# **Building Community Broadband Access**



# THE PROBLEM

Many communities are struggling with limited Internet access options. DSL and cable may be available but the prices increase nearly every year, often without improvements in technology or service. A lack of universal fast, affordable, and reliable Internet access results in less economic development, fewer educational opportunities, and a lower quality of life, particularly for low-income families and communities of color. Only a few US cities have access to much faster networks, often at more affordable prices similar to what is available in peer nations.

Most cities do have access to older DSL and cable networks that offer broadband. However, the existing networks suffer from much slower upload speeds than download, pushing subscribers to be consumers of content rather than creators. Furthermore, a lack of robust competition results in high prices and little incentive to invest in new technologies, like full fiber optic networks.

#### THE SOLUTION

Hundreds of communities have started investing in their own networks to connect themselves, local businesses, and even residents in some cases. While local governments rarely invested in telecommunications in the past, many have realized they must now take action. Cities may act along a continuum of options, from high reward but high cost options to low cost and low risk opportunities. The various strategies below offer an opportunity for any local government to increase its leverage among Internet access providers and take charge of its digital future.

LOW COST STRATEGIES: Even smaller governments have sizeable telecommunications needs — connecting City Hall, first responders, schools, and more. Rather than leasing connections that will be needed indefinitely, hundreds of communities have already built their own institutional networks. These investments often pay off in much less than 10 years and come with a dramatic increase in bandwidth and reliability. In Florida, Martin County's fiber network is



"The issue is, does our community control our own fate, or does someone else control it?"

— Harold DePriest, Chief Executive Officer, Electric Power Board of Chattanooga

projected to save \$30 million over 20 years<sup>1</sup> and nearby Greenacres has dramatically increased its capacity while reducing its yearly bill from \$33,000 to \$8,400 by connecting to the **Palm Beach County** network.<sup>2</sup> **Washington DC**'s network saves the city \$5 million per year.<sup>3</sup>

Much of the high cost of building fiber optic networks comes from attaching to poles or tearing up the streets to bury the conduit. Several forward-thinking communities developed plans to expand their fiber optic assets when streets are already disrupted for other projects, such building mass transit, replacing streets, or replacing water mains.

Sometimes called "Dig Once" policies, the cost of including fiber optics in other infrastructure projects often increases project cost by 1% or less. This approach by itself will not result in a full fiber network for everyone, but allows the city to move in that direction by building trunk lines at very low cost. Such lines can be used to connect businesses and neighborhoods that happen to be nearby, either by the city itself or by leasing conduit and/or fiber to independent ISPs. The key to success is a layered GIS map with prioritized locations for future networks, including major local businesses and anchor institutions that should ultimately be connected. When ongoing capital projects coincide with needed fiber segments, they can be included.

**Santa Monica** supports many free Wi-Fi spots and over 75 local businesses with a fiber network built incrementally.<sup>4</sup> The much smaller **Mount Vernon** in Washington has attracted businesses to locate there with the same strategy.<sup>5</sup>

**MIDDLE ROAD STRATEGIES:** Some of the communities that began with low cost investments have expanded the network to serve local businesses and/or residents. Often,

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local businesses that are frustrated with the options from private providers learn about a municipal network serving anchor institutions and ask to be connected. The municipal utility in **Franklin**, **KY** first extended a fiber line to a local business to keep them in town and is now expanding the network to many businesses. <sup>6</sup> In Missouri, **Springfield**'s SpringNet brings in millions of net income and has helped to create thousands of jobs in the city. <sup>7</sup>



"When incumbent providers cannot serve the broadband needs of some localities, local governments should be allowed—no, encouraged—to step up to the plate and ensure that their citizens are not left on the wrong side of the great divide."

- Michael Copps, former FCC Commissioner

TRANSFORMATIVE INVESTMENTS: Some 150 communities have extended cable or fiber network access to every address in their borders. Most of these communities already had a municipal electric utility that facilitated the investment. They rarely raise prices, offer some of the fastest connections in the nation, and ensure more of their subscriber dollars stay in the community rather than heading to corporate salaries. Chattanooga's fiber network was the first in the nation to offer citywide gigabit speeds and has helped to create many thousands of jobs. OptiNet in Bristol, VA, offers speeds up to a gig and has never raised its prices for telephone or Internet access since launching in 2003. And in Colorado, Longmont started with a simple dark fiber network that it is now expanding a gigabit to the entire community with one of the lowest prices in the country.

MIXES: Still other communities have engaged in some of the above strategies while also partnering with a private firm to expand access to next-generation services or create a real choice. Indianola, IA has built a fiber network that a local provider uses to deliver services, including gigabit Internet connections. To At risk of losing a major employer in part due to poor broadband access, Princeton, IL built a network that is managed by a nearby ISP to ensure local businesses retain competitive Internet access. To Some other communities have wanted to work with a partner but could not identify an appropriate one, resulting in project delay or a decision for the local government to offer services directly.

**OPPOSITION:** The big cable and telephone companies are vehemently opposed to municipal networks and have used their powerful lobbying abilities to limit local authority

to build networks in 19 states. <sup>12</sup> However, a solid majority of Democrats, Republicans, and Independents support this decision being made at the local level rather than state or federal.

### LANDSCAPE AND RESOURCES

The Institute for Local Self-Reliance tracks and analyzes community owned networks on a daily basis on its site MuniNetworks.org, which includes an interactive map of networks, fact sheets, and more. Other organizations that work on this issue include the Open Technology Institute at the New America Foundation, Common Cause, and National Association of Telecommunications Officers and Advisors (NATOA).

#### **NOTES**

- Institute for Local Self-Reliance, Florida Fiber: How Martin County Saves Big with Gigabit Network (2012).
- Willie Howard, Palm Beach Post, Greenacres links up with county's fiberoptic data network (Jun. 4, 2012).
- 3. Community Broadband Networks, Breaking the Broadband Monopoly (2010).
- Community Broadband Networks, Santa Monica Named Among Top 15 Government Innovators (2012).
- Community Broadband Networks, Smart Conduit Policy in Sandy, Mount Vernon Reduces Network Cost (2013).
- Community Broadband Networks, Franklin Municipal FiberNET Spurs Economic Development, Serves Government in Kentucky (2013).
- Community Broadband Networks, SpringNet Continues Driving Jobs and Revenue for Local Community (2013).
- 8. Institute for Local Self-Reliance, Broadband at the Speed of Light (2012).
- City of Longmont, Press Release, "Longmont is Building a Gigabit City" (2013).
- Community Broadband Networks, Indianola's Community Network Spurs Entrepreneurship (2013).
- Community Broadband Networks, Community Built Network Saves Local Jobs in Princeton (2013).

**Local Progress** is a national municipal policy network of local elected officials and partners who want to create more just and equitable cities. Our purpose is to build a broad network to support and learn from each other, share best practices and policies, and develop strategies for advancing shared goals.

The **Center for Popular Democracy** promotes equity, opportunity, and a dynamic democracy in partnership with innovative community-based organizations, elected officials, local and state networks, and progressive unions across the country. We work with our allies to design, pass, and implement cutting-edge state and local policies that deliver tangible benefits for working families.