



Broadband Infrastructure Application  
Submission to RUS (BIP) and NTIA (BTOP)

<b>Submitted Date:</b> 8/19/2009 5:38:05 AM	<b>Easygrants ID:</b> 506
<b>Funding Opportunity:</b> Broadband Initiatives Program and Broadband Technology Opportunities Program	<b>Applicant Organization:</b> North Georgia Network Cooperative Inc
<b>Task:</b> Submit Application - Infrastructure Programs	<b>Applicant Name:</b> Lee Ann Roy

- **Demonstration the Project Could not be Implemented But For Federal Grant Assistance**  
Applicant is providing matching funds of at least 20 percent towards the total eligible project costs?  
Yes

<b>7-k. Cost Sharing/Matching Fund Explanation</b>
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## C. Executive Summary

### Executive Summary of Project for BIP and BTOP:

#### 8. Infrastructure Projects Executive Summary

Background—The Problem and the Opportunity

President John F. Kennedy was so moved by what he saw in the Appalachian Region of the United States that in 1963 he formed a federal-state committee, the President's Appalachian Regional Commission, to address the region's persistent poverty and growing economic despair. Among other efforts, the ARC invested in infrastructure for the region—water and sewer capacity that brought a new job-producing textile and manufacturing base to north Georgia's foothill counties of Union, Towns, Rabun, Habersham, White, Lumpkin, Dawson and Forsyth, for whose benefit this application is made.

That investment served several generations of Appalachian residents very well. But today, almost 50 years later, the region again faces serious economic challenges as scores of manufacturers have cut jobs and shuttered the factories that once fueled the local economy. While the local economies of many American communities will begin putting workers back on the job as the recession lifts, north Georgia is faced with the dismal prospects of an economic base that is never coming back.

Recognizing both the problem and the opportunity at hand, the region's economic development leadership has taken a frontline, proactive approach, resolving to create a new economy for north Georgia—a technology-based economy. In order to accomplish this, we ask for federal investment in infrastructure that will lay the groundwork for another 50 years of progress. Only this time, instead of water and sewer, it is broadband infrastructure that will open the doors to opportunity, hope and prosperity for north Georgia and the southern



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Appalachian region.

#### The Solution

The North Georgia Network proposes to connect 135 miles of new fiber optic build with existing fiber spans to create a powerful and robust, 260 mile fiber optic ring traversing 12 north Georgia counties. [REDACTED] this new fiber ring promises to deliver into the region Gigabit broadband speeds and the reliability of dual-route redundancy never available before in the area.

#### An 8-County Service Area

The middle mile fiber infrastructure project will benefit an 8-county area with an estimated population (2008) of more than 334,000 people spread over 2,100 square miles. It will directly pass 245 strategic anchor institutions—including 146 county government facilities, 6 municipal facilities, 82 public schools, 7 technical institutions, colleges and universities and 4 hospitals—while also supporting deployment of last-mile fiber to the home [REDACTED] in underserved areas in the northern part of the region. From a broader view, the potential reach of the project is estimated to be more than 42,000 households, 9,209 businesses and 367 strategic anchor institutions.

#### An Open Network

NGN is an open network that will feature approximately 2,600 interconnection points along the route, where independent service providers will be encouraged, on a non-discriminatory basis, to interconnect with the system in order to build out their own fiber services to end users. Interconnection for independent service providers will be enabled through an access company that will be a member and owner of NGN. The plentiful interconnection opportunities will result in an abundance of broadband capacity, give consumers a choice of providers, and bring pricing in the region down to the more affordable levels typically enjoyed in non-rural areas.

#### System Design

There are three components to the network: core (backhaul), middle mile and last mile. The core includes a combination of new fiber construction, in-kind and infeasible Right of Use (IRU) agreements and leased services. The ring design enables path diversity and redundancy throughout the core. It is central to the project's ability to bring high-capacity, low-cost



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bandwidth into the region [REDACTED] while also delivering the resilient services necessary for business growth and economic development. The ability to maintain the lower prices needed in the northern, underserved part of the service area [REDACTED]

[REDACTED]



**Applications**

NGN's founding partners envisioned creation of a regional, broadband network not as a goal in and of itself, but as a means to a greater goal of "transforming" the north Georgia region—economically, educationally, socially and otherwise—so that "all boats will rise." Community stakeholders stand ready to use the network as a springboard for development of more robust healthcare services, richer educational opportunities, more effective literacy programs, stronger workforce development initiatives and more innovative job creation endeavors. The network will facilitate both the region's ability to offer new levels of services and residents' abilities to access them.

**Qualifications and Readiness to Implement the Network**

North Georgia Network Cooperative, Inc. is well qualified and prepared to implement and



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operate the North Georgia Network, in terms of both its organizational structure and its management and operational team.

NGN is structured as a member-owned cooperative, a governance model that has been successful in rural areas throughout the nation since the Rural Electrification Act of 1936. Two of the cooperative's owners are Habersham Electric Membership Corporation and Blue Ridge Mountain Electric Membership Corporation, each with decades of history behind them, who between them provide affordable, dependable electrical service [redacted] customers in 11 counties, primarily in rural northeast Georgia.

The two EMCs already have constructed locally-based fiber infrastructure to [redacted] residential, commercial and anchor institution customers. As such, each organization routinely engages in the activities that will be required in connection with the proposed project. In addition to contributing organizational resources and back office support to launch the project expediently, they have committed time and expertise of key members of management, who will function as an Interim Management Team as project activities get underway.

**Overall Cost**

The overall infrastructure cost of the broadband system is \$41,863,171. NGN and its partners are making in cash and in-kind equity contributions equal to 20% of the project costs.

[redacted]

**Job Creation**

Based on published research on the economics of broadband infrastructure construction, NGN anticipates that each \$1 million invested in this project will create 20 direct jobs and 500 indirect jobs. Therefore, our \$41 million-plus project is expected to generate 837 direct jobs and almost 21,000 indirect jobs over the construction period.

**Description of BTOP Project Purpose (BTOP Applicants Only Next Three Questions)**

**9. BTOP Statutory Purpose:**

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