

Broadband: A Key Development Strategy

By Thomas Asp, Principal Engineer and Analyst, December 2005

Economic development strategies have traditionally consisted of investment in good highways, adequate water and sewer lines, reliable gas and electric utilities, railroads, ports, and affordable real estate, labor, and taxes. While these remain significant factors of development, local policymakers have faced new economic development challenges in the changing global economy. Specifically, the information-based economy has required local governments to form new strategies for achieving or retaining economic competitiveness in their communities. Increasingly, a major consideration of this strategy shift has been the important role of broadband communications in retaining economic vitality.

Broadband is a connectivity service that provides multiple channels of data services through one connection without constraining the applications for which it is used. As such, broadband is an enabling technology. It allows businesses to transform processes through Internet business solutions, and to realize significant returns on investment. Broadband offers the opportunity to work and learn more efficiently, publish multimedia, and increase communication possibilities.

Despite the benefits of broadband, targeted private sector investment in broadband infrastructure has resulted in accessibility gaps to this enabling technology in some communities and regions. To address broadband access gaps, stakeholders have begun to assess the future of advanced connectivity in their communities and the feasibility of providing these services through the public sector or through public-private partnerships.

While broadband infrastructure is rapidly becoming essential for accessing education, safety, work, entertainment, government and other applications, creating a broadband infrastructure is not the sole means for achieving broadband accessibility. Additional factors, such as access to necessary computer hardware and technical skills, are also critical to broadband accessibility. Similarly, broadband accessibility—as it is distinguished from broadband infrastructure—is an enabling technology that can contribute to the economic development of a region, but not the sole means for achieving economic development. To create a successful framework for local economic development policy that includes broadband infrastructure and broadband accessibility, policymakers must consider the broader context in which broadband would be deployed. Specifically, do development efforts complement, or are they complemented by, the deployment of broadband infrastructure? A community's overall strategy may include the following:

- Targeting industries in a cluster approach to economic development that recognizes the importance of regional specialization
- Investing in human capital through education and training that emphasizes lifelong learning and workforce skill development

- Aligning human capital with industry cluster needs
- Building a tax and regulation system that fosters entrepreneurship
- Preserving or enhancing quality of life for citizens

Together, the objective of these economic development strategies is to create a comprehensive and sustainable catalyst for economic development to create jobs and expand business opportunities. Because broadband connectivity is newly emerging and other factors of economic development cannot be held constant, it is difficult to quantify the economic benefits of its deployment. Preliminary estimates, however, suggest that including broadband availability in a community's overall development policy can result in significant economic benefit. These benefits accrue from a variety of applications including:

- E-Commerce
- Public Safety (including biometrics, surveillance, and interoperability for law enforcement and investigations)
- E-government and delivery of government services on-line
- Telework
- Tourism
- Distance Learning
- Telemedicine
- Entertainment
- Video Conferencing

The long-term benefits of broadband-enabling applications—for government, commerce, education, research and medicine—include the ability to retain, expand and attract business and investment as well as developing workforce excellence. To gauge the benefits of investing in broadband as an economic development policy, it is important for a community to assess the market—supply and demand—for advanced telecommunications and information technology services. A market assessment for these services can be accomplished by conducting a feasibility analysis that includes market research. The consultants of Columbia Telecommunications Corporation specialize in providing communities with independent market assessments to determine whether telecommunications investment is a feasible economic development strategy.

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About the author: Thomas Asp has been serving public power systems for over 20 years. Tom is recognized as an expert in evaluating and offering recommendations regarding municipal broadband communications systems. He has been actively involved with telecommunication market research and feasibility analysis for over a decade.

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