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.

https://www.rd.usda.gov/programs–services/all–programs/telecom–programs
# Broadband (High-Speed Internet)

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

- **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.

[https://www.fcc.gov/research-reports/guides/household-broadband-guide](https://www.fcc.gov/research-reports/guides/household-broadband-guide)
Overview of Rowan County

- County Coverage Map Overview
- Federal and State Resources
- County Level Involvement
Broadband Availability Statistics

Rowan County, NC

View Nationwide

Nationwide

Total Pop w/o Access: 3,236
Late 2016 Citizen Survey Results

Rowan County Broadband Survey results

Adequate Service
- Null and/or NO
- Yes

n=204
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

https://www.rd.usda.gov/programs-services/all-programs/telecom-programs
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 Phase II - Final Eligible Areas Map

County Summary
Rowan County, NC
Total Price Cap (PC) County Locations: 70,090

<table>
<thead>
<tr>
<th>PC Carrier</th>
<th>State</th>
<th>Eligible Locations</th>
<th>Support Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>NC</td>
<td>333</td>
<td>$74,577</td>
</tr>
<tr>
<td>Windstream</td>
<td>NC</td>
<td>196</td>
<td>$49,202</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>529</td>
<td>$123,779</td>
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</tbody>
</table>

North Carolina State Summary

<table>
<thead>
<tr>
<th>PC Carrier</th>
<th>Eligible Locations</th>
<th>Support Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td>13,139</td>
<td>$3,498,885</td>
</tr>
<tr>
<td>CenturyLink</td>
<td>36,159</td>
<td>$10,008,387</td>
</tr>
<tr>
<td>Frontier Communications</td>
<td>11,981</td>
<td>$3,596,158</td>
</tr>
<tr>
<td>Verizon</td>
<td>87</td>
<td>$30,184</td>
</tr>
<tr>
<td>Windstream Communications</td>
<td>6,888</td>
<td>$1,952,081</td>
</tr>
<tr>
<td>Total</td>
<td>68,354</td>
<td>$19,085,695</td>
</tr>
</tbody>
</table>

Map Legend
- Eligible
- Ineligible - Exceeds Threshold
- Ineligible - Below Benchmark
- Ineligible - Other
- Elected Frozen
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

- Potential Grant Opportunities for Counties
  - Pre-identified sites by Broadband Office
  - Introduced $20 million grant program in NC budget
    - Note: Did not pass

https://it.nc.gov/cooper’s-strong-proposal-broadband-expansion-your-area
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
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
Questions?