



NORTH CAROLINA

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Rural Broadband Review

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Rural Broadband Importance

- ▶ Essential for the social and economic benefits it provides to residents, businesses, governments and communities.
- ▶ Crucial for increased health, educational and economic opportunities, as well as for job and business creation and growth.
- ▶ Available Private–Sector Broadband can help close the digital divide between rural and urban communities.

Broadband (High-Speed Internet)

	Light Use (Basic functions: email, browsing, basic video, VoIP, Internet radio)	Moderate Use (Basic functions plus <i>one</i> high-demand application: streaming HD video, multiparty video conferencing, online gaming, telecommuting)	High Use (Basic functions plus <i>more than one</i> high-demand application running at the same time)
1 user on 1 device	Basic	Basic	Medium
2 users or devices at a time	Basic	Medium	Medium/Advanced
3 users or devices at a time	Medium	Medium	Advanced
4 users or devices at a time	Medium	Advanced	Advanced

Basic Service = 3 to 8 Mbps*

Medium Service = 12 to 25 Mbps

Advanced Service = More than 25 Mbps

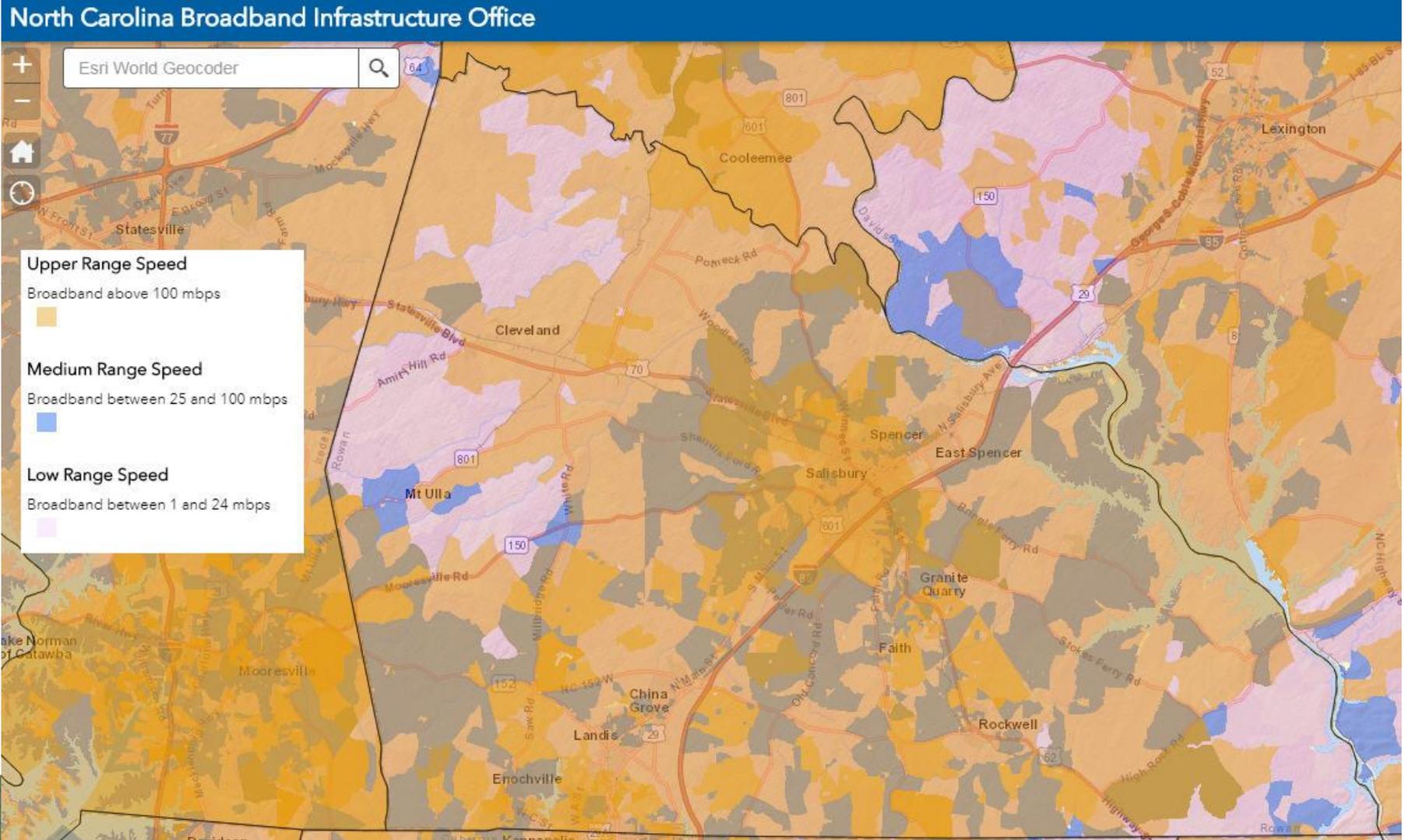
*Mbps (Megabits per second) is the standard measure of broadband speed. It refers to the speed with which information packets are downloaded from, or uploaded to, the internet.

Overview of Rowan County

- ▶ County Coverage Map Overview
- ▶ Federal and State Resources
- ▶ County Level Involvement



Broadband Availability in Rowan



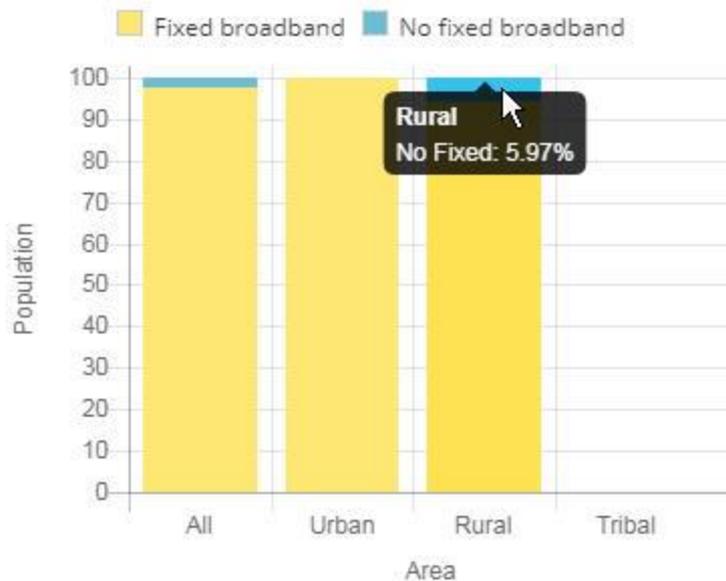
National Data current through June 2016

Broadband Availability Statistics

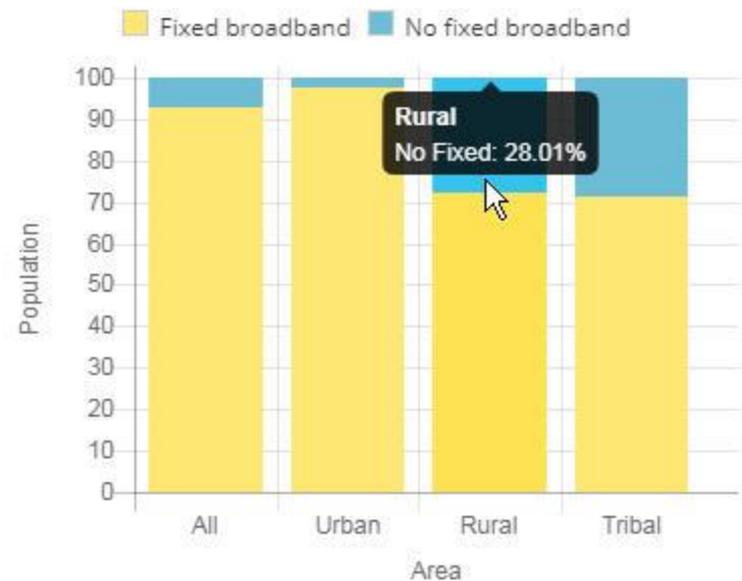
Rowan County, NC

[View Nationwide](#)

Empty columns indicate data not available.

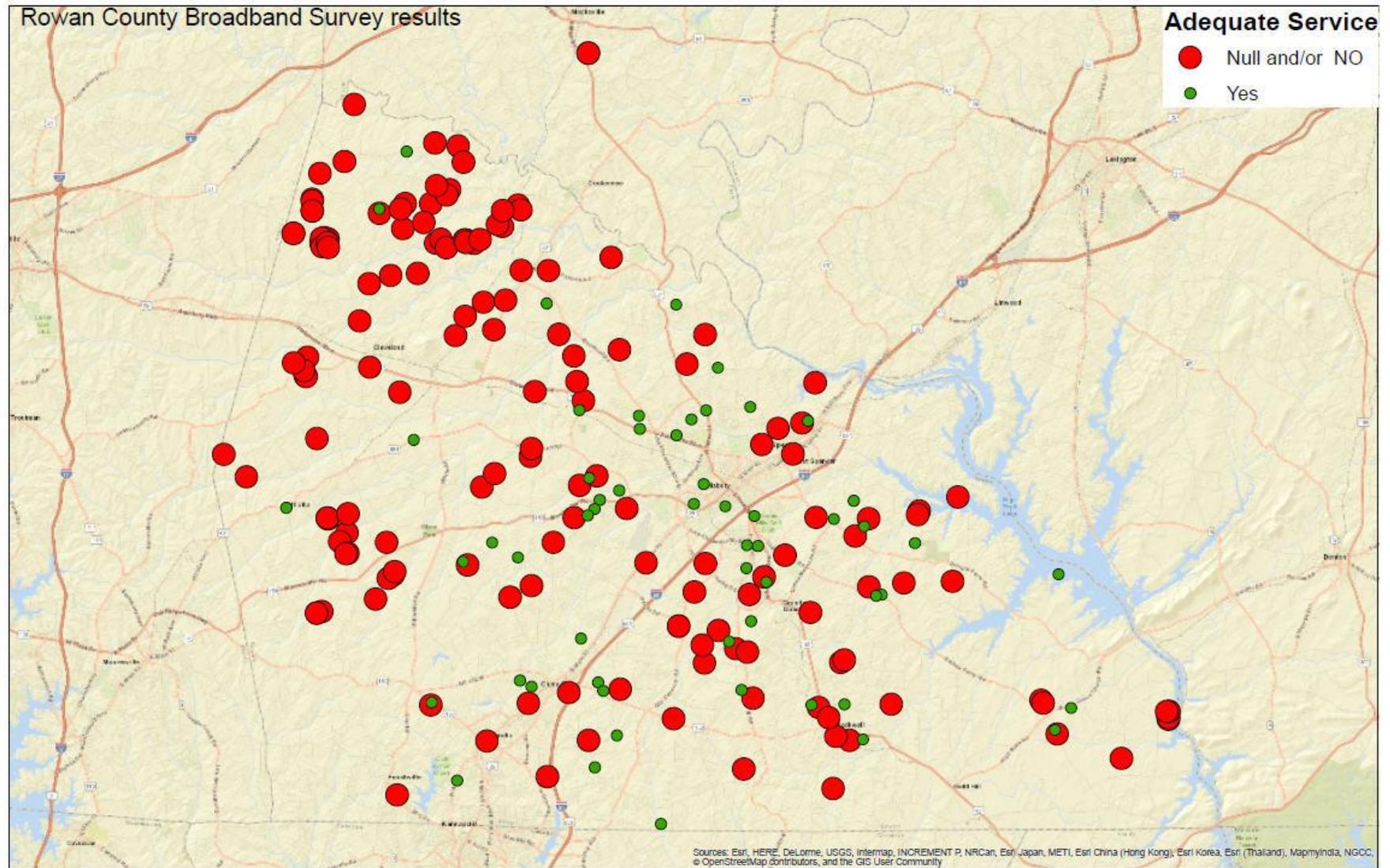


Nationwide



<https://www.fcc.gov/reports-research/maps/fixed-broadband-deployment-data/#lat=35.667676&lon=-80.47023&zoom=9>
Total Pop w/o Access: 3,236

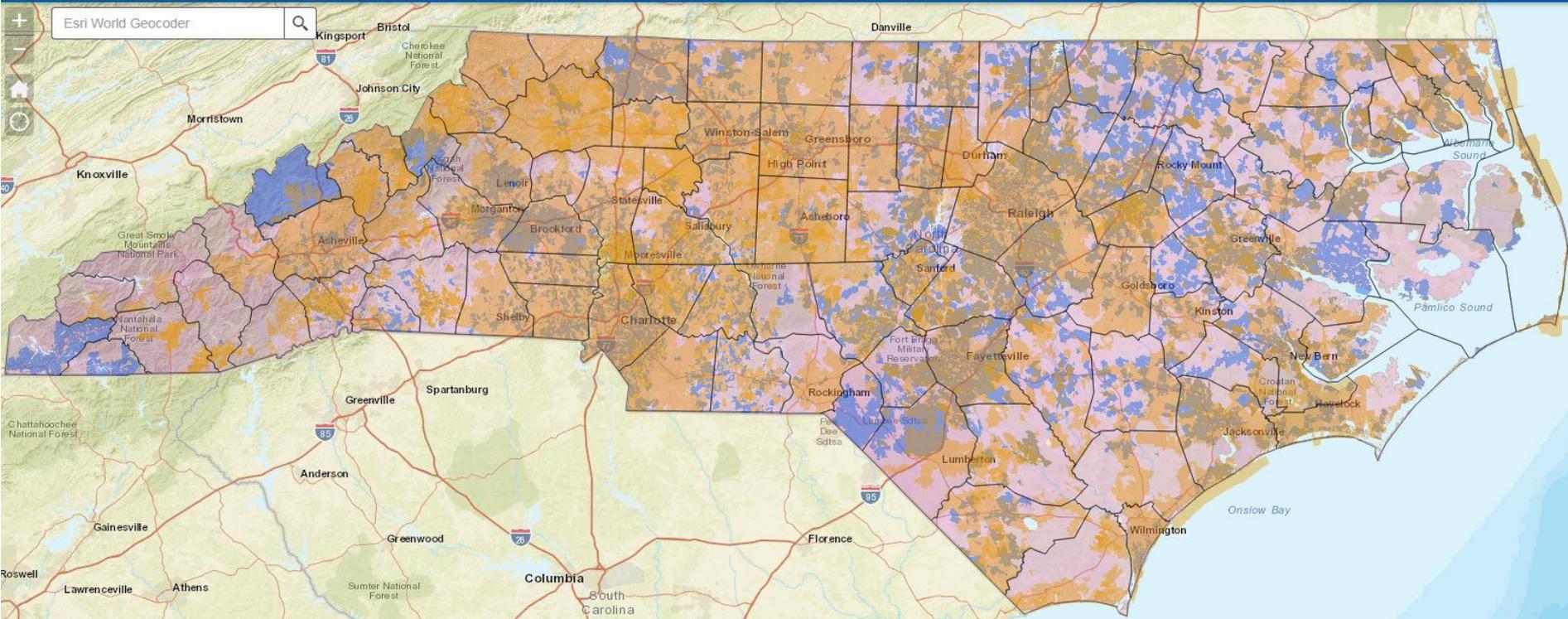
Late 2016 Citizen Survey Results



n=204

North Carolina Broadband Map

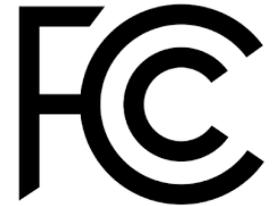
North Carolina Broadband Infrastructure Office



Federal Resources

- ▶ Federal Communications Commission (FCC)
 - Defining Broadband Speeds and Terms
 - Connect America Fund Phase II

- ▶ US Dept. of Agriculture (USDA) Grants
 - Community Connect Grants



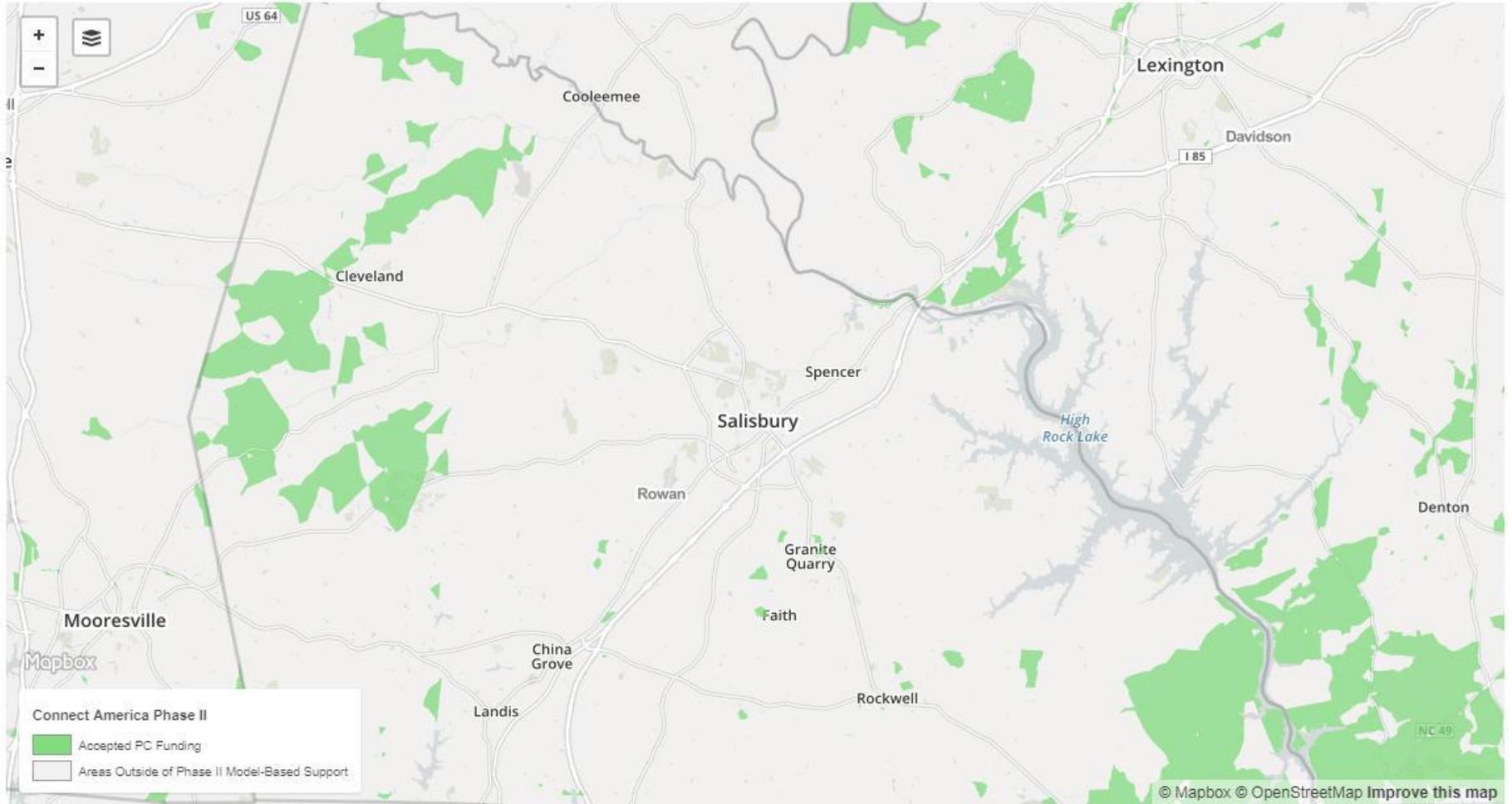
FCC – Connect America Fund

Phase II

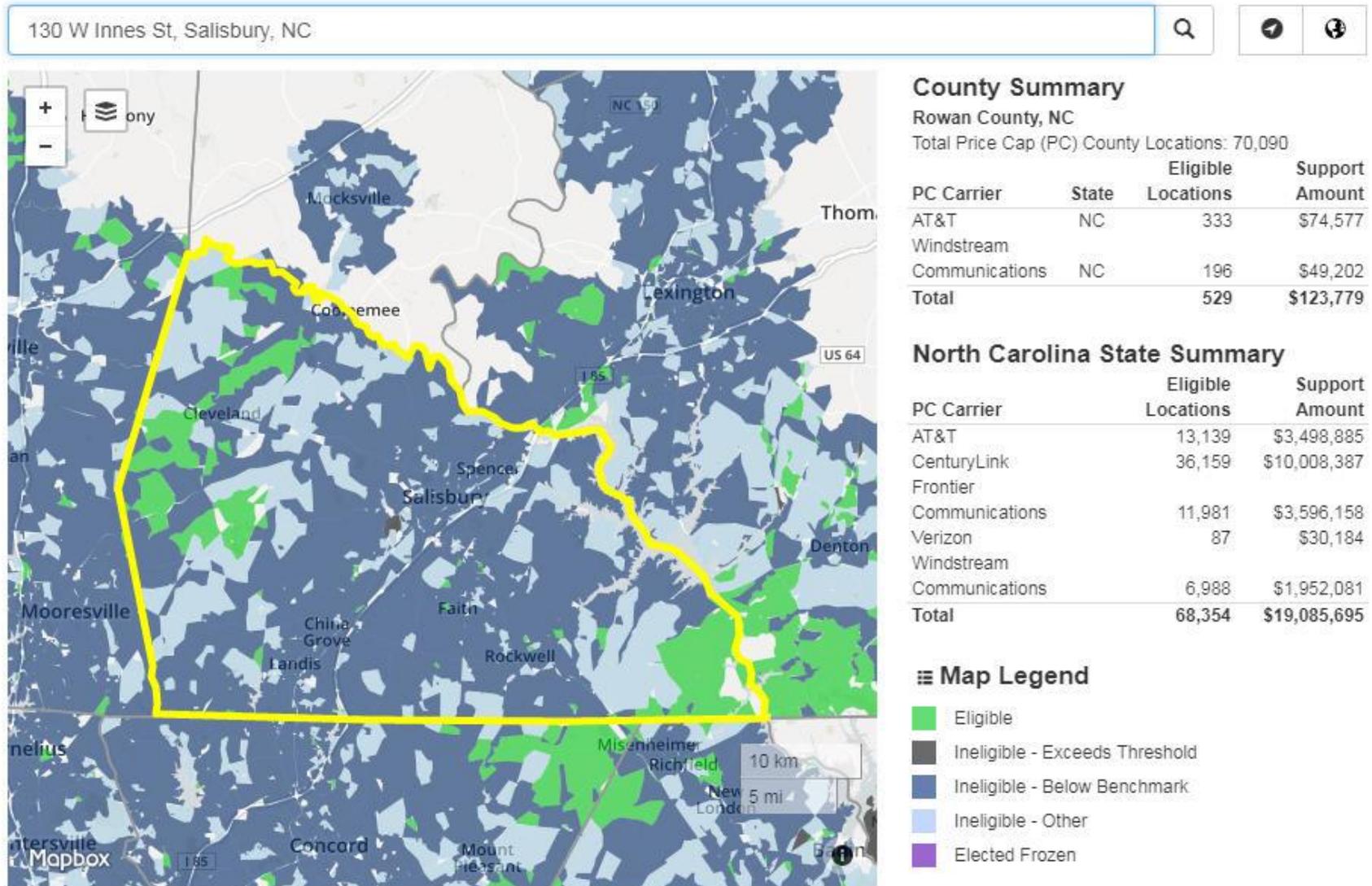
- ▶ Program to expand access to voice and broadband services for areas where they are unavailable
- ▶ Service providers review unserved areas and request funding if they intend to participate
- ▶ Provider has six years to plan and provide broadband to consumers.
 - Not every household is guaranteed access

Connect America Fund Phase II

Accepted Areas Map



Connect America Phase II - Final Eligible Areas Map



USDA Rural Development Community Connect Grants

- ▶ Work with a provider to extend broadband service to an unserved area
- ▶ Must have a critical community facility that receives service broadband service for 2 years at no cost
 - Public Schools, Fire Stations, and Public Libraries
- ▶ Grantees must have legal authority to provide, construct, operate and maintain the proposed facilities or services
- ▶ 15% matching funds from non-federal source

State of North Carolina Resources

▶ Broadband Infrastructure Office



- Established by the State CIO in 2015
 - Statewide resource for broadband access
 - Regional Support Contact, Glenn Knox
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- ## ▶ Potential Grant Opportunities for Counties
- Pre-identified sites by Broadband Office
 - Introduced \$20 million grant program in NC budget
 - Note: Did not pass

County Government Involvement

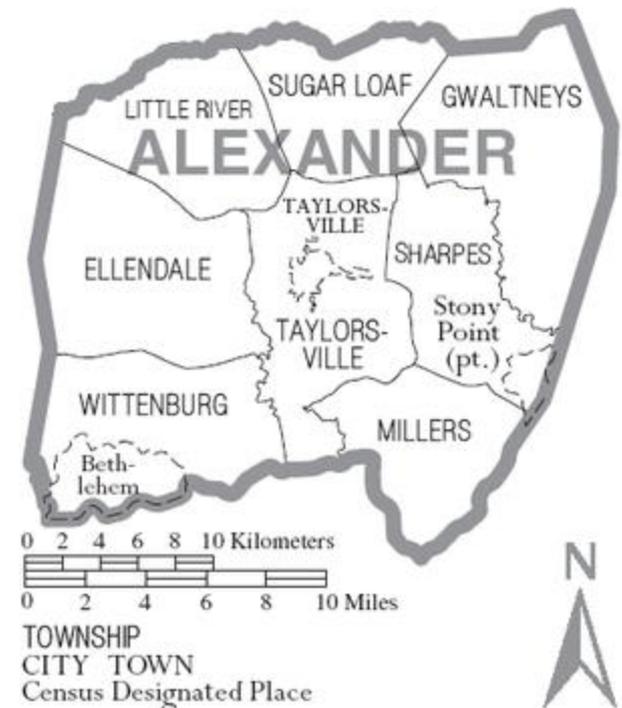
- ▶ State Broadband Infrastructure Office
 - ▶ Review of Broadband Feasibility Study from Alexander County
 - ▶ North Carolina law precludes Rowan County from owning, operating or investing in broadband service to the public.
 - ▶ Review of options for the Board of Commissioners
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Broadband Infrastructure Office

- ▶ Develops working models for Counties to achieve Rural Broadband Initiatives
- ▶ Recommended Framework for starting a broadband program
 - Create a broadband committee or task force, set goals and establish key members
 - Develop a Request for Information (RFI) for broadband providers
 - Announce RFI kickoff meeting (working with State) inviting current carriers and potential new providers

Other County Pursuits

- ▶ **Alexander County, NC**
- ▶ Broadband Feasibility Study Performed
- ▶ Well received with 11 vendor responses
 - – Responses varied: \$20–150K
- ▶ Published Jan 2, 2018



County Option: Create a Broadband Task Force

- ▶ Define membership to include key stakeholders to promote community involvement
- ▶ Define goals or a charge:
 - Promote broadband services countywide
 - Address the needs of unserved and underserved residents
 - Foster public-private innovation
 - Enhance existing capabilities
 - Support good governance



Task Force Membership Makeup

- ▶ Comprised of (Five to Seven Members)
Technical, Political, Management, Citizenship
- ▶ County Commissioner Leadership
- ▶ County IT Technical Advisory
- ▶ County Public Safety Official
- ▶ RSSS – IT Technical Advisory
- ▶ Rural Leadership (Coop–Ext, 4H, Rural Fire)
- ▶ Citizen Involvement from unserved areas

County Option: Broadband Feasibility Study RFP

- Conduct a Needs Assessment
 - Conduct Local Broadband Market Assessment
 - Evaluate County's Current Broadband Network Capabilities
 - Provide a GIS-Based Analysis for the Project
 - Perform a Gap Analysis of the Current Broadband Environment
 - Assess North Carolina's Regulatory Environment
 - Development of Market-Driven Demand Planning Tools
 - Recommend Broadband Strategy
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Questions?