Broadband for America’s Future: A Vision for the 2020s

Key strategies to deploy broadband in the areas that need it most.

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In the next decade, everyone in the United States should be able to use high-performance broadband. It can help grow the U.S. economy, transforming industries that are basic to everyday life, from farming to education to health care to energy. It can strengthen communities by boosting economic growth and jobs and improving education, learning, health care, and civic participation. And high-performance broadband can empower workers by advancing skills training in a time of increasing income inequality and economic frustration.

Today, too many people in the United States face barriers that keep them from maximizing the opportunities from fixed broadband connections that should run to everyone’s home. To overcome these barriers, leaders – notably at the state and local levels – are executing policies to boost deployment of networks where adequate broadband does not exist; competition, which will increase choices and spur lower prices and better-quality service to residents; and affordability and adoption for those who wish to have broadband in their homes but lack the means or the skills to acquire it. They also are working to support and enhance community anchor institutions, such as schools and libraries, that increasingly serve users wherever they are.

Where challenges to using broadband have not been solved, the result is obvious: People are disconnected from continuing their education, gaining new job skills, finding employment, and participating fully in their communities.

ADVANCING BROADBAND DEPLOYMENT

How should the United States ensure that robust, competitive, high-performance broadband finally reaches the places that lack service today? The first priority of deployment funding is to build to areas that lack broadband. But to ensure that everyone can fully benefit, policymakers also must examine places where broadband is inadequate. Key broadband deployment recommendations include the following:

1 Map broadband oases and deserts. The Federal Communications Commission (FCC) must move promptly to collect, verify and release data that will allow policymakers at all levels of government to make real judgments on the extent to which broadband is actually available to every U.S. household.

2 Increase the effectiveness of federal efforts. The National Telecommunications and Information Administration (NTIA), the FCC and the U.S. Department of Agriculture (USDA) should publish a comprehensive map that demonstrates the eligibility of different areas of the country for different broadband programs, including those administered by the USDA and the FCC. Congress should provide guidance to NTIA, FCC, and USDA efforts on how best to synergize their respective expertise.
3 **Deploy high-performance broadband.** Governments should promptly scrap obsolete performance standards, such as the FCC’s current 25/3 Mbps definition of broadband. Money should be spent on future-proof, scalable networks.

4 **Reach unserved areas (and reject the claim of “overbuilding”).** The focus should be on whether robust broadband is present – not on whether an area meets one of the multiple definitions of “rural.” Deployment and competition are good for consumers. The question for funding is not whether there is “overbuilding” but whether funding will be well spent. In considering expenditures, federal (and, where applicable, state) agencies should consider, among other factors, the benefits to consumers of increased deployment and competition and the ability of network expansion to capture the advantages of network efficiencies in reaching those areas (and passing those savings along to consumers).

5 **Deploy high-performance broadband on tribal lands.** Congress and the federal government should determine whether the particular challenges of Native American lands – which have left too many behind for too long – require additional specialized efforts.

6 **Employ reverse auctions to stretch federal dollars.** Where the federal government is spending significant sums of money to support capital expenditures for broadband deployment, reverse auctions can produce the most bang for the buck.

7 **Establish eligibility for reverse-auction participation.** Provider participation should extend broadly to include new entrants, such as rural electric co-ops and private-public collaborations.

8 **Establish requirements for funded deployment.** Governments should ensure that middle-mile and backhaul facilities constructed with government support are open and available to multiple broadband providers. In addition to meeting performance standards (such as 100/100 Mbps symmetrical speeds) for new construction and employing interim measures to support access to lower-speed broadband where necessary, recipients of federal funding for network construction to homes should be required to offer standardized tiers of service, including one for income-eligible individuals.

**PROMOTING BROADBAND COMPETITION**

Today, limited competition in the broadband marketplace harms consumers. With limited competition, U.S. residents pay some of the highest broadband prices in the world. In fact, competitive choices have generally been declining over the years as broadband technologies – and consumers’ bandwidth requirements – have evolved.

To the extent that lack of competition results in artificially high prices and/or low-quality services, people in some areas pay more than people in other areas for the same service, get lower-quality service, or both. People and communities especially likely to be impacted by limited competition...
include middle-class households, rural Americans, and people with lower incomes.

In a handful of major U.S. cities, ubiquitous, competitive, high-performance broadband markets are likely to emerge in the 2020s. These are broadband oases, places where competition between multiple networks drives the price of high-performance broadband lower and the features of broadband forward faster. However, these digital oases will be far from pervasive. Other places may find themselves in broadband deserts, with no broadband or with the limited competition that typically produces higher prices.

Public policy should rest on the proposition that more competition, especially beyond one or two providers, will benefit consumers by removing the shadow of artificially high prices (or low quality or less innovation or all of the above) from consumers. Key broadband competition recommendations include the following:

1 **Promote broadband competition at the local level.** Policymakers at all levels of government should encourage new entrants and the deployment of high-performance broadband to everyone in a community. States should repeal, and, if necessary, Congress should preempt, current state laws that restrict municipalities and counties from experimenting with various ways of increasing high-performance broadband deployment.

2 **Enact stronger federal policies to spur broadband competition.** The FCC should eliminate exclusive multiunit-building contracts that require residents to pay for broadband services they neither want nor use. To enable greater competition and maximize efficiency, the shared use of spectrum should be encouraged, including between governmental and private users, to improve deployment in unserved and underserved areas and by smaller and new broadband providers. In addition, more unlicensed spectrum should be provided to meet growing Wi-Fi demand.

3 **Adopt additional pro-competition policies across the board.** Federal funding for broadband deployment should be allocated based on competitive processes, such as reverse auctions. When federal funding is used for infrastructure projects, such as highway construction, fiber strands should be installed and made available to multiple providers. To make Lifeline service more accessible, more entities, including community-based institutions, should be allowed to provide service as Lifeline broadband providers. Finally, deployments made to community anchor institutions should be subject to competitive-bidding processes, which lower the cost of procurement.

**ENCOURAGING BROADBAND ADOPTION**

Broadband’s fundamental value doesn’t come from connecting computers to networks; it comes from connecting people to opportunity, and society to new solutions. When a network is available but a person who wants to use it can’t do so, then the network is less valuable to everyone who uses it.

Broadband adoption benefits people in concrete and practical ways. Children can do homework at home. Parents can become more involved in their kids’ schools. Families can stream educational content. Adults can obtain digital skills training, including workforce skills. Americans with disabilities can establish better access to education, employment, health care and community activities. Far too many people face practical barriers in using broadband service that they want and is ostensibly available to them. Academic research has established that socioeconomic factors impact broadband usage.

Local leadership is crucial in both identifying digital divides and combating them. As a nation, Americans also must set long-term goals to ensure that high-performance broadband is fully and realistically available to everyone in the United States. The following recommendations encourage broadband adoption:

1 **Create an affordability agenda.** The FCC should protect and strengthen the Lifeline program to ensure the most vulnerable U.S. populations are not left out. The FCC also should consider requiring that recipients of federal deployment funding offer eligible, low-income individuals an affordable broadband service for $10 per month. Finally, the FCC should educate and protect consumers, including through the use of the Fixed Broadband Consumer Disclosure Label, adopted by the FCC in 2015 but later rescinded. In addition to Lifeline, Congress should consider the creation of separate support for eligible low-income people to afford fixed-broadband connections, including those in need of special in-home services, such as health care.

2 **Support digital skills.** The federal government should support digital literacy efforts, such as those run by state and local governments. State and regional digital equity plans should provide financial support and identify purposes – such as improved education, health, and civic and social engagement – to which digital skills instruction can be targeted and content can be created. Digital skills programs should measure and monitor their results on an ongoing basis.

3 **Incorporate digital skills training in regional economic-growth strategies.** Applying the lessons of local and regional economic clusters, state and local governments should focus training on middle-skill and other jobs important to local economies. In addition, digital inclusion plans should recognize which local institutions can best reach the people who need to be served.

**THE ROLE OF COMMUNITY ANCHOR INSTITUTIONS**

Community anchors’ missions are moving beyond their walls. Libraries no longer deliver knowledge that is housed only within their buildings or the covers of hardbound books.
"One of the biggest differences I see with NISC versus a lot of the other vendors is the personal interactions - the personal touch - the care."

~ Matthew Weller, President
All West Communications
Public education today cannot exist separate from the ability of students and teachers to use broadband connections – both in and out of school. And health care professionals see and monitor patients both in hospitals and in their homes.

With advanced communications changing how education, health care and other vital services are delivered, the country needs an action plan to support the works of community anchor institutions in the 2020s. Community anchor institutions need competitively priced, high-performance broadband. They need to reach people wherever they are – both within and outside the buildings that house these institutions. The high-performance broadband networks that connect community anchor institutions can be used as launching pads for new service to residents.

In the coming decade, policymakers should help ensure that community anchor institutions have access to competitively priced, high-performance broadband and can connect to their users, wherever they are. More competition is the answer. Expanding the ability of a broad range of community anchor institutions to purchase connectivity will lower the cost of broadband for all.

One short-term answer to the lack of in-home broadband can be found in libraries across the nation that are experimenting with lending not just books but Wi-Fi hotspots as well. Many schools have recognized – and are acting on – the same need.

Congress and the FCC should expand the E-Rate program to provide wireless access to students from low-income families who do not have broadband at home. At current prices, $100 million per year would support the full cost of wireless broadband service to between 2 million and 3 million K–12 students.

Policymakers should also explore the possibility of lowering the cost of fixed-broadband connections to K–12 students and to vulnerable populations. For example, the aggregation of buying power by school districts might allow the subsidy of in-home broadband that would support educational uses at prices lower than normal residential retail rates.

In addition, to lower the cost of deployment to residential customers, policymakers should allow private companies to access, at their own expense, the broadband infrastructure community anchor institutions use. They can serve as a launching pad for neighborhood broadband access, in places where broadband has already been deployed, more broadband competition.

**BROADBAND AND DEMOCRACY**

At a fundamental level, the ideas of a competitive market and the idea of democracy are woven from the same fabric of truth seeking – the same idea from which science, technology, democracy and competition all emerge.

High-performance broadband is a tool that can help support democratic society and the social justice it engenders. Increasing economic growth and individual opportunity are the means for securing a foundation of support for democratic institutions.

The strength of high-performance broadband is that it will – if fully accessible to all in the United States – help meet some of the most critical societal challenges, and, wherever people live and work, help them overcome key barriers, regardless of their background, community surroundings, or demographic characteristics. Imagine each community enabled to identify and build on its strengths and employ technology accordingly. That is a profoundly democratic vision.

*This is an excerpt of the full report, available here: [www.benton.org/publications/broadband-policy2020](http://www.benton.org/publications/broadband-policy2020).*