

## Broadband for Economic Development

Excerpted from “Broadband in Allegany County: Status, Opportunities, and Strategies,” prepared for Allegany County Board of Education, July 2012

A body of economic literature, dating to the late 1990s, has demonstrated a link between the economic well-being of rural communities and broadband, even at low-speeds.<sup>1</sup> The U.S. Department of Commerce noted in a recent report on competitiveness that wireless broadband—like wired broadband— “has the potential to transform many different areas of the American economy by providing a platform for new innovation.”<sup>2</sup> The same report summarizes the existing scholarship linking broadband and economic development and concludes that, although it is difficult to quantify the economic effects of broadband, such effects “are likely to be substantial.”

According to a 2011 survey of building owners and property managers, broadband access is one of the most important decision factors for commercial real estate siting—after price, parking, and location.<sup>3</sup> Similarly, a national survey found that 77 percent of economic development professionals believe that to attract a new business, a community must have broadband of at least 100 Mbps;<sup>4</sup> in other words, they believe that economic development without broadband is essentially inconceivable.

These benefits may be even greater in rural areas, where high-speed connectivity can ameliorate the effects of physical distance. The City of Cumberland’s Office of Economic Development is working to secure such benefits, noting recently that “the growing trend of rural-sourcing”—companies bringing home to rural U.S. communities the type of jobs that have previously been outsourced to India and other countries.<sup>5</sup>

Among the key economic development targets identified by the County, City of Cumberland, and the Allegany County Chamber of Commerce, a number of locations are already scheduled for construction by the State of Maryland.<sup>6</sup> The County, City, and Chamber have also identified a number of additional locations where fiber might have economic impact. CTC engineers assessed these locations to determine potential fiber routes, including placement on existing utility poles and underground routes. Based on this analysis, we estimated the costs to construct each of the fiber segments:

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<sup>1</sup> See Gillett, Sharon E., et al., “Measuring the Economic Impact of Broadband Deployment,” National Technical Assistance, Training, Research, and Evaluation Project #99-07-13829, February 28, 2006.

[http://cfp.mit.edu/publications/CFP\\_Papers/Measuring\\_bb\\_econ\\_impact-final.pdf](http://cfp.mit.edu/publications/CFP_Papers/Measuring_bb_econ_impact-final.pdf) (accessed June 26, 2012).

<sup>2</sup> “U.S. Competitiveness and Innovation Capacity,” *Infrastructure for the 21<sup>st</sup> Century*, U.S. Department of Commerce (2011), p. 5-8 to 5-10.

<sup>3</sup> Joan Engebreston, “Comcast study: Broadband boosts real estate metrics,” Connected Planet, Sept. 26, 2011.

<http://blog.connectedplanetonline.com/unfiltered/2011/09/26/comcast-study-broadband-boosts-real-estate-metrics/> (accessed March 12, 2012).

<sup>4</sup> Craig Settles, “After the Stimulus: Broadband and Economic Development,” International Economic Development Council, October 2011. <http://www.cjspeaks.com/msp/IEDC2011.pdf> (accessed March 12, 2012).

<sup>5</sup> “Economic Development Strategies: Developing a New Queen City!” Brochure (undated). City of Cumberland, Office of Economic Development.

<sup>6</sup> Riverside Industrial Park, the McMullen Building, North Branch Industrial Park, and 11700 Mexico Farms Rd.

- Constructing fiber down the U.S. 220 corridor would cost an estimated \$2.3 million, including a spur to Rocket Center, West Virginia.
- Constructing fiber to every building in an eight block radius around the courthouse in downtown Cumberland would cost approximately \$500,000.
- Constructing fiber from an OMBN interconnection point to six specific sites identified as economic development priorities would cost approximately \$550,000.

The cost of construction, of course, is only the first part of the many costs that accrue to the public sector when it undertakes communications infrastructure projects—much as with all other infrastructure projects, such as roads, bridges, and government buildings. Public ownership of this fiber would entail, at a minimum, maintenance costs and the costs of securing private partners to light and operate the fiber.

We believe that the State’s Department of Information Technology or the Maryland Broadband Cooperative would be interested in partnerships for construction and leasing of the fiber on Route 220 and to the economic development target sites—partnerships that could leverage the State and Coop’s strengths, while delivering the economic development benefits of fiber to Allegany County but reducing the need to maintain and operate fiber locally.

The Route 220 fiber build may also be of significant interest to other parties who might share the cost of construction. A range of public and private entities, including the State and private carriers in both Maryland and West Virginia, have expressed interest in fiber connectivity on that route. First Energy, the local power company, may also be interested. CTC understands that the County has already initiated discussions with some of these entities and recommends expanding the discussions to include as many interested parties as possible with the hope that there is enough interest to enable shared construction at low cost for each entity.

### **Rural Sourcing Over Fiber**

“In-sourcing” or “reshoring”—the return of jobs to America that had been relocated overseas in the past decade—represents a small but important trend that has escalated over the past year. The non-profit Jobs4America is actively engaged in promoting rural sourcing,<sup>7</sup> and the Obama administration is facilitating various aspects of its development. The City of Cumberland has been exploring how to use its resources to attract jobs that are uniquely suited to a rural area—and broadband is a key element in its analysis.

Generally, rural sourcing is enabled by a combination of factors. One is the availability of big broadband to particular locations in rural areas. Sometimes this requires broadband to the home, but many rural-sourcing strategies are based on the availability of very big communications pipes to locations where many workers can be located. The other factors include the availability of an educated workforce; the availability of office/call center facilities that do not need extensive retrofitting; and the state and local governments’ approach to

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<sup>7</sup> “Broadband Makes U.S. Contact Center Jobs Possible,” Jobs4America: Expanding Contact Center Jobs in the U.S. <http://jobs4america.net/> (accessed June 27, 2012).

incentivizing (or not disincentivizing) the relocation.

### **Fiber to the Premises in Downtown Cumberland**

While the link between economic development and broadband has been established, what has not been established is whether *more* broadband (i.e., high-data-rate fiber to the premises, or FTTP) has a greater impact on economic development than do earlier-generation broadband technologies that deliver lower speeds, such as DSL and cable modem service. There is an ongoing debate in this regard, and what analyses do exist tend to be on a case study or qualitative, rather than a quantitative, basis.

Significantly, though, the debate about the economic impact of FTTP is largely a U.S. debate. The importance of FTTP to future economic development and competitiveness is taken as a given in much of Europe and the developed nations of Asia—most of which have made public investments in FTTP that, on average, are hundreds of times larger than the public broadband investments made by the United States through the 2009 Recovery Act broadband programs.

FTTP in downtown Cumberland presents a complex picture—at the same time as it holds enormous promise for the City and Chamber’s vision of attracting businesses and residents to some of the unused locations and upper floors of Cumberland’s historic downtown. FTTP, given its high capital and operating costs, requires high take rates (sales levels) to pay for itself—which can be particularly challenging in a competitive or semi-competitive environment such as Cumberland (where service, albeit at far lower bandwidth) is available from Atlantic Broadband, SkyPacket and other Allconet ISPs, Cumberland WiFi, U.S. Cellular, AT&T Wireless, and (in some locations) Verizon DSL.

FTTP in Cumberland would deliver to each connected location a world-class connection to the Internet and the world, but is likely to require significant subsidy, both for capital costs upfront and for long-term maintenance and perhaps operations. Ideally, the Chamber and public sector in Allegany can partner with one or more service providers who are interested in this market and would be willing to incur the capital costs for equipment to connect new customers.

### **Other recommendations**

We also recommend that the Chamber and public sector work to ensure that all Allegany County real estate agents, both commercial and residential, understand that broadband is a unique asset—and, frankly, that Allegany County, by rural standards, has an extraordinarily high level of broadband service. This understanding should be part of how they market the County in general, and the particular properties that they represent.

Educating commercial real estate agents in the County about the importance of broadband availability to commercial customers, and ensuring that they are in close coordination with the Chamber of Commerce and the public sector departments of economic development on this topic, will pay dividends in the long term.