



SC Broadband Advisory Council

Enabling South Carolinians to Thrive in the Global Digital Economy

South Carolina Office of Regulatory Staff | July 12, 2022

Agenda

Welcome / Roll Call
Review & Approve Minutes

Jim Stritzinger, Co-Chair

Legislative Update

Nanette Edwards, ORS

SC Broadband Office Update

Jim Stritzinger, ORS

County/Municipal ARPA Projects

Anna Berger, Co-Chair
Jason Ward, Administrator
Dorchester County

Other Business

All

Next Meeting – Tuesday, Oct. 11, 2022
Adjourn

All

Legislative Update

AMERICAN RESCUE PLAN ACT

H. 4408 \$400 Million for SC Broadband Infrastructure

Enacted
May 13, 2022

State Fiscal
Recovery Fund

- \$214.2 Million

Capital
Projects Fund

- \$185.8 Million

The funds in the ARPA Broadband Account shall be used to expand broadband infrastructure to households, businesses, and communities in the State that are unserved or underserved by broadband services.

SC Digital Drive Refresh











www.scdigitaldrive.org

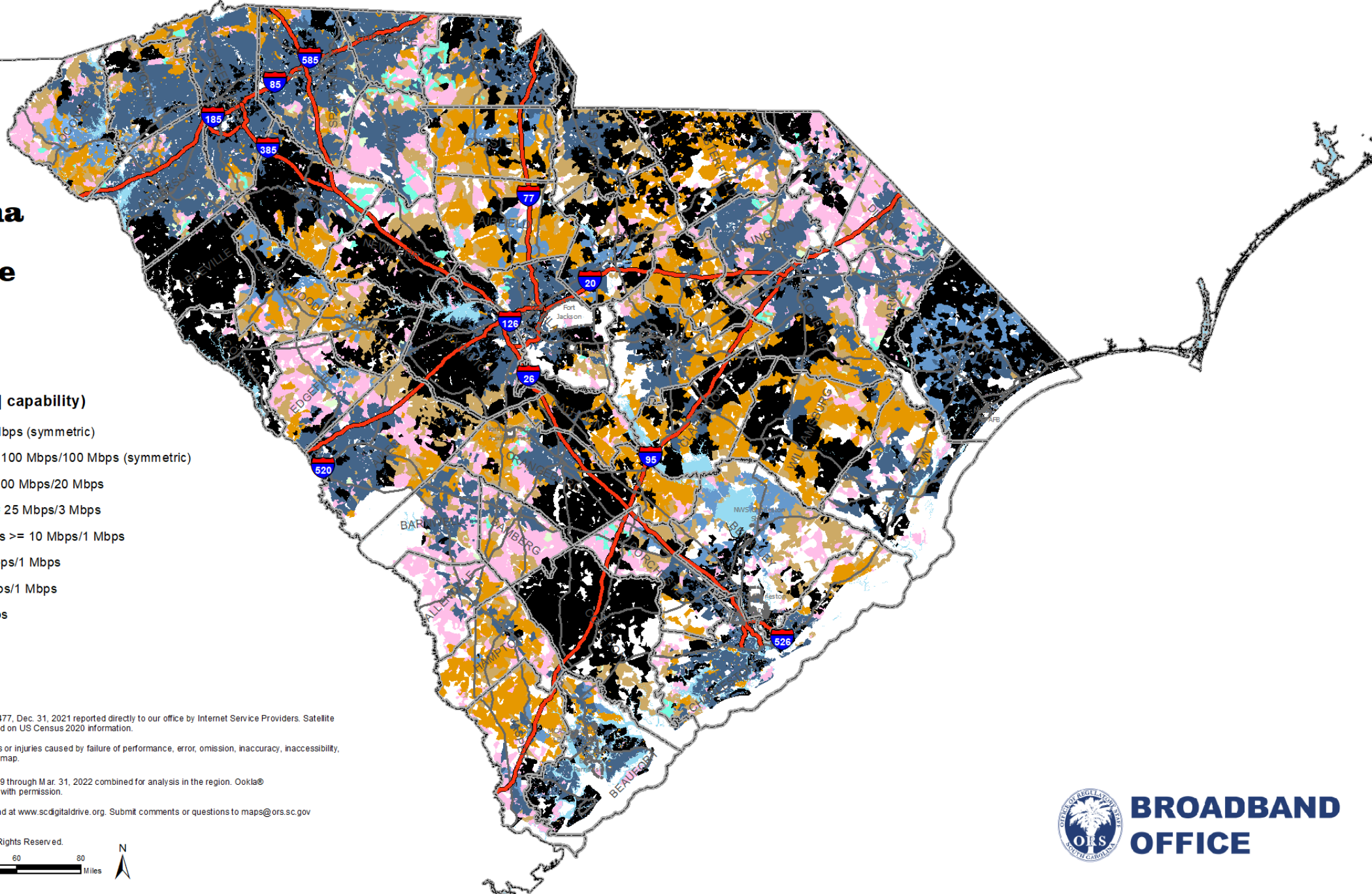
South Carolina

Best Available Technology

March 31, 2022

Best Available Technology (type | capability)

-  Fiber | Speeds \geq 100 Mbps/100 Mbps (symmetric)
-  Cable (DOCSIS 3.1+) | Speeds \geq 100 Mbps/100 Mbps (symmetric)
-  Cable (DOCSIS 3.0) | Speeds \geq 100 Mbps/20 Mbps
-  Cable (DOCSIS < 2.0) | Speeds \geq 25 Mbps/3 Mbps
-  VDSL (Fiber-To-The-Curb) | Speeds \geq 10 Mbps/1 Mbps
-  ADSL2, ADSL2+ | Speeds \geq 6 Mbps/1 Mbps
-  Fixed Wireless | Speeds \geq 10 Mbps/1 Mbps
-  ADSL | Speeds \geq 3 Mbps/768 kbps
-  No Internet Service Available
-  Zero Households



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.

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“Begin With the End in Mind”

Steven R. Covey, *7 Habits of Highly Effective People*

Speed Tiers (download / upload)





	100 Mbps / 100 Mbps (symmetric)
	100 Mbps / 20 Mbps
	25 Mbps / 3 Mbps
	Zero Households

DON'T INVEST HERE

Green: Already served. Meets or exceeds FCC's 25/3 Mbps

White: Nobody lives there.

Unserved Housing Units

	100 or More
	26 - 99
	11 - 25
	1 - 10

INVEST HERE!

Find the “freckles” and prioritize them. Freckles are places with a lot of homes with poor Internet.

South Carolina

Areas of Need

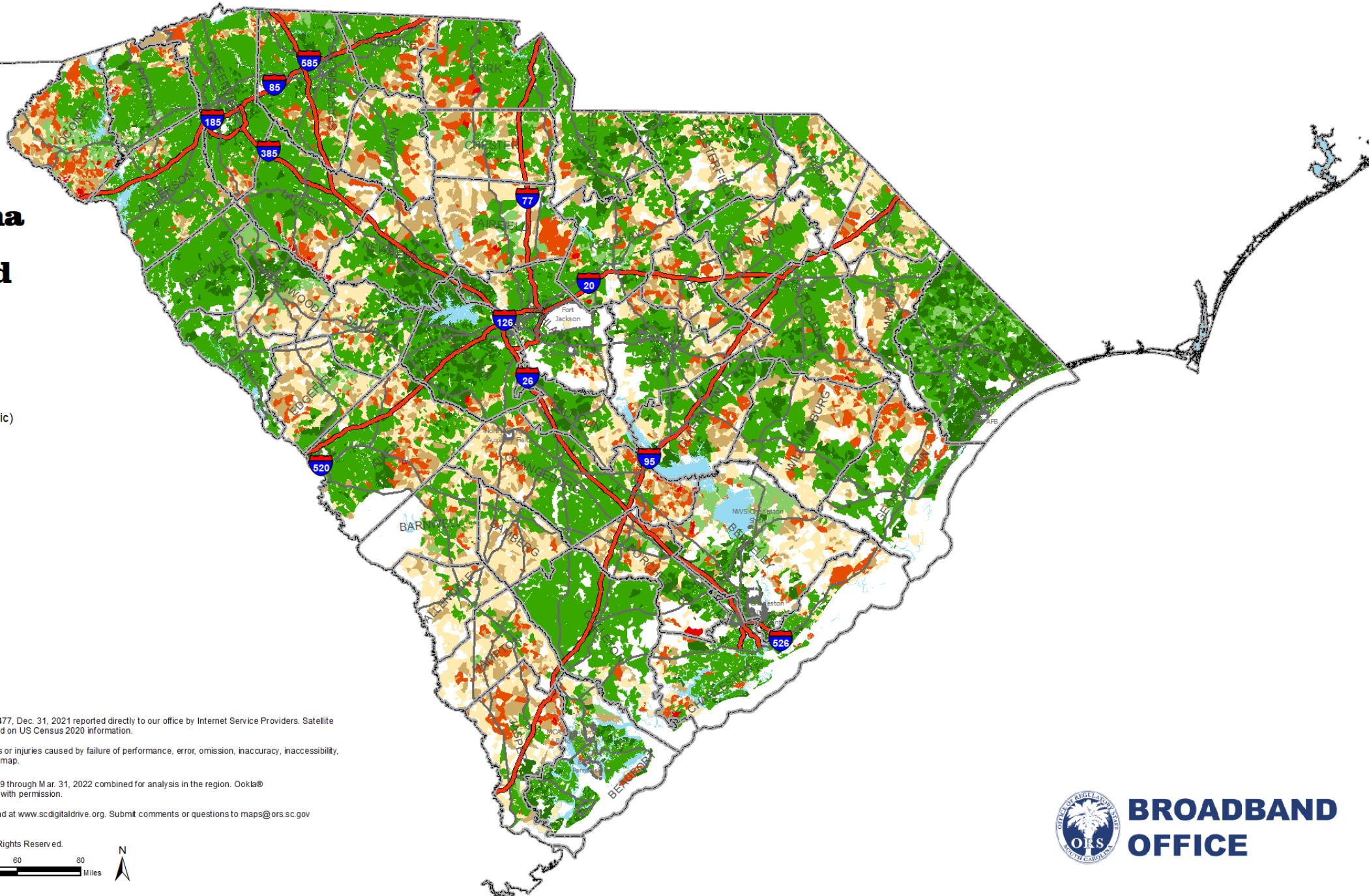
March 31, 2022

Speed Tiers (download / upload)

- >= 100 Mbps / 100 Mbps (symmetric)
- >= 100 Mbps / 20 Mbps
- >= 25 Mbps / 3 Mbps

Unserved Housing Units

- 100 or more
- 26 - 99
- 11 - 25
- 1 - 10
- Zero



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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.

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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	23,813
					7.7%	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	20,516
					6.7%	



SOUTH CAROLINA DIGITAL DRIVE

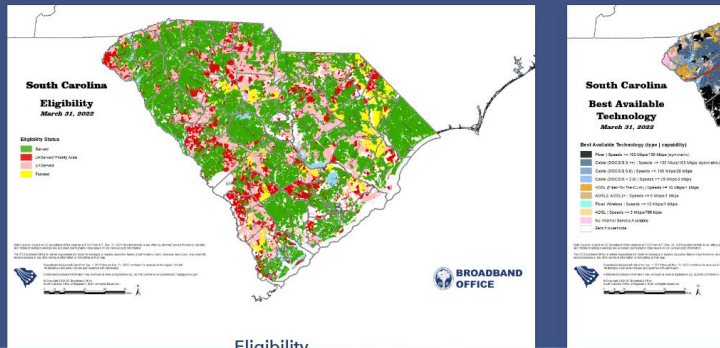
Tools and resources to inform consumers and stakeholders

Don't have access to internet? Take the [Need Internet](#) survey

Current Total Housing Units
With At Least
25↓ Mbps / 3↑ Mbps Service
2,164,673*

Current Total Housing
Without
25↓ Mbps / 3↑ Mbps S
181,715*

Explore
Maps



SC Broadband County Dashboard March 2022

Private Member
Private Organization

Summary

The Dashboard allows users to view general broadband statistics at the SC county level. Much of the data reflected in the Dashboard is based on Federal Communication Commission data submissions. The Dashboard uses data from Internet Service Providers (ISPs). Dashboard data is updated periodically - At a minimum 2 times per year. For questions about the Dashboard data, please contact the Broadband Office via scbroadband@ors.gov.

Read More

View Full Details

Details

- Dashboard Dashboard
- June 17, 2022 Date Updated
- June 15, 2022 Published Date
- Public Anyone can see this content
- No License Provided Request permission to use

SC Broadband Dashboard March 2022 Data

To begin click here to choose ... Statewide

Percent of Housing Units in a Census Tract 03/2022
Meet (25Mbps / 3Mbps)
 > 99.01% - 100%
 > 97.01% - 99.00%
 > 75.01% - 97.00%
 > 60.01% - 75.00%
 0% - 60.00%

Percent of Residential Addresses Served by Fiber in Statewide
39.26%

Percent of Residential Addresses Served by Cable in Statewide
54.09%

Estimated number K-12 Students
44,041

Total number of Funded Households
56,218

Total number of Unserved Households
181,715
That DON'T meet 25, Mbps / 31 Mbps

Total number of Served Households
2,164,673
That meet the Min 25, Mbps / 31 Mbps

Percent of Residential Addresses Served by Copper in Statewide
4.22%

*Note copper technology is considered Unserved

Percent of Residential Addresses Unserved in Statewide
7.74%

Powered by Esri

SCBBO Staffing Enhancements

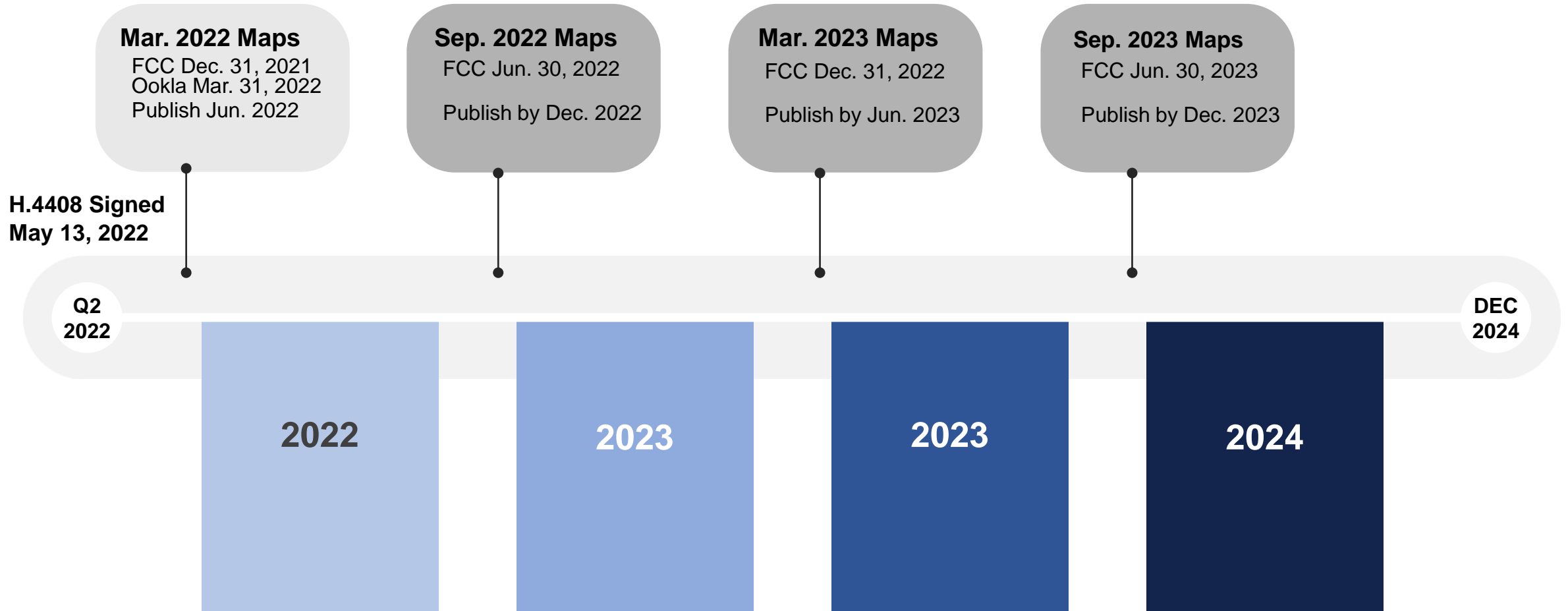
1) JUNE 30, 2022 – 3 Dedicated FTEs

- Jim Stritzinger – Director
- Mike Herzberger – Deputy Director
- James Tanis – Sr. Data Scientist
- Finance, Legal, IT, Admin – Shared Staff

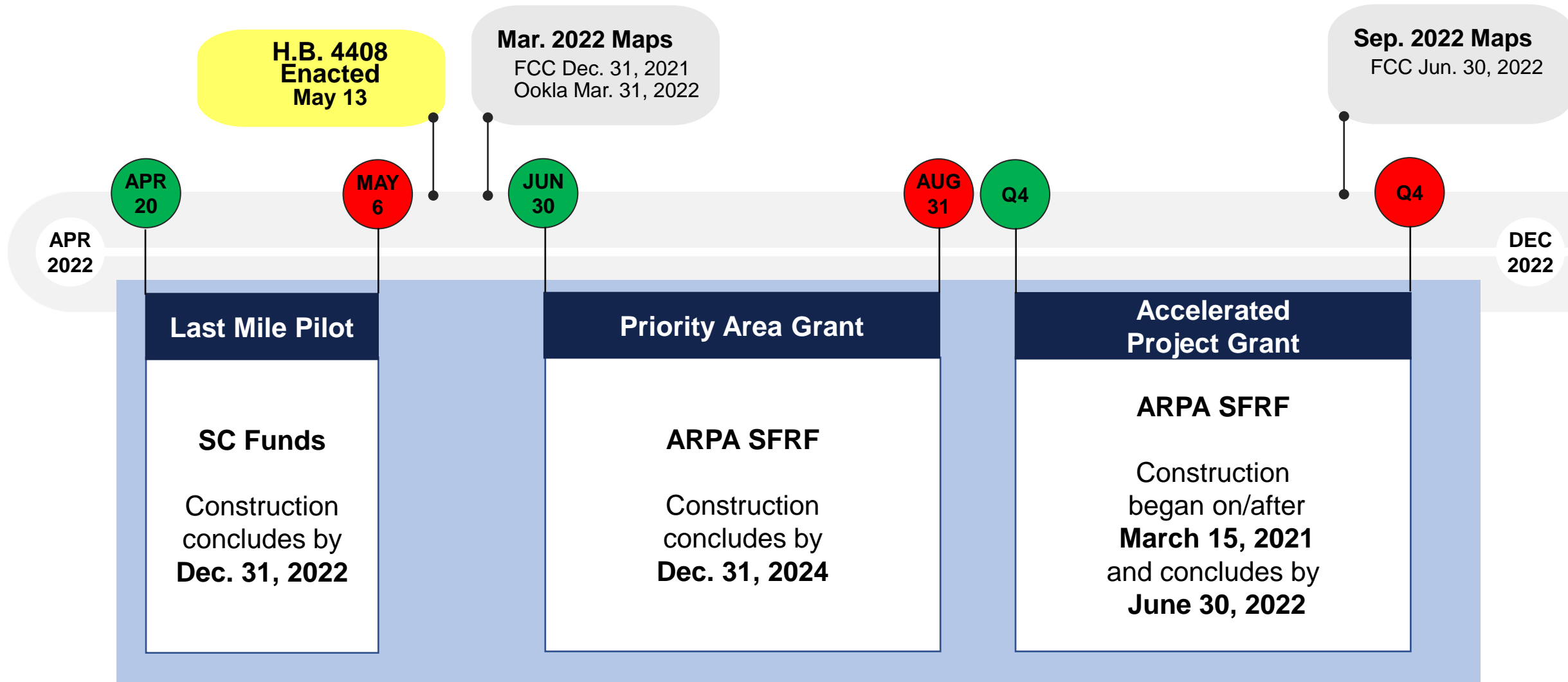
2) JULY 2022 – 3 New FTEs

- Program Coordinator – Emily Keys
- GIS Specialist - Michael Borowski
- GIS Specialist - Angelica Petsch

SC BROADBAND INVESTMENT ROADMAP



2022 SC BROADBAND GRANT PROGRAMS



* All dates are pending approval and are subject to change without notice.

Last Mile Grant Pilot Program

- 1) Direct Support for “I Need Internet” Survey Respondents
- 2) Targeting “Donut Holes” in Served Census Blocks
- 3) Applications Opened April 20 / Closed May 6
- 4) Awarded ~\$1.3M, to connect 569 Residential Homes
- 5) Six Internet Service Providers
 - CarolinaConnect
 - Charter
 - Comporium
 - Horry Telephone Cooperative
 - TruVista
 - WC Fiber
- 6) Construction Complete By Dec. 31, 2022

What are Accelerated Projects? (Preliminary)

- 1) **Broadband construction to unserved areas that was initiated on/after March 15, 2021 and was operational by June 30, 2022.**
- 2) **Unserved Areas are defined by Sep 2021 SC Eligibility Map**
 - ✓ This map represents FCC Form 477 June 30, 2021 status and excludes DSL
- 3) **ORS will award up to \$25,000,000 of the allocated ARPA funds**
- 4) **ORS will likely accept applications in Q4 2022**
- 5) **Applications must document operational status**
- 6) **Applications will require complete financial submission**

Source: H.4408, Section 7B: The grant program may include an opportunity to reimburse a portion of construction costs, incurred on or after March 15, 2021, related to the expansion of broadband during the pandemic.

What are Priority Areas?

Unserved 2020 Census Blocks with:

1) More than 20 public K-12 student households; **or,**

- ✓ Broadband maps include data from 785,000 public school students that was provided by SC Department of Education

2) Difficult Development Areas as identified by US Housing and Urban Development (HUD); **or,**

- ✓ Defined geographies that are updated annually by HUD and are the basis for deploying Community Development Block Grants (CDBG) in the United States.

3) No Internet Service Provider

- ✓ FCC Form 477 data shows null value for ISP as of Dec. 31, 2021.

Source: H.4408, Section 9: Priority must be given to unserved areas with no current Internet Service Provider, Difficult Development Areas as identified by U.S. Housing and Urban Development, and census blocks that have a high concentration of unserved public K-12 student households as documented by the South Carolina Department of Education.

How much will ORS invest in Priority Areas?

Depending on the number of qualified applications, ORS may award approximately \$180,000,000 of the allocated ARPA funds.

What are the match requirements?





Applicant May Define Their Own Match For Priority Areas!

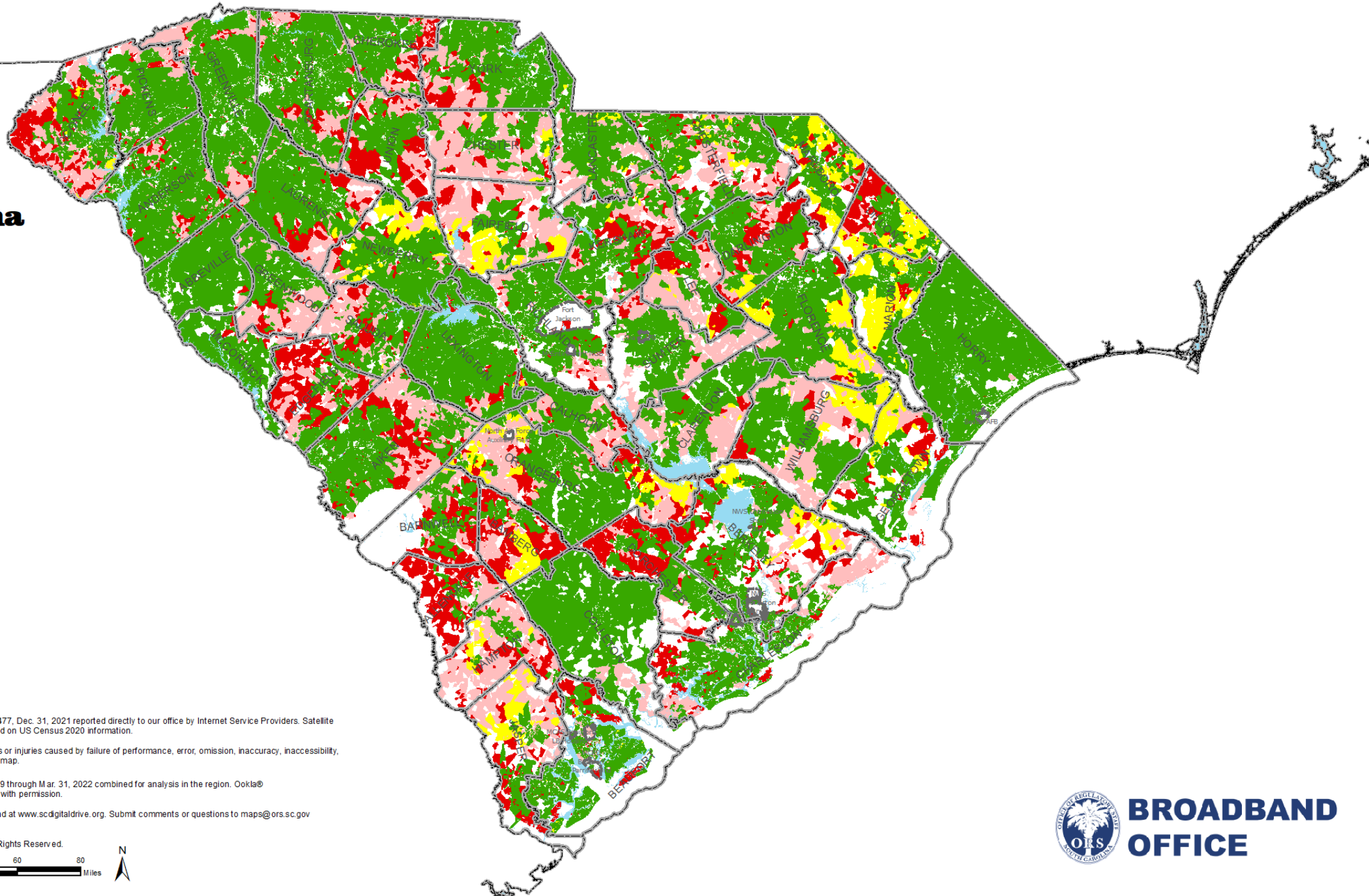
South Carolina

Eligibility

March 31, 2022

Eligibility Status

-  Served
-  UnServed Priority Area
-  UnServed
-  Funded



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Map Challenges

For documenting map errors in unserved census blocks due to:

- Map errors or work completed between 12/31/21 and 6/30/22.
- Challenges must be submitted by June 30, 2022, accepted challenges will be posted by July 15, 2022
- FCC Form 477 June 30, 2022 (due Sep. 1, 2022), submissions will be used to audit map challenges.

Funded Project Register

For documenting future projects that are fully funded due to:

- Private Funding
- FCC Rural Digital Opportunity Fund (RDOF)
- USDA ReConnect
- ARPA Local Fiscal Recovery Funds (LFRF, County/Municipal)
- Only for construction that will finish between **July 1, 2022**, and **June 30, 2023**
- FPR submissions due by **August 1, 2022**

**These tools help to
avoid duplication of
facilities!**

Eligible Applicants

Must be Internet Service Providers (ISPs) that:

- Offer **residential service** and have previously filed **FCC Form 477**
- Provide an **affordable high-speed Internet plan** (w/o income requirements)
- Participate in the FCC's **Affordable Connectivity Plan (ACP)**

Eligible Projects

Must:

- Contain **at least one high priority census block** of **K-12 students**
- **Serve 80%** of housing units in project area census blocks upon completion
- Utilize technology that **meets or exceeds 100/100** or provide documentation of scalability from 100/20.
- Must **not overbuild** existing 25/3 networks.

Scoring Criteria

- 1. High Priority Area (30%-35%)**
- 2. Total Number of Housing Units Served (20%)**
- 3. Availability – Broadband Infrastructure (15%)**
- 4. Geography (10%)**
- 5. Average Cost Per Structure (10%)**
- 6. Collaboration/Adoption/Community Assistance (10%)**
- 7. Broadband Service Provider Experience (5%)**

All eligible applications will be reviewed and scored; however, ORS reserves the right to award grants that are in the public interest and accelerate internet deployment.

Priority Grant Program Dates

Event	Date
Eligibility Map Published on the ORS Website <i>Challenge period to eligibility map opens</i>	6/20/2022
Application Period Opens <i>Challenge period to eligibility map closes</i>	6/30/2022
Map Challenge accepted and posted to ORS Website	7/15/2022
Application Period Closes	8/31/2022
Submitted Applications Posted on the ORS Website / Comment Period Opens	9/6/2022
Comment Period Closes	10/3/2022
Application Review / Selection	11/1/2022
Funding Agreements Sent to the Companies	11/14/2022
Funding Agreements Returned to the ORS	12/22/2022
Notices to Proceed Issued	12/30/2022
Quarterly Progress Report Due	4/17/2023 - 10/14/2024
Project Completion	12/31/2024
Final Reporting Due	1/30/2025

** All dates are pending approval and are subject to change without notice.*

Locating Documents

This screenshot shows the top navigation bar of the ORS website. The 'Broadband' menu item is highlighted. A search box labeled 'Search ORS' is in the top right. A callout box points to the search box with the text 'Sign up for all notifications!'. Another callout box points to the 'Investments' sub-menu with the text 'Pathway for Grant Docs'. The 'Investments' sub-menu is circled in yellow and contains three items: 'Broadband Grant Notifications', 'Federal Investment Programs', and 'State Investment Programs'. The 'State Investment Programs' item is circled in green.

Sign up for all notifications!

Pathway for Grant Docs

This screenshot shows the 'State Investment Programs' page on the ORS website. The breadcrumb trail is 'Home » Broadband » Investments » State Investment Programs'. The main heading is 'State Investment Programs'. Below it is a sub-heading 'American Rescue Plan Act - State and Local Fiscal Recovery Funds'. The text describes the funding of \$400 million for broadband infrastructure. There are two PDF links on the right: 'Total Broadband Funding by Company and County (PDF)' and 'Broadband Infrastructure Funding in South Carolina - October 2021 Update (PDF)'. A 'Learn more' link is at the bottom left.

SC ARPA Capital Projects Fund

AMERICAN RESCUE PLAN ACT

H. 4408 \$400 Million for SC Broadband Infrastructure

Enacted
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State Fiscal
Recovery Fund

- \$214.2 Million

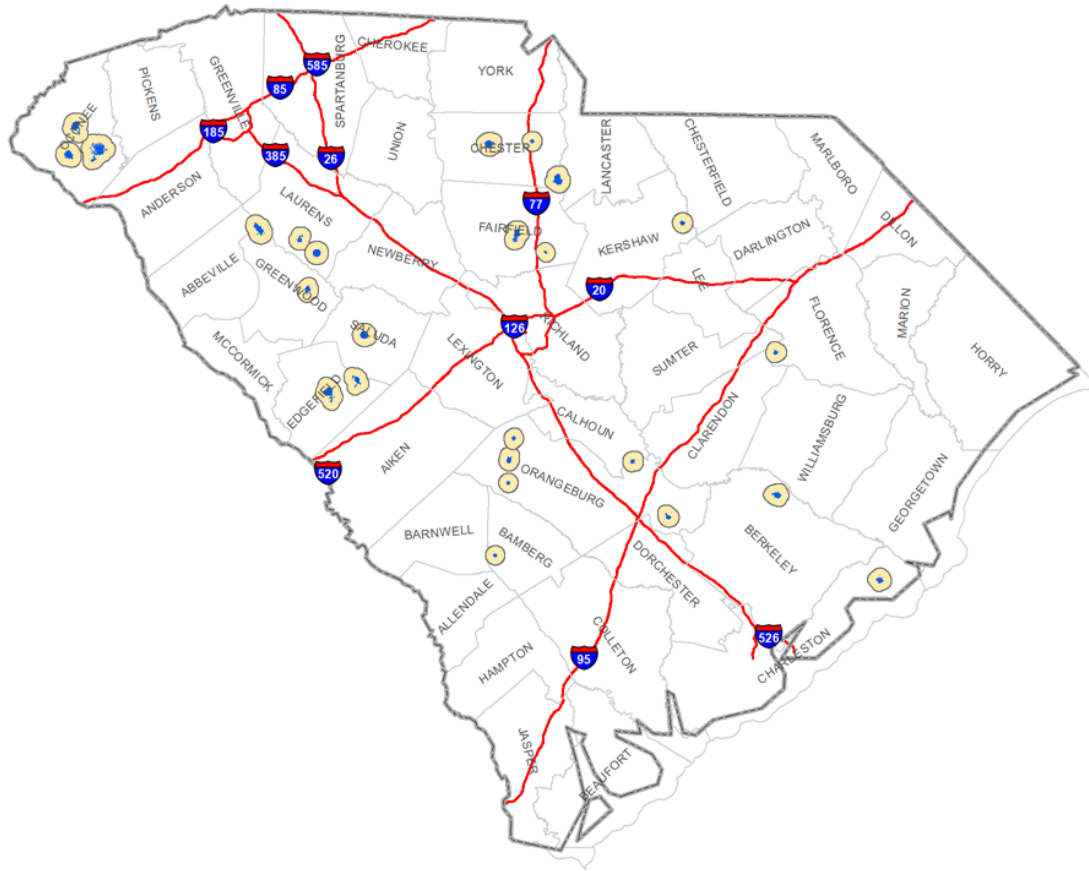
Capital
Projects Fund

- \$185.8 Million

The funds in the ARPA Broadband Account shall be used to expand broadband infrastructure to households, businesses, and communities in the State that are unserved or underserved by broadband services.

THE NEXT, NEXT GREATEST THING

Main Street, South Carolina



1. Main Street Communities

- ESA = Main St + 2mi buffer

2. Eligible if less than 50% have 100/20

3. Requires 100/100 Symmetric

4. “Dig Once” Opportunities

- Water & Sewer (RIA)
- Roads (SCDOT)

SC Rural Broadband Grant Program

Rural Broadband Grant Program (As of 3/31/22)

- 1) 17 Internet Service Providers / 18 Counties (11 Eligible / 7 Contiguous)**
- 2) \$30M State Money / Collaboration w/ SC Department of Commerce**
- 3) 776.1 miles of Fiber Construction**
- 4) Access for 5,023 Housing Units (24% of funded HU)**
- 5) Of the 34 projects**
 - Complete – 4**
 - > 70% and < 99% Complete – 12**
 - > 35% and < 69% Complete – 8**
 - > 10% and < 34% Complete – 7**
 - 3 Relinquished**
- 6) \$26,616,704 Project Expenses Incurred**
- 7) Construction Complete By Oct. 31, 2022**

County/Municipal ARPA Projects

**Mr. Jason Ward, Administrator
Dorchester County, SC**

Other Business

INFRASTRUCTURE ACT* CREATES ~\$65B IN BROADBAND FUNDING

NTIA will administer ~\$48B of this new funding

FCC to administer ~\$14B

\$14.2B

For Affordable Connectivity Program, which will replace the EBB program

USDA to administer \$2B

\$2.0B

Via the Rural Utilities Service

Private Activity Bonds

\$600M

\$600M

Authorizes State/local gov'ts to use private activity bonds for rural broadband

BEAD

**DIGITAL
EQUITY**

TRIBAL

**MIDDLE
MILE**

\$42.45B

\$2.75B

\$2.00B

\$1.00B

Title I - Broadband Equity, Access & Deployment Program

Formula-based grant program for U.S. states and territories. BEAD aims to close the access gap for unserved & underserved areas of the country.

Title III - Digital Equity Act

Three programs, established for planning & implementation of programs that promote digital equity, support digital inclusion activities, and build capacity related to the adoption of broadband.

Title II - Tribal Connectivity Technical Amendments

Furtheres current Tribal Broadband Connectivity Program by investing an additional \$2B to fund broadband adoption and infrastructure projects.

Title IV - Enabling Middle Mile Broadband Infrastructure

Provides funding to extend middle mile capacity to reduce cost of serving unserved and underserved areas and enhance network resilience.

* Infrastructure Investment and Jobs Act, Division F, Pub. L. 117-58 (Nov. 15, 2021)

Note: funding amounts inclusive of all administrative set-asides.



Starlink Pilot Program



- 1) Collaboration w SCDOE
- 2) 20 Student/Staff Homes
- 3) 7 School Districts
 - Allendale
 - Bamberg
 - Barnwell
 - Clarendon
 - Greenville
 - Hampton
 - Williamsburg
- 4) Statistics
 - 120.5/10.0 Mbps Avg Down/Up
 - 53.5ms Avg Ping
 - 21.1ms Avg Jitter
- 5) All Live on 6/29/22



Thank you!



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OFFICE**