BROADBAND OFFICE

ARPA SFRF 2022 Grant Programs

Informational Webinar

South Carolina Office of Regulatory Staff | June 24, 2022

Agenda

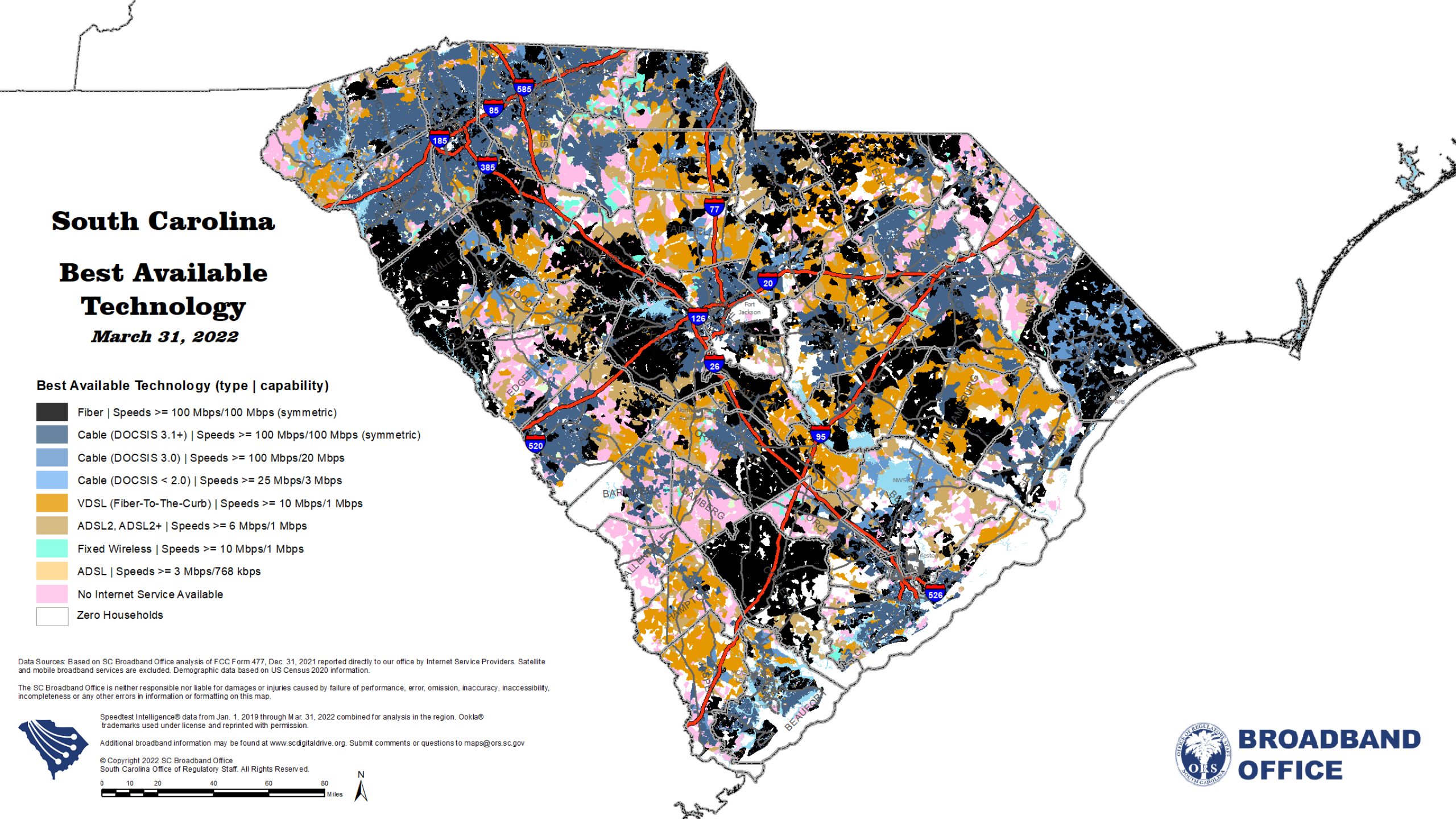
Introductions – ORS Broadband Team	All
Current SC Broadband Status	Jim Stritzinger, ORS
SC ARPA SFRF 2022 Grant Programs • **Eligibility Map** • **Map Challenges and Funded Project Register**	Jim Stritzinger, ORS
Required Broadband Project GIS Template	James Tanis, ORS
Developing 2022 Priority Area Grant Applications	Jim Stritzinger, ORS Mike Herzberger, ORS Amy Marshall, ORS
Questions and Answers	All

Current SC Broadband Status

South Carolina

Best Available Technology

March 31, 2022



Best Available Technology (type | capability)

- Fiber | Speeds >= 100 Mbps/100 Mbps (symmetric)
- Cable (DOCSIS 3.1+) | Speeds >= 100 Mbps/100 Mbps (symmetric)
- Cable (DOCSIS 3.0) | Speeds >= 100 Mbps/20 Mbps
- Cable (DOCSIS < 2.0) | Speeds >= 25 Mbps/3 Mbps
- VDSL (Fiber-To-The-Curb) | Speeds >= 10 Mbps/1 Mbps
- ADSL2, ADSL2+ | Speeds >= 6 Mbps/1 Mbps
- Fixed Wireless | Speeds >= 10 Mbps/1 Mbps
- ADSL | Speeds >= 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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0 10 20 40 60 80 Miles

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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

Unserved Housing Units

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

CAN'T INVEST HERE!

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

White: Nobody lives there.

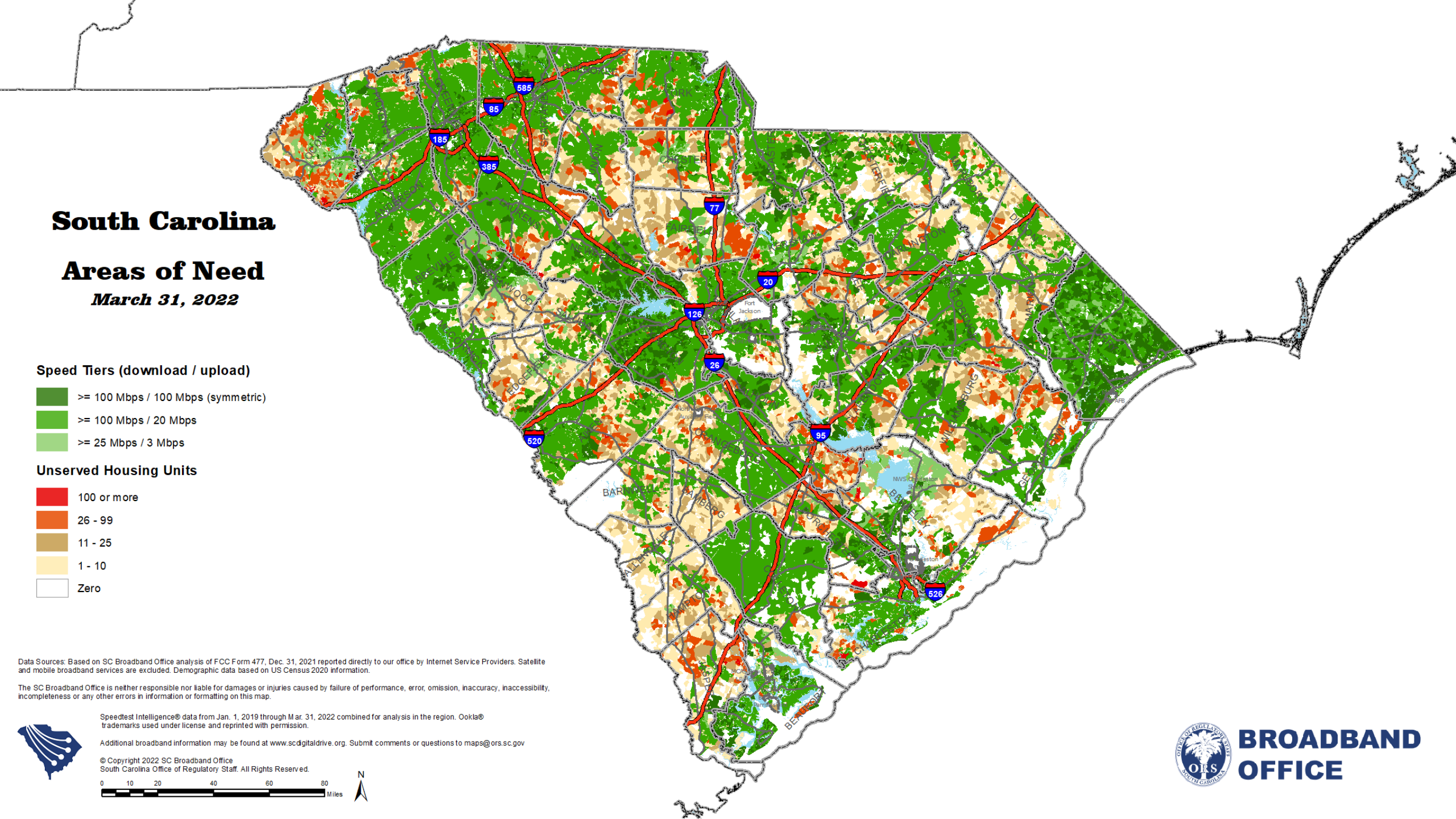
INVEST HERE!

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)

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Unserved Housing Units

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0 10 20 40 60 80 Miles

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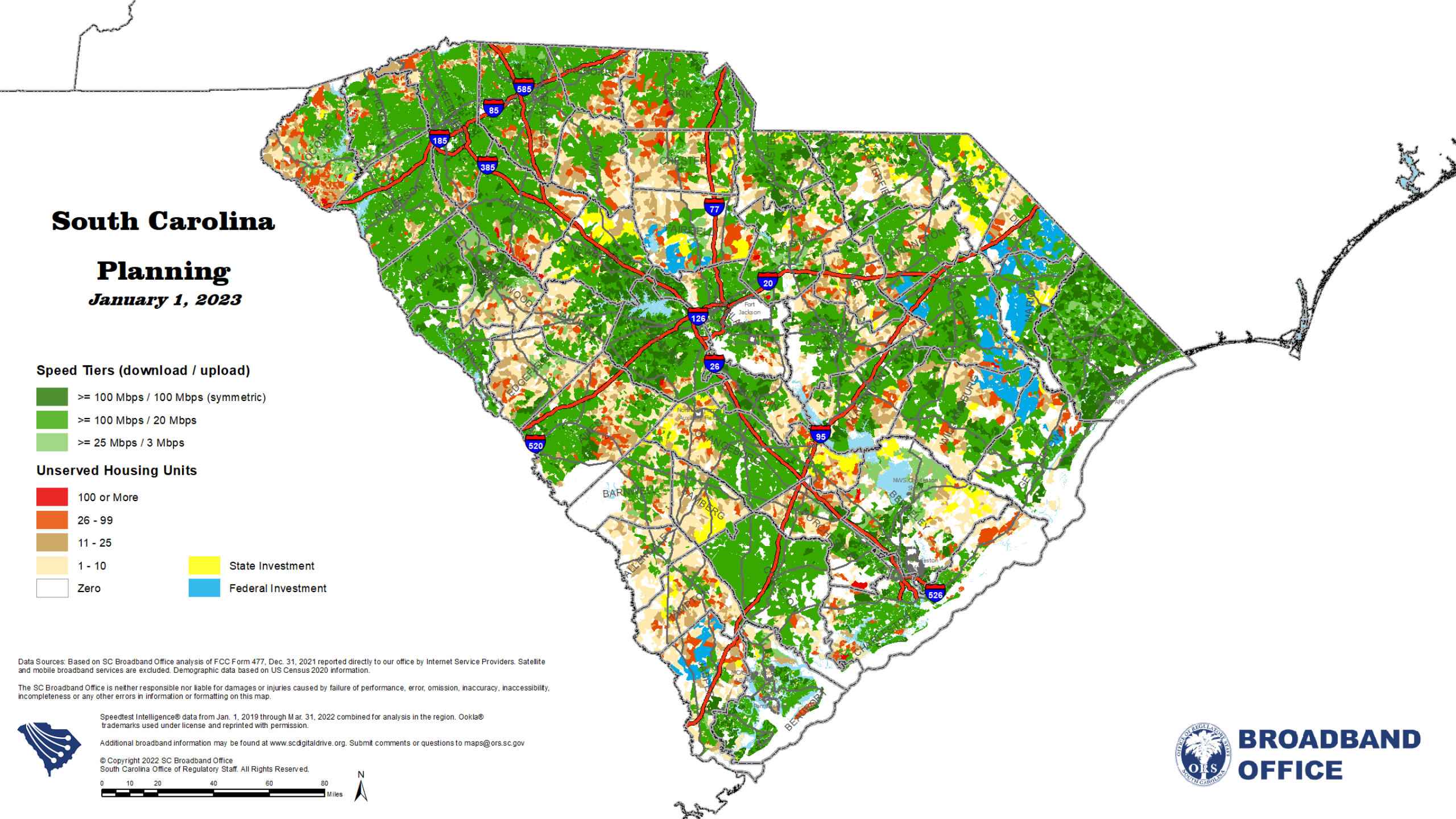
South Carolina

Planning

January 1, 2023



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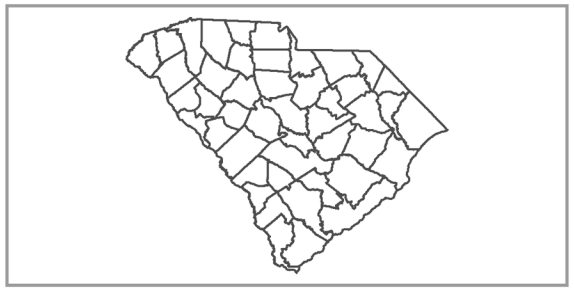
South Carolina

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	*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	

www.SCDigitalDrive.org

BROADBAND OFFICE | Broadband Maps | Consumers | Stakeholders | State Broadband Office | Contact

SOUTH CAROLINA DIGITAL DRIVE

Tools and resources to inform consumers and stakeholders

Don't have access to internet? Take the *I Need Internet* survey

Search for maps by county and type

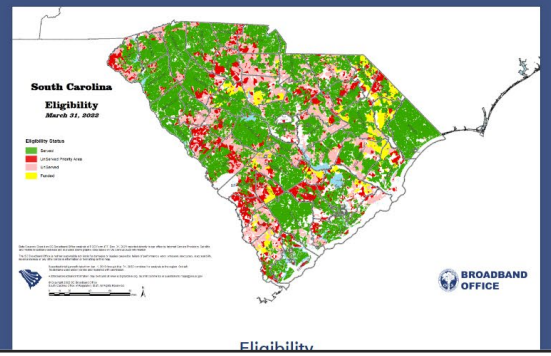
Current Total Housing Units With At Least 25↓ Mbps / 3↑ Mbps Service

2,164,673*

Current Total Housing Without 25↓ Mbps / 3↑ Mbps S

181,715*

Explore Maps



Eligibility

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 mapping@ors.sc.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

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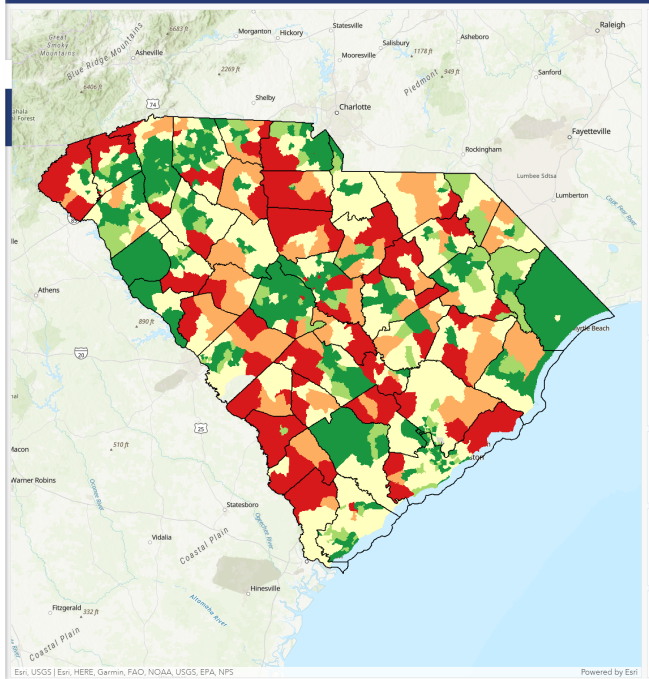
SC Broadband Dashboard March 2022 Data

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

Percent of Residential Addresses Served by Copper in Statewide
4.22%
*Note copper technology is considered Unserved

Total number of Funded Households
56,218

Total number of Unserved Households
181,715
That DON'T meet 25↓ Mbps / 3↑ Mbps

Percent of Residential Addresses Unserved in Statewide
7.74%

Total number of Served Households
2,164,673
That meet the Min 25↓ Mbps / 3↑ Mbps

ORS.SC.GOV

SC ARPA SFRF 2022 Grant Programs

** All subsequent information is pending approval and is subject to change.*

AMERICAN RESCUE PLAN ACT

H.B. 4408 $400 Million for SC Broadband Infrastructure

H.B. 4408 Enacted May 13, 2022

State Fiscal Recovery Fund

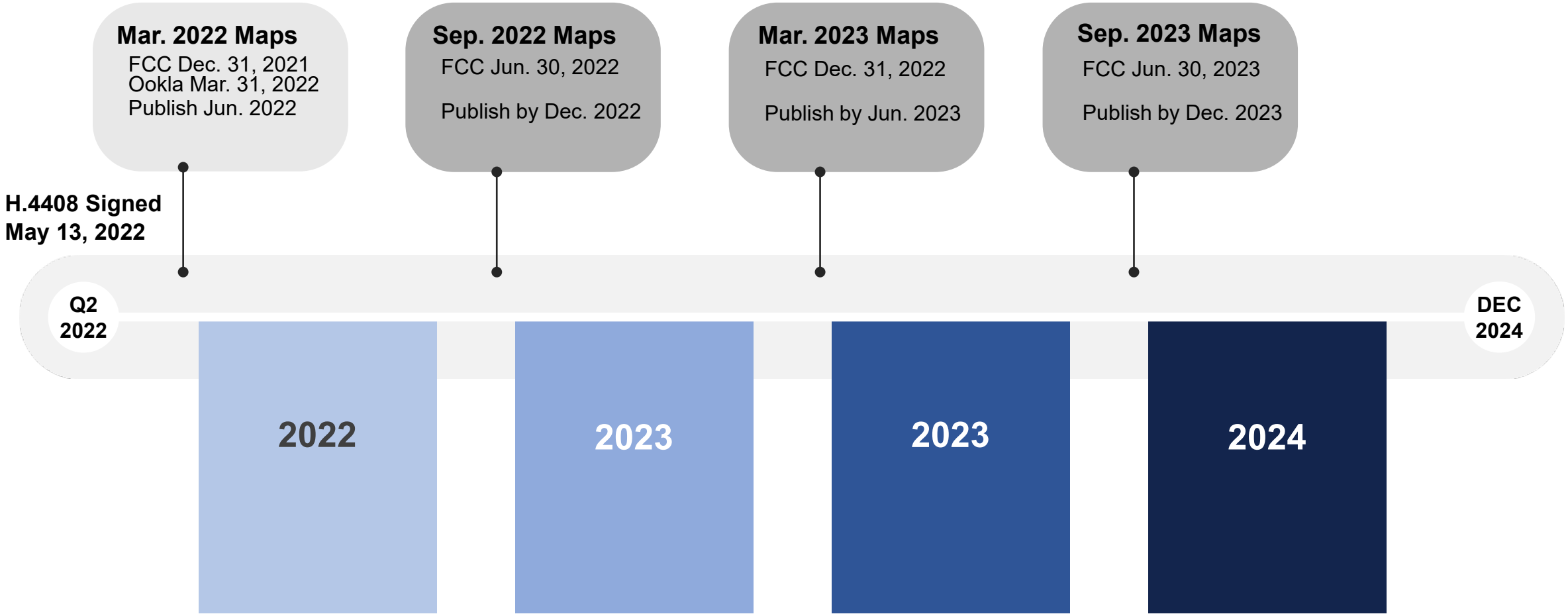
- $214.2 Million

Capital Projects Fund

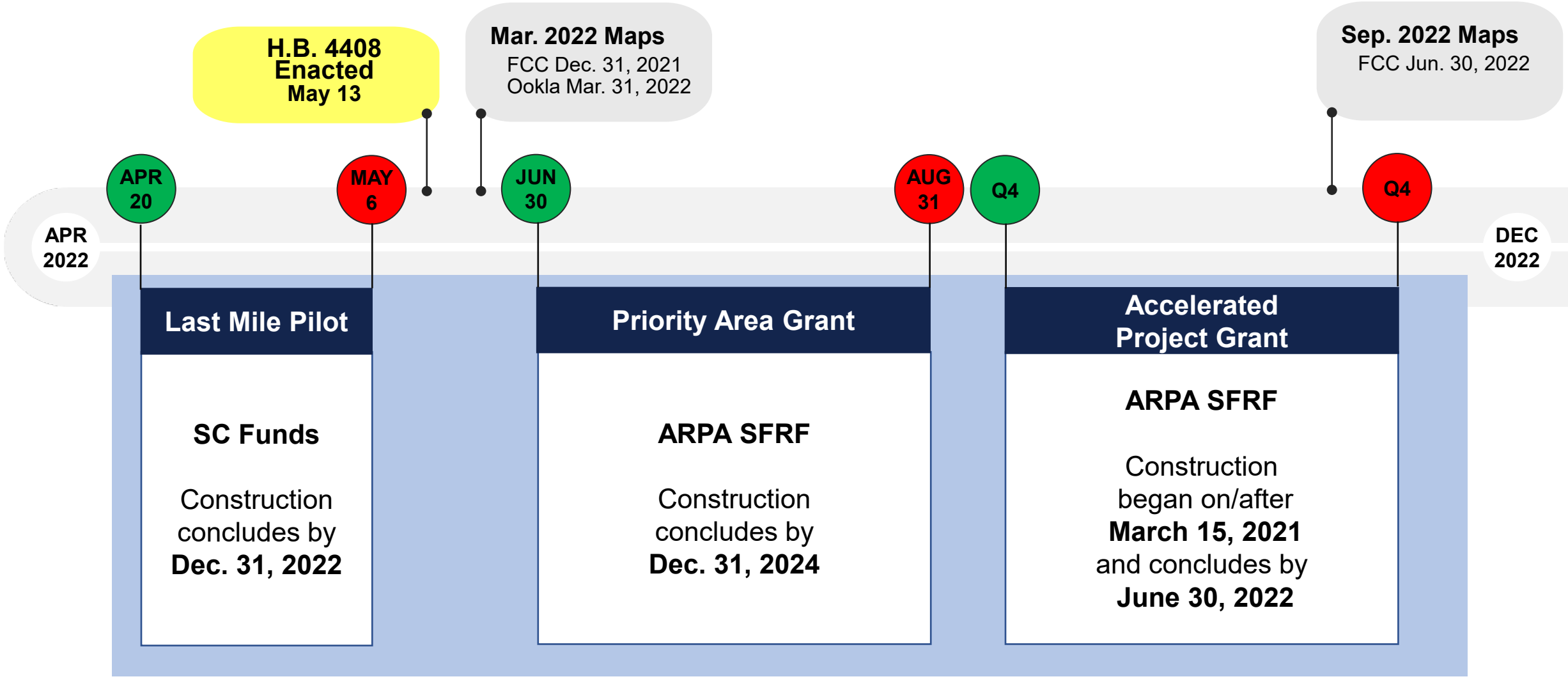
- $185.8 Million

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 BROADAND INVESTMENT ROADMAP



2022 SC BROADBAND GRANT PROGRAMS



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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) **No Internet Service Provider; or,**
   - ✓ FCC Form 477 data shows null value for ISP as of Dec. 31, 2021

3) **Difficult Development Areas as identified by US Housing and Urban Development (HUD)**
   - ✓ Defined geographies that are updated annually by HUD and are the basis for deploying Community Development Block Grants (CDBG) in the United States.

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.

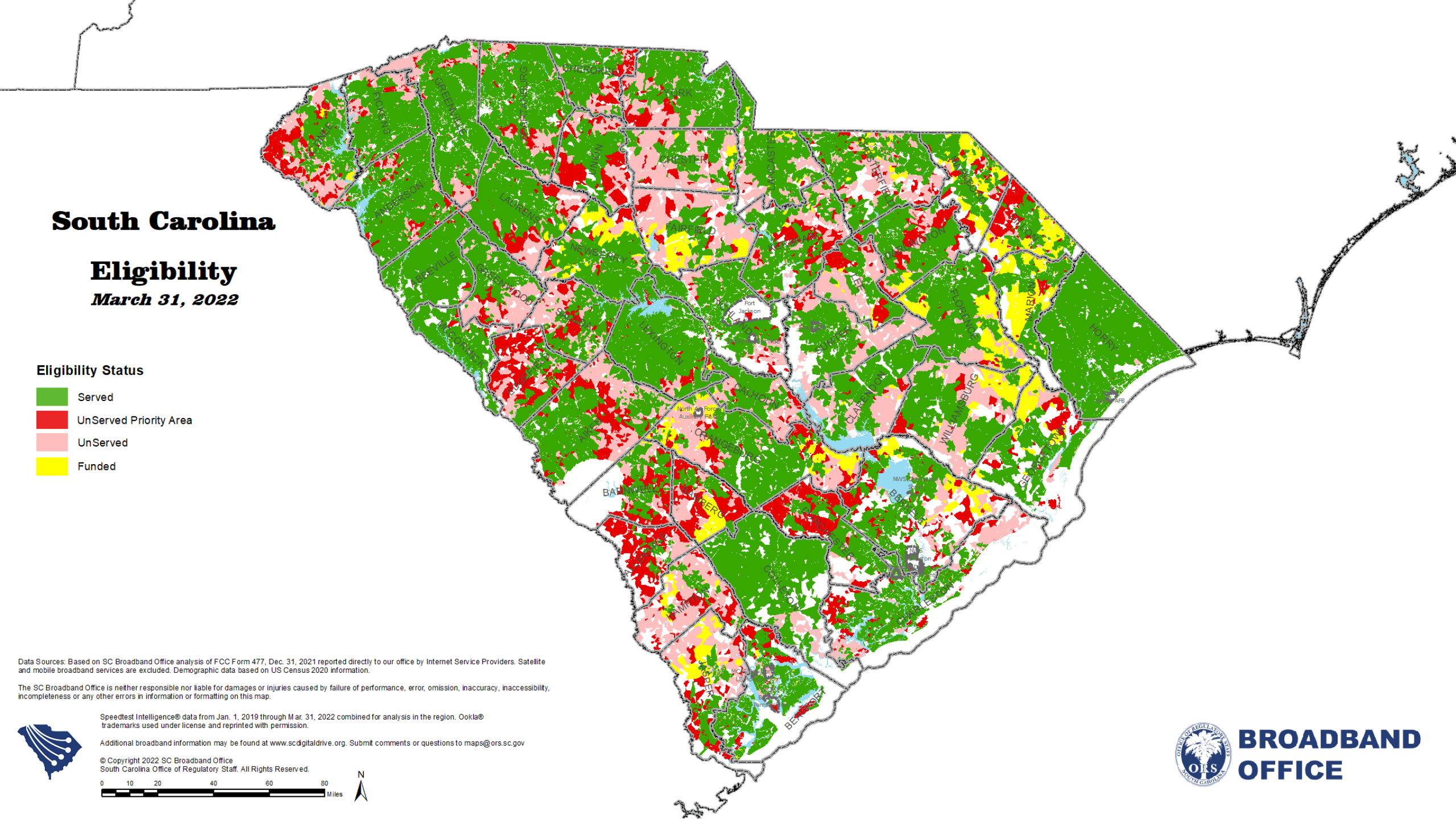
What are the match requirements?

Applicant May Define Their Own Match For Priority Areas!

South Carolina

Eligibility

March 31, 2022



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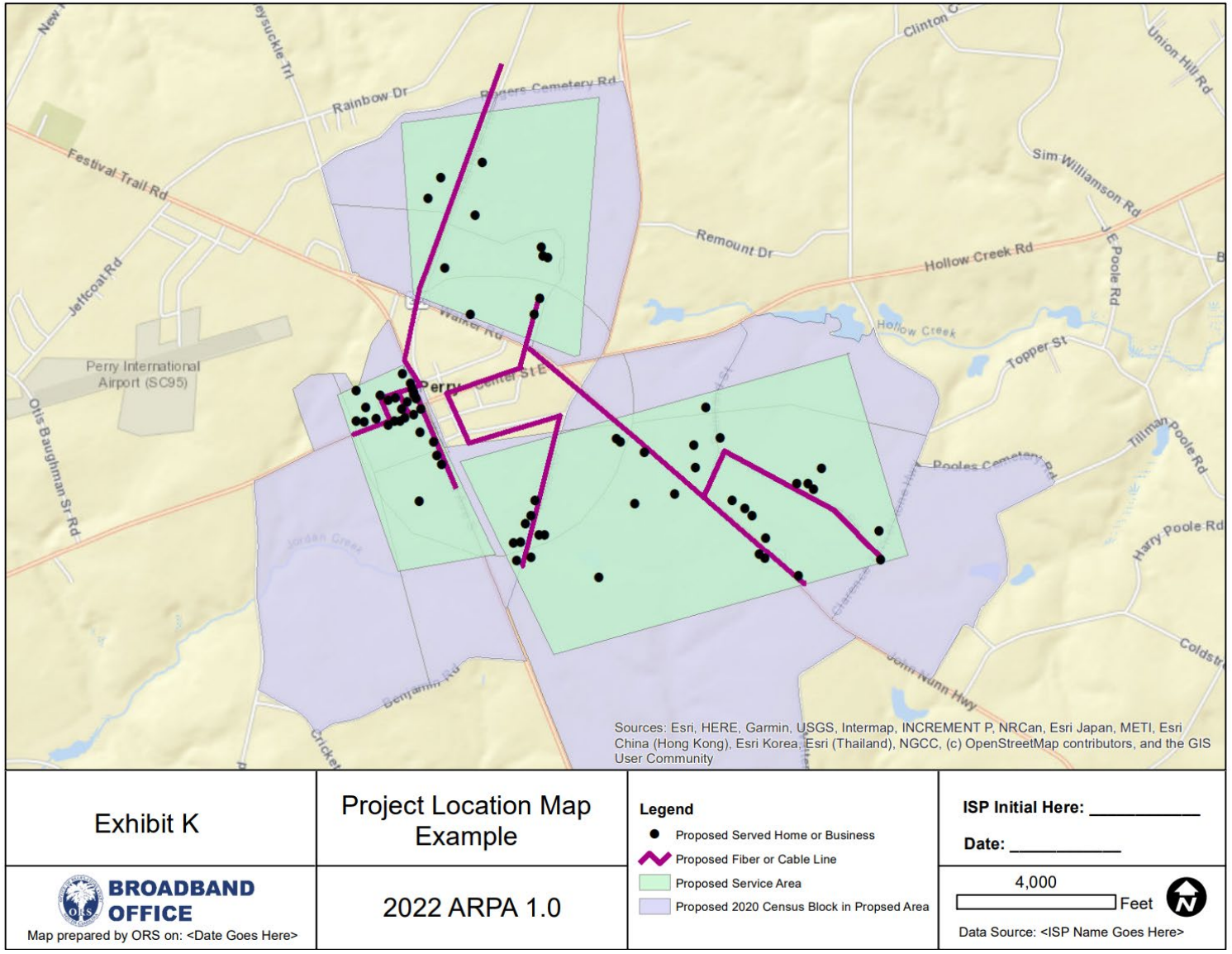
Required GIS Project Template

Ideal GIS Submission

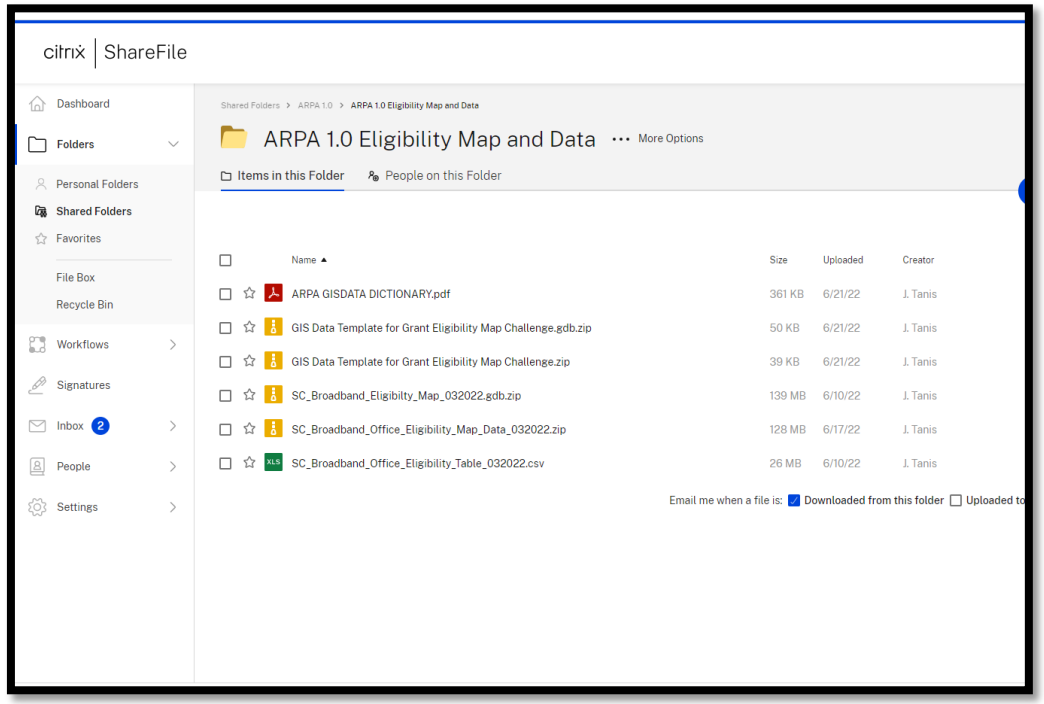
Four Key Layers

- **2020 Census Blocks**
  - ✓ Published during application comment period
- **Project Service Area**
- **Fiber or Cable Routes**
- **Proposed Served Locations**



Where do I find GIS Template Data?

Citrix ShareFile



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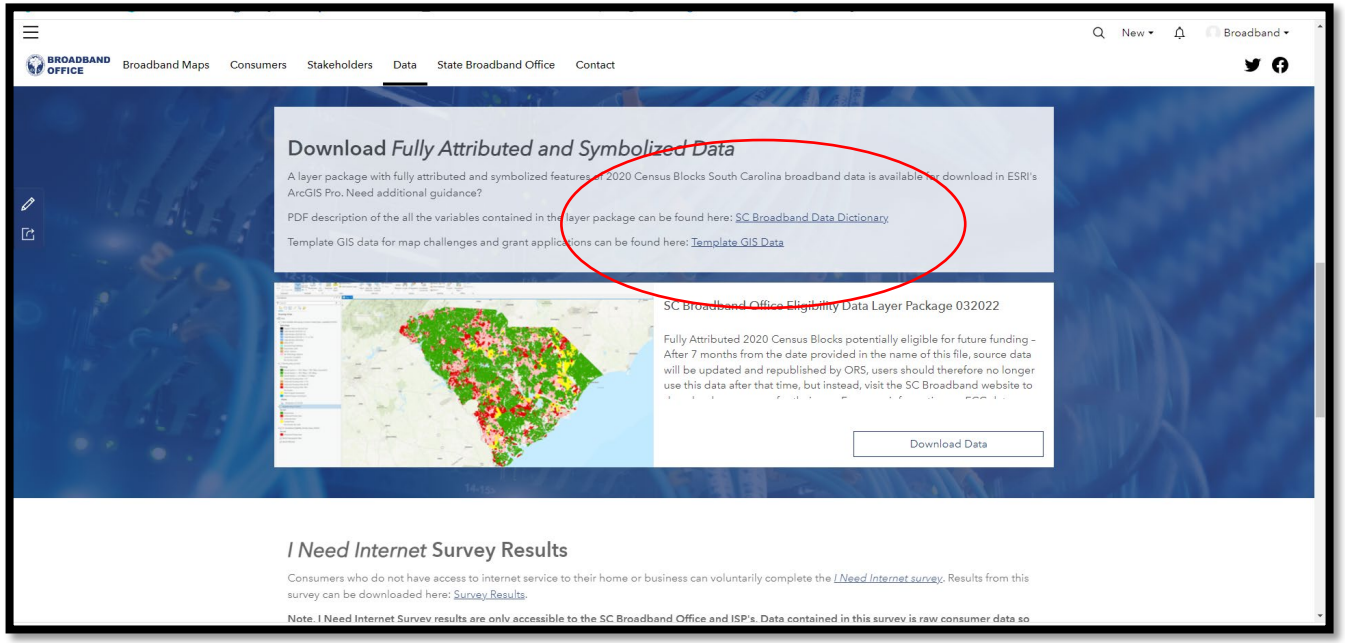


GIS Data Dictionary

Project Service Area

Layer Name	Layer Type	Definition	Comments
Proposed Project Service Area	Polygon	The serviceable project area boundary from which all structures will have Broadband Access upon completion of the project	Area should be inclusive of all proposed homes, businesses, and anchor institutions an ISP proposed to pass. Upon award, geometry cannot change without an amendment to the agreement
Attribute Name	Data Type	Definition	Values/Comments
Project ID Alias = ProjectID	Text	Unique ID provided by an ISP	This is an ISP generated value preferably linked to their internal management system
TechType Alias = Technology Type	Text	Type of Technology to be deployed	Fiber to the Premises, Hybrid Fiber/Coax, Fixed Wireless/Satellite

Proposed Census Blocks in Service Area

Layer Name	Layer Type	Definition	Values/Comments
2020 Census Blocks in Proposed Service Area	Polygon	Eligible 2020 Census Block data depicting only those areas for which a proposed project may occur	Feature instances should match with native 2020 Census Block data, (do not merge or edit the geometries of the Census data), only those areas where projects are proposed should be included. Upon award, geometry cannot change without an amendment to the agreement
Attribute Name	Data Type	Definition	Values/Comments
Project ID	Text	Unique ID provided by an ISP	This is an ISP generated value preferably linked to their internal management system
GEOID 2020	Integer	Unique Census Block ID for a given feature instance	This value is generated by the US Census
PerServed Alias = Percent to be Served	Float	Percentage of housing units within a Census Block to be served upon completion of the project expressed as a decimal value	If an ISP doesn't plan to serve every housing unit within a given Census block, estimate the number of homes that will have access as a percentage
TotHouse Alias = Total Housing Unit	Integer	Total number of housing units in the census block	The total number of housing units in a blocks according to the ISP
TotK12 Alias = Total number of K –12 Students	Text	Total number of K – 12 students	This value comes from the most current SC Broadband Office Eligibility map or Attribute table 0 = No Students YES = 1-5 Students 6 or more students is the raw student count
DDA Alias = HUD DDA	Integer	Indicating if it is a HUD DDA Census block	A value of Yes if the Census if a HUD DDA census block or a value of No if it is not a HUD DDA Census Block

GIS Data Dictionary

Proposed Line Work

Layer Name	Layer Type	Definition	Comments
Proposed Line Work	Line	Proposed broadband lines an ISP will construct upon completion of the project	Digitized fiber lines should be separated by segments, by technology type, and deployment type, snapped to vertices of adjoining fiber lines. Upon award and completion of the project, ISP must submit as-built update depicting actual locations of fiber lines that align with quantities outlined in expense reports prior to final payment.
Attribute Name	Data Type	Definition	Values/Comments
FCCTech Alias = FCC Technology Code	Integer	The FCC Technology code proposed for construction	50, 43, 42
Length	Integer	Length in feet of a given line segment	Length in feet calculated from read-only length field
DepMethod Alias = Deployment Method	Text	The method for which Broadband technology will be deployed at a given line segment	Aerial, Buried, Wireless

Network Proposed Served Structures

Layer Name	Layer Type	Definition	Comments
Proposed Served Structures	Point	Projected Homes/Business/Other structures that will be passed upon completion of the project	Structures should be fully contained within Project Service Area and 2020 Census Block Areas. Upon award and completion of the project, ISP must submit as-built update
Attribute Name	Data Type	Definition	Values/Comments
Type	Text	The type of structure that could be served upon completion of the project	Homes, Businesses, Other
Address	Text	Full address of the structure (House Number, Street Name, Unit/Apt., City, and Zip Code)	Complete physical address of the structure.

Network Junctions

Layer Name	Layer Type	Definition	Comments
Network Junctions	Point	Projected major surface features along a Fiber Line segment	With the exception of those areas an ISP must tie into their existing infrastructure, network junctions should be mostly contained within the Project Service and 2020 Census Block Areas. Upon award and completion of the project, ISP must submit as-built update depicting actual locations of fiber Network Junctions that align with quantities outlined in expense reports prior to final payment.
Attribute Name	Data Type	Definition	Values/Comments
Type	Text	The type of surface feature that's part of the fiber network	Node, Large Cabinet, Pedestal, Ect.

ISP Data Confidentiality

2021-2022 Provisions Ratified by SC General Assembly

- *Excerpt from Section 73.7 – "In order to facilitate the provision of information necessary to this task, all information provided by a broadband service provider or other entity providing information for the purpose of creating a South Carolina broadband map shall be maintained by the Office of Broadband Coordinator and any other agency as confidential, proprietary, and a trade secret as defined in Section 30-4-40 of the 1976 Code, and subject to exemption from disclosure under state and federal law."*

2022 HB 4408 Section 12 Paragraph B

- *"(B) The Office of Broadband Coordinator shall maintain as confidential all individual company-designated proprietary information. All such individual proprietary information is exempt from the provisions contained in S.C. Code Sections 30-4-10, et seq., the South Carolina Freedom of Information Act."*

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 ***Challenge period to eligibility map opens***	6/20/2022
Application Period Opens ***Challenge period to eligibility map closes***	**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 & Financial Reports Due	4/17/2023 - 10/31/2024
Project Completion	**12/31/2024**
Final Reporting Due	1/30/2025

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

Developing 2022 Priority Area Grant Applications

Application Highlights

- **Pivoting Grant Application from fillable PDF to Microsoft Excel Format**
  - ✓ Each tab corresponds to another section of the Grant Application
  - ✓ Will assist ORS with streamlining review process
- **ISP shall upload Microsoft Excel Document, GIS Data, Associated Attachments to Citrix**
  - ✓ Contact broadband@ors.sc.gov if you don't have access to SC Broadband Citrix File Share
- **ISP must provide signed affidavit certifying grant application is accurate and complete**

Grant Application Components

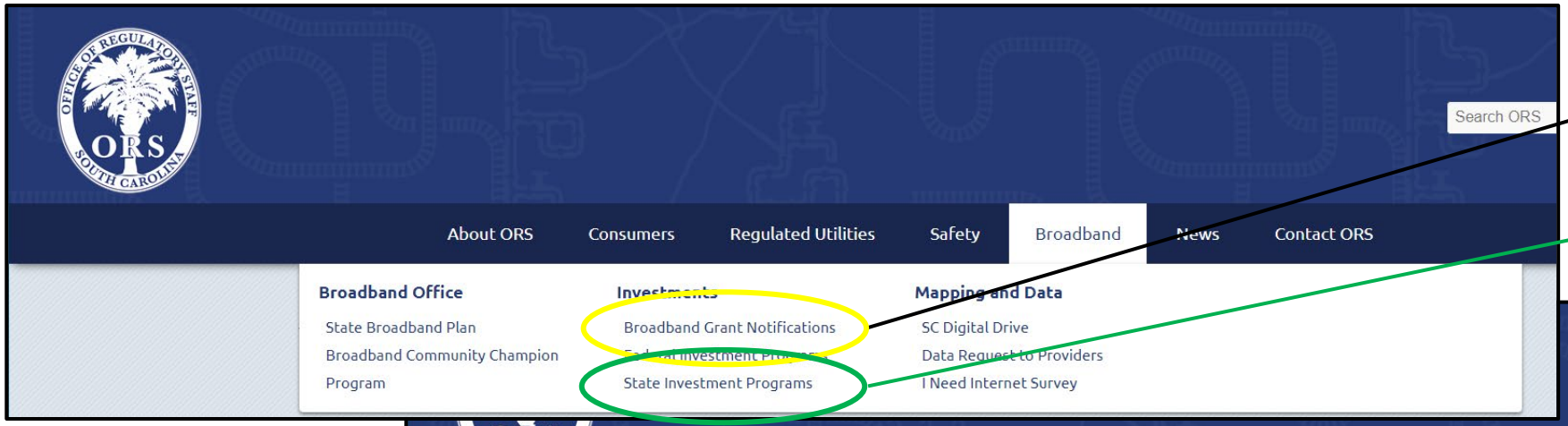
1) **Applicant Information**
2) **Budget Summary**
3) **Confirmations**
4) **Additional Information**
    - Project Narrative
    - Needs of the Community
    - Strategies for **Improving Adoption** and **Increasing Digital Literacy**
5) **Project Sponsors**
6) **Attachments**

Grant Financial Components

Excel Reporting Tabs

1) Summary
2) Payroll & Fringe
3) Other Expenses
4) Materials & Supplies

Locating Documents



Sign up for all notifications!

Pathway for Grant Docs

ORS.SC.GOV/Broadband

INFRASTRUCTURE ACT* CREATES ~$65B IN BROADBAND FUNDING

NTIA will administer ~$48B of this new funding

BEAD

$42.45B

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.

DIGITAL EQUITY

$2.75B

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.

TRIBAL

$2.00B

Title II - Tribal Connectivity Technical Amendments

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

MIDDLE MILE

$1.00B

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.

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't to use private activity bonds for rural broadband

** Infrastructure Investment and Jobs Act, Division F, Pub. L. 117-58 (Nov. 15, 2021)*
Note: funding amounts inclusive of all administrative set-asides.

Questions and Answers

Please email all questions to broadband@ors.sc.gov

Thank you!

BROADBAND OFFICE