

NC Broadband Division



**NORTH
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DEPARTMENT OF COMMERCE

NC Broadband

- Created as a division within Commerce effective January 1, 2012
- Serves as the State Broadband Initiative for North Carolina
- Primary role has been to carry out the work of the State Broadband Data & Development Grant (SBDD)
- Funded by the Natl Telecommunications & Information Admin (NTIA) of the US Department of Commerce

Under this federal grant, NC Broadband is responsible for implementing the following programs:

- **Data Collection & Mapping of Broadband Availability**
- **Technical Assistance to Communities**
- **State Capacity Building**
- **LITE-UP Pilot Program**
- **Update of the NC Master Address File**



Data Collection & Mapping

To carry out this work, NC Broadband:

- Collects data on where broadband is available across the state
- Maps coverage areas including broadband technology type and speeds by census block, street segment or address, to help identify unserved and underserved pockets in North Carolina

NC Broadband Map <http://e-ncbroadband.org/>

National Broadband Map (NTIA & FCC) <http://broadbandmap.gov/>

- Data submitted to NTIA April 1 and Oct 1 each year

Data Collection & Mapping

Fall 2012 Data Submission – Record Count:

Files Provided - Number of records

SBDD File Geodatabase 1,505,187

Fall 2012 Record Counts in Final Geodatabase

BB_Service_Address 538,189

BB_Service_Road_Segment 421,807

BB_Service_CensusBlock 535,778

BB_Service_CAInstitutions 6683

BB_Service_Wireless 47

BB_Service_Overview 343

BB_ConnectionPoint_LastMile 1074

BB_ConnectionPoint_MiddleMile 1265

**Thanks to the 77 participating broadband providers in NC.
Reported coverage – approximately 97.8%**

Broadband Challenges

Last Mile

- Unserved pockets around the state (includes small businesses, teleworkers, k-12 students at home, online learners, etc.)
- Data granularity, technology type, speeds
- Those in unserved pockets are unlikely to find solutions without concerted effort
- NC has significant middle mile resources to support solutions

Broadband Adoption, Digital Literacy, Relevancy Gap

Broadband Utilization & “Big” Broadband

adequate bandwidth, speed, application development

What Can Be Done? – Share information, continue to build partnerships and advocate for solutions
State Capacity Building & Technical Assistance programs

Public Private Partnerships

State Connectivity Incentive Grants (2011-2012)

(RFP process through Commerce, grants managed by NC Broadband)

\$697,300 awarded to CenturyLink, with over 1:1 match from provider

- 17 new locations in Johnston Co. with 1800 new DSL capable lines
- 5 new locations in Lenoir Co. with 370 new DSL capable lines
- 2 new locations in Rockingham Co. with 98 new DSL capable lines

\$302,700 awarded to Time Warner Cable, with over 1:1 match from provider

- 29 miles of new infrastructure, over 395 “homes passed”

Past incentive grants with State appropriated funding impacted:

- Gates, Greene, Jones, Warren Counties
- Caswell, Duplin, Pamlico, Tyrrell Counties
- Cherokee & Graham Counties

Public Private Partnerships

Track deployments from federal and other investments:

Recovery Funding

- National Telecommunications & Information Administration (BTOP)
- Rural Utilities Service (BIP)

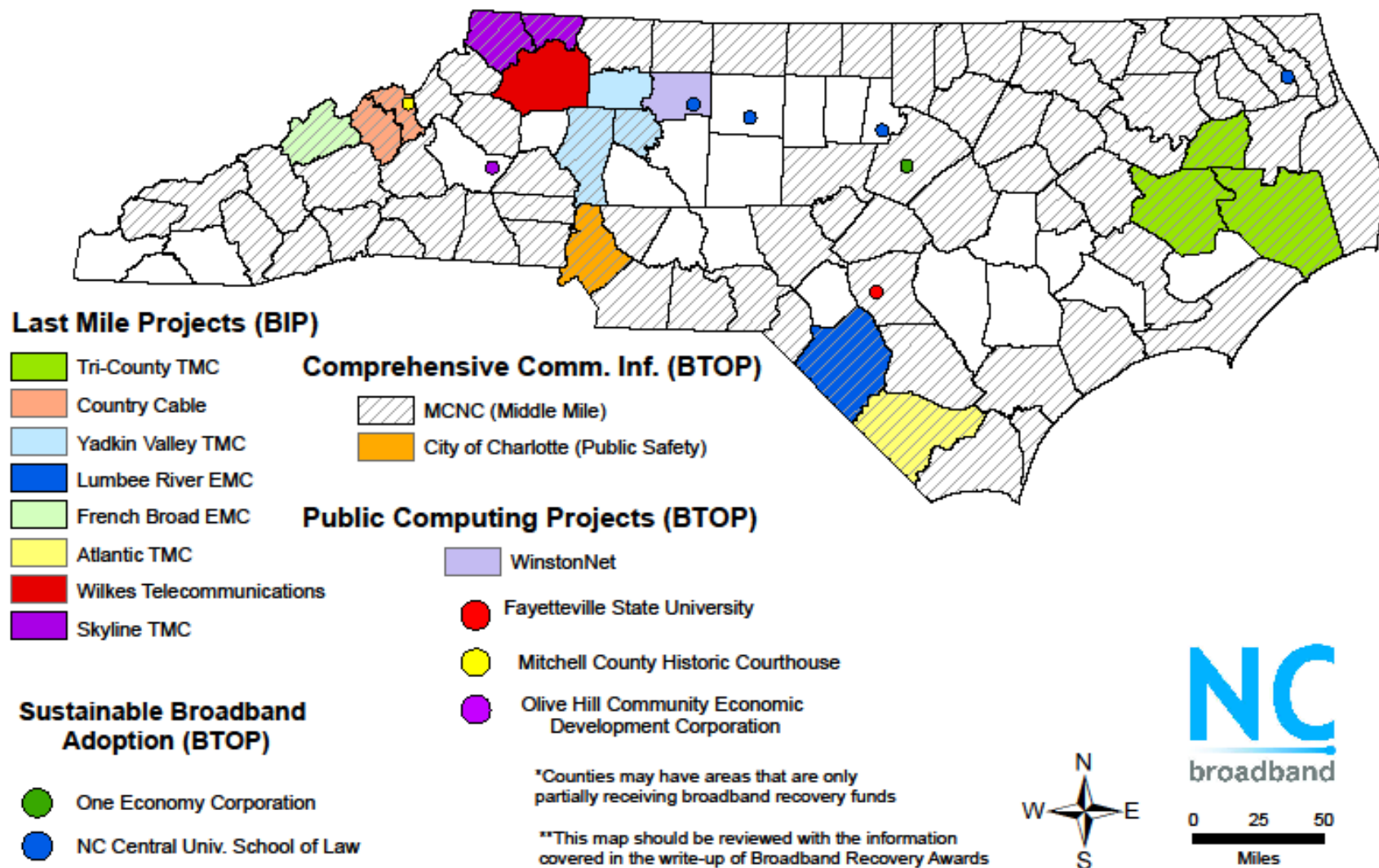
Connect America Funding (\$775/unserved household)

- CenturyLink
- Frontier Communications
- Windstream

County Incentive Programs

Session Law 2012-86 (Person County)

North Carolina Broadband Recovery Projects



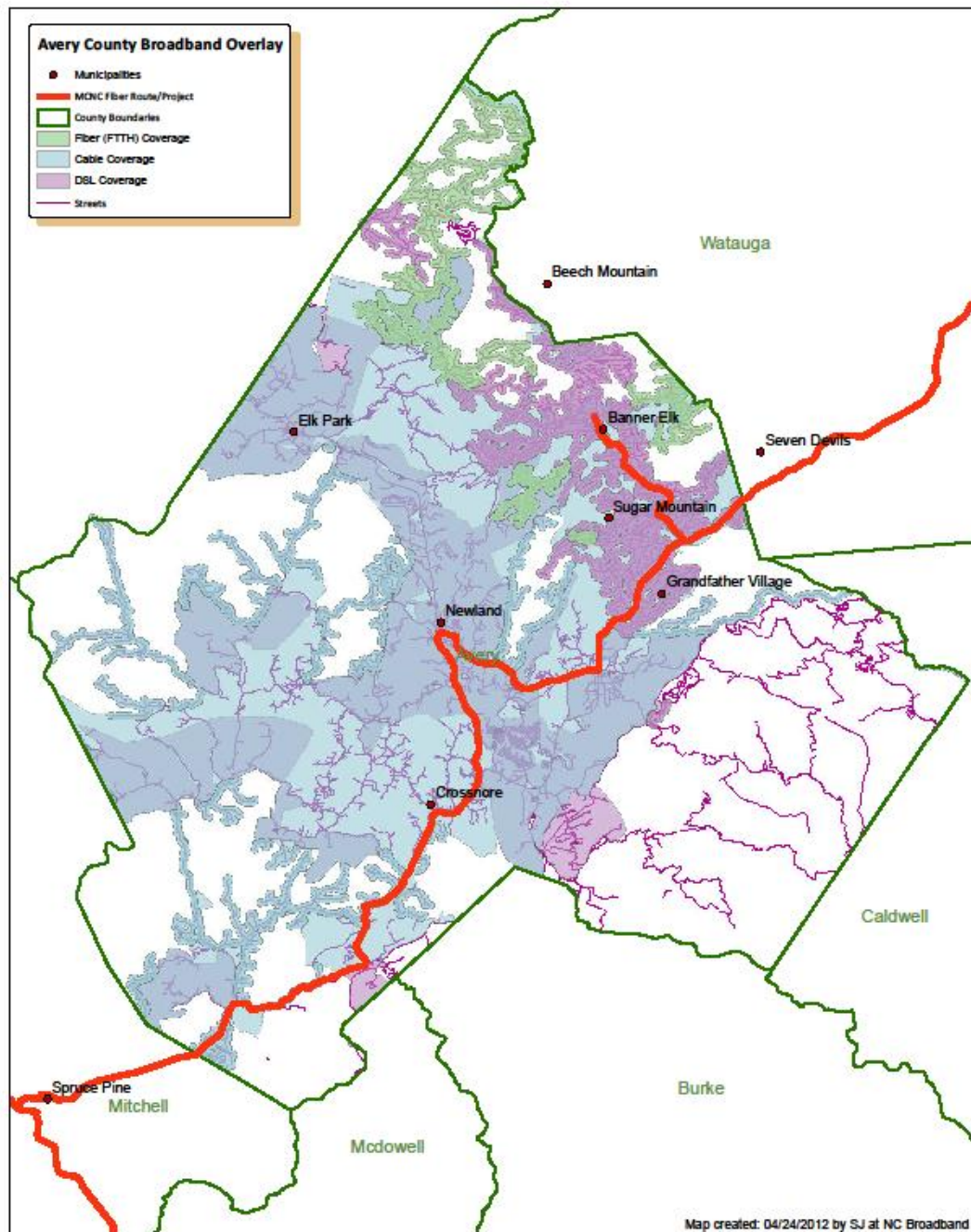
Broadband Planning

Broadband Planning efforts with counties / communities – resulting in increased deployment

- Granular citizen-sourced data, overlaid with state coverage data
- Demand aggregation
- Leveraging of assets

Examples:

- Graham County (DNET)
- Avery County (NC Wireless)
- Rutherford and McDowell Counties (SkyRunner)

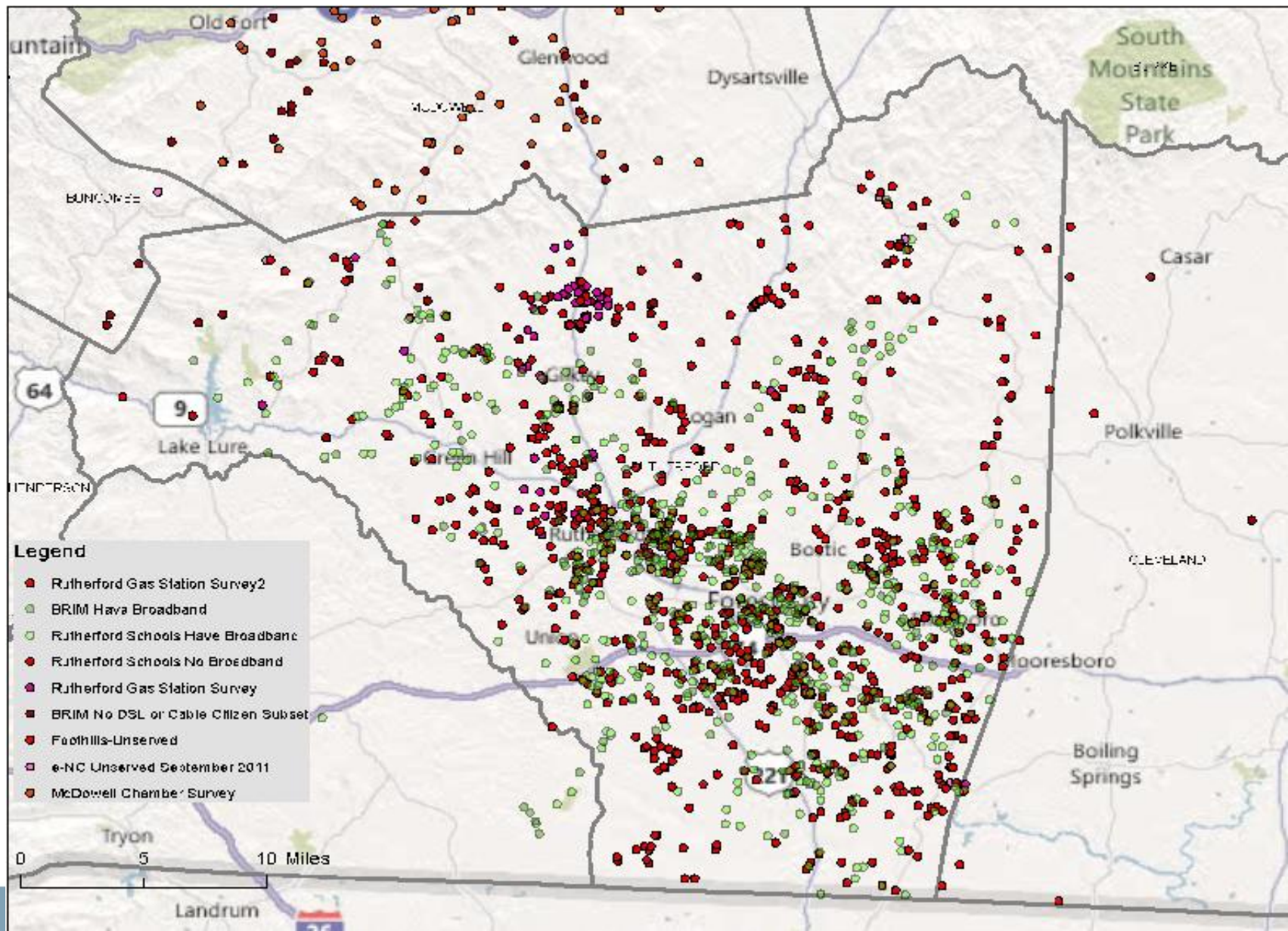


Sample Map -
Broadband Availability
Data – Coverage by
Technology Type

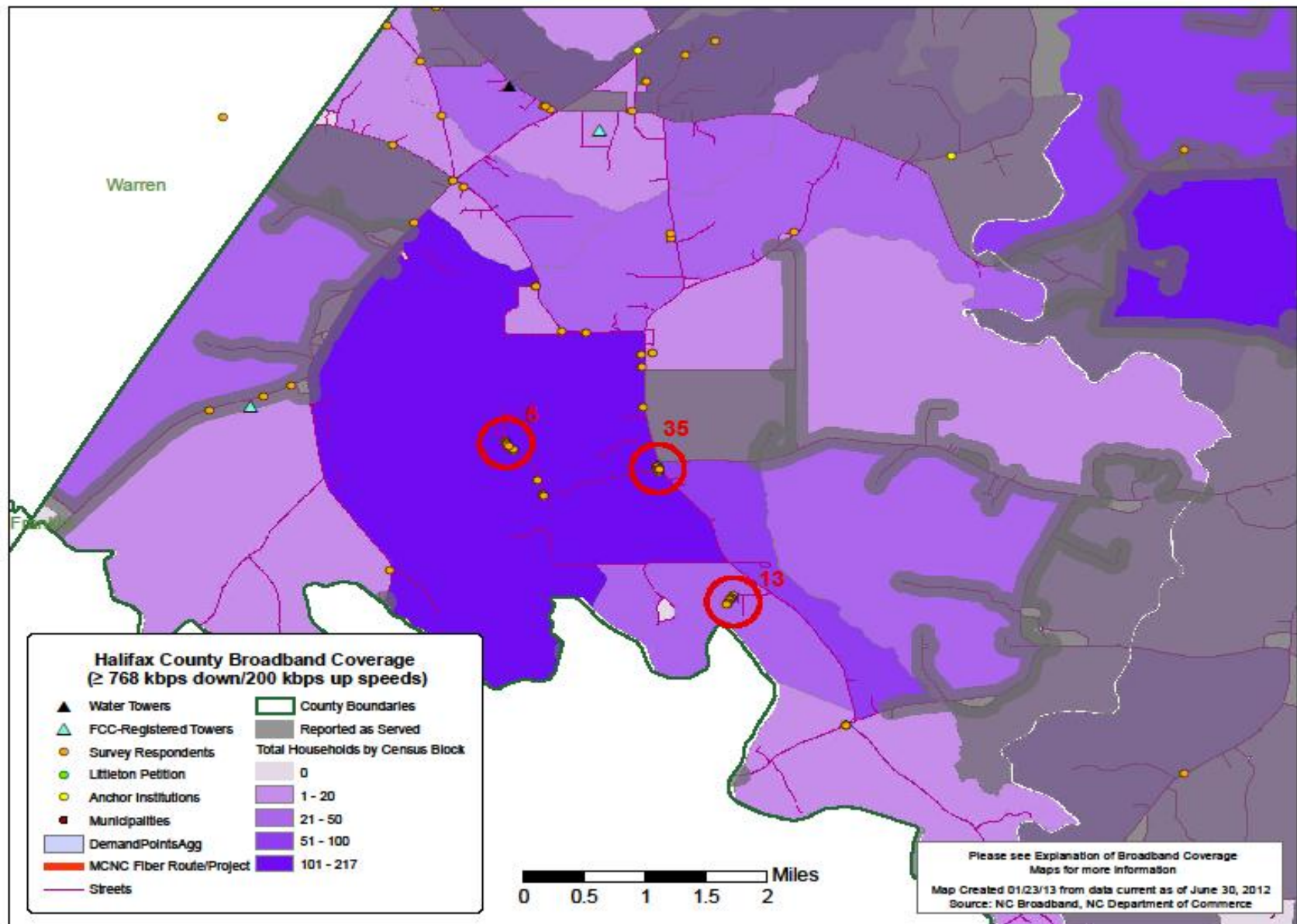
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Sample - More Granular Citizen Surveys to Identify Pockets of Demand



Demand Aggregation / Citizen-Sourced Data (example: Halifax and Jones)



READY Anywhere!

Partnering with the **NC Department of Public Instruction (DPI)** on READY Anywhere!

- North Carolina is a national leader in school connectivity.
- Due to a combination of factors (such as income level, access to devices, availability and uptake), too many students in North Carolina lack access to the Internet after school hours when this resource is critically needed to further their competitiveness.
- Connectivity that goes with the student into the home is absolutely necessary for students to graduate college and career ready.

Pilot Surveys Planned for Launch:

- Madison County, Greene County, Orange County (LEAs)
- Iredell/Statesville and Pender County (LEAs)

Broadband Adoption / Uptake

NC LITE-UP

Linking the Internet to Economically Underprivileged People

Research project looking at the barriers to broadband adoption – access to computer, monthly service cost, access to training, access to digital literacy support

In partnership with:

- Wilkes Telecommunications (Wilkes County)
- Wilkes County Department of Social Services
- Frontier Communications (Durham County)
- Durham County Department of Social Services
- Rutherford County (Help Desk)

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Broadband Adoption / Uptake

Primary sponsor for the **8th Annual Black Summit**,
organized by the NC Alliance of Black Elected Officials
•April 25-27, 2013

In NC, as in many states, African Americans are reflected as having lower adoption rates than other populations. In our 2011 Citizen Survey, <http://www.ncbroadband.gov/broadband-101/research> , African American respondents report the lowest percentage of home Internet access use, the next to lowest percentage of households with a home computer (just slightly higher than Hispanic respondents), and the lowest percentage of respondents saying they use the Internet anywhere.

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The **NC Center for Geographic Information & Analysis (CGIA)**, in the NC Office of the State Chief Information Officer, is the lead organization in the state for geographic information systems (GIS).

In 2008, the NC General Assembly directed CGIA to develop the **NC Master Address Dataset** (containing 4,766,652 points) in support of the 2010 decennial census. CGIA staff integrated address data statewide, from county and municipal governments, to develop one Master Address File for NC.

NC Broadband is contracting with CGIA to update this Master Address File. The primary goal of this federally-funded project is to work closely with local governments to better engage and enable their involvement in developing address information that is of higher quality, particularly in rural counties. Technical efficiencies will be developed and implemented to reduce the “per cycle” costs for updating the Master Address File for the state.

Data to be distributed through the **NC OneMap portal**.

<http://www.addressnc.com>

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FirstNet

National Public Safety Broadband Network (NPSBN)

- \$3.2m available to North Carolina for the **State & Local Implementation Grant Program (SLIGP)** from the NTIA
- Applications due March 19
- Nationwide, interoperable data network (4G, LTE)
- Lead entities – Department of Public Safety and Office of State CIO, with Department of Commerce/NC Broadband as a partner
- FirstNet (First Responder Network Authority) is the national board
- City of Charlotte – one of seven national pilots
- Ensure coverage in rural areas

NC Broadband

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