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Community Broadband: A Key Tool for Closing the Digital Divide

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The Digital Divide

Broadband access has evolved from a cutting-edge luxury to an absolutely essential utility for participation in daily life. The COVID-19 pandemic further emphasized the fact that internet access is a necessity for all Americans. Kindergartners adjusted to their first experience in public school by logging into virtual classrooms, furloughed workers applied for unemployment benefits through their state's online portal and frontline health care workers provided telehealth to those unable to leave their homes.

Too many American households and businesses remain cut off from reliable internet access, either because of a lack of infrastructure or because of outdated, inequitably distributed, or unaffordable options. In 2020, addressing the digital divide became a top priority for leaders at all levels of government. Picking up on the work they began before the pandemic, city leaders are continuing to push hard to ensure their residents have access to high-quality, affordable broadband. However, not every community has access to a key tool: community broadband.

Broadband is high-speed, reliable internet access, measured in download and upload speeds. Acceptable download and upload speeds vary widely in the U.S. The Federal Communications Commission (FCC) defines broadband as a minimum of 25 Mbps download and 3 Mbps upload. However, this definition does not align with modern uses. The federal broadband definition, which also dictates which census blocks in its maps are considered "served" or "unserved," has not been updated since 2015. 25/3 Mbps service,

particularly for common upload-intensive activities such as video conferencing or multiple users on the same connection, may not be sufficient. By comparison, Chattanooga EPB, the community broadband utility for the City of Chattanooga, TN, offers a minimum of 300 Mbps symmetrical service and up to 10 Gbps (10,000 Mbps) to its customers.

Broadband availability and adoption differ depending on a few factors. Because more people live in urban areas than rural, the majority of digitally disconnected households are in urban areas. In terms of overall adoption of broadband, rural areas are lagging urban areas. The rural adoption rate is 81 percent compared to urban adoption rate of 86 percent. Low-income residents and residents of color are still less likely to have reliable access to high-quality, in-home connections and enabling technology. Compared to the national average of 86 percent, Black households have a lower adoption rate at 82 percent. Relatedly, differences vary dramatically across income groups, with households earning less than $20,000 having a broadband adoption rate of 62 percent, compared to households earning more than $75,000 with an adoption rate of 81.8 percent. Older Americans are more likely to be digitally excluded with 42 percent of American seniors (22 million) lacking a broadband access at home. These differences also affect the kind of technology used: nearly a quarter of Black and Hispanic households report relying solely on smartphones for connectivity, and lack a home broadband connection or traditional computer or laptop. While mobile connections are a significant improvement upon no connection at all, they are not a complete substitute for fixed, in-home high-speed connections that can be used by multiple people simultaneously.

Access to broadband matters. It has real world outcomes in the lives of Americans. Global research has shown that increasing access to broadband has significant economic outcomes; countries in the top tier of broadband adoption have 2 percent higher GDP growth than countries in the bottom tier. A Great Recession study estimated that $10 billion investment in broadband networks would support the creation of 498,000 new or retained jobs in the U.S. Not only does broadband serve as the foundation of the economy, encouraging entrepreneurship and fostering small business growth, but it also increases quality of life for those with access. The FCC has stated that access to broadband is a social determinant of health, finding that communities with lower access to broadband have a higher prevalence of disease, such as diabetes and obesity, when compared to the national average.

Community Broadband Provides a Critical Alternative

Community broadband is broadband that is publicly provided, where municipalities, public-private partnerships, or cooperatives build the infrastructure and provide service directly to customers, or indirectly by providing network infrastructure access to internet service providers. Currently, more than 900 communities in the U.S. are served by some form of community broadband.

Cities need every tool possible to increase broadband accessibility. By prioritizing the needs of the community and broadband users, rather than simply profit, community broadband networks expand broadband availability and keep internet access affordable and high-quality. The New America Foundation also identifies "benefits beyond the balance sheet" for expanded community broadband. Greater access to educational opportunity and telemedicine were such benefits identified before the pandemic and were further highlighted by COVID-19. Competition is vital to ensuring equitable access to broadband. Three out of four Americans do not have an option when looking for 25 Mbps internet service in their community. As a means for providing greater access to broadband, 69 percent of economic development experts called for "increased local control of broadband networks and policy."

Community Broadband Has Broad Public Support

Whether it's provided as a municipal utility; public-private partnerships; or cooperatives, community broadband is a solution to a long-standing problem. Importantly, community broadband is not a new development. There are hundreds of already-existing networks; some operating since the turn of the 21st century, most in varying forms, but all striving to address lack of access, poor connectivity or inequality. The communities that have benefited have ranged from the small, rural community of Erwin, TN, to the city of Fort Collins, CO, to the Cheyenne River Sioux Tribe of South Dakota.

Access to community broadband equips cities with the ability to address digital divide issues in whatever manner makes sense for their residents and respects the local decision-making of these communities. When cities choose to pursue community broadband initiatives, they frequently have widespread community support. An April 2021 survey found that 53 percent of American adults believe that local governments should be allowed to build their own broadband networks. When Lafayette Parish, LA, held a referendum on establishing its community network, it was supported with more than

two-thirds of the vote. During the 2020 November election, the cities of Denver, CO, and Chicago, IL, voted overwhelmingly to pursue or consider community broadband, as did Berthoud and Englewood, CO.

Community Broadband Provides Clear Economic Benefits

Cities that have been able to address the digital divide in their communities through community broadband have seen some significant results. In Chattanooga, TN, EPB, the municipally owned utility, has built out a fiber optic community broadband network that reaches every home and business in a 600 square mile region. As of 2019, EPB offers service to more 100,000 customers. A 2020 report estimated the economic value of the project to Chattanooga at over $2.69 billion over 10 years compared to a cost of $396.1 million, stating that the project created 9,516 jobs.

Community broadband also has the potential to directly benefit the telecommunications industry. Public-private models and open access network models allow cities to directly invest in broadband infrastructure where it is most needed, while private companies create profit and generate local jobs by operating the systems, providing service directly to customers, and handling marketing of the service. The City of Ammon, ID, a city of 16,500, began building a lit fiber network in 2011. After opting into the initial fiber installation, residents and businesses can purchase services from local private providers or switch providers virtually without requiring a visit from the service provider. Although the network cost $1 million to build, the City originally calculated that it would save $70,000 annually in money paid to private providers. A 2017 report suggested that the open access network could save $43.6 million over 25 years. Without the ability to employ community broadband, these cities would be much further behind in their efforts to address the digital divide.

State Interference in Community Broadband Directly Harms Broadband Access and Adoption

Access to community broadband, however, is not available for all. More than a third of states have banned it as an option or instituted barriers that make it difficult to set up. Not only does this interfere with the attempts of communities to establish their own networks, but it also impacts the quality broadband available to residents.

According to a study conducted by Brian Whitacre and Roberto Gallardo, cities in states with community broadband restrictions had lower broadband availability rates than states without restrictions, a difference of 3.1 percentage points lower than would be expected without restrictions. These negative impacts of community broadband restrictions were even more pronounced in rural areas, with lower levels of access to high-quality broadband. A 2018 study shows that community broadband costs less and offers more transparent pricing models when compared to broadband from privately owned internet service providers. Community broadband can ensure coverage in underserved or unserved parts of the community where internet service providers have determined it is not cost effective to build their networks—unless the state has preempted cities, towns and villages from being able to pursue community broadband networks.

A Chance to Expand Community Broadband

What's keeping community broadband from solving digital divide issues for all, in particular those most in need, such as rural populations and communities of color? Why hasn't it been expanded, and in some states even restricted? Some fear that the investment may not make a return for the community. But, this was a primary reason for private providers to not serve these communities in the first place. With access to other financial tools—such as bond initiatives—community broadband can find other financial means. Similarly, some will cite competition with private providers. Typically, these are areas not being served—or underserved—by private providers already, making the community broadband necessary.

Until these state barriers to direct local broadband infrastructure investment are removed, the U.S. will continue to fight the digital divide with one hand tied behind its back. Legislation such as the Community Broadband Act would remove these unnecessary barriers and allow cities, towns and villages to make their own decisions and investments in broadband infrastructure. Local officials know that the challenges to connectivity are different in every community, and so the solutions must be locally tailored as well. Community broadband is an effective tool in the nation's infrastructure toolbox. Communities that are interested, willing and able to invest their own resources in publicly owned broadband infrastructure must be supported in doing so.

Municipal officials can take action now and tell their Congressional delegation to count cities in on broadband. https://nlc.quorum.us/campaign/33265/