

Ensuring Broadband Access in Appalachia



Central Appalachia Broadband Policy Recommendations

Kentucky, Maryland, Ohio, Tennessee, Virginia, and West Virginia

2012-2013



Contributors: West Virginia Center on Budget & Policy
Partnership of African American Churches





Table of Contents

Introduction 5

 Acknowledgments 5

Executive Summary of Broadband Policy Recommendations
for CARN States 6

 Kentucky 8

 Maryland 9

 Ohio 11

 Tennessee 13

 Virginia 14

 West Virginia 16

About the Central Appalachia Regional Network 19



Introduction

The Central Appalachia Regional Network (CARN) advocates for policies that support the availability of affordable high-quality broadband services for the citizens of the Central Appalachia region. These include both policies that will support broadband deployment as well as policies to increase public awareness of the need for broadband and digital literacy.

Why Broadband?

Broadband is a necessity.

High speed Internet or “broadband” has become a primary method for sharing information and ideas throughout the nation. Broadband has completely changed commerce, public discourse, and how we interact with each other and the rest of the world. As more everyday activities and services move online, broadband is no longer a luxury — it’s a public necessity. However, in too many rural communities, the opportunity to use the Internet to its full potential is limited by lack of network infrastructure, accessibility and affordability.

Access to broadband is paramount to improving the economic prosperity and wellbeing of Appalachia and would provide the region access to the benefits of telemedicine, telecommuting, higher education distance learning, improved emergency communications systems, greater connection to the global economy, among other benefits. A study on the impact of broadband development found that “between 1998 and 2002, communities in which mass-market broadband was available by December 1999 experienced more rapid growth in employment, the number of businesses overall, and businesses in IT-intensive sectors, relative to comparable communities without broadband at that time.”¹

About CARN

The Central Appalachia Regional Network (CARN) is a coalition of organizations from the Appalachian counties of Kentucky, Maryland, Ohio, Tennessee, Virginia, and West Virginia and is a member of the nationwide Rural People, Rural Policy Initiative. CARN strives to connect diverse



Photo Credit: Connect Ohio, www.ConnectOhio.org

organizations to promote policy and action to improve the quality of life available to the people of Central Appalachia.

Following recommendations from a multi-sector, regional summit in 2010, CARN established a Broadband (now Telecommunications) Work Group. CARN members recognize that our region will be left behind if we cannot participate in the digital revolution and therefore have made it a priority to advocate for policies on the local, state, regional and federal level that support and increase the availability of affordable high-quality broadband for the citizens of the Central Appalachia region. Part of those efforts includes participation in the Rural Broadband Policy Group of the National Rural Assembly.

Acknowledgements

The broadband policy recommendations for the CARN states were developed by Paul Miller of the West Virginia Center for Budget and Policy with input from the CARN Telecommunications Work Group. Initial funding for the Rural People, Rural Policy Initiative and funding for this project were provided by the W.K. Kellogg Foundation.

*For more information about the report or
to obtain a copy, please contact:*

Jenny Lancaster

Network Coordinator

Central Appalachia Regional Network

JLancaster@carnnet.org or www.carnnet.org

¹ Sharon E. Gillett, William H. Lehr, Carlos A. Osorio and Marin A. Sirbu, “Measuring the Impact of Broadband Deployment.” Prepared for the US Department of Commerce, Economic Development Administration, Washington, D.C., 2006.



Broadband development and deployment could be enhanced through policy adoption in various states that make up the CARN network. The improvement of broadband can be significantly enhanced through four key policy adoptions that are working in some of the CARN states, but not in all of them. Other states can learn from and emulate these policies in order to adopt them in their states. The first recommended policy adoption is to raise the issue and the importance of the states' commitment to broadband development and deployment. State governments respond to state level concerns and provide funding for these projects; broadband technologies have not been elevated in all CARN states as a fundamental responsibility of state government. State legislatures need to recognize the importance of broadband and wireless technologies and create a committee for these policy concerns and to help coordinate state level policy; state legislatures routinely create legislative committee on roads and infrastructure, but no state has a committee who focuses on broadband or wireless technology.

The chart on the opposite page summarizes the major policy recommendations across the six CARN states and indicates whether a state has accomplished this goal. In some cases a state may have made substantial progress toward completing a goal but fell short. These are notated by an asterisk. For example, providing computers and laptops to moderate and low income students is a goal that was nearly achieved in West Virginia in 2007 when state legislature passed HB 2558, but the bill did not take effect because the Governor ultimately vetoed the bill on technical grounds that were unrelated to the policy of providing computers to low income children.

Overall, Virginia, Maryland, and Kentucky have adopted important policies to promote broadband infrastructure and subscription among rural populations. In Virginia and Kentucky, Governors have been at the forefront of broadband policy development as these states have taken the initial steps to institutionalize the need for broadband at the state level by creating a cabinet level agency with some staff and resources. While these agencies could be strengthened in terms of personnel and funding, both Virginia and Kentucky have taken bold steps toward the future by displaying their states commitment to broadband and wireless technologies. Other states should follow their lead and develop agency level commitments to broadband. Maryland has taken a different

path as they've partnered with their land grant institution, the University of Maryland to create the eMaryland initiative. This model of creating virtual schools in rural areas should be emulated across the CARN network.

Broadband advocates in each of the CARN states could also exert pressure on state policymakers to develop funding streams for local and rural broadband projects. For example, Virginia has created a state fund for broadband projects, yet it hasn't been able to put any state revenues into the fund in order to get it started. The creation and setup of the Virginia Broadband Infrastructure Loan Fund is an ideal approach to state level strategic planning and development of broadband initiatives that should be emulated across all of the CARN states, but reliable funding sources will need to be identified in each of the CARN states in order for these broadband funds to accomplish their goals. West Virginia has made some significant financial investments in broadband deployment and development when it set aside \$5 million dollars in excess lottery funds to help jump start the state's Broadband Deployment Council. There have been plenty of ideas introduced within the CARN states in regard to generating revenues for broadband projects including increasing the state telecommunication tax as well as issuing state debt to name a few.

One issue that CARN states can work toward is the regulation of broadband and wireless technologies by the public service commission. This would ensure that consumers are protected against the lack of access, poor quality, and high prices. A consumer bill of rights would ensure that customers are getting what they're paying for. This would be an important step toward holding telecommunication companies responsible.

The final issue that CARN states can work toward is the improvement of broadband take up rates by ensuring that low income families have access to computers and laptops. West Virginia has introduced several pieces of legislation that would have created a statewide donation program to help income eligible families and children to have access to computer equipment so they too can participate in the digital revolution.

However, improving take-up rates will require more than providing computers and laptops to moderate and low-income families. CARN states should also develop comprehensive digital literacy campaigns to help residents understand the need and the benefits of broadband. In addition, these states could offer a subsidy to low-income families using state funds to help offset the cost of broadband.

Summary of Major Policy Recommendations across CARN States:

Goal 1: Institutionalize Broadband Priorities in State Government

Goal 2: Provide State Funding for Broadband Investments

Goal 3: Subject Broadband to Regulation by Public Service Commission

Goal 4: Improve Take-up Rates through Digital Literacy Programs and Access to Computers for Moderate and Low-Income Families

State	Goal 1 State Agency	Goal 2 State Financing	Goal 3 PSC Oversight	Goal 4 Computer Access
KY	YES	YES	YES*	NO
MD	NO	YES	NO	NO
OH	NO*	NO	NO	NO
TN	YES	NO	NO	NO
VA	YES	YES	NO*	NO
WV	YES	YES	NO	NO*

Broadband Policy Recommendations for **KENTUCKY**



GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

In 2004, Kentucky established a 19-member Kentucky Broadband Task Force to examine the deployment of broadband in Kentucky and report findings to the state. During the same year, HB 627 required the Office of the New Economy to develop baseline assessment of broadband deployments while also setting the regulatory boundaries for the regulation of broadband services in the state. These efforts will help the state track its investments and ensure that money is being spent wisely and should be encouraged to make these findings as transparent and accountable as possible.

State legislatures should recognize the importance of broadband and telecommunications and establish a legislative committee on broadband technologies. In 2005 and in 2006, Kentucky introduced legislation that would have created the Rural Enhancement and Development Committee to review rural development policies and programs to improve the quality of life for rural areas. A permanent legislative committee with staff and resources would help the state organize its efforts to improve broadband investments, infrastructure, and deployment.

In 2010, Governor Steve Beshear created the Kentucky Office of Broadband Outreach and Development

by executive order. The governor's office could as easily dissolve the Office of Broadband Outreach and Development by executive order, and therefore efforts should be made to create a permanent department within the executive branch that would have a dedicated line item in the Kentucky budget.

GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

While Kentucky has been a leading advocate for state investments in broadband deployment more could be done to fund broadband projects. In 2000, the Kentucky Innovation Commission was created to guide policy recommendations under the KY Innovation Act (HB 572) and provided a \$53 million dollar investment in broadband technologies. A Kentucky Rural Innovation Fund was also established to provide funding for small rural businesses to invest in research and innovation. In 2002, Kentucky created the Center for Information Technology Enterprise (CITE) to serve as an administrator of ConnectKentucky, a private non-profit organization who acts as a public-private partnership to lead technology-based initiatives in the Commonwealth. These programs need continuing financial support to help provide tax credits, subsidies, loans and grants to Kentucky businesses who invest in broadband infrastructure and deployment as well as families who need help paying for broadband services.

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

In 2002, Kentucky established the parameters of telecommunication regulations when it subjected municipal utilities who were planning to provide telecommunication services to be regulated by the Public Service Commission. This idea of treating broadband communications as another public utility to be regulated by a public service commission has merit. The treating of broadband as a public utility would provide opportunities for broadband customers to voice their complaints and concerns about the lack of access, the lack of quality, or the pricing of broadband. One important area would be to ensure that the advertised upload and download speeds were the true speeds offered

to rural customers. Efforts should be made to create an internet Consumer Bill of Rights as introduced in Maryland.

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

Kentucky should provide a framework for developing a statewide digital literacy campaign to improve take-up rates. Connect Kentucky is a grant funded non-profit organization that improves broadband access, adoption and use throughout the state. Kentucky could either emulate this strategy to improve take-up rates for broadband by utilizing state funds through a public agency, or by using state grants to continue and expand the current mission of Connect Kentucky.

Kentucky has already missed several opportunities to provide laptops and computers to school-age children, particularly low-income and minority children. Legislation was introduced in 2009, 2010, and 2011 that would have provided access to computers for low-income and minority children, but was defeated each time. Efforts should be made to ensure that low-income children have access to affordable or free computers such as providing access to state government surplus computers or, continuing the public-private partnership with AT&T and other telecommunication companies who can provide generous support for computers and laptops.

Kentucky should consider creating a subsidy program for low-income families to help offset the cost of broadband



Photo Credit: 2011 Shawn Poynter, www.ruralarchive.com

while stimulating the take-up rate of broadband. Kentucky could leverage the Kentucky Cabinet for Children and Families and their expertise in determining eligibility to help manage this program.

Broadband Policy Recommendations for Maryland



GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

Maryland has been a leader in broadband investments and making inroads into removing or reducing barriers to broadband development and deployment. Early in 2000, Maryland partnered with the University of Maryland to create eMaryland; a wireless task force was also created to report back to the legislature their findings as well as promoting telework and internet based education offerings. Maryland has been a leader in virtual school development and their model should be replicated across the CARN network.

Despite the Rural Broadband Coordination Board that was created in 2006 aside, Maryland has not yet established either a legislative committee or executive branch agency to provide statewide policy recommendations for broadband development and deployment. In 2001, legislation was introduced to create a Joint Committee on Technology, but

it did not pass. Efforts should be made to institutionalize the need for broadband policy and investments on a permanent basis by ensuring that adequate staff and resources are established as a priority in state government.

GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

In 2006, the Rural Broadband Coordination Board was created to deploy broadband in rural and underserved areas of the state. It established the Rural Broadband Assistance Fund in the Department of Business and Economic Development. The Governor included \$4 million annually from the general fund beginning in FY 2008 and 2009, including \$2 million from the Maryland Economic Development Assistance Fund. Legislation mandates that the fund will terminate in 2020. Efforts should be made to continue this funding beyond 2020.

Since 2000, legislation has failed to pass that would provide tax credits and incentives or provide exemptions from sales and use taxes to businesses that make qualified investments in broadband technologies, equipment, and inventory. Efforts should be made to ensure that indirect, off-budget expenditures in lieu of direct loans, grants, and subsidies should be offered to businesses and residents who invest or subscribe to broadband services.

In 2002, Maryland failed to secure passage of legislation which would have provided for the construction of network facilities in areas where existing commercial access is



lacking, and requiring the Governor to provide specified funding for network including funding in the state budget. This legislation would have set an important precedent for states to enter into the market place where private sector businesses aren't providing access or deployment.

One missed opportunity is the provision of tax credits for employers who participate in telework as early as 2002. Efforts should be made to encourage the use of telework and provide incentives to businesses and employees who participate in this work-arrangement.

Another opportunity for state funding of broadband initiatives in Maryland was in 2006 when the state failed to issue state debt in the amount of \$2 million dollars and the proceeds to be used as a grant to the Board of Directors of the Lower Shore Broadband Cooperative, Inc. to construct a statewide fiber optic network.

Finally, in 2012, Maryland provided \$5 million in its state budget for the 'One Maryland Broadband Network' which provided funds for the construction of a statewide fiber optic network (SB 151). Also, in 2012, Maryland passed legislation which authorized insurance carriers to begin paying for coverage of telemedicine and included as a fee for service (SB 781/HB1149). Both of these recent policy changes represents significant statewide commitments to broadband development and deployment.

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

As early as 2002, Maryland began introducing legislation that would have treated broadband as a public utility and subject to regulation by the public service commission. These efforts would have provided consumer protections and made recommendations to improve competitiveness in private broadband market. Efforts should be made to ensure that broadband technologies are treated as a public utility and subject to regulations and protections similar to other public services. While most CARN states introduced legislation to explicitly exclude broadband from consideration as a public utility, Maryland went in the other direction and attempted to include broadband, making Maryland a progressive state standing apart from the other states.

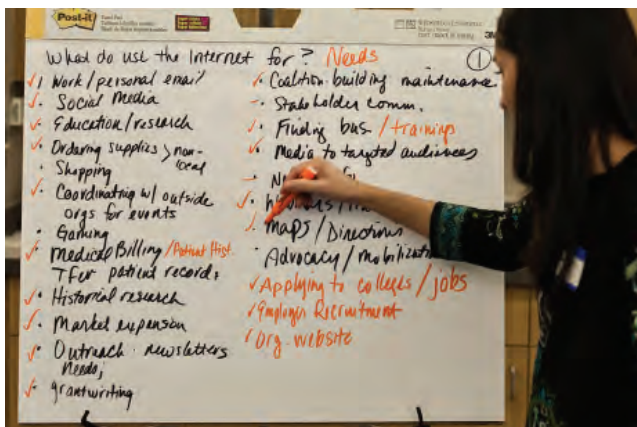


Photo Credit: 2011 Shawn Poynter, www.ruralarchive.com

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

Since 2007, the Maryland Department of Transportation is required to evaluate the Department's Telework Partnership with Employer's Initiative, a program designed to encourage employers to allow employees work from a satellite office or, from their home. In 2010, county boards of education were authorized to establish a virtual school for K-12 children. However, there are no programs in place to secure access to computers for low-income families or children to participate in telework or in virtual schools. Efforts should be made to provide state surplus computers to income-qualified families and children in order for Maryland families to take advantage of broadband technologies.

In addition to providing access to computers for moderate and low-income eligible families Maryland should provide a framework for developing a statewide digital literacy campaign to improve take-up rates. A low-income subsidy program to help state residents offset the cost of broadband would also help stimulate demand for broadband.

Broadband Policy Recommendations for Ohio



GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

Ohio serves as a good example of what happens when states don't institutionalize their efforts to secure broadband priorities at the state level. In 2007, by executive order 24S, Governor Strickland ordered the establishment of the Ohio Broadband Council to unite key state agencies in developing a strategic plan for the deployment of a new, statewide broadband data network. The new broadband data network to be established by the Broadband Council will be known as the Broadband Ohio Network. This Council expired on the last day of Strickland's governorship and serves as a reminder of why it is important for both the legislative and the executive branch to create permanent committee and agency level staff and resources to ensure that broadband development and deployment take place in Ohio.

In 2005 and 2007, Ohio failed to introduce legislation that would have created a broadband taskforce to review policies and investments in broadband among rural residents. Creating a task force or a broadband council would be a good first step toward getting state involvement in the development and deployment of broadband in Ohio.



Ohio has relied primarily on Connect Ohio to serve as the state's proxy agency to work on broadband deployment and development since 2008.

GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

Ohio has taken the initiative among CARN states to provide free online computer training classes for Ohio residents and businesses at local libraries in order to improve subscription rates. Ohio also created an innovative voice-mail system that allowed residents to have access to telecommunication services anywhere in the state, but the program was short lived and funding was capped at \$500,000.

Unfortunately, Ohio has not spent a significant amount of legislative or executive branch energy in dealing with the policy issues facing broadband development and deployment. Ohio has introduced only 9 bills and 1 executive order pertaining to broadband since 2000, the least among CARN states.

Efforts should be made to secure state level funding for broadband development and deployment including direct grants, loans, subsidies as well as indirect tax credits, incentives, and exemptions in order to promote the infrastructure development and outreach and education of broadband services. Ohio's goal has been to stay out of the way of private sector telecommunication companies and to only allow private sector solutions to improve access and deployment of broadband services.

Ohio's investment in broadband deployment and development is limited. In FY 2012 Ohio will spend \$270,756 and another \$106,347 in FY 2013 for broadband mapping from federal ARRA stimulus funds.

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

Ohio's efforts in telecommunications policy has largely been one where the state decided early on to ensure the broadband was not treated as a public utility and to prevent municipalities from providing broadband services. In 2005, the Public Utilities Commission was prohibited from establishing any requirements for the unbundling of network elements for the resale of telecommunications. In 2007, state franchising authority super-ceded local franchising authority and reaffirmed that the Public Utilities Commission has no jurisdiction over cable and video service. Again in 2009, SB 162 redefined a public utility to specifically exclude broadband service providers. Efforts should be exerted to undo the challenges that are confronting Ohio as a result of their inability to provide consumer protections for Ohio residents.

In addition, Ohio failed to secure legislation that would have imposed open access requirements on cable operators that also provide broadband services to ensure access to other ISP providers. Efforts should be made to ensure that all public and private providers have open access to markets in order to ensure that the best pricing structures are available to Ohio residents. In some cases, particularly for small telecommunication providers, concerns should be addressed to ensure that they are not unduly burdened by additional regulations while maintaining the goal of creating consumer protections for Ohio's rural residents.

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

No significant legislative or gubernatorial efforts have been made to ensure that low income families and children have access to computers. Efforts should be exerted to ensure

that new or surplus computers and laptops are available to families that are income eligible. Providing computers to these low-income families will help support adoption of broadband in rural areas.

Connect Ohio is non-profit organization that receives federal funds to improve access, adoption and use of broadband technologies. Ohio's commitment to improving take-up rates for broadband could include the emulation of this strategy using state funds through a public agency, or by using state grants to continue and expand the current mission of Connect Ohio. Ohio should develop and promote a statewide digital literacy campaign to improve take-up rates. In addition to access to education and computers Ohio should consider developing a low-income subsidy program to help state residents offset the cost of broadband.

Broadband Policy Recommendations for Tennessee



GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

In 2005, Tennessee adopted legislation that created the Tennessee Broadband Task Force to examine the deployment of broadband in the state. The task force would examine regulation, cost, access to facilities, and market competition of broadband and prepare a baseline

assessment of broadband deployment. This Task Force reports back to the Governor, Speaker of the House and Senate, and the Tennessee Regulatory Authority.

Tennessee should introduce legislation to create a legislative committee that deals with broadband technologies and the executive branch should create a state level agency to coordinate broadband policy across the state. Tennessee would benefit from the structure provided by legislative and executive branch commitments to broadband and the resources and staff that would accompany these changes.

Another missed opportunity was in 2007 when Tennessee failed to pass the Tennessee Broadband Access Corporation (TBAC), as a quasi-public, non-profit instrumentality to facilitate broadband access. This would have provided an early precedent for other CARN states to create a quasi-public enterprise.

GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

In 2003, Tennessee failed to pass legislation that would have imposed a tax on broadband personal communication services. This legislation would have increased the state sales tax on broadband communication services from 6% to 8.25%. The fiscal note suggested the state would have collected about \$1.3 million dollars that could have been used to support broadband development and deployment in rural Tennessee. Efforts should be made to support legislation that would provide a funding stream for the purpose of expanding broadband technologies.

In 2004, Tennessee failed to pass the Tennessee Broadband Technology Incentive Act of 2004. This legislation would have provided for an annual credit against the total franchise and excise tax liability of a telecommunication service provider and a maximum 50 percent tax credit that could be carried forward for 15 years. The bill included a tax credit of 5% for the cost of equipment to deploy broadband technologies in counties with population density of 500 square miles or more, a 10% credit would population density of 100 to 500 per square mile, and a 15% credit for population density of 100 square miles or less. This legislation has great merit because it

provides a tax credit that is proportional to population thus, recognizing that private sector companies need greater incentive to construct broadband infrastructure in more rural areas of Tennessee.

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

Unlike Ohio who marked a clear line in the sand to prevent public municipalities from entering into the provision of broadband services, Tennessee set an early precedent to allow public entities into the market. In 1999, legislation was passed that authorized municipalities to engage in business of providing cable and internet services. A municipal electric system would establish a separate division to deliver the services. Bill provides that electric cooperatives could construct or own system that provides for cable and internet services. This is an important first step toward recognizing the benefits of public participation in the broadband market. However, Tennessee enacted legislation early that prevents broadband from being regulated by the public service commission. In 2006, Tennessee adopted the “Broadband Business Certainty Act of 2006.” The bill prohibits the Tennessee Regulatory Authority from exercising jurisdiction over or relating to broadband services. Efforts should be made to reverse the legislative decision to prevent broadband from coming under the consumer protections of the public service commission. Tennessee rural residents will be unable to voice their concerns over the lack of quality and high prices of private market services until this decision gets reversed.

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

In 2007, Tennessee failed to enact legislation that provided that the Basic Education Program (BEP) and other state funding to ensure or promote classroom internet connectivity or technology access shall be paid by the state directly to the Local Education Agency (LEA). This would have increased the need for families and children to have access to computers and laptops.

In 2010, Tennessee failed to establish a grant for a pilot project in one LEA to provide laptop computers to all seventh graders for use through the 12th grade. The program would have increased technological fundamentals throughout the school curriculum. Both of these failed legislative actions would have helped to increase broadband subscription rates in Tennessee and provide opportunities for low income families and children to participate in growing technological advances.

Broadband Policy Recommendations for Virginia



Photo Credit: Kimber Simmons

GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

In 2004, Governor Warner allocated \$12 million for broadband technology known as the Regional Backbone and Roots of Progress Initiative. It was funded with \$6 million from the Virginia Tobacco Indemnification and Community Revitalization Commission and \$6 million from the US Department of Commerce. Since 2001, the Virginia Tobacco Commission has funded more than \$53 million dollars towards projects to create more than 900 miles of backbone and infrastructure as part of the New River Planning District. This serves as an excellent model for other CARN states to follow: allocate a portion of a large settlement toward the

creation of long term economic development projects such as the Mid-Atlantic Broadband Cooperative.

The Mid-Atlantic Broadband Cooperative, a non-profit, member-owned entity, has expanded internet service to include 800 miles of new coverage in 20 counties and four cities in rural Southeast Virginia. The Cooperative has been credited with creating over 2,200 jobs and attracting over \$300 million in new private sector investments, including Microsoft. Completed in 2006, they provide access to over 60 'gigaparks' that allow telecommunication and technology companies the ability to leverage low-cost high-speed fiber optics. This model exemplifies a new way to offer broadband services other than in a private, for-profit business model format.

In 2006, Governor Kaine issued executive order 35, creating the Office of Telework Promotion and Broadband Assistance. In 2008, it was codified in HB 1017. The goals of the office are to encourage telework as a family-friendly, business-friendly public policy and to work with public and private entities to develop widespread access to broadband services. Virginia is the only state in the CARN network to have an agency established by executive order and then codified by the state legislature as a permanent fixture to state government. These efforts should form the best practice for other CARN states to emulate.

In 2007, Governor Kaine announced the formation of the Virginia Broadband Roundtable to accelerate the attainment of broadband connectivity to every business by 2010. The Roundtable will deliver a "blueprint" to assist communities with broadband planning and deployment. Virginia's efforts to incorporate the business community with state government is to be commended and other states should this as an opportunity to bridge the gap between public and private sector interests in broadband development and deployment.

In 2009, HB 2423 established the Governor's Broadband Advisory Council to advise the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. In 2010, Governor McDonnell required an Annual Status Report to be issued on the broadband activities in the Commonwealth. The report identifies broadband coverage gaps and to set priorities to reduce the gaps on broadband access. These baseline reports are useful tools of analysis to ensure

that steady progress is made on increasing broadband development and deployment. In 2012, legislation was adopted to allow Commerce and Technology secretary's to appoint designees to Broadband Advisory Council.

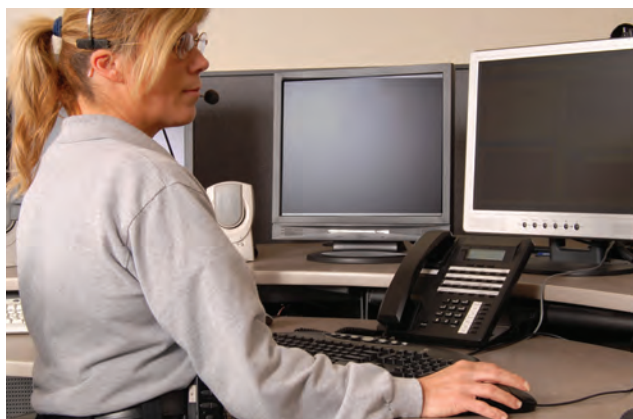
GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

In 2009, the VA Broadband Infrastructure Loan Fund was created and administered by the Virginia Resource Authority to establish guidelines regarding the loans from the Fund. Loans will be provided to political subdivisions to help foster broadband deployment and adoption. Currently, the legislature has not appropriated any money into the Fund. Efforts should be made to ensure that state funding is appropriated for the VA Broadband Infrastructure Loan Fund.

In 2001, 2002 and 2007, Virginia failed to pass legislation that would have created corporation tax credits and exemption and an income tax credits and exemption for investments in broadband technologies. The value of these credits would be proportional to the population of the residents where the investments are made.

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

Virginia set out early to establish regulatory and government structure to foster technology and innovation in telecommunications. In 2001, the Virginia Department of Housing and Community Development helped to



educate rural community leaders about the benefits of broadband development and devising community telecommunication plans.

In 2003, HB 2164 established the VA Wireless Services Authority Act which authorized political subdivisions to act as a wireless service authority. HB 2397 provided that the State Corporation Commission had the authority to enforce provisions of the law that permit a locality to offer communication services. Both of these recent legislative actions have moved Virginia more toward a hybrid public private model that provides broadband services to rural Virginia.

No legislation has been adopted or introduced that prohibits the public service commission from participating in establishing regulatory and consumer protections for Virginia residents. Efforts should be made to develop this policy toward a governmental regulatory environment for broadband.

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

In 2007, legislation did not pass that would have specified that the Virginia Public-Private Education Facilities and Infrastructure Act can be used for projects related to the technology and infrastructure necessary to deploy wireless broadband services to schools, businesses, and residential areas. Efforts should be made to support this legislation as well as providing computers and laptops to low-income families and children in order to participate in wireless broadband technologies.

Virginia's Office of Telework Promotion and Broadband Assistance provides technical assistance to communities seeking last-mile broadband connections, yet ignores digital literacy programs that are aimed toward citizens. Virginia should provide a framework for developing a statewide digital literacy campaign to improve take-up rates. A low-income subsidy program to offset the cost of broadband subscription as well as providing access to computers would help stimulate demand for broadband.

Broadband Policy Recommendations for West Virginia



GOAL #1: INSTITUTIONALIZING BROADBAND PRIORITIES IN STATE GOVERNMENT

Starting in 2000, West Virginia began introducing legislation to create a joint committee on technology. While this legislation has not passed it would be instrumental for the state to create a legislative committee with staff and resources to coordinate state level policy and planning of broadband investments. In 2001, the state legislature again introduced legislation that would have created a joint committee on advanced communications and information technology and report to the Governor's Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state. The state legislature needs to develop a champion for broadband and telecommunications in order to foster the development and deployment of broadband and wireless technologies. Efforts should be made to create a legislative committee that would focus on these issues.

The governor's office of information technology has heretofore refused to take ownership of broadband issues and policies. While the state created the Broadband Deployment Council in 2008 under legislative authorization there has been little state level coordination and planning

of broadband investments. The governor's office should force the Office of Information Technology to take on this new role. There has been significant leadership change in both the governor's office, the commerce department, and the information technology office. There holds promise that a new technology czar would appear to be willing to adopt broadband responsibilities and take over for the Broadband Deployment Council. Efforts should be made to institutionalize either the Broadband Deployment Council beyond the end of 2013, or to make it part of the mission statement of the Office of Information Technology.

In 2012, the state legislature increased the number of members on the Broadband Deployment Council (SB110) and increased the number of members required for a quorum. The powers and duties of the Broadband Deployment Council expanded to assert the role of the Council in matters affecting broadband deployment and development around the state.

GOAL #2: PROVIDE STATE FUNDING OF BROADBAND INVESTMENTS

Currently, the state has dedicated \$5 million dollars from excess lottery revenues to be used to fund broadband development and outreach projects around the state. These funds will be used to supplement the private sector investments to help propel broadband infrastructure development and lagging subscription rates in rural West Virginia.



Photo Credit: 2011 Shawn Poynter, www.ruralarchive.com

Efforts should be made to continue state funding for broadband projects in excess of the \$5 million dollar appropriation in 2008. A dedicated line-item in the general revenue budget should be pursued in order to continue the progress that has been made.

In 2003 and 2004, West Virginia failed to pass legislation that would have exempted from sales and use taxes purchases made in broadband equipment. These exemptions would have also applied to high-technology companies that make qualified investments. Efforts should be made to craft legislation that would secure additional private sector capital investment through the use of tax credits, exemptions, and subsidies if it is shown that broadband development and deployment have improved in Type 2 areas defined as areas where some subsidies would be useful in promoting broadband investments.





Photo Credit: 2011 Shawn Poynter, www.ruralarchive.com

GOAL #3: SUBJECT BROADBAND TO REGULATION BY PUBLIC SERVICE COMMISSION

In 2009, legislation was introduced relating to telecommunications regulations and it would have both modernized and streamlined antiquated telecommunications regulation. The legislation, which did not pass, would have confirmed that the Public Service Commission should not have jurisdiction over internet and broadband service rather the bill suggest that broadband be regulated at the federal level. Efforts should be made to continue to defeat this type of legislation and to introduce new legislation that would recognize state level authority over broadband technologies and would have required the public service commission to regulate this industry. Efforts should be made to ensure that a consumer bill of rights is adopted to make sure the customers have the ability to voice their concerns over access, quality and pricing. Additional protections would include requiring telecommunication companies to offer broadband services at speeds that are advertised for upload and download.

GOAL #4: IMPROVE TAKE-UP RATES THROUGH DIGITAL LITERACY PROGRAMS AND ACCESS TO COMPUTERS FOR MODERATE AND LOW-INCOME FAMILIES

West Virginia was one of the first CARN states to introduce legislation in 2000 to establish a statewide computer donation program, but this legislation did not pass. This program would allow all state agencies to donate their used

computer equipment to public schools, juvenile detention centers, and public safety offices.

In 2006, 2007, 2008 and 2011, additional legislation was introduced but failed to pass relating to the donation and transfer of surplus personal computers and other information systems, technology and equipment for educational purposes. In 2007, legislation passed both houses but was later vetoed by Governor Manchin due to technical flaws in the bill that would have required the Department of Administration's surplus program to donate computers to income eligible school age children. Efforts should be exerted to reintroduce this legislation to ensure that all low income families and children have access to computers and laptops.

Gaining access to computers should be a component of a larger program to increase take-up rates for broadband. Other measures would include computer literacy and subsidy programs to offset costs particularly, for moderate and low-income families. The Broadband Deployment Council can serve as an example for how other CARN states can use a state agency to advance take-up rates.



About the Central Appalachia Regional Network

The Central Appalachia Regional Network (CARN) is comprised of diverse organizations located in West Virginia and the Appalachian counties of Kentucky, Maryland, Ohio, Tennessee, and Virginia. The network was formed as part of the W.K. Kellogg Foundation's Rural People, Rural Policy Initiative, based on the premise that "rural America has abundant assets and that the brightest potential for rural America emerges when a critical mass of rural people are stronger, more organized policy actors."

Mission Statement

The Central Appalachia Regional Network (CARN) connects diverse organizations to promote policy and action to improve the quality of life available to the people of Central Appalachia.

Vision Statement

The Central Appalachia Regional Network (CARN) envisions healthy and thriving communities throughout the region. These empowered communities engage civic, public and private institutions to create change and ensure a just existence for all Central Appalachian residents.

We Value:

- Appalachian culture, heritage and context
- Education and knowledge
- Environmental integrity
- Empowerment
- Children, families and future generations
- Sustainable place and environment
- Healthy communities
- Equity in access
- Equity in resources
- Stewardship
- Diversity, inclusion and cultural equity

Broad Policy Areas: CARN members identified four broad policy areas on which to focus their efforts for collective action: Education, Health, Environment and Economic Development.

Policy Priorities & Work Groups: During the 2010 Central Appalachia Policy Summit hosted by CARN, participants identified the following three policy priorities on which to focus their efforts: Green Jobs, Local Control of Assets, and Broadband. These priorities were identified because they would benefit the larger region of Central Appalachia rather than a single locality and span more than one of the four original policy focus areas of Education, Health, Environment and Economic Development. These policy priorities serve as core issues that provide the basis for discussion as CARN continues its regional efforts to promote a higher quality of life for the people of Appalachia.

From these policy priorities, CARN has established the following Policy Work Groups:

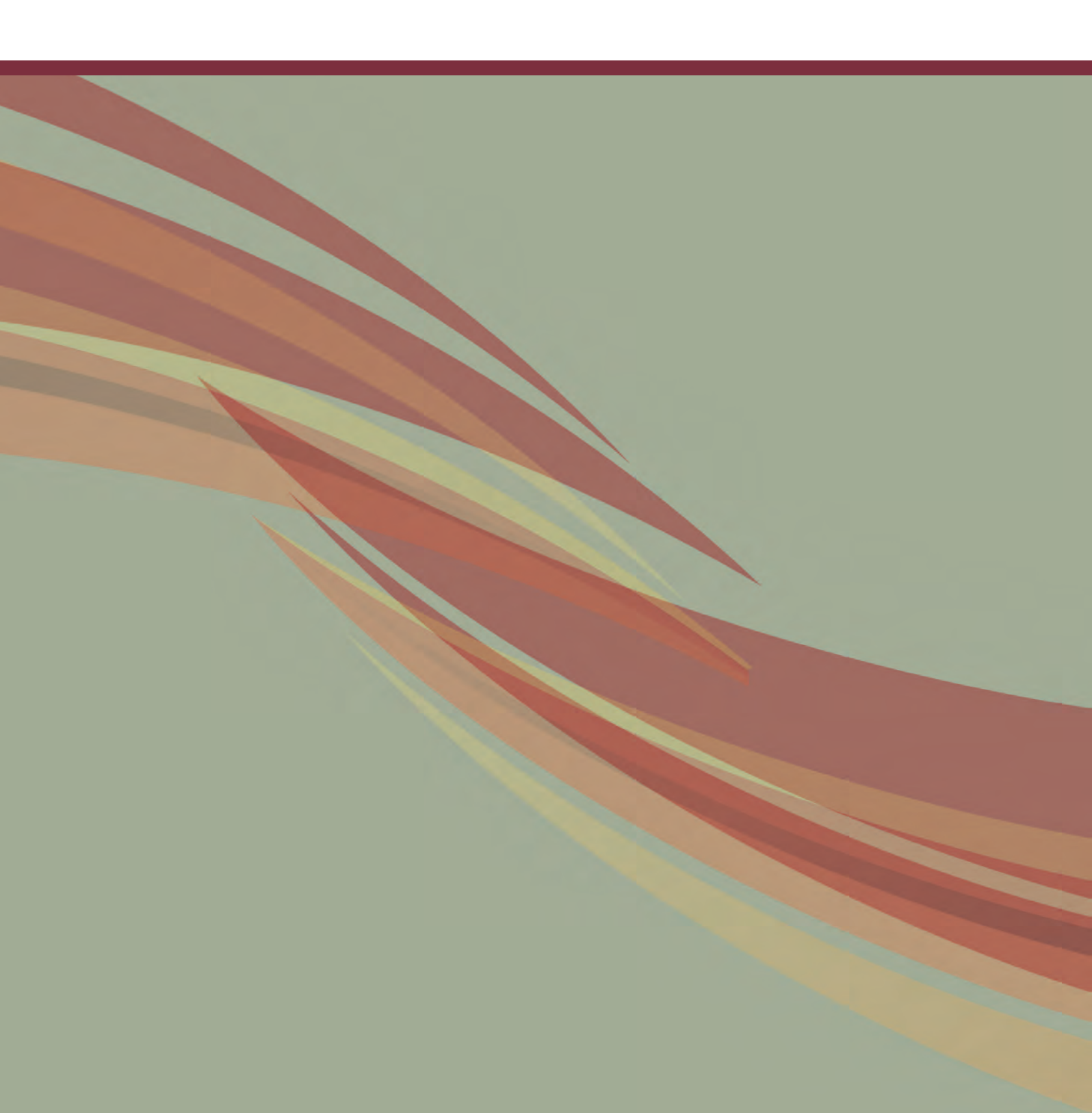
Broadband – Project Leader: Rev. James Patterson, Partnership of African American Churches
Local Control of Assets – Project Leader: Roy Silver, Southeast Kentucky Community & Technical College
Emerging Issues – Project Leader: Rotating leadership depending on issue selected.

CARN Network Members

- Appalshop, Inc. (KY)
- Center for Rural Virginia
- Council for Rural Virginia
- Community Access, Inc. (WV)
- Community Foundation of Hazard & Perry County (KY)
- Garrett County Community Action Committee, Inc. (MD)
- Good News Mountaineer Garage (WV)
- Hazard Perry County Community Ministries, Inc. (KY)
- Highlander Center (TN)
- Ohio Appalachian Educators Institute
- Ohio Univ. Voinovich School of Leadership & Public Affairs
- Partnership of African American Churches (WV)
- People Incorporated of Virginia
- Rural Action, Inc. (OH)
- Southeast Kentucky Community & Technical College
- VA Rural Center
- Virginia Rural Health Association
- Virginia Rural Health Resource Center
- West Virginia Center on Budget and Policy
- WV Community Development Hub

This policy statement and recommendations do not necessarily reflect the opinions of CARN member organizations.

For more information about the Central Appalachia Regional Network contact Jenny Lancaster, Network Coordinator, jlancaster@CARNnet.org or visit www.CARNnet.org



To support these policy recommendations or to join the CARN network, visit
www.CARNnet.org
or scan the QR code below with your smartphone.

