

May 17, 2017

President Donald J. Trump
The White House
1600 Pennsylvania Ave. NW
Washington, DC 20500

Dear Mr. President,

The undersigned companies and organizations admire the urgency of your call to improve America's crumbling bridges, airports and electrical grid. As you craft crucial infrastructure legislation, it is important to include a less visible component - high-speed broadband. Like train tracks in the 19th century and highways in the 20th century, broadband networks are the foundation for economic growth in the 21st century and beyond. In fact, broadband is often considered a "meta-infrastructure" that enhances transportation, electricity, agriculture, and all other infrastructure. Creating a nationwide network of state-of-the-art cyber-infrastructure in every city and town all across America will propel the United States forward as the world leader in business, education, and health. When drafting the new infrastructure bill, we urge you to include adequate funding for broadband infrastructure, made available through an open, market-based application process, and to ensure that schools, libraries, health clinics, and rural communities can obtain world-class broadband access to the Internet.

America has always been at the forefront of the digital age. But now the Organization for Economic Co-Operation and Development (OECD) ranks the U.S. 15th in terms of percentage of fixed broadband subscribers, and 23d in percentage of broadband subscribers with fiber.¹ The U.S. simply *must* invest more in broadband to restore our place as a digital powerhouse.

Schools, libraries, health providers and other anchor institutions should be key beneficiaries of any broadband investment initiative.

It is critically important that schools, libraries, health clinics, and all other anchor institutions are included as key beneficiaries in the new infrastructure package. Connecting our anchor institutions is the most efficient and cost-effective way to ensure that *every community in America* has access to high-quality broadband. While residential deployment connects one household at a time, deploying broadband to a school or library or health clinic benefits the entire community. We support residential broadband access and believe that every home should have affordable, high-speed Internet access. Building high-capacity broadband to all the anchor institutions is a cost-effective step toward that goal.

Broadband to Anchor Institutions Stimulates the Economy and Job Creation

Anchor institution broadband not only benefits populations most in need but the economy as a whole. Broadband access creates an economic multiplier effect by improving job creation, increasing innovation, and enabling entrepreneurs to tap into a global market no matter where their business is located. It has been shown that doubling broadband speeds can add .3% to

¹ <http://www.oecd.org/internet/broadband/oecdbroadbandportal.htm>

GDP growth.² In addition, demand for high-skilled workers is exceeding supply.³ Schools and libraries are the key providers of that necessary digital training. Unfortunately, schools, libraries, health clinics, and all other anchors are currently not up to speed, as shown by the following:

- 41% of schools, *representing almost half of the nation's K-12 students*, do not have enough capacity to meet the FCC minimum broadband standards, which means that students are unable to engage in online learning;⁴
- About 40% 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;⁵
- 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.⁶

Anchor institutions require greater bandwidth than residential users. If we do not build high-capacity broadband to connect our anchor institutions, our nation's education, health, and economy will suffer.

Particular emphasis should be given to rural markets.

America's broadband deficit is even more apparent in America's heartland. 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.⁷ Rural markets benefit more dramatically from Internet service compared to urban customers, as broadband gives those communities access to resources otherwise inaccessible or distant. Without adequate Internet connectivity, rural communities often encounter economic distress and a diminished quality of life.

The difficult economics of serving rural markets with high-speed broadband make it particularly challenging for the marketplace to address these needs. While reducing taxes on profits (tax credits) may incent a few commercial businesses to invest more where profits are achievable, tax credits will not stimulate deployment in rural areas where such profits are non-existent or where a non-profit organization is best suited to provide service. In short, ensuring that America has the greatest broadband infrastructure in the world, especially in rural areas, will require significant funding from the Federal government.

The broadband build-out program should incorporate an open application process.

Any funding in the infrastructure bill should be made available through an open application

² <https://www.ericsson.com/res/thecompany/docs/corporate-responsibility/2013/ericsson-broadband-final-071013.pdf>.

³ http://depts.washington.edu/eprc/education/slides/21_century_workforce.pdf.

⁴ <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report>

⁵ http://www.ala.org/news/sites/ala.org.news/files/content/Broadband_11-08-16_0.pdf

⁶ <https://www.ncbi.nlm.nih.gov/labs/articles/26934373/>

⁷ <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report>

process that encourages competition from a variety of broadband providers. The government should not pick winners and losers ahead of time by directing funding toward certain programs, such as the Connect America Fund, which give a preference to certain types of providers. The broadband program should not favor or exclude any type of provider, and it should be open equally to traditional telecommunications carriers, cable companies, wireless companies, municipal networks and other non-profit providers, including research and education networks and any other legally and technically qualified entity chosen by the state, county or local community to serve its broadband needs. The government should adopt an open, transparent application process that encourages competition and a market-based process to decide who will make the best use of such funding.

Network infrastructure built with public funds should be open to interconnection.

Broadband networks built with public funding should benefit the general public. These networks should be open to interconnection and sharing so that other users and organizations can access them. Allowing network sharing and interconnection can prevent investment in duplicative networks. For instance, one particularly cost-effective model is to promote broadband connections *to and through anchor institutions*; the anchor institution can act as an “anchor tenant” on the network while also allowing the network to be shared with residential consumers as well. Allowing open interconnection allows private sector parties to build off of these networks, creating a multiplier effect on economic growth and broadband adoption. This open interconnection strategy can be an efficient mechanism to close the “digital divide.”

Broadband Infrastructure Legislation Should Also Address Barriers to Broadband Deployment.

Network sharing is just one piece of a larger policy that supports coordinated and streamlined broadband deployment. For instance, infrastructure legislation should incorporate “dig once” strategies that install conduit for fiber during highway, bridge, and tunnel projects, drastically decreasing costs. Legislation should also favor streamlined “make-ready” policies to remove barriers to entry and promote investment. By coordinating across transportation and information sectors, we can efficiently and economically connect America coast to coast.

To compete in the Global Economy, America needs educated and tech-savvy workers who have the digital tools and skills to be productive in the Internet age. Following the guidelines set forth above will revitalize rural communities, lift up underprivileged and forgotten populations, and ensure America is academically, medically, and economically competitive for decades to come.

Thank you for your consideration and please know that we are available to assist you in these efforts. If you would like more information about our work to promote broadband connectivity for all Americans, please contact John Windhausen, Executive Director of the Schools, Health & Libraries Broadband Coalition (SHLB Coalition) at 1250 Connecticut Ave. NW Washington DC 20036, or at jwindhausen@shlb.org, or by phone at (202) 256-9616.

Sincerely,

Access Humboldt
Allband Communications
American Library Association
Benton Foundation

California Educational Technology Professionals Association (CETPA)
Colorado Telehealth Network
Connected Nation
Conterra Inc.
Chief Officers of State Library Agencies (COSLA)
Consortium for School Networking (CoSN)
Crown Castle
eX² Technology, LLC
Fatbeam
Funds for Learning
Gigabit Libraries Network
Independent Health Network
Indiana Rural Health Association
Indiana Telehealth Network
Kansas City Public Library Consulting, Inc.
Kellogg & Sovereign
Mobile Citizen
New Jersey State Library
Northwest Council for Computer Education (NCCE)
Next Century Cities
North Carolina Telehealth Network
Power and Communications Contractors Association (PCCA)
Schools, Health & Libraries Broadband Coalition (SHLB Coalition)
State Education Technology Directors Association (SETDA)
Virginia Rural Health Association
WANRack
X-Lab

cc: Department of Commerce/National Telecommunications and Information Administration
Department of Agriculture/Rural Utility Service
Federal Communications Commission
Office of Management and Budget