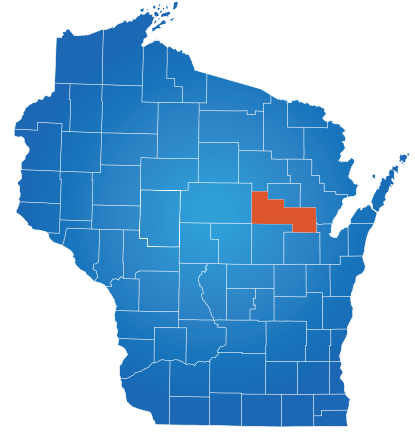


Shawano County

2023 WORKFORCE PROFILE



2022 Wisconsin Overview

Wisconsin's economy broke numerous records during 2022, as the rebound from the COVID-19 pandemic continued.

During January through April, the state achieved a record low seasonally adjusted unemployment rate of 2.8%, while also achieving record lows in initial and continuing weekly unemployment insurance claims. As the number of unemployed people trended downward, construction employment reached a record high, and the manufacturing industry also experienced strong growth.

By year end, the state had regained 99% of the 404,000 jobs lost during the COVID-19 pandemic, including the short, sharp recession of March and April 2020. In addition to the strong rebound in jobs during 2022, Wisconsin's real GDP reached record highs and the state concluded the year with a record high state surplus approaching \$7 billion.

While Wisconsin's year-ending labor force participation rate of 64.6% remained more than 2 percentage points above the national average, demographic trends including the aging and retirement of Baby Boomers contributed to the labor quantity challenge. Concerns over inflation, compounded by China's response to the COVID-19 pandemic and resulting supply chain disruptions, also defined the year.

As demand for workers grew throughout 2022, employers voiced concerns about their inability to attract talent and workers in general. This is unlikely to change in the foreseeable future. The primary underlying challenge is the demographic situation as Baby Boomers exit the workforce. This lifecycle event will continue to complicate the employers' ability to find workers and talent. These demographic problems extend beyond Wisconsin and affect the upper Midwest, the U.S. as a whole, much of Western Europe, and in fact, the developed world. Even China faces a talent shortage.

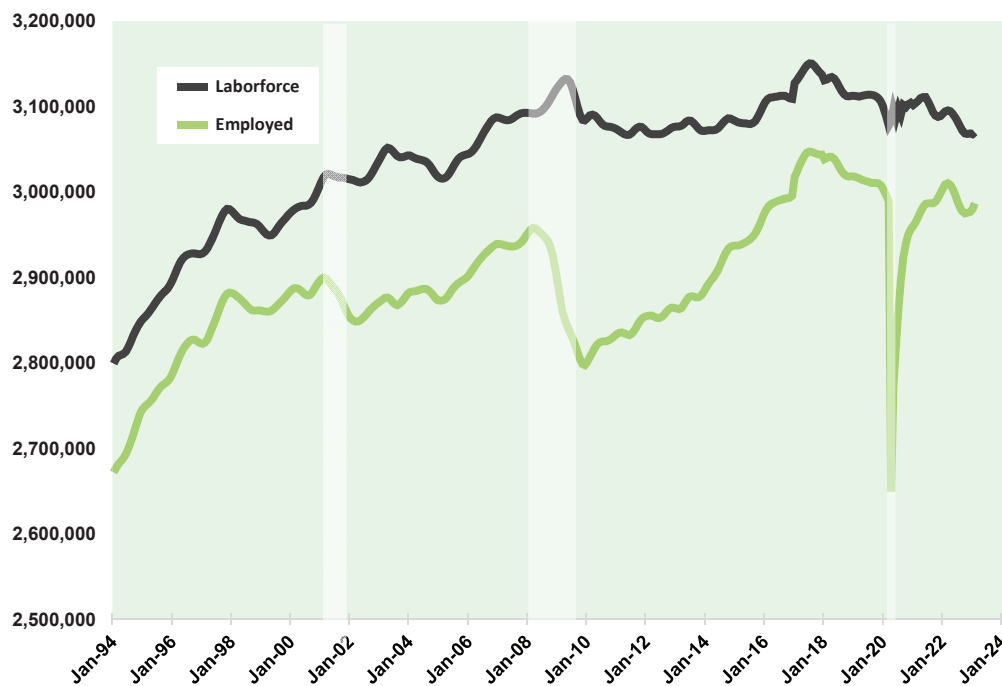


EMPLOYMENT

Wisconsin's labor force held relatively steady through the pandemic, while employment dropped severely and then recovered quickly. See Graphic 1.

The employment gyrations pushed the unemployment rate to 14.1% in April 2020. As employment recovered, the unemployment rate fell to new lows of 2.8% in March and April of 2022. As of December 2022, Wisconsin's seasonally adjusted unemployment is 3.2%.

Graphic 1: Wisconsin's Labor Force and Employment



Source: Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics

SHORT-RUN OUTLOOK

The short-run outlook for the state looks positive. Job levels continue at high levels, registering gains in 10 out of 12 months in 2022.

Job gains coupled with higher wages translate into healthy consumption, which makes up two-thirds of the economy. Wage gains have been robust. However, the surge in inflation brought about by supply chain disruptions and the war in Europe have undercut the gains in real terms. We expect high inflation to be transitory while wage gains will be permanent. With continued job and wage gains, consumption will be the underpinning of economic growth.

The most prominent economic risk is the Federal Reserve Bank (Fed) aggressively combatting inflation through higher interest rates. The Fed raised interest rates seven times in 2022 – going from essentially zero to 5%. They set a range of 25 basis points. As of March 1, 2023 the range is 4.7 – 5%. Interestingly, Fed fiscal policy contributed to inflation pressures over the last few years.

Experts expect that inflation pressures will ease as supply chains readjust. As inflation pressures ease, the Fed will be able to conduct a more accommodative monetary policy. Tighter fiscal policy will have an influence over the coming years as well.

Businesses continue to voice lack of workforce talent as the primary constraint on production growth. Pursuit of workers has brought about wage and benefit increases, signing bonuses, and other incentives to attract workers. However, other workforce barriers such as transportation, dependent care, housing affordability, and the uncertainty of workplace safety surrounding COVID-19. Solutions to these barriers are discussed below.

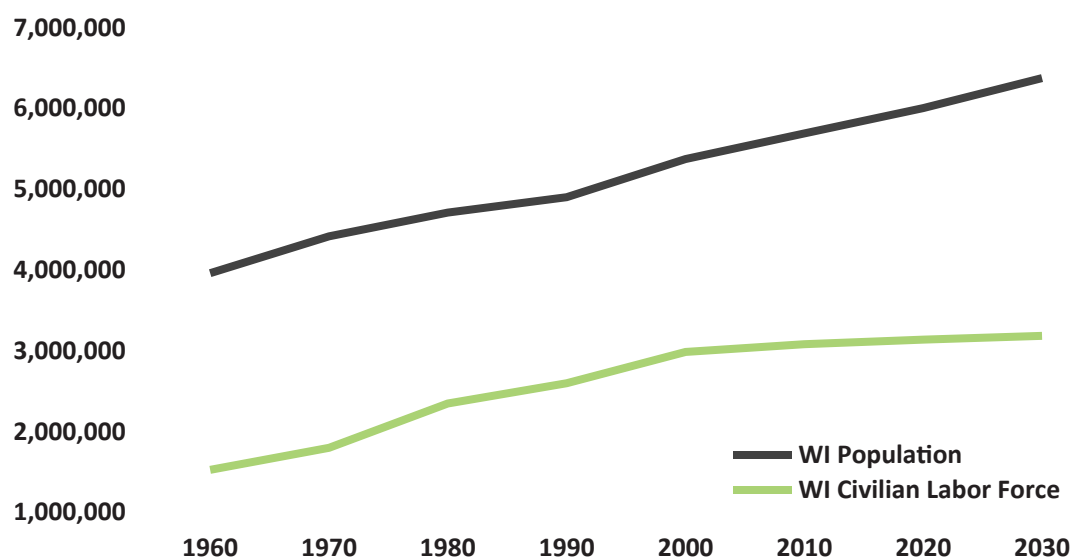
LONG-RUN CHALLENGE

Workforce quantity is the primary challenge facing Wisconsin's economic future. The demographic dynamics facing the state, other upper-Midwest states, the U.S., and most of the developed economies will advance unaltered in the coming decades.

While Wisconsin's population will continue to grow over the next 20 years, the workforce faces serious constraints. The labor force trend began to seriously flatten in 2008 after slowing in the late 1990s as the first baby boomers (those born in 1946) reached age 62 and began to leave the workforce. Baby boomers continue to exit the workforce in great numbers and will continue to do so over the next 20 years.

The number of retiring baby boomers nearly match the influx of new workers, resulting in a slow-growing workforce. This constrains employers' ability to secure talent across industries. Many businesses report that the lack of available workers has hindered expansion, and in some cases, even curtailed the ability to meet current business needs.

Graphic 2: Wisconsin Population and Labor Force



Source: WI DWD, OEA Special Tabulation

There are four solutions to the macroeconomic labor quantity challenge: 1) offshoring production, 2) immigration, 3) mitigating barriers to employment of the chronically unemployed, and 4) technological advancement. Critical to the technology solution is the concomitant match of labor skills with technologies' sophistication. This is true for designing, building, installing, operating, and maintaining the advanced technology being put in place as well as for development of the infrastructure and facilities needed to support technological progress: broadband, power, water, transportation.

Worker skills must align with skills demanded by the position. If you have the talent and not the job, the talent goes elsewhere. If you have the job and not the talent, the job goes elsewhere. For Wisconsin to successfully compete in the global economy, the state needs to attract and retain every body it can and educate and train everybody to match the requirements of the new technologies.

FOUR SOLUTIONS



Shawano County

POPULATION AND DEMOGRAPHICS

In recent years, Shawano County's population grew more rapidly than the nation but at a lower rate than the state. Since the 2020 Census, the county's population grew by 309 residents (0.8%). Population gains were most apparent in the City of Shawano, largest municipality. Among Shawano County's other major municipalities, only Belle Plaine and Bonduel experienced population declines.

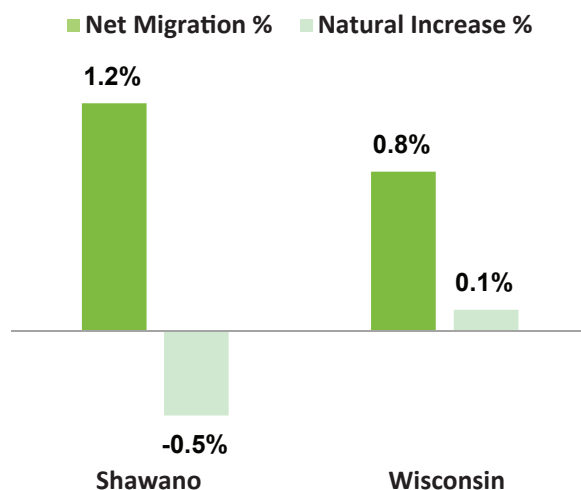
Graphic 3: 10 Most Populous Municipalities in County

	2020 Census	2022 Final Estimate	Numeric Change	Percent Change
Shawano, City	9,243	9,515	272	2.9%
Wescott, Town	3,257	3,265	8	0.3%
Washington, Town	1,965	1,973	8	0.4%
Angelica, Town	1,822	1,840	18	1.0%
Richmond, Town	1,832	1,839	7	0.4%
Belle Plaine, Town	1,800	1,763	-37	-2.1%
Bonduel, Village	1,417	1,411	-6	-0.4%
Lessor, Town	1,226	1,238	12	1.0%
Green Valley, Town	1,026	1,034	8	0.8%
Waukechon, Town	1,002	1,007	5	0.5%
Shawano County	40,881	41,190	309	0.8%
Wisconsin	5,893,718	5,949,155	55,437	0.9%

Source: WI Dept. of Administration, Demographic Services Center

Natural increase and net migration are the two sources of population change. A natural increase in population occurs when there are more births than deaths, while an increase through net migration arises when more people enter the county than exit. Like Wisconsin, Marinette County had positive net migration since 2020. However, the natural increase rate of -1.1% was almost enough to offset the gains through net migration. Natural increase is largely a function of age, which provides one way of illustrating state level workforce quantity issues on a local scale.

Graphic 4: Components of Population Change



Source: Demographic Services Center, WI Dept. of Administration

EMPLOYMENT BY INDUSTRY

Employment changes in 2021 were unsurprisingly less volatile than those in 2020, but job totals will also be compared to 2019 as a pre-pandemic benchmark. Employment in Shawano County increased by 245 jobs (2.1%) across all industries from 2020 to 2021. In comparison, Wisconsin's total employment grew by 2.4% over the year. As of 2021, employment in the county was still 4.18% below the 2019 total while Wisconsin's total employment was 3.1% below 2019.

Graphic 5: Employment Change by Industry

	2021 Average Monthly Employment	1-year Numeric Change	1-year Percent Change	2-year Numeric Change	2-year Percent Change	Percent of Total Employment
Construction	422	10	2.4%	32	8.2%	3.5%
Education & Health Services	2,479	-23	-0.9%	-227	-8.4%	20.3%
Financial Activities	351	-14	-3.8%	-22	-5.9%	2.9%
Information	68	0	0.0%	0	0.0%	0.6%
Leisure & Hospitality	1,795	121	7.2%	-50	-2.7%	14.7%
Manufacturing	2,172	206	10.5%	-21	-1.0%	17.8%
Natural Resources & Mining	651	-1	-0.2%	-228	-25.9%	5.3%
Other Services	303	17	5.9%	2	0.7%	2.5%
Professional & Business Services	524	-53	-9.2%	61	13.2%	4.3%
Public Administration	1,126	-10	-0.9%	-14	-1.2%	9.2%
Trade, Transportation, Utilities	2,318	-7	-0.3%	-68	-2.8%	19.0%
All Industries	12,210	245	2.0%	- 533	-4.2%	100.0%

Source: WI DWD, Labor Market Information, QCEW 2021

Four of 11 industries registered growth between 2020 and 2021. Seven industries remained below 2019 levels. The three largest industries in terms of employment share are education and health services; trade, transportation, utilities; and manufacturing. These three industries make up 57.1% of total employment and 59.3% of the overall employment decline.

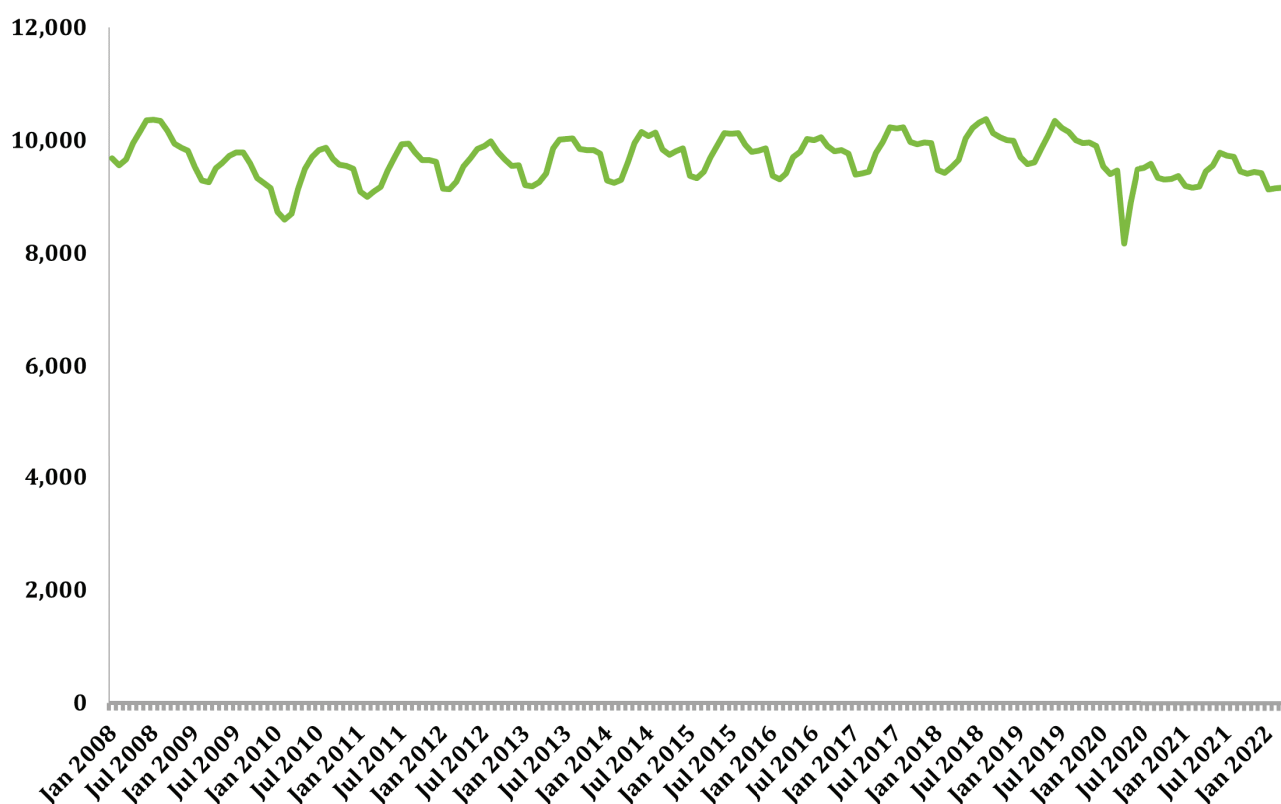
Natural resources and mining experienced the largest numeric and percentage employment declines since 2019. Most of those losses occurred in 2020, but employment recovery was also absent in 2021. Education and health services also experienced a similar level of job losses, but as one of the largest industries in the county, the percentage change was more modest. Financial activities was another sector that experienced a relatively high employment decrease.



TOTAL MONTHLY EMPLOYMENT

The monthly employment data in Graphic 6 provides updated local employment trend data, extending through March 2022. In addition, seasonal patterns are also evident here, with employment reaching a bottom in February and peaking in August. With these seasonal changes in mind, it's necessary to compare employment changes using the same month across different years. For example, total employment in Shawano County was 9,704 in August 2021 and 10,152 in August 2019.

Graphic 6: QCEW Monthly Employment



Source: WI DWD, Labor Market Information, QCEW Second Quarter

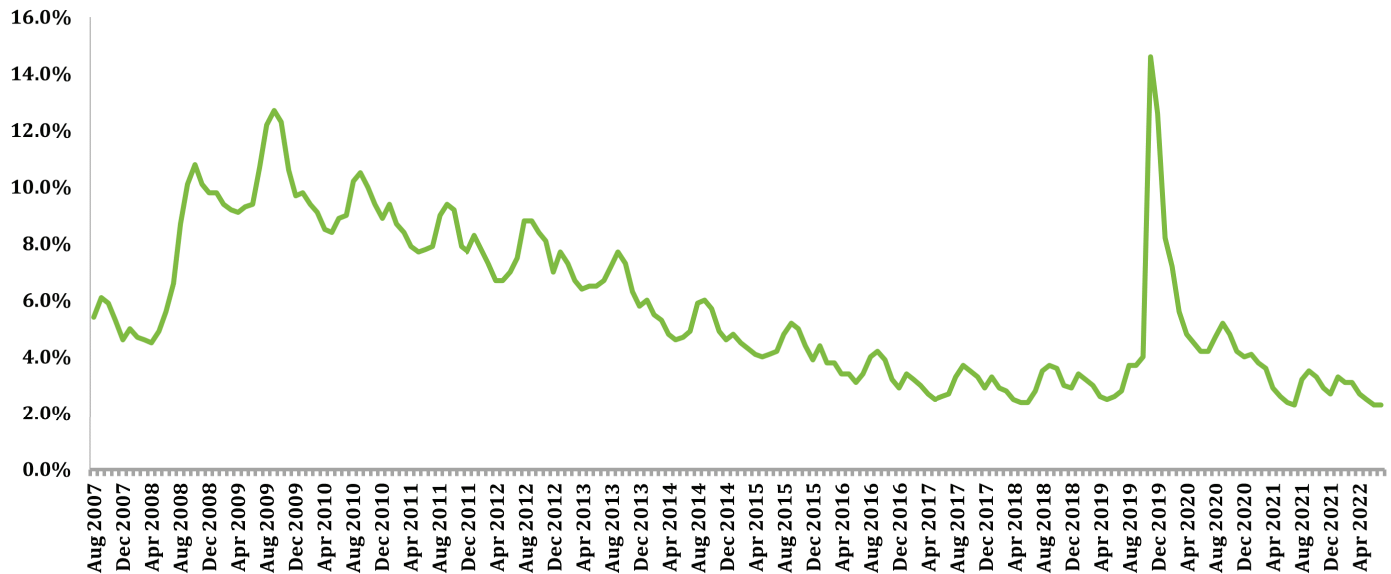
Local employment declined by 1,299 jobs (13.7%) in April 2020 alone, and the subsequent recovery period has been inconsistent. The most rapid rebound occurred in the late spring and early summer of 2020, but the pace of the recovery slowed down in the following fall and winter. Jobs growth continued throughout much of 2021 as well. As of March 2022, local employment stood at 9,152, which represents a 12 month decline of 18 jobs. That is still 314 jobs lower than the March 2020 level of 9,466.

It is evident that the labor market recovery that has been in progress over the past two years is by no means complete; local employment totals are still short of early 2020 levels, even without taking into consideration the pre-2020 growth trend. In the short term, the jobs outlook remains uncertain amid concerns over inflation, international supply chain disruptions, pandemic-induced behavioral changes, and monetary policy changes. Long-term changes will be covered in the discussion of industry and occupational employment projections.

UNEMPLOYMENT AND LABOR FORCE PARTICIPATION

In contrast to the Great Recession, the unemployment increase at the onset of the pandemic was more severe but less persistent. While Shawano County's unemployment rate peaked at 12.7% in the aftermath of the financial crisis, in April 2020 it climbed up by over 10 percentage points to 14.6%. The economy recovered rapidly after the most stringent lockdowns were lifted; however, throughout 2021 and 2022, the local unemployment rate continued to trend toward pre-pandemic levels. The December 2022 rate of 2.3% was the same it was December 2021, which is notable given the current economic uncertainties and inflation trends.

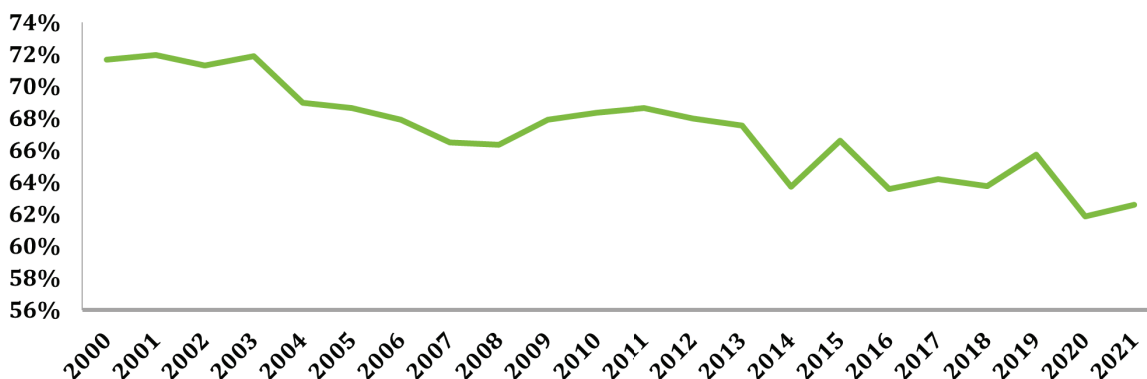
Graphic 7: Unemployment Rate



Source: Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics

Many of the current labor market challenges existed well before COVID-19. Shawano County's labor force participation rate (LFPR) has primarily trended downward since 2000, when the oldest baby boomers were in the late stages of their prime working years. As of 2021, the local LFPR of 62.6% was 0.7 percentage points higher than 2020. However, this recent bump is relatively minor compared to the 9.1 percentage point decline since 2000.

Graphic 8: Labor Force Participation Rate



Source: WI DWD, Office of Economic Advisors (OEA)

BARRIERS TO FULL UTILIZATION

As Shawano County's population ages and baby boomers exit the workforce, a long-term workforce quantity challenge arises. Therefore, it is increasingly important to address barriers that prevent people from attaining their full employment potential. Although there is no single solution to demographically driven staffing challenges, four common barriers persist across areas and industries. These barriers are transportation, housing, childcare, and access to broadband.

Transportation

Lack of reliable transportation can prevent individuals from pursuing opportunities and employers from filling good-paying positions. In Shawano County, 88.1% of employed residents rely on a car to get to work, with over 80% driving alone. The average commute time for residents is 23.7 minutes.

Inter-county commuting dynamics are more apparent in

Shawano County compared to the state, as evidenced by the higher shares of residents commuting out of the county (41.4%) and workers who live in a different county (40.9%). These data may change as the impacts of COVID-19 manifest into permanent structural changes. However, most incumbent workers will continue to rely on a car to get to work. Transportation as a condition of work leads to a conflict: qualified individuals could fill a job if they had transportation and could afford transportation if they had a job.

Graphic 9: Means of Transportation

	Wisconsin	Shawano County
Drive Car	87.6%	88.1%
Drive Alone	79.9%	81.7%
Mean Commute Time - Residents	22.2	23.7
Mean Commute Time - Workers	21.9	N
% of Residents Working in another County	28.0%	41.4%
% of Workers Residing in another County	24.3%	40.9%

Source: US Census Bureau, American Community Survey, 2020 5-year File

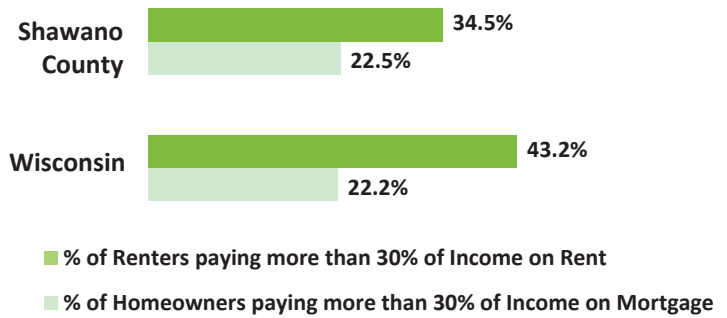


Housing

Housing affordability and availability are barriers that making it difficult for workers to relocate for job opportunities. The Department of Housing and Urban Development uses 30% of income as a guideline for housing affordability. Like the state, renters in Shawano County are more likely than homeowners to allocate more than 30% of their income to housing. Early data shows that the issue is worsening, as home values and monthly rent increased at an accelerated rate between 2020 and 2022. Two ways of bringing this share down would be to 1) provide more housing at a lower cost and 2) increase earnings.

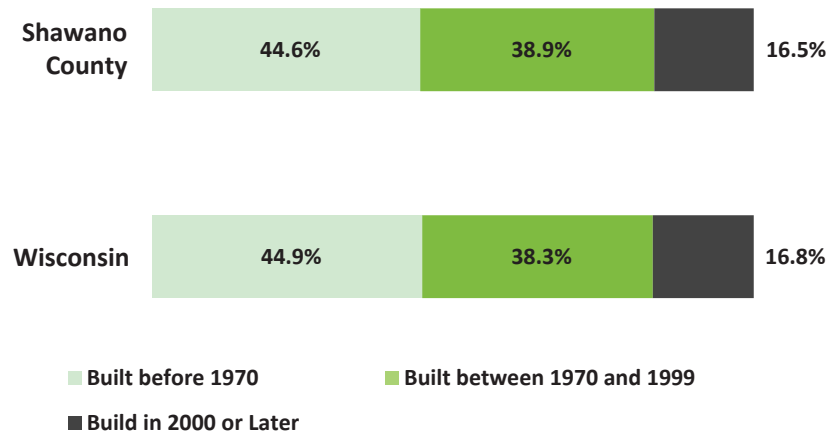
Lack of availability makes it difficult for individuals to find housing even if cost isn't an issue. Housing availability is difficult to quantify, but one way of looking at the issue is to view the age distribution of existing housing stock. As evidenced by the nearly identical shares across all three categories, the age of Shawano County's housing stock is largely in line with the state. Just under 45% was built before 1970, and 16.5% was built since 2000.

Graphic 10: % Paying more than 30% of Income on Housing



Source: US Census Bureau, American Community Survey, 2020 5-year File

Graphic 11: Housing Share by Year Built



Source: US Census Bureau, American Community Survey, 2020 5-year File



Childcare

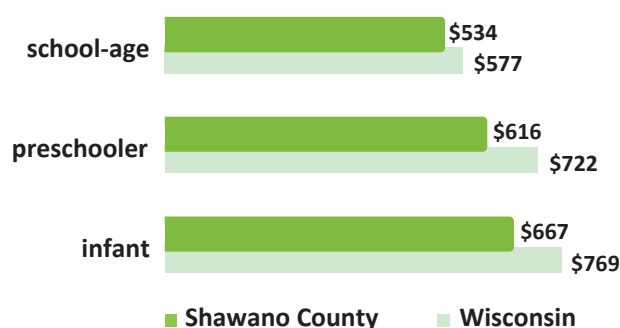
Due to its high cost, childcare is a significant barrier to employment for families across Wisconsin. With that in mind, childcare costs in Shawano County are lower than statewide levels across all three age groups, with monthly costs ranging from \$534 for a school-aged child and \$667 for an infant. In addition to cost, childcare availability is also a barrier to employment. The YoungStar provider database tracks 82% of childcare providers in the state. According to the database, Shawano County has nine total providers with a potential capacity of 401 children. This capacity is relatively low in comparison to the state. There are six childcare slots for every 100 children under the age of 14 in Shawano County compared to 14 statewide. Even families that have childcare struggle with disruptions to access. Easing the cost and access burden would allow parents to attain their full employment potential. Employers could also improve participation by providing flexibility to employees with childcare responsibilities.

Graphic 12: Childcare Capacity

	Wisconsin	Shawano County
Providers	3,863	9
Maximum Capacity	132,075	401
Capacity/100 Children Under 14**	0.14	0.06

Source: Wisconsin Department of Children and Families, Youngstar Database

Graphic 13: Childcare Cost



Source: Center for Women's Welfare, Uni. of Washington, 2019 Self-Sufficiency Standards

Broadband

Innovations in the work-from-home economy and virtual learning environment arose during the pandemic. Employers can use these innovations developed out of necessity to meet Wisconsin's workforce needs. For example, increased work-from-home options could alleviate talent shortages by providing flexible scheduling options that benefit workers. Despite these benefits, broadband internet availability issues limit employers and employees who need high-speed internet to make remote operations possible.

Graphic 14 displays broadband internet access distribution across households. Over 19% of households in Shawano County do not have internet, which is 4.5 percentage points higher than the state. Lack of access is especially notable in households earning less than \$20,000, where 46.5% of Shawano households do not have broadband access. It is more difficult for individuals living in these households to take advantage of virtual employment, training, and education opportunities.

Graphic 14: Percent of Households that **DO NOT have Internet Access by Annual Household Income**

	Wisconsin	Shawano County
Total	14.8%	19.3%
Less than \$20,000:	38.4%	46.5%
\$20,000 to \$74,999:	17.5%	20.5%
\$75,000 or more:	4.6%	7.0%

Source: US Census Bureau, American Community Survey, 2020 5-year File

INDUSTRY EMPLOYMENT PROJECTIONS

Graphic 15: Industry Employment Projections

Industry	2020 Employment	Projected 2030 Employment	Employment Change	Percent Change (2020-2030)
Total All Industries	439,519	474,738	35,219	8.0%
Natural Resources and Mining	8,297	9,187	890	10.7%
Construction	21,427	23,459	2,032	9.5%
Manufacturing	89,339	92,139	2,800	3.1%
Trade, Transportation, and Utilities	76,011	81,063	5,052	6.6%
Information	2,875	2,484	-391	-13.6%
Financial Activities	25,017	25,513	496	2.0%
Professional and Business Services	39,239	43,246	4,007	10.2%
Education and Health Services	78,470	86,488	8,018	10.2%
Leisure and Hospitality	34,212	41,516	7,304	21.3%
Other Services (except Government)	19,947	22,999	3,052	15.3%
Public Administration	21,487	23,155	1,668	7.8%
Self Employed and Unpaid Family Workers	23,198	23,489	291	1.3%

While studying past trends is useful, DWD also produces projections of industry and occupation employment into the future. The state is split into 11 Workforce Development Areas (WDAs) and projections are updated every two years. Shawano County is part of the Bay Area WDA, which includes 11 counties in northeast Wisconsin. DWD's projections methodology accounts for retirements, career changes, and changing demand.

Regional employment is expected to grow by 8% or over 35,000 jobs from 2020 to 2030. Statewide employment is projected to grow at a slower rate during the same timeframe (6.3%). Growth is projected to be stronger in service industries than product industries, due to a projected rebound in the leisure and hospitality industry. Note that these projections only forecast levels of filled positions rather than potential demand, which further illustrates the issues associated with an aging population. Job growth is expected to continue, despite declines in labor force growth. Employers find it difficult to replace workers even if overall employment in the industry declines. Businesses already face difficulty replacing retirees' positions, and this difficulty will expand to filling new openings, too. This could constrain job growth by limiting expansion. Although solutions will be different for each business, they will likely include a combination of talent pipeline development, increased focus on talent attraction and retention, engagement of under-utilized populations, increased automation, and retention of retirees in non-conventional work arrangements.



OCCUPATIONAL EMPLOYMENT PROJECTIONS

Graphic 16: Occupational Employment Projections

Occupation Title	2020 Employment	Projected 2030 Employment	Occupational Openings	Percent Change (2020-2030)
Total All Occupations	439,519	474,738	53,987	8.0%
Management	21,494	23,549	2,036	9.6%
Business and Financial Operations	24,520	26,593	2,401	8.5%
Computer and Mathematical	9,463	11,202	893	18.4%
Architecture and Engineering	7,538	8,191	618	8.7%
Life, Physical, and Social Science	2,652	2,925	286	10.3%
Community and Social Service	5,292	6,009	618	13.6%
Legal	1,653	1,779	132	7.6%
Education, Training, and Library	20,015	22,535	2,102	12.6%
Arts, Design, Entertainment, Sports, & Media	5,139	5,699	594	10.9%
Healthcare Practitioners and Technical	24,260	26,506	1,629	9.3%
Healthcare Support	17,447	19,806	2,473	13.5%
Protective Service	7,127	8,093	1,060	13.6%
Food Preparation and Serving Related	30,060	35,623	6,368	18.5%
Building & Grounds Cleaning & Maintenance	11,325	12,142	1,607	7.2%
Personal Care and Service	11,535	14,021	2,101	21.6%
Sales and Related	40,524	42,164	5,621	4.1%
Office and Administrative Support	53,827	53,059	5,872	-1.4%
Farming, Fishing, and Forestry	5,046	5,478	861	8.6%
Construction and Extraction	20,675	22,664	2,307	9.6%
Installation, Maintenance, and Repair	19,368	21,118	2,062	9.0%
Production	62,207	63,233	6,934	1.7%
Transportation and Material Moving	38,352	42,349	5,413	10.4%

DWD's occupational projections are used for workforce and career planning. This current cycle of projections implements the separations methodology, which more accurately captures the churns of the labor market by estimating the number of openings induced by workers who leave the labor force entirely (exits) and workers who change jobs and leave an occupation (transfers). Graphic 16 provides an accurate idea of occupations that will be in demand in the future. The fastest-growing occupational groups in terms of percentage change are personal care and service; food preparation and serving; computer and mathematical; community and social service; and protective service.

Over 45% of the projected annual openings in the Bay Area are concentrated in four occupational groups: production; food preparation and serving; office and administrative support; and sales. This result might be unexpected to some because three of these areas are projected to grow less than the Bay Area overall. Taking a more detailed look at the sources of openings will help explain why. Even though there are several occupational groups that have a larger number of openings due to growth, the number of openings induced by exits and transfers is more than enough to compensate. One of the main takeaways here is that there will be jobs in fields not associated with high growth due to the openings brought about by other causes.