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Presentation

“Addressing the Rural Broadband Gap in America: Causes, Impacts, and Ongoing Efforts”

While broadband has become more accessible to American households in the 21st Century, for many parts of the country it still remains a key infrastructure challenge. Broadband access can provide opportunities in terms of job creation, education, healthcare, energy management, public safety, governance, and information dissemination that can, in turn, impact a community's economic competitiveness in the global marketplace. However, while the number of Americans who have access has increased, nearly 100 million Americans still do not have broadband in their homes, and the vast majority of those Americans live in rural portions of the country.

Broadband access has been shown to provide many benefits to rural areas. Studies have shown that broadband can assist rural areas in the transition to an information-based global economy as well as local business development (LaRose et al., 2008). Environmentally, broadband provides benefits by reducing travel costs via telecommuting, teleconferencing, and video conferencing; saving paper with electronic documents; and enabling smart grid technology that can help utility companies efficiently distribute energy in geographically dispersed areas (Federal Communications Commission, 2009). Socially, broadband can connect disadvantaged rural populations to necessary services such as e-health and online learning, and may have an impact on improving conditions in rural areas and the attitudes of rural residents that lead to depopulation (LaRose et al., 2008). It also can impact agricultural activities and public safety in rural areas (Federal Communications Commission, 2009). Despite these potential benefits, rural portions of the United States still fall behind when it comes to the adoption and usage of home broadband service.

This gap in broadband adoption between rural and non-rural areas has often been attributed to socio-economic factors such as educational attainment, income level, race, and ethnicity (Mills and Whitacre, 2003). Various types of technology adoption have been shown to be correlated with significantly related to demographic variables such as marital status, educational attainment, gender, age, disability status, and income, as well as geographic variables such as metropolitan location, region, and urban/rural status (Dobrinsky and Hargittai, 2006; Flamm and Chaudhuri, 2007; Stanton, 2004). Other research has shown that more attitudinal factors, such as prior internet experience, the expected outcomes of broadband usage, the perceived benefits of access, direct experience with broadband, and efficacy of internet use can have direct effects on broadband adoption in rural areas (LaRose et al., 2007; LaRose et al., 2008) In terms of supply side factors, rural residents have less choice in service providers (Strover, 2003) and the costs to both providers and

subscribers is higher (Glass et al, 2003), making cost a large hurdle to overcome when attempting to increase rural broadband adoption. To overcome these gaps, a variety of policy tools and community engagement measures must be combined to make broadband accessible, desirable, and useful for all Americans, regardless of whether they live in a city or a rural countryside.

This study uses multiple analytic techniques to determine what steps are being taken to address the urban-rural broadband gap in America and how rural non-adopters vary from those living in urban portions of the country. This study begins with an overview of ongoing state and federal efforts to increase home broadband adoption in rural portions of the country. In addition, the study examines survey data from 12,000 adults in Michigan and Ohio to measure the differences in home broadband adoption, attitudes toward technology, and perceptions of broadband access in their communities. Data from these surveys show that lower broadband adoption in rural areas may be greatly impacted by both supply side variables, such as the availability of residential broadband service, telecommunications policies, and the quality and cost of available broadband service, as well as demand side variables such as socioeconomic determinants and consumer preferences. This study seeks to understand how a variety of factors, both supply and demand, impact rural broadband adoption and differentiate those patterns from those expressed by residents in urban areas.

Speakers

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