

THE UNEVEN RISE OF REMOTE WORK

Three years into the COVID-19 pandemic, remote and hybrid work arrangements remain widespread in Wisconsin and nationally. Census data show that working from home is far more common in some counties than others, driven by their concentrations of jobs in “remote-capable” occupations. This presents both challenges and opportunities for local economies and should be considered in planning for the future of downtowns and broader communities.

While COVID-19 prompted a rapid shift to remote work around the globe, its prevalence in Wisconsin varies widely between counties, according to the latest data from the U.S. Census Bureau’s American Community Survey (ACS).

Among 24 of the most populous counties in Wisconsin, remote work was most common in 2021 for residents of Dane and Ozaukee counties, where more than 20% of workers ages 16 and over primarily worked from home (see Figure 1). It was least common in Dodge, Rock, Manitowoc, and Sauk counties, where less than 10% of workers primarily worked from home. Statewide, the rate was 14.8%. These data were collected throughout the year in 2021 and are only available for larger counties.

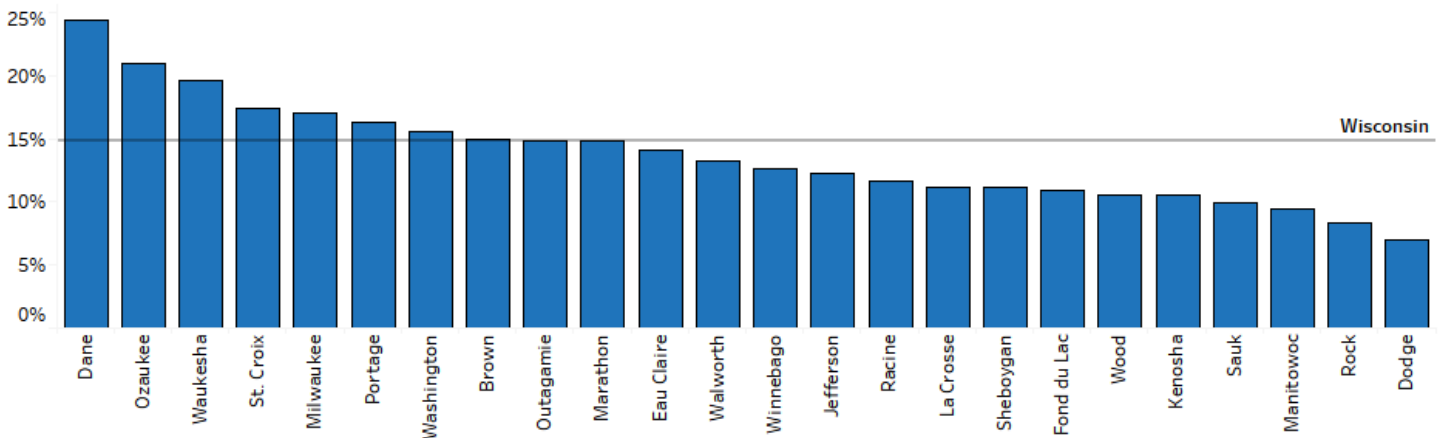
Differences in local economies heavily influence the share of jobs that can be performed remotely, which is likely the primary factor driving this variation. A 2020

National Bureau of Economic Research (NBER) [study](#) estimates that at least two-thirds of jobs in each of five major sectors (educational services; finance and insurance; information; management of companies and enterprises; and professional, scientific, and technical services) can be done fully or partially from home. Jobs in those sectors tend to require higher education levels and pay relatively high wages.

Meanwhile, less than one-quarter of jobs in several other sectors (accommodation and food services; agriculture, forestry, fishing, and hunting; retail trade; construction; transportation and warehousing; and manufacturing) can be done remotely, according to the NBER analysis.

Jobs in the five most “remote-capable” sectors accounted for 31.3% of total jobs in Dane County in 2021, according to [state data](#) from the Quarterly Census of Employment and Wages (QCEW). That was

Figure 1: Prevalence of Remote Work Varies Widely by County in Wisconsin
Percentage of Workers 16 and Over Who Primarily Worked from Home in 2021



Source: U.S. Census Bureau, American Community Survey 1-year estimates



the highest share among large counties in Wisconsin. On the other end of the spectrum, only 11.3% of jobs in Dodge County were in those highly remote-capable sectors. Manufacturing is the leading sector in Dodge County (30.2% of total jobs) and in Rock and Manitowoc counties, which have the next lowest rates of remote work. An important distinction to note, however, is that the QCEW data are based on place of work, whereas the ACS data are based on workers' home addresses. This is notable because some people live and work in two different counties.

Remote work is most common in counties within large metropolitan areas. After Dane County, four of the next six counties with the highest rates of remote work are those that comprise metro Milwaukee (Ozaukee, Waukesha, Milwaukee, and Washington), and a fifth (St. Croix) is on the outskirts of the Twin Cities metro area. Portage County, which is the only county not in a major metro area with a higher-than-average rate of remote work, has an especially strong concentration of jobs in the finance and insurance sector.

Among the 100 largest metropolitan areas nationally, the Madison area ranked 22nd (at 22.6%) and metro Milwaukee 45th (at 17.9%) in the share of workers who primarily worked at home in 2021. At the top of that list were the San Francisco, San Jose, and Washington D.C. metro areas, where at least one-third of workers (33%) primarily worked from home. The only metro areas in the Midwest with higher rates of remote work than the Madison area were Minneapolis-St. Paul (26.0%) and Columbus, OH (23.0%).

A September 2022 [report](#) by the bipartisan Economic Innovation Group (which examined the same data by “commuter zone” rather than metropolitan area) found that nationally, remote work is more common in places with higher education levels, longer commute times, and more expensive housing markets.

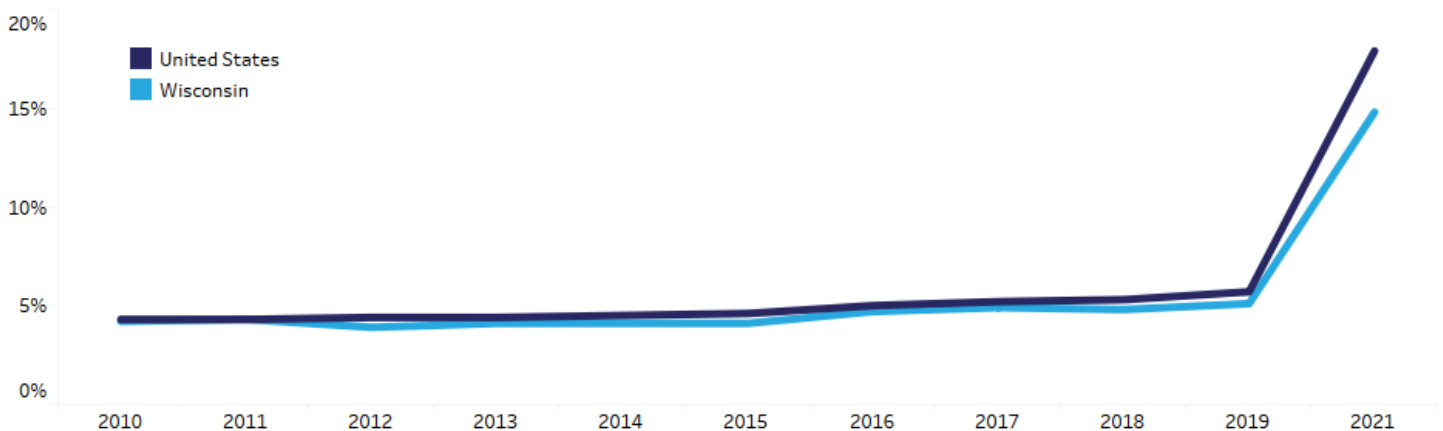
The ACS data come from a question that asks workers for their primary means of transportation to work during the week they were surveyed. One response option is “worked from home.” The responses to this question are often used by researchers to gauge the prevalence of remote work, though one important limitation is that they would not capture those who work less than half of the time at home, which has become increasingly common as many workers have transitioned to hybrid work arrangements.

REMOTE WORK LESS COMMON IN WISCONSIN

Both in 2021 and prior to the pandemic, remote work was less common in Wisconsin than nationally (see Figure 2). In 2021, 14.8% of Wisconsin workers primarily worked from home, compared with 17.9% of workers nationally. That is again influenced by differences in the industry mix of Wisconsin versus the nation. For example, a far higher share of private sector jobs are in the manufacturing sector in Wisconsin (19.1%) than nationally (10.0%).

Wisconsin women (16.6%) were more likely than men (13.2%) to work from home in 2021. This is similarly

Figure 2: Remote Work Less Common in Wisconsin than Nationally
Percentage of Workers 16 and Over Primarily Working from Home



Source: U.S. Census Bureau, American Community Survey 1-year estimates
Note: Data for 2020 are not available.



affected by the uneven distribution of women and men into occupations that can be performed remotely.

The ACS data also show that even before the pandemic, remote work was gradually becoming more common both in Wisconsin and nationally. The share of Wisconsin workers who primarily worked from home rose from 3.9% in 2012 to 5.1% in 2019.

ACS data are not available for 2020 because the pandemic affected the Census Bureau's ability to conduct the survey, but other data sources show the extent to which remote work spiked that year. For example, 59% of respondents to the Marquette University Law School's statewide [poll](#) in May 2020 said the pandemic had caused them or someone in their family (or both) to work from home.

WHAT HAS HAPPENED SINCE 2021?

To gain more recent insight into remote work trends, we drew on U.S. Census data from the [Household Pulse Survey](#), an online survey introduced in 2020 to study the impact of the COVID-19 pandemic and other emergent issues. The survey is designed to deploy quickly and collect and release results in near real-time, with the most recent available results dating to January 2023.

Among the questions included in the survey are whether anyone in the respondent's household teleworked or worked from home in the last seven days. Because the survey was initiated in April 2020, it cannot provide a pre-pandemic baseline for what share of respondents would have answered "yes" to this question before the arrival of COVID-19 and ensuing shift in work practices. However, it provides a useful tool to understand how this has changed during the various stages of the pandemic and nearly up to the present.

In Wisconsin and nationally, what stands out most about the responses to this question is how stable they have been since mid-2021, when many pandemic precautions and associated alternate work arrangements were still in place for many workers. In Wisconsin, the share of survey respondents answering "yes" to this question was 24.7% in July and August of 2021. In January 2023, it was 23.9%. Nationally the "yes" share was 27.4% in summer 2021, and 27.7% in January 2023.

In January 2023, the share of households responding affirmatively to this question were split about evenly between those saying someone in their household was teleworking five days a week, versus those saying someone was teleworking between one and four days a week.

Survey [data from Gallup](#) suggests there has been a strong shift to hybrid work arrangements nationally. In a June 2022 survey of over 8,000 workers whose jobs were considered remote-capable, roughly half (49%) were in hybrid work arrangements (defined as working remotely at least some of the time but not exclusively), while 29% were still fully remote and 22% were back to working exclusively on-site. The Gallup data also show that among those whose jobs can be done remotely, hybrid work arrangements became the most common structure in the first quarter of 2022 and the dominant structure by the second quarter of that year.

PROS AND CONS FOR WORKERS AND EMPLOYERS

The rise of remote work has spawned extensive analysis of its benefits and drawbacks for both employers and workers. Some benefits are relatively clear, including savings for employers on office space and for workers in time and money spent on commuting and parking, as well as benefits for the environment from reduced greenhouse gas emissions associated with commuting.

On other issues, like productivity, the research findings seem mixed or inconclusive. Some studies – like [one conducted by the state of Utah](#) – suggest that remote work increases productivity, while others – like [one by Microsoft](#) – suggest that long-term productivity may be hampered by reduced innovation in a remote work environment. Impacts on productivity likely vary depending on the type of work a business or organization does and how well their systems accommodate remote work.

Research also has found that drawbacks to remote work may include [employee disengagement](#) and reduced collaboration among team members.

Hybrid work arrangements, which attempt to balance the strengths of remote and on-site work, are what a majority of workers say they prefer. In responding to Gallup's June 2022 [survey](#), 60% of remote-capable workers nationally said they want a long-term hybrid work arrangement, while 34% say they want to work



remotely all of the time and 6% want to work on-site exclusively. A previous [survey](#) found the most commonly preferred amount of time workers want to work on-site is about half the time (40% to 60%).

From an equity perspective, remote and hybrid work options may exacerbate existing inequities by giving a new benefit to a subset of workers who typically already have other advantages, including higher levels of education, higher incomes, and better access to benefits like employer health care. Those whose jobs require them to work exclusively on-site are also [more likely to be Black or Hispanic](#) than those whose jobs can be performed remotely some or all of the time.

On the other hand, the increased access to remote and hybrid work arrangements may help to address inequities in other ways, such as by making it easier for parents and caregivers (who are disproportionately women) to balance the needs of their jobs and their families. As we pointed out in previous Forum [research](#), this could also help to decrease the gender wage gap over time.

IMPLICATIONS FOR DOWNTOWNS AND COMMUNITIES

The shift to remote work also has [affected downtowns](#) and local economies, and its sustained prevalence could continue to influence how communities in Wisconsin evolve.

For example, demand for office space may be reduced somewhat long-term, particularly in the state's two largest metro areas of Madison and Milwaukee, where remote work is more common. That could lead to some office space being converted to residential or other uses, though such conversions are only feasible in certain cases. Some [research](#) also has found that the shift to remote work during the pandemic increased demand for space at home and with it recent real estate prices.

Many workers have returned to working on-site at least part of the time, but fewer daily on-site workers still likely means [reduced spending](#) in downtowns and other job centers, which affects restaurants and retailers in those areas. It could also mean somewhat greater demand for certain services in the neighborhoods and communities where remote workers live.

COVID-19 also changed how people move around. For example, public [transit ridership plummeted](#) in Wisconsin cities and nationally in 2020 and 2021, and though it bounced back somewhat in 2022, ridership remains far below pre-pandemic levels. Remote and hybrid workers who previously used transit every day are one factor contributing to this trend.

The increase in remote work and its effects on individuals, families, businesses, and communities may be one of the pandemic's most far-reaching outcomes. For cities and metro areas in Wisconsin, it presents both challenges and opportunities that should be considered in planning for the future of downtowns and other job centers, transportation systems, and other aspects of community life.

