	6.4	6.4		
RUCA Code	5.1 (Urban)	92	0.5	0.5		
	6 (Rural)	571	3.1	3.1		
	7 (Rural)	1,261	6.8	6.8		
	7.1 (Urban)	81	0.4	0.4		
	8 (Rural)	233	1.3	1.3		
	9 (Rural)	51	0.3	0.3		
	10 (Rural)	375	2	2		
	10.1 (Urban)	82	0.4	0.4		

	10.3 (Rural)	50	0.3	0.3
	Missing	14		
RUCA Binary Classification	Rural	5,857	31.7	31.7
	Urban	12,610	68.2	68.3
	Missing	14		
How do you feel about the current options for connecting your home to the internet?	Delighted	3,948	21.4	23.7
	Frustrated	5,898	31.9	35.4
	Indifferent	4,347	23.5	26.1
	Stressed	2,467	13.3	14.8
	Missing	1,821	9.2	
Feeling Intensity of Current Options	Delighted	0.52	0.34	
	Frustrated	0.55	0.36	
	Indifferent	0.43	0.25	
	Stressed	0.51	0.30	
*Do you currently have an internet connection at your home?	Yes	12,426	67.2	73.1
	No	1,513	8.2	8.9
	Access home internet using a cell phone ONLY	3,066	16.6	18
	Missing	1,476	8	
Please select your Internet Service Provider from the menu provided: [among those who have Internet]	AT&T	1,410	11.3	11.7
	Breezeline formerly Atlantic Broadband	125	1	1
	Brightspeed	325	2.6	2.7
	CarolinaConnect	71	0.6	0.6
	Cherokee Broadband	1	0	0
	Comcast	472	3.8	3.9
	Comporium	716	5.8	6
	DirectTV	75	0.6	0.6
	Frontier	152	1.2	1.3
	FTC	357	2.9	3
	GCI Communications	1	0	0
	Hargray	519	4.2	4.3
	Home Telecom	475	3.8	4
	HTC	938	7.5	7.8
	HughesNet	326	2.6	2.7
	Net Doctors	3	0	0
	NTInet	8	0.1	0.1
	Open Broadband	1	0	0
	Orangeburg County Broadband	11	0.1	0.1
	Palmetto Rural	116	0.9	1
Piedmont Rural	58	0.5	0.5	
RiverNet Connect	27	0.2	0.2	
Sandhill Telephone	45	0.4	0.4	
Skyrunner	2	0	0	

	Spectrum	3,301	26.6	27.5
	Starlink	72	0.6	0.6
	TDS	59	0.5	0.5
	T-Mobile	308	2.5	2.6
	TriCoLink	41	0.3	0.3
	Truvista	241	1.9	2
	Upcountry Fiber	19	0.2	0.2
	Verizon	212	1.7	1.8
	Viasat	107	0.9	0.9
	Vyve	159	1.3	1.3
	WCTEL	430	3.5	3.6
	Windstream	66	0.5	0.5
	WOW	49	0.4	0.4
	Other Internet Service Provider	293	2.4	2.4
	I dont know	416	3.3	3.5
	Missing	419	3.4	
*What type of connection do you have at your home? [among those who have Internet]	DSL	1,335	10.7%	13.3%
	Cable	4,117	33.1%	41.1%
	Fiber	2,559	20.6%	25.6%
	Fixed Wireless	1,094	8.8%	10.9%
	Satellite	620	5.0%	6.2%
	I do not know	289	2.3%	2.9%
	Missing	2,412	19.4%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	7,355	59.2	62.9
	No	4,341	34.9	37.1
	Missing	730	5.9	
*Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	1. Does not meet our PERSONAL needs in terms of stability and/or speed	3,282	75.6	77.0%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	1,434	33	33.6%
	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	1,696	39.1	39.8%
	4. The service is too expensive	2,332	53.7	54.7%
	5. Locked into a service contract and cannot change internet service provider	359	8.3	8.4%
	6. Contract has data limits that restrict our use or slow down our connection	897	20.7	21.0%
	7. Some other circumstance	423	9.7	9.9%
	Missing (ie. None of the 7 items selected)	77	1.77	
When it comes to Customer Service, how do you feel about your Internet	Delighted	3,083	24.8	27.5
	Disappointed	2,017	16.2	18

How do you feel about your internet Service Provider (ISP)? [among those who have Internet]	Frustrated	1,617	13	14.4
	Indifferent	4,505	36.3	40.1
	Missing	1,204	9.7	
Feeling Intensity of Current Options	Delighted	0.48	0.33	
	Disappointed	0.46	0.30	
	Frustrated	0.54	0.37	
	Indifferent	0.38	0.24	
*Among NO INTERNET: Would you like an internet connection at home?	Yes	1,166	77.1	80.9
	No	275	18.2	19.1
	Missing	72	4.8	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	2,708	88.3	90.6
	No	281	9.2	9.4
	Missing	77	2.5	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	3,874	84.6	87.4
	No	556	12.1	12.6
	Missing	149	3.3	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 1,166]	1. There is no Internet Service Provider (ISP) serving our home's location	406	34.8	37.2%
	2. The options available do not meet our needs	174	14.9	15.9%
	3. We don't have the devices or tools to get online	155	13.3	14.2%
	4. The cost is too high	643	55.1	58.9%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	86	7.4	7.9%
	6. We don't feel confident in our ability to use the internet	57	4.9	5.2%
	7. We don't feel safe using the internet	70	6.0	6.4%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	191	16.4	17.5%
	9. Some other circumstance(s)	51	4.4	4.7%
	Missing (ie. None of the 9 items selected)	74	6.3	
AMONG (2. The options available do not meet our needs): You selected "The options available do not meet our needs" would you be willing to pay more to get the level of service needed? [among those with No Internet AND WANT Internet AND Options available do not meet needs = 174]	Yes	65	37.4	55.6
	No	52	29.9	44.4
	Missing	57	32.8	

<p>*Among NO INTERNET and DO NOT WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND DO NOT WANT Internet = 275]</p>	0. We don't have interest in a home internet connection	102	37.1	41.0%
	1. There is no Internet Service Provider (ISP) serving our home's location	10	3.6	4.0%
	2. The options available do not meet our needs	9	3.3	3.6%
	3. We don't have the devices or tools to get online	28	10.2	11.2%
	4. The cost is too high	113	41.1	45.4%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	17	6.2	6.8%
	6. We don't feel confident in our ability to use the internet	27	9.8	10.8%
	7. We don't feel safe using the internet	33	12.0	13.3%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	19	6.9	7.6%
	9. Some other circumstance(s)	9	3.3	3.6%
Missing (ie. None of the 10 items selected)	26	9.5		
<p>*Among CELL ONLY AND WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 2,708]</p>	1. There is no Internet Service Provider (ISP) serving our home's location	1,087	40.1	43.2%
	2. The options available do not meet our needs	486	17.9	19.3%
	3. We don't have the devices or tools to get online	253	9.3	10.0%
	4. The cost is too high	1,407	48.0	55.9%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	177	6.5	7.0%
	6. We don't feel confident in our ability to use the internet	128	4.7	5.1%
	7. We don't feel safe using the internet	126	4.7	5.0%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	358	13.2	14.2%
	9. Some other circumstance(s)	114	4.2	4.5%
Missing (ie. None of the 9 items selected)	190	7.0		
<p>AMONG (2. The options available do not meet our needs): You</p>	Yes	215	44.2	59.9
	No	144	29.6	40.1

selected "The options available do not meet our needs" would you be willing to pay more to get the level of service needed?

[among those with Cell only AND WANT Internet AND Options available do not meet needs =

Missing 127 26.1

	0. We don't have interest in a home internet connection	115	40.9	45.1%	
	1. There is no Internet Service Provider (ISP) serving our home's location	24	8.5	9.4%	
	2. The options available do not meet our needs	20	7.1	7.8%	
*Among CELL ONLY AND DO NOT WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND DO NOT WANT Internet = 281]	3. We don't have the devices or tools to get online	17	6.0	6.7%	
	4. The cost is too high	117	41.6	45.9%	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	11	3.9	4.3%	
	6. We don't feel confident in our ability to use the internet	16	5.7	6.3%	
	7. We don't feel safe using the internet	16	5.7	6.3%	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	20	7.1	7.8%	
	9. Some other circumstance(s)	9	3.2	3.5%	
	Missing (ie. None of the 10 items selected)	26	9.3		
		School age child(ren) [pre-K - 12 student(s)]	5,294	28.6	32.7%
		College, vocational or other type of student(s)	2,738	14.8	16.9%
	Veteran(s)	2,576	13.9	15.9%	
	Senior Citizen(s) (65+ years of age)	7,148	38.7	44.1%	
	Person(s) with a physical disability	2,074	11.2	12.8%	
	Person(s) with a chronic illness	2,002	10.8	12.4%	
*Does any member of your household identify as one or more of the following? [Select any that apply]	Person(s) with a developmental or learning difficulty/disability	886	4.8	5.5%	
	Person(s) who do(es) not speak English or has a language barrier	603	3.3	3.7%	
	Person(s) who is (are), or has (have) been, incarcerated	275	1.5	1.7%	
	Person(s) who is (are) unemployed and looking for work	1,139	6.2	7.0%	
	None of the above	2,552	13.8	15.8%	
	Missing (ie. None of the 11 items selected)	2,283	12.4		
	Black or African American	4,930	26.7	30.6%	

*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	White	8,842	47.8	54.9%
	American Indian or Alaska Native	276	1.5	1.7%
	Asian or Pacific Islander	317	1.7	2.0%
	Hispanic/Latino	1,572	8.5	9.8%
	Some other racial or ethnic identity	301	1.6	1.9%
	Prefer not to say	1,251	6.8	7.8%
Missing (ie. None of the 7 items selected)		2,382	12.9	
*Select any of the following that apply to your household	I/We live in a rural location	8,046	43.5	50.5%
	I/We homeschool my/our child(ren)	533	2.9	3.3%
	Someone in our household works remotely from home	3,813	20.6	23.9%
	I/We run a business (or farm) from home	1,733	9.4	10.9%
	None of these apply	5,228	28.3	32.8%
	Missing (ie. None of the 5 items selected)	2,545	13.8	
Which of the following best describes your home?	Single Family Home (no shared walls)	11,022	59.6	70.1
	Multi-Unit Dwelling (such as an apartment, townhome, or condo)	1,744	9.4	11.1
	Public Housing or Housing Projects (government subsidized housing)	529	2.9	3.4
	Mobile Home	2,039	11	13
	Other	397	2.1	2.5
	Missing	2,750	14.9	
Are you familiar with the Affordable Connectivity Program (ACP) program?	Yes	4,230	22.9	26.6
	No	11,648	63	73.4
	Missing	2,603	14.1	
Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	communicating with providers, ordering prescriptions)	10,529	57	66.9%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	5,494	29.7	34.9%
	Performing job functions as a remote employee (i.e. working from home)	6,760	36.6	43.0%
I/We NEED reliable internet access at home for:	Running a business	2,507	13.6	15.9%
	Some other critical reason	2,586	14	16.4%
	Nobody in the home has a critical need for the internet	1,703	9.2	10.8%
	Missing (ie. None of the 6 items selected)	2,750	14.9	
For what purposes do members of your household need to be able to access healthcare services from	Urgent care	3,011	28.6	29.4%
	Primary care	6,869	65.2	67.0%
	Mental health care	1,808	17.2	17.6%
	VA services	1,449	13.8	14.1%
	Prescription Refills and or Referrals	7,688	73.0	75.0%
	Appointment scheduling	8,049	76.4	78.5%

home?	Patient portal access (such as MyChart)	7,836	74.4	76.4%
Select all that apply. [Among Critical Need_Healthcare - 10529]	Some other purpose	415	3.9	4.0%
	Missing (ie. None of the 8 items selected)	276	2.6	
What reasons contribute to your need to access healthcare from home? [Among Critical Need_Healthcare - 10529]	Convenience	9,057	86	89.2%
	Costs	4,889	46.4	48.2%
	Mobility issues make leaving home difficult	1,890	18	18.6%
	Transportation is unreliable, expensive, or difficult to obtain	1,678	15.9	16.5%
	Some other reason	765	7.3	7.5%
	Missing (ie. None of the 5 items selected)	381	3.6	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 10529]	Skeptical	747	7.1	7.5
	Nervous	1,323	12.6	13.4
	Indifferent	1,820	17.3	18.4
	Comfortable	6,013	57.1	60.7
	Missing	626	5.9	
Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments? [Among Critical Need_Education - 5494]	Yes	4,619	84.1	87.3
	No	672	12.2	12.7
	Missing	203	3.7	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 5494]	Yes, we own a computer that is dedicated to school activities	2,033	37.0	38.3
	Yes, our child(ren)'s computer is provided through their school	2,443	44.5	46.0
	No	834	15.2	15.7
	Missing	184	3.3	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 5494]	Skeptical	2,195	40.0	42.5
	Nervous	1,018	18.5	19.7
	Indiferent	1,364	24.8	26.4
	Comfortable	584	10.6	11.3
	Missing	333	6.1	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet	My/Our household income is dependent on having internet access at home	3,483	51.5	56.6%
	An employer requires the ability to perform some or all job functions from home	3,957	58.5	64.3%
	My/Our career options are currently restricted due to inefficient internet stability or speed	1,273	18.8	20.7%
	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	1,407	20.8	22.9%

connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 6760]	I/We would be willing to pay more for internet that is faster or more stable	1,457	21.6	23.7%
	Some other situation or circumstance	345	5.1	5.6%
	Missing (ie. None of the 6 items selected)	605	8.9	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 6760]	Excited	2,215	32.8	35.9
	Frustrated	1,017	15.0	16.5
	Indifferent	1,715	25.4	27.8
	Stressed	1,222	18.1	19.8
	Missing	591	8.7	
In general, how do you use the internet today? Select ALL that apply, regardless of how or where you connect to the internet.	1. Email	13,981	75.7	93.0%
	2. News, Weather, Current Events	11,593	62.7	77.1%
	3. Social Media & Online Community	10,593	57.3	70.5%
	4. Attending Spiritual Services	5,195	28.1	34.6%
	5. Shopping for Goods & Services or Paying Bills	11,655	63.1	77.6%
	6. Streaming Entertainment (TV, Movies, Music, etc.)	9,771	52.9	65.0%
	7. Video Gaming	3,811	20.6	25.4%
	8. Video Conferencing	5,883	31.8	39.1%
	9. Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.)	5,254	28.4	35.0%
	10. Research & Personal Enrichment	8,449	45.7	56.2%
	11. Job Searching	3,988	21.6	26.5%
	12. Homework or Education	6,157	33.3	41.0%
	13. Home Security	4,828	26.1	32.1%
	14. Managing Accounts (related to banking, finance, or employment benefits, etc.)	10,503	56.8	69.9%
	15. Organizing Transportation or Accessing Maps	5,997	32.4	39.9%
	16. Managing or Receiving Healthcare	8,083	43.7	53.8%
	Missing (ie. None of the 16 items selected)	3,454	18.7	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	7,767	42	53.6
	Confused	1,747	9.5	12.1
	Indifferent	3,601	19.5	24.9
	Stressed	1,363	7.4	9.4
	Missing	4,003	21.7	
Review the following list and select all of the internet-connected devices you currently use:	1. Computer (desktop or laptop)	12,410	67.2	82.6%
	2. Tablet	9,054	49.0	60.2%
	3. Smart Phone	13,535	73.2	90.1%
	4. Smart Security (Doorbell Cams, Door Locks, Lighting etc.)	5,024	27.2	33.4%
	5. Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)	7,321	39.6	48.7%

	6. There are no Smart Devices in the home	477	2.6	3.2%
	Missing (ie. None of the 6 items selected)	3,452	18.7	
What was your total household income, last year, before taxes?	\$0 to \$9,999	527	2.9	3.7
	\$10,000 to \$19,999	709	3.8	5
	\$20,000 to \$29,999	1,114	6	7.9
	\$30,000 to \$39,999	1,232	6.7	8.7
	\$40,000 to \$49,999	1,197	6.5	8.5
	\$50,000 to \$59,999	1,009	5.5	7.2
	\$60,000 to \$69,999	814	4.4	5.8
	\$70,000 to \$79,999	748	4	5.3
	\$80,000 to \$89,999	610	3.3	4.3
	\$90,000 to \$99,999	550	3	3.9
	\$100,000 to \$129,000	1,080	5.8	7.7
	\$130,000 to \$159,000	649	3.5	4.6
	More than \$160,000	964	5.2	6.8
	I do not know	425	2.3	3
Prefer not to answer	2,462	13.3	17.5	
	Missing	4,391	23.8	
Which of the following best describes your relationship to your home?	The home is owned by you or someone in this household	10,934	59.2	74.2
	household	2,231	12.1	15.1
	I/We own a mobile home on property that is rented	719	3.9	4.9
	Some other relationship	859	4.6	5.8
	Missing	3,738	20.2	
Including yourself, how many adults (18 years of age and older) live in your home?	1	3,020	16.3	21
	2	7,810	42.3	54.2
	3	2,311	12.5	16
	4	990	5.4	6.9
	5+	275	1.5	1.9
	Missing	4,075	22	
How many children (17 years of age and younger) live in your home?	0	7,884	42.7	59.5
	1	2,284	12.4	17.2
	2	2,041	11	15.4
	3	726	3.9	5.5
	4	227	1.2	1.7
	5+	90	0.5	0.7
	Missing	5,229	28.3	
What is the highest level of education achieved by any member of your	No formal education	122	0.7	0.8
	Some high school (no diploma)	475	2.6	3.2
	High school diploma or equivalent certificate (GED)	1,817	9.8	12.2
	Some college credit, no degree	1,714	9.3	11.5
	Trade/Technical/Vocational training or certificate	1,036	5.6	6.9

achieved by any member of your household?	Associate's degree	1,689	9.1	11.3
	Bachelors degree	3,749	20.3	25.1
	Postgraduate degree	3,420	18.5	22.9
	I dont know	155	0.8	1
	Prefer not to say	745	4	5
	Missing	3,559	19.3	
What is your gender?	Woman	8,643	46.8	58.3
	Man	5,102	27.6	34.4
	Prefer to self-identify	51	0.3	0.3
	Prefer not to say	1,027	5.6	6.9
	Missing	3,658	19.8	
% Reached Last Question	Percentage of respondants that answered last MCQ (non open-ended question): What is your gender?	14,823	80.3	
% Complete	Percentage of respondants that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	13,024	70.5	

* = Required question for complete

COMPLETE SURVEY RESPONSES (N=13,024)

	Variable	Count (n) or Mean	Percent (%) or SD	Valid Percent (%)	County Population	Rate (per 10,000)
	English	12,474	95.8	95.8		
Survey Language	Spanish	550	4.2	4.2		
	Abbeville County	51	0.4	0.4	24,404	20.9
	Aiken County	240	1.8	1.8	172,895	13.9
	Allendale County	205	1.6	1.6	8,331	246.1
	Anderson County	220	1.7	1.7	204,353	10.8
	Bamberg County	391	3	3	13,906	281.2
	Barnwell County	279	2.1	2.1	20,805	134.1
	Beaufort County	482	3.7	3.7	195,656	24.6
	Berkeley County	605	4.6	4.6	235,987	25.6
	Calhoun County	55	0.4	0.4	14,554	37.8
	Charleston County	689	5.3	5.3	417,981	16.5
	Cherokee County	87	0.7	0.7	57,316	15.2
	Chester County	95	0.7	0.7	32,232	29.5
	Chesterfield County	62	0.5	0.5	45,606	13.6
	Clarendon County	202	1.6	1.6	33,415	60.5
	Colleton County	128	1	1	37,481	34.2
	Darlington County	128	1	1	66,509	19.2
	Dillon County	158	1.2	1.2	30,367	52.0
	Dorchester County	342	2.6	2.6	165,737	20.6
	Edgefield County	159	1.2	1.2	27,120	58.6
	Fairfield County	257	2	2	22,059	116.5
	Florence County	195	1.5	1.5	137,588	14.2
	Georgetown County	396	3	3	63,353	62.5
*County	Greenville County	353	2.7	2.7	532,486	6.6
	Greenwood County	484	3.7	3.7	71,074	68.1
	Hampton County	291	2.2	2.2	18,053	161.2
	Horry County	1,369	10.5	10.5	365,449	37.5
	Jasper County	71	0.5	0.5	31,588	22.5
	Kershaw County	168	1.3	1.3	67,472	24.9
	Lancaster County	106	0.8	0.8	100,926	10.5
	Laurens County	210	1.6	1.6	67,883	30.9
	Lee County	132	1	1	16,701	79.0
	Lexington County	546	4.2	4.2	303,946	18.0
	Marion County	110	0.8	0.8	9,430	116.6
	Marlboro County	30	0.2	0.2	30,158	9.9
	McCormick County	238	1.8	1.8	25,581	93.0
	Newberry County	95	0.7	0.7	38,445	24.7
	Oconee County	218	1.7	1.7	80,015	27.2
	Orangeburg County	739	5.7	5.7	85,343	86.6
	Pickens County	133	1	1	127,983	10.4
	Richland County	607	4.7	4.7	419,051	14.5
	Saluda County	190	1.5	1.5	20,315	93.5
	Spartanburg County	297	2.3	2.3	326,205	9.1
	Sumter County	344	2.6	2.6	106,360	32.3
	Union County	157	1.2	1.2	26,991	58.2
	Williamsburg County	179	1.4	1.4	29,825	60.0
	York County	531	4.1	4.1	289,105	18.4
	Lowcountry	3,998	30.7	30.7		
	Midlands	3,273	25.1	25.1		
	PeeDee	3,305	25.4	25.4		
SC Region	Upstate	2,448	18.8	18.8		
	Large-in a metro area with at least 1 million residents or more	937	7.2	7.2		
	Small-in a metro area with fewer than 1 million residents	7,817	60	60		
Urban Influence Code (UIC) 2013	Noncore adjacent to a large metro area	62	0.5	0.5		
	Micropolitan adjacent to a small metro area	2,308	17.7	17.7		
	Noncore adjacent to a small metro with town of at least 2,500 residents	1,509	11.6	11.6		
	Noncore adjacent to micro area and contains a town of 2,500-19,999 residents	391	3	3		
	1 (Urban)	5,102	39.2	39.2		
	1.1 (Urban)	276	2.1	2.1		
	2 (Urban)	2,472	19	19		
	2.1 (Urban)	85	0.7	0.7		

	3 (Urban)	468	3.6	3.6
	4 (Rural)	1,564	12	12
	4.1 (Urban)	55	0.4	0.4
	5 (Rural)	939	7.2	7.2
RUCA Code	5.1 (Urban)	72	0.6	0.6
	6 (Rural)	463	3.6	3.6
	7 (Rural)	826	6.3	6.3
	7.1 (Urban)	57	0.4	0.4
	8 (Rural)	186	1.4	1.4
	9 (Rural)	42	0.3	0.3
	10 (Rural)	304	2.3	2.3
	10.1 (Urban)	72	0.6	0.6
	10.3 (Rural)	39	0.3	0.3
RUCA Binary Classification	Rural	4,363	33.5	33.5
	Urban	8,659	66.5	66.5
How do you feel about the current options for connecting your home to the internet?	Delighted	2,866	22	22.8
	Frustrated	4,631	35.6	36.8
	Indifferent	3,154	24.2	25.1
	Stressed	1,924	14.8	15.3
	Missing	449	3.4	
Feeling Intensity of Current Options	Delighted	0.52	0.35	
	Frustrated	0.56	0.36	
	Indifferent	0.43	0.25	
	Stressed	0.52	0.31	
*Do you currently have an internet connection at your home?	Yes	9,038	69.4	69.4
	No	1,293	9.9	9.9
	Access home internet using a cell phone ONLY	2,693	20.7	20.7
	AT&T	1,011	11.2	11.2
	Breezeline formerly Atlantic Broadband	103	1.1	1.1
	Brightspeed	247	2.7	2.7
	CarolinaConnect	60	0.7	0.7
	Cherokee Broadband	1	0	0
	Comcast	403	4.5	4.5
	Comporium	471	5.2	5.2
	DirectTV	55	0.6	0.6
	Frontier	97	1.1	1.1
	FTC	280	3.1	3.1
	GCI Communications	1	0	0
	Hargray	385	4.3	4.3
	Home Telecom	360	4	4
	HTC	669	7.4	7.4
	HughesNet	275	3	3
	Net Doctors	2	0	0
	NTInet	8	0.1	0.1
	Open Broadband	1	0	0
Please select your Internet Service Provider from the menu provided: [among those who have Internet]	Orangeburg County Broadband	10	0.1	0.1
	Palmetto Rural	107	1.2	1.2
	Piedmont Rural	42	0.5	0.5
	RiverNet Connect	19	0.2	0.2
	Sandhill Telephone	29	0.3	0.3
	Skyrunner	2	0	0
	Spectrum	2,338	25.9	25.9
	Starlink	60	0.7	0.7
	TDS	48	0.5	0.5
	T-Mobile	247	2.7	2.7
	TriCoLink	35	0.4	0.4
	Truvista	179	2	2
	Upcountry Fiber	19	0.2	0.2
	Verizon	170	1.9	1.9
	Viasat	92	1	1
	Vyve	138	1.5	1.5
	WCTEL	367	4.1	4.1
	Windstream	44	0.5	0.5
	WOW	33	0.4	0.4
	Other Internet Service Provider	265	2.9	2.9
	I dont know	365	4	4
*What type of connection do you have at your home? [among those who have Internet]	DSL	1,247	13.8%	13.8%
	Cable	3,727	41.2%	41.2%
	Fiber	2,358	26.1%	26.1%
	Fixed Wireless	937	10.4%	10.4%

	Satellite	520	5.8%	5.8%
	I do not know	249	2.8%	2.8%
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	5,656	62.6	62.6
	No	3,382	37.4	37.4
*Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	1. Does not meet our PERSONAL needs in terms of stability and/or speed	2,600	76.9	76.9
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	1,169	34.6	34.6
	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	1,392	41.2	41.2
	4. The service is too expensive	1,897	56.1	56.1
	5. Locked into a service contract and cannot change internet service provider	299	8.8	8.8
	6. Contract has data limits that restrict our use or slow down our connection	735	21.7	21.7
	7. Some other circumstance	340	10.1	10.1
When it comes to Customer Service, how do you feel about your Internet Service Provider (ISP)? [among those who have Internet]	Delighted	2,386	26.4	27.6
	Disappointed	1,579	17.5	18.2
	Frustrated	1,282	14.2	14.8
	Indifferent	3,409	37.7	39.4
	Missing	382	4.2	
Feeling Intensity of Current Options	Delighted	0.48	0.33	
	Disappointed	0.47	0.29	
	Frustrated	0.55	0.37	
	Indifferent	0.38	0.24	
*Among NO INTERNET: Would you like an internet connection at home?	Yes	1,051	81.3	81.3
	No	242	18.7	18.7
*Among CELL ONLY: Would you like an internet connection at home?	Yes	2,443	90.7	90.7
	No	250	9.3	9.3
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	3,494	87.7	87.7
	No	492	12.3	12.3
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 1,051]	1. There is no Internet Service Provider (ISP) serving our home's location	392	37.3	
	2. The options available do not meet our needs	165	15.7	
	3. We don't have the devices or tools to get online	150	14.3	
	4. The cost is too high	624	59.4	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	82	7.8	
	6. We don't feel confident in our ability to use the internet	57	5.4	
	7. We don't feel safe using the internet	70	6.7	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	188	17.9	
	9. Some other circumstance(s)	48	4.6	
AMONG (2. The options available do not meet our needs): You selected "The options available do not meet our needs" would you be willing to pay more to get the level of service needed? [among those with No Internet AND WANT Internet AND Options available do not meet needs = 165]	Yes	62	37.6	55.9
	No	49	29.7	44.1
	Missing	54	32.7	
*Among NO INTERNET and DO NOT WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that	0. We don't have interest in a home internet connection	98	40.5	
	1. There is no Internet Service Provider (ISP) serving our home's location	9	3.7	
	2. The options available do not meet our needs	8	3.3	
	3. We don't have the devices or tools to get online	28	11.6	
	4. The cost is too high	111	45.9	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	17	7.0	

apply. [among those with No Internet AND DO NOT WANT Internet = 242]	6. We don't feel confident in our ability to use the internet	27	11.2	
	7. We don't feel safe using the internet	33	13.6	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	18	7.4	
	9. Some other circumstance(s)	8	3.3	
*Among CELL ONLY AND WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 2,443]	1. There is no Internet Service Provider (ISP) serving our home's location	1,059	43.3	
	2. The options available do not meet our needs	469	19.2	
	3. We don't have the devices or tools to get online	246	10.1	
	4. The cost is too high	1,371	56.1	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	167	6.8	
	6. We don't feel confident in our ability to use the internet	125	5.1	
	7. We don't feel safe using the internet	126	5.2	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	345	14.1	
	9. Some other circumstance(s)	104	4.3	
AMONG (2. The options available do not meet our needs): You selected "The options available do not meet our needs" would you be willing to pay more to get the level of service needed? [among those with Cell only AND WANT Internet AND Options available do not meet needs = 469]	Yes	207	44.1	60.0
	No	138	29.4	40.0
	Missing	124	26.4	
*Among CELL ONLY AND DO NOT WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND DO NOT WANT Internet = 250]	0. We don't have interest in a home internet connection	113	45.2	
	1. There is no Internet Service Provider (ISP) serving our home's location	24	9.6	
	2. The options available do not meet our needs	18	7.2	
	3. We don't have the devices or tools to get online	17	6.8	
	4. The cost is too high	117	46.8	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	11	4.4	
	6. We don't feel confident in our ability to use the internet	16	6.4	
	7. We don't feel safe using the internet	16	6.4	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	19	7.6	
9. Some other circumstance(s)	9	3.6		
*Does any member of your household identify as one or more of the following? [Select any that apply]	School age child(ren) [pre-K - 12 student(s)]	4,310	33.1	
	College, vocational or other type of student(s)	2,172	16.7	
	Veteran(s)	2,137	16.4	
	Senior Citizen(s) (65+ years of age)	5,698	43.8	
	Person(s) with a physical disability	1,666	12.8	
	Person(s) with a chronic illness	1,597	12.3	
	Person(s) with a developmental or learning difficulty/disability	716	5.5	
	Person(s) who do(es) not speak English or has a language barrier	493	3.8	
	Person(s) who is (are), or has (have) been, incarcerated	233	1.8	
	Person(s) who is (are) unemployed and looking for work	937	7.2	
None of the above	2,069	15.9		
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	Black or African American	3,841	29.5	
	White	7,283	55.9	
	American Indian or Alaska Native	215	1.7	
	Asian or Pacific Islander	257	2.0	
	Hispanic/Latino	1,342	10.3	
	Some other racial or ethnic identity	251	1.9	
Prefer not to say	983	7.5		

	I/We live in a rural location	6,768	52	
	I/We homeschool my/our child(ren)	454	3.5	
*Select any of the following that apply to your household	Someone in our household works remotely from home	3,169	24.3	
	I/We run a business (or farm) from home	1,468	11.3	
	None of these apply	4,119	31.6	
	Single Family Home (no shared walls)	8,945	68.7	70.4
	Multi-Unit Dwelling (such as an apartment, townhome, or condo)	1,355	10.4	10.7
Which of the following best describes your home?	Public Housing or Housing Projects (government subsidized housing)	428	3.3	3.4
	Mobile Home	1,671	12.8	13.2
	Other	299	2.3	2.4
	Missing	326	2.5	
	Yes	3,456	26.5	27
Are you familiar with the Affordable Connectivity Program (ACP) program?	No	9,343	71.7	73
	Missing	225	1.7	
	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	8,559	65.7	67.3%
Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Supporting child(ren) in Pre-Kindergarten through 12th grade education	4,506	34.6	35.4%
	Performing job functions as a remote employee (i.e. working from home)	5,563	42.7	43.8%
I/We NEED reliable internet access at home for:	Running a business	2,065	15.9	16.2%
	Some other critical reason	2,093	16.1	16.5%
	Nobody in the home has a critical need for the internet	1,338	10.3	10.5%
	Missing (ie. None of the 6 items selected)	309	2.4	
	Urgent care	2,440	28.5	29.2%
	Primary care	5,632	65.8	67.5%
	Mental health care	1,471	17.2	17.6%
For what purposes do members of your household need to be able to access healthcare services from home?	VA services	1,179	13.8	14.1%
	Prescription Refills and or Referrals	6,340	74.1	76.0%
	Appointment scheduling	6,608	77.2	79.2%
	Patient portal access (such as MyChart)	6,423	75.0	77.0%
Select all that apply. [Among Critical Need_Healthcare - 8559]	Some other purpose	315	3.7	3.8%
	Missing (ie. None of the 8 items selected)	216	2.5	
	Convenience	7,406	86.5	89.5%
What reasons contribute to your need to access healthcare from home? [Among Critical Need_Healthcare - 8559]	Costs	4,091	47.8	49.5%
	Mobility issues make leaving home difficult	1,544	18	18.7%
	Transportation is unreliable, expensive, or difficult to	1,394	16.3	16.9%
	Some other reason	601	7	7.3%
	Missing (ie. None of the 5 items selected)	287	3.4	
	Skeptical	584	6.8	7.2
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 8559]	Nervous	1,100	12.9	13.6
	Indifferent	1,477	17.3	18.2
	Comfortable	4,942	57.7	61.0
	Missing	456	5.3	
Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments? [Among Critical Need_Education - 4506]	Yes	3,815	84.7	87.4
	No	549	12.2	12.6
	Missing	142	3.2	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 4506]	Yes, we own a computer that is dedicated to school activities	1,637	36.3	37.5
	Yes, our child(ren)'s computer is provided through their school	2,045	45.4	46.8
	No	689	15.3	15.8
	Missing	135	3.0	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 4506]	Skeptical	472	10.5	11.1
	Nervous	1,176	26.1	27.6
	Indifferent	829	18.4	19.5
	Comfortable	1,778	39.5	41.8
	Missing	251	5.6	
	My/Our household income is dependent on having internet access at home	2,846	51.2	56.0%
	An employer requires the ability to perform some or all job functions from home	3,328	59.8	65.5%

Which statement(s) best describe your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 5563]	My/Our career options are currently restricted due to inefficient internet stability or speed	1,125	20.2	22.2%
	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	1,215	21.8	23.9%
	I/We would be willing to pay more for internet that is faster or more stable	1,253	22.5	24.7%
	Some other situation or circumstance	285	5.1	5.6%
	Missing (ie. None of the 6 items selected)	484	8.7	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 5563]	Excited	1,801	32.4	35.2
	Frustrated	868	15.6	17.0
	Indifferent	1,404	25.2	27.5
	Stressed	1,039	18.7	20.3
	Missing	451	8.1	
In general, how do you use the internet today? Select ALL that apply, regardless of how or where you connect to the internet.	1. Email	11,363	87.2	93.5%
	2. News, Weather, Current Events	9,480	72.8	78.0%
	3. Social Media & Online Community	8,607	66.1	70.8%
	4. Attending Spiritual Services	4,188	32.2	34.5%
	5. Shopping for Goods & Services or Paying Bills	9,519	73.1	78.3%
	6. Streaming Entertainment (TV, Movies, Music, etc.)	7,939	61.0	65.3%
	7. Video Gaming	3,139	24.1	25.8%
	8. Video Conferencing	4,850	37.2	39.9%
	9. Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.)	4,342	33.3	35.7%
	10. Research & Personal Enrichment	6,934	53.2	57.1%
	11. Job Searching	3,277	25.2	27.0%
	12. Homework or Education	5,071	38.9	41.7%
	13. Home Security	4,013	30.8	33.0%
	14. Managing Accounts (related to banking, finance, or employment benefits, etc.)	8,643	66.4	71.1%
	15. Organizing Transportation or Accessing Maps	4,957	38.1	40.8%
	16. Managing or Receiving Healthcare	6,627	50.9	54.5%
	Missing (ie. None of the 16 items selected)	872	6.7	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	6,336	48.6	53.9
	Confused	1,423	10.9	12.1
	Indifferent	2,921	22.4	24.8
	Stressed	1,076	8.3	9.2
	Missing	1,268	9.7	
Review the following list and select all of the internet-connected devices you currently use:	1. Computer (desktop or laptop)	10,033	77.0	82.4%
	2. Tablet	7,348	56.4	60.3%
	3. Smart Phone	10,987	84.4	90.2%
	4. Smart Security (Doorbell Cams, Door Locks, Lighting etc.)	4,101	31.5	33.7%
	5. Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)	5,955	45.7	48.9%
	6. There are no Smart Devices in the home	401	3.1	3.3%
	Missing (ie. None of the 6 items selected)	845	6.5	
What was your total household income, last year, before taxes?	\$0 to \$9,999	384	2.9	3.3
	\$10,000 to \$19,999	547	4.2	4.8
	\$20,000 to \$29,999	924	7.1	8.1
	\$30,000 to \$39,999	1,033	7.9	9
	\$40,000 to \$49,999	979	7.5	8.5
	\$50,000 to \$59,999	812	6.2	7.1
	\$60,000 to \$69,999	638	4.9	5.6
	\$70,000 to \$79,999	608	4.7	5.3
	\$80,000 to \$89,999	509	3.9	4.4
	\$90,000 to \$99,999	444	3.4	3.9
	\$100,000 to \$129,000	925	7.1	8.1
	\$130,000 to \$159,000	559	4.3	4.9
	More than \$160,000	809	6.2	7.1
	I do not know	290	2.2	2.5
Prefer not to answer	2,002	15.4	17.5	
Missing	1,561	12		
Which of the following best describes your relationship to your home?	The home is owned by you or someone in this household	8,872	68.1	74.1
	The home is rented by you or someone in this household	1,777	13.6	14.9

your relationship to your home?	I/We own a mobile home on property that is rented	603	4.6	5
	Some other relationship	714	5.5	6
	Missing	1,058	8.1	
Including yourself, how many adults (18 years of age and older) live in your home?	1	2,387	18.3	20.4
	2	6,387	49	54.5
	3	1,888	14.5	16.1
	4	830	6.4	7.1
	5+	227	1.7	1.9
	Missing	1,305	10	
How many children (17 years of age and younger) live in your home?	0	6,386	49	59.2
	1	1,873	14.4	17.4
	2	1,690	13	15.7
	3	599	4.6	5.6
	4	174	1.3	1.6
	5+	70	0.5	0.6
What is the highest level of education achieved by any member of your household?	Missing	2,232	17.1	
	No formal education	97	0.7	0.8
	Some high school (no diploma)	401	3.1	3.3
	High school diploma or equivalent certificate (GED)	1,448	11.1	12
	Some college credit, no degree	1,383	10.6	11.4
	Trade/Technical/Vocational training or certificate	848	6.5	7
	Associate's degree	1,395	10.7	11.5
	Bachelors degree	3,038	23.3	25.1
	Postgraduate degree	2,768	21.3	22.9
	I dont know	100	0.8	0.8
	Prefer not to say	604	4.6	5
Missing	942	7.2		
What is your gender?	Woman	6,806	52.3	56.6
	Man	4,328	33.2	36
	Prefer to self-identify	40	0.3	0.3
	Prefer not to say	842	6.5	7
	Missing	1,008	7.7	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	12,016	92.3	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	13,024	100	

* = Required question for complete

		Has Internet: Needs Met (N=7,355)			Underserved or Unserv ^{ed} (N=8,215)				
		Valid Percent			Valid Percent			County	Rate of Under/Unserv ^{ed}
Variable	Count (n)	Percent (%)	(%)	Count (n)	Percent (%)	(%)	Population	(per 10,000)	
English	7,225	98.2	98.2	7,748	94.3	94.3			
Survey Language	Spanish	130	1.8	1.8	467	5.7	5.7		
	Abbeville County	48	0.7	0.7	8	0.1	0.1	24,404	3.3
	Aiken County	115	1.6	1.6	134	1.6	1.6	172,895	7.8
	Allendale County	17	0.2	0.2	177	2.2	2.2	8,331	212.5
	Anderson County	102	1.4	1.4	149	1.8	1.8	204,353	7.3
	Bamberg County	107	1.5	1.5	324	3.9	3.9	13,906	233.0
	Bamwell County	38	0.5	0.5	270	3.3	3.3	20,805	129.8
	Beaufort County	368	5	5	232	2.8	2.8	195,656	11.9
	Berkeley County	372	5.1	5.1	370	4.5	4.5	235,987	15.7
	Calhoun County	39	0.5	0.5	26	0.3	0.3	14,554	17.9
	Charleston County	383	5.2	5.2	416	5.1	5.1	417,981	10.0
	Cherokee County	39	0.5	0.5	64	0.8	0.8	57,316	11.2
	Chester County	42	0.6	0.6	73	0.9	0.9	32,232	22.6
	Chesterfield County	30	0.4	0.4	47	0.6	0.6	45,606	10.3
	Clarendon County	110	1.5	1.5	116	1.4	1.4	33,415	34.7
	Colleton County	89	1.2	1.2	47	0.6	0.6	37,481	12.5
	Darlington County	50	0.7	0.7	88	1.1	1.1	66,509	13.2
	Dillon County	38	0.5	0.5	127	1.5	1.5	30,367	41.8
	Dorchester County	208	2.8	2.8	187	2.3	2.3	165,737	11.3
	Edgefield County	35	0.5	0.5	137	1.7	1.7	27,120	50.5
	Fairfield County	64	0.9	0.9	245	3	3	22,059	111.1
	Florence County	144	2	2	109	1.3	1.3	137,588	7.9
	Georgetown County	321	4.4	4.4	177	2.2	2.2	63,353	27.9
	Greenville County	255	3.5	3.5	194	2.4	2.4	532,486	3.6
*County	Greenwood County	228	3.1	3.1	291	3.5	3.5	71,074	40.9
	Hampton County	116	1.6	1.6	212	2.6	2.6	18,053	117.4
	Horry County	1,294	17.6	17.6	497	6	6.1	365,449	13.6
	Jasper County	38	0.5	0.5	66	0.8	0.8	31,588	20.9
	Kershaw County	121	1.6	1.6	112	1.4	1.4	67,472	16.6
	Lancaster County	81	1.1	1.1	61	0.7	0.7	100,926	6.0
	Laurens County	111	1.5	1.5	140	1.7	1.7	67,883	20.6
	Lee County	52	0.7	0.7	101	1.2	1.2	16,701	60.5
	Lexington County	337	4.6	4.6	335	4.1	4.1	303,946	11.0
	Marion County	120	1.6	1.6	70	0.9	0.9	9,430	74.2
	Marlboro County	14	0.2	0.2	22	0.3	0.3	30,158	7.3
	McCormick County	221	3	3	61	0.7	0.7	25,581	23.8
	Newberry County	30	0.4	0.4	71	0.9	0.9	38,445	18.5
	Oconee County	68	0.9	0.9	178	2.2	2.2	80,015	22.2
	Orangeburg County	161	2.2	2.2	634	7.7	7.7	85,343	74.3
	Pickens County	99	1.3	1.3	67	0.8	0.8	127,983	5.2
	Richland County	412	5.6	5.6	335	4.1	4.1	419,051	8.0
	Saluda County	34	0.5	0.5	174	2.1	2.1	20,315	85.7
	Spartanburg County	98	1.3	1.3	246	3	3	326,205	7.5
	Sumter County	103	1.4	1.4	284	3.5	3.5	106,360	26.7
	Union County	57	0.8	0.8	126	1.5	1.5	26,991	46.7
	Williamsburg County	123	1.7	1.7	92	1.1	1.1	29,825	30.8
	York County	419	5.7	5.7	321	3.9	3.9	289,105	11.1
	Missing	4	0.1		2	0			
	Lowcountry	1,898	25.8	25.8	2,691	32.8	32.8		
	Midlands	1,728	23.5	23.5	2,268	27.6	27.6		
	PeeDee	2,399	32.6	32.6	1,730	21.1	21.1		
	Upstate	1,326	18	18	1,524	18.6	18.6		

SC Region	Missing	4	0.1		2	0	
How do you feel about the current options for connecting your home to the internet?	Delighted	2,693	36.6	37.8	806	9.8	10.2
	Frustrated	1,134	15.4	15.9	4,322	52.6	54.7
	Indifferent	2,659	36.2	37.3	1,250	15.2	15.8
	Stressed	637	8.7	8.9	1,529	18.6	19.3
	Missing	232	3.2		308	3.7	
Are you familiar with the Affordable Connectivity Program (ACP) program?	Yes	2,074	28.2	29.6	1,947	23.7	25
	No	4,922	66.9	70.4	5,838	71.1	75
	Missing	359	4.9		430	5.2	
Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services	4,399	59.8	63.9%	5,467	66.5	70.6%
	Supporting child(ren) in Pre-K-12	1,947	26.5	28.3%	3,200	39	41.3%
	Working from home	2,777	37.8	40.3%	3,611	44	46.6%
	Running a business	1,010	13.7	14.7%	1,386	16.9	17.9%
	Some other critical reason	1,239	16.8	18.0%	1,200	14.6	15.5%
I/We NEED reliable internet access at home for:	Noone has a critical need for net	927	12.6	13.5%	577	7	7.4%
	Missing (ie. None of the 6 items selected)	470			444		
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare]	Comfortable	2,914	66.2	70.1	2,814	51.5	54.7
	Indifferent	788	17.9	18.9	938	17.2	18.2
	Nervous	322	7.3	7.7	851	15.6	16.6
	Skeptical	135	3.1	3.2	537	9.8	10.4
	Missing	240	5.5		327	6.0	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education]	Comfortable	1,300	66.8	70.9	748	23.4	24.8
	Indifferent	310	15.9	16.9	648	20.3	21.5
	Nervous	191	9.8	10.4	1,104	34.5	36.6
	Skeptical	33	1.7	1.8	513	16.0	17.0
	Missing	113	5.8		187	5.8	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work]	Excited	1,404	50.6	55.4	692	19.2	21.0
	Frustrated	78	2.8	3.1	876	24.3	26.6
	Indifferent	825	29.7	32.5	808	22.4	24.5
	Stressed	228	8.2	9.0	922	25.5	28.0
	Missing	242	8.7		313	8.7	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	4,086	55.6	64	3,274	39.9	45.9
	Confused	432	5.9	6.8	1,108	13.5	15.5
	Indifferent	1,538	20.9	24.1	1,833	22.3	25.7
	Stressed	324	4.4	5.1	911	11.1	12.8
	Missing	975	13.3		1,089	13.3	

* = Required question for complete

@Underserved = Has Internet but Needs Not Met; Unserved = (No Internet Or Cell Only) and Wants Internet

County * Feelings about current options internet @ Home: Frustrated & Stressed Crosstabulation

County	Positive Feeling	Row %	Negative Feeling	Row %2	Column3
Abbeville County	36	61.0%	11	18.6%	59
Aiken County	69	24.0%	146	50.9%	287
Allendale County	37	18.0%	128	62.4%	205
Anderson County	47	17.8%	178	67.4%	264
Bamberg County	119	24.5%	254	52.3%	486
Barnwell County	74	21.8%	217	64.0%	339
Beaufort County	102	16.3%	352	56.2%	626
Berkeley County	138	17.1%	440	54.6%	806
Calhoun County	33	49.3%	17	25.4%	67
Charleston County	181	20.6%	445	50.6%	879
Cherokee County	43	35.5%	62	51.2%	121
Chester County	8	6.5%	97	78.9%	123
Chesterfield County	26	31.7%	42	51.2%	82
Clarendon County	69	36.1%	56	29.3%	191
Colleton County	52	34.9%	56	37.6%	149
Darlington County	17	12.0%	90	63.4%	142
Dillon County	81	58.7%	28	20.3%	138
Dorchester County	80	19.3%	204	49.2%	415
Edgefield County	18	10.1%	144	80.4%	179
Fairfield County	78	24.6%	196	61.8%	317
Florence County	78	30.2%	107	41.5%	258
Georgetown County	157	29.5%	185	34.8%	532
Greenville County	92	19.7%	228	48.7%	468
Greenwood County	141	25.0%	314	55.8%	563
Hampton County	76	22.1%	204	59.3%	344
Horry County	470	24.8%	713	37.6%	1898
Jasper County	35	31.3%	53	47.3%	112
Kershaw County	58	23.1%	128	51.0%	251
Lancaster County	34	22.4%	77	50.7%	152
Laurens County	36	13.7%	156	59.5%	262
Lee County	48	29.8%	72	44.7%	161
Lexington County	152	21.3%	356	49.9%	714
Marion County	92	44.9%	73	35.6%	205
Marlboro County	14	33.3%	18	42.9%	42
McCormick County	144	50.5%	55	19.3%	285
Newberry County	22	18.6%	83	70.3%	118
Oconee County	38	15.4%	172	69.6%	247
Orangeburg County	238	25.6%	544	58.6%	928
Pickens County	35	19.8%	88	49.7%	177
Richland County	212	25.2%	365	43.3%	842
Saluda County	13	6.0%	164	75.9%	216
Spartanburg County	42	11.7%	254	70.9%	358
Sumter County	103	26.1%	189	47.8%	395
Union County	27	14.1%	135	70.3%	192
Williamsburg County	128	47.4%	54	20.0%	270
York County	152	19.3%	412	52.4%	786
Total	3945	23.7%	8362	50.2%	16651

	Delighted	Frustrated	Indifferent	Stressed	
Abbeville County	36	9	12	2	59
Aiken County	69	104	72	42	287
Allendale County	37	66	40	62	205
Anderson County	47	159	39	19	264
Bamberg County	119	146	113	108	486
Barnwell County	74	177	48	40	339
Beaufort County	102	285	172	67	626
Berkeley County	138	296	228	144	806
Calhoun County	33	12	17	5	67
Charleston County	181	317	253	128	879
Cherokee County	43	54	16	8	121
Chester County	8	76	18	21	123
Chesterfield County	26	32	14	10	82
Clarendon County	69	32	66	24	191
Colleton County	52	40	41	16	149
Darlington County	17	50	35	40	142
Dillon County	81	18	29	10	138
Dorchester County	80	150	131	54	415
Edgefield County	18	110	17	34	179
Fairfield County	78	155	43	41	317
Florence County	78	62	73	45	258
Georgetown County	157	124	190	61	532
Greenville County	92	163	148	65	468
Greenwood County	141	241	108	73	563
Hampton County	76	156	64	48	344
Horry County	470	491	715	222	1898
Jasper County	35	38	24	15	112
Kershaw County	58	100	65	28	251
Lancaster County	34	61	41	16	152
Laurens County	36	102	70	54	262
Lee County	48	51	41	21	161
Lexington County	152	242	206	114	714
Marion County	92	50	40	23	205
Marlboro County	14	11	10	7	42
McCormick County	144	36	86	19	285
Newberry County	22	67	13	16	118
Oconee County	38	139	37	33	247
Orangeburg County	238	320	146	224	928
Pickens County	35	68	54	20	177
Richland County	212	208	265	157	842
Saluda County	13	110	39	54	216
Spartanburg County	42	200	62	54	358
Sumter County	103	104	103	85	395
Union County	27	120	30	15	192
Williamsburg County	128	29	88	25	270
York County	152	314	222	98	786
Total	3945	5895	4344	2467	16651

All Sample	All Respondants	Has Internet: Needs Met (N=7,355)	Has Internet: Needs Not Met (N=4,341)	No Internet, Cell Only: wants Net (N=3,874)	Internet, Cell Only: Doesn't want Net (N=5)
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Variable	Count (N)	Count (n)	Column Percent (%)	% of All Respondants		% of All Respondants		% of All Respondants		% of All Respondants		SUM of Row %	SUM of % Under/Unse rved				
				Count (n)	Column Percent (%)	Count (n)	Column Percent (%)	Count (n)	Column Percent (%)	Count (n)	Column Percent (%)						
Abbeville County	61	58	0.3	48	0.7	82.8%	5	0.1	8.6%	3	0.1	5.2%	2	0.4	3.4%	100.0%	13.8%
Aiken County	305	276	1.7	115	1.6	41.7%	65	1.5	23.6%	69	1.8	25.0%	27	4.9	9.8%	100.0%	48.6%
Allendale County	231	218	1.3	17	0.2	7.8%	25	0.6	11.5%	152	3.9	69.7%	24	4.3	11.0%	100.0%	81.2%
Anderson County	279	253	1.5	102	1.4	40.3%	71	1.6	28.1%	78	2	30.8%	2	0.4	0.8%	100.0%	58.9%
Bamberg County	560	479	3	107	1.5	22.3%	71	1.6	14.8%	253	6.5	52.8%	48	8.6	10.0%	100.0%	67.6%
Bamwell County	363	337	2	38	0.5	11.3%	73	1.7	21.7%	197	5.1	58.5%	29	5.2	8.6%	100.0%	80.1%
Beaufort County	680	608	3.7	368	5	60.5%	208	4.8	34.2%	24	0.6	3.9%	8	1.4	1.3%	100.0%	38.2%
Berkeley County	892	759	4.8	372	5.1	49.0%	291	6.7	38.3%	79	2	10.4%	17	3.1	2.2%	100.0%	48.7%
Calhoun County	77	70	0.4	39	0.5	55.7%	18	0.4	25.7%	8	0.2	11.4%	5	0.9	7.1%	100.0%	37.1%
Charleston County	970	826	5.3	383	5.2	46.4%	232	5.3	28.1%	184	4.8	22.3%	27	4.9	3.3%	100.0%	50.4%
Cherokee County	137	111	0.7	39	0.5	35.1%	19	0.4	17.1%	45	1.2	40.5%	8	1.4	7.2%	100.0%	57.7%
Chester County	137	116	0.7	42	0.6	36.2%	59	1.4	50.9%	14	0.4	12.1%	1	0.2	0.9%	100.0%	62.9%
Chesterfield County	94	78	0.5	30	0.4	38.5%	33	0.8	42.3%	14	0.4	17.9%	1	0.2	1.3%	100.0%	60.3%
Clarendon County	279	238	1.5	110	1.5	46.2%	49	1.1	20.6%	67	1.7	28.2%	12	2.2	5.0%	100.0%	48.7%
Colleton County	167	139	0.9	89	1.2	64.0%	33	0.8	23.7%	14	0.4	10.1%	3	0.5	2.2%	100.0%	33.8%
Darlington County	159	145	0.9	50	0.7	34.5%	52	1.2	35.9%	36	0.9	24.8%	7	1.3	4.8%	100.0%	60.7%
Dillon County	192	178	1	38	0.5	21.3%	11	0.3	6.2%	116	3	65.2%	13	2.3	7.3%	100.0%	71.3%
Dorchester County	458	407	2.5	208	2.8	51.1%	113	2.6	27.8%	74	1.9	18.2%	12	2.2	2.9%	100.0%	45.9%
Edgefield County	185	173	1	35	0.5	20.2%	47	1.1	27.2%	90	2.3	52.0%	1	0.2	0.6%	100.0%	79.2%
Fairfield County	338	311	1.8	64	0.9	20.6%	128	2.9	41.2%	117	3	37.6%	2	0.4	0.6%	100.0%	78.8%
Florence County	285	257	1.5	144	2	56.0%	71	1.6	27.6%	38	1	14.8%	4	0.7	1.6%	100.0%	42.4%
Georgetown County	580	519	3.1	321	4.4	61.8%	115	2.6	22.2%	62	1.6	11.9%	21	3.8	4.0%	100.0%	34.1%
Greenville County	517	450	2.8	255	3.5	56.7%	143	3.3	31.8%	51	1.3	11.3%	1	0.2	0.2%	100.0%	43.1%
*County Greenwood County	588	530	3.2	228	3.1	43.0%	172	4	32.5%	119	3.1	22.5%	11	2	2.1%	100.0%	54.9%
Hampton County	386	347	2.1	116	1.6	33.4%	129	3	37.2%	83	2.1	23.9%	19	3.4	5.5%	100.0%	61.1%
Horry County	2,234	1,795	12.1	1,294	17.6	72.1%	448	10.3	25.0%	49	1.3	2.7%	4	0.7	0.2%	100.0%	27.7%
Jasper County	116	106	0.6	38	0.5	35.8%	45	1	42.5%	21	0.5	19.8%	2	0.4	1.9%	100.0%	62.3%
Kershaw County	283	235	1.5	121	1.6	51.5%	67	1.5	28.5%	45	1.2	19.1%	2	0.4	0.9%	100.0%	47.7%
Lancaster County	162	144	0.9	81	1.1	56.3%	51	1.2	35.4%	10	0.3	6.9%	2	0.4	1.4%	100.0%	42.4%
Laurens County	272	258	1.5	111	1.5	43.0%	66	1.5	25.6%	74	1.9	28.7%	7	1.3	2.7%	100.0%	54.3%
Lee County	176	159	1	52	0.7	32.7%	31	0.7	19.5%	70	1.8	44.0%	6	1.1	3.8%	100.0%	63.5%
Lexington County	805	681	4.4	337	4.6	49.5%	233	5.4	34.2%	102	2.6	15.0%	9	1.6	1.3%	100.0%	49.2%
Marion County	242	191	1.3	120	1.6	62.8%	32	0.7	16.8%	38	1	19.9%	1	0.2	0.5%	100.0%	36.6%
Marlboro County	46	37	0.2	14	0.2	37.8%	12	0.3	32.4%	10	0.3	27.0%	1	0.2	2.7%	100.0%	59.5%
McCormick County	294	283	1.6	221	3	78.1%	37	0.9	13.1%	24	0.6	8.5%	1	0.2	0.4%	100.0%	21.6%
Newberry County	122	105	0.7	30	0.4	28.6%	39	0.9	37.1%	32	0.8	30.5%	4	0.7	3.8%	100.0%	67.6%
Oconee County	267	246	1.4	68	0.9	27.6%	107	2.5	43.5%	71	1.8	28.9%	0	0	0.0%	100.0%	72.4%
Orangeburg County	997	899	5.4	161	2.2	17.9%	125	2.9	13.9%	509	13.1	56.6%	104	18.7	11.6%	100.0%	70.5%
Pickens County	200	166	1.1	99	1.3	59.6%	49	1.1	29.5%	18	0.5	10.8%	0	0	0.0%	100.0%	40.4%
Richland County	948	781	5.1	412	5.6	52.8%	179	4.1	22.9%	156	4	20.0%	34	6.1	4.4%	100.0%	42.9%
Saluda County	223	211	1.2	34	0.5	16.1%	57	1.3	27.0%	117	3	55.5%	3	0.5	1.4%	100.0%	82.5%
Spartanburg County	375	349	2	98	1.3	28.1%	123	2.8	35.2%	123	3.2	35.2%	5	0.9	1.4%	100.0%	70.5%
Sumter County	456	400	2.5	103	1.4	25.8%	84	1.9	21.0%	200	5.2	50.0%	13	2.3	3.3%	100.0%	71.0%
Union County	210	185	1.1	57	0.8	30.8%	69	1.6	37.3%	57	1.5	30.8%	2	0.4	1.1%	100.0%	68.1%
Williamsburg County	286	248	1.5	123	1.7	49.6%	47	1.1	19.0%	45	1.2	18.1%	33	5.9	13.3%	100.0%	37.1%
York County	837	758	4.5	419	5.7	55.3%	207	4.8	27.3%	114	2.9	15.0%	18	3.2	2.4%	100.0%	42.3%
Missing	10	6		4						2						0.0%	0.0%

RACIAL/ETHNIC MINORITY (N=6,930)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	6,310	91.1	91.1
	Spanish	620	8.9	8.9
SC Region	Lowcountry	2,498	36	36.1
	Midlands	1,794	25.9	25.9
	PeeDee	1,805	26	26.1
	Upstate	828	11.9	12
	Missing	5	0.1	
How do you feel about the current options for connecting your home to the internet?	Delighted	1,804	26	27.4
	Frustrated	1,858	26.8	28.3
	Indifferent	1,747	25.2	26.6
	Stressed	1,167	16.8	17.7
	Missing	354	5.1	
*Do you currently have an internet connection at your home?	Yes	4,155	60	60.7
	No	975	14.1	14.3
	Access home internet using a cell phone ONLY	1,711	24.7	25
	Missing	89	1.3	
*What type of connection do you have at your home? [among those who have Internet]	DSL	525	12.6%	15.8%
	Cable	1,256	30.2%	37.9%
	Fiber	631	15.2%	19.0%
	Fixed Wireless	450	10.8%	13.6%
	Satellite	236	5.7%	7.1%
	I do not know	216	5.2%	6.5%
	Missing	841	20.2%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	2,343	56.4	59.1
	No	1,624	39.1	40.9
	Missing	188	4.5	
	1. Does not meet our PERSONAL needs in terms of stability and/or speed	1,059	65.2%	65.5%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	592	36.5%	36.6%

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	570	35.1%	35.3%
	4. The service is too expensive	979	60.3%	60.5%
	5. Locked into a service contract and cannot change internet service provider	158	9.7%	9.8%
	6. Contract has data limits that restrict our use or slow down our connection	400	24.6%	24.7%
	7. Some other circumstance	121	7.5%	7.5%
	Missing (ie. None of the 7 items selected)	7	0.4%	
	*Among NO INTERNET: Would you like an internet connection at home?	Yes	759	77.8
No		188	19.3	19.9
Missing		28	2.9	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	1,494	87.3	88.7
	No	190	11.1	11.3
	Missing	27	1.6	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	2,253	83.9	85.6
	No	378	14.1	14.4
	Missing	55	2.0	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 759]	1. There is no Internet Service Provider (ISP) serving our home's location	242	31.9%	33.4%
	2. The options available do not meet our needs	99	13.0%	13.7%
	3. We don't have the devices or tools to get online	116	15.3%	16.0%
	4. The cost is too high	453	59.7%	62.6%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	70	9.2%	9.7%
	6. We don't feel confident in our ability to use the internet	49	6.5%	6.8%
	7. We don't feel safe using the internet	62	8.2%	8.6%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	142	18.7%	19.6%
	9. Some other circumstance(s)	24	3.2%	3.3%
Missing (ie. None of the 9 items selected)	35	4.6%		

	1. There is no Internet Service Provider (ISP) serving our home's location	460	30.8%	25.9%	
	2. The options available do not meet our needs	201	13.5%	11.3%	
	3. We don't have the devices or tools to get online	168	11.2%	9.4%	
*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 1,494]	4. The cost is too high	911	61.0%	51.2%	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	136	9.1%	7.6%	
	6. We don't feel confident in our ability to use the internet	111	7.4%	6.2%	
	7. We don't feel safe using the internet	98	6.6%	5.5%	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	227	15.2%	12.8%	
	9. Some other circumstance(s)	61	4.1%	3.4%	
	Missing (ie. None of the 9 items selected)	102	6.8%	5.7%	
	*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	Black or African American	4,930	71.1%	
		White	892	12.9%	
American Indian or Alaska Native		276	4.0%		
Asian or Pacific Islander		317	4.6%		
Hispanic/Latino		1,572	22.7%		
Some other racial or ethnic identity		301	4.3%		
Prefer not to say [#]		14	0.2%		
*Select any of the following that apply to your household	I/We live in a rural location	3,780	54.5%	55.8%	
	I/We homeschool my/our child(ren)	256	3.7%	3.8%	
	Someone in our household works remotely from home	1,189	17.2%	17.6%	
	I/We run a business (or farm) from home	606	8.7%	8.9%	
	None of these apply	2,128	30.7%	31.4%	
	Missing (ie. None of the 5 items selected)	156	2.3%		
Are you familiar with the Affordable Connectivity Program (ACP) program?	Yes	1,744	25.2	26	
	No	4,961	71.6	74	
	Missing	225	3.2		

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	4,130	59.6%	53.0%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	3,042	43.9%	39.1%
	Performing job functions as a remote employee (i.e. working from home)	2,716	39.2%	34.9%
I/We NEED reliable internet access at home for:	Running a business	932	13.4%	12.0%
	Some other critical reason	923	13.3%	11.9%
	Nobody in the home has a critical need for the internet	781	11.3%	10.0%
	Missing (ie. None of the 6 items selected)	257	3.7%	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 4130]	Skeptical	373	9.0	9.7
	Nervous	696	16.9	18.1
	Indifferent	745	18.0	19.4
	Comfortable	2,026	49.1	52.8
	Missing	290	7.0	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 3042]	Yes, we own a computer that is dedicated to school activities	1,120	36.8	38.2
	Yes, our child(ren)'s computer is provided through their school	1,357	44.6	46.3
	No	457	15.0	15.6
	Missing	108	3.6	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 3042]	Skeptical	279	9.2	9.8
	Nervous	746	24.5	26.3
	Indiferent	629	20.7	22.2
	Comfortable	1,181	38.8	41.7
	Missing	207	6.8	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet	My/Our household income is dependent on having internet access at home	1,328	48.9%	53.6%
	An employer requires the ability to perform some or all job functions from home	1,454	53.5%	58.7%
	My/Our career options are currently restricted due to inefficient internet stability or speed	620	22.8%	25.0%

connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 2716]	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	603	22.2%	24.3%
	I/We would be willing to pay more for internet that is faster or more stable	500	18.4%	20.2%
	Some other situation or circumstance	124	4.6%	5.0%
	Missing (ie. None of the 6 items selected)	238	8.8%	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 2716]	Excited	929	34.2	38.0
	Frustrated	399	14.7	16.3
	Indifferent	673	24.8	27.5
	Stressed	443	16.3	18.1
	Missing	272	10.0	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	2,879	41.5	47.6
	Confused	981	14.2	16.2
	Indifferent	1,597	23	26.4
	Stressed	594	8.6	9.8
	Missing	879	12.7	
What was your total household income, last year, before taxes?	\$0 to \$9,999	402	5.8	6.7
	\$10,000 to \$19,999	434	6.3	7.2
	\$20,000 to \$29,999	657	9.5	10.9
	\$30,000 to \$39,999	708	10.2	11.8
	\$40,000 to \$49,999	593	8.6	9.8
	\$50,000 to \$59,999	450	6.5	7.5
	\$60,000 to \$69,999	323	4.7	5.4
	\$70,000 to \$79,999	261	3.8	4.3
	\$80,000 to \$89,999	227	3.3	3.8
	\$90,000 to \$99,999	133	1.9	2.2
	\$100,000 to \$129,000	244	3.5	4.1
	\$130,000 to \$159,000	142	2	2.4
	More than \$160,000	170	2.5	2.8
	I do not know	317	4.6	5.3
Prefer not to answer	961	13.9	16	
Missing	908	13.1		
	No formal education	89	1.3	1.4
	Some high school (no diploma)	390	5.6	6.1

What is the highest level of education achieved by any member of your household?	High school diploma or equivalent certificate (GED)	1,128	16.3	17.7
	Some college credit, no degree	810	11.7	12.7
	Trade/Technical/Vocational training or certificate	546	7.9	8.6
	Associate's degree	723	10.4	11.4
	Bachelors degree	1,243	17.9	19.5
	Postgraduate degree	949	13.7	14.9
	I dont know	132	1.9	2.1
	Prefer not to say	358	5.2	5.6
	Missing	562	8.1	
What is your gender?	Woman	4,125	59.5	65.2
	Man	1,819	26.2	28.7
	Prefer to self-identify	32	0.5	0.5
	Prefer not to say	353	5.1	5.6
	Missing	601	8.7	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	6,368	91.3	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	5,509	79.5	

* = Required question for complete

@ Racial/Ethnic Minority includes those who indicated that someone living in their household identify as any of the following: Black or African American OR American Indian or Alaska Native OR Asian or Pacific Islander OR Hispanic/Latino OR Some other racial or ethnic identity

Fourteen (14) individuals selected "Prefer Not to Say" in response to "Does anyone living in your household identify as any of the following?", and concurrently selected at least one of the other response items for minority/racial household composition. Those should be investigated further, in future iterations of data management, for consistency in responses

RURAL (N=8,046)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	7,916	98.4	98.4
	Spanish	130	1.6	1.6
SC Region	Lowcountry	2,602	32.3	32.3
	Midlands	1,984	24.7	24.7
	PeeDee	1,598	19.9	19.9
	Upstate	1,861	23.1	23.1
	Missing	1	0	
How do you feel about the current options for connecting your home to the internet?	Delighted	1,626	20.2	21.1
	Frustrated	3,400	42.3	44.2
	Indifferent	1,464	18.2	19
	Stressed	1,198	14.9	15.6
	Missing	358	4.4	
*Do you currently have an internet connection at your home?	Yes	4,970	61.8	62.2
	No	959	11.9	12
	Access home internet using a cell phone ONLY	2,058	25.6	25.8
	Missing	59	0.7	
*What type of connection do you have at your home? [among those who have Internet]	DSL	1,019	20.5%	24.2%
	Cable	1,078	21.7%	25.6%
	Fiber	976	19.6%	23.2%
	Fixed Wireless	557	11.2%	13.2%
	Satellite	492	9.9%	11.7%
	I do not know	85	1.7%	2.0%
	Missing	763	15.4%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	2,517	50.6	52.5
	No	2,278	45.8	47.5
	Missing	175	3.5	
	1. Does not meet our PERSONAL needs in terms of stability and/or speed	1,862	81.7%	82.1%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	972	42.7%	42.8%

*Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	1,073	47.1%	47.3%
	4. The service is too expensive	1,146	50.3%	50.5%
	5. Locked into a service contract and cannot change internet service provider	162	7.1%	7.1%
	6. Contract has data limits that restrict our use or slow down our connection	601	26.4%	26.5%
	7. Some other circumstance	236	10.4%	10.4%
	Missing (ie. None of the 7 items selected)	9	0.4%	
	*Among NO INTERNET: Would you like an internet connection at home?	Yes	779	81.2
No		153	16	16.4
Missing		27	2.8	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	1,881	91.4	92.9
	No	143	6.9	7.1
	Missing	34	1.7	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	2,660	88.2	90.0
	No	296	9.8	10.0
	Missing	61	2.0	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 779]	1. There is no Internet Service Provider (ISP) serving our home's location	322	41.3	44.2%
	2. The options available do not meet our needs	131	16.8	18.0%
	3. We don't have the devices or tools to get online	102	13.1	14.0%
	4. The cost is too high	409	52.5	56.2%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	51	6.5	7.0%
	6. We don't feel confident in our ability to use the internet	37	4.7	5.1%
	7. We don't feel safe using the internet	44	5.6	6.0%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	106	13.6	14.6%
	9. Some other circumstance(s)	28	3.6	3.8%
Missing (ie. None of the 9 items selected)	51	6.5	0.1	

	1. There is no Internet Service Provider (ISP) serving our home's location	906	48.2	51.0%	
	2. The options available do not meet our needs	380	20.2	21.4%	
	3. We don't have the devices or tools to get online	177	9.4	10.0%	
*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 1,881]	4. The cost is too high	908	48.3	51.1%	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	87	4.6	4.9%	
	6. We don't feel confident in our ability to use the internet	75	4.0	4.2%	
	7. We don't feel safe using the internet	72	3.8	4.0%	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	228	12.1	12.8%	
	9. Some other circumstance(s)	69	3.7	3.9%	
	Missing (ie. None of the 9 items selected)	103		5.8%	
		Black or African American	3,082	38.3	38.7%
		White	4,078	50.7	51.1%
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	American Indian or Alaska Native	136	1.7	1.7%	
	Asian or Pacific Islander	110	1.4	1.4%	
	Hispanic/Latino	559	6.9	7.0%	
	Some other racial or ethnic identity	151	1.9	1.9%	
	Prefer not to say	568	7.1	7.1%	
	Missing (ie. None of the 7 items selected)	73	0.9		
		I/We live in a rural location	8,046	100	
	I/We homeschool my/our child(ren)	290	3.6		
*Select any of the following that apply to your household	Someone in our household works remotely from home	1,607	20		
	I/We run a business (or farm) from home	1,013	12.6		
	None of these apply [#]	22	0.3		
	Yes	2,048	25.5	25.9	
Are you familiar with the Affordable Connectivity Program (ACP) program?	No	5,846	72.7	74.1	
	Missing	152	1.9		

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	5,534	68.8	70.7%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	3,128	38.9	39.9%
	Performing job functions as a remote employee (i.e. working from home)	3,356	41.7	42.9%
	I/We NEED reliable internet access at home for:	Running a business	1,384	17.2
	Some other critical reason	1,221	15.2	15.6%
	Nobody in the home has a critical need for the internet	709	8.8	9.1%
	Missing (ie. None of the 6 items selected)	215	2.7	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 5534]	Skeptical	470	8.5	9.0
	Nervous	825	14.9	15.8
	Indifferent	935	16.9	17.9
	Comfortable	3,004	54.3	57.4
	Missing	300	5.4	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 3128]	Yes, we own a computer that is dedicated to school activities	1,182	37.8	39.0
	Yes, our child(ren)'s computer is provided through their school	1,392	44.5	45.9
	No	456	14.6	15.0
	Missing	98	3.1	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 3128]	Skeptical	439	14.0	15.0
	Nervous	890	28.5	30.4
	Indiferent	506	16.2	17.3
	Comfortable	1,091	34.9	37.3
	Missing	202	6.5	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet	My/Our household income is dependent on having internet access at home	1,647	50.9	53.2%
	An employer requires the ability to perform some or all job functions from home	1,961	58.4	63.3%
	My/Our career options are currently restricted due to inefficient internet stability or speed	900	26.8	29.1%

connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 3356]	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	977	29.1	31.6%
	I/We would be willing to pay more for internet that is faster or more stable	902	26.9	29.1%
	Some other situation or circumstance	156	4.6	5.0%
	Missing (ie. None of the 6 items selected)	260	7.7	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 3356]	Excited	872	26.0	28.3
	Frustrated	734	21.9	23.8
	Indifferent	722	21.5	23.4
	Stressed	751	22.4	24.4
	Missing	277	8.3	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	3,633	45.2	50.6
	Confused	934	11.6	13
	Indifferent	1,726	21.5	24
	Stressed	889	11	12.4
	Missing	864	10.7	
What was your total household income, last year, before taxes?	\$0 to \$9,999	278	3.5	3.9
	\$10,000 to \$19,999	386	4.8	5.4
	\$20,000 to \$29,999	720	8.9	10.1
	\$30,000 to \$39,999	765	9.5	10.8
	\$40,000 to \$49,999	695	8.6	9.8
	\$50,000 to \$59,999	578	7.2	8.1
	\$60,000 to \$69,999	422	5.2	5.9
	\$70,000 to \$79,999	357	4.4	5
	\$80,000 to \$89,999	319	4	4.5
	\$90,000 to \$99,999	253	3.1	3.6
	\$100,000 to \$129,000	475	5.9	6.7
	\$130,000 to \$159,000	273	3.4	3.8
	More than \$160,000	334	4.2	4.7
	I do not know	150	1.9	2.1
Prefer not to answer	1,100	13.7	15.5	
Missing	941	11.7		
No formal education	55	0.7	0.7	
Some high school (no diploma)	263	3.3	3.5	

What is the highest level of education achieved by any member of your household?	High school diploma or equivalent certificate (GED)	1,137	14.1	15.2
	Some college credit, no degree	936	11.6	12.5
	Trade/Technical/Vocational training or certificate	601	7.5	8
	Associate's degree	908	11.3	12.1
	Bachelors degree	1,780	22.1	23.8
	Postgraduate degree	1,374	17.1	18.4
	I dont know	85	1.1	1.1
	Prefer not to say	348	4.3	4.6
	Missing	559	6.9	
What is your gender?	Woman	4,552	56.6	61.2
	Man	2,349	29.2	31.6
	Prefer to self-identify	17	0.2	0.2
	Prefer not to say	524	6.5	7
	Missing	604	7.5	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	7,442	92.5	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	6,768	84.1	

* = Required question for complete

Twenty-two (22) individuals selected "None of the Above" in response to "Select any of the following that apply to your household", and concurrently selected "I/We live in a rural location". Those should be investigated further, in future iterations of data management, for consistency in responses

@ Rural includes those who indicated that they live in rural location (self-reported rurality)

LOW INCOME (N=2,350)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	2,315	98.5	98.5
	Spanish	35	1.5	1.5
SC Region	Lowcountry	715	30.4	30.4
	Midlands	607	25.8	25.8
	PeeDee	688	29.3	29.3
	Upstate	340	14.5	14.5
How do you feel about the current options for connecting your home to the internet?	Delighted	613	26.1	27.8
	Frustrated	740	31.5	33.6
	Indifferent	504	21.4	22.9
	Stressed	345	14.7	15.7
	Missing	148	6.3	
*Do you currently have an internet connection at your home?	Yes	1,305	55.5	55.9
	No	432	18.4	18.5
	Access home internet using a cell phone ONLY	596	25.4	25.5
	Missing	17	0.7	
*What type of connection do you have at your home? [among those who have Internet]	DSL	190	14.6%	19.0%
	Cable	409	31.3%	41.0%
	Fiber	138	10.6%	13.8%
	Fixed Wireless	133	10.2%	13.3%
	Satellite	82	6.3%	8.2%
	I do not know	46	3.5%	4.6%
*Does the internet connection at your home meet your needs? [among those who have Internet]	Missing	307	23.5%	
	Yes	726	55.6	58.8
	No	509	39	41.2
*Which statement(s) best describes your situation or circumstances when it comes to your current home internet	Missing	70	5.4	
	1. Does not meet our PERSONAL needs in terms of stability and/or speed	363	71.3%	71.6%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	173	34.0%	34.1%
	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	129	25.3%	25.4%

your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	4. The service is too expensive	286	56.2%	56.4%
	5. Locked into a service contract and cannot change internet service provider	49	9.6%	9.7%
	6. Contract has data limits that restrict our use or slow down our connection	121	23.8%	23.9%
	7. Some other circumstance	59	11.6%	11.6%
	Missing (ie. None of the 7 items selected)	2	0.4%	
*Among NO INTERNET: Would you like an internet connection at home?	Yes	310	71.8	75.1
	No	103	23.8	24.9
	Missing	19	2.9	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	538	90.3	92.1
	No	46	7.7	7.9
	Missing	12	2	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	848	82.5	85.1
	No	149	14.5	14.9
	Missing	31	3.0	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 759]	1. There is no Internet Service Provider (ISP) serving our home's location	105	33.9%	34.9%
	2. The options available do not meet our needs	37	11.9%	12.3%
	3. We don't have the devices or tools to get online	64	20.6%	21.3%
	4. The cost is too high	188	60.6%	62.5%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	25	8.1%	8.3%
	6. We don't feel confident in our ability to use the internet	17	5.5%	5.6%
	7. We don't feel safe using the internet	13	4.2%	4.3%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	56	18.1%	18.6%
	9. Some other circumstance(s)	12	3.9%	4.0%
Missing (ie. None of the 9 items selected)	9	2.9%		
	1. There is no Internet Service Provider (ISP) serving our home's location	145	27.0%	27.9%
	2. The options available do not meet our needs	58	10.8%	11.2%

	3. We don't have the devices or tools to get online	67	12.5%	12.9%	
*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 1,494]	4. The cost is too high	337	62.6%	64.8%	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	49	9.1%	9.4%	
	6. We don't feel confident in our ability to use the internet	28	5.2%	5.4%	
	7. We don't feel safe using the internet	21	3.9%	4.0%	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	88	16.4%	16.9%	
	9. Some other circumstance(s)	36	6.7%	6.9%	
	Missing (ie. None of the 9 items selected)	18	3.3%	3.5%	
		Black or African American	1,315	56.0%	56.7%
		White	835	35.5%	36.0%
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	American Indian or Alaska Native	30	1.3%	1.3%	
	Asian or Pacific Islander	24	1.0%	1.0%	
	Hispanic/Latino	152	6.5%	6.6%	
	Some other racial or ethnic identity	36	1.5%	1.6%	
	Prefer not to say	113	4.8%	4.9%	
	Missing (ie. None of the 7 items selected)	30	1.3%		
		I/We live in a rural location	1,384	58.9%	60.4%
	I/We homeschool my/our child(ren)	86	3.7%	3.8%	
*Select any of the following that apply to your household	Someone in our household works remotely from home	208	8.9%	9.1%	
	I/We run a business (or farm) from home	119	5.1%	5.2%	
	None of these apply	740	31.5%	32.3%	
	Missing (ie. None of the 5 items selected)	59	2.5%		
		Yes	758	32.3	32.8
Are you familiar with the Affordable Connectivity Program (ACP) program?	No	1,553	66.1	67.2	
	Missing	39	1.7		
	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	1,546	65.8%	67.0%	

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Supporting child(ren) in Pre-Kindergarten through 12th grade education	863	36.7%	37.4%
	Performing job functions as a remote employee (i.e. working from home)	629	26.8%	27.3%
I/We NEED reliable internet access at home for:	Running a business	215	9.1%	9.3%
	Some other critical reason	434	18.5%	18.8%
	Nobody in the home has a critical need for the internet	278	11.8%	12.0%
	Missing (ie. None of the 6 items selected)	42	1.8%	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 1546]	Skeptical	109	7.1	7.4
	Nervous	287	18.6	19.6
	Indifferent	261	16.9	17.8
	Comfortable	810	52.4	55.2
	Missing	79	5.1	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 863]	Yes, we own a computer that is dedicated to school activities	262	30.4	31.0
	Yes, our child(ren)'s computer is provided through their school	386	44.7	45.6
	No	198	22.9	23.4
	Missing	17	2.0	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 863]	Skeptical	121	14.0	14.9
	Nervous	199	23.1	24.5
	Indiferent	156	18.1	19.2
	Comfortable	337	39.0	41.5
	Missing	50	5.8	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee? [Among Critical Need_Education - 863]	My/Our household income is dependent on having internet access at home	321	51.0%	55.2%
	An employer requires the ability to perform some or all job functions from home	250	39.7%	43.0%
	My/Our career options are currently restricted due to inefficient internet stability or speed	206	32.8%	35.5%
	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	196	31.2%	33.7%

Need_Remote Work - 629]	I/We would be willing to pay more for internet that is faster or more stable	90	14.3%	15.5%
	Some other situation or circumstance	62	9.9%	10.7%
	Missing (ie. None of the 6 items selected)	48	7.6%	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 629]	Excited	187	29.7	32.3
	Frustrated	105	16.7	18.1
	Indifferent	156	24.8	26.9
	Stressed	131	20.8	22.6
	Missing	50	7.9	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	1,068	45.4	49.7
	Confused	354	15.1	16.5
	Indifferent	468	19.9	21.8
	Stressed	259	11	12.1
	Missing	201	8.6	
What was your total household income, last year, before taxes?	\$0 to \$9,999	527	22.4	22.4
	\$10,000 to \$19,999	709	30.2	30.2
	\$20,000 to \$29,999	1,114	47.4	47.4
	\$30,000 to \$39,999	-	-	-
	\$40,000 to \$49,999	-	-	-
	\$50,000 to \$59,999	-	-	-
	\$60,000 to \$69,999	-	-	-
	\$70,000 to \$79,999	-	-	-
	\$80,000 to \$89,999	-	-	-
	\$90,000 to \$99,999	-	-	-
	\$100,000 to \$129,000	-	-	-
	\$130,000 to \$159,000	-	-	-
	More than \$160,000	-	-	-
	I do not know	-	-	-
	Prefer not to answer	-	-	-
Missing	-	-	-	
What is the highest level of education	No formal education	41	1.7	1.8
	Some high school (no diploma)	179	7.6	7.8
	High school diploma or equivalent certificate (GED)	686	29.2	29.7
	Some college credit, no degree	387	16.5	16.8

what is the highest level of education achieved by any member of your household?	Trade/Technical/Vocational training or certificate	223	9.5	9.7
	Associate's degree	232	9.9	10.1
	Bachelors degree	273	11.6	11.8
	Postgraduate degree	98	4.2	4.2
	I dont know	96	4.1	4.2
	Prefer not to say	91	3.9	3.9
	Missing	44	1.9	
What is your gender?	Woman	1,650	70.2	71.8
	Man	534	22.7	23.2
	Prefer to self-identify	8	0.3	0.3
	Prefer not to say	105	4.5	4.6
	Missing	53	2.3	
% Reached Last Question	Percentage of respondants that answered last MCQ (non open-ended question): What is your gender?	2,306	97.7	
% Complete	Percentage of respondants that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	1,855	78.9	

* = Required question for complete

@ Low Income includes those who indicated that their household income is less than \$29,999

VETERANS (N=2,576)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	2,526	98.1	98.1
	Spanish	50	1.9	1.9
SC Region	Lowcountry	880	34.2	34.2
	Midlands	595	23.1	23.1
	PeeDee	697	27.1	27.1
	Upstate	403	15.6	15.7
	Missing	1	0	
How do you feel about the current options for connecting your home to the internet?	Delighted	565	21.9	22.8
	Frustrated	970	37.7	39.1
	Indifferent	567	22	22.9
	Stressed	377	14.6	15.2
	Missing	97	3.8	
*Do you currently have an internet connection at your home?	Yes	1,847	71.7	71.9
	No	230	8.9	9
	Access home internet using a cell phone ONLY	491	19.1	19.1
	Missing	8	0.3	
*What type of connection do you have at your home? [among those who have Internet]	DSL	236	12.8%	15.2%
	Cable	649	35.1%	41.7%
	Fiber	395	21.4%	25.4%
	Fixed Wireless	157	8.5%	10.1%
	Satellite	103	5.6%	6.6%
	I do not know	15	0.8%	1.0%
	Missing	292	15.8%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	1,085	58.7	61
	No	694	37.6	39
	Missing	68	3.7	
	1. Does not meet our PERSONAL needs in terms of stability and/or speed	566	81.5	81.8%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	234	33.7	33.8%

*Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	307	44.2	44.4%
	4. The service is too expensive	385	55.5	55.6%
	5. Locked into a service contract and cannot change internet service provider	55	7.9	7.9%
	6. Contract has data limits that restrict our use or slow down our connection	147	21.2	21.2%
	7. Some other circumstance	82	11.8	11.8%
	Missing (ie. None of the 7 items selected)	2	0.3	
	*Among NO INTERNET: Would you like an internet connection at home?	Yes	195	84.8
No		33	14.3	14.5
Missing		2	0.9	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	438	89.2	90.1
	No	48	9.8	9.9
	Missing	5	1	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	633	87.8	88.7
	No	81	11.2	11.3
	Missing	7	1.0	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 195]	1. There is no Internet Service Provider (ISP) serving our home's location	85	43.6	45.5%
	2. The options available do not meet our needs	37	19.0	19.8%
	3. We don't have the devices or tools to get online	28	14.4	15.0%
	4. The cost is too high	134	68.7	71.7%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	25	12.8	13.4%
	6. We don't feel confident in our ability to use the internet	18	9.2	9.6%
	7. We don't feel safe using the internet	28	14.4	15.0%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	31	15.9	16.6%
	9. Some other circumstance(s)	6	3.1	3.2%
Missing (ie. None of the 9 items selected)	8	4.1		

*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 438]	1. There is no Internet Service Provider (ISP) serving our home's location	191	43.6	47.0%
	2. The options available do not meet our needs	78	17.8	19.2%
	3. We don't have the devices or tools to get online	51	11.6	12.6%
	4. The cost is too high	255	58.2	62.8%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	30	6.8	7.4%
	6. We don't feel confident in our ability to use the internet	27	6.2	6.7%
	7. We don't feel safe using the internet	37	8.4	9.1%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	68	15.5	16.7%
	9. Some other circumstance(s)	10	2.3	2.5%
Missing (ie. None of the 9 items selected)	32	7.3		
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	Black or African American	775	30.1	30.4%
	White	1,492	57.9	58.6%
	American Indian or Alaska Native	67	2.6	2.6%
	Asian or Pacific Islander	75	2.9	2.9%
	Hispanic/Latino	215	8.3	8.4%
	Some other racial or ethnic identity	83	3.2	3.3%
	Prefer not to say	234	9.1	9.2%
Missing (ie. None of the 7 items selected)	28	1.1		
*Select any of the following that apply to your household	I/We live in a rural location	1,303	50.6	51.6%
	I/We homeschool my/our child(ren)	98	3.8	3.9%
	Someone in our household works remotely from home	598	23.2	23.7%
	I/We run a business (or farm) from home	315	12.2	12.5%
	None of these apply	818	31.8	32.4%
Missing (ie. None of the 5 items selected)	50	1.9		
Are you familiar with the Affordable Connectivity Program (ACP) program?	Yes	625	24.3	24.8
	No	1,899	73.7	75.2
	Missing	52	2	

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	2,002	77.7	79.9%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	732	28.4	29.2%
	Performing job functions as a remote employee (i.e. working from home)	996	38.7	39.7%
I/We NEED reliable internet access at home for:	Running a business	403	15.6	16.1%
	Some other critical reason	450	17.5	18.0%
	Nobody in the home has a critical need for the internet	220	8.5	8.8%
	Missing (ie. None of the 6 items selected)	70	3.1	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 2002]	Skeptical	156	7.8	8.2
	Nervous	294	14.7	15.4
	Indifferent	354	17.7	18.5
	Comfortable	1,105	55.2	57.9
	Missing	93	4.6	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 732]	Yes, we own a computer that is dedicated to school activities	278	38.0	39.3
	Yes, our child(ren)'s computer is provided through their school	310	42.3	43.8
	No	120	16.4	16.9
	Missing	24	3.3	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 732]	Skeptical	85	11.6	12.2
	Nervous	195	26.6	28.1
	Indiferent	130	17.8	18.7
	Comfortable	284	38.8	40.9
	Missing	38	5.2	
	My/Our household income is dependent on having internet access at home	512	51.4	55.3%
	An employer requires the ability to perform some or all job functions from home	618	62.0	66.7%
	My/Our career options are currently restricted due to inefficient internet stability or speed	246	24.7	26.6%

Which statement(s) best describe your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 996]	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	264	26.5	28.5%
	I/We would be willing to pay more for internet that is faster or more stable	240	24.1	25.9%
	Some other situation or circumstance	59	5.9	6.4%
	Missing (ie. None of the 6 items selected)	70	7.0	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 996]	Excited	284	28.5	30.8
	Frustrated	182	18.3	19.7
	Indifferent	250	25.1	27.1
	Stressed	207	20.8	22.4
	Missing	73	7.3	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	1,228	47.7	53
	Confused	292	11.3	12.6
	Indifferent	576	22.4	24.8
	Stressed	222	8.6	9.6
	Missing	258	10	
What was your total household income, last year, before taxes?	\$0 to \$9,999	29	1.1	1.3
	\$10,000 to \$19,999	60	2.3	2.7
	\$20,000 to \$29,999	137	5.3	6.2
	\$30,000 to \$39,999	192	7.5	8.7
	\$40,000 to \$49,999	206	8	9.3
	\$50,000 to \$59,999	197	7.6	8.9
	\$60,000 to \$69,999	143	5.6	6.5
	\$70,000 to \$79,999	128	5	5.8
	\$80,000 to \$89,999	98	3.8	4.4
	\$90,000 to \$99,999	86	3.3	3.9
	\$100,000 to \$129,000	210	8.2	9.5
	\$130,000 to \$159,000	120	4.7	5.4
	More than \$160,000	140	5.4	6.4
	I do not know	25	1	1.1
Prefer not to answer	433	16.8	19.6	
Missing	372	14.4		
No formal education	14	0.5	0.6	
Some high school (no diploma)	55	2.1	2.3	

What is the highest level of education achieved by any member of your household?	High school diploma or equivalent certificate (GED)	231	9	9.7
	Some college credit, no degree	267	10.4	11.2
	Trade/Technical/Vocational training or certificate	172	6.7	7.2
	Associate's degree	288	11.2	12.1
	Bachelors degree	635	24.7	26.7
	Postgraduate degree	559	21.7	23.5
	I dont know	4	0.2	0.2
	Prefer not to say	154	6	6.5
Missing		197	7.6	
What is your gender?	Woman	1,066	41.4	45.2
	Man	1,032	40.1	43.7
	Prefer to self-identify	15	0.6	0.6
	Prefer not to say	246	9.5	10.4
	Missing	217	8.4	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	2,359	91.6	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	2,137	80	

* = Required question for complete

@ Veterans includes those who indicated that their household includes: Veterans

SENIORS (N=7,148)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	7,017	98.2	98.2
	Spanish	131	1.8	1.8
SC Region	Lowcountry	2,147	30	30
	Midlands	1,470	20.6	20.6
	PeeDee	2,285	32	32
	Upstate	1,244	17.4	17.4
	Missing	2	0	
How do you feel about the current options for connecting your home to the internet?	Delighted	1,649	23.1	24.2
	Frustrated	2,297	32.1	33.7
	Indifferent	1,758	24.6	25.8
	Stressed	1,115	15.6	16.4
	Missing	329	4.6	
*Do you currently have an internet connection at your home?	Yes	5,184	72.5	73.1
	No	694	9.7	9.8
	Access home internet using a cell phone ONLY	1,209	16.9	17.1
	Missing	61	0.9	
*What type of connection do you have at your home? [among those who have Internet]	DSL	645	12.4%	15.1%
	Cable	1,848	35.6%	43.3%
	Fiber	1,045	20.2%	24.5%
	Fixed Wireless	401	7.7%	9.4%
	Satellite	247	4.8%	5.8%
	I do not know	79	1.5%	1.9%
	Missing	919	17.7%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	3,198	61.7	64
	No	1,799	34.7	36
	Missing	187	3.6	
	1. Does not meet our PERSONAL needs in terms of stability and/or speed	1,368	76.0%	76.4%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	433	24.1%	24.2%

*Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	543	30.2%	30.3%
	4. The service is too expensive	1,017	56.5%	56.8%
	5. Locked into a service contract and cannot change internet service provider	148	8.2%	8.3%
	6. Contract has data limits that restrict our use or slow down our connection	365	20.3%	20.4%
	7. Some other circumstance	169	9.4%	9.4%
	Missing (ie. None of the 7 items selected)	8	0.4%	
	*Among NO INTERNET: Would you like an internet connection at home?	Yes	540	77.8
No		135	19.5	20
Missing		19	2.7	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	1,078	89.2	91
	No	106	8.8	9
	Missing	25	2.1	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	1,618	85.0	87.0
	No	241	12.7	13.0
	Missing	44	2.3	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 540]	1. There is no Internet Service Provider (ISP) serving our home's location	195	36.1	38.5%
	2. The options available do not meet our needs	76	14.1	15.0%
	3. We don't have the devices or tools to get online	88	16.3	17.4%
	4. The cost is too high	301	55.7	59.4%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	35	6.5	6.9%
	6. We don't feel confident in our ability to use the internet	33	6.1	6.5%
	7. We don't feel safe using the internet	41	7.6	8.1%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	94	17.4	18.5%
	9. Some other circumstance(s)	22	4.1	4.3%
Missing (ie. None of the 9 items selected)	33	6.1		

	1. There is no Internet Service Provider (ISP) serving our home's location	387	35.9	38.5%	
	2. The options available do not meet our needs	152	14.1	15.1%	
	3. We don't have the devices or tools to get online	131	12.2	13.0%	
*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 1,078]	4. The cost is too high	601	55.8	59.7%	
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	52	4.8	5.2%	
	6. We don't feel confident in our ability to use the internet	60	5.6	6.0%	
	7. We don't feel safe using the internet	64	5.9	6.4%	
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	143	13.3	14.2%	
	9. Some other circumstance(s)	46	4.3	4.6%	
	Missing (ie. None of the 9 items selected)	72	6.7		
		Black or African American	2,136	29.9	30.3%
		White	4,096	57.3	58.1%
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	American Indian or Alaska Native	107	1.5	1.5%	
	Asian or Pacific Islander	95	1.3	1.3%	
	Hispanic/Latino	437	6.1	6.2%	
	Some other racial or ethnic identity	116	1.6	1.6%	
	Prefer not to say	560	7.8	7.9%	
	Missing (ie. None of the 7 items selected)	101	1.4		
		I/We live in a rural location	3,617	50.6	51.8%
	I/We homeschool my/our child(ren)	103	1.4	1.5%	
*Select any of the following that apply to your household	Someone in our household works remotely from home	1,108	15.5	15.9%	
	I/We run a business (or farm) from home	577	8.1	8.3%	
	None of these apply	2,611	36.5	37.4%	
	Missing (ie. None of the 5 items selected)	168	2.4		
		Yes	1,822	25.5	26.1
Are you familiar with the Affordable Connectivity Program (ACP) program?	No	5,164	72.2	73.9	
	Missing	162	2.3		

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	5,447	76.2	78.8%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	1,342	18.8	19.4%
	Performing job functions as a remote employee (i.e. working from home)	2,026	28.3	29.3%
I/We NEED reliable internet access at home for:	Running a business	864	12.1	12.5%
	Some other critical reason	1,146	16	16.6%
	Nobody in the home has a critical need for the internet	841	11.8	12.2%
	Missing (ie. None of the 6 items selected)	237	3.3	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 5447]	Skeptical	398	7.3	7.7
	Nervous	850	15.6	16.5
	Indifferent	904	16.6	17.6
	Comfortable	2,984	54.8	58.1
	Missing	311	5.7	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 1342]	Yes, we own a computer that is dedicated to school activities	473	35.2	36.8
	Yes, our child(ren)'s computer is provided through their school	519	38.7	40.4
	No	292	21.8	22.7
	Missing	58	4.3	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 1342]	Skeptical	148	11.0	12.0
	Nervous	318	23.7	25.8
	Indiferent	280	20.9	22.7
	Comfortable	486	36.2	39.4
	Missing	110	8.2	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet	My/Our household income is dependent on having internet access at home	1,021	50.4	55.6%
	An employer requires the ability to perform some or all job functions from home	1,099	54.2	59.8%
	My/Our career options are currently restricted due to inefficient internet stability or speed	409	20.2	22.3%

connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 2026]	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	452	22.3	24.6%
	I/We would be willing to pay more for internet that is faster or more stable	388	19.2	21.1%
	Some other situation or circumstance	131	6.5	7.1%
	Missing (ie. None of the 6 items selected)	189	9.3	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 2026]	Excited	610	30.1	33.3
	Frustrated	308	15.2	16.8
	Indifferent	557	27.5	30.4
	Stressed	355	17.5	19.4
	Missing	196	9.7	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	3,231	45.2	51.1
	Confused	971	13.6	15.4
	Indifferent	1,443	20.2	22.8
	Stressed	677	9.5	10.7
	Missing	826	11.6	
What was your total household income, last year, before taxes?	\$0 to \$9,999	174	2.4	2.8
	\$10,000 to \$19,999	344	4.8	5.6
	\$20,000 to \$29,999	608	8.5	9.9
	\$30,000 to \$39,999	626	8.8	10.2
	\$40,000 to \$49,999	537	7.5	8.7
	\$50,000 to \$59,999	437	6.1	7.1
	\$60,000 to \$69,999	373	5.2	6.1
	\$70,000 to \$79,999	341	4.8	5.5
	\$80,000 to \$89,999	238	3.3	3.9
	\$90,000 to \$99,999	234	3.3	3.8
	\$100,000 to \$129,000	365	5.1	5.9
	\$130,000 to \$159,000	192	2.7	3.1
	More than \$160,000	282	3.9	4.6
	I do not know	125	1.7	2
	Prefer not to answer	1,271	17.8	20.7
Missing	1,001	14		
No formal education	51	0.7	0.8	
Some high school (no diploma)	201	2.8	3.1	

What is the highest level of education achieved by any member of your household?	High school diploma or equivalent certificate (GED)	944	13.2	14.3
	Some college credit, no degree	783	11	11.9
	Trade/Technical/Vocational training or certificate	460	6.4	7
	Associate's degree	698	9.8	10.6
	Bachelors degree	1,556	21.8	23.6
	Postgraduate degree	1,536	21.5	23.3
	I dont know	22	0.3	0.3
	Prefer not to say	338	4.7	5.1
	Missing	559	7.8	
What is your gender?	Woman	3,674	51.4	56.2
	Man	2,350	32.9	35.9
	Prefer to self-identify	16	0.2	0.2
	Prefer not to say	499	7	7.6
	Missing	609	8.5	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	6,539	91.5	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	5,698	79.7	

* = Required question for complete

@ Seniors includes those who indicated that their household includes: Senior Citizen(s) (age 65+ years)

DISABILITY (N=2,676)[@]

	Variable	Count (n)	Percent (%)	Valid Percent (%)
Survey Language	English	2,631	98.3	98.3
	Spanish	45	1.7	1.7
SC Region	Lowcountry	862	32.2	32.2
	Midlands	693	25.9	25.9
	PeeDee	654	24.4	24.4
	Upstate	467	17.5	17.5
How do you feel about the current options for connecting your home to the internet?	Delighted	471	17.6	18.6
	Frustrated	1,085	40.5	42.8
	Indifferent	548	20.5	21.6
	Stressed	434	16.2	17.1
	Missing	138	5.2	
*Do you currently have an internet connection at your home?	Yes	1,824	68.2	68.5
	No	268	10	10.1
	Access home internet using a cell phone ONLY	571	21.3	21.4
	Missing	13	0.5	
*What type of connection do you have at your home? [among those who have Internet]	DSL	283	15.5%	18.9%
	Cable	576	31.6%	38.5%
	Fiber	325	17.8%	21.7%
	Fixed Wireless	165	9.0%	11.0%
	Satellite	119	6.5%	8.0%
	I do not know	27	1.5%	1.8%
	Missing	329	18.0%	
*Does the internet connection at your home meet your needs? [among those who have Internet]	Yes	888	48.7	50.8
	No	861	47.2	49.2
	Missing	75	4.1	
*What type of needs do you have?	1. Does not meet our PERSONAL needs in terms of stability and/or speed	700	81.3%	81.4%
	2. Does not meet our EDUCATIONAL needs in terms of stability and/or speed	383	44.5%	44.5%

Which statement(s) best describes your situation or circumstances when it comes to your current home internet connection? Select all that apply. [among those who have Internet and Needs Not Met]	3. Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed	392	45.5%	45.6%
	4. The service is too expensive	484	56.2%	56.3%
	5. Locked into a service contract and cannot change internet service provider	72	8.4%	8.4%
	6. Contract has data limits that restrict our use or slow down our connection	211	24.5%	24.5%
	7. Some other circumstance	119	13.8%	13.8%
	Missing (ie. None of the 7 items selected)	1	0.1%	
	*Among NO INTERNET: Would you like an internet connection at home?	Yes	230	85.8
No		31	11.6	11.9
Missing		7	2.6	
*Among CELL ONLY: Would you like an internet connection at home?	Yes	517	90.5	92.2
	No	44	7.7	7.8
	Missing	10	1.8	
*Among NO INTERNET and CELL ONLY: Would you like an internet connection at home?	Yes	747	89.0	90.9
	No	75	8.9	9.1
	Missing	17	2.0	
*Among NO INTERNET and WANT INTERNET: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with No Internet AND WANT Internet = 230]	1. There is no Internet Service Provider (ISP) serving our home's location	89	38.7%	39.9%
	2. The options available do not meet our needs	29	12.6%	13.0%
	3. We don't have the devices or tools to get online	45	19.6%	20.2%
	4. The cost is too high	144	62.6%	64.6%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	26	11.3%	11.7%
	6. We don't feel confident in our ability to use the internet	21	9.1%	9.4%
	7. We don't feel safe using the internet	29	12.6%	13.0%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	53	23.0%	23.8%
	9. Some other circumstance(s)	17	7.4%	7.6%
Missing (ie. None of the 9 items selected)	7	3.0%		

*Among CELL ONLY: Based on your experience, which of the following statements describe your situation or circumstance(s)? Select any that apply. [among those with Cell Only AND WANT Internet = 517]	1. There is no Internet Service Provider (ISP) serving our home's location	191	36.9%	39.2%
	2. The options available do not meet our needs	89	17.2%	18.3%
	3. We don't have the devices or tools to get online	60	11.6%	12.3%
	4. The cost is too high	319	61.7%	65.5%
	5. We cannot get internet service due to lack of an ID, bank account, or credit history	44	8.5%	9.0%
	6. We don't feel confident in our ability to use the internet	45	8.7%	9.2%
	7. We don't feel safe using the internet	33	6.4%	6.8%
	8. We access the internet outside of the home (through a neighbor, community center, business, library)	79	15.3%	16.2%
	9. Some other circumstance(s)	22	4.3%	4.5%
Missing (ie. None of the 9 items selected)		30	5.8%	6.2%
*Does anyone living in your household identify as any of the following? [Select all that apply to the people in your household.]	Black or African American	935	34.9%	35.6%
	White	1,454	54.3%	55.3%
	American Indian or Alaska Native	87	3.3%	3.3%
	Asian or Pacific Islander	49	1.8%	1.9%
	Hispanic/Latino	215	8.0%	8.2%
	Some other racial or ethnic identity	87	3.3%	3.3%
	Prefer not to say	199	7.4%	7.6%
Missing (ie. None of the 7 items selected)		46	1.7%	
*Select any of the following that apply to your household	I/We live in a rural location	1,534	57.3%	58.9%
	I/We homeschool my/our child(ren)	155	5.8%	6.0%
	Someone in our household works remotely from home	624	23.3%	24.0%
	I/We run a business (or farm) from home	341	12.7%	13.1%
	None of these apply	684	25.6%	26.3%
Missing (ie. None of the 5 items selected)		73	2.7%	
Are you familiar with the Affordable Connectivity Program (ACP) program?	Yes	824	30.8	31.7
	No	1,777	66.4	68.3
	Missing	75	2.8	

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.	Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)	2,152	80.4%	83.2%
	Supporting child(ren) in Pre-Kindergarten through 12th grade education	1,006	37.6%	38.9%
	Performing job functions as a remote employee (i.e. working from home)	1,080	40.4%	41.7%
I/We NEED reliable internet access at home for:	Running a business	440	16.4%	17.0%
	Some other critical reason	566	21.2%	21.9%
	Nobody in the home has a critical need for the internet	134	5.0%	5.9%
	Missing (ie. None of the 6 items selected)	89	3.3%	
How do you feel about using technology to access healthcare services? [Among Critical Need_Healthcare - 2152]	Skeptical	181	8.4	9.0
	Nervous	332	15.4	16.6
	Indifferent	363	16.9	18.1
	Comfortable	1,127	52.4	56.3
	Missing	149	6.9	
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities? [Among Critical Need_Education - 1006]	Yes, we own a computer that is dedicated to school activities	403	40.1	41.3
	Yes, our child(ren)'s computer is provided through their school	422	41.9	43.3
	No	150	14.9	15.4
	Missing	31	3.1	
Considering your current access to the internet, how do you feel about your child(ren)'s ability to be successful in their education? [Among Critical Need_Education - 1006]	Skeptical	151	15.0	15.9
	Nervous	259	25.7	27.3
	Indiferent	174	17.3	18.4
	Comfortable	364	36.2	38.4
	Missing	58	5.8	
Which statement(s) best describe your situation or circumstances when it comes to needing a home internet	My/Our household income is dependent on having internet access at home	611	56.6%	59.6%
	An employer requires the ability to perform some or all job functions from home	650	60.2%	63.4%
	My/Our career options are currently restricted due to inefficient internet stability or speed	318	29.4%	31.0%

connection to perform job functions as a remote employee? Select all that apply. [Among Critical Need_Remote Work - 1080]	My/Our professional development/learning is currently restricted due to inefficient internet stability or speed	349	32.3%	34.0%
	I/We would be willing to pay more for internet that is faster or more stable	271	25.1%	26.4%
	Some other situation or circumstance	55	5.1%	5.4%
	Missing (ie. None of the 6 items selected)	54	5.0%	
How does your ability (or inability) to work remotely make you feel about your job opportunities? [Among Critical Need_Remote Work - 1080]	Excited	260	24.1	26.4
	Frustrated	231	21.4	23.4
	Indifferent	250	23.1	25.4
	Stressed	245	22.7	24.8
	Missing	94	8.7	
When you're doing new things online that you would usually do in person, how do you feel?	Comfortable	1,198	44.8	50.8
	Confused	329	12.3	13.9
	Indifferent	537	20.1	22.8
	Stressed	295	11	12.5
	Missing	317	11.8	
What was your total household income, last year, before taxes?	\$0 to \$9,999	153	5.7	6.6
	\$10,000 to \$19,999	204	7.6	8.8
	\$20,000 to \$29,999	254	9.5	10.9
	\$30,000 to \$39,999	240	9	10.3
	\$40,000 to \$49,999	226	8.4	9.7
	\$50,000 to \$59,999	179	6.7	7.7
	\$60,000 to \$69,999	150	5.6	6.5
	\$70,000 to \$79,999	107	4	4.6
	\$80,000 to \$89,999	70	2.6	3
	\$90,000 to \$99,999	68	2.5	2.9
	\$100,000 to \$129,000	144	5.4	6.2
	\$130,000 to \$159,000	64	2.4	2.8
	More than \$160,000	110	4.1	4.7
I do not know	55	2.1	2.4	
Prefer not to answer	297	11.1	12.8	
Missing	355	13.3		
	No formal education	22	0.8	0.9
	Some high school (no diploma)	117	4.4	4.8

What is the highest level of education achieved by any member of your household?	High school diploma or equivalent certificate (GED)	376	14.1	15.3
	Some college credit, no degree	353	13.2	14.3
	Trade/Technical/Vocational training or certificate	219	8.2	8.9
	Associate's degree	276	10.3	11.2
	Bachelors degree	518	19.4	21.1
	Postgraduate degree	466	17.4	18.9
	I dont know	14	0.5	0.6
	Prefer not to say	99	3.7	4
	Missing	216	8.1	
What is your gender?	Woman	1,453	54.3	59.5
	Man	803	30	32.9
	Prefer to self-identify	9	0.3	0.4
	Prefer not to say	176	6.6	7.2
	Missing	235	8.8	
% Reached Last Question	Percentage of respondents that answered last MCQ (non open-ended question): What is your gender?	2,460	91.2	
% Complete	Percentage of respondents that completed the *minimal needed* questions as defined by SC-BBO and Vizbii	2,153	80.5	

* = Required question for complete

@ Disability includes those who indicated that their household includes: (1) Person(s) with a physical disability OR (2) Person(s) with a developmental or learning difficulty/disability

Better-Internet Survey

(HAS HOME INTERNET)

Welcome to the Better-Internet Survey. It won't take long. (Most people finish in under five minutes). But, letting your voice be heard can go a long way in improving internet connections for you and your community.

Your participation is completely voluntary, and you are under no obligation to participate. All questions are optional and anonymous as you will NOT be asked for any personal identifying information like your name, phone number or email address. When requesting the paper survey, you agreed to the terms and conditions.

If you have any questions or concerns, you can find more information at:

Get Connected SC

getconnectedsc.org/terms-conditions

INSTRUCTIONS

Answer button questions with a **single X**:

- Yes
- No

Answer checkbox questions with as many check marks as necessary:

- Option 1
- Option 2
- Option 3

START HERE...

Please write-in the Zip Code for the physical address of your home (Not a P.O. Box):

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

(Mark with an **X** to **SELECT ONLY ONE**)



Frustrated



Stressed



Indifferent



Delighted



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low



Low



High



Very high



Do you want to explain that feeling?

Please identify your Internet Service Provider or state "I do not know":

What type of connection do you have at your home? (Mark with an **X** to **SELECT ONLY ONE**)

- DSL (using a telephone line)
- Cable (using a black coax television cable)
- Fiber
- Fixed Wireless (receiver attached to the home that wirelessly connects to a tower)
- Satellite (satellite dish attached to the home or in the yard)
- I do not know

Does the internet connection at your home meet your needs?

- Yes
- No

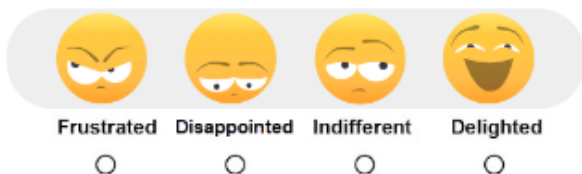
If NO, which statement(s) best describe(s) your situation or circumstances when it comes to your current home internet connection?

√ ANY THAT APPLY

- Does not meet our PERSONAL needs in terms of stability and/or speed
 - Does not meet our EDUCATIONAL needs in terms of stability and/or speed
 - Does not meet our PROFESSIONAL or BUSINESS (including farming) needs in terms of stability and/or speed
 - The service is too expensive
 - Locked into a service contract and cannot change Internet Service Provider
 - Contract has data limits that restrict our use or slow down our connection
 - Some other circumstance - Please explain:
-
-

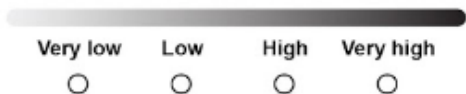
When it comes to Customer Service, how do you feel about your Internet Service Provider?

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

Does any member of your household identify as one of more of the following?

√ ANY THAT APPLY

- School age child(ren) [pre-k - 12 student(s)]
- College, vocational or other type of student(s)
- Veteran(s)
- Senior Citizen(s) (65+ years of age)
- Person(s) with a physical disability
- Person(s) with a chronic illness
- Person(s) with a developmental or learning difficulty/disability
- Person(s) who do(es) not speak English or has a language barrier
- Person(s) who is (are), or has (have) been, incarcerated
- Person(s) who is (are) unemployed and looking for work
- None of the above

Does anyone living in your household identify as any of the following?

√ ANY THAT APPLY

- Black or African American
- White
- American Indian or Alaska Native
- Asian or Pacific Islander
- Hispanic/Latino
- Some other racial or ethnic identity
- Prefer not to say

Do any of the following apply to your household?

√ ANY THAT APPLY

- I/We live in a rural location
- I/We homeschool my/our children
- Someone in our household works remotely from home
- I/We run a business (or farm) from home
- None of these apply

Which of the following best describes your home?

(Mark with an **X** to **SELECT ONLY ONE**)

- Single Family Home (no shared walls)
- Multi-Unit Dwelling (such as an apartment, townhome, or condo)
- Public Housing or Housing Projects (government subsidized housing)
- Mobile Home
- Other

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

Thanks for providing this valuable information! Next, we'll be asking about the critical reasons your household needs better internet.

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.

√ ANY THAT APPLY

I/We NEED reliable internet access at home for:

- Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)*
 - Supporting child(ren) in Pre-Kindergarten through 12th grade education**
 - Performing job functions as a remote employee (i.e., working from home)***
 - Running a business
 - Some other critical reason - *Please explain:*
-
- Nobody in the home has a critical need for the internet

***IF your household NEEDS reliable internet to access healthcare services, please fill out the following (IF NOT, please SKIP ahead).**

For what purposes do members of your household need to be able to access healthcare services from home?

√ ANY THAT APPLY

- Urgent care
- Primary care
- Mental health care
- VA services
- Prescription refills and or referrals
- Appointment scheduling
- Patient portal access (such as MyChart)
- Some other purpose - *Please explain:*

What reasons contribute to your need to access healthcare from home?

√ ANY THAT APPLY

- Convenience
- Costs
- Mobility issues make leaving home difficult
- Transportation is unreliable, expensive, or difficult to obtain
- Some other reason - *Please explain:*

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

(Mark with an **X** to **SELECT ONLY ONE**)



Skeptical Nervous Indifferent Comfortable

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low Low High Very high

Do you want to explain that feeling?

****IF your household *NEEDS* reliable internet to support child(ren) in their PreK–12 education, please fill out the following (IF NOT, please SKIP ahead).**

Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments?

- Yes
- No

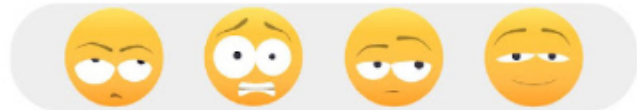
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities?

(Mark with an **X** to **SELECT ONLY ONE**)

- Yes, we own a computer that is dedicated to school activities
- Yes, our child(ren)'s computer is provided through their school
- No

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

(Mark with an **X** to **SELECT ONLY ONE**)



Skeptical Nervous Indifferent Comfortable

-
-
-
-

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low Low High Very high

-
-
-
-

Do you want to explain that feeling?

***IF your household **NEEDS reliable internet to perform job functions**, please fill out the following (IF NOT, please SKIP ahead).

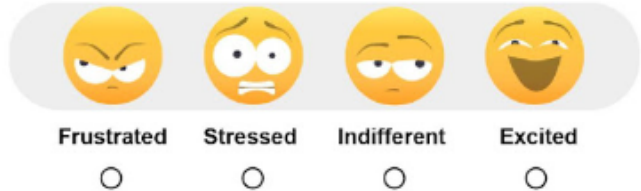
Which statement(s) best describes your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee?

√ ANY THAT APPLY

- My/Our household income is dependent on having internet access at home
- An employer requires the ability to perform some or all job functions from home
- My/Our career options are currently restricted due to inefficient internet stability or speed
- My/Our professional development/learning is currently restricted due to inefficient internet stability or speed
- I/We would be willing to pay more for internet that is faster or more stable
- Some other situation or circumstance - *Please explain:*

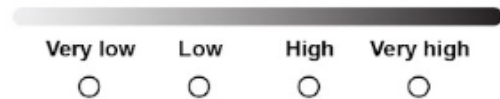
How does your ability (or inability) to work remotely make you feel about your job opportunities?

(Mark with an **X** to **SELECT ONLY ONE**)



How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Do you want to explain that feeling?

In general, how do you use the internet today?

√ ANY THAT APPLY, REGARDLESS OF HOW OR WHERE YOU CONNECT TO THE INTERNET

- Email
- News, Weather, Current Events
- Social Media & Online Community
- Attending Spiritual Services
- Shopping for Goods & Services or Paying Bills
- Streaming Entertainment (TV, Movies, Music, etc.)
- Video Gaming
- Video Conferencing
- Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.)
- Research & Personal Enrichment
- Job Searching
- Homework or Education
- Home Security
- Managing Accounts (related to banking, finance, or employment benefits, etc.)
- Organizing Transportation or Accessing Maps
- Managing or Receiving Healthcare

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

(Mark with an **X** to **SELECT ONLY ONE**)



Stressed



Confused



Indifferent



Comfortable

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low

Low

High

Very high

Do you want to explain that feeling?

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

(Mark with an **X** to **SELECT ONLY ONE**)

- \$0-\$9,999
- \$10,000-\$19,999
- \$20,000-\$29,999
- \$30,000-\$39,999
- \$40,000-\$49,999
- \$50,000-\$59,999
- \$60,000-\$69,999
- \$70,000-\$79,999
- \$80,000-\$89,999
- \$90,000-\$99,999
- \$100,000-\$129,999
- \$130,000-\$159,999
- More than \$160,000
- I don't know
- Prefer not to answer

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

(Mark with an **X** to **SELECT ONLY ONE**)

- The home is owned by you or someone in this household
- The home is rented by you or someone in this household
- I/We own a mobile home on property that is rented
- Some other relationship

Review the following list and select all of the internet-connected devices you currently use:

✓ ANY THAT APPLY

- Computer (desktop or laptop) - How many?
- Tablet - How many?
- Smart Phone
- Smart Security (Doorbell Cams, Door Locks, Lighting, etc.)
- Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)
- There are no Smart Devices in the 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? _____

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

(Mark with an **X** to **SELECT ONLY ONE**)

- No formal education
- Some high school (no diploma)
- High school diploma or equivalent certificate (GED)
- Some college credit, no degree
- Trade/Technical/Vocational training or certificate
- Associate's Degree
- Bachelor's Degree
- Postgraduate Degree
- I don't know
- Prefer not to say

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:

What is your gender?

(Mark with an **X** to **SELECT ONLY ONE**)

- Woman
- Man
- Prefer to self-identify - Please indicate:

- Prefer not to say

Thank you for completing the survey. Your voice matters. Your input will be shared with Internet Service Providers as they determine where to expand and enhance internet access in your area. While this is a multi-year process with several stages, your participation will help build a better internet for a better South Carolina.

If you lack access to the internet or your current service is inadequate, please let us know by completing this form online: ors.sc.gov/broadband/mapping/ineedinternet

Find more resources for financial assistance by visiting:

AffordableConnectivity.gov
and
GetConnectedSC.org



Better-Internet Survey

(NO INTERNET OR CELL ONLY)

Welcome to the Better-Internet Survey. It won't take long. (Most people finish in under five minutes). But, letting your voice be heard can go a long way in improving internet connections for you and your community.

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Get Connected SC

getconnectedsc.org/terms-conditions

INSTRUCTIONS

Answer button questions with a **single X**:

- Yes
- No

Answer checkbox questions with as many check marks as necessary:

- Option 1
- Option 2
- Option 3

START HERE...

Please write-in the Zip Code for the physical address of your home (Not a P.O. Box):

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

(Mark with an **X** to **SELECT ONLY ONE**)

Frustrated Stressed Indifferent Delighted

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)

Very low Low High Very high

Do you want to explain that feeling?

Which statement best describes your situation when it comes to the internet?

(Mark with an **X** to **SELECT ONLY ONE**)

- At home, I only have access to the internet using my cell phone with a data plan
- I have no access to the internet at home

Would you like an internet connection at your home?

- Yes
- No

Based on your experience, which of the following statements describe your situation or circumstance(s)?

√ ANY THAT APPLY

- We don't have interest in a home internet connection
- There is no Internet Service Provider serving our home's location
- The options available do not meet our needs
- We don't have the devices or tools to get online
- The cost is too high
- We cannot get internet service due to a lack of an ID, bank account, or credit history
- We don't feel confident in our ability to use the internet
- We don't feel safe using the internet
- We access the internet outside of the home* (*through a neighbor, community center, business, library*)
- Some other circumstance(s) - *Please explain:*

***IF you selected "We access the internet outside of the home," please list the places where you intentionally go to get online:**



Does any member of your household identify as one of more of the following?

√ ANY THAT APPLY

- School age child(ren) [pre-k - 12 student(s)]
- College, vocational or other type of student(s)
- Veteran(s)
- Senior Citizen(s) (65+ years of age)
- Person(s) with a physical disability
- Person(s) with a chronic illness
- Person(s) with a developmental or learning difficulty/disability
- Person(s) who do(es) not speak English or has a language barrier
- Person(s) who is (are), or has (have) been, incarcerated
- Person(s) who is (are) unemployed and looking for work
- None of the above



Does anyone living in your household identify as any of the following?

√ ANY THAT APPLY

- Black or African American
- White
- American Indian or Alaska Native
- Asian or Pacific Islander
- Hispanic/Latino
- Some other racial or ethnic identity
- Prefer not to say

Which of the following best describes your home?

(Mark with an **✕** to **SELECT ONLY ONE**)

- Single Family Home (no shared walls)
- Multi-Unit Dwelling (such as an apartment, townhome, or condo)
- Public Housing or Housing Projects (government subsidized housing)
- Mobile Home
- Other

Do any of the following apply to your household?

√ ANY THAT APPLY

- I/We live in a rural location
- I/We homeschool my/our children
- Someone in our household works remotely from home
- I/We run a business (or farm) from home
- None of these apply

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

Thanks for providing this valuable information! Next, we'll be asking about the critical reasons your household needs better internet.

Whether you have internet at home or not, complete the following statement by selecting ALL options that apply to members of your household.

√ ANY THAT APPLY

I/We NEED reliable internet access at home for:

- Accessing healthcare services (scheduling, communicating with providers, ordering prescriptions)*
- Supporting child(ren) in Pre-Kindergarten through 12th grade education**
- Performing job functions as a remote employee (i.e., working from home)***
- Running a business
- Some other critical reason - *Please explain:*

- Nobody in the home has a critical need for the internet

IF your household **NEEDS reliable internet to access healthcare services, please fill out the following (IF NOT, please SKIP ahead).*

For what purposes do members of your household need to be able to access healthcare services from home?

√ ANY THAT APPLY

- Urgent care
- Primary care
- Mental health care
- VA services
- Prescription refills and or referrals
- Appointment scheduling
- Patient portal access (such as MyChart)
- Some other purpose - *Please explain:*

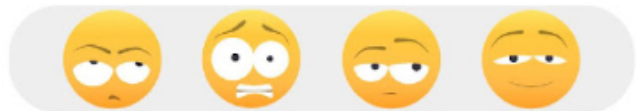
What reasons contribute to your need to access healthcare from home?

√ ANY THAT APPLY

- Convenience
- Costs
- Mobility issues make leaving home difficult
- Transportation is unreliable, expensive, or difficult to obtain
- Some other reason - *Please explain:*

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

(Mark with an **X** to **SELECT ONLY ONE**)



Skeptical Nervous Indifferent Comfortable

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low Low High Very high

Do you want to explain that feeling?

****IF your household *NEEDS* reliable internet to support child(ren) in their PreK–12 education, please fill out the following (IF NOT, please SKIP ahead).**

Does the school your child(ren) attend(s) require that they use an internet connection outside of the school to complete assignments?

- Yes
- No

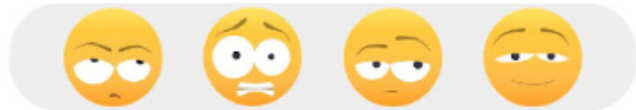
Is there at least one computer (laptop or desktop) in your home dedicated to, or prioritized, for your child to participate in school-related activities?

(Mark with an **X** to **SELECT ONLY ONE**)

- Yes, we own a computer that is dedicated to school activities
- Yes, our child(ren)'s computer is provided through their school
- No

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

(Mark with an **X** to **SELECT ONLY ONE**)



Skeptical Nervous Indifferent Comfortable

-
-
-
-

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low Low High Very high

-
-
-
-

Do you want to explain that feeling?

***IF your household **NEEDS** reliable internet to perform job functions, please fill out the following (IF NOT, please SKIP ahead).





Which statement(s) best describes your situation or circumstances when it comes to needing a home internet connection to perform job functions as a remote employee?

√ ANY THAT APPLY

- My/Our household income is dependent on having internet access at home
- An employer requires the ability to perform some or all job functions from home
- My/Our career options are currently restricted due to inefficient internet stability or speed
- My/Our professional development/learning is currently restricted due to inefficient internet stability or speed
- I/We would be willing to pay more for internet that is faster or more stable
- Some other situation or circumstance - Please explain:

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


(Mark with an **X** to **SELECT ONLY ONE**)

Frustrated Stressed Indifferent Excited

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low Low High Very high

Do you want to explain that feeling?

In general, how do you use the internet today?

√ ANY THAT APPLY, REGARDLESS OF HOW OR WHERE YOU CONNECT TO THE INTERNET

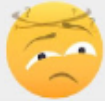
- Email
- News, Weather, Current Events
- Social Media & Online Community
- Attending Spiritual Services
- Shopping for Goods & Services or Paying Bills
- Streaming Entertainment (TV, Movies, Music, etc.)
- Video Gaming
- Video Conferencing
- Conducting Business Activities (such as checking reports, managing marketing and online sales, etc.)
- Research & Personal Enrichment
- Job Searching
- Homework or Education
- Home Security
- Managing Accounts (related to banking, finance, or employment benefits, etc.)
- Organizing Transportation or Accessing Maps
- Managing or Receiving Healthcare

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

(Mark with an **X** to **SELECT ONLY ONE**)



Stressed



Confused



Indifferent



Comfortable

How intense is the feeling you just expressed?

(Mark with an **X** to **SELECT ONLY ONE**)



Very low

Low

High

Very high

Do you want to explain that feeling?

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

(Mark with an **X** to **SELECT ONLY ONE**)

- \$0-\$9,999
- \$10,000-\$19,999
- \$20,000-\$29,999
- \$30,000-\$39,999
- \$40,000-\$49,999
- \$50,000-\$59,999
- \$60,000-\$69,999
- \$70,000-\$79,999
- \$80,000-\$89,999
- \$90,000-\$99,999
- \$100,000-\$129,999
- \$130,000-\$159,999
- More than \$160,000
- I don't know
- Prefer not to answer

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

(Mark with an **X** to **SELECT ONLY ONE**)

- The home is owned by you or someone in this household
- The home is rented by you or someone in this household
- I/We own a mobile home on property that is rented
- Some other relationship

Review the following list and select all of the internet-connected devices you currently use:

✓ ANY THAT APPLY

- Computer (desktop or laptop) - How many?
- Tablet - How many?
- Smart Phone
- Smart Security (Doorbell Cams, Door Locks, Lighting, etc.)
- Other Smart Devices (TVs, Health Monitors, Digital Assistants, Thermostats, Ovens)
- There are no Smart Devices in the 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? _____

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

(Mark with an **X** to **SELECT ONLY ONE**)

- No formal education
- Some high school (no diploma)
- High school diploma or equivalent certificate (GED)
- Some college credit, no degree
- Trade/Technical/Vocational training or certificate
- Associate's Degree
- Bachelor's Degree
- Postgraduate Degree
- I don't know
- Prefer not to say

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:

What is your gender?

(Mark with an **X** to **SELECT ONLY ONE**)

- Woman
- Man
- Prefer to self-identify - Please indicate:

- Prefer not to say

Thank you for completing the survey. Your voice matters. Your input will be shared with Internet Service Providers as they determine where to expand and enhance internet access in your area. While this is a multi-year process with several stages, your participation will help build a better internet for a better South Carolina.

If you lack access to the internet or your current service is inadequate, please let us know by completing this form online: ors.sc.gov/broadband/mapping/ineedinternet

Find more resources for financial assistance by visiting:

AffordableConnectivity.gov
and
GetConnectedSC.org





8.2 Asset Inventory Mapping (Clemson)



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Broadband Equity, Access and Deployment (BEAD) Program Asset Inventory Key Findings Report

August 23, 2023

Clemson Project Team

Faculty: David Vaughn, Dr. Rieta Drinkwine, Kevin Autry

CEDC Interns: Alex Walters, Carson Potts, Connor Miaskiewicz, Holden Keebaugh,
Jonathan Cowles, Mark Cristino, Nate Polakowski, Victoriana Malvoso, Zachery Holland



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BEAD: Asset Inventory Key Findings

Overview

Clemson University assisted the South Carolina Broadband Office (SCBBO) with developing an asset inventory of all broadband-related activities statewide to be included as part of the state's Five-Year Action Plan, as well as to inform the state's Initial and Final Proposals. A primary goal of the inventory is to enable identification of resource, funding and programming gaps.

In addition to creating a *Resource and Asset Map Book*, Clemson also generated a list of key findings from inventory surveys conducted in key sectors across the state, including: Libraries (both public and academic), Public K-12 Schools, Telehealth providers, and Utility companies. Clemson also consulted with key organizations relating to broadband in South Carolina, including Palmetto Care Connections and the South Carolina Office of Rural Health, as part of the inventory process. The inventory surveys were comprised of questions derived from the NTIA BEAD 5-Year Action Plan Guidance document, and they were tailored to the various key sectors, with some sectors, such as libraries and schools, being asked more questions while others, such as utility companies, were asked fewer questions.

Summary of Key Findings

The following priorities were identified through the inventory process:

- Expanded, standardized digital literacy and digital navigator programs statewide in partnership with all key sectors, with a focus on libraries, schools, and healthcare providers
- Standardized technology available through libraries and schools, including loaned devices, in-library and in-school technology, and consistent statewide implementation of 1-1 devices for all grades
- Trained IT professionals in all communities to support broadband implementation, such as through public libraries
- Consistent access to CIPA compliant public wifi through public facilities
- Increased availability of:
 - Low-cost devices
 - State-level utility assistance programs
- Improved cell coverage for hotspots
- Expanded presence digital equity coalitions in all counties, with a focus on increasing equitable access for education, healthcare, and economic development
 - Increased engagement of all key sectors as part of statewide digital equity efforts, with an emphasis on utility companies and businesses



BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

Public Libraries

Responses received from 34 out of 41 library systems (83%) representing 37 counties (80%)

Identified priorities based on responses:

- Trained IT professionals in all libraries
- Standardized technology available through libraries, including loaned devices and in-library technology
 - Should include emerging technology along with laptops, web cameras, headphones, etc. necessary for work and school
 - Assistance with cost for hotspots
- Expanded, standardized digital literacy and digital navigator programs
- Consistent access to CIPA compliant public wifi at all government/community facilities
- Increased availability of low-cost devices
- Increased availability of state-level utility assistance programs
- Improved cell coverage for hotspots

Summary of responses:

- All public libraries provide public computers and assistance
 - Although not part of the survey, not all libraries have trained IT professionals
- Digital Literacy
 - 68% of libraries indicated providing digital literacy programs
 - Only 50% of rural systems provide programs as opposed to 100% of urban systems
 - Computer classes are most common type of program
 - Most programs are on library premises (only one mentioned off-site programs)
 - A couple specified programs for seniors
 - 48% indicated at least one other organization in county providing digital literacy programs
 - Most common other organizations were higher ed and adult ed
 - Other common orgs: Goodwill, United Way, Public Schools, SC DEW
 - Urban systems had more additional orgs than rural
- Devices
 - All libraries provide free access to computers for in-library use and provide assistance for using computers
 - 78% of libraries loan out at least one kind of device, such as tablets, hotspots, and computers
 - The percentage is slightly lower among rural systems at 69% as opposed to 100% of all urban libraries loaning devices.



BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

Public Libraries

Summary of responses (continued):

- Devices
 - Subsidized
 - Only one system noted providing low-cost devices, which was in partnership with PCC
 - Loaned
 - Hotspots most common - loaned by 60% of responding systems
 - These are cost-prohibitive and some counties do not have adequate cell coverage for hotspots
 - Laptops are available at 19% of responding systems, but about half only provide them for in-library use
 - Launchpads and tablets are the next most common category of devices
- Digital navigators
 - Only 2 systems indicated digital navigator programs
- Awareness and Outreach campaigns
 - 43% conduct awareness and outreach campaigns, mostly urban library systems
- Digital Equity Coalitions
 - 22% noted a coalition in their county
 - Similar response rate across urban and rural
 - 20% indicated involvement in coalition
 - Town systems most likely to be involved in coalitions
- Utility assistance programs
 - 51% indicated availability of programs in their counties
 - Lowest availability in suburb and rural systems
 - Most commonly provided through local community action or faith-based organizations
 - Several noted that previous state and federal programs are no longer funded (i.e., SC Stay and NAACP)
- Public wifi
 - 38% indicated awareness/availability of public wifi outside of library facilities
 - Parks most common public wifi noted
 - Restaurants most common wifi noted, however not public
 - Consistent awareness/availability between urban and rural

BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

Academic Libraries

Responses received from 3 out of 18 tech schools (17%) and 8 out of 28 higher education institutions (29%) (Note: Numbers of schools/institutions based on PASCAL membership list)

Identified priorities based on responses:

- Standardized technology available through libraries, including loaned devices and in-library technology
 - Should include emerging technology along with laptops, web cameras, hotspots, headphones, etc. necessary for school
- Academic libraries should be engaged as part of coalition building and to increase awareness of digital inclusion
- Expanded, standardized digital literacy and digital navigator programs
- Increased availability of low-cost devices

Summary of responses:

- Digital Literacy Programs
 - Less than 50% provide programs
 - Mostly through library instructional sessions in classes
 - 6 out of 11 responded "N/A" to the question about digital literacy programs
- Devices
 - 64% loan devices
 - Laptops are the most common type
 - One specified laptops are loaned based on faculty/staff referral based on need
 - Only one respondent noted hotspots
 - A couple respondents noted webcams, as well as other types of technology for coursework like calculators, DVD players, etc.
- No respondents indicated their library provides low-cost devices or has a digital navigator program
- Only one respondent indicated their library conducts awareness or outreach campaigns for digital inclusion
- No respondents indicated participation in any digital equity coalitions

BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

K-12 Schools

Responses received from 33 out of 72 districts (46%) representing 25 counties (54%)(Note: survey was sent to district IT staff using the e-rate contact list)

Identified priorities based on responses:

- Full 1-1 device adoption of consistent quality of devices for all grades, including adult education, with devices being able to go home with all students
 - Ensure appropriate technology for accessibility
- Digital literacy for students, staff, and caregivers
- Public wifi at all school facilities and on buses

Summary of responses:

- Digital Literacy Programs
 - Less than 50% provide some form of digital literacy
 - No pattern between urban/rural in terms of programs
 - Common sense and Learning.com were platforms listed by districts
 - There is no consistency for whether digital literacy is provided for both staff and students
 - No mention in responses of family-level training programs
- Devices
 - 64% loan devices
 - 1-1 device programs
 - Not all districts have 1-1 devices yet, and chromebooks are more common than laptops
 - No pattern between urban/rural in terms of types of devices
 - Only one district noted 1-1 devices for adult education
 - Younger grades often do not get to take 1-1 devices home
 - A few noted K & 1st got iPads and older grades received laptops
 - Several noted chromebooks/tablets for lower grades and laptops for middle/high school
 - Most devices provided through 1-1 programs are loans
 - Other device loans
 - The only other type of device loaned is hotspots (only 40% loan hotspots)
 - Some specified mifi or kajeet
 - Accessibility
 - Approximately 1 in 5 district IT staff responding is not aware of providing any technology for accessibility



BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

K-12 Schools

Summary of responses (continued):

- Public wifi
 - More than 1/3 do not have public wifi
 - Majority of those without public wifi are rural and low income counties
 - Only a few districts have public wifi on buses
 - Sports complexes were noted as potential additional sites

Healthcare Providers

12 responses were received from the SC Telehealth Alliance network list, which is where the survey was distributed

Identified priorities based on responses:

- Consistent availability of digital literacy programs to assist with healthcare access for patients, families/caregivers, and medical providers/staff
- Access to devices necessary for healthcare, either loaned or low-cost

Summary of responses:

- Digital literacy
 - 33% provide programs
 - Mostly patient focused
- Devices
 - Loans
 - 58% of respondents indicated they do not provide any devices
 - Only one healthcare provider loans devices to patients
 - Palmetto Care Connections provides a variety of devices
 - Medical equipment most common type of device loaned
 - One respondent indicated they only provide devices for staff
 - Low-cost
 - 58% of respondents indicated they do not provide low-cost devices or connect patients with resources to get devices
 - Palmetto Care Connections provides low-cost devices for patients
 - A couple of respondents indicated they loan medical devices and phones and direct patients to the state broadband discount program or other resources for devices



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BEAD: Asset Inventory Key Findings

Detailed Findings by Sector

Utility Companies

Only 3 responses were collected

Identified priorities based on responses:

- There needs to be engagement of utility companies with digital equity efforts in general
- Need increased availability of state-level utility assistance programs

Summary of responses:

- Not all provide utility assistance
- None conduct any awareness efforts relating to digital inclusion nor are aware of digital equity coalitions

Additional Priorities

Consultations with key organizations resulted in identification of the following priorities:

- Need digital equity coalitions in each county
 - Should focus on education, healthcare, and economic development
 - Need stronger connection to business community, such as working with Beaufort and Charleston Digital Corridors to develop statewide technology corridors
 - Should work with service corps (AmeriCorps, VISTA, etc.)
- Need statewide standards and services, including
 - Consistent access to high-quality devices
 - Managed IT and maintenance assistance
 - Training to use devices
- Need utilities assistance programs for all communities
- Need increased availability and access to equipment for people with disabilities
- Need to highlight innovations and successes to create best practices
 - Possible opportunity: mentorship programs between counties/localities focused on technology

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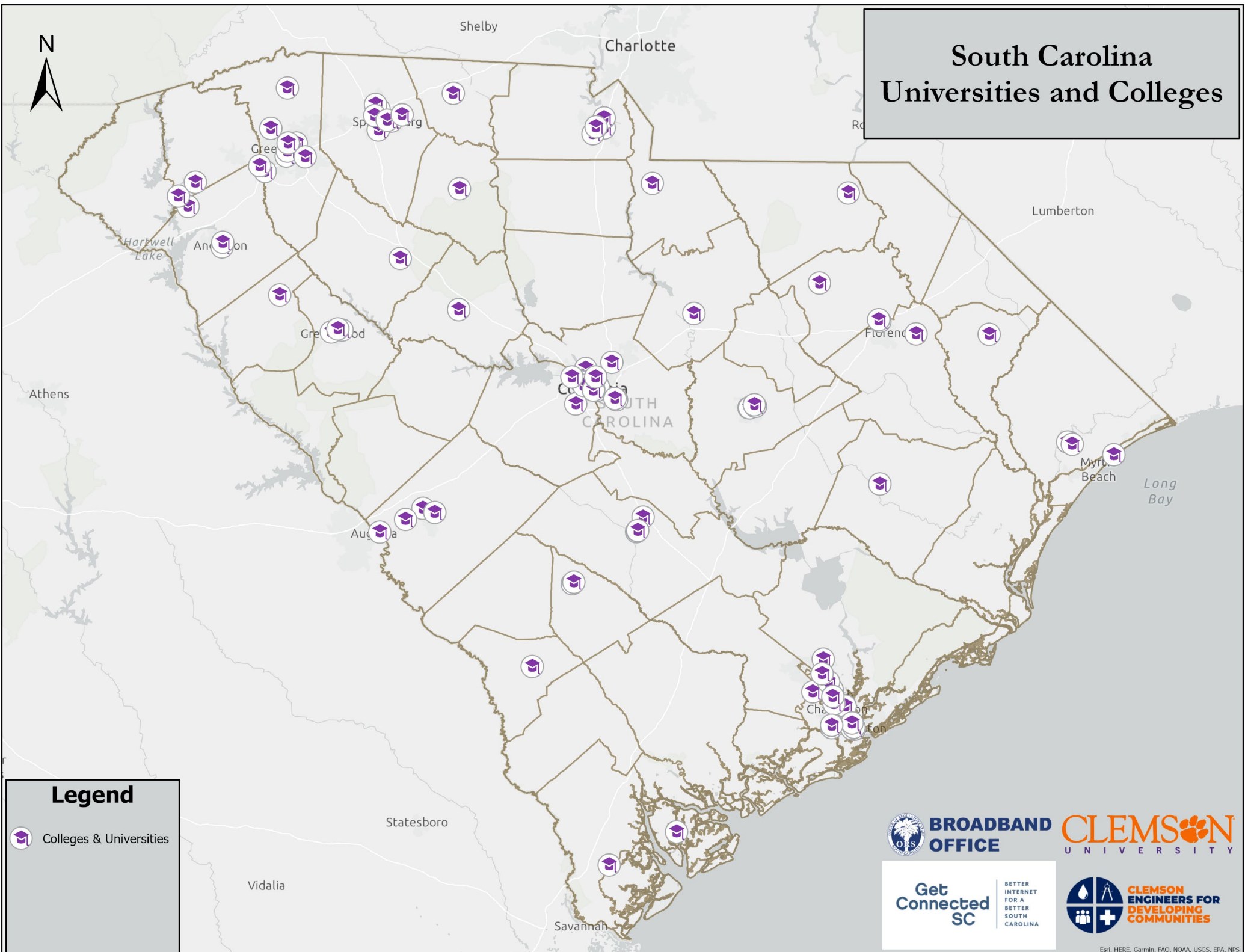
**Broadband Equity, Access and
Deployment (BEAD) Program**

Asset and Resource Map Book

August 23, 2023



South Carolina Universities and Colleges



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 Colleges & Universities

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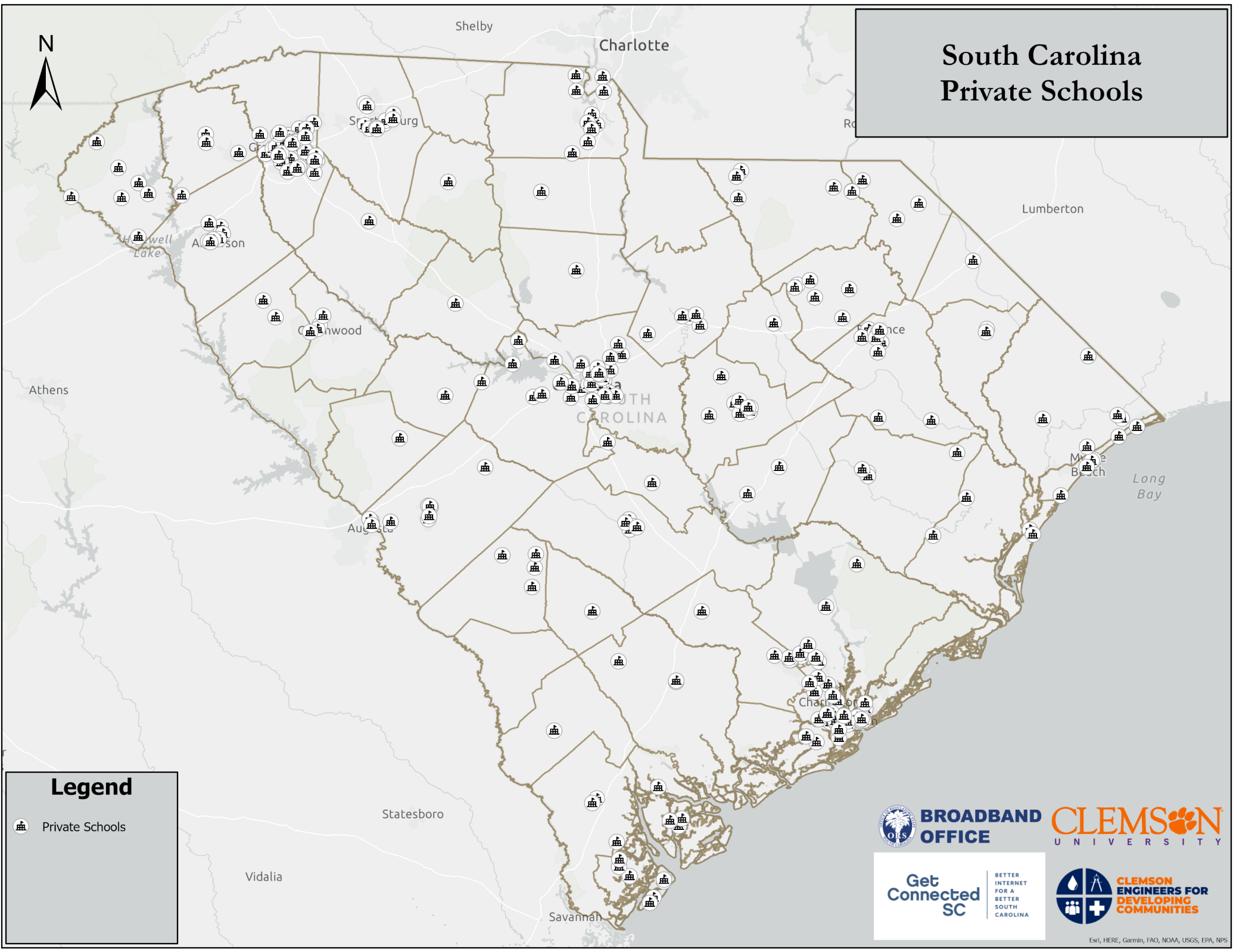
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South Carolina Private Schools



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 Private Schools



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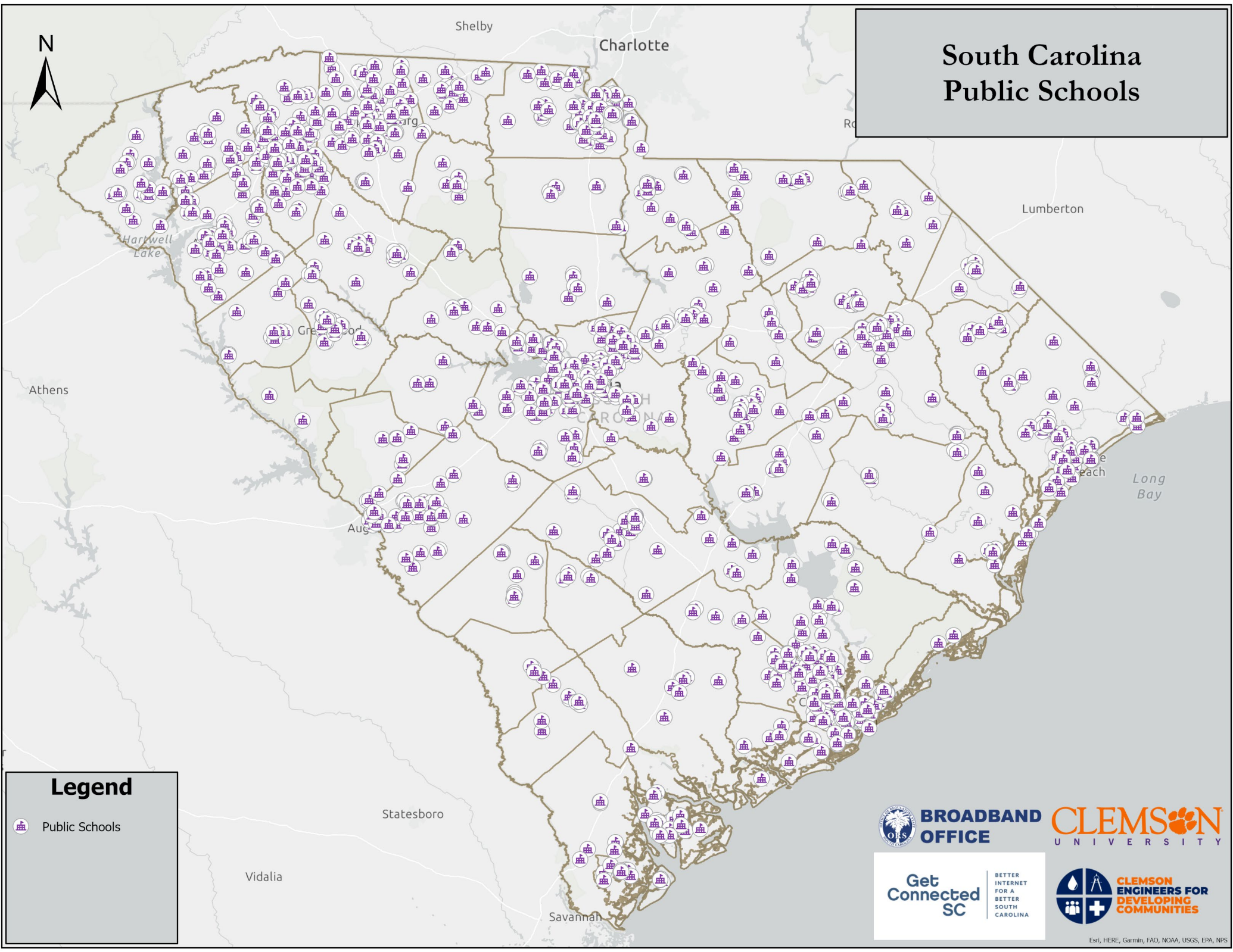
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South Carolina Public Schools



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 Public Schools



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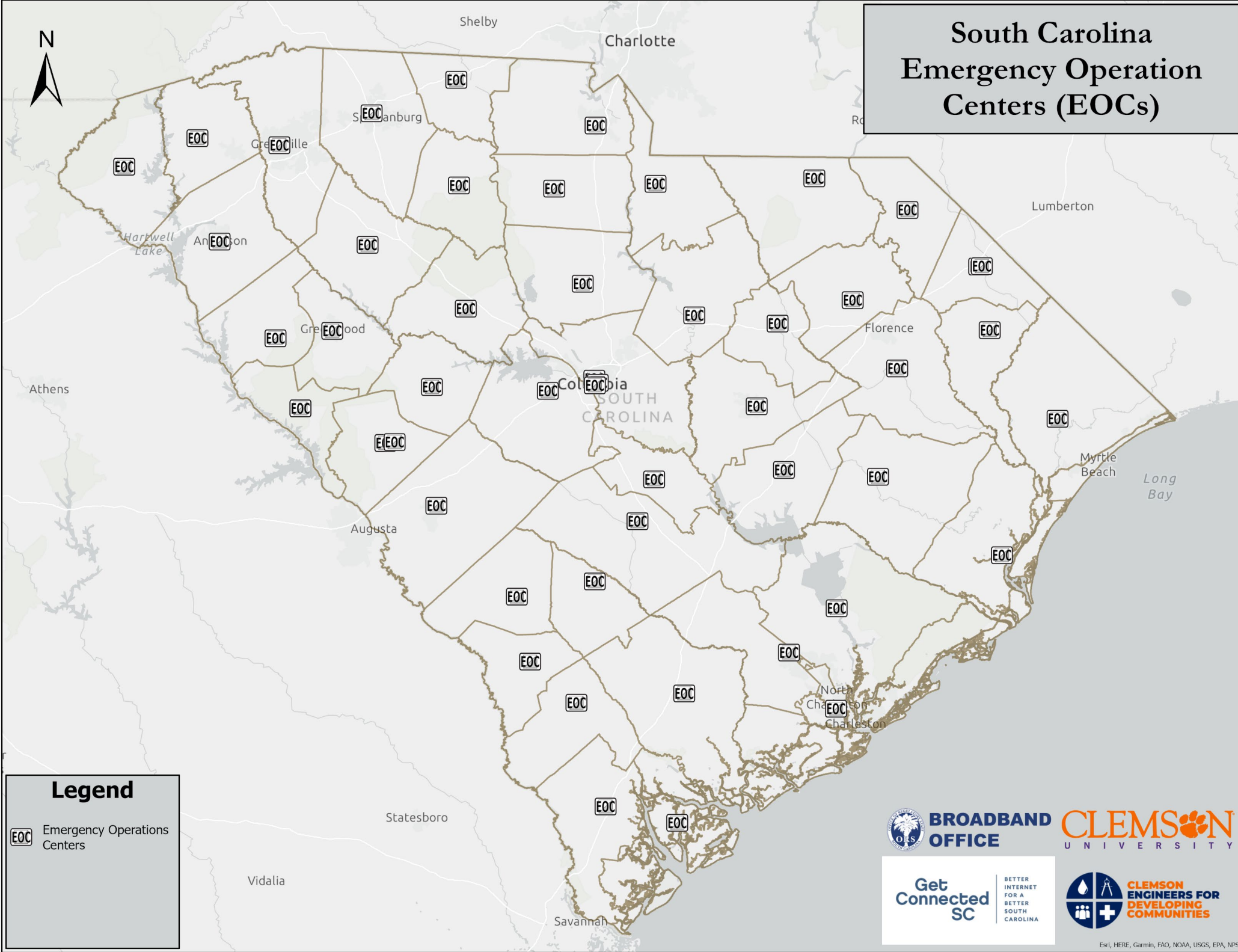
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South Carolina Emergency Operation Centers (EOCs)



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 Emergency Operations Centers



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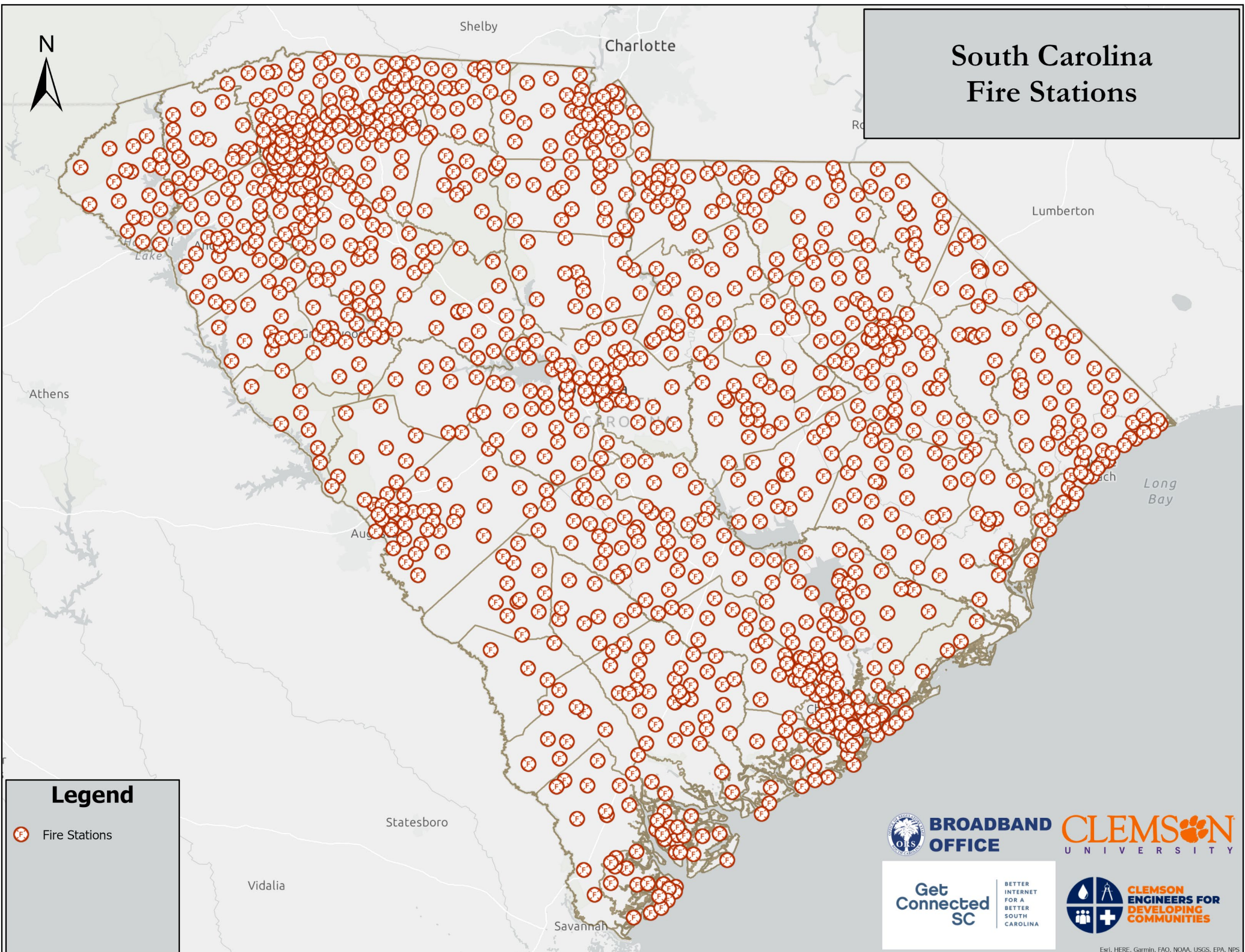
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South Carolina Fire Stations



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 Fire Stations



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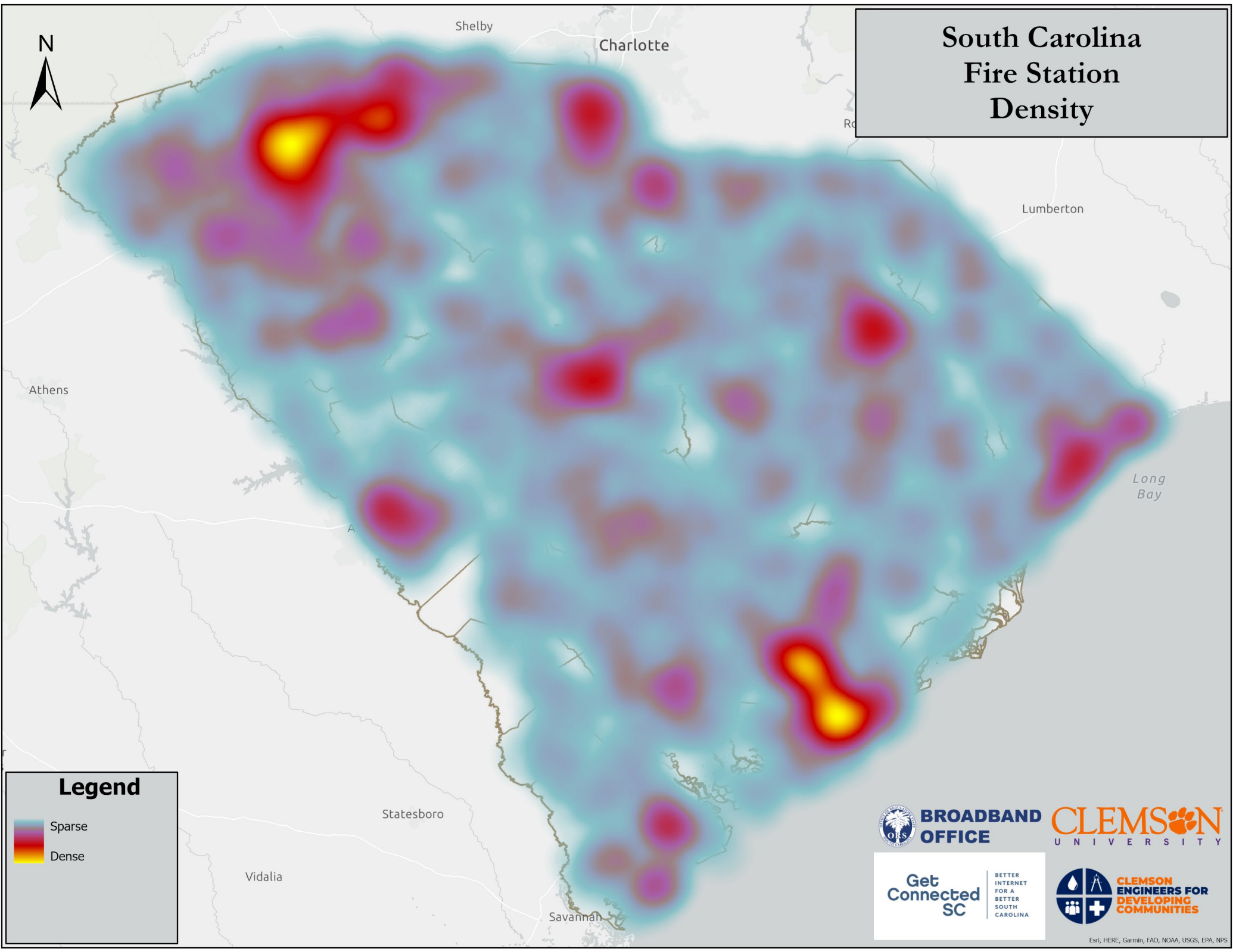
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South Carolina Fire Station Density



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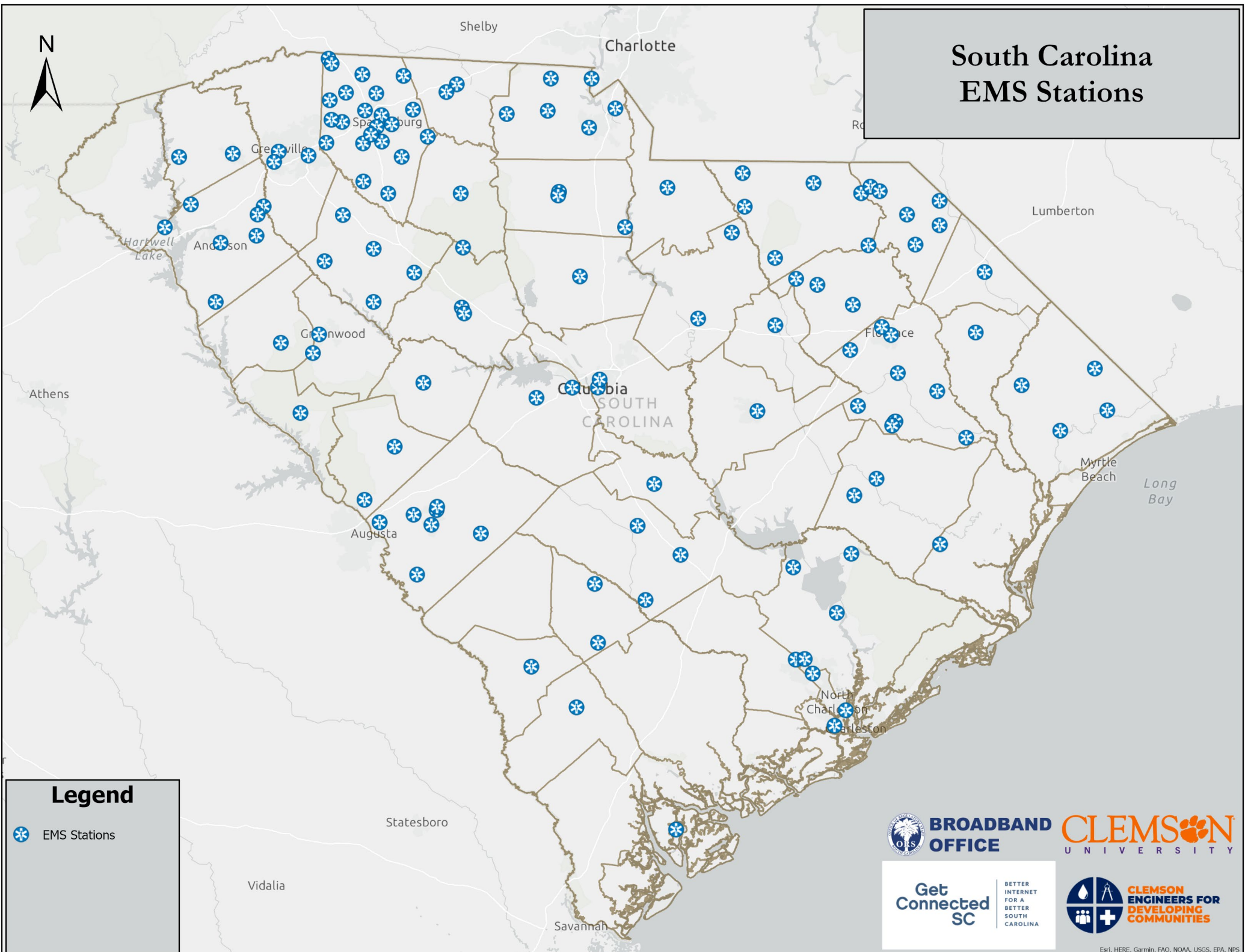
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South Carolina EMS Stations



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 EMS Stations



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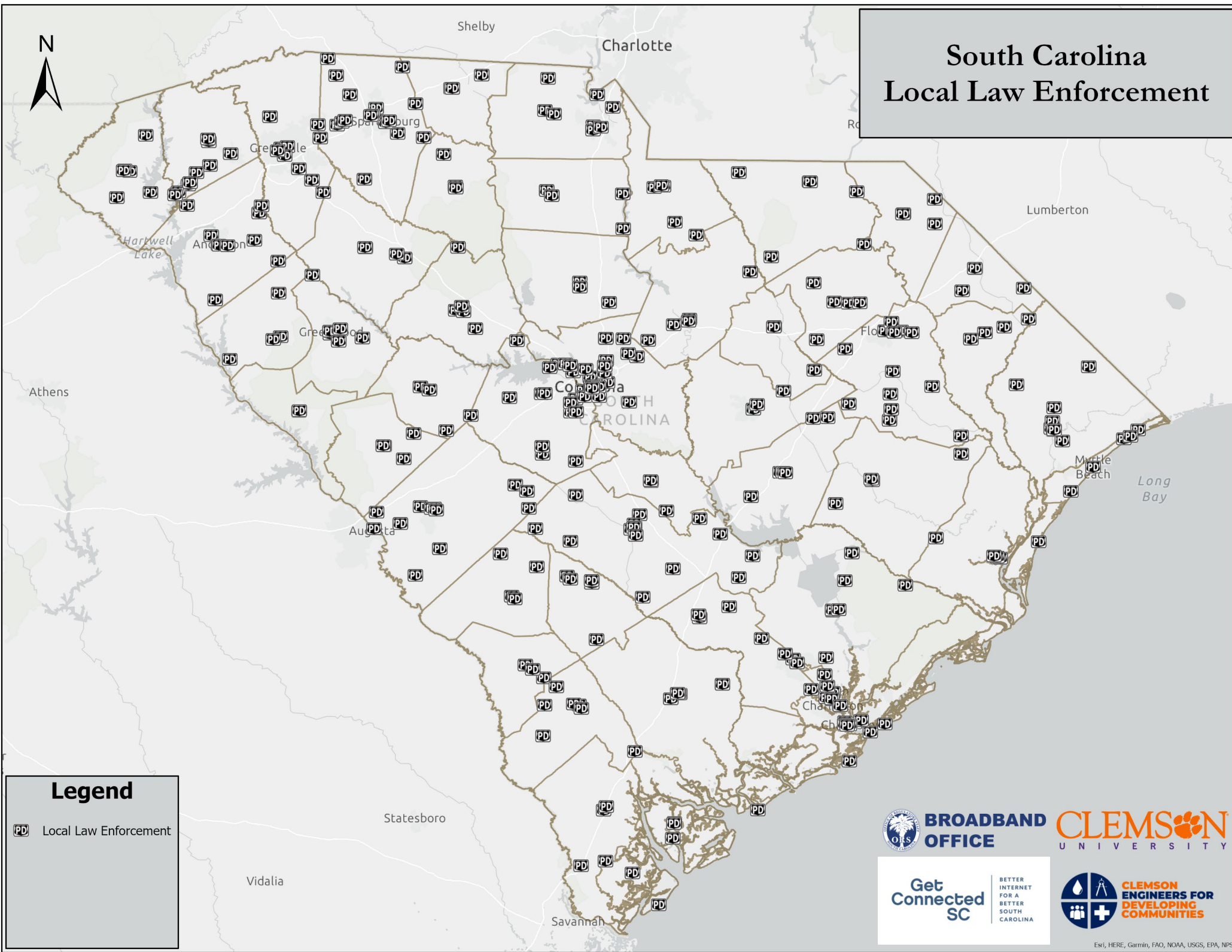
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South Carolina Local Law Enforcement



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 Local Law Enforcement



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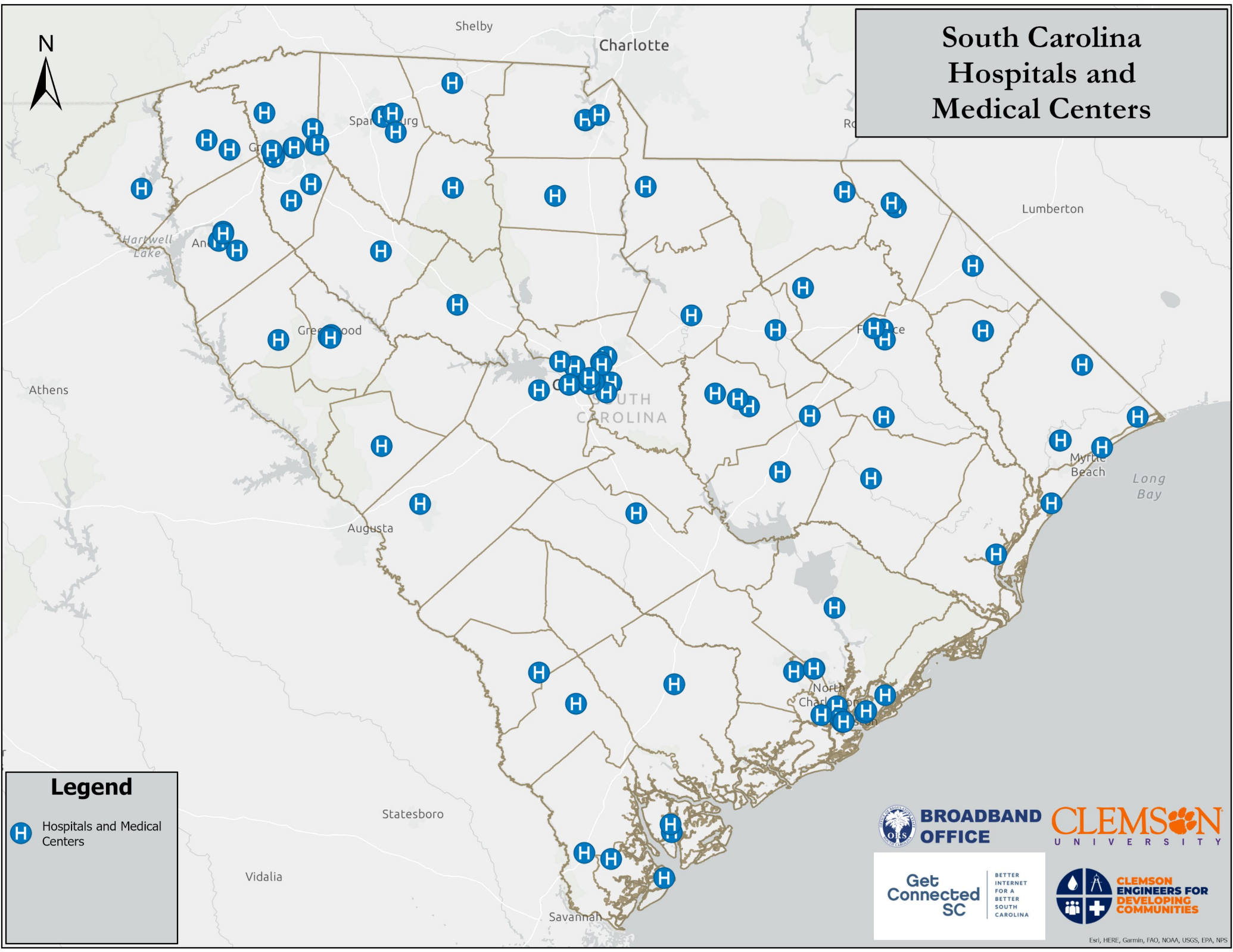
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South Carolina Hospitals and Medical Centers



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 Hospitals and Medical Centers



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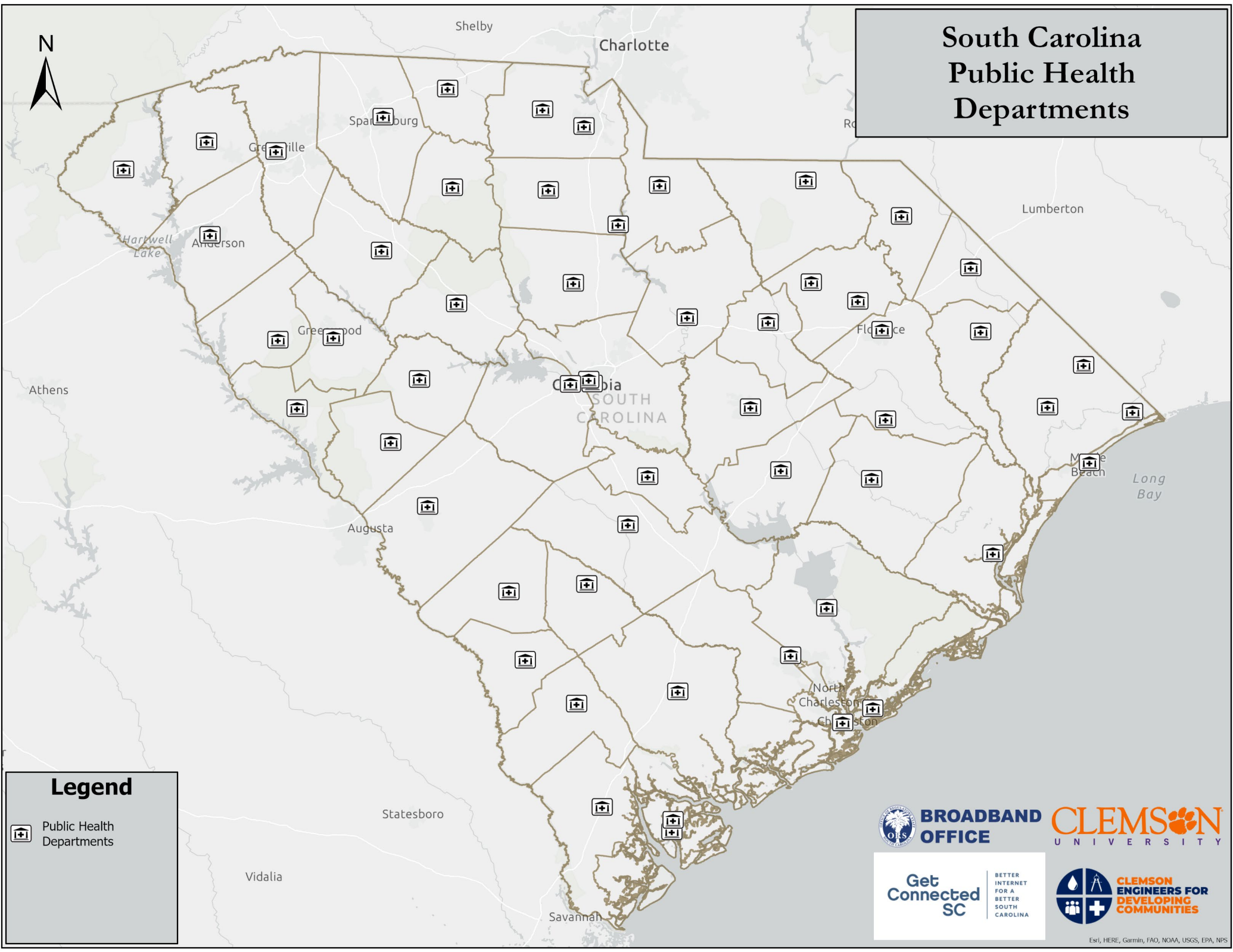
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South Carolina Public Health Departments



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 Public Health Departments

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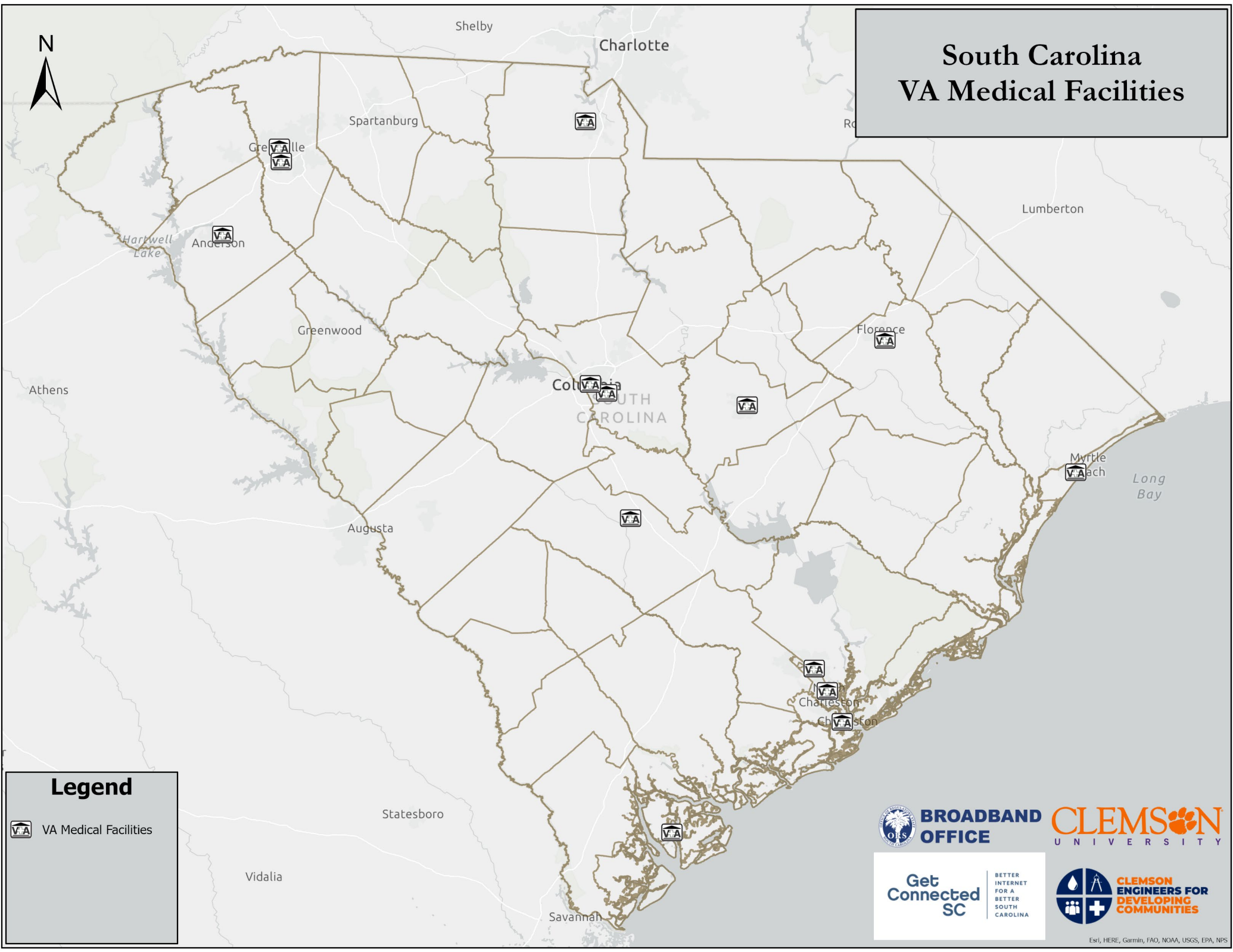
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South Carolina VA Medical Facilities



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 VA Medical Facilities



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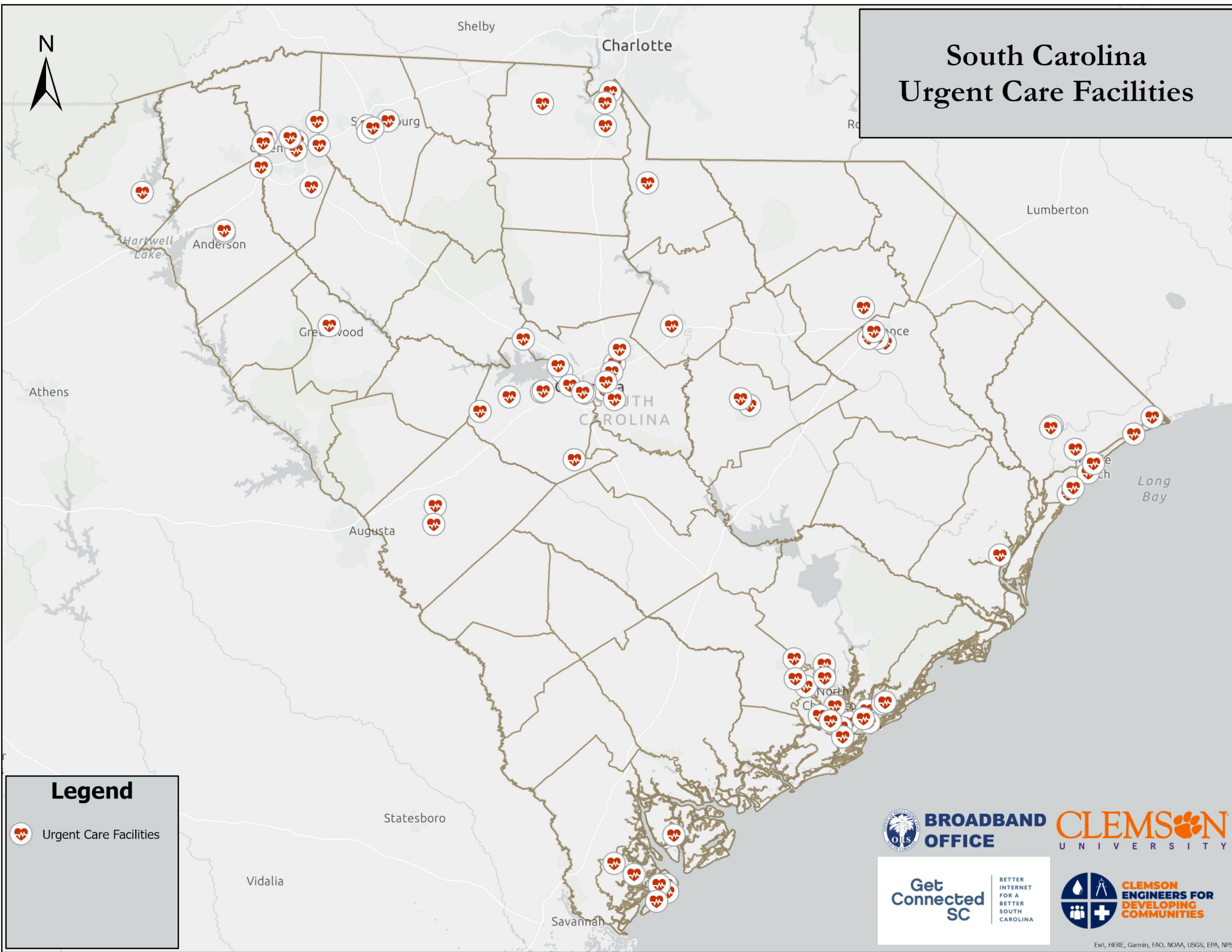
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South Carolina Urgent Care Facilities

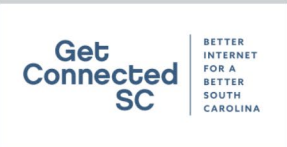


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 Urgent Care Facilities



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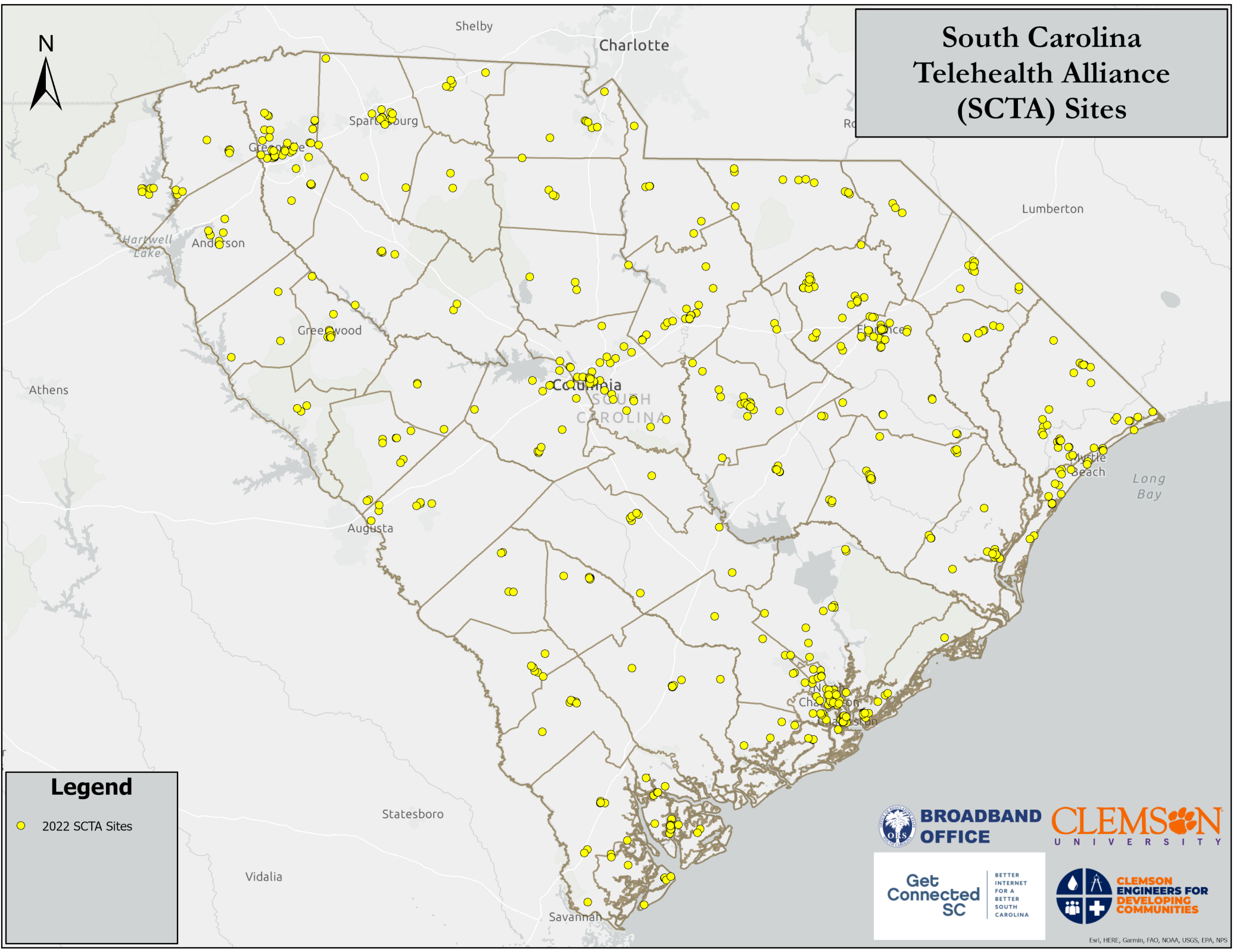


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South Carolina Telehealth Alliance (SCTA) Sites



Legend

- 2022 SCTA Sites

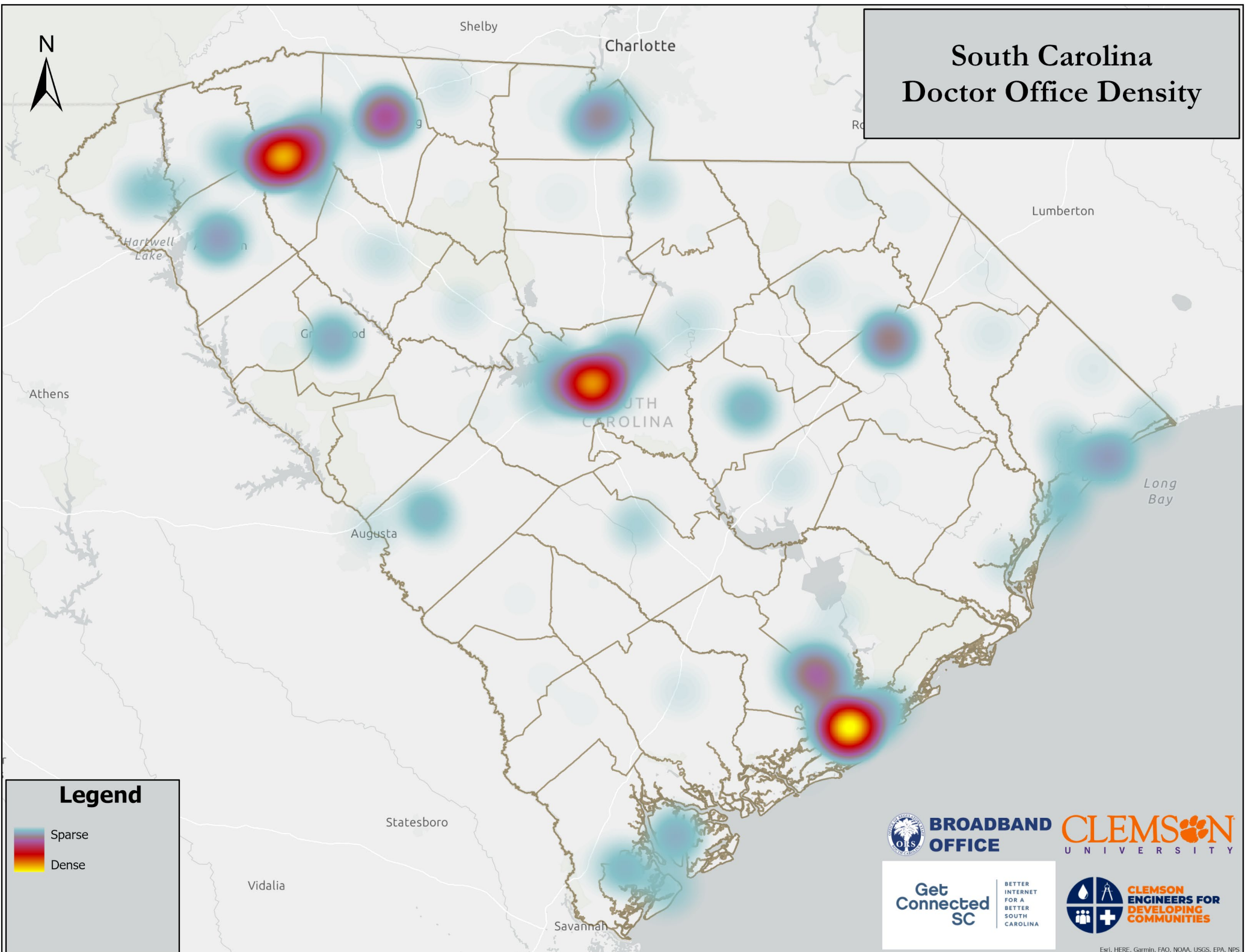


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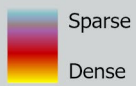


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South Carolina Doctor Office Density




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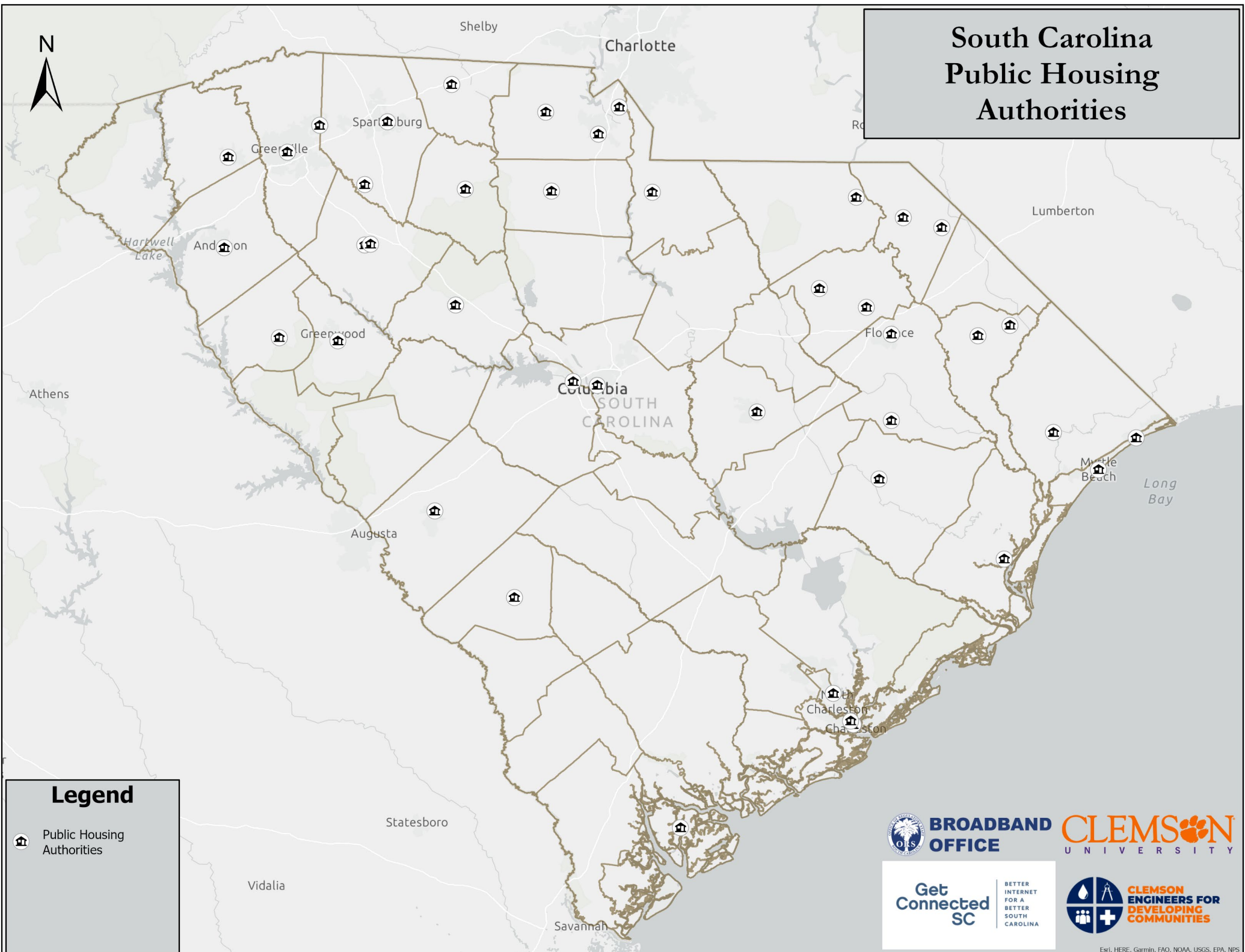
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South Carolina Public Housing Authorities



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 Public Housing Authorities



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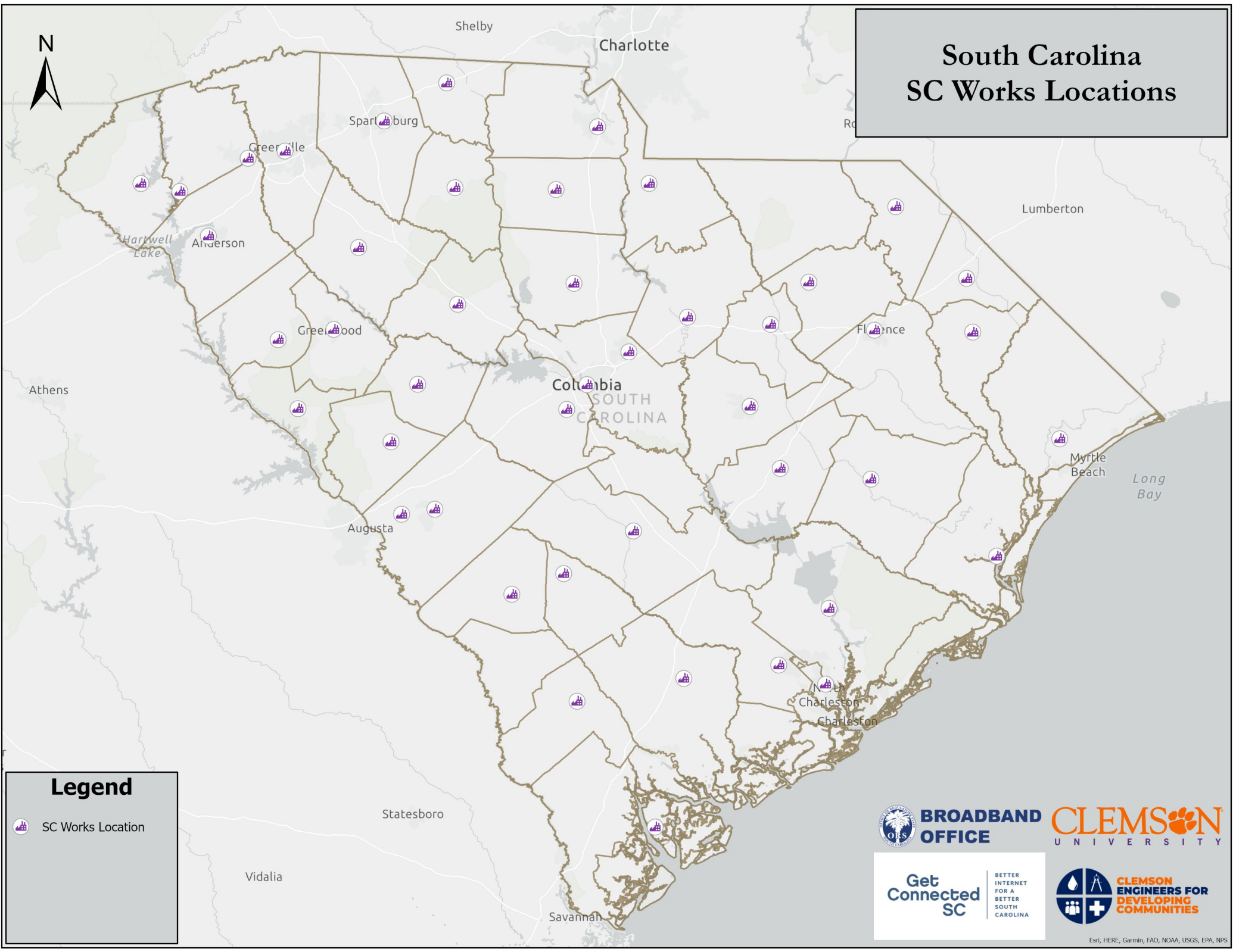
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South Carolina SC Works Locations



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 SC Works Location



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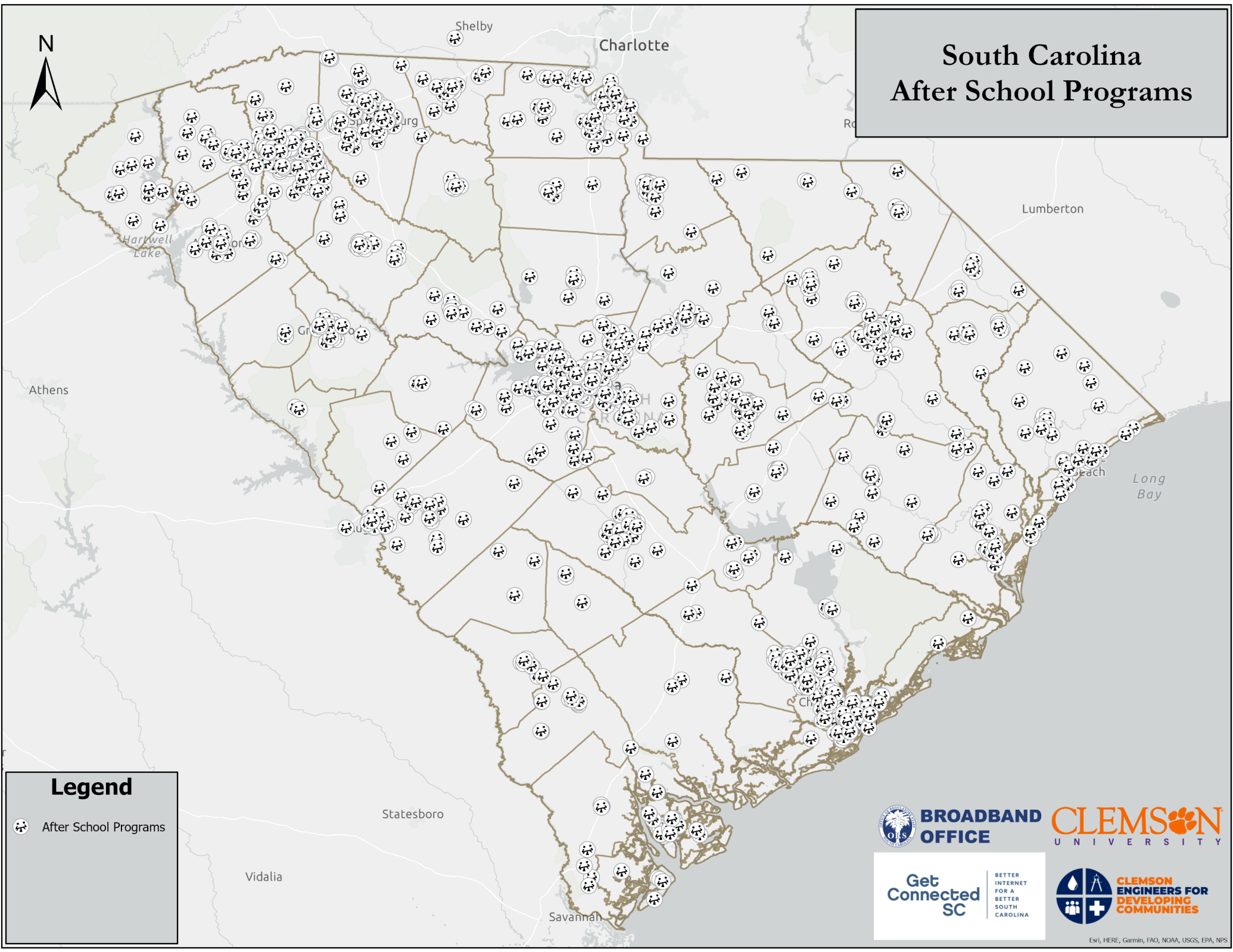
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South Carolina After School Programs



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 After School Programs



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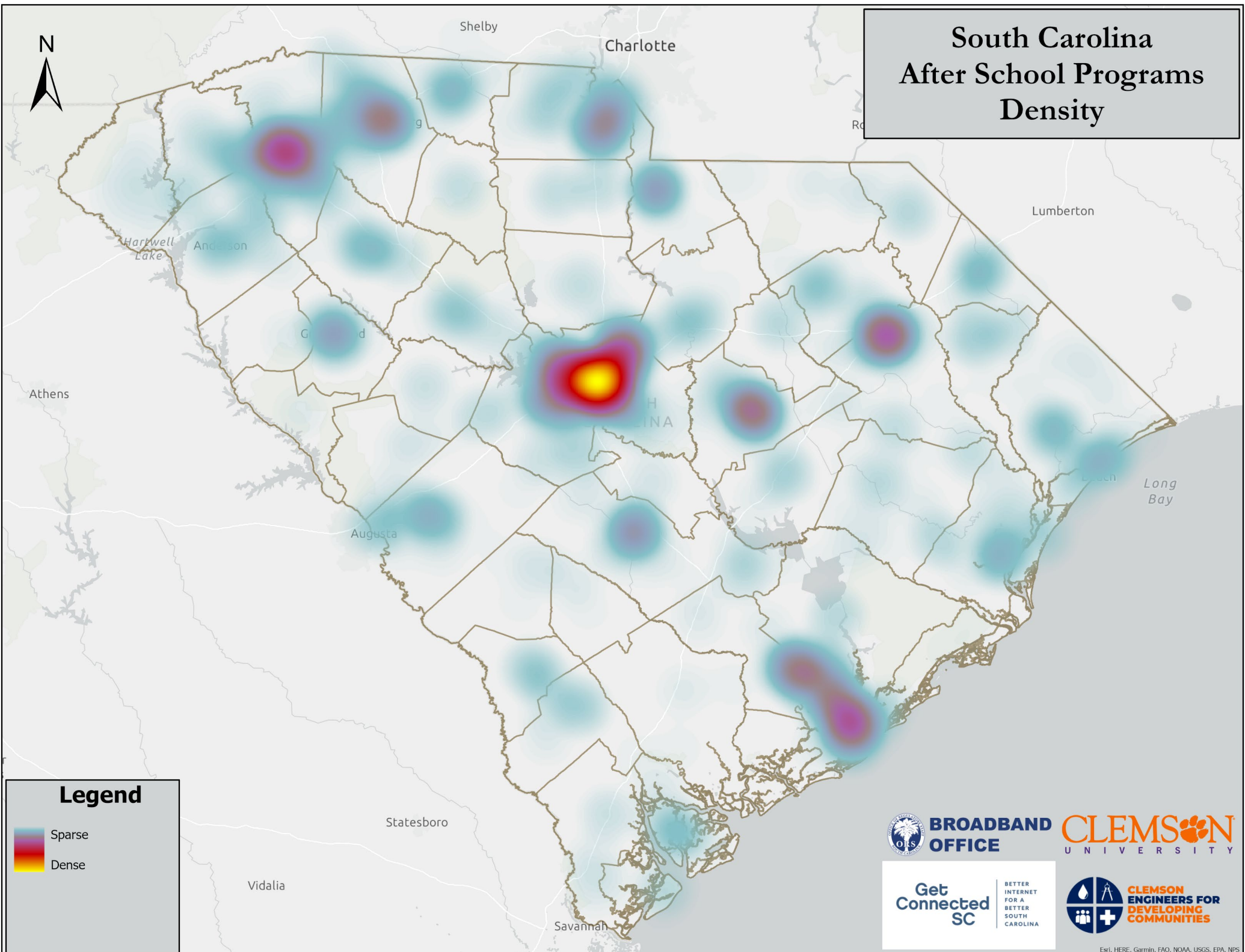
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South Carolina After School Programs Density



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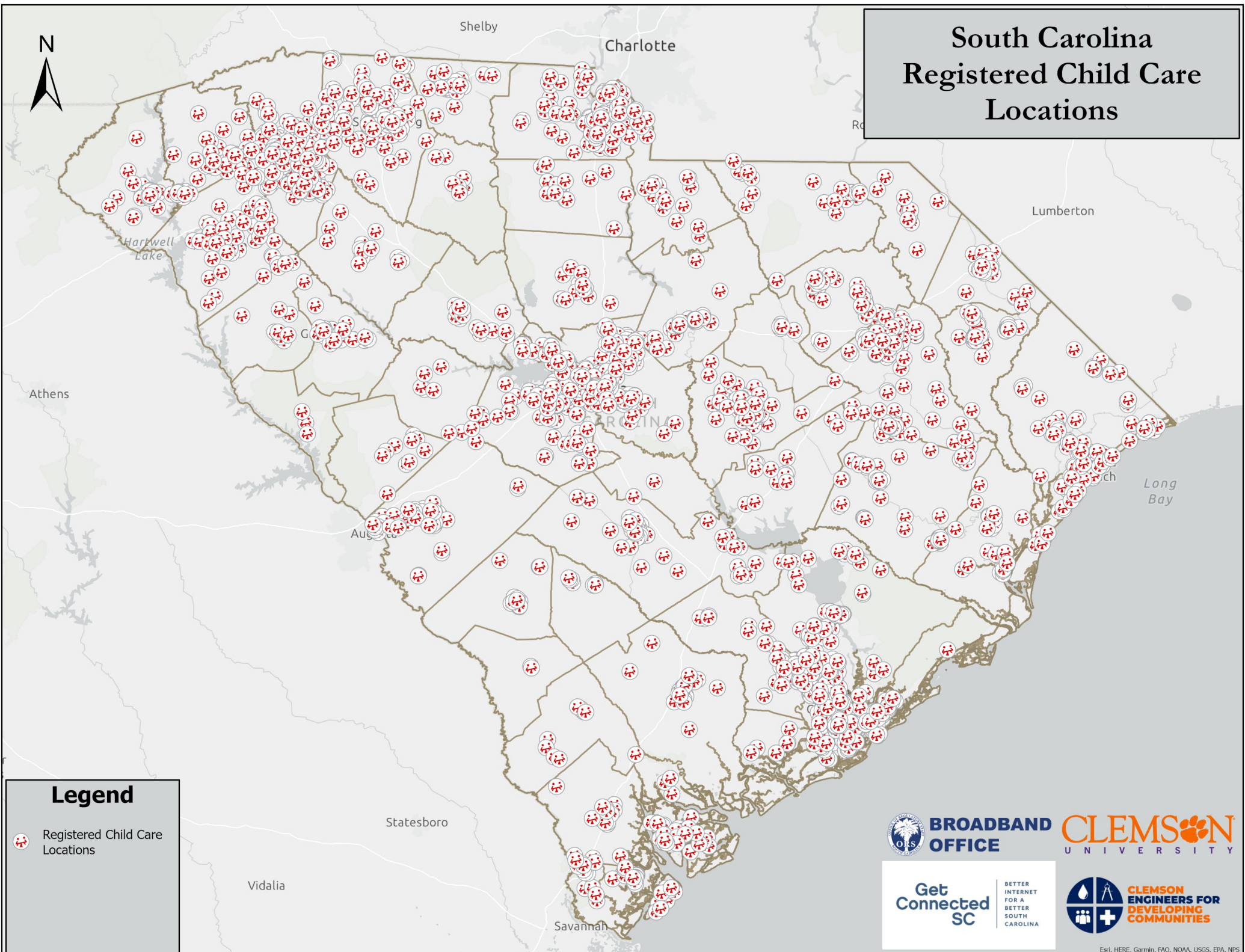
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South Carolina Registered Child Care Locations



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-  Registered Child Care Locations



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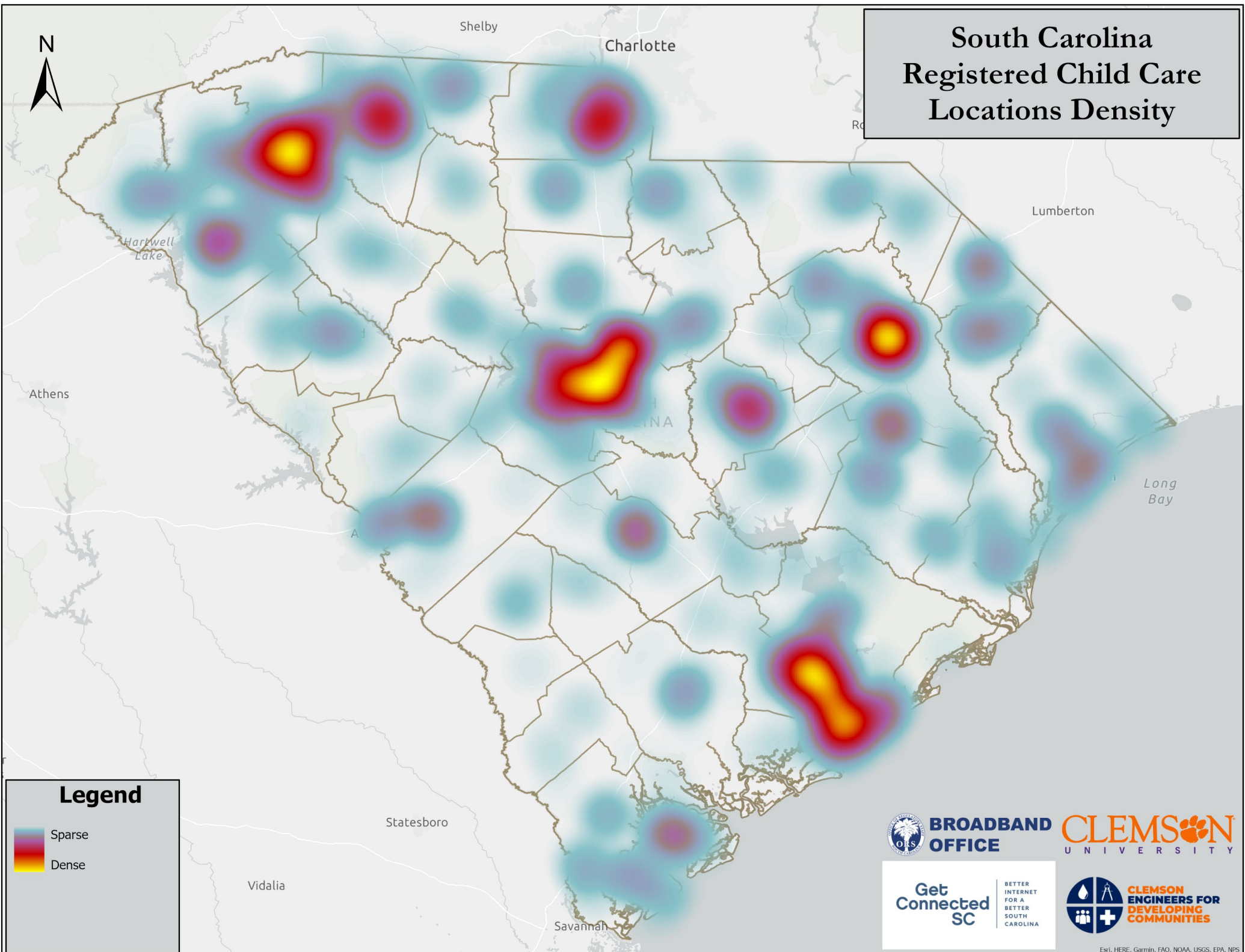
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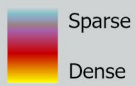


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South Carolina Registered Child Care Locations Density



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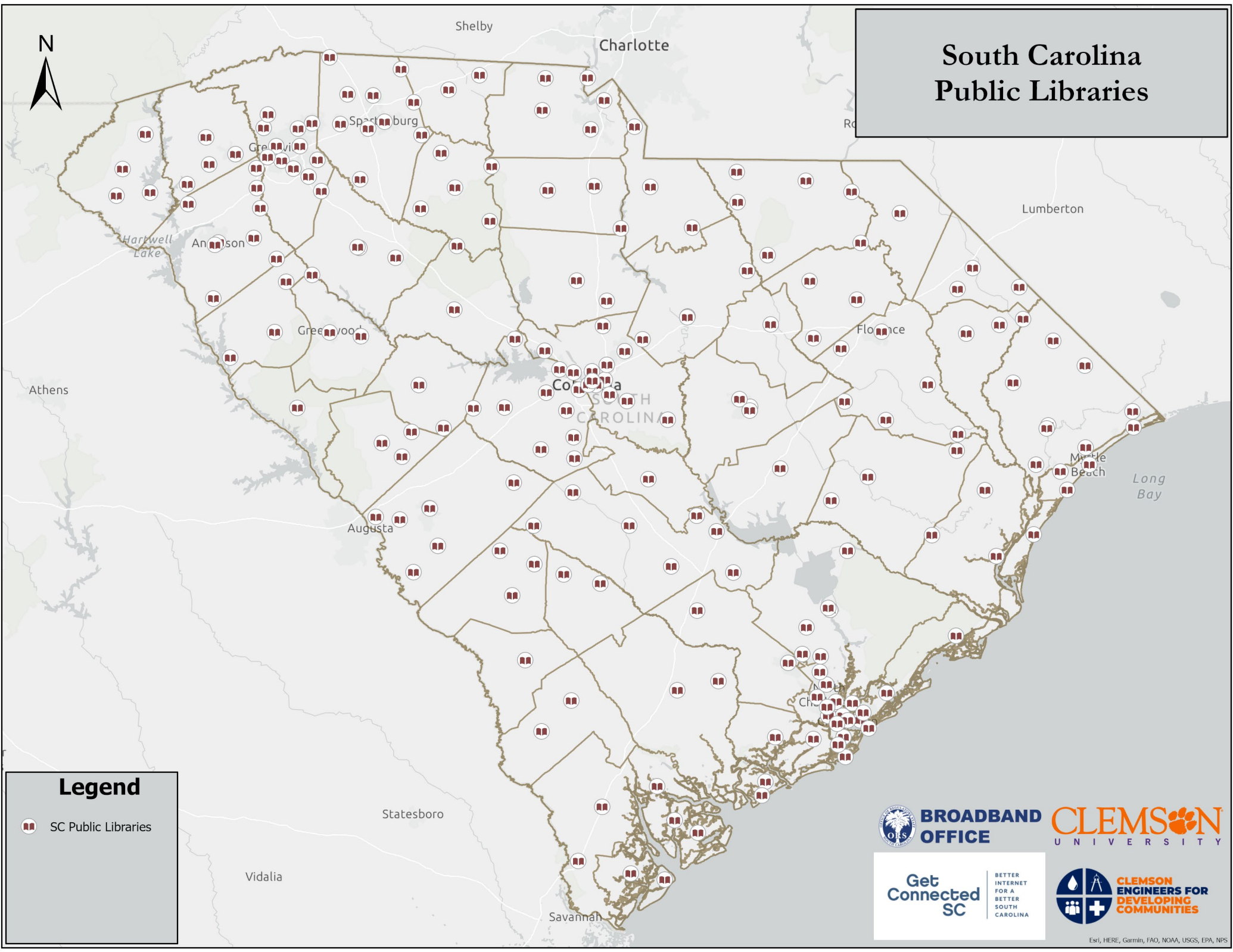


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South Carolina Public Libraries



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 SC Public Libraries



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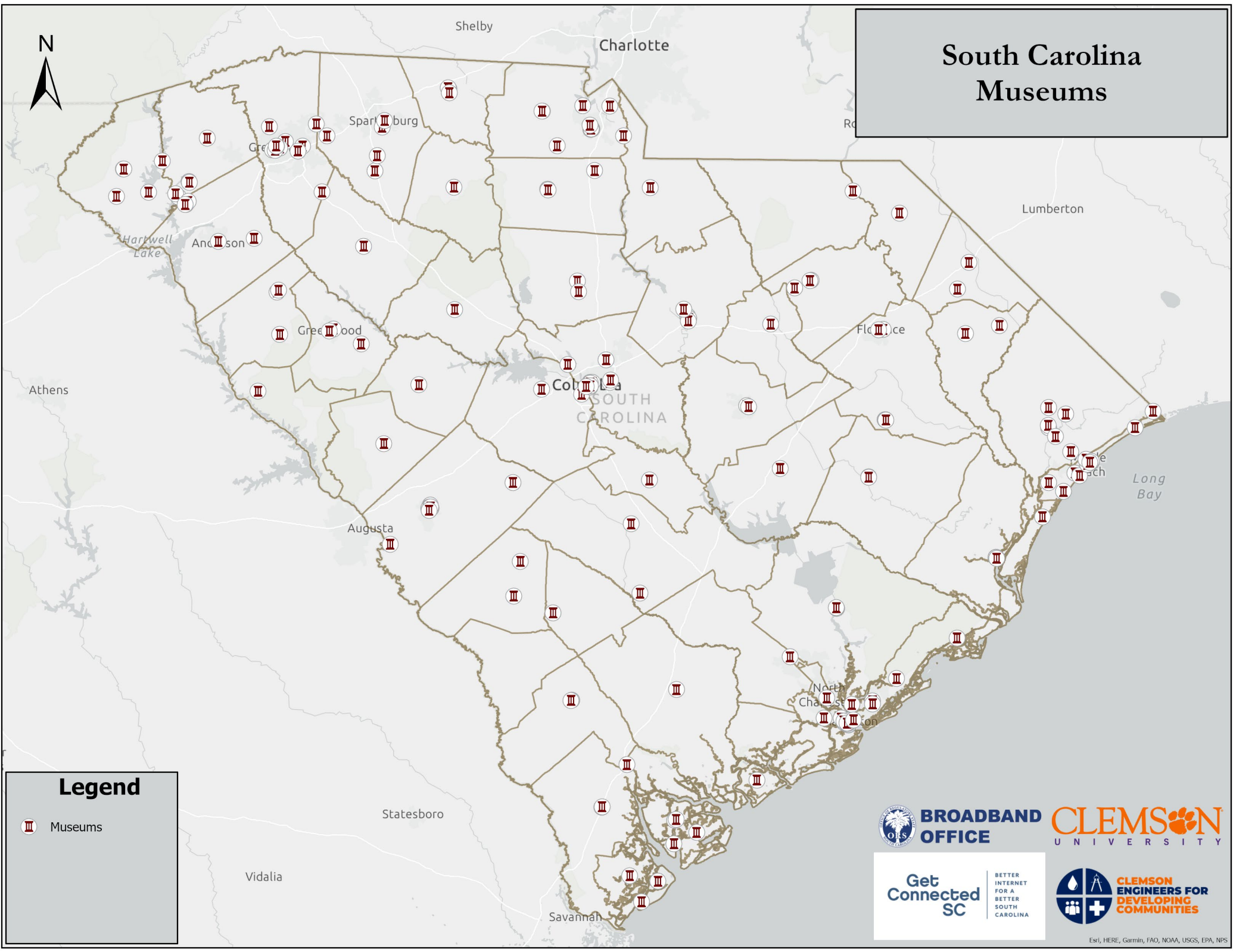
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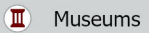


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South Carolina Museums



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Museums



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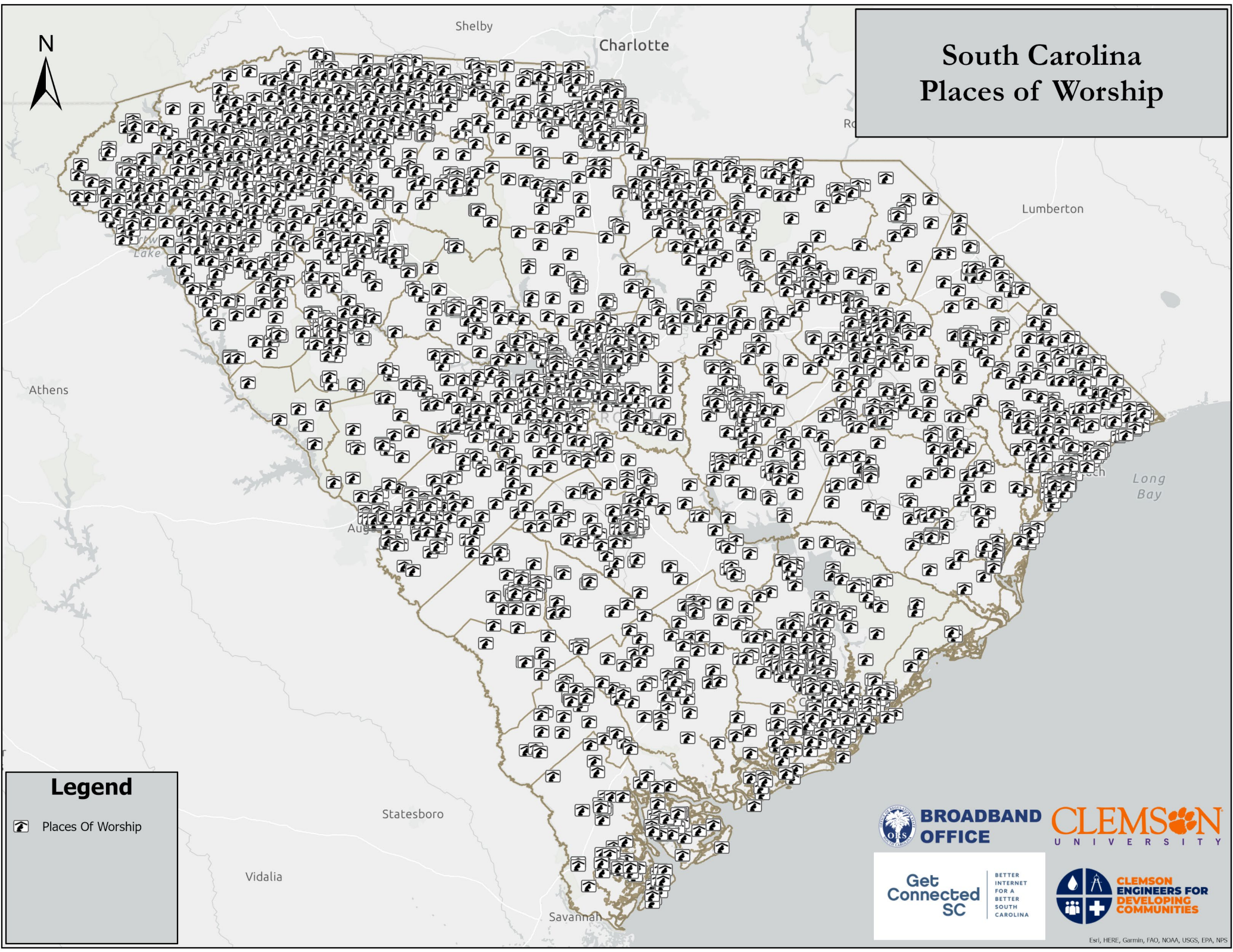


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South Carolina Places of Worship



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 Places Of Worship



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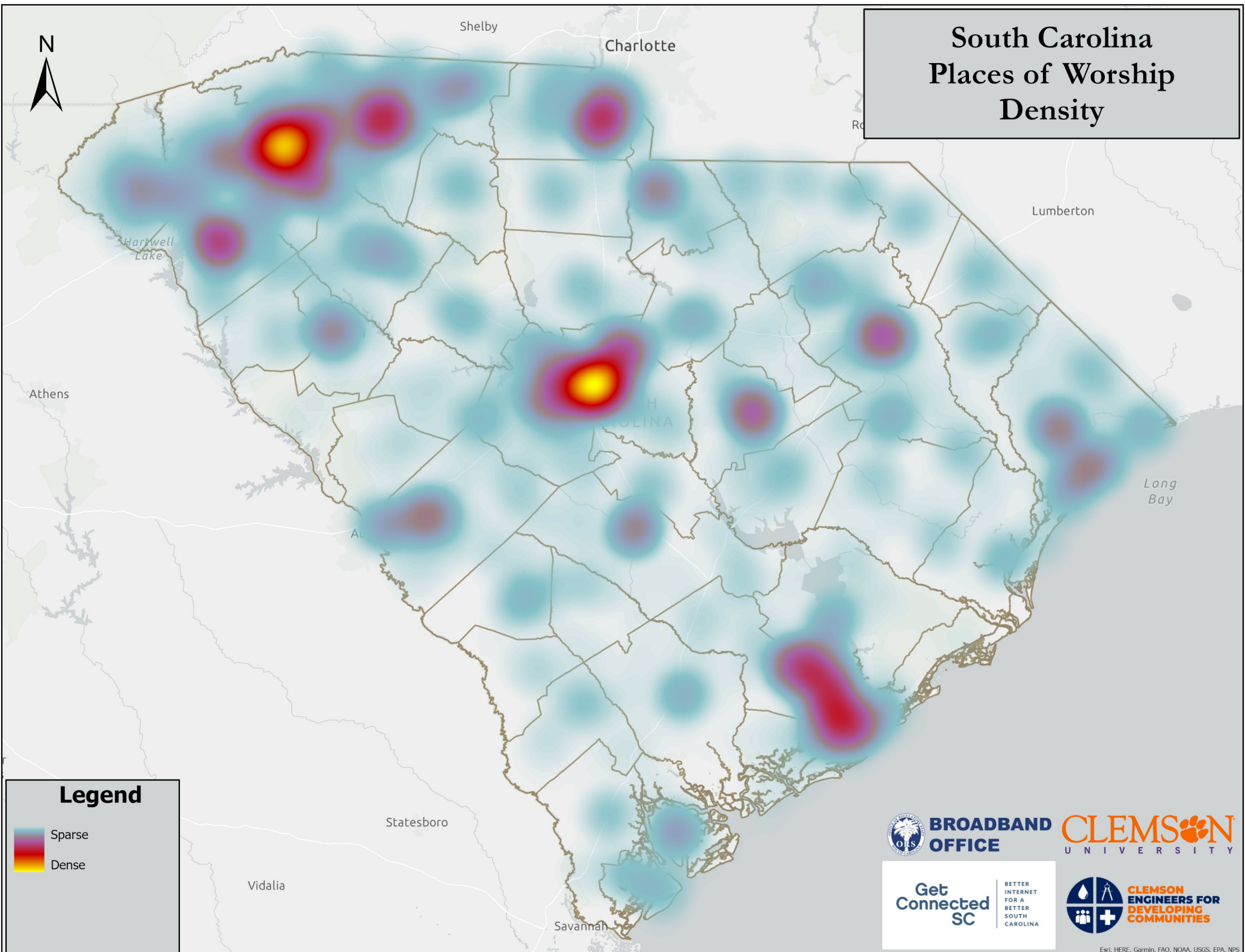
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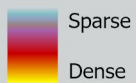


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South Carolina Places of Worship Density



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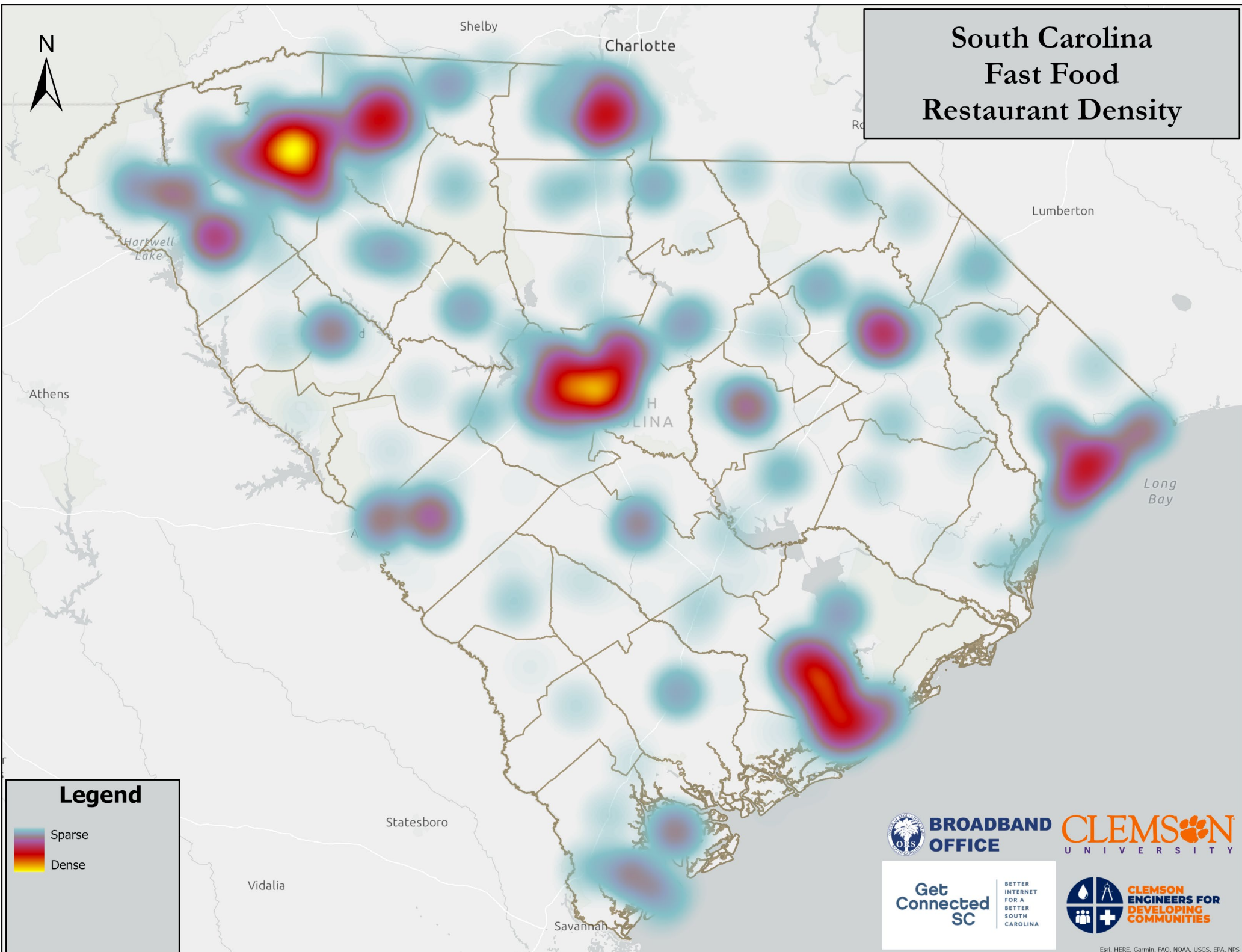
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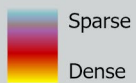
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South Carolina Fast Food Restaurant Density



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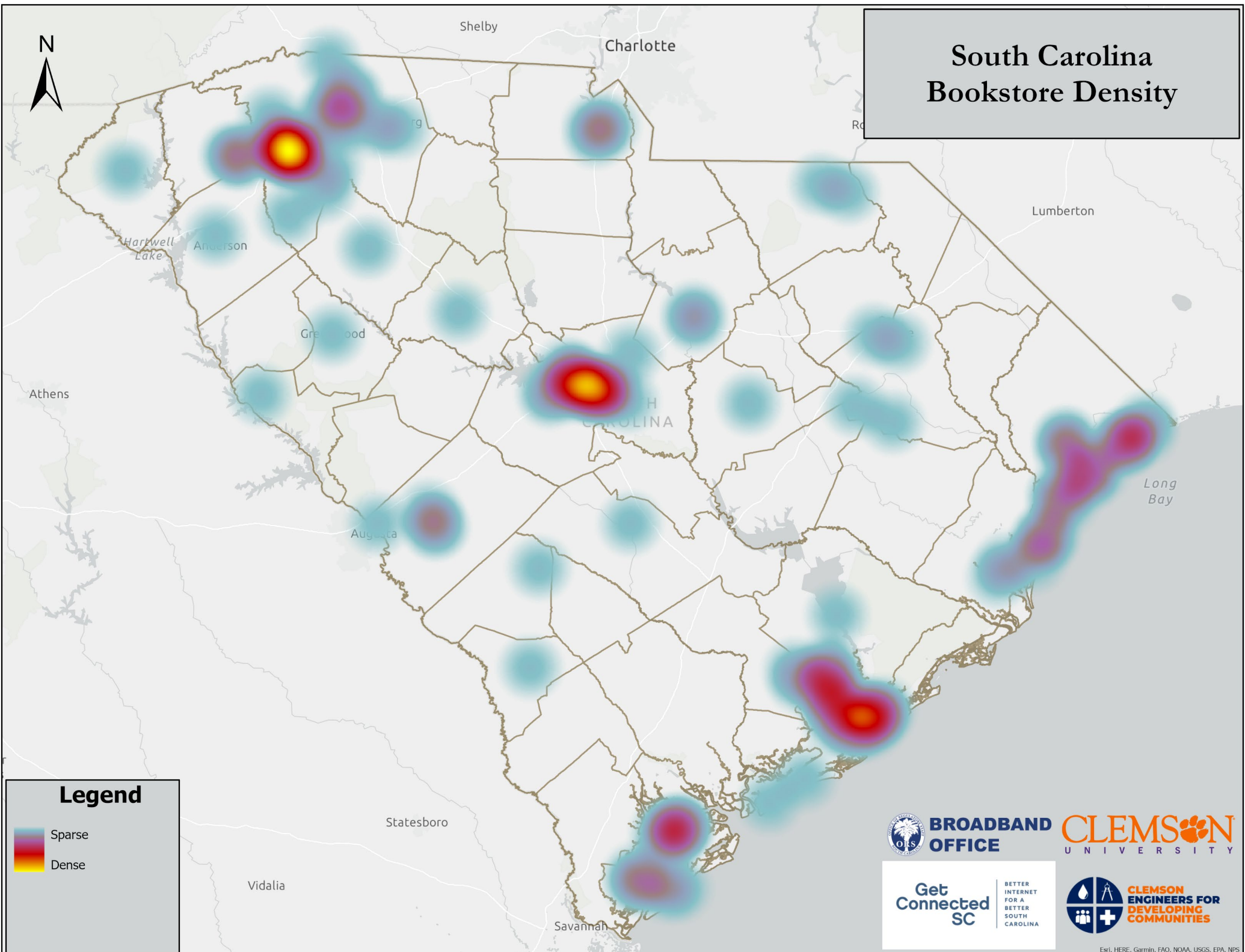
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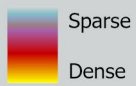
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South Carolina Bookstore Density



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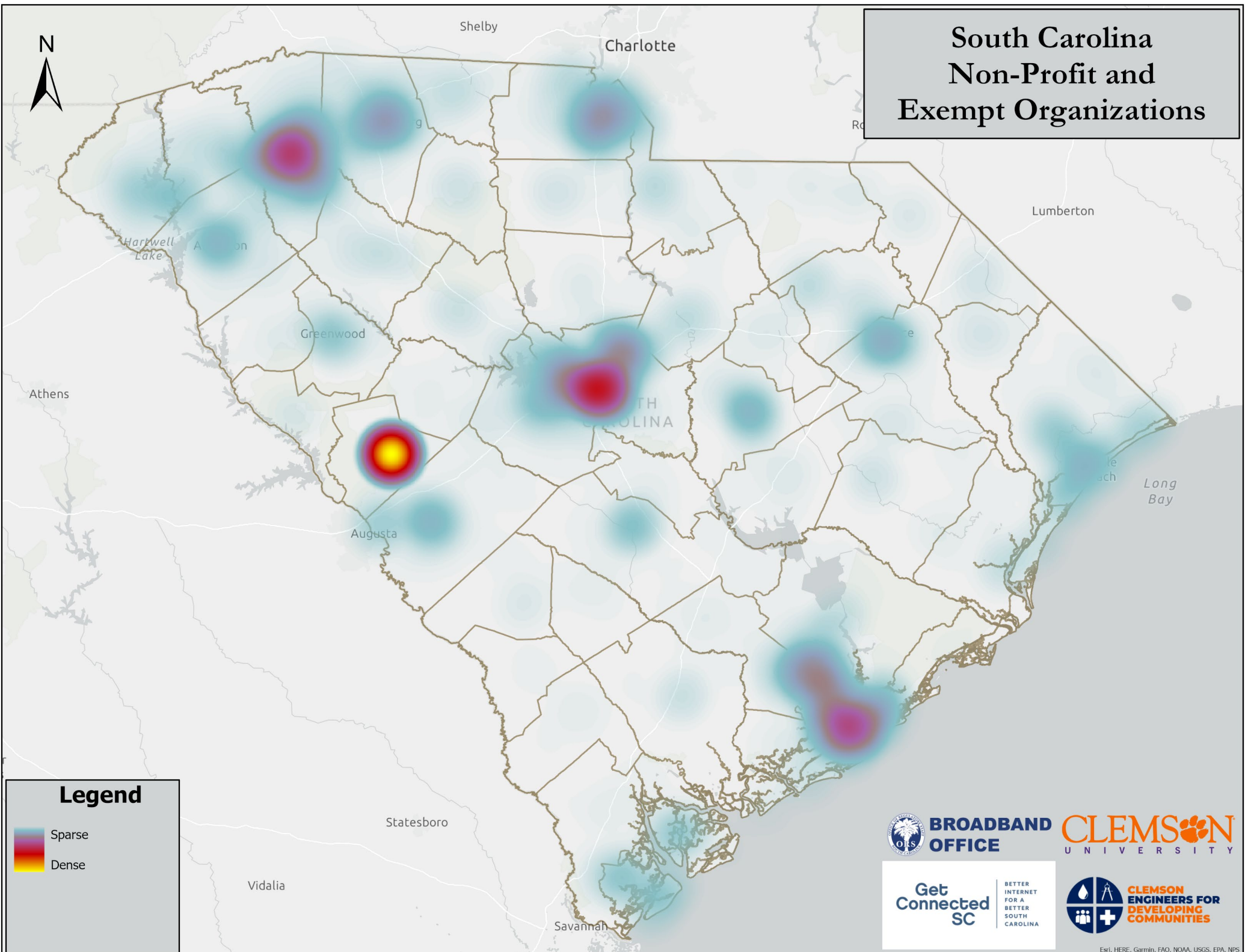
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South Carolina Non-Profit and Exempt Organizations




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