

State CARES Act Broadband Funding Report

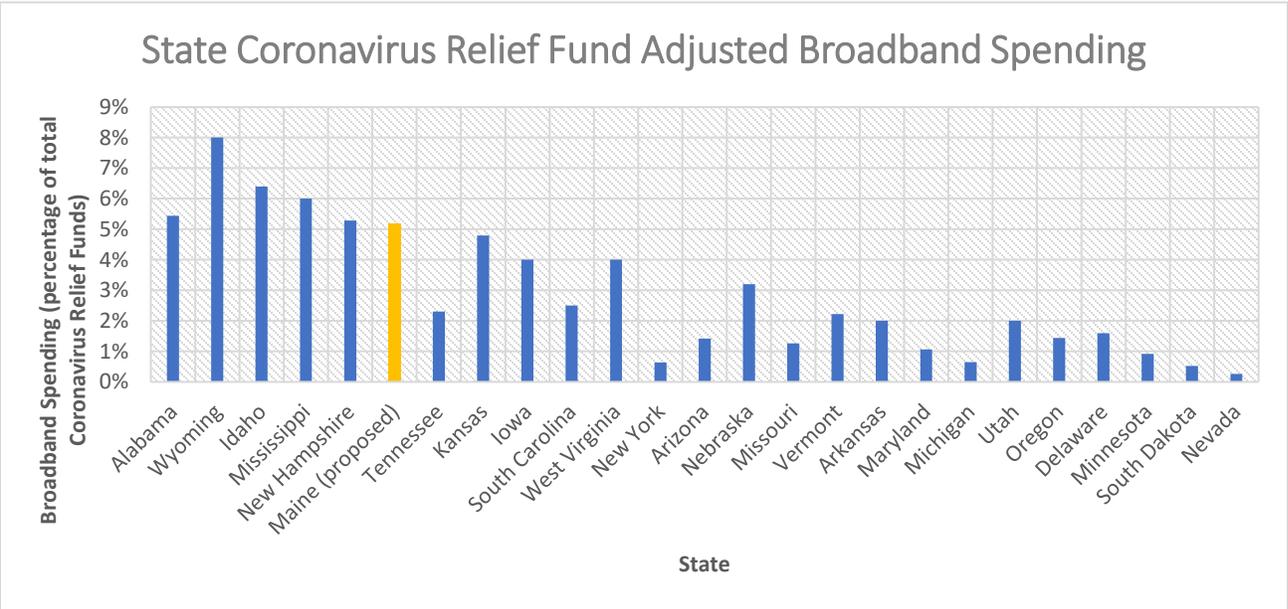
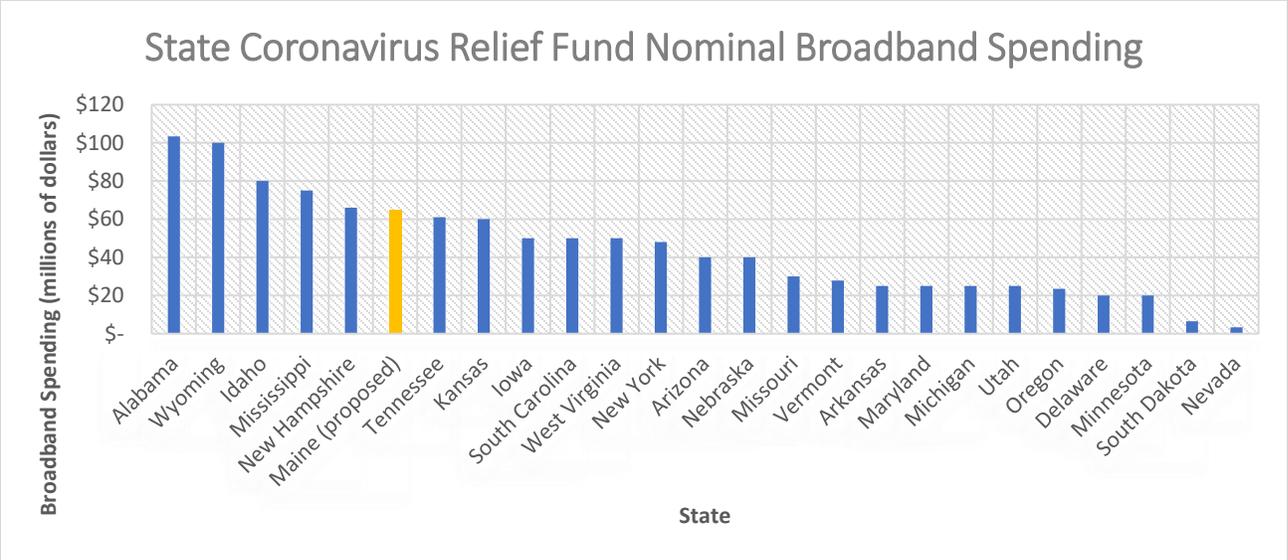
Background

The Coronavirus Aid, Relief, and Economic Security Act was an economic stimulus bill passed by the U.S. Congress and signed into law on March 27th, 2020. The bill provided over \$150 billion in stimulus through its Coronavirus Relief Fund to state and local governments. Maine received \$1.25 billion through the Fund, which could be spent on expenses incurred between March 1st and December 30th, 2020, if they related to the public health emergency. As stay-at home orders emerged in response to the pandemic, Americans became more reliant on internet communications for telemedicine, distance learning, and remote work to offset a reduction in face-to-face social interaction. However, internet access is far from universal: More than 21 million Americans lack access to internet that meets the Federal Communication Commission's standard of 25 megabits per second of download speed and 3 megabits per second of upload speed (the 25/3 standard), disproportionately in rural areas.

In July, the Maine Governor's Economic Recovery Committee recommended that the state invest \$60 million in Coronavirus Relief Fund dollars to connect unserved and underserved communities to broadband, as well as an additional \$5 million in state funding over 5 years for equipment, training, and mapping technology, in order to begin closing the rural connectivity gap. As of the time of this report, the State of Maine has not yet committed Coronavirus Relief funds towards the recommendation, though just over \$400 million remain uncommitted in Maine's fund. However, since March, many other states and municipalities have used portions of their Coronavirus Relief funds to expand access to high-speed broadband.

Examining all 50 states, 24 of them have made direct allocations of discretionary CARES Act funding to broadband and internet expansion. The vast majority of these states emphasized broadband expansion in rural areas, since these remain disproportionately disconnected on account of low potential subscriber densities and less clear returns on investment for private internet service providers.

It is worth noting, however, that though many rural areas lack broadband service, some already have fiber or wireless networks built in their vicinity. In order to determine which areas remained unconnected, states took several approaches to "broadband mapping." Washington state issued a broadband mapping survey to its residents, who could fill it out to report a lack of access to internet meeting the FCC's 25/3 standard. Iowa is targeting broadband expansion to underserved parts of the state, as defined by the "targeted service areas" from the U.S. Census Bureau's 2018 broadband access data in coordination with Iowa's state government. Kansas was able to take advantage of the Kansas Broadband Map, released by a non-profit called Connected Nation, which outlined areas with little to no coverage. After determining what areas and populations needed broadband access most, disbursements of money quickly followed.



Data and Analysis

In total, the 24 states that devoted Coronavirus Relief funding to internet expansion spent more than \$1 billion on broadband access, with a particular focus on rural areas. Wyoming spent the greatest proportion of its CARES Act funding on broadband expansion, at more than 8 percent. The bulk of this money, \$86 million, was disbursed through the Connect Wyoming Initiative, which funded broadband expansion projects in rural areas, impacting 15 counties and 54 separate communities. Interestingly, though the vast majority of funds were used to begin shovel-ready projects for expanding fiber networks, nearly \$13 million in funds were used to develop “fixed wireless builds,” which use antennae and other wireless links to provide ethernet and WiFi service to consumers and businesses.

Fixed wireless builds can provide connectivity to entire counties, albeit at sub-fiber reliability, though they can be easily deployed in remote areas far from existing fiber networks. The state of Maryland allocated \$10 million to the construction of a “Wireless Education Network,” a fixed wireless network that

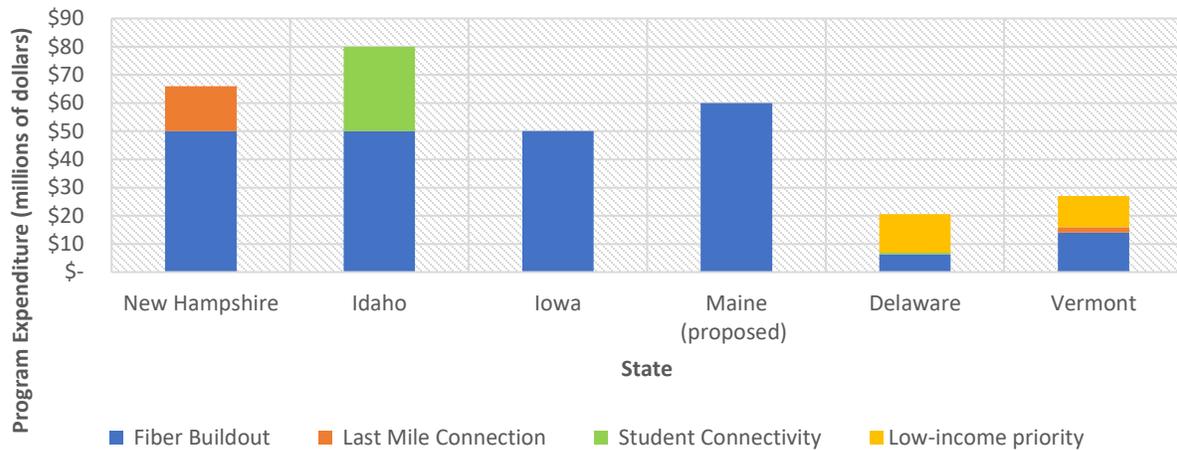
uses Long-Term Evolution (LTE) cellular communication to transmit data, which can be accessed by students without connectivity to attend online classes and engage with their local schools. The network will be designed to serve students in rural Western Maryland, Southern Maryland, and the Eastern Shore. Although states took a number of approaches to build access in internet deserts, the presence of a wired or wireless build is just one aspect of promoting internet access. Another is the fact that if a connection exists, nearby households must have the funds available to subscribe to the service so they can actively reap the benefits of high-speed internet.

As a nominal figure, Alabama dedicated the largest appropriation of any state to broadband: the state allocated \$103.4 million to increasing its broadband “take-rate” (the proportion of people subscribing to broadband access in an area with pre-existing infrastructure). This was accomplished through the establishment of a broadband voucher program which subsidized internet access for households with school-age children, supporting both internet service providers as well as students who may lack internet access. Delaware completed a similar \$20 million program, which built fiber lines in addition to subsidizing broadband for low-income families.

The mean proportion of CARES Act funds spent on broadband, for the 24 states that did choose to allocate funds to broadband expansion, was 2.83 percent, equivalent to an average of \$43.94 million in funding. If Maine dedicated this mean proportion of its CARES Act funding to broadband expansion, it would equate to \$35.375 million in broadband funding. The middle 12 states (in terms of broadband spending) spent between \$25 million and \$55 million. State broadband spending had a full range of approximately \$100 million, on account of the state of Nevada spending just \$3.3 million on its Department of Education, which expanded a handful of broadband networks for local school districts.

States with budget sizes close to Maine’s approximately \$8 billion biennial sum include Idaho, Iowa, New Hampshire, Vermont, and Delaware. Idaho allocated \$80 million to a broadband grant program which could be applied to by cities, counties, tribal governments, port districts, and state agencies, with priority placed on communities with a population under 3,000 or broadband speeds slower than 10/1. The grant program aimed to close connectivity gaps and improve distance learning, telehealth, and e-commerce. Iowa aimed a \$50 million grant program at existing internet service providers, with half of the funds going towards building fiber that met the 25/3 standard in new areas of the state and the other half going towards fiber at speeds of 100/20, primarily in urban areas and population centers. The legislation also charged the state’s Office of the Chief Information Officer with developing accurate state broadband maps to determine the areas most in need of fiber buildout.

Selected State Broadband Coronavirus Relief Fund Expenditures



New Hampshire used \$16 million in CARES Act funding establish a “last mile” program called the Connecting New Hampshire Broadband Expansion Program. The program focused on funding telecommunications companies that built fiber-to-the-premises networks near existing fiber lines, rather than laying large fiber lines across the state to reach new communities. This approach comprises a relatively cost-effective way to connect as many homes to a fiber network as possible. New Hampshire was able to connect each household at a cost of approximately \$3,000. Vermont completed a similar program, the \$2 million Line Extension Customer Assistance Program tailored to customers with a demonstrated financial need. West Virginia authorized \$50 million from their Coronavirus Relief Fund to build general broadband infrastructure, but with a purpose of expanded distance education and telehealth, likely to comply with the federal government’s spending requirements for the fund. Finally, Connecticut allocated funds for devices, low-income hotspots, and, notably, \$4.5 million for public WiFi hotspots.

In several cases, however, states that did not allocate CARES Act funding to broadband expansion had already allocated funds to that purpose, either from their general revenue or from other federal grants. Chief among these federal grants was the United States Department of Agriculture’s Rural Development Broadband (ReConnect) program. In its first round, USDA ReConnect awarded more than \$350 million in grants and nearly the same in loans to projects in 33 states. In its second (current) round of funding, so far, 8 projects in 7 states have received grant funding, totaling more than \$85 million. The vast majority of ReConnect grants were awarded to telecommunications companies that built fiber-to-the-premises networks in rural communities, providing high-speed internet access to households, farms, and businesses in rural areas.

Furthermore, several states had broadband expansion programs that predated the COVID-19 pandemic and, thus, do not rely on CARES Act funding. Since 2016, Massachusetts has run a Last Mile broadband expansion program which is entirely funded from state revenues. Similarly, North Carolina since 2018 has run a grant program called the Growing Rural Economies with Access to Technology (GREAT), which spent more than \$15 million on building fiber networks in rural communities. Texas has

funded annual broadband infrastructure improvements with a dedicated sales tax on intrastate telecommunications services. Each of the three above states declined to allocate Coronavirus Relief Fund dollars to their broadband programs.

States are not alone, however, as proponents of broadband expansion. A handful of counties chose to spend a portion of their locally allocated Coronavirus Relief Fund dollars on broadband expansion for their citizens. Albemarle County, Virginia spent \$1 million (nearly 10% of its stimulus funds) on expanding broadband throughout the county. In Pennsylvania, Somerset, Snyder, and Union Counties are spending between \$3.3 million and \$10.94 million on broadband expansion throughout their counties. Some of these funds go towards municipal broadband providers whereas some are used to fund existing private internet service providers.

Broadband Adjacent Spending

Aside from expanding access to broadband and wireless internet, states also spent significant portions of their Coronavirus Relief Funds on other technologies to increase access to necessary services, such as remote education, work, and healthcare. The 21 states that made broadband-adjacent tech expenditures spent at least \$6.5 billion on their programs, with an average of \$320 million per state, although this is largely skewed by the state of California that spent several billion dollars on education technology and student connectivity.

Many of the costliest expenditures were to purchase devices and cellular network-based hotspots for students so that they could continue to receive their public schooling from home. In fact, California allocated nearly \$5.3 billion in CARES Act funding, or more than a third of its total funds, to its public school districts for the express purpose of providing device access and hotspot-based connectivity for all students, in addition to creating online variants of certain courses such as those for English language learners and students requiring special education. At least 16 states implemented a device- or hotspot-purchasing service using their Coronavirus Relief Fund dollars.

Finally, some states decided to invest in existing public infrastructure in order to expand digital connectivity during the COVID-19 pandemic, especially using their CARES Act funds. Nevada allocated \$30m to their State Library Administrative Agencies so they could expand their own network access, buy devices, provide tech support, and promote digital inclusion. Although the state did not provide individual internet access to households using their funds, bolstering the connectivity of public institutions will help promote digital access, especially after the pandemic fades away and social distancing measures are phased out. Idaho, in addition to allocating funds to device purchasing and broadband expansion, also dedicated \$4 million to the establishment of a statewide “post-secondary digital campus,” an entirely online, publicly-available center for obtaining certifications, taking courses, and promoting professional education for residents of the state. This could prove an innovative and low-cost model for improving the state’s workforce talent and human capital.

It is clear there is a groundswell of state and local support for closing the connectivity gap and guaranteeing that all Americans can take advantage of the economic, commercial, and other benefits associated with broadband access. This process has been greatly accelerated by the allocation of Coronavirus Relief funds to states and localities, who, through targeted investment, have been able to make a meaningful and positive difference in the lives of disconnected Americans.