



SC Broadband Advisory Council

Enabling South Carolinians to Thrive in the Global Digital Economy

South Carolina Office of Regulatory Staff | October 11, 2022

Agenda

Welcome / Roll Call

Review & Approve Minutes

New BBAC Members

Jim Stritzinger, Co-Chair

Anna Berger, Co-Chair

SC Broadband Office Update

Jim Stritzinger, ORS

SC Digital Equity Office Introduction

Mike Shealy, SC Admin

Sara Pincelli, SC Admin

Other Business

All

Next Meeting – Tuesday, Jan. 10, 2023

Adjourn

All

McMaster, Clyburn celebrate milestone of 100K homes provided high-speed internet access

BY SEANNA ADCOX SADCOX@POSTANDCOURIER.COM

OCT 3, 2022

1 of 2



U.S. Rep. Jim Clyburn, South Carolina's senior congressman and only elected Democrat in Washington, and Gov. Henry McMaster, a Republican seeking re-election, appeared together in the governor's Statehouse office Monday, Oct. 3, 2022, to celebrate bipartisan efforts to expand access to high-speed internet statewide. Seanna Adcox/Staff

BY SEANNA ADCOX SADCOX@POSTANDCOURIER.COM

BUY NOW

and



BROADBAND OFFICE

2022 Year in Review

September 30, 2022

Preliminary

Areas of Need

Speed Tiers (download / upload)

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

Unserviced Housing Units

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

Best Available Technology

- Fiber | Speeds >= 100 Mbps/100 Mbps (symmetric)
- Cable (DOCSIS 3.1+) | Speeds >= 100 Mbps/100 Mbps
- Cable (DOCSIS 3.0) | Speeds >= 100 Mbps/20 Mbps
- Cable (DOCSIS < 2.0), All Other | 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, all other Copper | Speeds >= 3 Mbps/768 kbps
- No Internet Service Available

Data 2021: Based on SC Broadband Office analysis of FCC Form 477, Dec. 31, 2020 (pub. Oct. 29, 2021). In addition, multiple Internet Service Providers contributed their FCC Form 477, Jun. 30, 2021 data to augment and update the base dataset. Satellite and mobile broadband services excluded. Demographic data based on US Census 2010 information that was enhanced with ES11 premise-level information through Jun. 30, 2020. Ookla® Speedtest Intelligence® data from Jan. 1, 2019 through Jun. 30, 2021 combined for analysis in the region.

Data 2022: Based on preliminary SC Broadband Office analysis of FCC Form 477, Jun. 30, 2022 reported directly to our office by Internet Service Providers. Satellite and mobile broadband services excluded. Demographic data based on US Census 2020 information. Speedtest Intelligence data from Jan. 1, 2019 through Jun. 30, 2022 combined for analysis in the region.

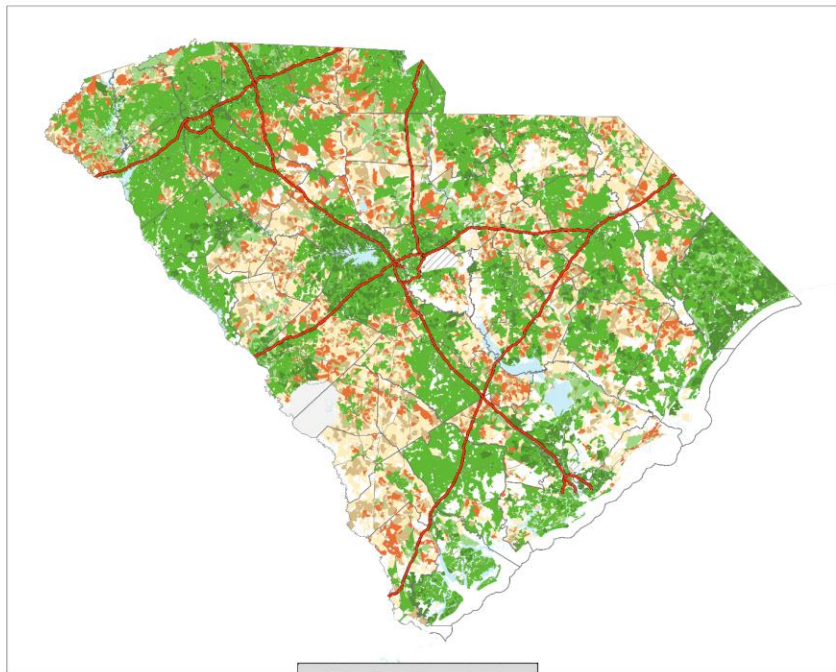
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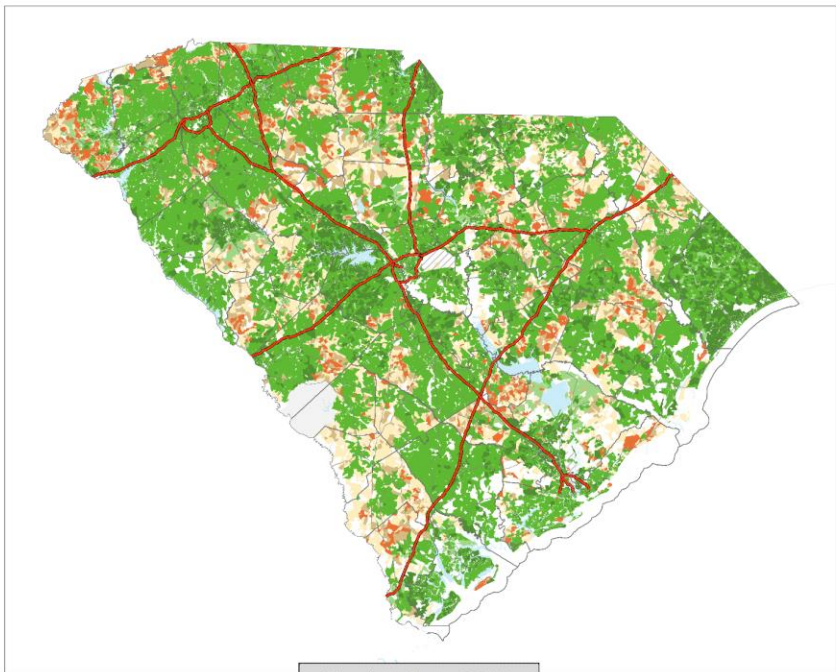
Submit comments or questions to maps@ons.sc.gov



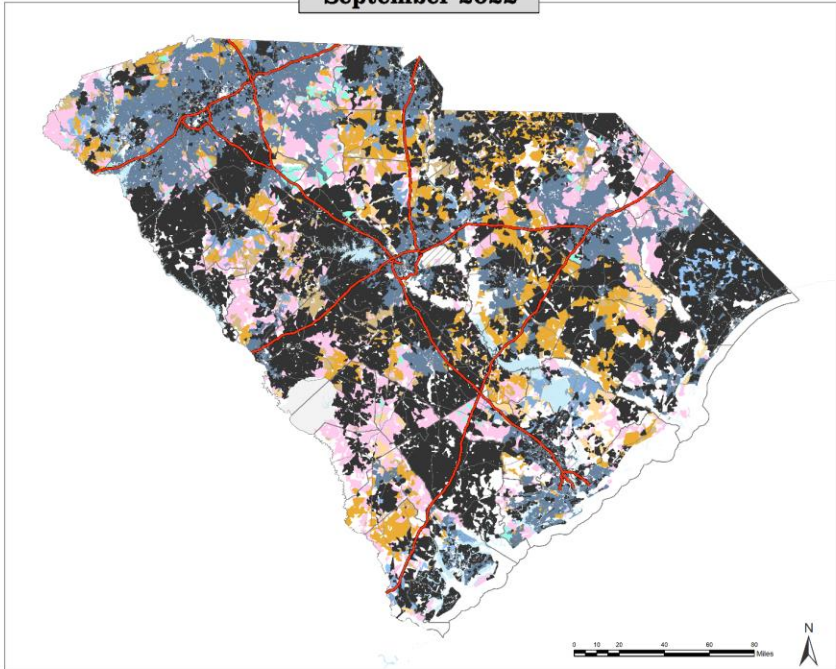
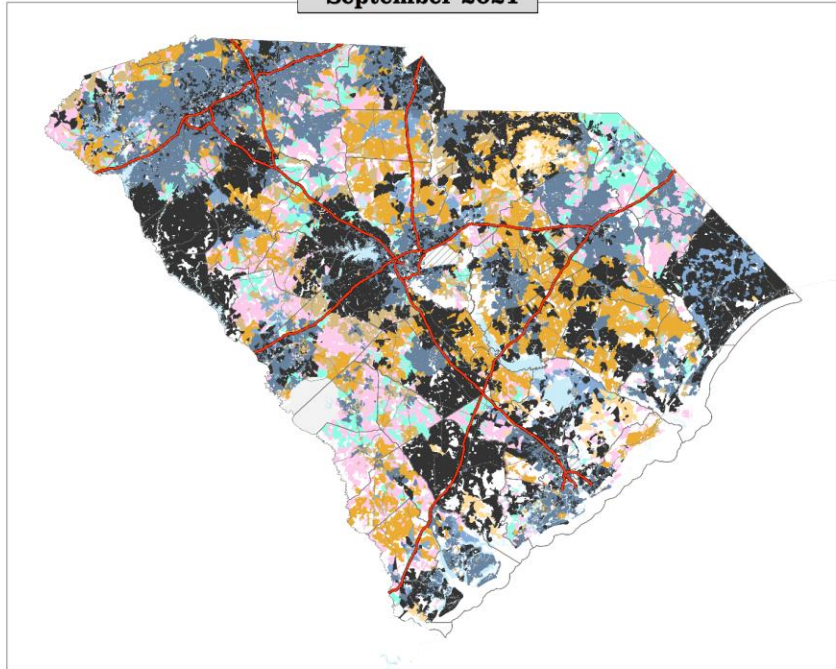
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September 2021



September 2022





Office of Broadband Coordinator

ANNUAL REPORT



Rural Broadband Grant Program (As of 6/30/22)

- 1) 17 Internet Service Providers / 18 Counties (11 Eligible / 7 Contiguous)**
- 2) \$30M State Money / Collaboration w/ SC Department of Commerce**
- 3) 1,245.9 miles of Fiber Construction**
- 4) Access for 9,164 Housing Units (54% of funded HU)**
- 5) Of the 31 projects**
 - Complete – 9**
 - > 75% and < 99% Complete – 13**
 - > 50% and < 74% Complete – 6**
 - < 50% Complete – 3**
 - 3 Relinquished**
- 6) \$42,034,672 Project Expenses Incurred**
- 7) Most Construction Complete By Oct. 31, 2022**

AMERICAN RESCUE PLAN ACT

H. 4408 \$400 Million for SC Broadband Infrastructure

Enacted
May 13, 2022

State Fiscal Recovery Fund

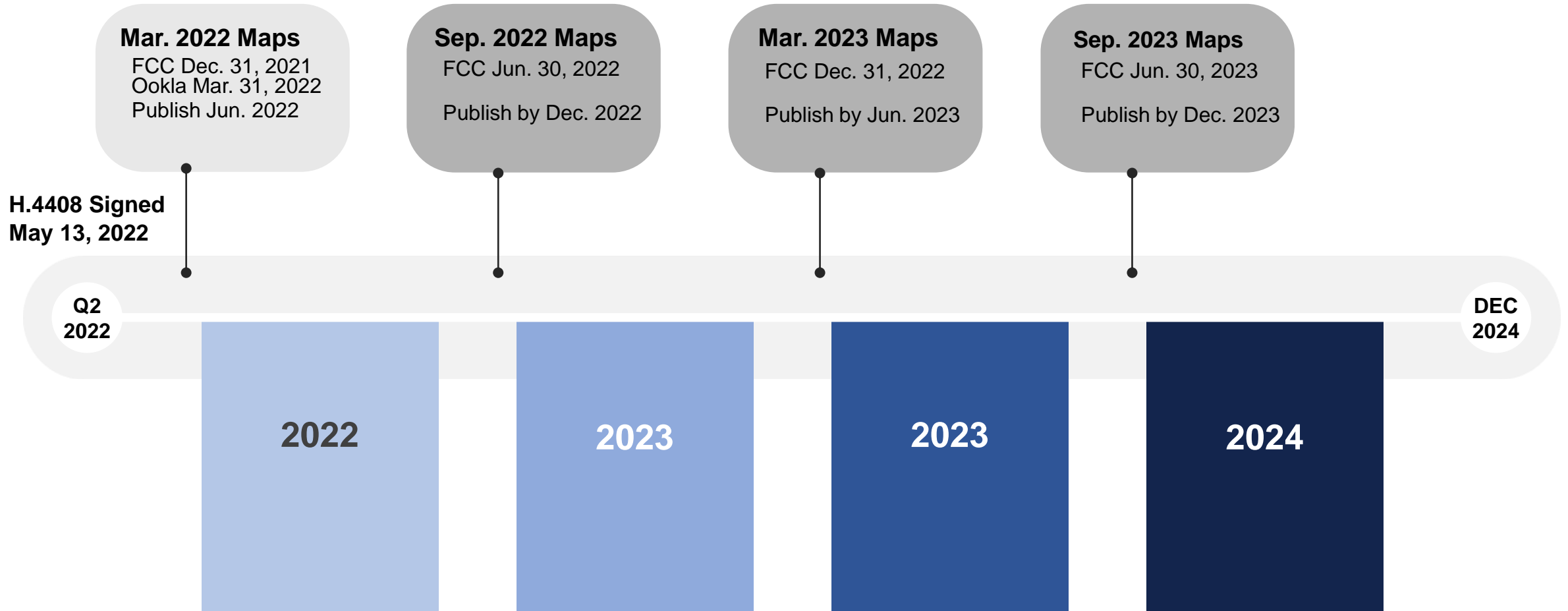
- \$214.2 Million

Capital Projects Fund

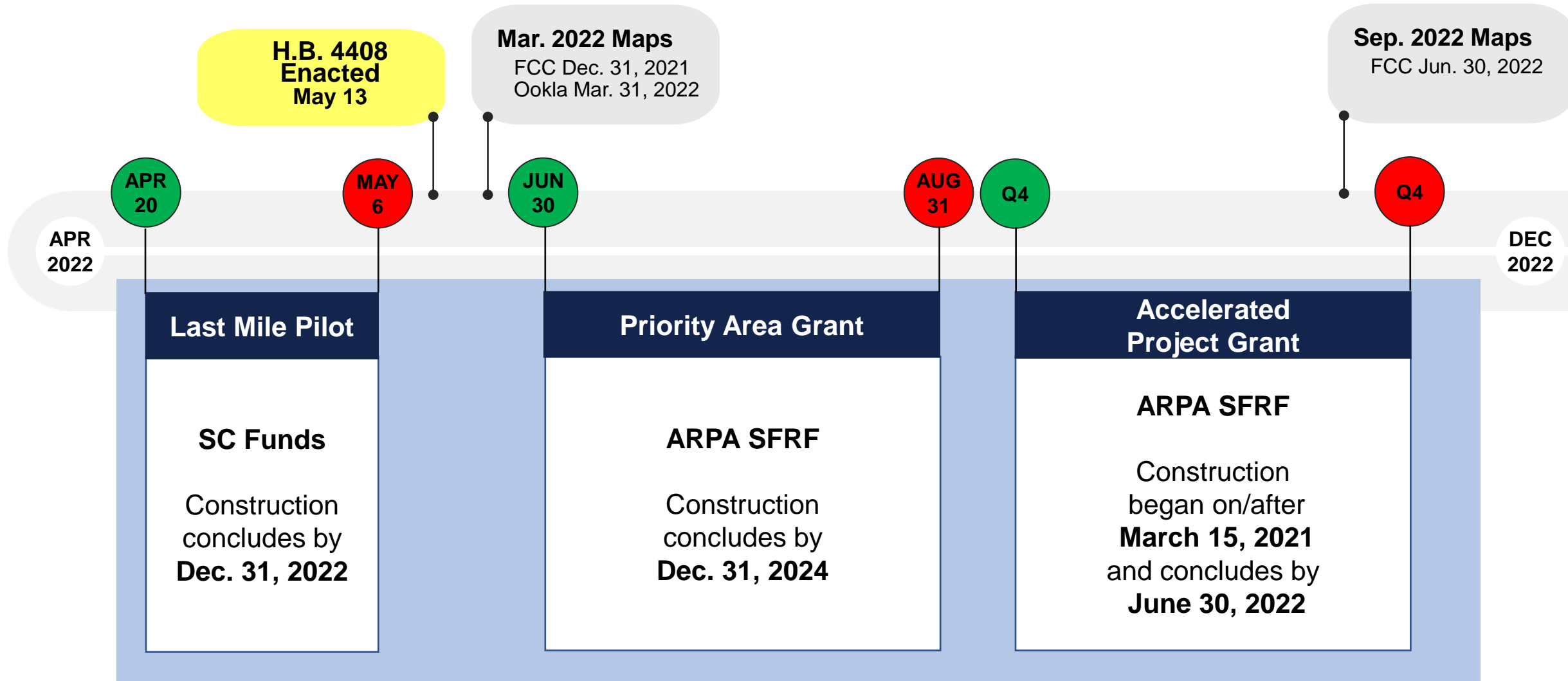
- \$185.8 Million

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 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!

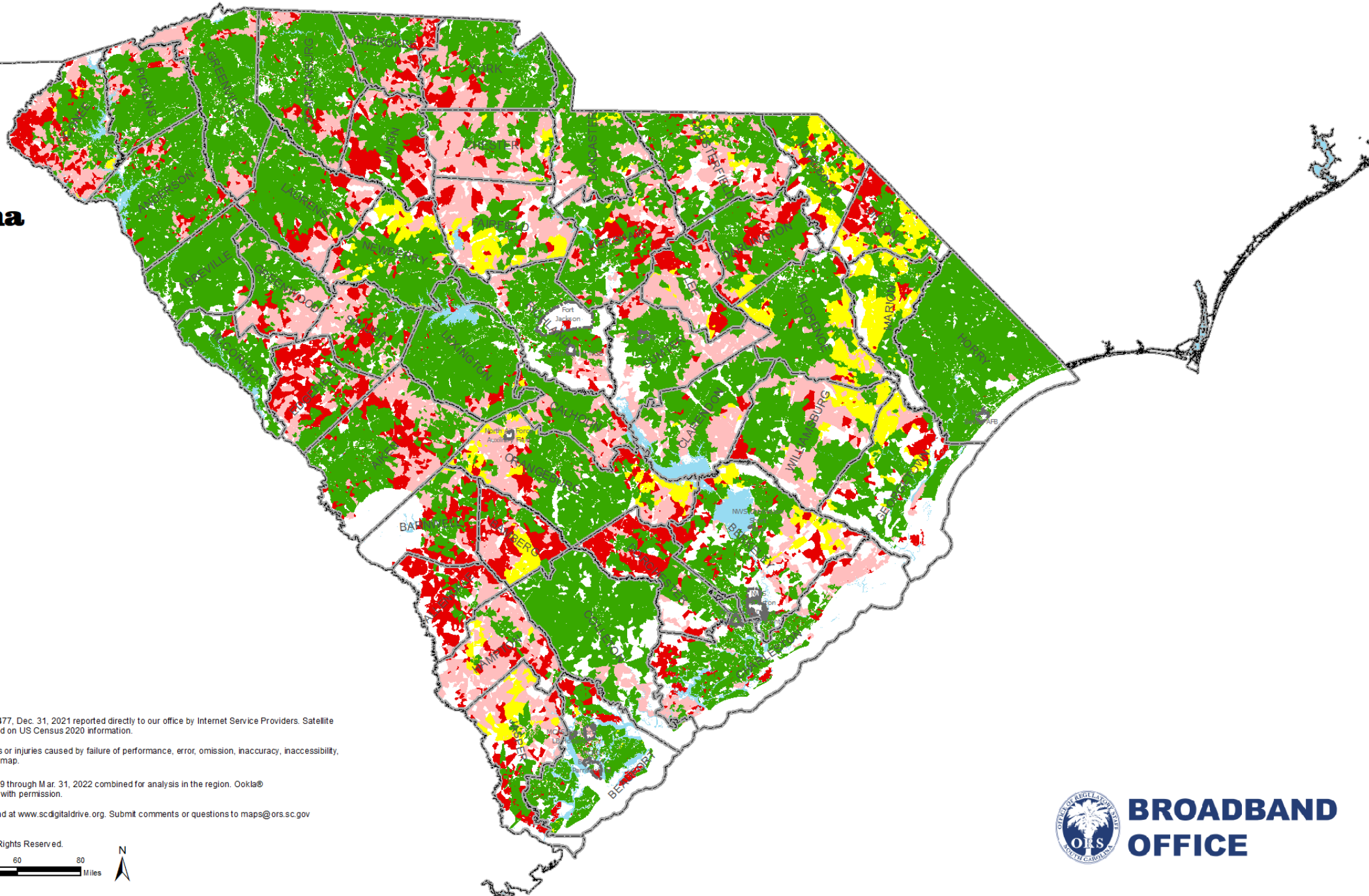
South Carolina

Eligibility

March 31, 2022

Eligibility Status

-  Served
-  UnServed Priority Area
-  UnServed
-  Funded



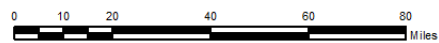
Data Sources: Based on SC Broadband Office analysis of FCC Form 477, Dec. 31, 2021 reported directly to our office by Internet Service Providers. Satellite and mobile broadband services are excluded. Demographic data based on US Census 2020 information.

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

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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 expanded, showing 'Broadband Grant Notifications' and 'State Investment Programs' circled in yellow and green respectively.

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 section titled '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.

AMERICAN RESCUE PLAN ACT

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State Fiscal
Recovery Fund

- \$214.2 Million

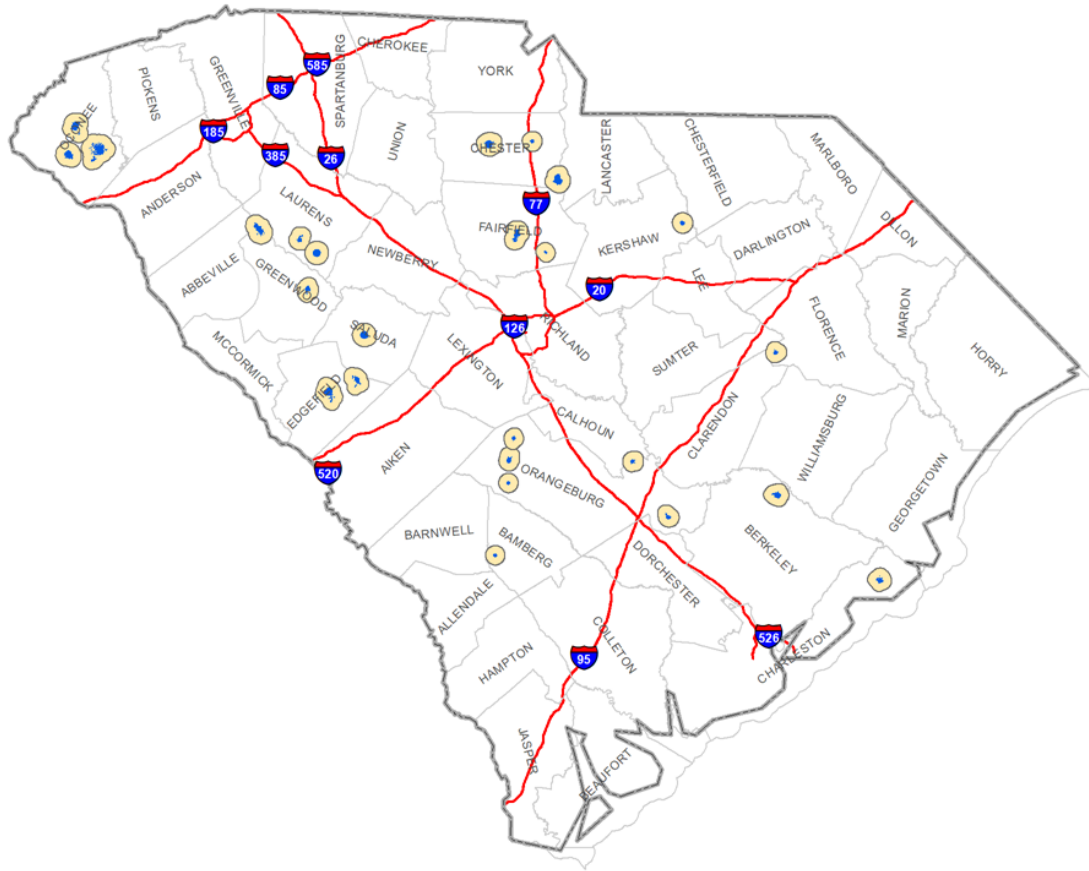
Capital
Projects Fund

- \$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. Add Main Street Priority Areas

- Main St + 2mi buffer

2. Requires 100/100 Symmetric

3. “Dig Once” Opportunities

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

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

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

FCC to administer ~\$14B

BEAD

**DIGITAL
EQUITY**

TRIBAL

**MIDDLE
MILE**

\$42.45B

\$2.75B

\$2.00B

\$1.00B

\$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

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.



BEAD (I/II) | THE "BEAD" PROGRAM WILL PROVIDE ~\$42B FOR INFRASTRUCTURE PLANNING AND IMPLEMENTATION

OVERVIEW

Official name: Broadband Equity, Access and Deployment Program

Funding pool: \$42.45B

Type of program: State and Territory formula program

Program objective: to close the availability gap, as Congress finds that "access to affordable, reliable, high-speed broadband is essential to full participation in modern life in the United States."

PROGRAM PRIORITIES

- 1 Unserved locations
No access to 25/3 Mbps
- 2 Underserved locations
No access to 100/20 Mbps
- 3 Community anchor institutions
Without gigabit connections

Eligible entity must also prioritize

- Persistent poverty / high-poverty areas
- Speed of proposed network
- Build time
- Demonstrated record on compliance with federal labor & employment laws

OTHER KEY FEATURES

Quality requirements

Specific network requirements are included e.g., speeds of at least 100/20 Mbps

Matching requirement

Eligible entities must ensure that they or a subgrantee provide at least 25% match (*unless waiver granted*)

Low-cost plan requirement

Required to offer a low-cost plan to eligible subscribers (*to be determined by NTIA*)

Note: funding amounts inclusive of all administrative set-asides



BEAD (II/II) | STATES AND U.S. TERRITORIES ARE ELIGIBLE FOR FUNDING, WITH LEGISLATION SPECIFYING ELIGIBLE ACTIVITIES

ELIGIBLE ENTITIES

"**Eligible entity**" for this program refers to **all 50 U.S. States and U.S. Territories** (including the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands)

ELIGIBLE COSTS & ACTIVITIES

Planning Funds

- 1) Research & Data Collection
- 2) Publications, Outreach & Communication Support
- 3) Employee Training for SCBBO
- 4) Operating and Increasing Capacity in the SCBBO
- 5) Asset mapping broadband-related activities
- 6) Conducting surveys of unserved, underserved, and underrepresented communities to better understand barriers to adoption.

DIGITAL EQUITY (I/IV) | THE DIGITAL EQUITY ACT CREATES 3 SEQUENCED PROGRAMS TO PROMOTE DIGITAL INCLUSION

OVERVIEW

Official name: Title III – The Digital Equity Act

Funding pool: \$2.75B

Programs' objective: support the closure of the digital divide & promote equity and digital inclusion, so that "individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States."

PROGRAM/S PRIORITIES

- **Veterans**
- Individuals living in households **earning at or below 150% of the poverty line**
- **Aging** individuals
- **Incarcerated** individuals
- Individuals with **disabilities**
- Individuals with a **language barrier**
- Individuals who are members of a **racial or ethnic minority group**
- Individuals who primarily reside in **a rural area**

PROGRAMS CREATED

State program

State Planning Grant Program (\$60M)



State Capacity Grant Program (\$1.44B)

Comp. program

Competitive Grant Program (\$1.25B)

Created once state implementation grants begin being awarded

Note: funding amounts inclusive of all administrative set-asides



DIGITAL EQUITY (II/IV) | THE FIRST PROGRAM CREATES \$60M FOR STATE DIGITAL EQUITY PLANNING

State Planning Grant Program

OVERVIEW

Official name: State Digital Equity Planning Grants

Funding pool: \$60M

Type of program: State and Territory formula program

Programs' objective:
Ensure States have the capacity & appropriate plans to achieve digital equity & support digital inclusion

ELIGIBILITY

"Eligible entities" for this program are any U.S. State, the District of Columbia & Puerto Rico. State Governors must appoint an 'administering entity', which can be one, or a partnership of:

- The State, political subdivision, agency, or instrumentality of State
- An Indian Tribe, Alaska Native entity or Native Hawaiian organization located in the State
- A foundation, corporation, institution, association, or coalition that is a not-for-profit, not a school, and is providing services in the State;
- A community anchor institution (not a school) located in the State.
- A local educational agency that is located in the State.
- An entity located in the State that carries out a workforce development program.
- An agency of the State that is responsible for administering or supervising adult education and literacy activities in the State.
- A public or multi-family housing authority that is located in the State.

ELIGIBLE COSTS

Grant funds awarded for planning can only be used for the following purposes

- To develop the Stage Digital Equity Plan
- To make subgrants to any eligible entities to assist in the development of the State Digital Equity Plan

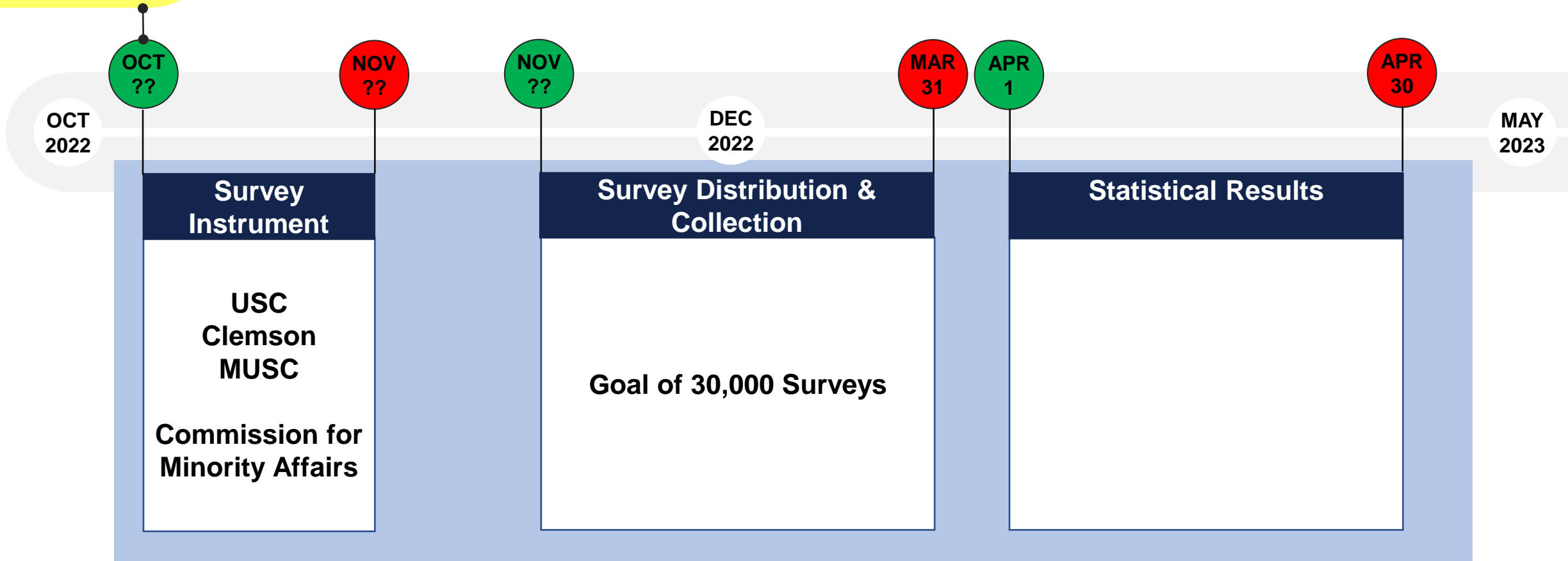
Note: funding amounts inclusive of all administrative set-asides



BEAD / DEA Survey Process

BEAD / DEA
Planning Funds
Received ??

270-Day Shot Clock from Fund Receipt!





Digital Equity Dashboard

October 2022

Ryan Palmer

Global Digital Equity Strategist

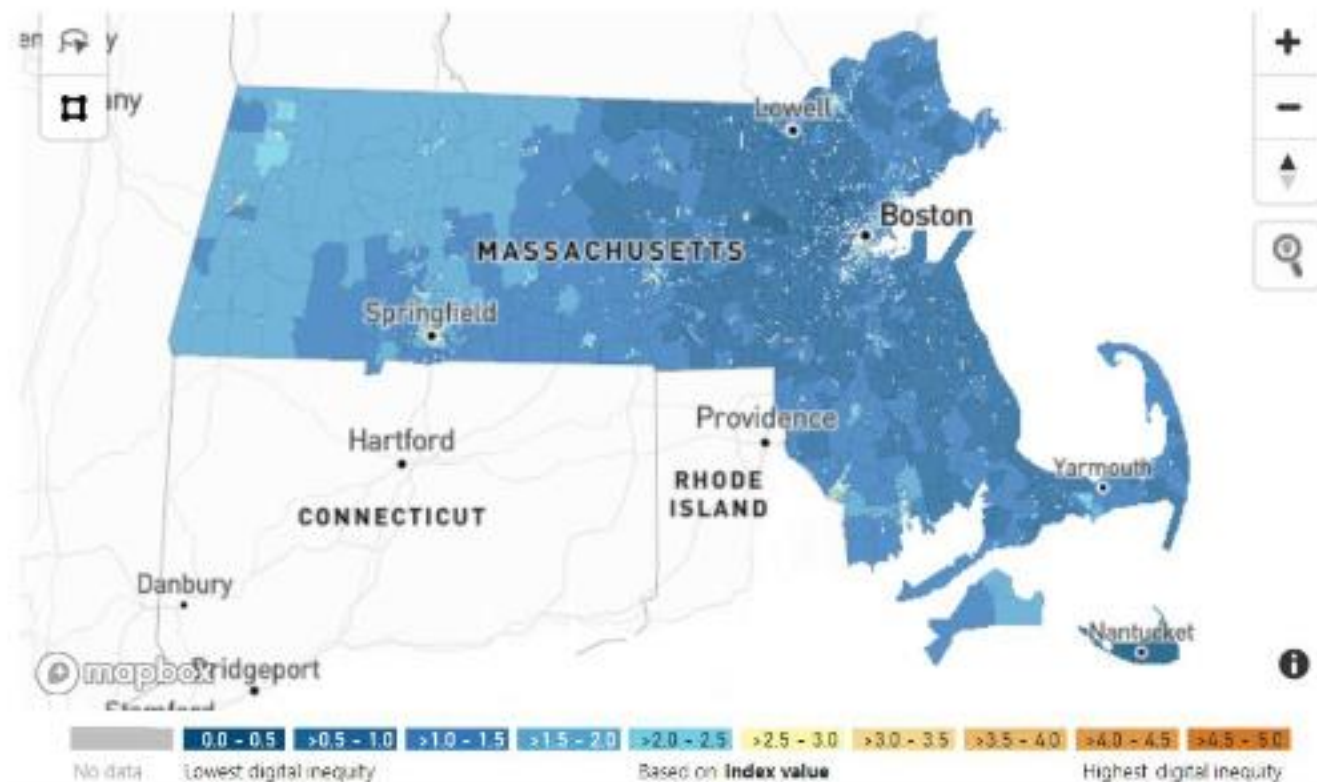
ryanpalmer@microsoft.com



Digital equity data dashboard

A public-facing tool that empowers state agencies and broadband thought leaders with data to target digital equity funds efficiently and maximize resources and investments in communities of highest need.

aka.ms/digitalequitymaps



Report/source	Agency/source	Link
2019 American Community Survey	US Census Bureau	Explore Census Data
14 th Broadband Report	FCC	Fourteenth Broadband Deployment Report
BroadbandNow		Availability by Address - BroadbandNow
Computer Science Access Report	Code.org	Computer Science Access Report Data
Microsoft Broadband Usage	Microsoft	GitHub US Broadband usage

Data Sources

2019 American Community Survey

- 25+ years old without graduating high school
- No internet subscription: broadband such as cable, fiber optic or DSL
- No broadband internet subscription in households < \$20,000
- No broadband internet subscription in households \$20k - \$74,999
- No broadband internet subscription in households \$75,000+
- 25+ years old without an associate's degree or higher
- 25+ years old without a bachelor's degree or higher
- Below poverty level in the past 12 months
- Below 150% poverty level in the past 12 months
- Below 200% poverty level in the past 12 months
- Disability status
- Households without a desktop or laptop
- Without an internet subscription: broadband of any type

FCC 14th Broadband Report

- Without access to broadband of any type
- Without broadband: DSL
- Without broadband: cable
- Without broadband: fiber
- Without broadband: terrestrial fixed wireless

BroadbandNow

% of annual median income spend on broadband

Code.org

% of high schools without a foundational CS course

Microsoft

% of people not using the internet at broadband speed

Inputs to determine digital equity

Input

25+ yrs old without graduating high school

Blank field

Blank field

Select one input, "25+ without graduating high school,"

Blank field

County

If the user sorts the "Details by census tract table" to reveal the census tracts with the lowest index values, they will see the census tracts with the lowest number of residents over 25 without a high school diploma, which have a value of 0.

Data sources and attributions:

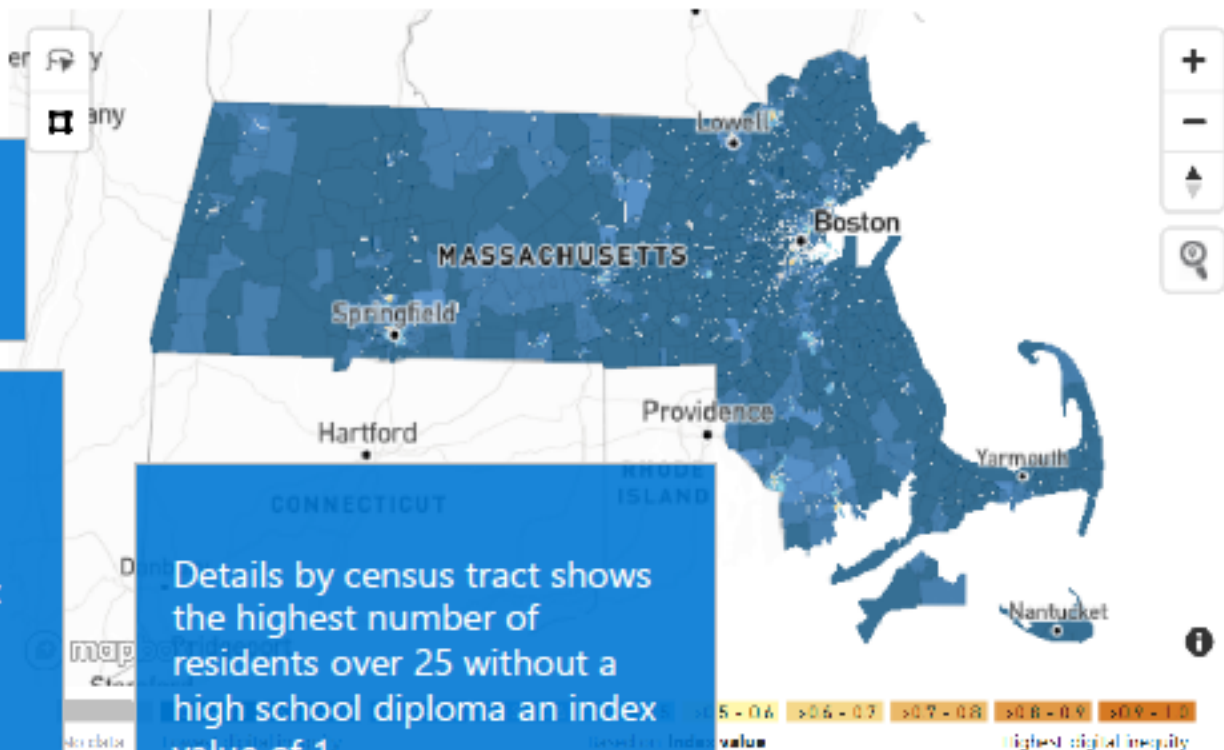
All other census tracts receive index values relatively from 0-1. High index value = high digital inequity, or high need for digital equity funding/interventions

Download data

Microsoft AI for Good Lab

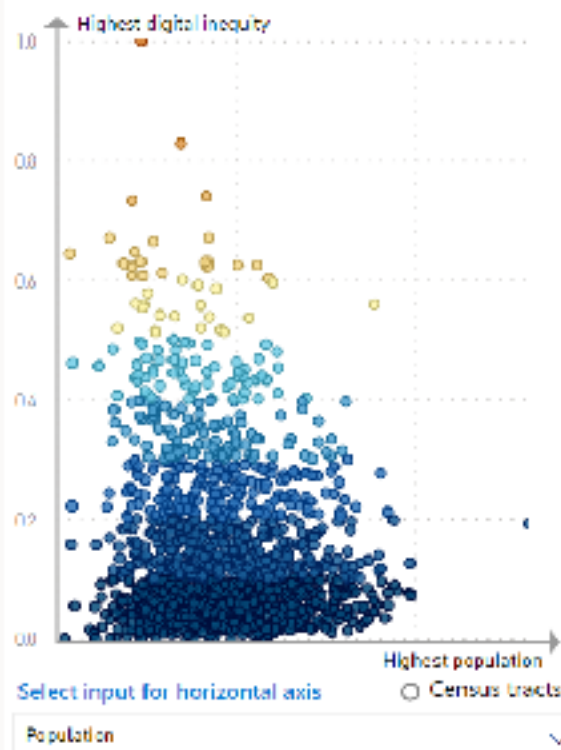
This tool helps state agencies identify areas with the highest digital inequities using a data-driven approach, to maximize resources and investments in the communities most impacted by the digital divide.

Digital equity by census tract



Details by census tract shows the highest number of residents over 25 without a high school diploma an index value of 1

1,470 Census Tracts by Digital Equity and Population



Details by census tract

Census tract	Index	County	Population	W	B / AA	AI & AN	A	NH & OPI	Other	H	25+ yrs old without graduating high school	Blank field	Blank field	Blank field	Blank field
2500300000	1.0	Hampden County	2,374	67%	10%	1%	0%	0%	23%	96%	68.2%				
25009251000	0.8	Essex County	3,479	48%	9%	0%	0%	0%	43%	93%	56.5%				
25009254000	0.7	Essex County	4,192	57%	3%	0%	0%	0%	40%	97%	50.5%				
25009008000	0.7	Hampden County	2,123	62%	12%	0%	0%	0%	26%	82%	50.0%				
25009251200	0.7	Essex County	1,495	41%	2%	2%	0%	0%	54%	97%	45.7%				
Total			6,850,553	78%	8%	0%	7%	0%	7%	12%	9.2%				

Race: W: White | B / AA: Black or African American | AI & AN: American Indian and Alaska Native | A: Asian | NH & OPI: Native Hawaiian and Other Pacific Islander | Other (includes two or more races)
 Ethnicity: H: Hispanic or Latino



Thank you!



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