

RURAL AMERICAN BROADBAND CONNECTIVITY PROGRAM

*A broadband infrastructure
proposal from the SHLB Coalition*



SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

Rural ABC Program



GOAL

The goal of this program is to ensure that **every American community** has affordable, high-capacity broadband connectivity to the Internet through its community anchor institutions (CAIs).¹ This document recommends a variety of policy measures to encourage commercial and non-commercial broadband providers to deploy fiber and wireless broadband networks efficiently and to make those services available to the general public at affordable prices through each community's anchor institutions.

WHY IS BROADBAND FOR ANCHOR INSTITUTIONS A NATIONAL PRIORITY?

Providing high-capacity broadband **to and through anchor institutions** is a cost-effective way to solve the “digital divide.” While strong evidence² exists linking access to high speed broadband with economic benefits, social engagement, educational attainment, and personal health, most broadband investments to date have improved broadband access in urban areas but not in rural markets. Thirty-nine percent of rural Americans (23 million people) lack access to 25 Mbps broadband service (41 percent on Tribal lands), compared to only 4 percent of urban residents. Rural residents are suffering economic distress and a diminished quality of life in part because they do not have adequate access to high-speed Internet services.

Focusing on deploying broadband **to and through community anchor institutions** in rural and hard-to-reach areas has many advantages, such as:

- High-speed broadband creates jobs, promotes economic growth, enhances digital learning and promotes telemedicine;
- Anchor institutions can serve as “anchor tenants” that help to make broadband networks economically sustainable;
- Deploying to anchor institutions is more cost-effective than deploying to every home;³
- Anchor institutions are well-established and stable members of the community with resources to serve the general public; and
- Anchor institutions serve the public interest, not special interests.

¹ Community anchor institutions include community centers, public housing, hospitals and health clinics, senior citizen centers, museums, community colleges, public media, schools, libraries, and other non-profit community-based organizations.

² See, e.g. Dutz, Orszag and Willig, “The Substantial Consumer Benefits of Broadband to Households,” July 2009, at https://internetinnovation.org/files/special-reports/CONSUMER_BENEFITS_OF_BROADBAND.pdf. See also, Lehr, “Anchor Institutions Help to Secure Broadband’s Promise,” at <http://www.shlb.org/uploads/Policy/Policy%20Research/SHLB%20Research/Anchor%20Institutions%20Help%20Secure%20Broadband.pdf>.

³ Bringing broadband to anchor institutions is a cost-effective first step to bringing broadband to the whole community

Anchor institutions are a vital part of the economy in rural communities. For instance, a rural hospital with only 25 beds is typically one of the three largest employers in the county, employing (on average) 141 people while generating \$6.8 million in wages, salaries and benefits. Access to affordable, high-capacity bandwidth can determine whether the health institution can survive financially. Ensuring that these anchor institutions have adequate broadband to accomplish their mission is often critically important to the economic health of the whole community.

ANCHOR INSTITUTIONS' BROADBAND DEFICIT

Unfortunately, many rural schools, libraries, hospitals and health clinics and other anchor institutions have insufficient broadband connectivity, as shown by the following:

- **42% of schools** do not have enough capacity to meet the FCC minimum broadband standards, which means that students are not able to engage in on-line learning and cannot develop the digital skills needed for today's workforce. Schools and school districts are moving towards student-centered, personalized learning utilizing digital applications and devices. High-speed broadband access enables schools to expand learning options, allowing students to create content, to participate in virtual courses that may not be available on their campuses, and to collaborate with experts or other students remotely. The CoSN 2016 Annual Infrastructure Survey found that 57% of school districts said cost was a barrier to broadband connectivity. Many rural districts pay ten times more than the urban district average of \$5 per Mbps.⁴
- **41% of libraries** have a broadband connection that is 10 Mbps or less, which is far below the FCC minimum broadband standard that each library receive at least 100 Mbps. The low speed access means only a handful of library patrons can use the Internet at the same time and just several patrons watching videos can slow access to a catatonic state. Libraries specialize in providing skilled personnel, digital literacy training, computers, laptops and Wi-Fi connections to the general public, but their level of service depends on having a robust broadband connection. With greater bandwidth, the local library could ensure that everyone in the community has access to essential Internet-based services.
- **88% of non-metro health providers** have less than a 50 Mbps connection, which means that they cannot implement telemedicine solutions to improve health care in rural areas. Rural citizens may not have access to doctors and specialists in their local communities, but a broadband connection from a local health clinic to an urban hospital can bring the best quality medical care to rural consumers via telemedicine.⁵

WHAT APPROACH SHOULD BE TAKEN TO ADDRESS THE RURAL BROADBAND PROBLEM?

To overcome the challenges above, we recommend a program to incentivize capital investment in broadband infrastructure projects that otherwise would remain unfunded.

First, local communities will conduct a needs assessment and identify the gaps in broadband coverage. The community should consult with multiple stakeholders and the broadband industry to determine how to aggregate demand and attract capital investment.

⁴ CoSN's 2016 Annual Infrastructure Survey, Nov. 11, 2016, at <http://www.cosn.org/Infrastructure2016>.

⁵ The data from the National Broadband Map (which last collected data in 2014), showed that there are over 347,000 community anchor institutions). The above statistics only cover schools, libraries and health providers. We do not have data concerning the broadband access for hundreds of thousands of other anchor institutions, but we think it likely that these other anchor institutions have even less broadband capability than schools, libraries and health providers

The federal government would then make available a variety of financial instruments to incentivize the most cost-effective and market-based investment strategies to fill those gaps in coverage. These tools should include “dig once” deployment strategies, low-interest and subsidized bonds, low-interest loans, tax credits, and direct funding for both up-front capital costs and (in the highest cost regions) operational expenses. It is important to make a variety of financial instruments available to both commercial and non-commercial providers so that communities can choose which strategy is best suited to promote deployment of high-capacity broadband to the anchor institutions in its region.

This proposed program would **supplement, not replace, existing Universal Service Fund (USF) programs.**⁶ The existing USF programs have been enormously helpful in increasing broadband connectivity across America, but these programs have not solved the problem in the most rural and hard-to-reach areas.

The program should also leverage other infrastructure investments, such as highway, bridge, and tunnel projects where broadband infrastructure can efficiently be installed together. Innovative financing options (such as tax credits) should be made available to fund installation of conduit and/or fiber as part of the construction of any lateral infrastructure. By driving down the total cost of construction, the program would bring critical broadband infrastructure to the heartland of America that might otherwise face uncertain financing due to difficult project economics in rural and hard-to-reach areas.

The program would not give preference to, or exclude, any type of provider and would be open equally to telecommunications carriers, cable companies, wireless companies, municipal and non-profit providers, or any other legally and technically qualified entity eligible to be chosen by the state, county and local community to serve its broadband needs.

CONCLUSION

To compete in the New Economy, America will need a rich supply of educated, creative, capable workers from all walks of life - rich and poor, rural and urban. This broadband program will help to revitalize rural and hard-to-reach communities by providing access to affordable, high-speed broadband through our nation’s community anchor institutions to every person in America.

*The SHLB Coalition is a 501c3 non-profit membership organization dedicated to promoting open, affordable, high-capacity broadband for anchor institutions and their communities. www.shlb.org. For questions concerning this proposal, please contact **John Windhausen, Executive Director of the SHLB Coalition**, at **202-263-4626**, or by email at **jwindhausen@shlb.org**.*

⁶ The ABC program does not duplicate the FCC’s Connect America Fund because that Fund is primarily focused on residential consumers, while the ABC proposal is primarily focused on anchor institutions.