



## Introduction

The Quilt ([www.thequilt.net](http://www.thequilt.net)) and StateNets ([www.educause.edu/StateNets](http://www.educause.edu/StateNets)) organizations wish to thank the NTIA for the opportunity to provide our feedback on the implementation of the Broadband Technology Opportunities Program. Collectively, we speak for 30 of our country's state and regional advanced networks that are the critical "middle-mile" of our national research and education networks (R&E). We connect over 2200 colleges and universities; thousands of K-12 school districts, libraries, municipalities, museums and hospitals; numerous high-technology corporations.

State and regional R&E networks provide advanced networking services to urban and rural community anchor institutions that otherwise would not have such services. Our networks enable anchor institutions to join together within their communities' geographic areas to cost-effectively carry out research, education and public service that require high broadband speeds. We connect our member institutions to advanced national and international networks that support innovative research and education. We not only meet the advanced broadband needs of higher education institutions, K-12 schools, libraries, museums, state and local governments, non-profit organizations, and health-care but also partner with private industry engaged in research and education.

Please note that the comments provided below include a number in parentheses after each. This number refers to the section of the NTIA Request for Feedback document to which the comment is addressed.

## Establishing Selection Criteria for Grant Awards

- The NTIA should give priority to multi-purpose requests that best serve the public interest and address requirements across multiple grant categories. In particular, the NTIA should give priority to multi-purpose requests that implement the principles set forth in the white paper from the higher education community, "Unleashing the Waves of Innovation," submitted as comments to this BTOP proceeding by Ed Lazowska of The University of Washington on March 22, 2009. (1)
- To promote broadband as critical foundation infrastructure, the NTIA should encourage applicants to take an expansive approach that coordinates existing state resources and provides broadband services to a wide array of community anchor institutions including research and education; libraries, municipalities and healthcare. Per the "Unleashing the Waves" principles, the NTIA should give priority weighting to multi-purpose proposals that provide broadband infrastructure to anchor institutions. (1)
- The NTIA should prioritize proposals that leverage existing statewide broadband investments, extending and expanding advanced broadband services to community anchor institutions including K-12 schools, public and private higher education and research institutions, public libraries,



municipalities, and hospital and health care communities in served, unserved and underserved areas within states. (1)

### **Eligible Grant Recipients and Financial Contributions by Grant Applicants**

- In addition to the eligible recipients listed in the Recovery Act, we propose that state and regional research and education network organizations with substantial investment in services delivered to communities be considered eligible, regardless of their for-profit or not-for-profit status. (3)
- Section 6001(b) of the Recovery Act states that the purposes of the program are to—
  - (1) provide access to broadband service to consumers residing in unserved areas of the United States;
  - (2) provide improved access to broadband service to consumers residing in underserved areas of the United States;
  - (3) provide broadband education, awareness, training, access, equipment, and support
  - (4) improve access to, and use, of broadband service by public safety agencies; and
  - (5) stimulate the demand for broadband, economic growth, and job creation.

In response to the question if a certain percentage of grant funds be apportioned to each category, we recommend that the NTIA should not apportion grant funds using an “a priori” categorical formula for these programs. (1)

- During the public round table discussions in March, representatives of the NTIA stated that funds spent by applicants on broadband stimulus eligible items prior to grant award would not be counted as matching funds. This stance may have the unintended consequence of causing applicants to delay spending until grant awards are made. If the objective of the ARRA is for immediate stimulus and job creation, then we believe during the interim until grants are awarded, continued spending in the sector should be favorably viewed.

The NTIA should consider a policy that allows funds spent on eligible items after September 30, 2008 qualify as matching for NTIA BTOP ARRA funds. Proper accounting, contracts and receipts, as defined by the NTIA, would be proof of expenditure that should be submitted with the grant application. To this point: (9)

- we strongly urge the NTIA to consider direct costs incurred as part of preparing a grant proposal, e.g., project management and project design costs, as matching funds.
- we strongly recommend that under the circumstance a BTOP project is a result of a private/public partnership, that private partner contributions such as rights of way, equipment and/or materials which are otherwise sufficient to meet financial matching requirements be qualified as eligible match.



### **Feedback on Increasing Public Computer Center Capacity**

- State training facilities, centers at universities and university extension offices, regional technology centers and state vocational centers should be added to the list of entities eligible to receive funding. (6)
- We support granting funding priority to existing public computing centers where facility and staffing resources already exist and can be leveraged and expanded. Advanced consideration should be given to requests that plan for ample broadband infrastructure that will support expanded computer capacity on a five-year demand horizon and provide for connectivity to other anchor community institutions. (6)
- While public libraries and extension centers are generally open to the public, many community anchors such as K-12 buildings and college and university campuses have security concerns and would not be considered “open to the public at-large.” There is a need to define “public” to understand what user availability stipulations are tied to funding for these centers. (6)

### **Grants for Innovative Programs to Encourage Sustainable Adoption of Broadband Service**

- *Perceived value* will be the key to adoption and sustainability. The public needs to know how “big pipes” will *transform* their business and their life. It is the core competency of the research and education community to develop innovative uses and educate the public on how to apply the technology to their challenges. Small Business & Technology Development Centers are already served out of many university campuses. We envision programs which identify key communities (health care, farming, construction, light manufacturing, etc.) and develop a seminar series on the innovative uses of existing technologies for these communities. (7)
- NTIA should give priority to funding requests under this program for public interest projects that support the provision of advanced networking services and applications for community anchor institutions. These advanced networking services should foster collaborations among researchers, educators, doctors, and students all who play vital roles in wider broadband adoption. The scope of support for proposals should include plans to deploy advanced network services that require specific end point equipment such as telepresence and telehealth. (7)
- Strong consideration should be given to proposals that provide for community-based adoption, including digital book repositories, home-based health and emergency access services, security and safety programs should be given priority. (7)



## Broadband Mapping

- On the onset of a comprehensive national broadband mapping effort, our organizations strongly recommend that the NTIA move expeditiously to add questions to address broadband availability to the household in our country's national census starting in 2010. If our nation endeavors to implement a national broadband strategy, then capturing metrics in support of this strategy should be evident in our national census efforts. (8)
- This mapping activity funded by the public should serve a public good and be consumer and small business-centric. Data on fiber infrastructure acquired through a BTOP grant should be made public through public mapping efforts with no expiration on data availability and at no additional cost. (8)
- For states which do not already have GIS maps, prior to a state endorsing any single mapping proposal, it should be required to review all proposals available with for-profit, not-for profit and educational institutions eligible to respond. Many universities have social and economic data analysis capabilities sufficient to ensure an accurate picture of broadband facilities in the state. Many of these same universities have GIS resource centers capable of creating, maintaining, and visually representing the broadband data. This approach enables an independent and statistically valid view of the broadband capabilities in the state. (8)
- To be effective, broadband maps should meet the needs of government, education, business and consumers today. (8)

For consumers and businesses:

- Type of connection
- Up/Down speeds
- Comparison of average \$/meg availability
- Name and contact information for providers in the area

For Government and Education

- Same as consumer and business data plus;
- Current infrastructure availability of providers, including lit and unlit fiber, and public infrastructure
- Airway spectrum
- Location of subscribers
- Collect individual survey responses of consumers and businesses in a specific area to match up against data provided by service providers to validate mapping data. Consumers and business owners have practical knowledge of broadband availability in their area and are a knowledgeable resource that should be included in this process



#### About The Quilt

The Quilt gathers more than 30 leading research and education networking organizations in the United States to promote consistent, reliable, interoperable and efficient advanced networking services that extend to the broadest possible community; and to represent common interests in the development and delivery of advanced network services. For more information, see <http://www.thequilt.net>

#### About StateNets

State Research and Education Networks provide vital resources and services to our K-20 communities in support of education; research and development; and outreach and public service. The mission of StateNets is to provide a national organization for collaboration among individual state R&E networks and to provide a leadership role in articulating a unified vision in the research and education networking community as well as serving to build unity among various national organizations. For more information, see <http://www.educause.edu/StateNets>