



Developments in Rural Broadband

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Broadband service generally refers to high-speed internet access that is faster than traditional dialup access. Many rural areas, both in Wisconsin and nationwide, have historically been underserved with respect to broadband. To address this challenge, various state and federal agencies have established programs to further expand broadband coverage to underserved communities.

BACKGROUND

The quality of internet service is often measured by transmission speed, the metric that determines the extent of activity that can be conducted over a connection. The Federal Communications Commission (FCC) defines “broadband” as a transmission speed of 25 megabits per second (Mbps) for downloads and 3 Mbps for uploads (often referred to as “25/3” service).¹ For context, 12 to 25 Mbps is generally suitable for three users or devices to simultaneously stream high-definition video. However, the use of multiple high-demand applications, such as multiparty video conferencing and telecommuting, may require greater speeds.

Broadband service may be delivered through various wired and wireless technologies. Wired technologies, including cable and fiber, offer faster speeds and often provide wide coverage areas. However, these options may be unavailable in rural areas due to the high costs of installation, among other factors. Consequently, rural populations may instead turn to wireless technologies, such as satellite and “fixed wireless” (using terrestrial antennas). However, these options present infrastructure needs of their own, and may be subject to speed issues.

Despite the diversity of options for broadband services, as of 2022, the Wisconsin Public Service Commission (PSC) describes roughly 57 percent of Wisconsin as underserved and 6.8 percent as unserved.² Wisconsin statutes define an underserved area as an area that is not serviced by two or more broadband service providers. An unserved area is defined as an area that is not served by an internet service provider that offers fixed or wireless service capable of providing at least 20 percent of the upload and download speeds required for advanced telecommunications.³

PSC GRANT PROGRAMS

The PSC administers a state-funded broadband grant program and has also distributed certain federal funds related to broadband service. The state Broadband Expansion Grant Program was created by 2013 Wisconsin Act 20 to provide funding for the construction of broadband infrastructure in underserved areas of the state. Under this program, the PSC must designate areas of the state as underserved, prescribe information that must be included in grant applications, evaluate applications, and award grants.⁴ Although grants are primarily awarded to telecommunications utilities, municipalities and counties may also be eligible if they partner with a telecommunications utility.⁵ The statutes require the PSC to prioritize projects that involve public-private partnerships, affect unserved areas, promote economic development, and affect a large number of underserved individuals or communities.⁶ For the 2022 state fiscal year, 71 projects received grants under the program totaling \$124 million.

As noted previously, the PSC has also been tasked with administering certain federal funds awarded to the state. In 2020, the Department of Administration allocated \$6.2 million in federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funding to the PSC to establish a broadband grant program to address distance learning and telework needs resulting from the COVID-19 pandemic. From this funding, 12 awards were granted with \$5.3 million awarded to recipients. In 2022, the PSC also awarded funds from the federal American Rescue Plan Act (ARPA), under the ARPA Broadband Access Grant Program.⁷ From this funding, 83 awards were given, with approximately \$100 million awarded to

recipients. For both of the federal grant programs, eligibility and project priority criteria differed from the criteria established for the state-funded Broadband Expansion Grant Program.⁸

The PSC will also administer funding provided to the state under the 2021 Bipartisan Infrastructure Law's Broadband Equity, Access and Deployment (BEAD) program. In total, this program will provide \$42.5 billion to states to build broadband infrastructure and increase reliable internet access. In November 2022, the National Telecommunications and Information Administration (NTIA) awarded \$5 million to the PSC to support the BEAD planning process, and the state is expected to receive between \$700 million and \$1.2 billion under the program.⁹ Funding will be awarded to eligible applicants through a competitive process expected to begin in late 2023 and continue through 2028. Priority will be given to locations lacking 25/3 Mbps service, with secondary priority given to areas lacking 100/20 Mbps service.¹⁰

NTIA-ADMINISTERED GRANT PROGRAMS

The NTIA provides funding to Wisconsin through multiple programs. One such program, created under the Digital Equity Act within the 2021 Bipartisan Infrastructure Law, has provided approximately \$1 million to Wisconsin for the creation of an inclusive five-year digital equity plan that will serve as a guide and implementation proposal for increasing digital equity in the state and preparing for future digital equity grant funding. The NTIA's State Capacity Grant Program will provide additional funding to the state based on the results of its digital equity plan.¹¹

The NTIA also offers the Tribal Broadband Connectivity Program, a \$980 million program directed towards tribal governments for the purposes of broadband development on Tribal lands. This program received an additional \$2 billion from the Bipartisan Infrastructure Law. While applications for the most recent round of funding are still being processed, tribes including the St. Croix Chippewa Indians of Wisconsin have been awardees in the past.¹²

U.S. DEPARTMENT OF AGRICULTURE GRANT AND LOAN PROGRAMS

The U.S. Department of Agriculture (USDA) administers the ReConnect Loan and Grant Program to fund the expansion of high-speed internet access to rural areas. Parties eligible for funding include corporations, state and local governments, and Indian Tribes.¹³ The Bipartisan Infrastructure Law allocated an additional \$2 billion in funding for this program and directs \$74 million to the USDA's Rural Utilities Service for the Rural Broadband Access Loan and Loan Guarantee program, which also supports the development of broadband infrastructure in rural areas.

¹ Household Broadband Guide, FCC (2022), <https://www.fcc.gov/consumers/guides/household-broadband-guide>.

² Alex Moe, PSC chair says 650,000 residents still lack broadband access, WISPOLITICS (2022), <https://www.wispolitics.com/2022/psc-chair-says-650000-residents-still-lack-broadband-access>.

³ s. 196.504 (1) (b) and (c), Stats. Although "broadband service" is not defined in statute, the PSC has interpreted the term to mean service that meets the FCC's definition of broadband, described previously. The speed threshold established within the state's definition of "unserved" are 20 percent of this FCC benchmark.

⁴ s. 196.504 (2), Stats.

⁵ State Broadband Expansion Grants, PSC, <https://psc.wi.gov/Pages/ServiceType/Broadband/GrantsStateExpansion.aspx>.

⁶ s. 196.504 (2) (c), Stats.

⁷ The Legislative Audit Bureau conducted a limited-scope review of how PSC administered CARES and ARPA funds dated September 2022. Results of the review can be viewed here: https://legis.wisconsin.gov/lab/media/3437/22-11full_323503.pdf.

⁸ ARPA Broadband Access Grants, PSC <https://psc.wi.gov/Pages/ServiceType/Broadband/GrantsARPA.aspx>.

⁹ State of Wisconsin, Office of the Governor, Governor Evers, PSC Announce Federal Internet for All Grant Awards (2022).

¹⁰ Governor's Task Force on Broadband Access (2022), <https://psc.wi.gov/Documents/broadband/2022GovernorsTaskForceOnBroadbandAccess.pdf>.

¹¹ *Id.*

¹² Tribal Broadband Connectivity Program, National Telecommunications and Information Administration, <https://broadbandusa.ntia.doc.gov/resources/grant-programs/tribal-broadband-connectivity-program>.

¹³ ReConnect Loan and Grant Program Overview, USDA, <https://www.usda.gov/reconnect/program-overview>.