



Broadband Affordability Resources

Executive Summary

In their 2021 State of the State addresses, at least 40 Governors [highlighted](#) the importance of broadband infrastructure and the interconnections with remote learning and telemedicine. These are critical to closing equity gaps and responding to the COVID-19 pandemic and associated economic crisis. Expanding the physical infrastructure of the internet is only part of the challenge of extending access and connectivity to broadband services across the country. The affordability of sufficient internet service remains a significant barrier to increasing adoption and closing the digital divide in both urban and rural communities.

Surveys from the [Pew Research Center](#) show adults making less than \$30,000 annually are half as likely to report having home internet access as adults making \$75,000 or more, with only 57 percent of low-income households reporting access in 2021. During the pandemic, 15 percent of all households with home broadband access reported they had [trouble paying](#) their bills, including 34 percent of households making less than \$30,000 per year. Further, according to research from the organization [BroadbandNow](#), only 51 percent of Americans have access to broadband that costs \$60 per month or less.

These data may not reflect recent services and discounts providers have offered in response to the COVID-19 pandemic. Internationally, the [Broadband Commission for Sustainable Development](#) sets a threshold for entry-level affordable broadband service at 2 percent of a country's average monthly income. Notably, broadband prices in the United States have been [notoriously difficult](#) to study due to a lack of comprehensive data, assorted fees, and varying price-speed tiered structures.

For Governors seeking to expand the affordability of broadband services, the following types of strategies have emerged among the leading best practices:

- Providing direct customer assistance,
- Incentivizing affordable rates through grant programs,
- Expanding service options, and
- Investing in infrastructure and community anchor institutions.

Governors Providing Direct Customer Assistance

During the COVID-19 pandemic, states responded quickly to ensure residents did not lose connection to critical services. Governors, state legislatures and utility regulators in 34 states [issued moratoria](#) on disconnection and fees for late bill collection for a combination of energy, water and/or telecommunications utilities and services, which provided temporary relief for households. Since then, Governors have secured and administered federal emergency funds while utilizing state resources to ensure residents have continued access to affordable broadband.

Disconnection Moratoria

Through [Executive Orders 126](#) and [190](#), **New Jersey** Governor Phil Murphy issued a moratorium on residential disconnections and late fee collections for residential electric, natural gas, water, and cable or telecommunications providers resulting from nonpayment. Residential voice and internet customers at risk of disconnection were offered enrollment in an interest-free payment plan of at least 12 monthly installments. Disconnection of internet services in households with school-aged children was also prohibited.

Maryland Governor Larry Hogan issued a similar moratorium through [Executive Order 20-06-29-01](#), prohibiting the disconnection of services and late payment fee collection from any “electric, gas, sewage disposal, telegraph, telephone, water, cable television company, or internet service provider” during the initial months of the pandemic, and as the moratorium was lifted in September 2020, the Maryland Public Service Commission encouraged internet providers in the state to establish transition plans for their customers.

For a full list of disconnections, [through September 2021](#), NARUC tracked state disconnections and included orders or legislation that affected telecommunications, as well as energy, gas and water utility service.

As these disconnection moratoria expire, Governors are working with utility regulators, service providers and consumer advocates to identify more nuanced solutions to protect customers from disconnection and foster more affordable bills and repayment plans.

Combining State and Federal Resources to Lower Costs

The federal government, through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA), and the American Rescue Plan Act (ARPA), devoted significant federal funds to ensure Americans had affordable access to broadband. For a list of federal funding programs with discrete funding for broadband, visit <https://www.nga.org/broadband/>. Some programs such as the Federal Communications Commission’s (FCC) Lifeline Program, the Emergency Broadband Benefit Program, and the Emergency Connectivity Fund go directly to consumers or schools and other anchor institutions. States have utilized myriad federal funding programs to support broadband affordability.

Administered by the **Wisconsin** Department of Administration, the [Wisconsin Emergency Rental Assistance Program](#) partnered with the Wisconsin Community Action Program Association and Energy Services Inc. to assist renters affected by the COVID-19 pandemic with up to 12 months of rent and utility payment assistance. The program received more than \$322 million from the federal Emergency Rental Assistance Program and, [as of the end of August 2021](#), has provided assistance to nearly 18,000 households. In July 2021, Wisconsin Governor Tony Evers announced the program will help [cover internet costs](#) for qualified households. The Governor's Task Force on Broadband Access recently [released a report](#) recommending that the state establish a new broadband affordability program to support low-income households, along with recommendations to establish a digital equity fund and a digital navigator program. The Public Service Commission of Wisconsin set a goal for 75 percent of households in the state with income below the 200 percent of the federal poverty level to have access to a home internet service at a rate of less than [\\$25 per month by 2025](#).

In the fall of 2020, **Alabama** Governor Kay Ivey dedicated \$50 million in federal CARES Act funding to create the [Alabama Broadband Connectivity \(ABC\) for Students](#) program. The program provided a voucher for free internet service to all households with K-12 students who qualify for the National School Lunch Program. By December 2020, ABC for Students reached more than 200,000 students through 42 internet service providers. The Alabama Department of Economic and Community Affairs (ADECA) managed the program in partnership with CTC Technology & Energy. Additionally, the [ABC Ambassador Center](#) provided technical customer support, assisted customers with the application process and connectivity challenges, and initiated thousands of calls to qualified households that had failed to redeem their voucher by the December 2020 deadline.

Additionally, [ADECA and CTC](#) operated a mobile hotspot program, "Cells on Wheels," to deploy mobile cell towers to supplement satellite networks in unserved and underserved areas of the state. When the FCC deployed the Emergency Broadband Benefit program, ADECA modified the ABC for Students program to transition households to the FCC's program to continue receiving subsidized service after the state's program expired in spring 2021. Currently, the ABC for Students program is developing a detailed white paper that will document the program's success and identify lessons for future efforts.

Colorado Governor Jared Polis signed legislation ([SB21-060](#)) in June 2021 requiring that the state's Broadband Deployment Board develop a program with up to \$5 million to reimburse eligible households for up to \$600 per year for broadband services. Eligible households include those with children receiving free or reduced lunch in grades K-12 and those with incomes that do not exceed either 80 percent of the area median income or 200 percent of the federal poverty level.

In August 2020, **Delaware** Governor John Carney announced the allocation of \$20 million in CARES Act funding to support new broadband infrastructure and services for low-income students. The Delaware Department of Technology and Information partnered with the state's Department of Education to create the [Connect Delaware](#) subsidy program to provide free fixed and hotspot broadband connections to qualifying

low-income students through the 2021 school year. Student eligibility was determined by a household's participation in various federal assistance programs, including the National School Lunch Program, Medicaid, Public Housing Assistance, and the Low-Income Home Energy Assistance Program, among others.

With \$3 million in CARES Act funding, **Vermont** Governor Phil Scott created the [Temporary Broadband Subsidy Program](#) in 2020 to provide eligible households with up to \$40 per month to assist with internet service costs. Qualified households include those that suffered an economic hardship due to COVID-19 and require high-speed internet services for remote work, distance learning or telehealth services. The program was extended through the end of 2021 and is designed to complement the FCC's Emergency Broadband Benefit program. Eligible economic hardships are defined by the program to include:

- Employment layoffs;
- Salary or hourly reductions of 20 percent or more;
- Needed assistance with child care duties or home care due to school, child care facility or assisted facility closures, or the infirmity of a household or family member; and,
- COVID-19 health related impacts to the individual or a member of the household, or family member requiring quarantine, hospital assistance or hospice care by the utility service account holder.

In August, **Maryland** Governor Larry Hogan [announced the Connect Maryland initiative](#), which will utilize state funding to supplement the Federal Emergency Broadband Benefit program. The Maryland Emergency Broadband Benefit Program will provide an additional \$15 beyond the federal Emergency Broadband Benefit's \$50 per month subsidy, for a total savings of \$65 per month for eligible Maryland households. To qualify for the Maryland program, a household need only be approved for the federal program.



Incentivizing Affordable Rates through State Grant Programs

Governors of the states and territories with broadband grant programs can encourage and reward service providers for offering affordable rates and assistance programs. Specifically, several states have built grant programs with scoring metrics and funding thresholds that incentivize applicants (providers, political subdivisions, nonprofits, associations and other grant-eligible entities) to incorporate low-income assistance offerings and digital inclusion programs. Below are a few examples from states that have incorporated affordable rates and inclusion programs into their grant applications.

The **Minnesota** [Border to Border Broadband Development Grant](#) program scores applicants on a 120-point scale, which includes a 10-point category on Broadband Adoption Assistance awarding points based on the following:

- Are broadband adoption activities included in project planning?
- Will technical support or training on broadband be offered?
- Is there – or will there be – a low-income broadband assistance program offering?

Similarly, **Missouri's** [Broadband Grant](#) program scores applicants with up to 15 points out of 120 points for demonstrating the necessary broadband adoption strategies will be in place to assist with the overall success of the proposed project, with specific provisions on the availability of technical support and training services, digital literacy and online security informational events, and providing a low-income broadband assistance program. According to **Alabama's** [Broadband Accessibility Fund Grant](#) scoring metrics, projects providing “higher internet speeds, no data caps, special community pricing, etc. will receive additional scoring consideration.” For the **Illinois** [Connect Broadband Grant](#) program's 200-point scoring criteria, 20 points are awarded based on the applicants having affordable low-price service tiers and incorporating programs to foster adoption.

Indiana Governor Eric Holcomb has invested a combined \$270 million in broadband access and adoption through the [Next Level Connections Broadband Grant Program](#) since 2019. Applicants to the program are requested to include answers to several questions on the service rate tiers that will be provided, the applicant's adoption strategies, and examples of the discounted pricing that applicants may make available if awarded. In the latest round of the 250-point scoring process, the inclusion of “economically disadvantaged student household service packages” is awarded up to 15 points and up to 65 points is awarded for the “project description and readiness” category, which includes demonstrating the “initial five-year service (speed tiers and pricing) [will be] offered at or above speed stated in the application at affordable prices.”

The **Virginia** Telecommunication Initiative includes a [40-point scoring criteria](#) out of 300 points for applicants on their alignment with the commonwealth's broadband priorities including -- among several aspects -- “digital equity efforts to ensure low to



moderate income households in the proposed project area will have affordable access to speeds above 25mbps/3mbps [upload/download].”

Michigan’s [Connecting Michigan Communities Grant](#) Program includes an affordability and service limitation [scoring criteria](#) for applicants of 20 points out of 150. Scoring for the projects is based on the ability of those included within the proposed area of the project to afford and use the service. Equal weight is awarded for the monthly cost of service compared to available household income data, the lack of data restrictions or caps on serviced users’ connections, the applicants’ proven incorporation of the FCC’s Lifeline program, and the project’s proposal to at least partially serve a distressed community, as defined by the Michigan State Housing Development Authority.

California is holding a [Digital Divide Innovation Challenge](#), an open competition that will award up to \$1 million to the “boldest proposals to eliminate the digital divide and expand high speed internet across California.” Additionally, California’s Advanced Services Fund (CASF) [Infrastructure Grant](#) provides increased funding cost-share for projects in areas that fall below the state’s median household income (30 percent increase in funding), and “projects with low-income households that offer service to low-income customers at less than \$15/month shall be eligible for an additional 10 percent funding.” All awarded projects “shall provide an affordable broadband plan for low-income customers... At minimum, the low-income broadband plan must meet all CASF performance criteria” and must be offered throughout the entire project area.

Summary of CASF Funding Criteria

Maximum Funding Level: 100%
Baseline for Eligible Project 60% of total construction costs (up to 40% for dial-up only)
Low Income: Up to + 40% <ul style="list-style-type: none">• Median Household Income for community is less than California Alternate Rates for Energy (CARE) standard for a family of 4, which is currently \$50,200 (30%).• Applicant serves low-income customers for no more than \$15/month (10%).
PU Code Sec 281 (f)(13) Criteria: + 10% per criterion, up to + 20% <ul style="list-style-type: none">• Inaccessible Location (10%)• Uses Existing Infrastructure (10%)• Makes a Significant Contribution to the Program Goal (10%)

In June 2021, **Colorado** Governor Jared Polis signed legislation ([HB21-1289](#)) requiring applicants seeking grant funding from the state’s new Broadband Stimulus Grant program to submit an income-qualified plan to the state’s Broadband Deployment Board, demonstrating how the applicant would provide broadband to income-qualified customers at a reduced cost. Additionally, the legislation created a separate \$35 million digital inclusion grant program.

Expanding Service Options Available to Customers

States and territories have the capacity to indirectly expand affordable broadband offerings by lowering regulatory barriers that can increase competition among providers, including by allowing for public entities such as municipalities and rural [electric, water and telephone cooperatives](#) (co-ops) to offer broadband services. Municipally operated broadband networks and broadband services through nonprofit, electric and telephone co-ops have been found to [increase the affordability](#) of internet services within their markets, with many directly offering [low-cost rates](#).

Municipal Networks

As of September 2021, more than [600 communities](#) in the United States are served by some form of a municipal broadband network. NGA Chairman **Arkansas** Governor Asa Hutchinson [signed legislation](#) in February 2021 to allow local governments to “provide, directly or indirectly, voice, data, broadband, video, or wireless telecommunications services and make any telecommunications capacity or associated facilities that the government entity now owns, or may construct or acquire, available to the public,” after reasonable notice and a public hearing. In May 2021, **Washington** Governor Jay Inslee [signed legislation](#) to remove the state’s regulatory restriction on public entities offering internet services. In 2018, **New Hampshire** Governor Chris Sununu signed legislation granting [municipalities bonding authority](#) for broadband infrastructure development and, in 2020, signed legislation allowing for the formation of municipality or communication districts between local governments.

Citywide networks, such as Chattanooga, Tennessee’s EPB Fiber; Wilson, North Carolina’s [Greenlight](#); and Louisiana’s Lafayette Utilities System (LUS) services have provided high-speed service to residents and have led to [lower rates](#). However, the structure and services of each municipal system can vary widely, as demonstrated by Provo, Utah’s iProvo network, which began deploying in 2001 and was notably sold to [Google Fiber](#) in 2013 for \$1 with an agreement to offer single family homes along the existing network free service of 5mbps/3mbps with no more than a \$30 activation fee for seven years. Currently, [22 states](#) have some form of regulatory restriction hindering the formation or operation of municipal broadband networks, ranging from explicit constraints to bureaucratic hurdles.

Finally, the bipartisan *Infrastructure Investments and Jobs Act* contains a provision that would prevent municipal networks from being excluded from the Broadband, Equity, Access, and Deployment grant program. This legislation was passed by the Senate in early August and awaits final passage.

Rural Electric Cooperatives

As NGA previously outlined in the report “[Governor Strategies to Expand Affordable Broadband Access](#),” the high cost of connecting individual customers in areas with geographic challenges or low population density can be a significant barrier to affordability. However, several states deliver broadband to challenging areas at a lower cost by diversifying their partnerships and broadening broadband service provider eligibilities. In 2020, five states passed legislation authorizing electric or telephone co-

ops to use or lease utility equipment for last-mile broadband services. Governors can work with rural cooperative utilities to reach unserved customer bases.

Tennessee Governor Bill Lee dedicated the state's CARES Act relief funds to the [Tennessee Emergency Broadband Fund](#), and through the program, \$61 million in grants was awarded across 62 projects, with [\\$40 million awarded](#) to electric cooperatives to provide rural broadband services. Since the 2017 passage of the [Tennessee Broadband Accessibility Act](#), which granted electric cooperatives in the state the authority to provide broadband service, more than half of the state's 23 electric cooperatives have announced plans to provide broadband and have begun construction. The \$40 million awarded through CARES Act funds comes in addition to more than \$20 million that Tennessee has awarded to projects from electric cooperatives as part of the state's ongoing Tennessee Broadband Accessibility Grant program.

In July 2020, **Mississippi** Governor Tate Reeves signed the [Mississippi Electric Cooperatives Broadband COVID-19 Act](#), designating \$65 million of the state's CARES Act relief funds in matched grants to electric cooperatives for broadband access expansion as a necessary response to the COVID-19 public health emergency, which is estimated to make service available to more than [35,000 rural homes](#).



Investing in State Infrastructure and Community Anchor Institutions

Beyond the administration of grant programs to subsidize the buildout of broadband networks, states and territories have made internet services more affordable through strategic infrastructure investments. By targeting anchor institutions, subsidizing the cost of services and the purchase of devices, and through the construction and operation of open-access middle mile networks, these infrastructure investments both directly and indirectly increase affordability.

In pursuit of **Illinois** Governor JB Pritzker's goal of achieving universal broadband access and affordability, the state commissioned a [study of cost options](#) for increasing the affordability of internet services. The [2020 report](#) produced cost estimates for four different approaches:

- Providing free service to all residents through hotspots and satellite equipment, without providing long-term infrastructure investments;
- Providing free access and service by deploying wired infrastructure in all currently unserved areas;
- Subsidizing affordable service for all residents; and.
- Subsidizing affordable service only for those in high-poverty ZIP Codes.

These cost estimates have helped to inform Illinois' planning and implementation of infrastructure grant programs to increase affordability and adoption.

Governors have utilized anchor institutions — including schools, libraries and other government facilities — to significantly boost affordable services, both directly and as a leveraging mechanism to connect services to surrounding communities. In **Utah**, the Murray City School District, in partnership with the Utah Education Technology Network, is expanding internet access from school campuses [to nearby communities](#) by leveraging Citizens Broadband Radio Service spectrum. Through **Colorado's** [ConnectME pilot program](#), the Boulder Valley School District partnered with the provider LiveWireNet in 2016 to provide free internet services to qualified families in the free-and-reduced lunch program. In 2020, the school district expanded access to more than [1,000 families](#) through a combination of hotspots and direct-to-home fiber service, exchanging school real estate and dark fiber access for the free services, along with 25 percent of the provider's gross revenue (estimated to net the district \$200,000 to \$300,000). In November 2020, Colorado Governor Jared Polis announced the [Connecting Colorado Students Grant Program](#), a public-private partnership with internet service providers and community organizations to provide internet access for students, educators and staff, prioritizing funding school districts with a high percentage of students who are on free and reduced lunch. The program began with \$2 million in funding and was expanded to \$20 million in 2021. One grant recipient, the [St. Vrain Valley School District](#) in Longmont, Colorado, is creating new public Wi-Fi areas, reviving a decommissioned wireless network in the city, and expanding the city's fiber network, NextLight, which provides free service to income-qualified students.

During the COVID-19 pandemic, Governors utilized state and federal funds to leverage anchor institutions and provide mobile hotspots, devices and public Wi-Fi services. **Connecticut** Governor Ned Lamont [announced](#) that the state was able to provide a learning device to every PK-12 student in need, including 144,000 laptops and 44,000 at-home internet connections. In March 2021, Schmidt Futures and the Ford Foundation launched ConnectED NY, an emergency fund to provide free internet access for approximately 50,000 K-12 students across **New York** through the 2021-2022 school year.

Several states have created their own broadband networks, including open access middle mile networks and last mile connections, many designed to directly serve anchor institutions and government facilities. By making the upfront infrastructure investment, these networks can partner with providers to lower the cost of service to communities and anchor institutions. In **Massachusetts**, the [MassBroadband 123](#) network spans more than 1,200 miles, covering 120 communities in western and central Massachusetts, and directly connects hundreds of public facilities. For the Longmeadow High School, access to the MassBroadband 123 network has [lowered monthly fees](#) and will allow the district to pay back its \$500,000 investment in technology upgrades at the schools within five years, a much shorter timeframe than with other infrastructure projects. Similarly, **Vermont's** Department of Public Service owns or holds license to roughly [340 route miles](#) of open access dark fiber optic cable.

In **Illinois**, the [Illinois Century Network](#) connects more than 6,000 community anchor institutions over 2,100 miles of fiber-optic network. Since 2013, the Illinois Century Network [began offering](#) access to the network to commercial providers, lowering the cost of entry in rural and underserved regions with 40 providers currently delivering last mile service through the state's network. Similar middle mile networks exist in **Maryland**, where the [One Maryland Broadband Network](#) provides service to state facilities, cities and counties, and cooperatives through a public-private consortium, and in **Kentucky**, where the Kentucky Communications Network Authority manages the construction and operation of the [Kentucky Wired](#) network, a 3,200-mile fiber optic network across all 120 of Kentucky's counties as a result of a public-private partnership.

North Dakota, despite being a large and considerably rural state, consistently has some of the [highest internet speeds](#) in the country. As the organization [Broadband Now](#) summarizes, "Access to reasonably priced high-speed internet is available to the majority of North Dakota's residents... current [affordability data](#) reveals that North Dakota is well above national averages when it comes to offering low-priced internet. Over three-quarters, [nearly 78 percent] of North Dakota residents have access to a monthly internet plan that costs \$60 or less." In no small part, strategic infrastructure investments are responsible for these widely available high-speeds and affordable connections in North Dakota. In 1999, the state [codified statutory language](#) creating the [Statewide Technology Access Government and Education Network](#) (STAGEnet) and authorizing the use of the state-run network by all eligible public institutions, creating an anchor tenant model for providing broadband in essentially every community in the state. As a direct result, today, every K-12 school district, county courthouse, higher education campus and state government building in North Dakota has a fiber internet connection through STAGEnet. The state works with local providers

to grant access to network, lowering potentially duplicative construction costs and enabling the provision of more affordable services. Further, in 2019, the state assembly [passed legislation](#) (HB 2040) enacting a sales and use tax exemption for investments in telecommunications infrastructure.



Conclusion

Closing the digital divide has been a long-standing priority for Governors. In the effort to expand access to broadband services across the country, access to the physical infrastructure of the internet is only part of the challenge. The cost of sufficient internet services remains a significant barrier to increasing adoption and closing the digital divide in both urban and rural communities, and these challenges have been exacerbated by the COVID-19 pandemic. Governors are championing new and improved strategies, from leveraging federal resources to launching new programs and partnerships, immediately increasing the affordability of internet services and permanently creating a more affordable digital landscape for the future.