

DISPARATE ACCESS

Broadband Access by Geography, Income & Age

—Dale Knapp, Director, Forward Analytics

In 2010, the authors of “*Connecting America: The National Broadband Plan*”¹ wrote:

Broadband is the great infrastructure challenge of the early 21st century. Like electricity a century ago, broadband is a foundation for economic growth, job creation, global competitiveness and a better way of life ... But broadband in America is not all it needs to be. Approximately 100 million Americans do not have broadband at home.

Little did they know that a decade later, the country’s broadband infrastructure would be tested in an unexpected way and issues of access would be highlighted.

The Covid-19 pandemic and related stay at home orders forced a large number of employees to work from home, interacting with coworkers and business associates via meeting software that requires reliable broadband. Most college students finished their spring semesters with online classes. Elementary and secondary students did the same.

Many workers and students who live in areas without reliable broadband access were at a significant disadvantage.

Access Varies

Federal Communications Commission (FCC) data show that 7% of Wisconsin residents did not have access to high speed internet with download speeds of at least 25 Mbps in 2020, a significant improvement over 2016 (13%). Nationally, 5.6% lacked access in 2020.

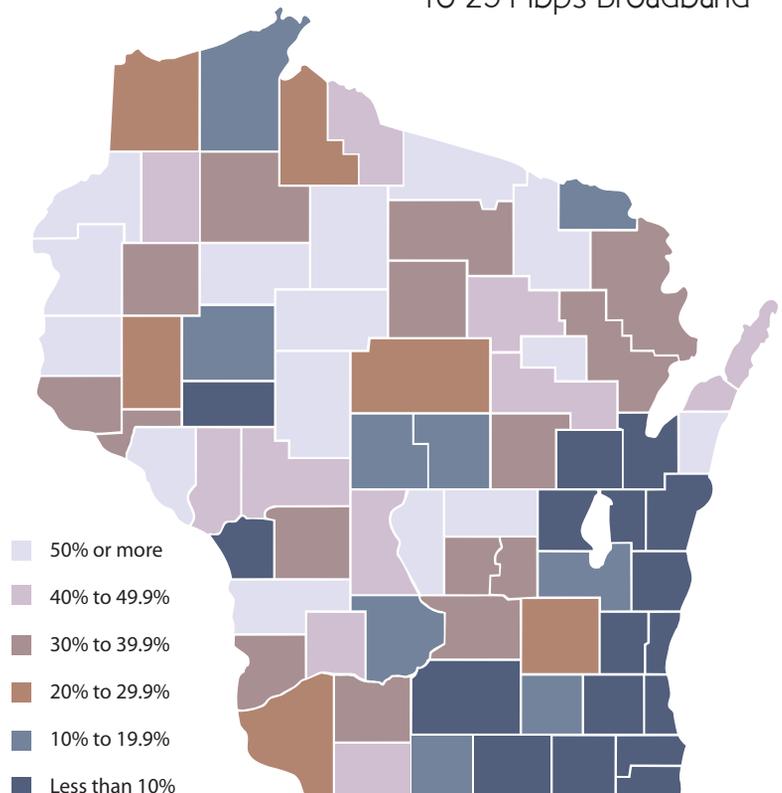
Drilling down to counties, the FCC figures highlight the rural/urban divide in broadband. In 15 mostly rural Wisconsin counties, more than half of residents lacked access to high speed internet in 2016² (see map below). In another 25 counties, the percentage without access was above 30%.

By contrast, less than 10% of residents in 17 mostly urban counties – primarily in southeast Wisconsin – did not have high-speed internet available for purchase.

Access Versus Affordability

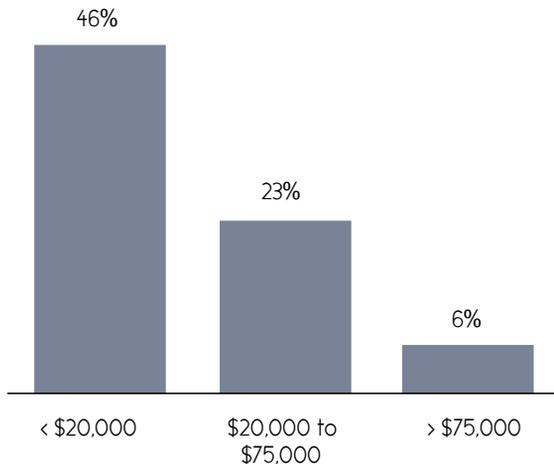
The FCC numbers give insight into the location of broadband infrastructure but tells us nothing about affordability and usage. The U.S. Census Bureau’s American Community Survey sheds light on those numbers.

Percent of Population Without Access to 25 Mbps Broadband





Percent of Households Without Broadband By Income



According to the Census Bureau, 20% of Wisconsin households did not have 25 Mbps broadband in the home in 2018. Lack of broadband could have been due to availability, cost, or some other reason.

The percentage without broadband varied widely by household income – it was 46% for those with incomes under \$20,000 and just 6% for those with income above \$75,000 (see chart above).

Student Access

The Census Bureau figures tell us little about access for college students but show that home broadband availability for elementary and secondary school students is unevenly distributed. Statewide, 10% of children under 18 years of age did not have broadband in the home. That

percentage was as high as 38% in Clark County and above 30% in Vernon County. In another 13 rural counties and in Milwaukee County, the percentage was above 15%, creating challenges for educators during the past several months.

Worker Access

As previously mentioned, the recent stay at home orders changed, at least temporarily, the way some people do their job. Recent reports indicate that companies are now re-thinking how they will conduct business in the years ahead, with increased telecommuting part of that discussion. Home broadband access for employees is key to this discussion.

In 2018, 11% of Wisconsin's labor force³ did not have broadband at home. In Clark, Forest, and Menominee Counties, that percentage topped 20%. In other rural counties, lack of access was above 15%. By contrast, only 4% of those in the Waukesha County labor force did not have high-speed internet. That figure was less than 7% in Calumet, Ozaukee, and Portage Counties.

What's Ahead?

Wisconsin has made progress on broadband over the past decade, but in many areas that progress has been slow. The Broadband Expansion Grant program was established in 2013 to help bring broadband to rural and other high-cost areas. The good news is that the 2019-2021 state budget allotted \$48 million to this program. (see related article on page 27).

The Covid-19 pandemic, and accompanying economic and educational disruptions, raises an important question: are we moving fast enough in our efforts to make affordable broadband available everywhere? ♦

Endnotes

¹ Published by the U.S. Federal Communications Commission.

² County data not available for 2020.

³ Includes those working and those unemployed but looking for work.