



**Office of the Director
eXtension Foundation**

University of Nebraska – Lincoln
6 Ag Communications Building
PO Box 830918
Lincoln, NE 68583-0918
Office: 402.472.8841
Fax: 402.472.0025
E-mail: dan.cotton@eXtension.org
Web: www.eXtension.org

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To: The National Telecommunications and Information Administration, Department of Commerce; and Rural Utilities Service, Department of Agriculture

From: Dan Cotton Director, eXtension Foundation; Kevin Gamble, Associate Director, eXtension Foundation; Bo Beaulieu, Director and Professor Southern Rural Development Center, Mississippi State, MS; Bill Shuffstall, Extension Educator, The Pennsylvania State University; Theodore R. Alter, Professor of Agricultural, Environmental and Regional Economics, Co-Director, Center for Economic and Community Development, The Pennsylvania State University

Subject: Comments Pertaining to the American Recovery and Reinvestment Act of 2009 Broadband Initiatives

Thank you for this opportunity to provide comments related to the American Recovery and Reinvestment Act of 2009 Broadband Initiatives. The eXtension Foundation is a national Internet-based educational network providing 24/7/365 access to objective, science-based information from land-grant universities and partners nationwide. It is an integral part of and complements the community-based Cooperative Extension System.

Following you will find an Executive Summary of less than one page and a longer statement with more details. If you have questions, please advise.

Executive Summary:

The Cooperative Extension Service is a federal, state and local partnership that offers an outreach educational program that operates as an integral part of Land-grant institutions in each state and territory and provides science-based, non-formal educational programming.

The Cooperative Extension System provides leadership to the National e-Commerce Extension Initiative, an effort designed to introduce, strengthen, and expand the adoption of appropriate e-commerce strategies by local businesses and governments. Investments have resulted in the development of a host of new e-commerce educational products and the delivery of innovative educational programs that are helping to meet many of the information, technical assistance, and educational needs of small businesses and communities in rural America.

In addition, the Cooperative Extension System is working to strengthen and expand rural America's entrepreneurial activities. Thanks to the efforts of the National eXtension Initiative, a national Internet-based educational network providing 24/7/365 access to objective, science-based information from land-grant universities and partners nationwide, a dedicated team of Cooperative Extension educators from land-grant universities across the country has designed, developed, and launched an abundance of educational resources, including Frequently Asked Questions, Information Briefs, and Ask the Experts functionality. This system is linked to "on the ground" educators in nearly every county/parish in the US.

We know that "connected communities" see Internet access as critical to realizing sustained socioeconomic viability into the future; therefore, we believe the *Grants for Expanding Public Computer Center Capacity* and the *Grants for Innovative Programs to Encourage Sustainable Adoption of Broadband Service* should target organizations with:

- A proven track record in community and economic development, curriculum development, and experience with digital literacy programs designed for serving unserved and underserved audiences.
- Experience bridging the physical aspects of providing broadband services with the human elements required for adopting and effectively using the technology.
- An established network of local learning centers incorporated within a larger educational system that provides a full complement of educational services.
- Established partnerships with local educational institutions, government, and businesses.
- Experience in measuring impacts to demonstrate a significant return on investment.

Furthermore, we believe the program should be grounded in research that provides new insights into the socioeconomic, policy, and technological issues, decisions and trade-offs inherent in meeting this challenge. Not only must these issues be considered at the macro-level, they must also be discussed and acted upon at the local level – in communities across the urban, suburban, and rural landscapes. Making sound decisions requires communities to have access to objective information and educational/technical assistance provided by people and organizations that are trusted. That is where we believe the Cooperative Extension System can play such a valuable role.

Statement of Input to NTIA/RUS Regarding Broadband Initiatives:

The presence of what some have described as a “digital divide” between rural and urban areas of the United States has prompted policymakers, and both private and nonprofit sectors to seek the expansion of broadband to rural America. Having access to rural broadband can help create a “level playing field” between rural businesses and their urban-based counterparts. In fact, evidence suggests that improved access to broadband, coupled with the appropriate adoption of this important innovation, can translate into more profits for rural businesses and spur improvements in the economic health of rural areas. While the delivery of broadband to rural areas has emerged as a critical priority of Congressional and federal agency leaders as a result of the American Recovery and Reinvestment Act of 2009, having access to trusted sources of information and education that can guide the adoption strategies of local businesses, governments, and individuals is equally important.

We know that "connected communities" see Internet access as critical to realizing sustained socioeconomic viability into the future. Some use digital technologies to enhance their local workforce or attract new workers, tourists, or businesses. Others seek to provide an environment where young people will return to live and work. Other communities use digital technologies as a way to help build “community” within their community, using it as a way to help individuals with like interests find and associate with each other.

The availability of affordable broadband services in a community does not ensure that community is truly connected. Connectivity also depends on the ability of organizations and individuals in the community to use the Internet and digital tools (computers, video conferencing, etc.) to meet their goals. Leaders in connected communities undertake projects that focus on developing the several essential components of connectedness:

- Community Vision
- Broadband infrastructure
- Adoption and use of digital tools by residents
- Adoption and use of digital tools by organizations and firms

That’s where the educational programs and information resources of USDA and the Cooperative Extension System (CES), coupled with those of the land-grant universities, comes into play. Over the past several years, the Cooperative Extension System has provided leadership to the National e-Commerce Extension Initiative, an effort designed to introduce, strengthen, and expand the adoption of appropriate e-commerce strategies by local businesses and governments. Investments have resulted in the development of a host of new e-commerce educational products and the delivery of innovative educational programs that are helping to meet many of the information, technical assistance, and educational needs of small businesses and communities in rural America. Currently, significant programming is being supported by USDA’s four Regional Rural Development Centers (RRDCs) through the National e-Commerce Extension initiative, which is comprised of three complementary efforts:

1. A State of the Art On-line Educational Resource Center that provides easy, hands-on training to help rural businesses (i.e., small, micro, entrepreneurial enterprises) succeed in today's globally-driven economic climate, as well as tools that can help local governments and community leaders identify, develop, and implement sustainable community-based projects that increase the availability of affordable advanced communication services, and increase adoption of broadband services by local businesses, institutions, and residents. To date, 12 curricula have been developed through a national competitive grants program to ensure that the e-commerce educational needs of Extension customers can be quickly and effectively generated and delivered by the most talented Extension educators across the country.
2. A Trained Team of Extension Educators who provide guidance to rural businesses and local governments regarding the successful adoption of broadband usage. Extension educators from 26 states have already joined this multi-state team and are committed to advancing the capacity of rural businesses and local governments in their states to embrace this new technology. Having completed an intensive training regimen, the team is armed with both educational resources, as well as technical assistance expertise.
3. Website and Bi-Monthly Newsletters are providing rural businesses and governments with ready access to research reports, statistical data, educational programs, and upcoming workshop on e-commerce and business-related topics. Web-based seminars are being hosted throughout the year, introducing educators, small businesses and local governments to new e-commerce training and products. The eNEWS bimonthly newsletter is offering people across the country with valuable tips on e-commerce successes and strategies.

As Federal and state leaders and agency leaders work to expand access to broadband in rural America, the Cooperative Extension System and its Extension partners are positioned to deliver the type of high quality education and technical assistance that rural businesses and communities need to make informed choices regarding the best use of this important innovation. This includes facilitating and guiding a citizen-centered planning activity that produces a strategic blueprint and action plan regarding on how this innovation can be best be used to benefit local government, small businesses, community organizations, and local residents. Please see the National e-Commerce Extension site at: <http://srdc.msstate.edu/ecommerce/index.html>.

A key companion piece to the e-commerce work is the work being undertaken by the Cooperative Extension System to strengthen and expand rural America's entrepreneurial activities. In many communities across the nation, entrepreneurship is emerging as a critical strategy to complement the industrial recruitment and business retention and expansion efforts of communities. Not only are entrepreneurs a growing segment of the employment base of urban areas, they are expanding at a hefty pace in rural areas, as well. In fact, the numbers who are self-employed (i.e., non-farm proprietors) now surpasses 5.6 million persons in rural America. At the present pace of growth, nearly 1 in 3 rural adult residents is expected to be self-employed by 2015. Unfortunately, this accelerated growth does offer reason for concern. On average, earnings captured by self-employed rural Americans are about 50 percent lower than those secured by rural wage and salary workers.

Strengthening the viability of entrepreneurial and small business activities will be dependent, in part, on their capacity to access a comprehensive network of people and educational programs that can equip them with the knowledge, skills and tools they need to succeed in today's volatile business environment. Thanks to the efforts of the National eXtension Initiative, a national Internet-based educational network providing 24/7/365 access to objective, science-based information from land-grant universities and partners nationwide (see <http://www.extension.org>), a dedicated team of Cooperative Extension educators from land-grant universities across the country has designed, developed, and launched the Entrepreneurs and Their Communities eXtension website. This site is a virtual resource center that provides communities and entrepreneurs with a one-stop website for securing information on a host of entrepreneurship-related topics, including:

- Frequently Asked Questions (FAQs) that deal with many aspects of starting and maintaining a business.
- Information Briefs that offer short, focused, and to-the-point information on such topics as: "Creating a Business Image," "The Basics of Marketing," and "Does My Business Need a Website?"
- Research Highlights that help business owners catch up on the latest research on entrepreneurship.
- Case Studies that share inspirational stories of individuals who worked hard to realize success as entrepreneurs.
- Learning Lessons that offer a series of educational opportunities to individuals – anytime, any day, anywhere – right at their fingertips.
- Web conference seminars that introduce entrepreneurs and rural communities to a variety of new information, programs, and products related to entrepreneurship via the use of eXtension web-based conferencing capability.
- Ask an Expert system that offers eXtension customers with tailored responses to information they need related to their entrepreneurship or small business activities.

Both the National e-Commerce Extension and eXtension Entrepreneurs and Their Communities initiatives represent critical "added value" activities of our nation's land-grant university system – products and programs that are supported by a strong network of county-based Cooperative Extension educators in states across America. At the same time, we believe a nationally-focused eXtension Community of Practice, a multi-institutional and multidisciplinary virtual team of subject matter specialists serving clientele needs, in the area of "digital literacy" represents a very timely and important set of resources to assist communities in their access to and use of broadband services. These are important capacities that exist in the Cooperative Extension System right now. With its access to a variety of important science-based resources, the Cooperative Extension System is ready to serve as a valuable conduit for enhancing the use of broadband and e-commerce in rural America, and for strengthening the role that entrepreneurship can play in promoting the economic vitality of communities across rural America.

From this perspective we offer the following comments for consideration in the final writing and development of the national broadband program.

6. Grants for Expanding Public Computer Center Capacity: The Recovery Act directs that not less than \$200,000,000 of the BTOP shall be awarded for grants that expand public computer center capacity, including at community colleges and public libraries.

a. What selection criteria should be applied to ensure the success of this aspect of the program?

- Organizations with a proven track record in community and economic development, and in supporting digital literacy programs. For instance, the long established project of the USDA Children, Youth, and Family Network (CYFERNet - <http://www.cyfernet.org/>) has combined computing and network access with high-quality educational opportunities for unserved and underserved youth. Moreover, the land-grant university based Regional Rural Development Centers have mobilized the best Cooperative Extension System educators and applied researchers from across each region's land-grant universities to tackle the variety of community and economic development challenges and opportunities existing in their respective regions. They have been successfully doing so for 35 years. And a significant component of their efforts have been focused on low-wealth residents, underserved and economically distressed communities, and areas with sizable numbers of high poverty counties.
- Applicants should offer an existing network of local learning centers. For instance, the Cooperative Extension System has offices in nearly every U.S. county (note: there are over 3,100 counties in the U.S.). They are technologically and broadband enabled, and they support distance education access and services.
- Local centers should include educators experienced in supporting local access and user needs. The Cooperative Extension System, with its more than 15,000 employees nationwide, has at least one educational assistant in place in every U.S. county office.
- A track record of partnerships with local educational institutions, government, and businesses. The Cooperative Extension System has long been involved in community development, particularly in the ability to bring people together to work on issues of common interest. Such work has involved diverse and representative groups of key stakeholders, including schools, libraries, civic organizations, community foundations, businesses, local governments, and more. Since many local individuals are unable to actively take part in these community improvement efforts, Cooperative Extension System educators often go the extra mile to capture the perspectives of those whose voices often go unheard. They do so by organizing forums/roundtables or informal meetings to ensure that the perspectives of the unheard voices are given due attention and consideration when the community's strategic priorities are being developed.
- Access to a full complement of educational services. In other words, improving literacy is about more than hardware and software.
- Learning centers should be incorporated within a larger educational system. The Cooperative Extension System is well organized and a vital part of each state's land-grant university system, and thus brings with it many important linkages to science and educational programs that, can positively impact local workforce development.

b. What additional institutions other than community colleges and public libraries should be considered as eligible recipients under this program?

- Universities with local distance education programs and facilities (e.g. learning centers, county Cooperative Extension System offices, outreach programs, etc.).
- Cooperative Extension System offices in rural unserved and underserved communities, and their land-grant based Regional Rural Development Centers.
- Local after school programs supported by local communities and hosted by schools, community centers, churches, and other community organizations.

7. Grants for Innovative Programs to Encourage Sustainable Adoption of Broadband Service: The Recovery Act directs that not less than \$250,000,000 of the BTOP shall be awarded for grants for innovative programs to encourage sustainable adoption of broadband services.

a. What selection criteria should be applied to ensure the success of this program?

- Programs with a proven track record in community and economic development, entrepreneurship and experience in developing and delivery of local digital literacy programs.
- Evidence of sustainability and access to programs and services after the grant resources expire.
- Programs that are attentive to and address local needs and applications. In the case of the Cooperative Extension System's National e-Commerce Initiative and curriculum, products can be tailored to help support and guide the broadband and e-Commerce needs of local businesses, entrepreneurs, and communities
- Ready access to outside expertise offered by land-grant universities whose mission includes serving the educational needs of local communities.
- Access to distance learning programs and the technology to participate.
- Organizations with a proven track record in community and economic development, and in supporting digital literacy programs.
- Organizations with established digital literacy programs and a commitment to technology adoption (e.g., the Cooperative Extension System's e-Commerce program, CYFERNet, eXtension, etc.).
- Partnerships with local educational institutions, government, businesses, and other community-based organizations and institutions.

b. What measures should be used to determine whether such innovative programs have succeeded in creating sustainable adoption of broadband services?

- Measurable impacts to demonstrate a significant return on investment (e.g., economic development, workforce development supported by job creation and placement, improved health, improved environmental conditions, and more). For example, growth in the sale of products and/or services as a result of adoption of e-commerce strategies; new jobs created by existing firms as a result of marketing products and services via the Internet; number of rural communities recruiting new firms as a result of having broadband available; number of new Internet-based entrepreneurial businesses being seeded as a result of broadband access.

10. Timely Completion of Proposals

a. What is the most efficient, effective, and fair way to carry out the requirement that the BTOP be established expeditiously and that awards be made before the end of fiscal year 2010?

b. What elements should be included in the application to ensure the projects can be completed within two (2) years following an award (e.g., timelines, milestones, letter of agreement and partners?)

- Established organizations with proven track records in technology experience, curriculum development and delivery.
- Established infrastructure (e.g., physical, fiscal, staffing, technology, instructional materials, curriculum, evaluation, and more).
- Experience in community and economic development, entrepreneurship and community leadership. This includes our system of Regional Rural Development Centers that can quickly mobilize the talent and resources of Extension specialists across each region to work in tandem in developing and delivering state of the art community/economic development educational programs to our front-line county-based Extension educators. They, in turn, help provide these valuable programs and resources to key local groups engaged in community improvement activities.

12. Coordination with USDA's Broadband Grant Program.

a. What specific programmatic, elements should both agencies adopt to ensure that grant funds are utilized in the most effective and efficient manner?

- Emphasis should be placed on organizations that can bridge the physical aspects of providing broadband services with the human elements required to adopt and effectively use the technology. As the non-formal educational outreach effort of USDA, the Cooperative Extension System is perfectly situated to serve in this bridging capacity.

b. In cases where proposals encompass both rural and non-rural areas, what programmatic elements should the agencies establish to ensure that worthy projects are funded by one or both programs in the most cost effective manner without unjustly enriching the applicant(s)?

- Emphasis should be place on organizations with a history and experience of serving both urban and rural audiences. The Cooperative Extension System is often thought of as working with rural audiences; however, Cooperative Extension works with urban audiences, as well, addressing many issues identified by this program.

14. Measuring the Success of the BTOP Program.

b. Should applicants be required to report on a set of common data elements so that the relative success of individual proposals may be measured? If so, what should those elements be?

- Yes. Systems should be developed to allow people to directly communicate, in narrative format, the impact this program has made in their lives; we need to hear directly from the people.

In conclusion, closing the digital divide between “haves” and “have-nots” in America has proven to be a difficult task, to date. This task is now widely recognized as one of our nation’s critical infrastructure challenges as we seek to be full, active players in the global economy. What is at stake is nothing less than the economic, political and social enfranchisement of all citizens in our society in the 21st Century. The ultimate effectiveness of this proposed initiative must be grounded in research that provides new insights into the socioeconomic, policy, and technological issues, decisions and trade-offs inherent in meeting this challenge. Not only must these issues be considered at the macro-level, they must also be discussed and acted upon at the local level – in communities across the urban, suburban, and rural landscapes. Making sound decisions requires communities to have access to objective information and educational/technical assistance provided by people and organizations that are trusted. That is where we believe the Cooperative Extension System can play such a valuable role. Moreover, with our long history of engagement in community and economic development programming, we can help communities understand the impact not just in wires and connections, but also in how these investments brought genuine improvements in local workforce development, community/ economic development (including e-commerce and entrepreneurship activities), and broad-based community enhancement activities.

Thank you for the opportunity to provide these comments and feedback. We believe these types of investments will enhance workforce development, create jobs and strengthen the economy of the United States.