

Before the  
National Telecommunications and Information Administration  
Washington, D.C. 20554

In the Matter of )  
 )  
American Recovery and Reinvestment Act of 2009 ) Docket No. 090309298-9299-01  
 )  
Broadband Initiative Programs )

**COMMENTS OF**  
**APPALSHOP**  
**ACCESS HUMBOLDT**  
**CALIFORNIA CENTER FOR RURAL POLICY**  
**CENTER FOR RURAL STRATEGIES**  
**INSTITUTE FOR LOCAL SELF-RELIANCE**  
**MAIN STREET PROJECT**  
**MOUNTAIN AREA INFORMATION NETWORK**  
**NATIONAL CONGRESS OF AMERICAN INDIANS**  
**NATIVE PUBLIC MEDIA**

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April 13, 2009

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To: The National Telecommunications and Information Administration

COMMENTS OF THE  
RURAL INTERNET AND BROADBAND POLICY GROUP

Appalshop, Access Humboldt, California Center for Rural Policy, Center for Rural Strategies, Institute for Local Self-Reliance, Main Street Project, Mountain Area Information Network, National Congress of American Indians, and Native Public Media (collectively The “Rural Internet and Broadband Policy Group”) files these comments in the above captioned proceeding.

The attached “Rural Broadband Principles and Comments to NTIA and RUS,” in its present form as submitted, constitutes the comments and recommendations of the above listed organizations. The Rural Internet and Broadband Policy Group consists of organizations dedicated to rural broadband, rural development, or are otherwise involved in digital inclusion policies.

Respectfully submitted,

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## Rural Internet and Broadband Policy Group

The Rural Internet and Broadband Policy Group is a growing national coalition of rural broadband advocates. The Rural Internet and Broadband Policy Group has two goals: 1) to articulate national broadband policies that provide opportunities for rural communities to participate fully in the nation's democracy, economy, culture, and society, and 2) to spark and kindle national collaboration among rural broadband advocates.

As the National Telecommunications and Information Administration (NTIA) and the Rural Utilities Service (RUS) consider how best to invest American Recovery and Reinvestment Act (ARRA) funds in broadband deployment, we request that you consider the needs of marginalized rural communities. We respectfully encourage NTIA and RUS to adopt the Rural Broadband Principles we have listed and to consider the following comments.

### Rural Broadband Principles

The Rural Internet and Broadband Policy Group upholds the following principles to articulate broadband and internet policies for rural America.

#### 1. Communication is a fundamental human right.

Lack of access to broadband denies rural areas the fundamental human right to communicate. Without broadband, rural communities are further isolated from the new model of economic and civic participation, thus, diminishing antipoverty efforts. Economic distress in rural communities – lack of jobs, inadequate education, poor healthcare, outflow of local talent, etc. – is exacerbated by the inability to communicate.

Broadband is no longer a luxury but a vital service necessary to fully participate in the nation's democracy, economy, culture, and society. As the nation moves forward in new ways with advanced digital communications, broadband access becomes a fundamental human right. Observing and protecting this right will provide more resources for rural areas to improve economic conditions and advance with the rest of the nation.

## 2. Rural America is diverse.

Rural America is diverse in terrains, cultures, foods, peoples, and knowledge. There is no one-size-fits-all solution for all rural communities. Tribal lands are an example of the diverse needs of rural areas. Tribal sovereignty includes the right of each Native Nation to govern relationships and territory within tribal homelands. As with each tribe, each rural community has its own land based network of knowledge. Therefore, the diversity of rural America must be represented in national broadband policies. Priority should be given to policies that support diverse technologies, develop locally produced broadband content, encourage adequate data collection methods, and respect the unique characteristics of each community.

## 3. Local ownership and investment in community is the priority.

The success of a project lies in the commitment of those who envision and apply it. Policies that prioritize local ownership invest in the success of geographic communities. Absentee-ownership of broadband infrastructure and service has failed to serve rural communities in part because outside corporations fear rural areas will not return profits available from wealthier, more densely populated markets. Local ownership of broadband infrastructure and service can address problems ignored by absentee-owners such as lack of broadband access, slow speeds, limited (if any) provider choice, open access, training

and adoption of technology, data collection, and aggregation of demand. Rural communities must own local communications infrastructure, not only to boost their local economies, but to ensure that broadband is accessible to every rural community in the nation.

#### 4. Network neutrality and open access are vital

Rural areas generally have less access to all forms of media, not just broadband. Therefore, net neutrality, which establishes the principle of open and unfiltered access to information, is vitally important for rural communities. The ability to originate content on an equitable and symmetric basis is also necessary to meet the public interest.

### Comments

#### 1. Compensate for lack of private investment.

Please use these public funds to compensate for the lack of private broadband investment in unserved and underserved communities, such as rural areas and low-income metropolitan areas. Public funding should prioritize reaching communities that do not have access to broadband, rather than rebuilding existing networks. Furthermore, these projects will be funded by tax payer's money; thus, oversight, transparency, accountability, and public access to collected information are important.

#### 2. Unserved communities should be given funding priority.

To prevent the widening of the technology divide, it is imperative that ARRA funds reach rural communities that do not have reliable internet service. The more

we wait on providing internet service to unserved communities, the more challenging and expensive it will be to update them in the future as technology evolves.

### 3. Unserved and Underserved Definitions

“Unserved” areas should be defined as places that currently do not have Internet service or have only dial-up service. The agencies should be flexible in how they allow applicants to define “underserved.” Rather than relying solely on geographical boundaries, applicants should be asked to address the following criteria:

- a. Whether the cost of current broadband services is out of reach for the target population.
- b. Whether the current speeds available fail to meet the target population’s needs for advanced communication services.
- c. Whether the target population has no access to broadband services because of language, technology education, hardware limitations, or cost.

All applicants should include information on how their projects will:

- a. Provide broadband at affordable rates for the target audience.
- b. Provide broadband service at optimal speeds for the targeted audience.
- c. Promote adoption of broadband technology in the target community.
- d. Collect data about the broadband services provided to the target community.

#### 4. Invest in local projects

NTIA and RUS should invest in projects that promote community-based development. Funding should favor community-based projects such as nonprofit, local, cooperatives, tribal, and municipal networks. NTIA and RUS should also encourage community-based ownership of broadband infrastructure and services. State legislatures and/or tribal governments can play a coordinating role for local projects to ensure each project can be leveraged so the most people can benefit from this money.

Community-based projects re-invest local digital dollars in the community, rather than transferring local wealth outside. Because community-based projects live and work in the communities they serve, they are more responsive to local needs (e.g. emergency response, disaster-recovery), will be inherently more accountable for how stimulus funds are spent, and are more likely to create sustainable business models. Furthermore, community-based projects bring technical expertise back to our communities, after decades of a "rural brain drain," and will encourage local IT expertise for innovation, job-creation, and grassroots economic development.

#### 5. Speed

The standards of speed for broadband access must first rest on symmetrical upload and download rates. Our networks must make it as easy to produce content

as it is to consume. To ensure participation, the standard of speed in networks should weight the upload speed over the download speed.

As the standard of speed changes, we should not be locked in a regulatory framework that limits us to obsolete technology. Instead NTIA and RUS must promote and fund low-latency networks that offer a high quality of service and the functionality to meet the service and application needs of our communications future.

Our communications infrastructure must prioritize competition, innovation and localism. The standards of speed must consider these issues demanding higher speeds from privately owned networks at rates that are competitive with other industrialized nations. The internet serves as a global public infrastructure. The build out and regulation of networks must ensure connection to the backbone of the internet globally, at high speeds that break the barriers of frontiers for communication and commerce.

The current broadband data transmission speed, as defined by the FCC, is 768 kilobits per second. To reap the benefits of advanced communications, we need more ambitious speed goals. However, some projects may have backhaul limitations and each community has the right to determine their optimal speed. We recommend that each project requesting funding state how it will provide the highest speed available to the community it proposes to serve.

## 6. Mapping

We support the Broadband Data Improvement Act as a vehicle for obtaining adequate broadband accessibility data from rural areas. We know that access to broadband is more limited in rural areas than in metropolitan areas, but we do not know precise and comprehensive statistics on the state of infrastructure, access, cost, and adoption of rural communities. In order to obtain useful, granular, verifiable data, we recommend NTIA and RUS:

- a. Change the zip code method of defining where broadband service exists. The zip code method does not reveal the true availability of broadband to residences and businesses in rural areas and will lead to poor funding decisions.
- b. Mapping should be done at the street address level and with field-based mapping techniques that will include communities without street addresses but rather Post Office boxes such as some reservations and *colonias* across the southwest.
- c. Prioritize funding of locally-driven broadband data collection projects that apply verifiable methodologies and make the data accessible to the public.
- d. Collect data on available speeds based on actual, not advertised availability.
- e. Data collected also needs to include technical information about traffic routing, network architecture and geo-spatial data to identify the

quality of service and functionality of connections at any given location.

Furthermore, data should also be collected with the goal of assessing and creating adoption of broadband technology. In order to learn about the state of broadband adoption and ways to increase adoption of the technology, we recommend NTIA and RUS:

- a. Collect data on the challenges communities face in using broadband technology such as affordability, language barriers, technology training, and access to hardware.
- b. Collect data on prices for broadband service. This information is crucial in determining whether a community has access to broadband – if broadband service is not affordable for the community, then the community does not have access to broadband.
- c. Require funded projects to submit a report on how the target population uses broadband technology and on what are the challenges and opportunities for the target population to increase their use of the technology.

A Data Map should:

- a. Utilize verifiable, reliable data sources.
- b. Standardize GIS schema at a national level.

- c. Map broadband services, upload and download speeds at time of peak usage, and factors that affect adoption.
- d. Map all federally owned, state-owned, and tribal-owned lands and buildings.

#### Transportation Projects Data Base

We recommend NTIA and RUS create a transportation projects data base to facilitate coordination between NTIA and RUS about projects funded, allow broadband providers to view upcoming construction projects and be given an opportunity to lay fiber during the construction phase, decreasing both broadband system construction costs and public disturbance to right-of-way.

The federal government, state institutions, tribal governments, and local leaders should work together to determine the variety of geographical areas' needs to understand the nature of universal broadband deployment.

## 7. Adoption

American Recovery and Reinvestment Act funds should be invested in projects that serve as examples for how the United States can return to leadership in broadband accessibility. Learning about adoption trends and encouraging the adoption of broadband technology in our nation is a crucial component of regaining leadership globally. We recommend NTIA and RUS:

- a. Fund adoption projects with a track record of contributing to communities historically at the margins of technology such as rural, low-income, immigrant, and communities of color.
- b. Require all broadband projects funded to include a substantial, community based adoption component.
- c. Require funded projects to report on how the target population uses broadband technology, and what are the challenges and opportunities for the target population to increase their use of the technology.

### Endorsements

The Commission should note that while other organizations were consulted in the drafting and preparation of this document, only the organizations listed have endorsed these comments for inclusion in the record of this proceeding:

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