

Broadband Project Frequently Asked Questions

What is the history of the Nelson County broadband project?

- Nelson County completed its research and planning for this project, with the assistance of the Virginia Department of Housing and Community Development's (DHCD's) Community Broadband Study. The project was part of the Virginia Rural Broadband Planning Initiative. The County received a total of \$115,000 in grant funds and hired ICON Broadband Technologies, Inc. to assist the County in three phases of planning that culminated in the County's Broadband Technology Opportunities Program (BTOP) middle mile project grant application. The County accepted the NTIA/BTOP grant award on April 6, 2010 and subsequently began implementation of its middle mile network project. Middle mile project is defined as follows:
 - *Middle Mile Project*: a broadband infrastructure project that does not predominantly provide broadband service to end users or to end-user devices, and may include interoffice transport, backhaul, Internet connectivity, or special access.

How and for what purpose did Nelson County obtain funding for the project?

- Through a highly competitive grant process, Nelson County obtained \$1,826,646 for the Broadband Project from the National Telecommunications and Information Administration's (NTIA's) Broadband Technology Opportunities Program (BTOP). The purpose of this funding is to enhance and expand broadband Internet services in *unserved* and *underserved* areas of Nelson County by deploying approximately 31 miles of new fiber and four new wireless tower sites, and directly connecting 13 *Community Anchor Institutions (CAIs)*. The CAIs that received direct connections to the new network are five county government facilities, three K-12 schools, the Blue Ridge Medical Center, Afton Family Medicine, Nelson Rescue, Nelson County Service Authority, and the Nelson Memorial library. The project plans to provide speeds from 10 Mbps up to 1 Gbps and spur more affordable broadband Internet service for as many as 1,500 households, 250 businesses, and an additional 30 CAIs, by enabling Internet service providers to connect to the project's open access network.

The Nelson County Virginia Broadband Project will also:

- Enable the Blue Ridge Medical Center to deploy telemedicine capabilities and enhance collaboration with health care specialists at the University of Virginia.
- Enhance public safety by allowing emergency services personnel to communicate and transmit vital patient data en route to a hospital.
- Provide residents, students, and teachers' greater access to multimedia educational information and distance learning opportunities.

How much money was spent on the project?

- A total of \$3,173,205 was spent on the project. Funding is broken down as follows: \$1,826,646 in federal grant funds, \$456,662 in required local match, \$200,000 in state grant funds, and \$689,897 in other local funds were spent on the project.

What were the requirements of the grant?

- At least 75 percent of the *proposed funded service area* to be funded had to be within *rural areas* that were *unserved* or *underserved* as defined as follows:
 - *Proposed funded service area*: the area (either in all or part of an existing service area or a new service area) where the applicant is requesting BIP or BTOP funds to provide broadband service pursuant to the July 2009 NOFA.
 - *Rural area*: any area, as confirmed by the latest decennial census of the Bureau of the Census, which is not located within: (i) a city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or (ii) an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants. For purposes of the definition of rural area, an urbanized area means a densely populated territory as defined in the latest decennial census of the U.S. Census Bureau.
 - *Unserved*: At least 90 % of households in the proposed funded service area lack access to facilities-based, terrestrial broadband service, either fixed or mobile, at the minimum broadband transmission speed. A household has access to broadband service if the household can readily subscribe to that service upon request; or
 - *Underserved*:
 - No more than 50 % of the households in the proposed funded service area have access to facilities-based, terrestrial broadband service at greater than the minimum broadband transmission speed;
 - No fixed or mobile broadband service provider advertises broadband transmission speeds of at least 3 mbps downstream in the proposed funded service area; or
 - The rate of broadband subscribership for the proposed funded service area is 40 % of households or less
 - A proposed funded service area may qualify as underserved for middle mile projects if one interconnection point terminates in a proposed funded service area that qualifies as unserved or underserved for Last Mile projects.

Note: An unserved/underserved area may include individual Census block groups or tracts that on their own would not be considered underserved and the availability of or subscribership rates for satellite broadband service is not considered for the purpose of determining whether an area is unserved and or underserved.

- For broadband infrastructure projects seeking more than \$1 million in funding, a certification, from a Professional Engineer was required, that attested that: a) the system would deliver the stated performance; and b) the proposed project would be substantially complete within two years, and fully complete within three years.
- Two-way data transmission with advertised speeds of at least 768 kbps downstream and 200 kbps upstream must be provided.

- Applicant agreed to comply with the nondiscrimination and interconnection obligations outlined in the Notice of Funding Availability (NOFA) as follows:
 - *Nondiscrimination and interconnection obligations:*
 - adherence to the FCC’s Internet Policy Statement adopted on August 5, 2005 as follows: (1) consumers are entitled to access the lawful Internet content of their choice; (2) consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement; (3) consumers are entitled to connect their choice of legal devices that do not harm the network; (4) consumers are entitled to competition among network providers, application and service providers, and content providers
 - not favor some lawful applications and content over others;
 - describe and display any network management policies;
 - connect to the public Internet and not be an entirely private closed network; and
 - offer interconnection, including the ability to connect to the public Internet and physical interconnection for the exchange of traffic.

- The project had to advance at least one of the following statutory purposes for BTOP, Nelson County’s project advanced all three at the time of its application:
 - Provide access to broadband service to consumers residing in “unserved” areas of the United States
 - Provide improved access to broadband service to consumers residing in “underserved” areas of the United States
 - Provide broadband education, awareness, training, access, equipment, and support to *Community Anchor Institutions (CAIs)* as defined as follows:
 - *Community Anchor Institutions:*
 - Schools, libraries, medical and healthcare providers, community colleges and other institutions of higher education, and other community support organizations by or through these organizations
 - Organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by low-income, unemployed, aged, and otherwise vulnerable populations
 - Job-creating strategic facilities located within a State-designated economic zone, Economic Development District designated by the Department of Commerce, Renewal Community or Empowerment Zone designated by the Department of Housing and Urban Development, or Enterprise Community designated by the Department of Agriculture
 - Improve access to, and use of, broadband service by public safety agencies
 - Stimulate the demand for broadband, economic growth, and job creation

- Applicant had to provide matching funds of at least 20 percent towards the total eligible project costs. The County was required to provide a match of \$456,662.00. \$200,000 in State grant funds were used to offset this cost.
- Applicant had to document that the project would not have been implemented during the grant period without federal grant assistance.

Has the grant project been completed?

- As of March 2013, the grant project is in the final stages of completion with all but the connection to the Massie's Mill tower site being completed. The project final completion deadline is June 30, 2013.

What is the network comprised of?

- The NCBA Broadband Network is comprised of approximately 31 miles of fiber backbone extending from Afton to Colleen along routes 151, 6 and 29 within the County. The network also includes four communications towers with connectivity to the network to be used by wireless internet service providers in delivering services. These towers are located in Afton at the Rockfish Valley Fire Department, in Avon at Martin's Store, in Massies Mill near the Solid Waste Collection Site, and at Colleen in the Colleen Business Park.

Will there be grant funding to connect individual homes and businesses?

- Not at this time. The BTOP grant that provided funding for the project, only required that the thirteen identified *Community Anchor Institutions (CAIs)* be directly served by the project. The grant funding did not provide for any additional connections beyond these.

Who owns the network?

- Nelson County owns all network infrastructure and leases the network to the Nelson County Broadband Authority (NCBA) for its operation. It is the intent of Nelson County to own and NCBA to lease and operate all fiber infrastructure all the way to the customer premise, in order to promote a competitive environment for service provision.

Who monitors and maintains the network?

- Nelson County Broadband Authority (NCBA) has contracted with Blue Ridge Internetworks (BRI), a Charlottesville based technology firm, to monitor and maintain the network. BRI brings a wealth of technical expertise and personnel who provide 24 x 7 x 365 network monitoring and support to keep the network up and running.

What is the role of service providers?

- Service providers lease connections on the NCBA network to reach and serve customers. Each service provider develops their own service offerings and associated pricing. Customers are to contact service providers directly for information regarding these services and their costs.

Who can be a service provider?

- Any internet service provider wishing to offer services utilizing the network can do so provided they can meet the contractual obligations established by NCBA.

Who are the current service providers and how do I contact them?

- As of March 2013, NCBA is under contract with or has contracts pending for service provision with the following providers - please contact these service providers directly:
 - Blue Ridge Internetworks (BRI), Charlottesville VA, Wired Internet Services, **(434) 817-0707**, <http://www.briworks.com/>
 - Stewart Computer Services (SCS), Arrington VA, Wireless & Satellite Internet Services – **Contract Pending (434) 263-6363**, <http://www.stewartcomputerservices.com/>

What services does NCBA anticipate will be offered over the network?

- To date service providers have indicated that they intend to utilize the network to deliver three different types of services: wireless, fiber to the home or business, and hybrid fiber/copper (DSL) to the home or business.

When will services be available?

- The deployment of services to the customer is driven by the service provider. NCBA does not provide services to individual customers. The time required before services will be available to you will depend upon the effort required for deployment and installation by the provider. The schedule for deployment can be impacted by the complexity of the installation, contract negotiations, weather and customer demand.

What is the future of the network?

- NCBA will continue to plan strategically for expansion of the network based on customer demand, the viability of the existing network, and available capital funding.

For more information regarding the Nelson County NTIA grant see the following website:

<http://www2.ntia.doc.gov/grantees/NelsonCounty>