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# **RURAL BROADBAND PRINCIPLES AND POLICY RECOMMENDATIONS**

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**Rural Broadband Policy Group**

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## **Rural America and Broadband**

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Rural America is vast and diverse. Sixty million Americans, or about 20 percent of the population, live in the countryside on 80 percent of the nation's land. While such a large area belies easy characterization, nonmetropolitan areas do share a common set of concerns and features that bear directly on communications policy.

The predominant feature of rural areas is the land: mountains, plains, coastlines, deltas, and other geographic characteristics. Rural cultures and economies grow in response to place, and in rural areas place is defined by land. Rural areas are by definition geographically dispersed and less densely populated than urban areas, making delivery of public services more challenging. But the health of the nation as a whole is directly linked to the wellbeing of rural America. Rural America provides the food and natural resources upon which healthy cities rely, and urban areas are a primary market for rural goods. The United States cannot build a healthy economy without considering the interdependent nature of rural and urban areas. When America's rural communities lag behind, the entire nation feels the effects. Taken as a whole, America's rural communities are at risk. Rural Americans are far more likely to be poor, undereducated, sick, and prone to a range of maladies such as drug addiction, depression, and suicide. Of the 250 poorest American counties, 244 are rural.

Digital communications technology could be part of the solution for addressing these economic and social difficulties. Broadband access would allow rural America to reap the benefits of telehealth, telecommuting, higher education distance learning, improved emergency communications systems, and greater connection to the global economy. But rural America lags the rest of the nation in broadband penetration. Currently, the United States ranks 15<sup>th</sup> in broadband penetration. While the national penetration rate is 63 percent, a 2009 study by the Pew Internet & American Life Project shows that less than half of rural residents have broadband in the home. Geography, demographics, and policy obstacles contribute to this disparity. Long distances, poverty, and lack of access to quality education are all factors that correlate with reduced internet usage. The current market-driven policies for the build out of broadband do not adequately serve rural communities. The federal government defines rural areas as regions lying outside metropolitan markets thus making market-driven solutions for rural areas problematic by definition.

Rural America needs broadband. We need an approach to broadband development with rural principles at its core. We need broadband to participate fully in the nation's democracy, economy, culture, and society. It is our responsibility to ensure that the new administration addresses the needs and builds upon the opportunities of all – and “all” includes rural America.

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## **Rural Broadband Policy Group**

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The Rural Broadband Policy Group is a growing national coalition of rural broadband advocates. The RBPG 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.

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## Rural Broadband Principles

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The Rural Broadband Policy Group upholds the following principles to articulate broadband and internet policies for rural America. We encourage the administration, appropriate agencies, and rural broadband advocates to adopt these principles as a framework to develop a national broadband plan.

### **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 or no 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.

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## Policy Recommendations

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

Public funds allocated for broadband development should be used 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. Oversight, transparency, accountability, and public access to collected information are important components of all broadband development projects funded by tax payer's money.

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

To prevent the widening of the technology divide, it is imperative that funds reach rural communities that do not have reliable broadband service. The more we wait on providing broadband 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" communities are places that currently do not have Internet service or have only dial-up service. The definition of "underserved" areas is flexible. Rather than relying solely on geographical boundaries, an "underserved" area should address the following criteria:

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

When seeking public funds, all applicants seeking to serve an "unserved" or "underserved" area, 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

Public funds should be invested in projects that promote community-based development. Funding should favor community-based projects such as nonprofit, local, cooperatives, tribal, and municipal networks. We 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 public funds.

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.

As the standard of speed changes, we should not be locked in a regulatory framework that limits us to obsolete technology. We 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.

Because the internet serves as a global public infrastructure, we must demand higher speeds from privately owned networks at rates that are competitive with other industrialized nations. 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.

Our communications infrastructure must prioritize competition, innovation and localism. The current broadband data transmission speed, as defined by the FCC, is 768 kilobits per second. To reap the benefits of advanced communications and compete globally, we need more ambitious speed goals; however, each community has the right to determine their optimal speed.

## 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:

- 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:

- 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. Collect data on how communities use broadband technology and on what are the challenges and opportunities for communities 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 the creation of a transportation projects data base to facilitate coordination between the appropriate agencies 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**

Public 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:

- a. Funding of 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.

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## Endorsements

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While other organizations were consulted in the drafting and preparation of this document, only the organizations listed have endorsed these comments.

### **Access Humboldt**

Sean McLaughlin, *Executive Director*  
Eureka, California

### **Appalshop**

Mimi Pickering, *Media Initiative*  
Whitesburg, Kentucky

### **California Center for Rural Policy**

Connie Stewart, *Executive Director*  
Arcata, California

### **Center for Rural Strategies**

Dee Davis, *President*  
Whitesburg, Kentucky

### **Institute for Local Self-Reliance**

Christopher Mitchell, *Director*  
Minneapolis, Minnesota

### **Main Street Project**

Amalia Deloney, *Senior Fellow*  
Minneapolis, Minnesota

### **Mountain Area Information Network**

Wally Bowen, *Executive Director*  
Asheville, North Carolina

### **National Congress of American Indians**

Geoffrey C. Blackwell, *Chair of Telecommunications Subcommittee*  
Washington, D.C.

### **Native Public Media**

Loris Ann Taylor, *Executive Director*  
Flagstaff, Arizona