



“I promised to work to ensure every Wisconsinite had access to high-quality, high-speed internet, and our State Broadband Expansion Grant Program is one of the fastest and most efficient ways we have to do just that.”

- Wisconsin Governor, Tony Evers



Frequently Used Terminology

What is the 5th Utility?

Broadband and the transfer of data has become a necessity for today's economy and lifestyle, joining four other utilities that we expect to be available anywhere—electricity, gas, water, and telephone.

What is Broadband Expansion?

The development and deployment of infrastructure through which advanced telecommunications capability (broadband) can be delivered to underserved areas.

What is the Middle Mile vs. Last Mile?

The middle mile is the high-capacity broadband infrastructure required to connect global internet networks (backbone) to the end users (last mile). In some cases, middle mile may connect anchor institutions, business parks, or other large, critical end users. Middle mile can be expensive to build, especially for smaller broadband providers.

Public-Sector (Government) Involvement

This is often necessary to address existing gaps in broadband service. Broadband started to replace dial-up service in the early 2000's. By 2020, 95% of urban Wisconsinites had broadband access whereas, in most rural counties, just 63% had access (UW-Madison Extension study). **Internet Service Providers (ISPs) have largely provided broadband service to those areas where they could attain a profit or reasonable return on investment.** Some areas may also have broadband service that is insufficient for today's growing technological demands. For such unserved or underserved areas, financial assistance or more active involvement from the public-sector is often needed.

Three Alternative Approaches

If ISPs have been unable to address local demand, a local unit of government is most likely to get actively involved in one of three ways:

Private-Public Partnership

Most commonly, a local unit of government will partner with an ISP and/or other private-sector partners to develop and implement a broadband expansion project. This often includes the unit of government making a cash contribution, helping to secure grant funding, and/or providing access to favorable bond financing. In such a case, the local municipality or a community group can partner with an ISP to “fill the gap” between actual capital costs and allowing the ISP a reasonable return-on-investment or to break even (if non-profit). Applications to the Wisconsin Broadband Expansion Grant Program will score higher if the project includes a strong private-public partnership.

Local Government-Owned Infrastructure

A municipality, a utility/commission established by the municipality, or other public-sector collaborative constructs their own broadband infrastructure for government use or to provide services within all or part of the community. State rules limit the ability of most municipalities to act as an ISP. Instead, some municipalities have installed conduit and fiber, which is leased to one or more ISPs.

Community Area Networks (CANs)

CANs are broadband communication networks that are collectively designed and managed, with costs shared by the members or end users. CANs in Wisconsin most commonly serve local units of government, state government, educational institutions, libraries, health care and nonprofits.

The above general approaches are not meant to limit creativity or other options (e.g., creation of a new cooperative). Regardless, it is important to be strategic and “big picture” in your planning. A project that is limited to the most profitable areas or largest customers can exacerbate a local digital divide by making it less desirable and less profitable for a second ISP to provide service to the remaining unserved areas. Further, the second ISP may also lack control or ownership over the “middle mile” in such a scenario, which may limit their options or impact service levels.



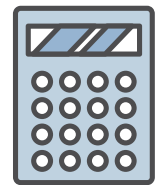
In 2020, Taylor County approved a \$9.5 million bond and, through a request-for-proposals process, selected WANRack to help develop and manage a fiber network that will span 74.6 miles throughout the county. In addition, other ISPs will be able to affordably lease any portion of the new fiber to provide high-speed service to residents.



Broadband Funding Sources

Financing broadband expansion can be complicated and may involve a mix of funding sources and partners. The following are some of the more common funding sources:

- **Federal & State Funding** A list of the most commonly used programs for units of government is available at www.wcwrpc.org/Broadband.html, though this list does change over time. Private foundation grants for broadband expansion capital are rare. ISP partners will often assist in preparing grant applications.
- **Private Equity & Financing** by ISPs, investors/investment banks, developers, local residents, and businesses, including private equity or debt financing, mezzanine funding, private-public development agreements, and crowdfunding with patient capital.
- **Municipal Financing & Leasing**, such as tax-exempt debt financing, general obligation bonds, revenue bonds, industrial revenue bonds, avoided costs, and the leasing of public land or structures to an ISP for broadband infrastructure. This could include the installation and lease of “dark fiber” by the municipality to reduce capital costs to ISPs. When an ISP is unable to secure needed financing terms on their own, some municipalities have used their borrowing capacity to issue bonds to help finance broadband infrastructure as part of an agreement where the ISP has the primary obligation to repay the loan over time (through their subscription revenues) and the municipality is the second bond guarantor.
- **Tax & Assessment-Based Financing**, such as Utility Assessments, Tax Assessment Districts, Property-Assessed Broadband (landowner driven), Tax Increment Financing, Business Improvement Districts, Opportunity Zones, New Market Tax Credits, and utility connection fees.



Broadband Equity, Access & Deployment (BEAD) Program

As part of the 2022 Bipartisan Infrastructure Law (BIL), Wisconsin is expected to receive \$700 million to \$1.2 billion in BEAD funding for broadband infrastructure deployment prioritizing locations lacking 25/3 Mbps service. States are first required to complete a 5-year broadband implementation plan. The Wisconsin Broadband Office expects to have their plan complete in Summer 2023, with the initial round of BEAD grant applications opening during the second half of 2023. BIL also created a new Enabling Middle Mile Broadband Infrastructure Program, which is administered by the National Telecommunications & Information Administration (NTIA).

NEW FCC Broadband Mapping & Broadband Labeling

Many broadband grants, including Wisconsin's Broadband Expansion Grant Program, target unserved or underserved areas. Good data is vital to a competitive grant application. Facilities-based ISPs are required to file data (Form 477) with the FCC twice per year. The FCC launched a new broadband data collection program in June 2022 that should result in better, more accurate broadband maps. It is expected that the new maps will be available starting Fall 2022. In 2024, internet service providers will be required to provide broadband consumer labels, similar to nutrition labels, making it easier for customers to understand what they are paying for and getting when it comes to their internet service.

