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Rural Broadband Development

Broadband internet is a type of high speed data transmission service which can be provided through a number of technologies including wireless, satellite, cable modem, fiber optic, or direct subscriber line (DSL); all of these allow users to access the internet and internet related services at higher speeds than would be possible with dial up internet.¹ While the economies in cities and urban areas have benefited greatly from broadband access with the advent of the information age, rural America has struggled to keep up. Companies have often been hesitant to extend their networks into rural areas because they have determined that regions of low population density would not provide good returns on investment. This unwillingness on the part of the market has stymied the extension of broadband, but efforts on the part of some private enterprises, cooperatives, citizens' groups, and government agencies have helped to bridge the gap in the "digital divide." The Federal government has asserted that broadband access is an essential component of contemporary American life, aiding in areas such as the expansion of business, the provision of healthcare, and the enhancement of education and public safety.²

Broadband and Economic Growth

History has often shown that a higher degree of connectivity to the world is complementary to the goal of an improved economy. A 2010 California Public Policy Institute study on this subject found that while it is difficult to establish a definite causal link, there was a "positive relationship between broadband expansion and economic growth."³ Another report from 2008 by the Rural Policy Research Institute determined that broadband is necessary in order to have substantive interaction with the American economy, Institute of California, "Does Broadband Boost Local" accessed February 15, 2011, <http://www.ppic.org/content/pubs/r>

for business development and employment growth.⁵ Additionally, a 2010 Brookings Institution study of international broadband development found, through examining the policies and infrastructure of other countries, that “high speed broadband enhances economic development, social connections, civic engagement, and online government.”⁶

U.S. Government Programs

The American Recovery and Reinvestment Act (ARRA) of 2009 allocated \$7.2 billion dollars to states for the development of broadband.⁷ This money was administered jointly through the Rural Utility Service (RUS) of the Department of Agriculture, and the National Telecommunications and Information Administration (NTIA) of the Department of Commerce. As of September 2010 RUS had dispersed more than \$2.5 billion dollars in grants and loans to 45 states for the development of broadband.⁸ NTIA, meanwhile, had invested about \$4 billion dollars in projects around the nation.⁹ These funds are estimated to create or upgrade at least 120,000 miles of broadband network, and improve access at about 24,000 “community anchor institutions” such as schools, hospitals, libraries, police stations, and fire departments. Additionally, the RUS operates a Farm Bill program which awards loans to entities such as corporations and cooperatives in order to facilitate the provision of broadband service to rural areas.¹⁰ Furthermore, President Obama has stated the need to do more to expand broadband access. His latest plan of February 10, 2011, calls for the expansion of high speed, wireless access to 98% of Americans.¹¹

State ~~of~~

Kentucky

The Commonwealth of Kentucky recognized the integral role that technology plays in facilitating economic development and growth; it was under this paradigm that the Kentucky Legislator passed the Kentucky Innovation Act (KIA) of 2000. This act called for a \$53 million dollar investment in the fields of research, development, and technology.¹³ The most pertinent aspect of the KIA to rural broadband development was its establishment of the was

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Mississippi

As one of the most economically disadvantaged states in the Union, Mississippi has been keen on developing broadband capabilities in order to enhance growth.¹⁹ A report by the John C. Stennis Center in Mississippi on broadband in rural Mississippi found that the state lags behind the rest of the country in broadband in A

businesses throughout the state.²⁴ In 2009, the network began to connect Emporia to Wallops Island on the Eastern Shore. This network is funded by the grants from the U.S. Department of Commerce's Economic Development Administration and an additional \$48 million comes from the Virginia's Tobacco Indemnification and Community Revitalization Commission. The network seeks to expand as more communities want to be included and funding is available. Since 2001, the Virginia Tobacco Commission has also funded more than \$53 million dollars towards projects to create more than 900 miles of backbone and infrastructure in the LENOWISCO, Mount Rogers, and Cumberland Plateau Planning Districts and part of the New River Planning District.²⁵

The Virginia Department of Housing and Community Development (DHCD) has played an integral role since 2001 in educating rural community leaders about the benefits of broadband development and devising community telecommunication plans.²⁶ This has resulted in the 24 planning efforts covering over 36 localities. In 2009, the DHCD funded \$740, 990 in Virginia Community Development Block Grant funds which resulted in the creation of 40 new jobs and increased access to healthcare.²⁷ From 2008 to 2009, the Virginia General Assembly expanded the Virginia Resource Authority to include funding for

West Virginia

A majority of West Virginia's rural communities do not have access to broadband. West Virginia ranks 45 communities