

The Next, Next Greatest Thing

Rural Broadband: Closing the Digital Divide



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Aug 1, 2021

THE NEXT GREATEST THING



50 Years of Rural Electrification
In America

*“Brothers and sisters,
I want to tell you this.
The greatest thing on earth
is to have the love of God in your
heart, and the next greatest thing
is to have electricity
in your house.”*

Farmer giving witness in a rural
Tennessee church in the early 1940s

THE NEXT GREATEST THING



50 Years of Rural Electrification
In America

*“Brothers and sisters,
I want to tell you this.
The greatest thing on earth
is to have the love of God in your
heart, and the next, **next** greatest thing
is to have **Internet**
in your house.”*

Use:

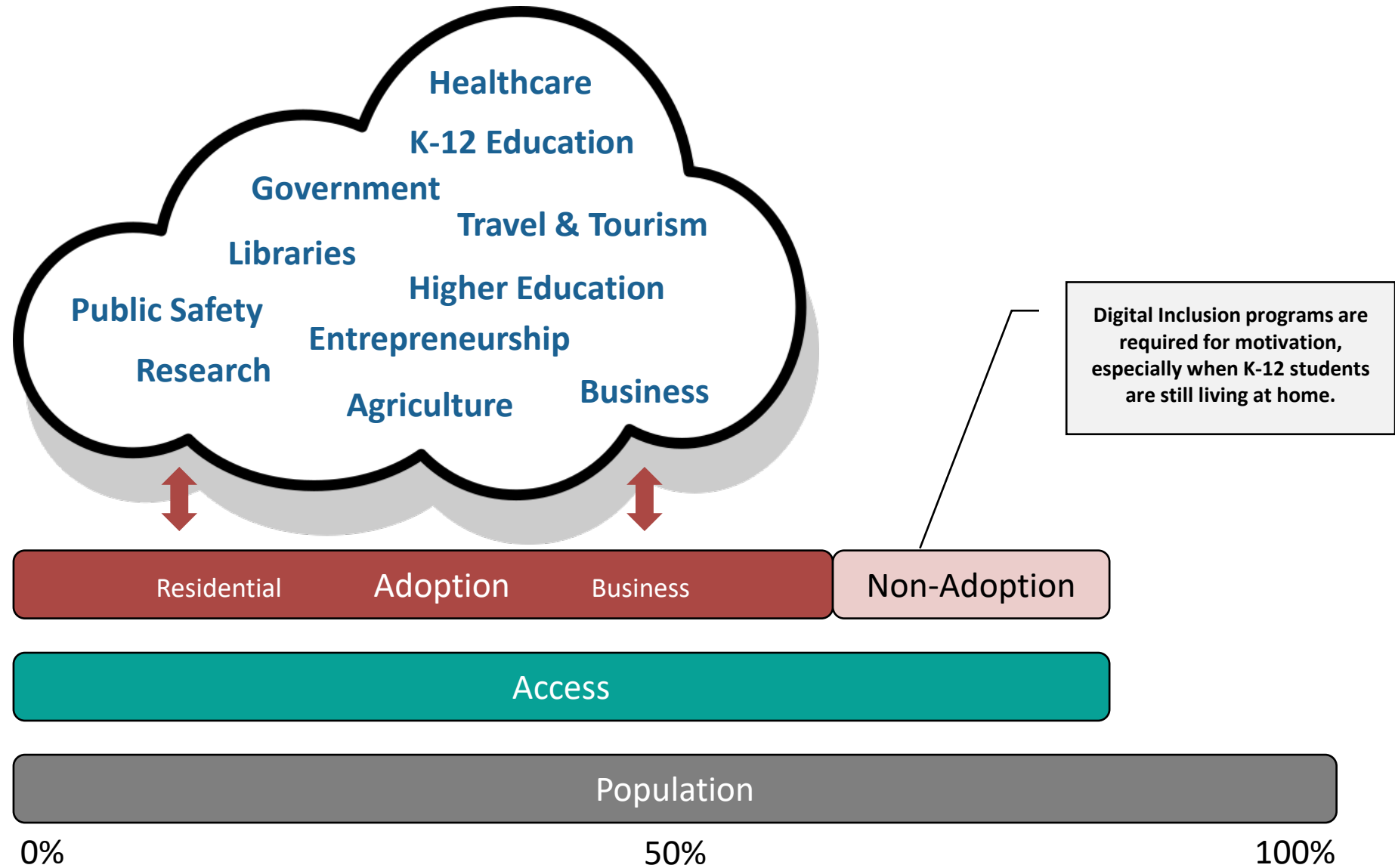
Skills and applications to leverage technology to improve quality of life and community/economic development

Adoption:

Recognizing the value in broadband and subscribing either at home, work, or via public institutions

Access:

The physical connection to high-speed infrastructure

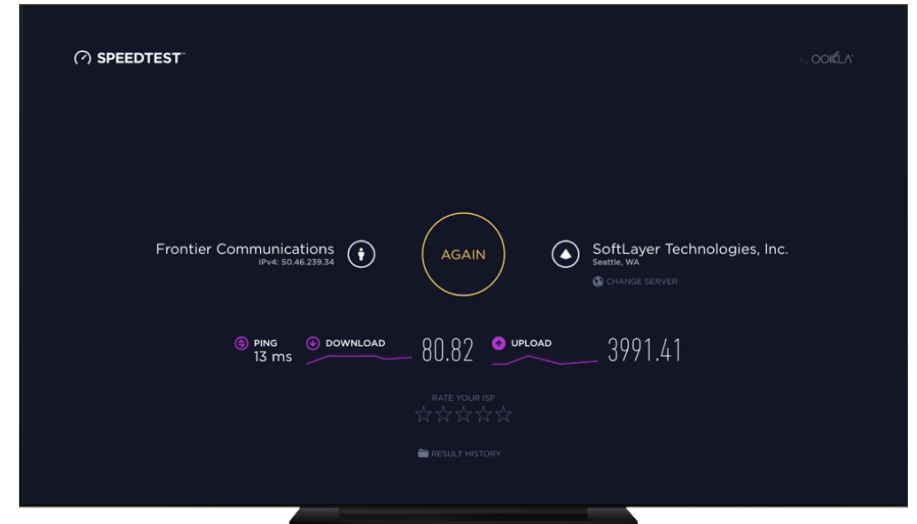
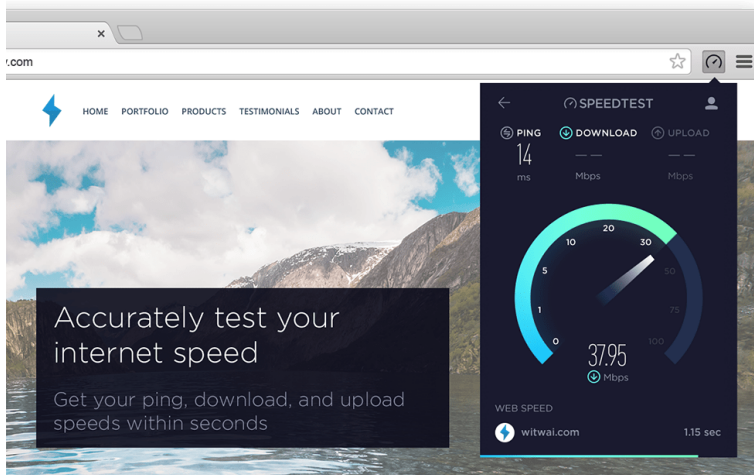


FCC Internet Benchmarks

Date Adopted	Minimum Download	Minimum Upload	FCC Commissioner
2015	25 Mbps	3 Mbps	Tom Wheeler, D
2010	4 Mbps	1 Mbps	Julius Genachowski, D
1996	200 Kbps	200 Kbps	William Kennard, D



Ookla's mission is to make the internet better, faster and more accessible for everyone



iOS



Speedtest is available for:
Web, Android, iOS, macOS, Windows, AppleTV, Chrome

Residential Broadband Technology



Copper & Fixed Wireless

Only one copper technology (VDSL) technology reaches 25/3. All others are at end of life.

Fixed Wireless requires optimum conditions to reach 25/3; however, it delivers *Speed to Access* meaning that high need areas have the potential to get coverage fast while physical connections to each house are built.

No Internet Options Exist

This has nothing to do with affordability!

Customers in these areas cannot receive service at their physical address.

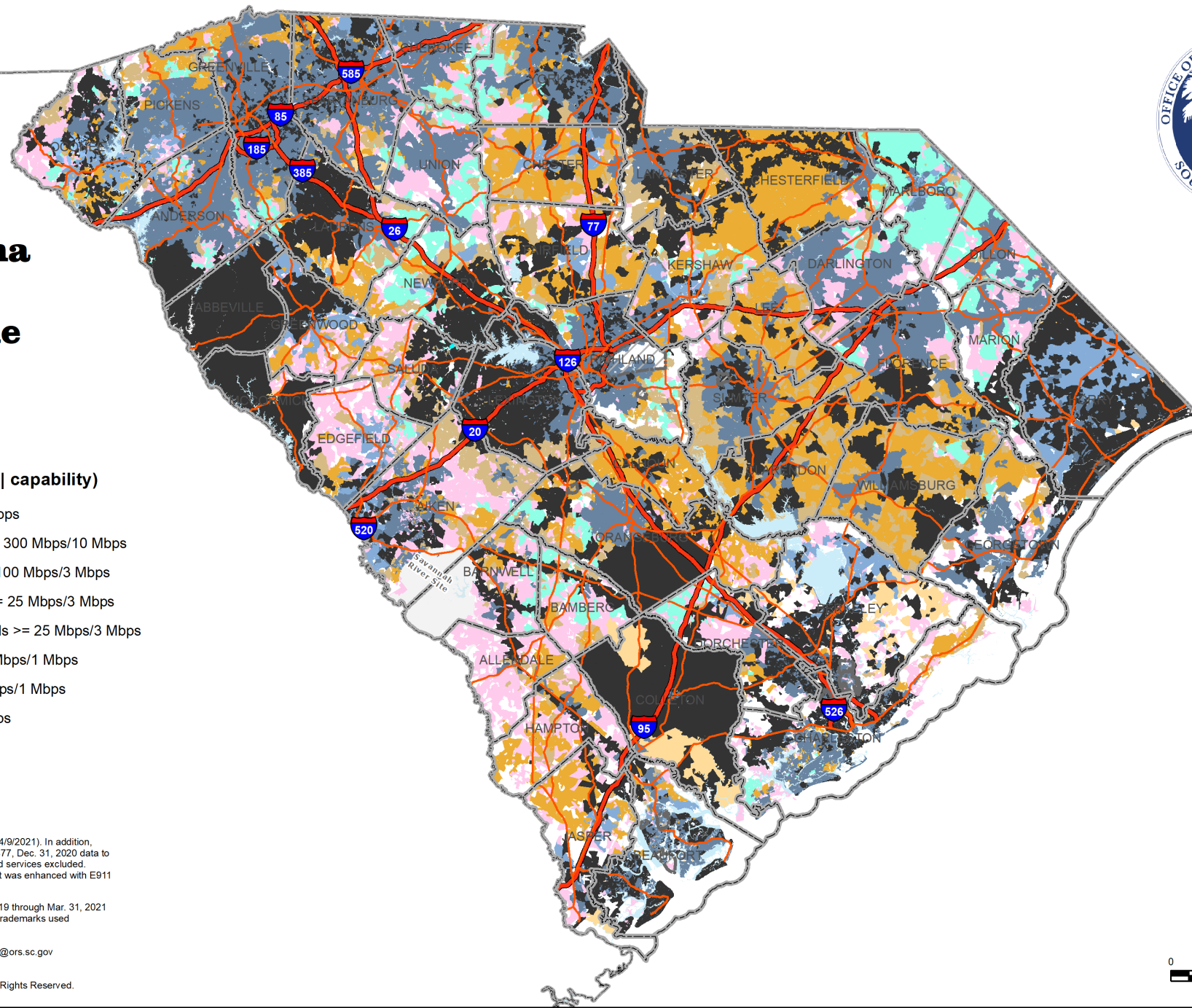
South Carolina

Best Available Technology

July 1, 2021

Best Available Technology (type | capability)

- Fiber | Speeds \geq 300 Mbps/10 Mbps
- Cable (DOCSIS 3.1+) | Speeds \geq 300 Mbps/10 Mbps
- Cable (DOCSIS 3.0) | Speeds \geq 100 Mbps/3 Mbps
- Cable (DOCSIS $<$ 2.0) | Speeds \geq 25 Mbps/3 Mbps
- VDSL (Fiber-To-The-Curb) | Speeds \geq 25 Mbps/3 Mbps
- ADSL2, ADSL2+ | Speeds \geq 10 Mbps/1 Mbps
- Fixed Wireless | Speeds \geq 10 Mbps/1 Mbps
- ADSL | Speeds \geq 3 Mbps/768 kbps
- No Internet Service Available
- Zero Households



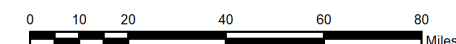
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Residential Broadband Speeds






Speed Tiers (download / upload)

	300 Mbps / 10 Mbps
	100 Mbps / 3 Mbps
	25 Mbps / 3 Mbps

When Internet speeds are 25/3 or better

Green: Meets or exceeds FCC’s Broadband Internet Benchmark of 25/3 Mbps.

Density of Unserved Households

	200 or More (per sq. mi.)
	25 - 199
	1 - 24
	> 0 and < 1
	Zero Households

When Internet speeds are below 25/3

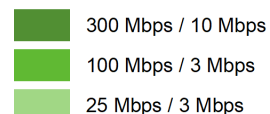
We don’t care about speed. Need to see **household info**. Reds & Tans: Indicate engineering issues that need to be resolved by an Internet Service Provider (ISP). ISP’s need to know where homes are located as well as where homes are not located. For an ISP, one home equals one customer. Therefore, the maps showcase household density in slow speed areas of the state.

South Carolina

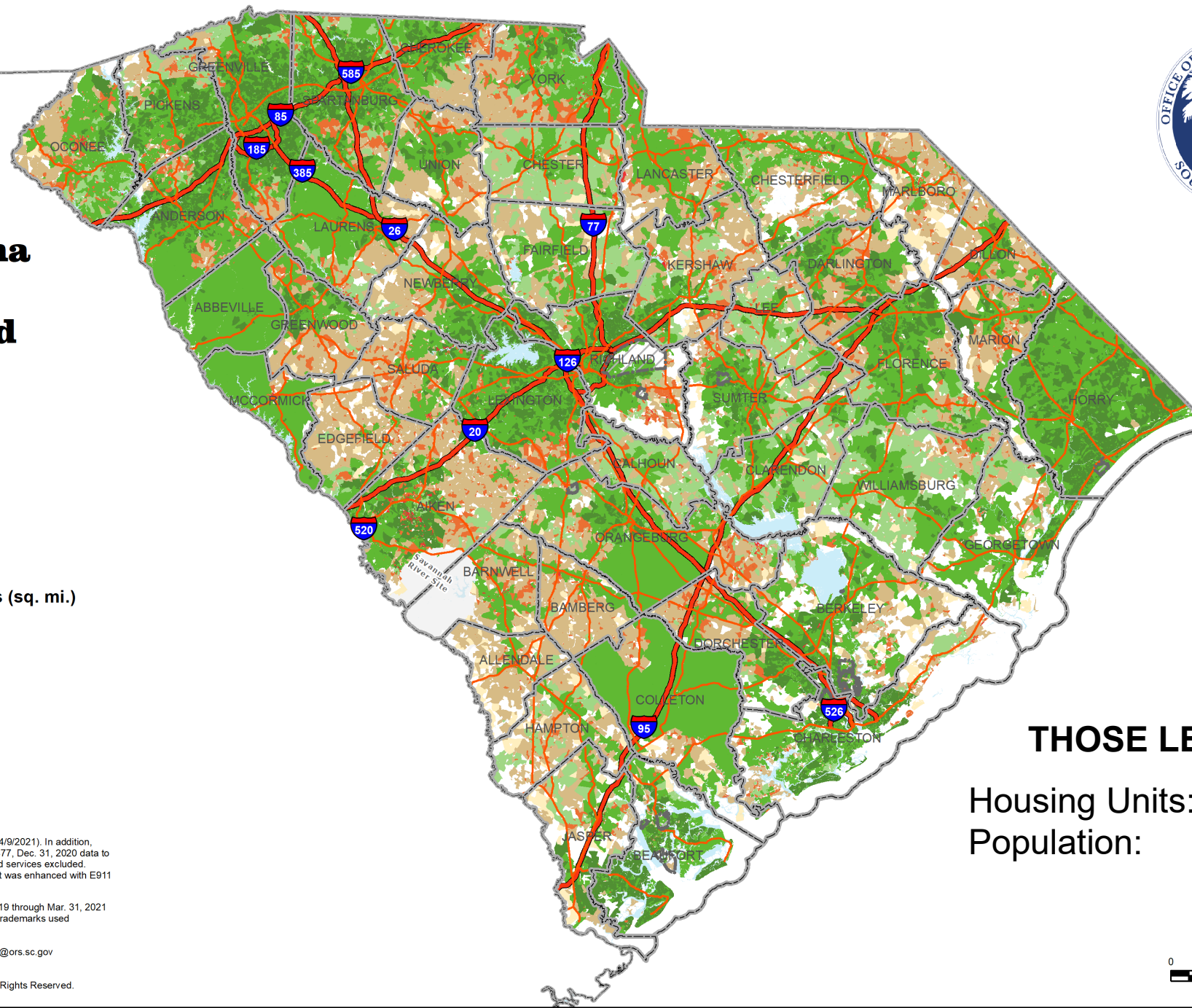
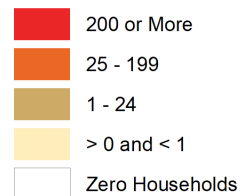
Areas of Need

July 1, 2021

Speed Tiers (download / upload)



Density of Unserved Households (sq. mi.)



THOSE LESS THAN 25/3

Housing Units: **189,757** (8.2%)
Population: **401,185** (7.8%)

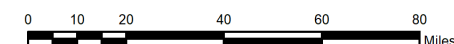
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Richland County

South Carolina

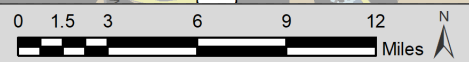
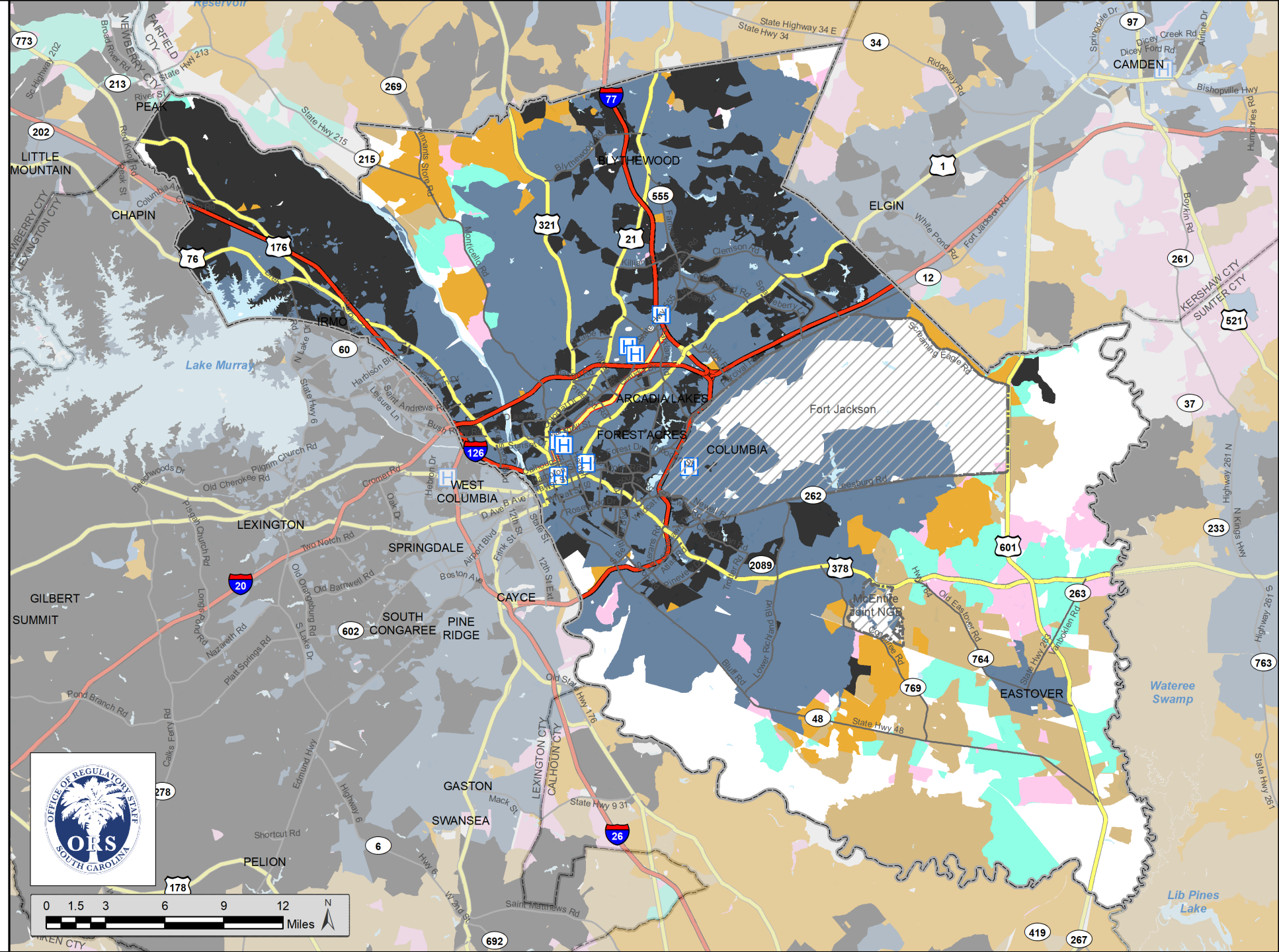
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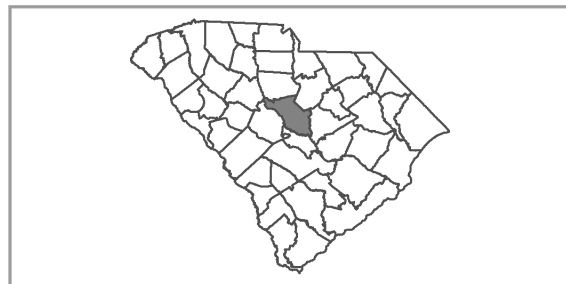
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Richland County

South Carolina

Areas of Need

July 1, 2021

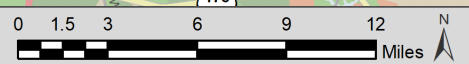
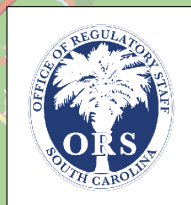
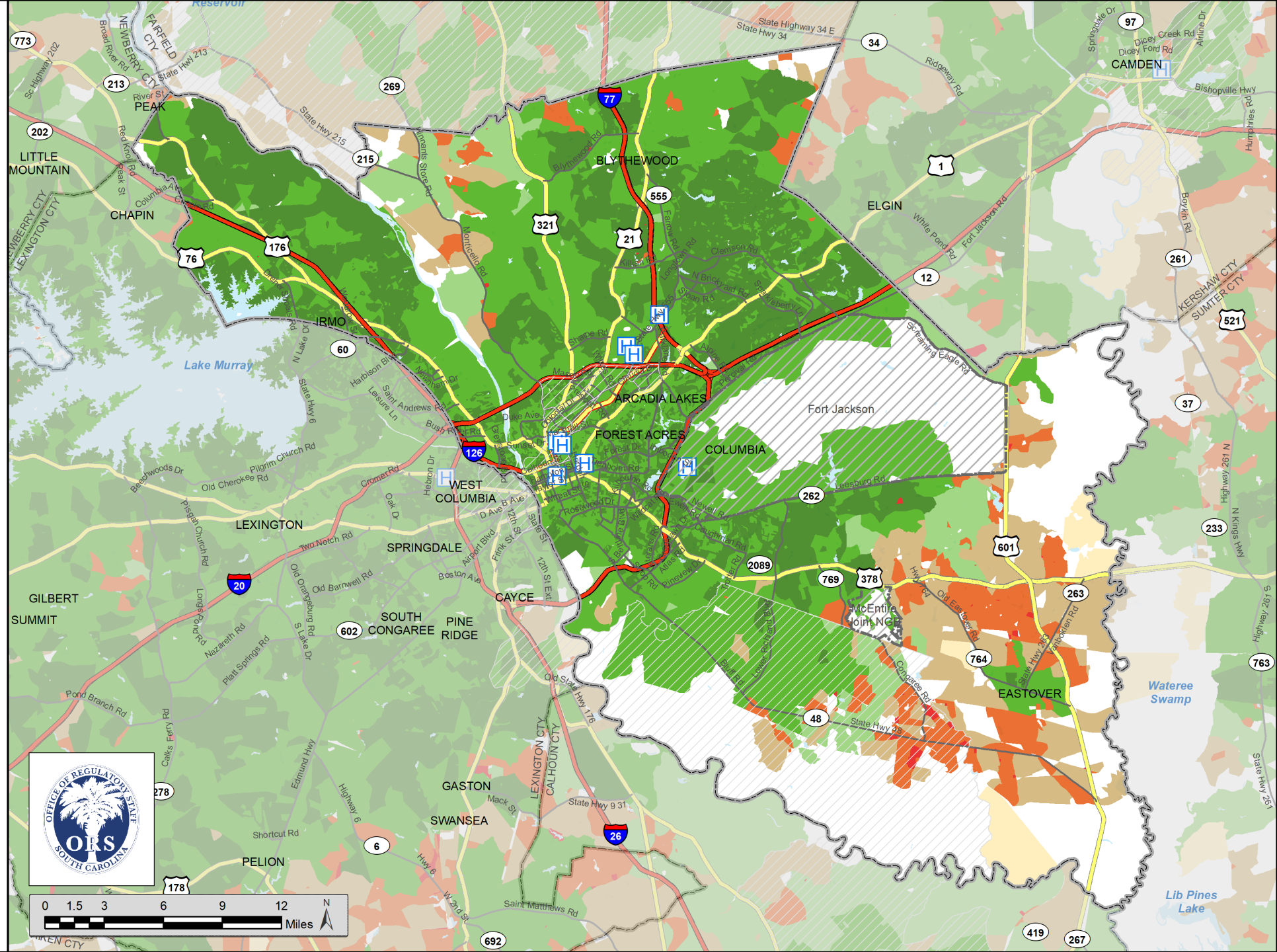


Speed Tiers (download / upload)

- 300 Mbps / 10 Mbps
- 100 Mbps / 3 Mbps
- 25 Mbps / 3 Mbps

Density of Unserved Households (sq. mi.)

- 200 or More
- 25 - 199
- 1 - 24
- > 0 and < 1
- Zero Households
- Opportunity Zone



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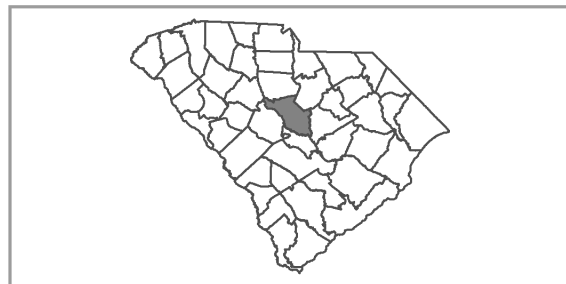
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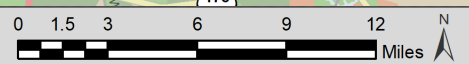
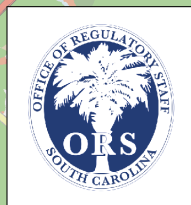
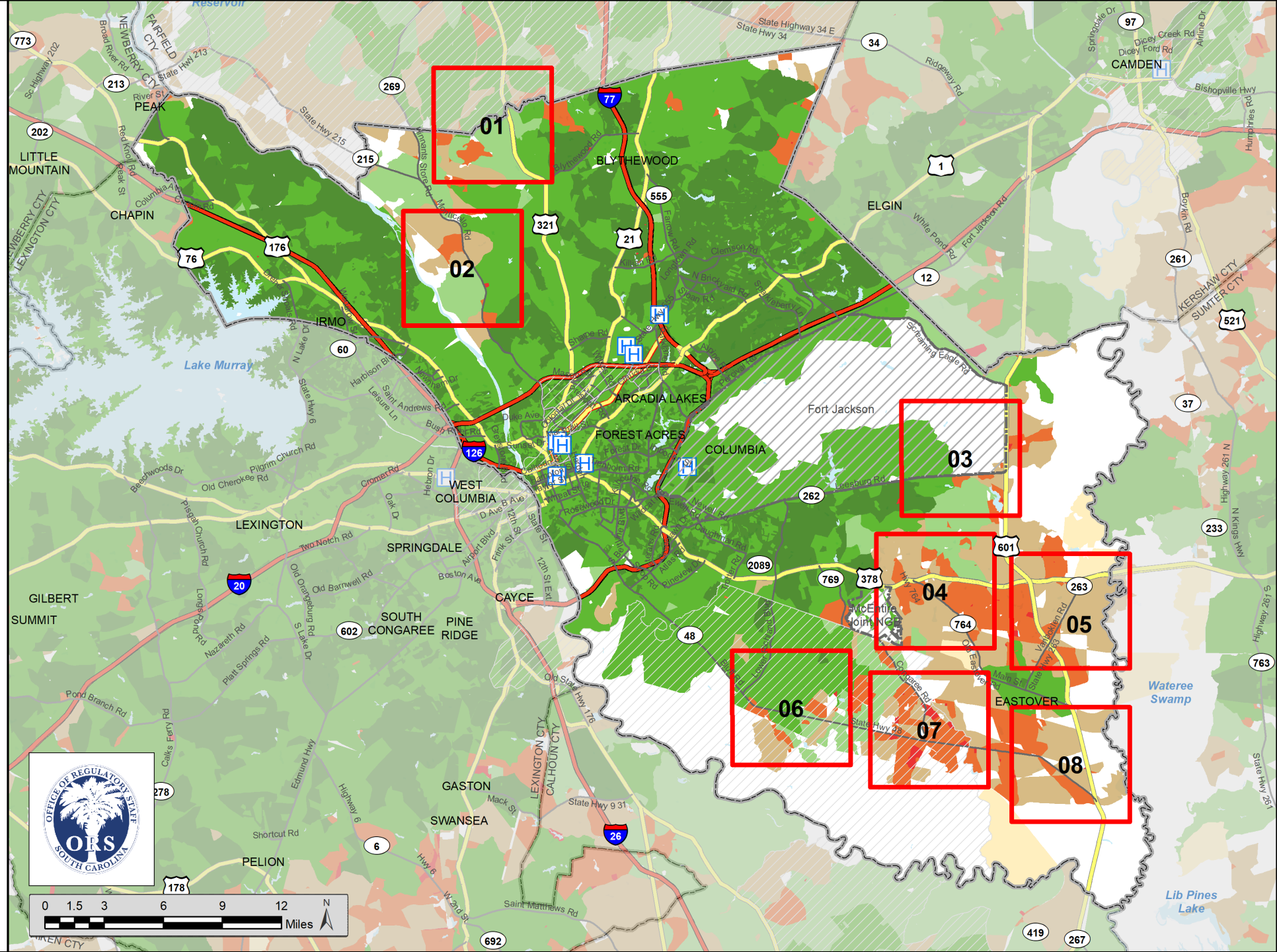


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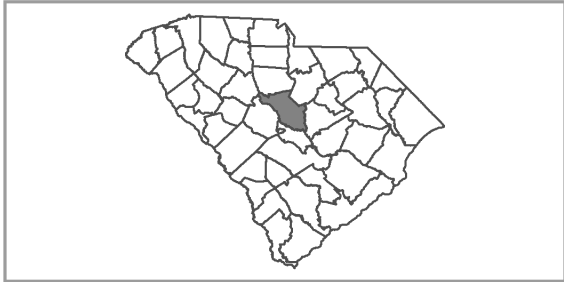
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Richland County

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Areas of Need

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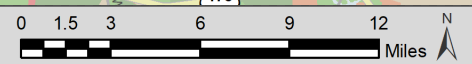
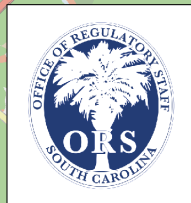
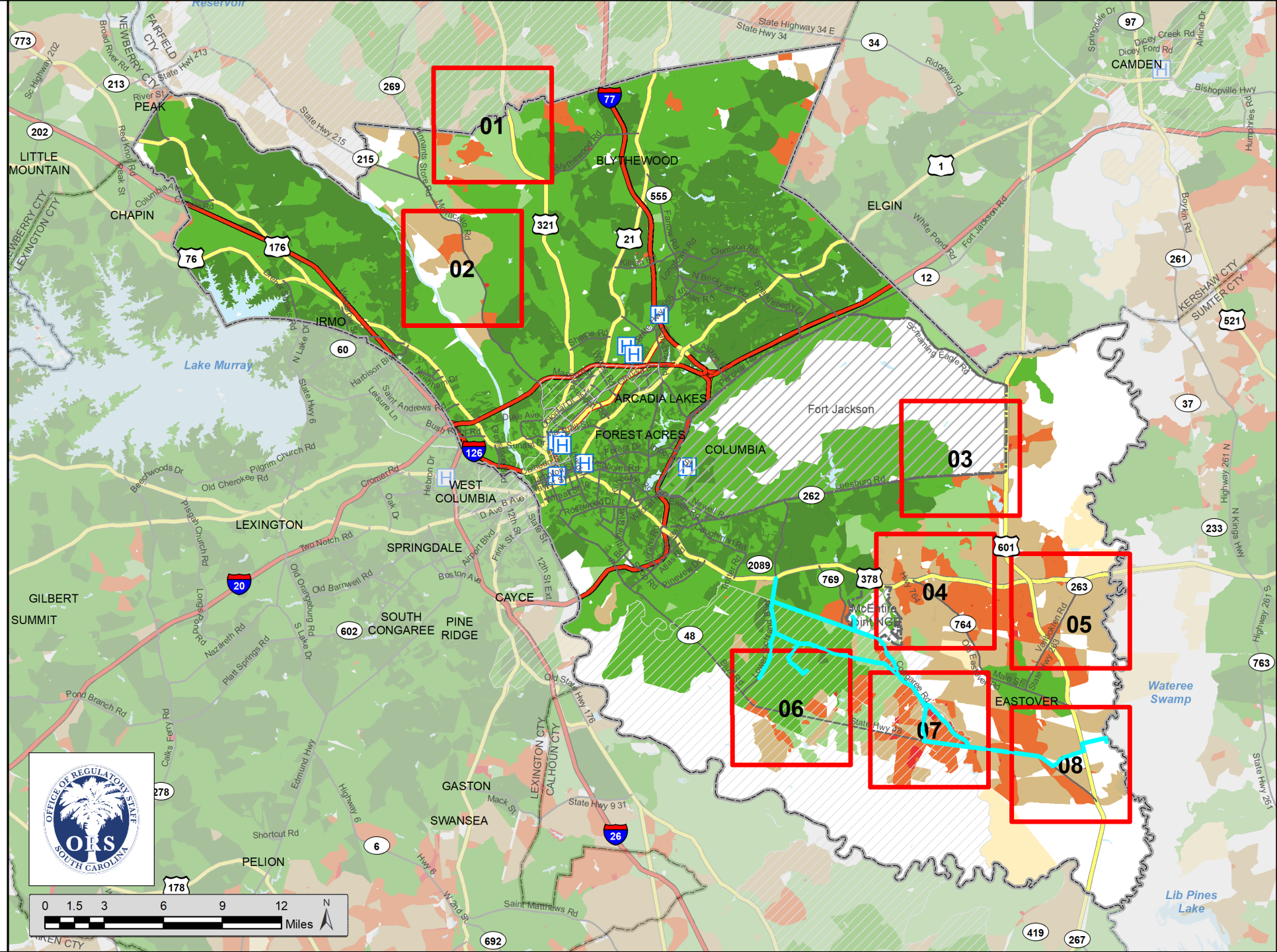


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INTERNET FOR ALL

Dedicated to ensuring that every home has access to affordable, high-speed Internet by the end of 2026.

www.scdigitaldrive.com

EDUCATION

Giving our students the platform they need to excel.

TELEHEALTH

High quality healthcare in the convenience of your own home.

ECONOMY

Activating every corner of our state and lifting all market sectors.

2020 CARES Act Funding Authorization

Hotspots and Monthly Service for Student Households	\$20,000,000
Mapping	\$300,000
Infrastructure	\$29,700,000
Total	\$ 50,000,000

Online Learning Initiative

Statistics

Number of Participants

Public K-12	82
Private K-12	4
Charter	3
Higher Ed Institutions	26
	<hr/> 115

Number of Hotspots / Wired Services Ordered

Verizon	60,059
AT&T	24,477
T-Mobile	1,377
Service Only	390
Wired	6,181
	<hr/> 92,484



ONLINE LEARNING
Initiative

Broadband Infrastructure Program

Applications Funded	78
Companies	14
Counties Served	27
Program Targets	59
Priority Targets	35
Homes and Businesses Passed	19,574
Total Funds Expended	\$17,157,488

Funding of these applications is subject to the completion of a funding agreement with the ORS and the evaluation of any duplication of infrastructure. More information can be found on the ORS website at ORS.SC.GOV/Broadband.

Rural Broadband Grant Program 2021

- Allocation of \$30,000,000 for a competitive grant program to expand broadband availability and access in South Carolina.
- ORS and SC Department of Commerce collaboration
- **14 Eligible Counties** and **15 Contiguous Counties**
- Eligible Applicant: Internet Service Providers
- Applicants provided 1:1 match using non-public funds
- Awards announced **July 13, 2021**

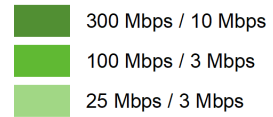


South Carolina

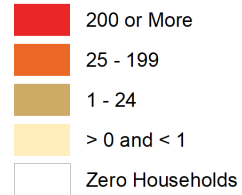
Areas of Need

July 1, 2021

Speed Tiers (download / upload)



Density of Unserved Households (sq. mi.)



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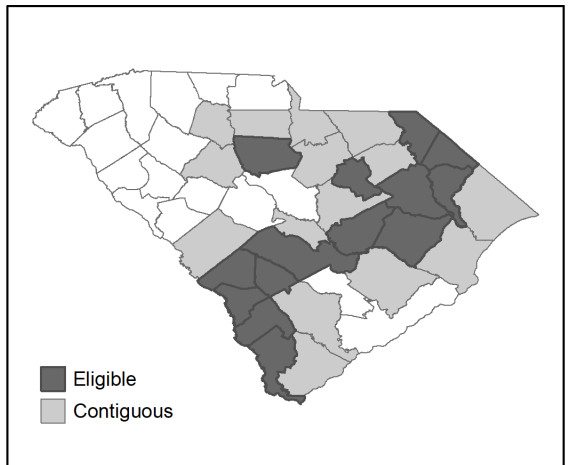


South Carolina
Department of Commerce

Just right for business.



Eligible & Contiguous Counties



South Carolina

RBGP Projects

July 1, 2021



South Carolina
Department of Commerce
Just right for business.



Speed Tiers (download / upload)

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2021 SC Rural Broadband Grant

Federal Program Investment

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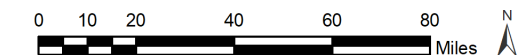
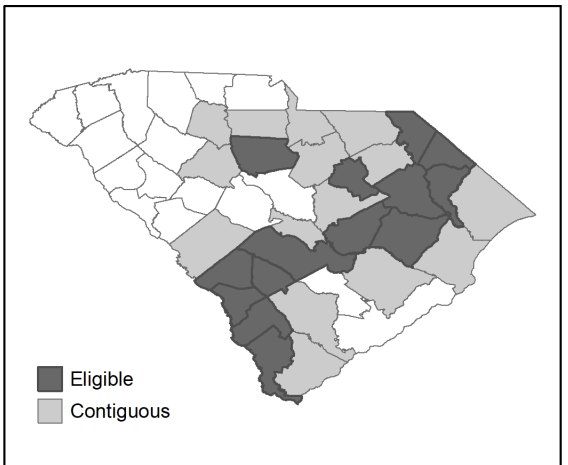


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Eligible & Contiguous Counties

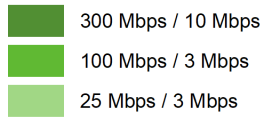


South Carolina

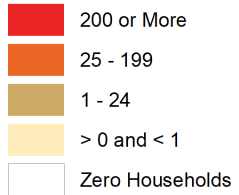
Areas of Need

October 31, 2022

Speed Tiers (download / upload)



Density of Unserved Households (sq. mi.)



RBGP IMPACT

Housing Units: **23,625!**

HU Remaining: **166,132** (7.2%)

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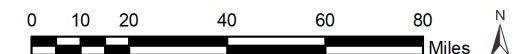
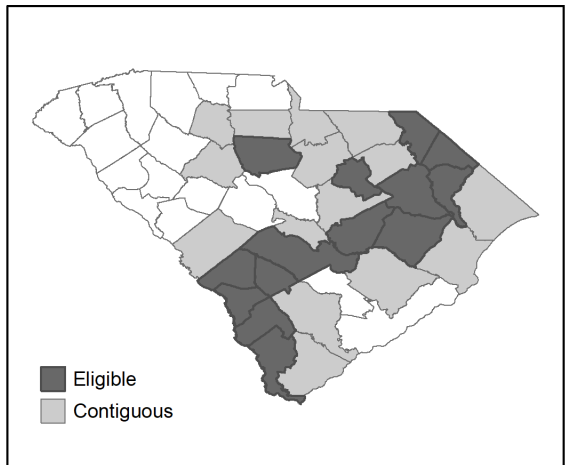


South Carolina
Department of Commerce

Just right for business.



Eligible & Contiguous Counties



South Carolina

Areas of Need

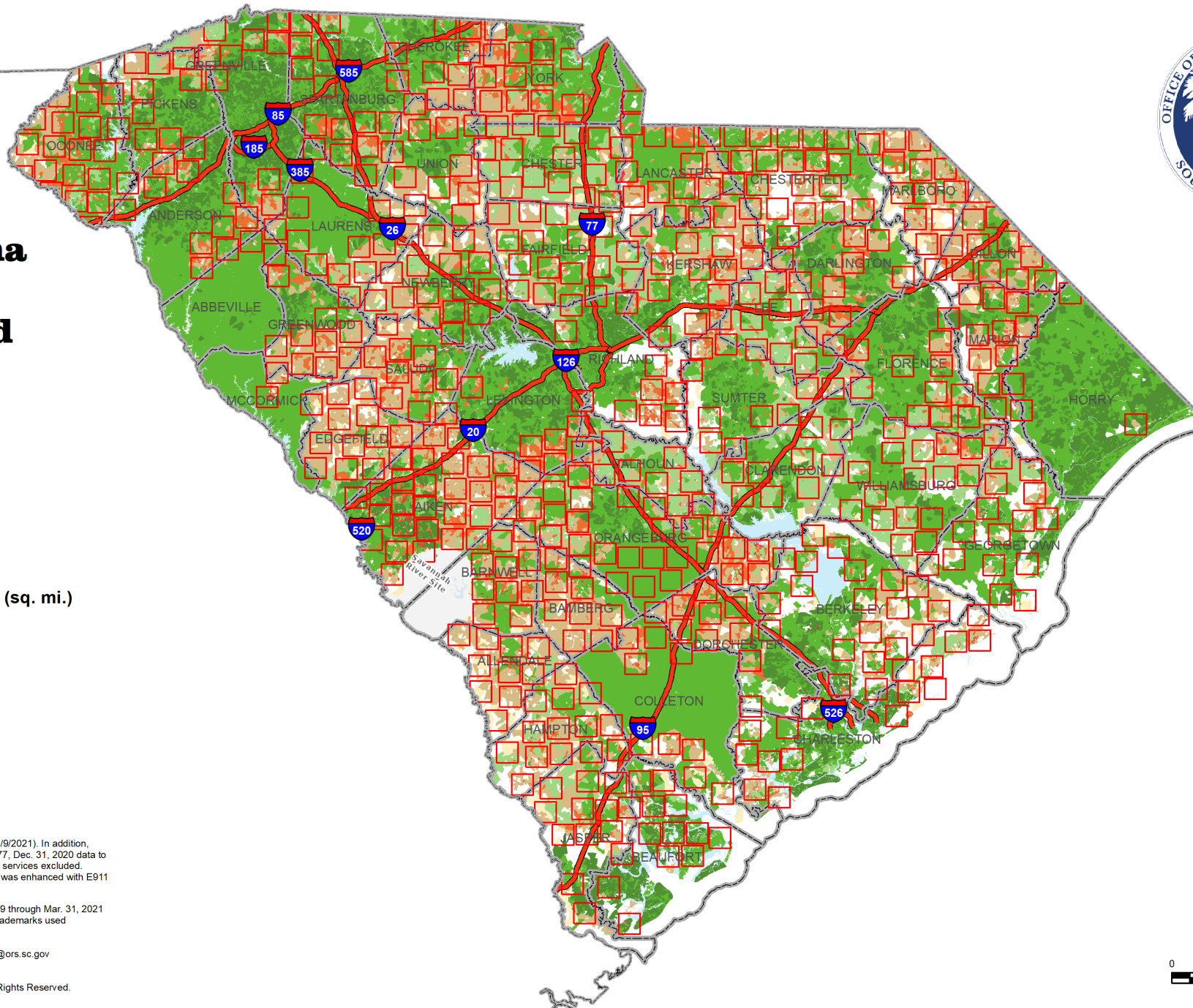
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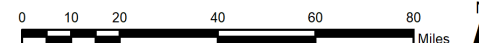
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Session 1

Understanding Internet Infrastructure

Session 2

Eliminating Gaps in K-12 Education

Session 3

Identifying Healthcare Opportunities



Broadband Community Champion Training Program

