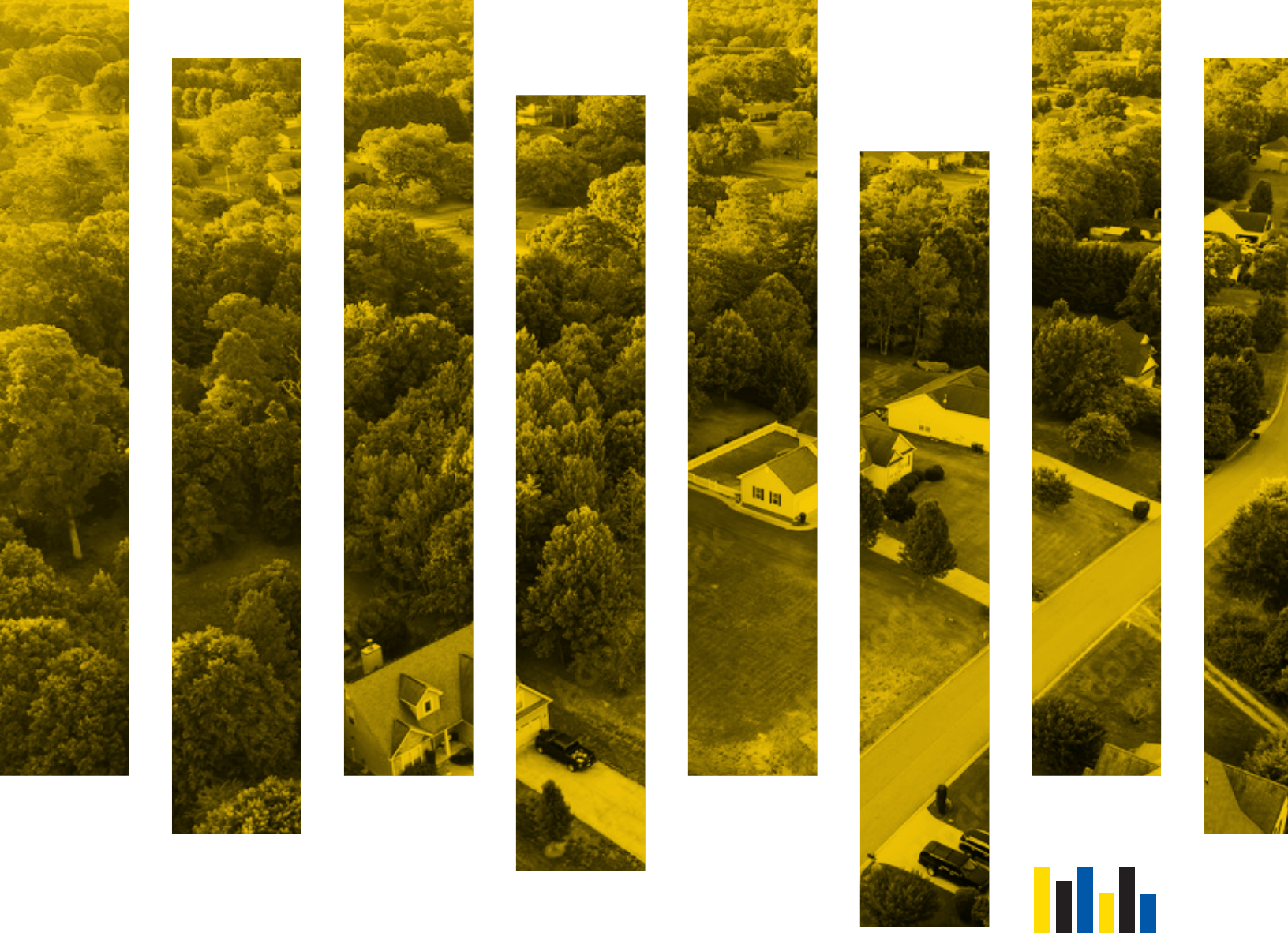


2022

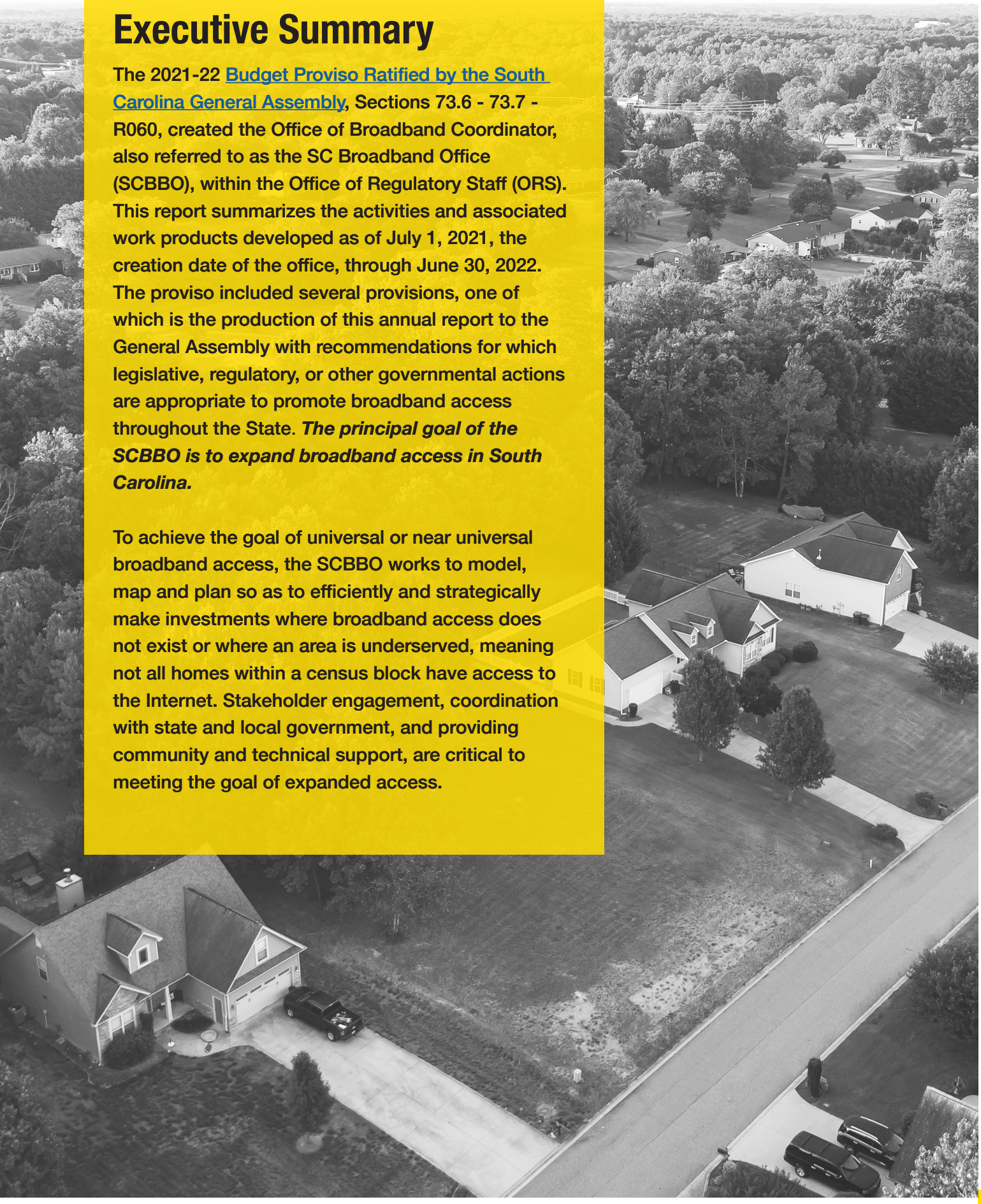
Office of Broadband Coordinator

ANNUAL REPORT

Executive Summary

The 2021-22 Budget Proviso Ratified by the South Carolina General Assembly, Sections 73.6 - 73.7 - R060, created the Office of Broadband Coordinator, also referred to as the SC Broadband Office (SCBBO), within the Office of Regulatory Staff (ORS). This report summarizes the activities and associated work products developed as of July 1, 2021, the creation date of the office, through June 30, 2022. The proviso included several provisions, one of which is the production of this annual report to the General Assembly with recommendations for which legislative, regulatory, or other governmental actions are appropriate to promote broadband access throughout the State. ***The principal goal of the SCBBO is to expand broadband access in South Carolina.***

To achieve the goal of universal or near universal broadband access, the SCBBO works to model, map and plan so as to efficiently and strategically make investments where broadband access does not exist or where an area is underserved, meaning not all homes within a census block have access to the Internet. Stakeholder engagement, coordination with state and local government, and providing community and technical support, are critical to meeting the goal of expanded access.



Expand Access

- Provide $10 million (CARES II) for broadband infrastructure projects that were approved for funding pursuant to Act 142 of 2020 (CARES I) but not constructed by December of 2020
- Issue Notices to Proceed in the $30 Million Rural Broadband Grant Program (RBGP) funded by the SC Department of Commerce
- Create a pilot Last Mile Grant Program
- Partner with the SC Department of Education on a SpaceX Starlink pilot program
- Initiate the High Priority American Rescue Plan Act (ARPA) Grant Program
- Develop draft of the Capital Project Fund Plan

Model, Map and Plan

- Develop a digital platform for disseminating web applications, dashboards, data, maps, and surveys called SCDigitalDrive (www.scdigitaldrive.org)
- Compile county-by-county broadband mapping, as required by Section 10 of Act 142 of 2020, showing the Census Blocks in South Carolina that are served or unserved
- "I Need Internet Survey" so that residential consumers can raise their hand indicating a need for Internet service
- Coordinate with the SC Department of Education to obtain several hundred thousand public K-12 student addresses to identify the number of students in unserved and served areas
- Coordinate with the SC Revenue and Fiscal Affairs Office for data layers
- Coordinate with South Carolina Department of Social Services for SNAP/TANF recipients
- Request and receive two comprehensive sets of Internet Service Provider (ISP) data

Engage Stakeholders

- Convene a collaborative stakeholder process and identify challenges to expediting broadband access
- Create and facilitate a Permit Working Collaborative with legislative support
- Form a Broadband Advisory Council (BBAC)

Provide Community Support and Technical Assistance

- Analyze and update statewide broadband deployment information.
- Serve as a central resource to collect and publish information regarding federal and state programs to fund broadband expansion
- Provide a Broadband Community Champion Training Program
- Provide technical assistance to Voorhees University, a Historically Black College in Denmark, SC, supporting their application for a $3 million grant from the National Telecommunications and Information Administration (NTIA) Connecting Minority Communities program
- Provide webinars and assistance to ISPs so that the accuracy of the SC Broadband maps is increased and the ISP's ability to apply for state and federal funding is improved
- Met with numerous local governments and county administrators and community leaders to assist with increasing broadband access in their areas

Manage Grants Efficiently

- Develop significant grant management capability including documents, internal controls, and procedures
- Leverage ORS legal and finance teams to develop grant documents
- Create process control for each step in the grant process
- Streamline and reduce cost of construction oversight by utilizing geotagged photos and self-service inspections
- Increase full-time SCBBO team to three members by successfully recruiting a Deputy Director and Senior Data Scientist

Expand Access

Programs Administered by SCBBO

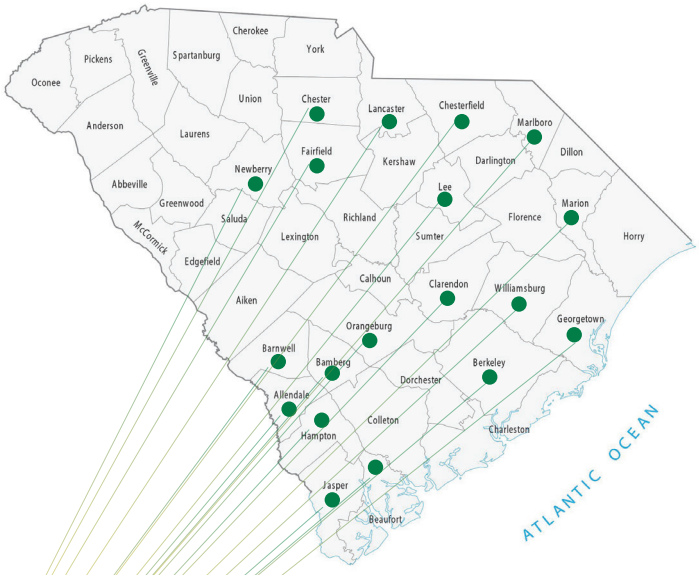
Four different grant programs were administered by the ORS and the SCBBO. **The Coronavirus Aid, Relief, and Economic Security Act (CARES I)** funds were allocated to the ORS prior to the creation of the SCBBO but served as the foundation from which other grant programs were developed. **CARES II** funds reflect an additional $10 million investment to complete projects begun under CARES I.

CARES II projects were to be complete by March 31, 2022. Upon completion, the SCBBO invested $7,873,282 and the 17 projects, from 8 different ISPs, resulted in 6,116 additional locations with access to service.

In March of 2021, the SC Joint Bond Review Committee approved the allocation of $30 million from the SC Department of Commerce (SCDOC) to the ORS to administer the Rural Broadband Grant Program (RBGP). RBGP investments were restricted to 14 Eligible Counties and 15 Contiguous Counties. Of the $30 million, only $7 million could be invested in Contiguous Counties.

By July 2021, the SCBBO issued Notices to Proceed to 18 ISPs in 19 counties for almost $30 million in projects to expand broadband availability in rural areas of need in South Carolina.

Projects were awarded in Allendale, Bamberg, Barnwell, Beaufort, Berkeley, Chester, Chesterfield, Clarendon, Fairfield, Georgetown, Hampton, Jasper, Lancaster, Lee, Marion, Marlboro, Newberry, Orangeburg, and Williamsburg counties.

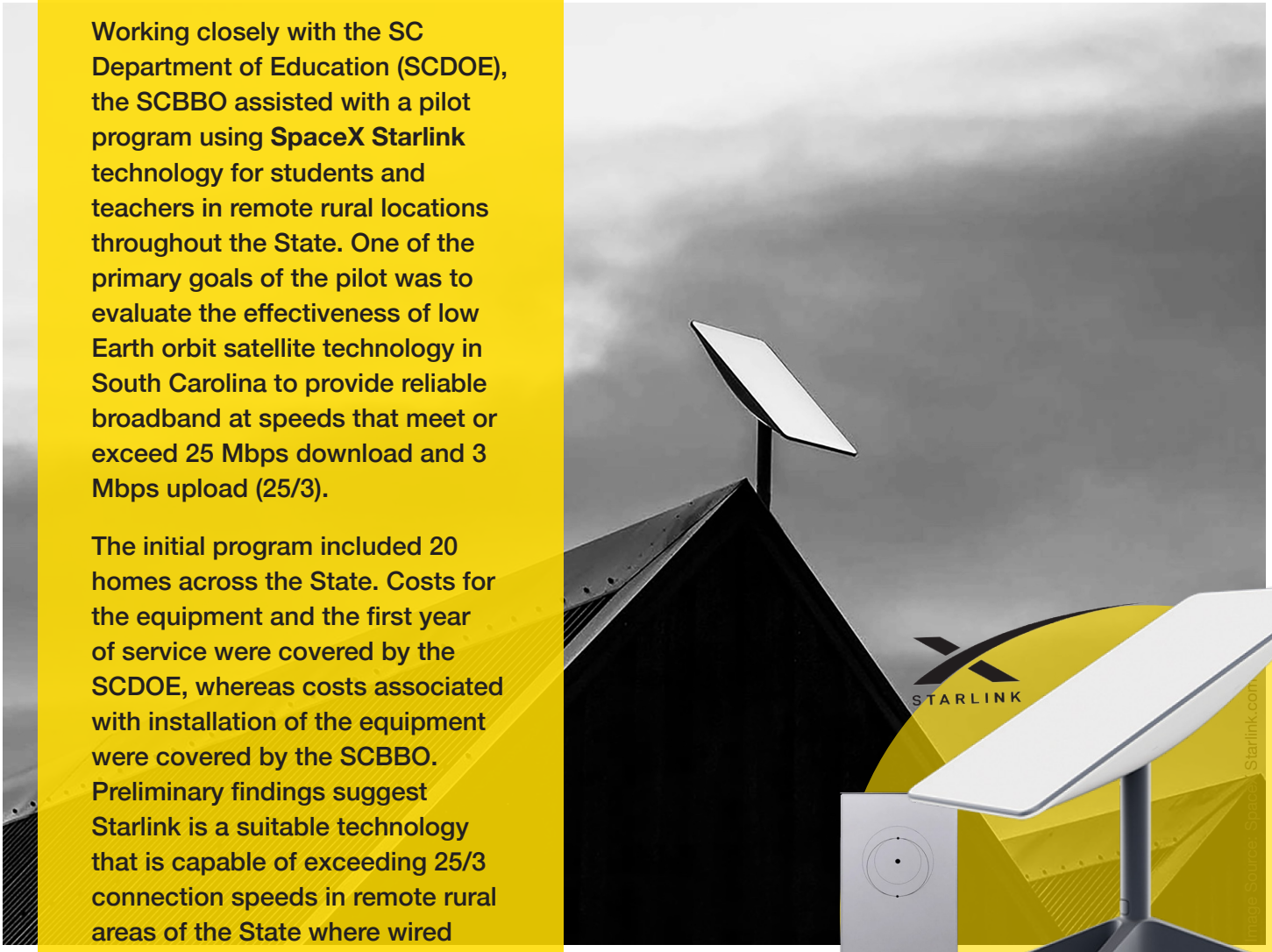


All RBGP projects are scheduled to be completed by October 31, 2022. In the first two quarters of 2022, three Allendale County projects were relinquished; as a result, no payments will be made. Current projections reflect that, upon completion of the remaining projects, approximately $29.4 million of the $30 million will be expended. The SCBBO discussed several options with the SCDOC to reallocate the remaining $344,375 to support other broadband projects.

As of June 30, 2022, with the combined effort of 17 ISPs, based on their data, the projects are 54% complete based on location totals, and we now have broadband construction underway or completed in 18 counties.

Working closely with the SC Department of Education (SCDOE), the SCBBO assisted with a pilot program using **SpaceX Starlink** technology for students and teachers in remote rural locations throughout the State. One of the primary goals of the pilot was to evaluate the effectiveness of low Earth orbit satellite technology in South Carolina to provide reliable broadband at speeds that meet or exceed 25 Mbps download and 3 Mbps upload (25/3).

The initial program included 20 homes across the State. Costs for the equipment and the first year of service were covered by the SCDOE, whereas costs associated with installation of the equipment were covered by the SCBBO. Preliminary findings suggest Starlink is a suitable technology that is capable of exceeding 25/3 connection speeds in remote rural areas of the State where wired connections to reliable broadband do not currently exist and are extremely expensive to construct.



The **Last Mile Grant Program (LMGP)** is a pilot grant program focused on reaching those consumers who are in an area that is generally considered "served" but are still without access due to the cost of delivering service to the home. An example would be a home that has a mile-long driveway or a set of homes that are located on the other side of railroad tracks or on the other side of a bridge such that the cost of reaching the homes has not been within the reach of the nearby broadband provider.

Partially served areas are those US Census Blocks reported to the Federal Communications Commission (FCC) by ISPs that have access to reliable broadband at speeds of 25/3 or higher but lack complete coverage for access to all residents. Approximately $1.3 million have been committed by the LMGP in May 2022; upon completion by December 31, 2022, this commitment will result in at least 569 residential homes receiving service. Results from the "I Need Internet" survey formed the basis of the LMGP program. Since inception of the "I Need Internet" survey, approximately 530 households have been notified they are able to receive service without any additional aid in construction costs to consumers or financial support from the State.

Most recently, Act 244 (2022) was signed by Governor McMaster on May 13, 2022. This legislation allocates $400,000,000 to the SCBBO through the ARPA State and Local Fiscal Recovery Fund (SLFRF $214,234,345) and the Capital Projects Fund (CPF $185,765,655).

The ARPA SLFRF grant application period opened on June 30, 2022, with grant awards to ISPs targeted for the fall of 2022. The US Treasury requires a written plan outlining strategy and overall approach toward leveraging CPF funds. As a result, the SCBBO drafted a plan that was routed to the SC Broadband Advisory Council (BBAC) and other stakeholders prior to submission to the US Treasury for approval.

Although unsuccessful, within forty days of its formation, the SCBBO applied for an NTIA Broadband Infrastructure Program grant in August 2021. The work in developing that grant request was utilized to develop the Capital Projects Fund Plan which was due to the U.S. Treasury by September 24, 2022. The CPF plan was filed on September 22, 2022.

Programs Administered by Federal Agencies

There are also several federal programs that currently fund broadband access and adoption in South Carolina:

- Rural Development Opportunity Fund (RDOF) and the Affordable Connectivity Program (ACP) are administered by the FCC.
- ReConnect Loan and Grant Program (ReConnect) is administered by the U.S. Department of Agriculture. A map of ReConnect Service Areas may be found here.
- NTIA manages multiple broadband grant programs including the Broadband Infrastructure Program, Connecting Minority Communities, Tribal Broadband Connectivity (TBC), and the $48.2 billion Infrastructure Investment and Jobs Act (IIJA).

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 AV systems, as well as the provision of Zoom-enabled laptops to staff engaged in telehealth and e-commerce related activities.

PROGRAMS ADMINISTERED BY FEDERAL AGENCIES:

- Rural Development Opportunity Fund
- Affordable Connectivity Program
- ReConnect Loan and Grant Program
- Broadband Infrastructure Program
- Connecting Minority Communities
- Tribal Broadband Connectivity (TBC)



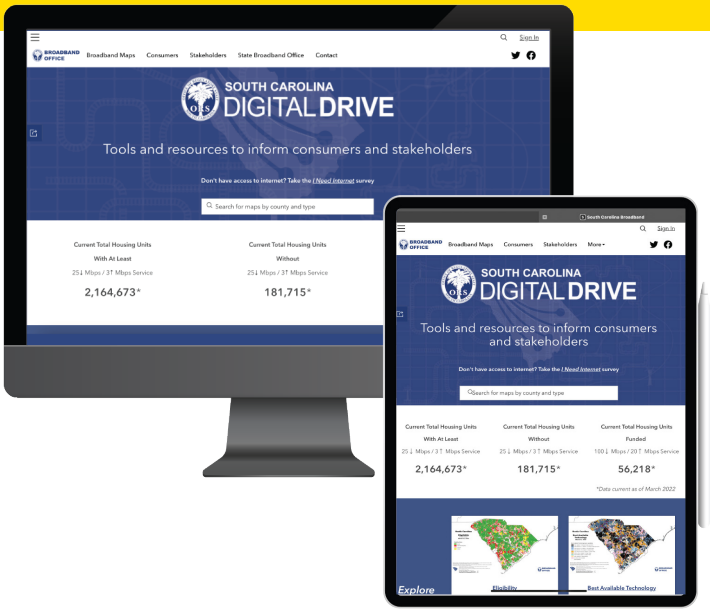
Model, Map, and Plan

Broadband maps are a vital resource to determine eligibility of grant applications to fund deployment projects across the State with much of the data used for analysis coming from SC ISPs themselves. Every ISP in the United States is required to submit FCC Form 477 data twice a year. In addition, the SCBBO requires each ISP to file Form 477 information to participate in grant programs the FCC administers.

Data is proprietary and protected as part of Sections 73.6 - 73.7 and, as such, the SCBBO has obtained 100% compliance with receiving copies of the requested data from all ISPs providing residential service. Simultaneous access to this data means South Carolina eliminated a lag of approximately one year.

Other datasets are also leveraged to further refine the map results. These datasets include:

- **SCDOE Public/Charter School Student Housing Data**
- **SC Department of Social Services Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) Data**
- **US Housing and Urban Development (HUD) Difficult Development Areas (DDA) Data**
- **Ookla® Speedtest Intelligence® Data**
- **Results from the "I Need Internet" Survey**



In addition to a relaunch of the SC Broadband homepage on the ORS website, the SCBBO developed a series of tools and resources to aid consumers, stakeholders, and ISPs related to broadband and uses the website SCDigitalDrive (https://www.scdigitaldrive.org).

The complete set of county and statewide maps are available for download from SCDigitalDrive. The site serves as a launching point for GIS-based web mapping applications and dashboards leveraging the same datasets used to produce statewide broadband maps. Broadband data is available for download by ISPs and other interested stakeholders such as county planning professionals and academic researchers.

The analyses performed by the SCBBO focus heavily on the type of technology that is being deployed by ISPs. In fact, the SCBBO was one of the first in the nation to declare Digital Subscriber Line (DSL) technology at the end of its useful lifespan and is no longer capable of reliably delivering 25/3 Mbps.[1]

The decision to code areas historically ranked as served (green) to unserved (red) has given rise to greater opportunity for ISPs to obtain grant dollars to fund broadband construction for reliable access to high-speed Internet for homes and businesses across the State.

1 An opinion paper regarding DSL is located at this link: https://ors.sc.gov/sites/ors/files/Documents/Broadband/DSL%20A%20Discussion%20Paper.pdf

The SCBBO conducts statewide broadband analyses twice yearly. See the Appendix for detailed statewide maps which include the following:

- Areas of Need
- Planning
- Best Available Technology
- Statewide Eligibility
- Statewide Investments

The SCBBO stays informed on industry developments by participating in conferences and leveraging information gathered through the distribution of materials by the Office of Internet Connectivity and Growth (OICG) within the NTIA and the State Broadband Leaders Network (SBLN). Members of the SCBBO attended the March 2022 SBLN Conference (Washington, DC) to gain greater insight on newly established federal programs and glean lessons learned from other broadband offices throughout the nation regarding best practices focused on administration of broadband deployment projects.

Looking forward, the SCBBO is fully engaged in the FCC's new Broadband Data Collection program and will prepare challenge information in the event that the federal map undercounts the number of unserved street address locations within South Carolina. Importantly, the FCC's Broadband Serviceable Location Fabric will be used by the NTIA to determine the formula amount available under the IIJA Broadband, Equity, Access, and Deployment (BEAD) program for South Carolina. While BEAD sets a minimum of $100 million for infrastructure, the amount allocated may be higher.

Engage Stakeholders

The SCBBO established a cross section of industry leaders to comprise the BBAC. The Director of the SCBBO serves as Co-Chair along with the Director of Operations for the South Carolina Association of Counties. The 21-member advisory council meets quarterly, and meetings are open to the public for in-person attendance or via registration portal on the ORS website. The members of the SC BBAC are listed in the Appendix.

Several state and federal agencies have contributed to ensure a streamlined review process for project permitting. For instance, the SC Department of Health and Environmental Control, United States Army Corps of Engineers (USACE), and SC Department of Transportation (SCDOT) gave multiple informational presentations to ISPs. Additionally, the SCDOT developed utility right-of-way guidance and permitting workflows for seamless integration of broadband infrastructure along state-owned roadway easements. See Appendix for guidance documentation published by SCDOT on Fiber Optic Broadband Permitting in SCDOT rights-of-way.

CSX, Norfolk Southern, and Palmetto Railways, a division of SCDOC, worked with ISPs to communicate their permitting processes.

The SCBBO presented at numerous county council meetings as well as several annual conferences throughout the State on the issuance of new statewide broadband maps, tools, and resources. Annual events included but are not limited to:

- **South Carolina Association of Counties (SCAC)**
- **Municipal Association of South Carolina (MASC)**
- **South Carolina Telecommunications and Broadband Association (SCTBA)**
- **Multiple Councils of Governments (COG)**
- **South Carolina Economic Developers Association (SCEDA)**



The SCBBO designed a Broadband Community Champion Training program that delivers instructor-led content through a series of three, two-hour 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, county administrator, sheriff, elected official) from novice to knowledgeable advocate for successful broadband deployment in their local area.

The SCBBO collaborates with nonprofits to perform classroom administration. The benefits of the personal relationships are tangible and serve to streamline deployment in rural areas. To date, over 150 community leaders in 14 different counties have completed training and become Broadband Community Champions.

Provide Community Support and Technical Assistance

The SCBBO developed a survey for unserved consumers called “I Need Internet” to help build a bridge between the ISPs (the suppliers of residential broadband service) and those citizens who want to subscribe to high-speed Internet (consumer demand). In FY2022, the SCBBO received well over 6,500 survey responses, which allowed greater insight on the distribution of need for reliable high-speed Internet across the State. Since inception of the “I Need Internet” survey, approximately 530 households have been notified they are able to received service without any additional aid in construction costs to consumers or financial support from the State.



Recommendations

Currently, under budget Proviso 73.7, ISPs are only required to file annual broadband deployment data with the SCBBO. However, the FCC currently requires facilities-based providers of fixed and mobile broadband Internet access — who have one or more end user connections in service on June 30, 2022 — to file both FCC Form 477 (Deployment/ Subscription) and Broadband Data Collection (BDC) information on a bi-annual basis.

Going forward, the FCC's BDC will occur twice a year on the same schedule as Form 477 filings. Generally, data as of June 30th will be due approximately September 1st, and data as of December 31st will be due approximately March 1st. In addition, the FCC will establish a nationwide broadband map that is location specific. It is called the Broadband Service Location Fabric (BSLF).

The ORS recommends that Proviso 73.7 be amended to align with the current FCC requirements to streamline reporting and minimize the burden to all parties. The ISPs would simply provide a copy of their FCC filings — in the exact same format — to the SCBBO on the same day as it is due to the FCC.



1 Attachments

- Members of the Broadband Advisory Committee
- Broadband Resources Brief
- SCDOT Guidance on Fiber Optic Broadband Permitting in State Owned Rights-of-Way
- I Need Internet Flyer
- Statewide Broadband Access Statistics

2 Maps

- Statewide Planning Map
- Statewide Eligibility Map
- Statewide Area of Need Map
- Statewide Best Available Technology Map

3 Tables

- ORS Broadband Investments by ISP, County and Grant Program
- Total Broadband Investments by ISP, County, and Grant Program (ISP Match Included)

4 Graphs

- Total Broadband Investments

APPENDIX



South Carolina Broadband Advisory Council

Anna Berger *(Co-Chair)*
Senior Director of Operations
SC Association of Counties

Jim Stritzinger *(Co-Chair)*
Director, SC Broadband Office
SC Office of Regulatory Staff

Leesa Aiken
Director
SC State Library System

Melanie Barton
Senior Education Advisor
Office of the Governor

Eric Budds
Deputy Executive Director
Municipal Association of SC

Elizabeth Carpentier
Deputy Superintendent
SC Dept of Education

Mike Coker
Senior Manager,
Broadband and Telecom Services
Santee Cooper

Mike Couick
President & CEO
The Electric Cooperatives of SC

Lorie Dickes, PhD
MPA Program, Associate Chair
Clemson University

Stephanie Frazier
Interim Asst. General Manager
SC Educational TV

W. Keller Kissam
President
Dominion Energy South Carolina

Bernie Mazyck
President & CEO
SC Association of Community
Economic Development

Madeleine McGee
President & CEO
TogetherSC

Peggy McLean
Director, Integrated Rural Strategies
SC Dept of Commerce

Gwynth R. Nelson, PhD
AVP, Institutional Advancement
SC State University

Kathy Schwarting
CEO
Palmetto Care Connections

Susie Shannon
President & CEO
SC Council on Competitiveness

Ray Sharpe
Executive Director
SC Cable Television Association

Robert G. Woods, IV
Director, SC Dept of Public Safety
SC Council on Competitiveness

Brad Wright
SC Telephone Coalition

Victor C. Young
Director, All4SC
University of South Carolina

SC Broadband Office
Office of Regulatory Staff
1401 Main Street
Suite 900
Columbia, SC 29201

BROADBAND OFFICE

Broadband Resources

Assistance Programs

Lifeline

The ORS provides administrative oversight for the Federal Lifeline Program. This program provides a discount on home or cell phone service for qualifying low-income consumers to ensure that all Americans have the opportunities and security that phone service brings, including being able to connect to jobs, family, and emergency services.

For more information and eligibility requirements, visit: ORS.SC.GOV/consumers/telecommunications/lifeline

Affordable Connectivity Program

Congress created the Affordable Connectivity Program, a new long-term program to replace the Emergency Broadband Benefit Program. The purpose of this program is to help ensure that we citizens can afford the connections needed for work, school, health care and more. The maximum monthly benefit will change from $50 per month to $30 per month for households not located on qualifying Tribal lands. The monthly benefit will remain at $75 per month for households on qualifying Tribal lands.

AFFORDABLE CONNECTIVITY PROGRAM

For more information and eligibility requirements, visit: www.fcc.gov/acp

County Resources

Counties that are interested in receiving grant funding for broadband projects in their area should work with surrounding Internet Service Providers (ISPs) to develop a partnership. Within the partnership the ISP will need to apply for grant funding through the ORS. The ORS will **NOT** provide funding to individual counties. Funding **MUST** be awarded through the grant process to qualifying ISPs.

For county resources, visit: www.sccounties.org

Surveys, Access Forms, and Sites

SC Digital Drive

Source for data and resources around broadband in South Carolina

Forms and surveys can be found on the SC Digital Drive website.

SCDigitalDrive.org

I Need Internet Survey

Survey to reflect need for broadband access at the consumer level

https://survey123.arcgis.com/share/a79de0eacc1f48098d03f1a33a707670?portalUrl=https://SCORS.maps.arcgis.com

Yes to Connect Survey

Survey to inform perspectives on broadband adoption and use

https://survey123.arcgis.com/share/263530aa0de74ea98e32d6058d5b430c

Challenges and Barriers Survey

Survey for stakeholders to share challenges and provide suggested solutions

https://survey123.arcgis.com/share/595be82ad0fa46659155d3dfb249a653

Upload a Project Form

Form for counties and municipal governments to upload broadband projects to minimize risk of overbuilding in an area already funded for construction

https://arcg.is/GfqK8

Data Access Request Form

Form for stakeholders and ISPs to request access to Broadband Office GIS data and results from the I Need Internet Survey

https://survey123.arcgis.com/share/68bc66c8d7dd4913b58489dc27d2a729

About the Broadband Office

The Broadband Office, housed within the South Carolina Office of Regulatory Staff (ORS), serves as the central broadband planning body for South Carolina and coordinates with federal, state, regional, local, and private entities, to the extent practicable, to encourage the continued development of access to broadband.

ORS.SC.GOV/Broadband

(803) 737-0800

South Carolina Office of Broadband Coordinator

MARCH 2022

SCDOT Guidance on Fiber Optic Broadband Permitting in State-Owned Rights-of-Way

version 1.0

Multi-County, Same-District, Fiber Optic Broadband Encroachment Application Help Guide

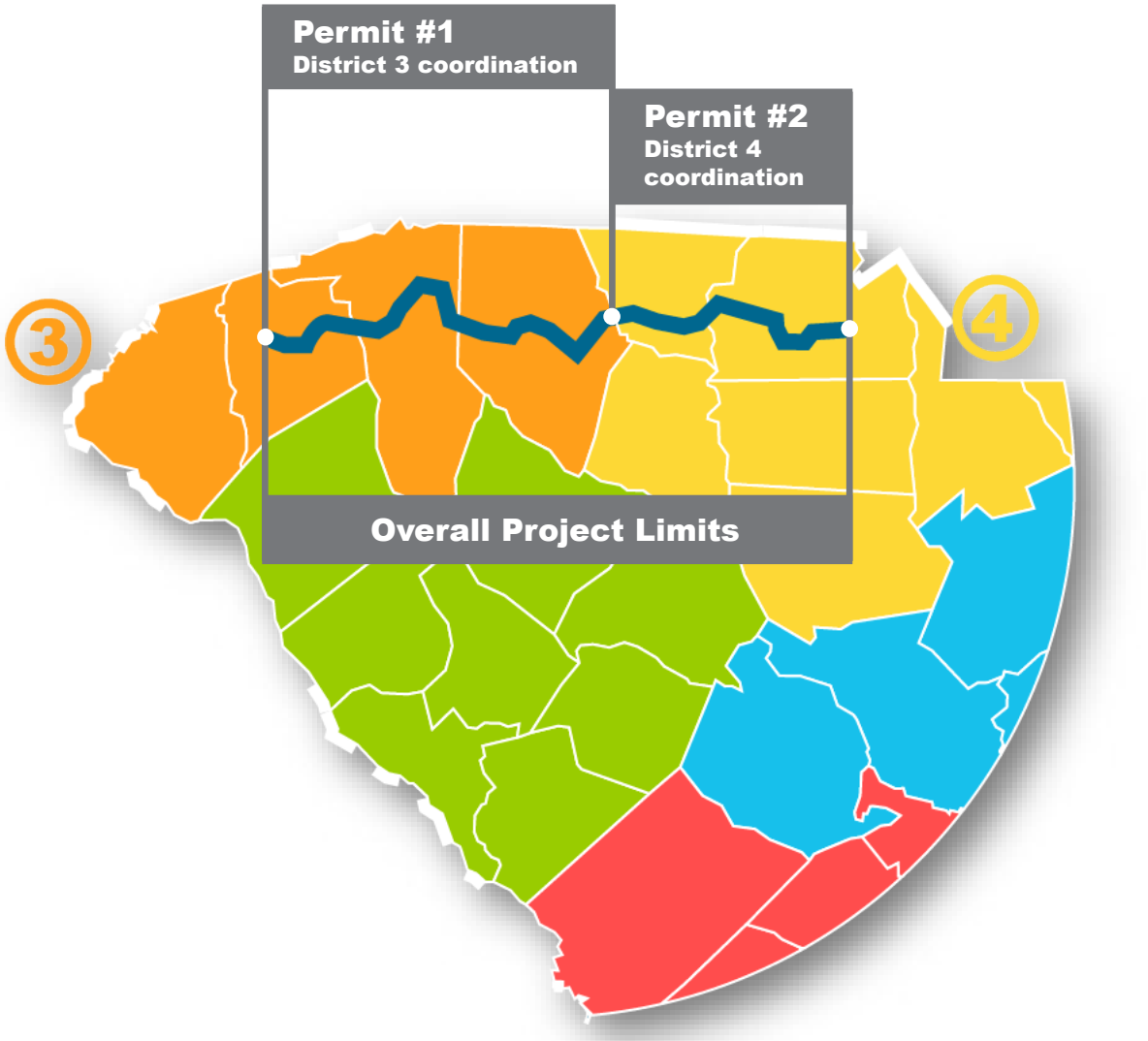
South Carolina Department of Transportation

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What is the Multi-County, Same-District, Fiber Optic Broadband Encroachment Permit?

The Multi-County, Same-District, Fiber Optic Broadband (FOB) encroachment permit is available as an option for applicants wishing to construct longer segments of fiber optic broadband cable that spans multiple Counties within the same District along SCDOT's Right-Of-Way, without the need for multiple permits.

The FOB permit is restricted to one District, regardless of the total project distance. If the project limits continue into neighboring Districts, the applicant will be responsible for obtaining FOB permits for each District. For the purposes of permitting, the project limits for each permit should end and begin at the District line along the route.



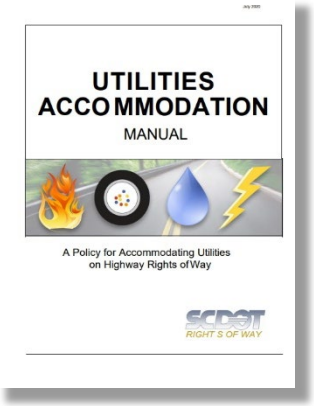
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When should I choose the FOB permit over SCDOT's standard Utility Permits?

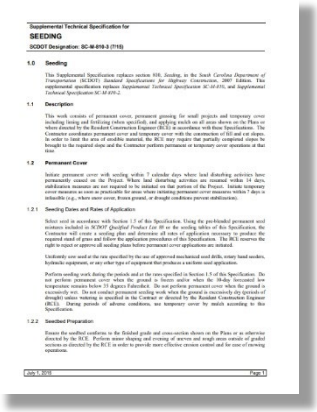
The FOB permit is intended only for the purposes of running *Fiber Optic Broadband* cable; and only for distances that span *multiple Counties* within the *same District*.

Standard cable television, telephone, and other types of communications, should continue to use SCDOT's "Communications (Cable TV, Telephone, & Other)" utility encroachment permit. *The FOB permit is not intended for standard communications utilities wishing to install multiple utility poles or installation locations in multiple Counties.* These utility types should continue to obtain permits for each individual location.

What information should I reference when preparing my application?



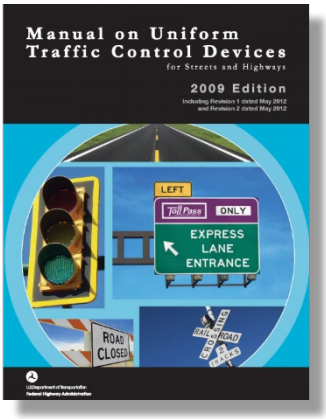
Utility Accommodations Manual, Chapters 6 & 13



Supplemental Technical Specification for Seeding, SC-M-810-3



Access and Roadside Management Standards



Manual on Uniform Traffic Control Devices

(Continued on next page)

Pole Attachments.

If the Fiber Optic lines are being attached to an existing overhead power pole, please provide documentation that a pole attachment is allowed via:

- Pole attachment agreement or a letter/ email from the owner of the poles, or
- Proof that the applicant is the owner of the power pole and permission is not needed.

This should be done for each pole attachment along your planned work route.

Additional notes.

1. Bridge Attachments will need to be coordinated with the District Bridge Office; and will need to be attached via new conduit or pulled through existing conduit.
2. Communicate all work progress, before and after start, with each county permit manager/RME.
3. Per the provisions of the Encroachment Permit, provide monthly progress reports to the District Permit office.
4. Once the work has been completed, provide red-lined, as-built drawings to the DPE.
5. All drainage structures must be indicated on the plan and profile sheets. Dimension all minimum horizontal and vertical separation requirements.
6. Cables/conduits shall not be placed above any drainage structure.

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DISTRICT 3

252 South Pleasantburg Drive
Greenville, SC 29607
(864)241-1010

Ben Olson OlsonBG@scdot.org
Jason Cisson CissonJS@scdot.org

DISTRICT 4

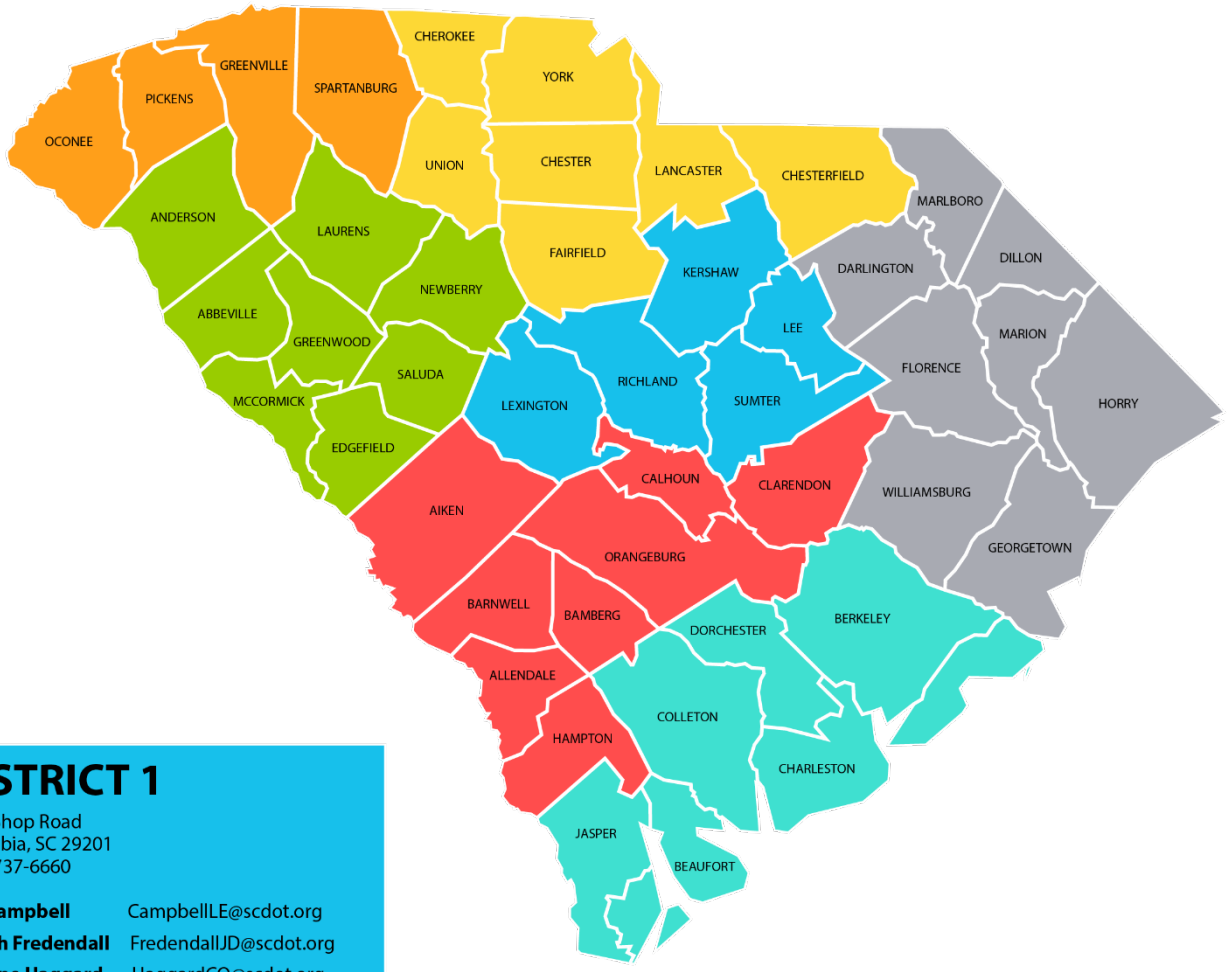
1232 J.A. Cochran Bypass
Chester, SC 29706
(803) 377-4155

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Allison Love LoveAC@scdot.org

DISTRICT 5

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Florence, SC 29501
(843) 661-4710

Raleigh Ward WardRO@scdot.org



DISTRICT 1

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Joseph Fredendall FredendallJD@scdot.org
Caroline Haggard HaggardCO@scdot.org

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Ryan Balentine BalentinDR@scdot.org

DISTRICT 7

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David Brandyburg BrandybuDA@scdot.org

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North Charleston, SC 29406
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JuLeigh Fleming FlemingJB@scdot.org
Wade Grooms GroomsRW@scdot.org

4 **District Permit Engineer Map**

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Underground Encroachments

- ☐ Right-Of-Way and Controlled Access areas.
- ☐ Size of each Bore Pit.
- ☐ All applicable MUTCD plan sheets for traffic control and closures. Only MUTCD and SCDOT standards may be used for traffic control.
- ☐ Cable size, type of cable, and encasement type.
- ☐ Refer to Chapter 6 of the Utility Accommodations Manual and ensure the depth for the chosen cable type is acceptable.
- ☐ Underground method of installation.
- ☐ Distances between any bridge piles and footings.
- ☐ Properly color coded telecom and fiber technology lines.
- ☐ Distance from the Fiber Optic line to the edge of existing pavement.
- ☐ Overlash details, where applicable.
- ☐ Replacement plan for any vegetation removed (refer to SCDOT Supplemental Technical Specification for Seeding, SC-M-810-3).

(Continued on next page)

Overhead Encroachments

- ☐ Cross-sectional view of the aerial line showing the 18-foot minimum height over the roadway section has been met.
- ☐ Right-Of-Way and Controlled Access areas.
- ☐ Explanation of the method by which the line will be strung (rolling road block, time of day, equipment to be used, etc).
- ☐ All applicable MUTCD plan sheets for traffic control and closures. Only MUTCD and SCDOT standards may be used for traffic control.

I Need Internet Flyer

Need Internet? Take the I Need Internet Survey!

https://SCDigitalDrive.org

Dealing with slow connection speeds or no internet access at all to home or business?

Complete the *I Need Internet* survey

Results from survey shared with ISPs to inform expansion of broadband access across State

Statewide Broadband Access Statistics

South Carolina
Statewide

Statistics
March 31, 2022



Population
Population estimates are calculated by multiplying Census 2020 housing unit data times an approximate residents per housing unit.

Public K-12
K-12 student data reflects the subset of public school students which have been geocoded as of March 31, 2022. Student data was provided by the SC Department of Education.

Housing Units
A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. US Census 2020 housing unit data is utilized in all calculations.

Qualified HU
Qualified Housing Units (HU) are located within Difficult Development Areas (Qualified Census Tracts) as determined by US Housing and Urban Development utilizing Census 2010 format. Census 2020 translation was done by the SC Broadband Office.

ACP
The Affordable Connectivity Program is an FCC benefit program that helps ensure that households can afford the broadband they need for work, school, healthcare and more.

Data Sources: Based on SC Broadband Office analysis of FCC Form 477, Dec. 31, 2021 reported directly to our office by Internet Service Providers. Satellite and mobile broadband services are excluded. Demographic data based on US Census 2020 information. ACP data reported by the Universal Service Administrative Company through March 31, 2022.

The SC Broadband Office is neither responsible nor liable for damages or injuries caused by failure of performance, error, omission, inaccuracy, inaccessibility, incompleteness or any other errors in information or formatting on this map.

Additional broadband information may be found at www.scdigitaldrive.org.
Submit comments or questions to maps@ors.sc.gov

BROADBAND OFFICE

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South Carolina Office of Regulatory Staff. All Rights Reserved.

US Census	Population		Housing Units	
2010	4,625,364		2,137,683	
2020	5,118,425	10.7%	2,344,963	9.7%
March 31, 2022	5,119,045	10.7%	2,346,388	9.8%

CURRENT	Current Below 25↓ Mbps Download / 3↑ Mbps Upload							
	Population		Public K-12		Housing Units		Qualified HU	
March 31, 2022	388,629	7.6%	50,167	7.1%	181,715	7.7%	23,813	13.1%

ACCESS					
Fiber		Cable		Copper	
892,935	38.1%	2,022,211	86.2%	1,911,509	81.5%

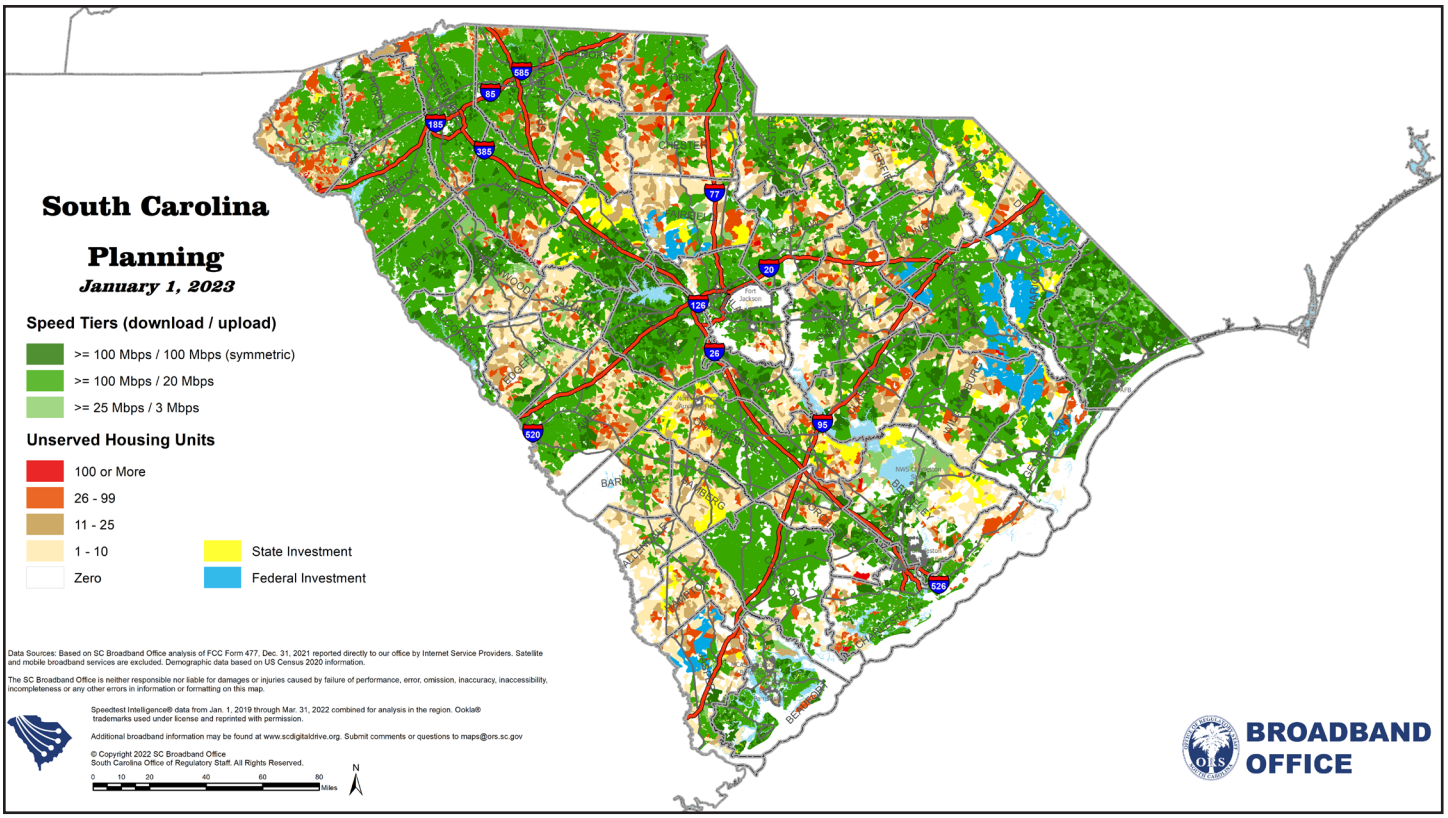
ADOPTION					
Fiber		Cable		Copper	
336,939	14.4%	1,203,234	51.3%	300,184	12.8%

ACP Enrollment				
Subscribers		Service	Device	Devices
205,051	8.7%	$4,603,516	$240,383	2,408

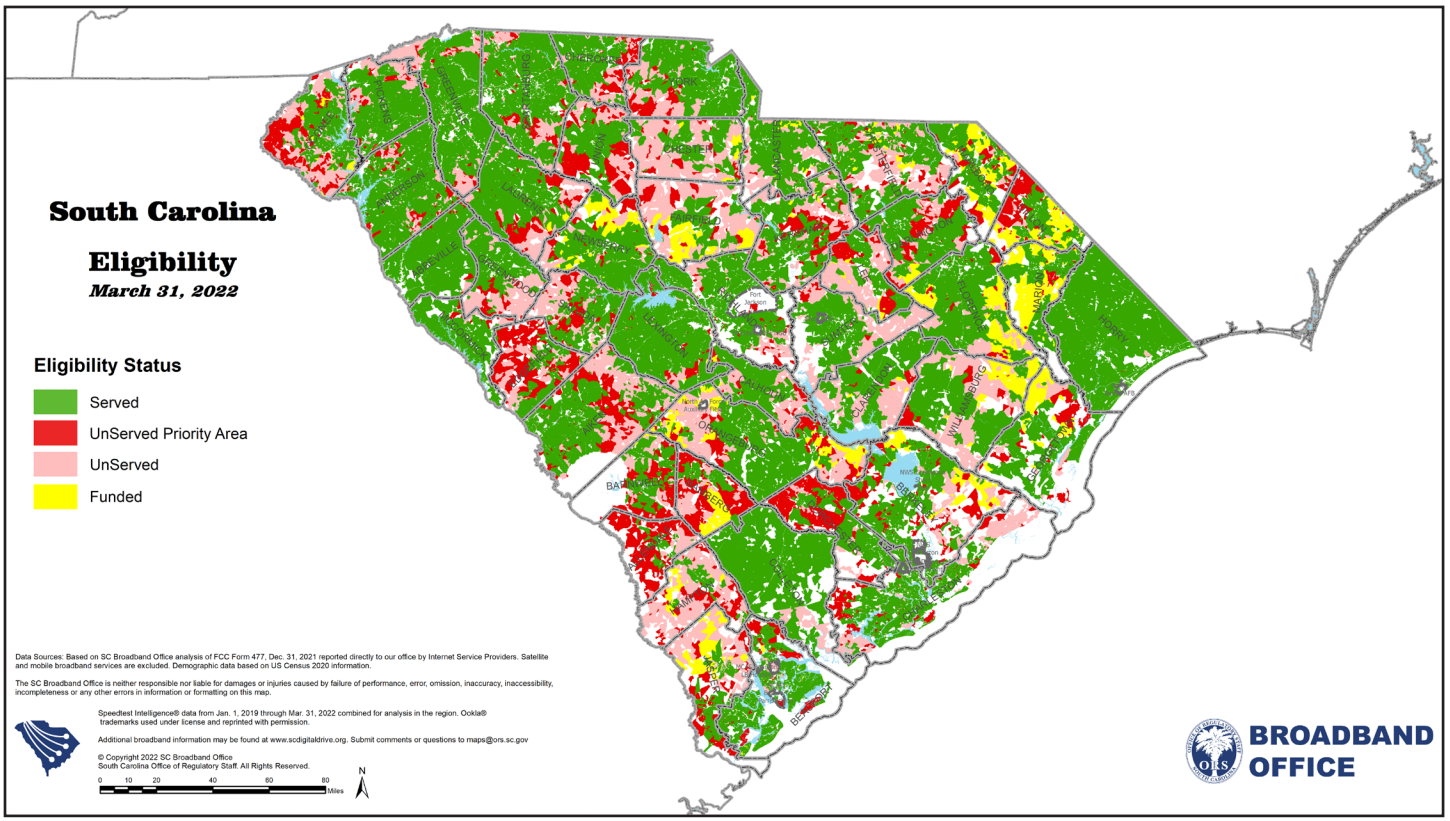
FUNDED PROJECTS	Projected Investment Impact			
	Population	Public K-12	Housing Units	Qualified HU
Federal Funding	20,435	2,632	9,766	946
State Funding	31,006	3,494	14,846	2,351
Total	51,441	6,126	24,612	3,297

FUTURE	Remaining Below 25↓ Mbps Download / 3↑ Mbps Upload					
	Population		Public K-12	Housing Units		Qualified HU
January 1, 2023	337,188	6.6%	44,041	157,103	6.7%	20,516

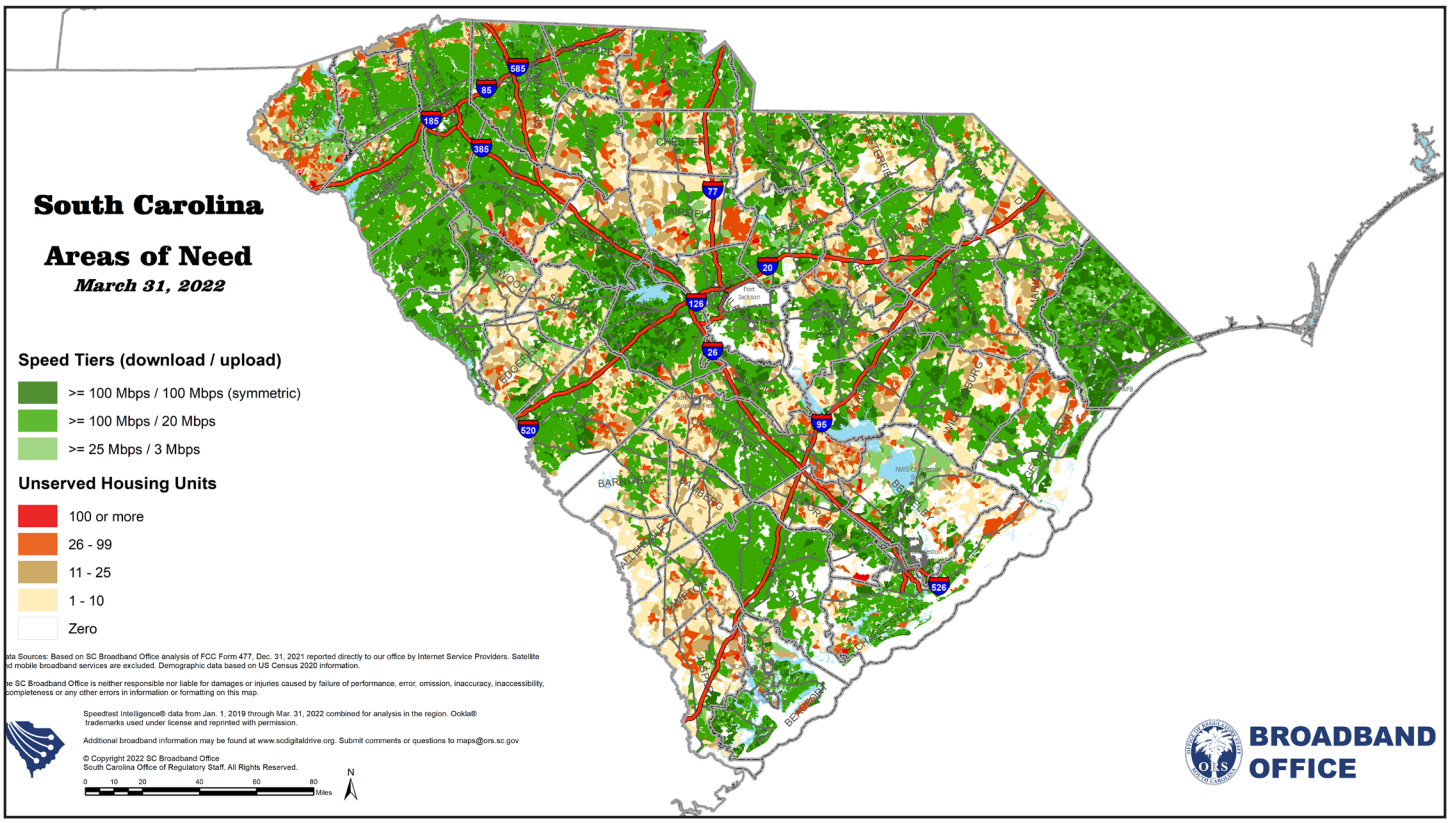
Statewide Planning Map



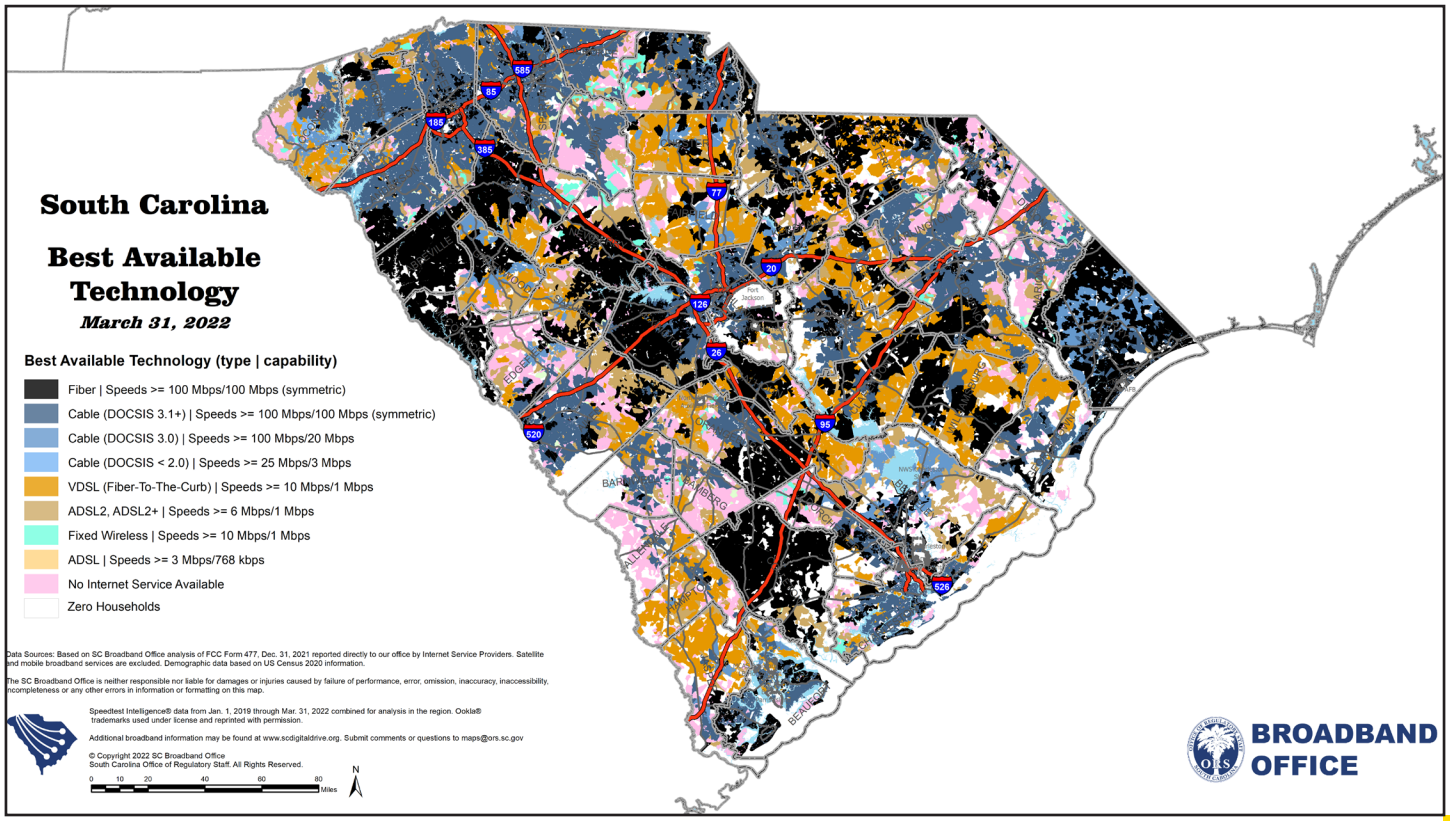
Statewide Eligibilty Map



Statewide Areas of Need Map



Statewide Best Available Technology Map



ORS Broadband Investments by ISP, County and Grant Program

TOTAL ORS ACTUAL (OR PROJECTED **) FUNDING - BY COMPANY (as of 6/30/2022)					
Company	CARES Act (completed)	RBGP	Proviso 73.6		Grand Total
			CARES Act II (completed)	Last Mile	
Aiken Electric Cooperative, Inc.	$ 554,575	$ 2,266,700			$ 2,821,275
CarolinaConnect Cooperative / Aiken EC				$ 25,000	$ 25,000
CarolinaConnect Cooperative / Newberry EC				$ 91,985	$ 91,985
CenturyLink		$ 1,503,135			$ 1,503,135
Comcast Cable Communications, LLC		$ 3,600,000			$ 3,600,000
Comporium	$ 3,501,706	$ 3,179,698	$ 1,720,037	$ 439,935	$ 8,841,376
Farmers Telephone Cooperative, Inc.	$ 365,804	$ 1,903,750	$ 13,426		$ 2,282,980
Hargray	$ 1,411,656	$ 1,418,666	$ 147,771		$ 2,978,093
Home Telecom	$ 607,418	$ 1,946,221			$ 2,553,639
Horry Telephone Cooperative, Inc.	$ 2,347,078	$ 3,052,828		$ 117,209	$ 5,517,115
Lynches River Electric Cooperative	$ 818,567	$ 158,750	$ 513,928		$ 1,491,245
Newberry Electric Cooperative	$ 1,297,750	$ 639,061	$ 1,469,868		$ 3,406,679
OneTone	$ 217,000				$ 217,000
Orangeburg County Broadband	$ 300,000	$ 300,000			$ 600,000
Palmetto Telephone Communications, LLC		$ 3,557,500			$ 3,557,500
Sandhill Telephone Cooperative, Inc.	$ 1,286,058	$ 4,392,440			$ 5,678,498
Spectrum Southeast LLC and Affiliates	$ 342,875			$ 214,970	$ 557,845
Tri-County Electric Cooperative		$ 1,319,660			$ 1,319,660
TruVista Communications, Inc.	$ 937,559	$ 117,105	$ 2,861,538	$ 20,340	$ 3,936,541
Upcountry Fiber			$ 825,000		$ 825,000
WC Fiber, LLC	$ 2,740,376		$ 321,715	$ 379,654	$ 3,441,745
Grand Total	**$ 16,728,421**	**$ 29,355,514**	**$ 7,873,282**	**$ 1,289,093**	**$ 55,246,310**

TOTAL BROADBAND INVESTMENT ACTUAL (OR PROJECTED **) FUNDING - BY COMPANY (as of 6/30/2022)					
Company	CARES Act (completed)	RBGP	Proviso 73.6		Grand Total
			CARES Act II (completed)	Last Mile	
Aiken Electric Cooperative, Inc.	$ 1,389,505	$ 4,533,400			$ 5,922,905
CarolinaConnect Cooperative / Aiken EC				$ 50,000	$ 50,000
CarolinaConnect Cooperative / Newberry EC				$ 183,970	$ 183,970
CenturyLink		$ 3,006,270			$ 3,006,270
Comcast Cable Communications, LLC		$ 7,200,000			$ 7,200,000
Comporium	$ 7,179,255	$ 6,359,395	$ 3,783,077	$ 943,032	$ 18,264,759
Farmers Telephone Cooperative, Inc.	$ 731,607	$ 3,807,500	$ 60,956		$ 4,600,063
Hargray	$ 2,828,122	$ 2,837,331	$ 301,932		$ 5,967,385
Home Telecom	$ 1,214,837	$ 3,892,442			$ 5,107,279
Horry Telephone Cooperative, Inc.	$ 4,693,694	$ 6,105,656		$ 234,418	$ 11,033,768
Lynches River Electric Cooperative	$ 1,643,170	$ 317,500	$ 1,027,855		$ 2,988,525
Newberry Electric Cooperative	$ 2,751,454	$ 1,278,122	$ 2,939,737		$ 6,969,313
OneTone	$ 472,407				$ 472,407
Orangeburg County Broadband	$ 642,372	$ 600,000			$ 1,242,372
Palmetto Telephone Communications, LLC		$ 7,115,000			$ 7,115,000
Sandhill Telephone Cooperative, Inc.	$ 2,695,956	$ 8,784,880			$ 11,480,836
Spectrum Southeast LLC and Affiliates	$ 695,775			$ 433,768	$ 1,129,543
Tri-County Electric Cooperative		$ 2,639,319			$ 2,639,319
TruVista Communications, Inc.	$ 1,875,117	$ 234,209	$ 5,723,075	$ 40,680	$ 7,873,081
Upcountry Fiber			$ 3,132,534		$ 3,132,534
WC Fiber, LLC	$ 6,454,549		$ 658,904	$ 839,793	$ 7,953,246
Grand Total	**$ 35,267,820**	**$ 58,711,024**	**$ 17,628,070**	**$ 2,725,661**	**$ 114,332,575**

**Assumes funding requested and company match will come in at 100% for 'In Progress' projects

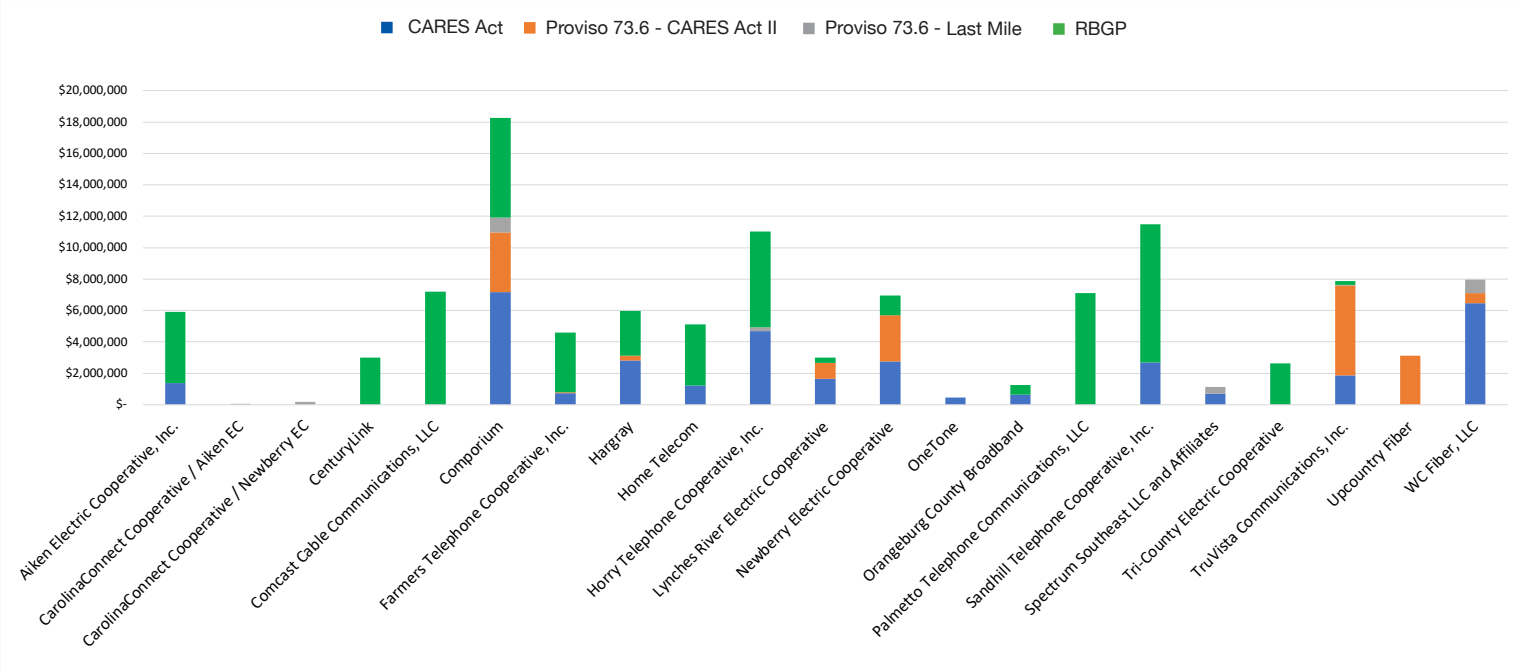
TOTAL ORS ACTUAL (OR PROJECTED **) FUNDING - BY COUNTY (as of 6/30/2022)					
County	CARES Act (completed)	RBGP	Proviso 73.6		Grand Total	Number of Locations ***
			CARES Act II (completed)	Last Mile		
Abbeville				$ 19,499	$ 19,499	8
Aiken	$ 359,352				$ 359,352	4
Allendale					$ -	
Anderson	$ 851,948			$ 110,285	$ 962,233	560
Bamberg		$ 3,557,500			$ 3,557,500	1,029
Barnwell		$ 112,240			$ 112,240	122
Beaufort	$ 1,223,166	$ 783,275	$ 128,935		$ 2,135,376	1,839
Berkeley	$ 113,970	$ 1,946,221			$ 2,060,191	2,227
Calhoun					$ -	
Charleston					$ -	
Cherokee					$ -	
Chester	$ 874,049	$ 742,775			$ 1,616,824	917
Chesterfield	$ 587,587	$ 158,750	$ 145,064		$ 891,400	950
Clarendon	$ 308,618	$ 634,550			$ 943,168	598
Colleton					$ -	
Darlington	$ 43,355			$ 28,303	$ 71,658	46
Dillon				$ 14,528	$ 14,528	6
Dorchester	$ 493,448				$ 493,448	533
Edgefield				$ 25,000	$ 25,000	5
Fairfield	$ 63,510	$ 117,105	$ 2,861,538	$ 20,340	$ 3,062,493	1,059
Florence	$ 4,775			$ 14,039	$ 18,814	13
Georgetown	$ 645,932	$ 1,081,607		$ 117,209	$ 1,844,748	694
Greenville	$ 12,811				$ 12,811	35
Greenwood	$ 1,124,110		$ 321,715		$ 1,445,825	1,871
Hampton	$ 188,490	$ 3,600,000	$ 18,836		$ 3,807,326	1,263
Horry	$ 106,348				$ 106,348	13
Jasper		$ 635,391			$ 635,391	532
Kershaw	$ 89,586				$ 89,586	232
Lancaster	$ 1,492,289	$ 819,425	$ 368,864		$ 2,680,578	2,205
Laurens	$ 897,757		$ 175,657		$ 1,073,414	818
Lee		$ 640,000			$ 640,000	502
Lexington	$ 1,407,332		$ 1,720,037	$ 8,692	$ 3,136,061	2,001
Marion	$ 1,594,798	$ 1,971,221			$ 3,566,019	729
Marlboro	$ 1,286,058	$ 4,392,440			$ 5,678,498	6,909
McCormick					$ -	
Newberry	$ 1,297,750	$ 639,061	$ 1,294,212	$ 111,185	$ 3,342,208	5,011
Oconee	$ 276,174		$ 825,000	$ 96,250	$ 1,197,424	1,908
Orangeburg	$ 495,223	$ 6,894,753			$ 7,389,976	6,080
Pickens				$ 217,011	$ 217,011	122
Richland					$ -	
Saluda	$ 753,457			$ 24,401	$ 777,858	295
Spartanburg	$ 79,343			$ 63,606	$ 142,949	126
Sumter					$ -	
Union				$ 11,903	$ 11,903	3
Williamsburg	$ 57,186	$ 629,200	$ 13,426		$ 699,812	310
York				$ 406,842	$ 406,842	121
Grand Total	**$ 16,728,421**	**$ 29,355,514**	**$ 7,873,282**	**$ 1,289,093**	**$ 55,246,310**	**41,696**

** Assumes funding requested and company match will come in at 100% for 'In Progress' projects
*** Based on the total number of locations as listed in final progress report for completed projects, and total number of locations as listed in application for in-progress projects. Locations include households, businesses, educational institutions, healthcare facilities and community anchor institutions.

TOTAL BROADBAND INVESTMENT ACTUAL (OR PROJECTED **) FUNDING - BY COUNTY (as of 6/30/2022)						
County	CARES Act (completed)	RBGP	Proviso 73.6		Grand Total	Number of Locations ***
			CARES Act II (completed)	Last Mile		
Abbeville				$ 39,184	$ 39,184	8
Aiken	$ 976,553				$ 976,553	4
Allendale					$ -	
Anderson	$ 2,151,792			$ 275,319	$ 2,427,111	560
Bamberg		$ 7,115,000			$ 7,115,000	1,029
Barnwell		$ 224,480			$ 224,480	122
Beaufort	$ 2,447,732	$ 1,566,549	$ 258,255		$ 4,272,536	1,839
Berkeley	$ 227,939	$ 3,892,442			$ 4,120,381	2,227
Calhoun					$ -	
Charleston					$ -	
Cherokee					$ -	
Chester	$ 1,748,097	$ 1,485,550			$ 3,233,647	917
Chesterfield	$ 1,175,100	$ 317,500	$ 290,127		$ 1,782,727	950
Clarendon	$ 617,236	$ 1,269,100			$ 1,886,336	598
Colleton					$ -	
Darlington	$ 88,900			$ 58,759	$ 147,659	46
Dillon				$ 29,056	$ 29,056	6
Dorchester	$ 986,898				$ 986,898	533
Edgefield				$ 50,000	$ 50,000	5
Fairfield	$ 127,020	$ 234,209	$ 5,723,075	$ 40,680	$ 6,124,984	1,059
Florence	$ 10,964			$ 28,779	$ 39,743	13
Georgetown	$ 1,291,918	$ 2,163,214		$ 234,418	$ 3,689,550	694
Greenville	$ 29,695				$ 29,695	35
Greenwood	$ 2,472,060		$ 658,904		$ 3,130,964	1,871
Hampton	$ 380,391	$ 7,200,000	$ 43,677		$ 7,624,068	1,263
Horry	$ 212,180				$ 212,180	13
Jasper		$ 1,270,782			$ 1,270,782	532
Kershaw	$ 187,630				$ 187,630	232
Lancaster	$ 3,030,582	$ 1,638,850	$ 737,728		$ 5,407,160	2,205
Laurens	$ 2,097,576		$ 351,314		$ 2,448,890	818
Lee		$ 1,280,000			$ 1,280,000	502
Lexington	$ 2,915,302		$ 3,783,077	$ 17,384	$ 6,715,763	2,001
Marion	$ 3,189,596	$ 3,942,442			$ 7,132,038	729
Marlboro	$ 2,695,956	$ 8,784,880			$ 11,480,836	6,909
McCormick					$ -	
Newberry	$ 2,751,454	$ 1,278,122	$ 2,588,423	$ 222,370	$ 6,840,369	5,011
Oconee	$ 590,755		$ 3,132,534	$ 209,375	$ 3,932,664	1,908
Orangeburg	$ 1,055,324	$ 13,789,504			$ 14,844,828	6,080
Pickens				$ 442,881	$ 442,881	122
Richland					$ -	
Saluda	$ 1,536,115			$ 48,802	$ 1,584,917	295
Spartanburg	$ 158,686			$ 127,773	$ 286,459	126
Sumter					$ -	
Union				$ 24,035	$ 24,035	3
Williamsburg	$ 114,371	$ 1,258,400	$ 60,956		$ 1,433,727	310
York				$ 876,846	$ 876,846	121
Grand Total	**$ 35,267,820**	**$ 58,711,024**	**$ 17,628,070**	**$ 2,725,661**	**$ 114,332,575**	**41,696**

** Assumes funding requested and company match will come in at 100% for 'In Progress' projects
*** Based on the total number of locations as listed in final progress report for completed projects, and total number of locations as listed in application for in-progress projects. Locations include households, businesses, educational institutions, healthcare facilities and community anchor institutions.

Total Broadband Investment Allocated by ISP



1 Additional Investments were made by the South Carolina State Department of Education ($36,655.20), and the Office of Broadband Coordinator ($30,740.00) toward the Starlink pilot. Total cost to fund the pilot program was $67,395.20.



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