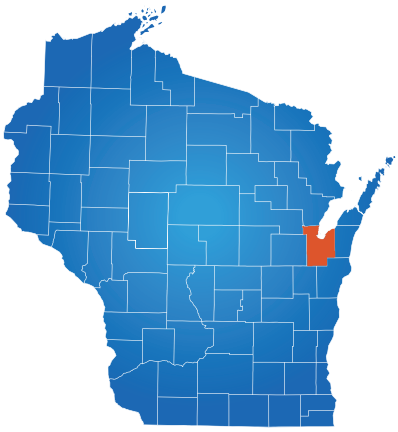
Brown County



2023 WORKFORCE PROFILE

STATE OF WISCONSIN
DWD
Department of Workforce Development

WisConomy

DETI-17957-BRW-P (R. 06/2023)

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.

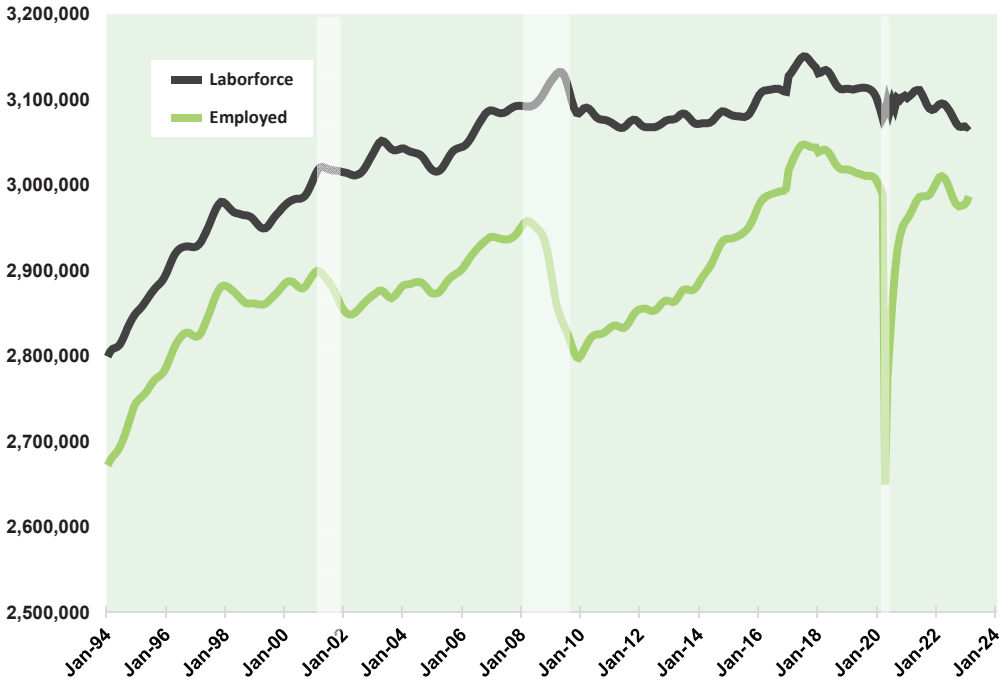
As demand for workers grew throughout 2022, employers voiced concerns about their inability to attract talent and workers in general. This is unlikely to change in the foreseeable future. The primary underlying challenge is the demographic situation as Baby Boomers exit the workforce. This lifecycle event will continue to complicate 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.

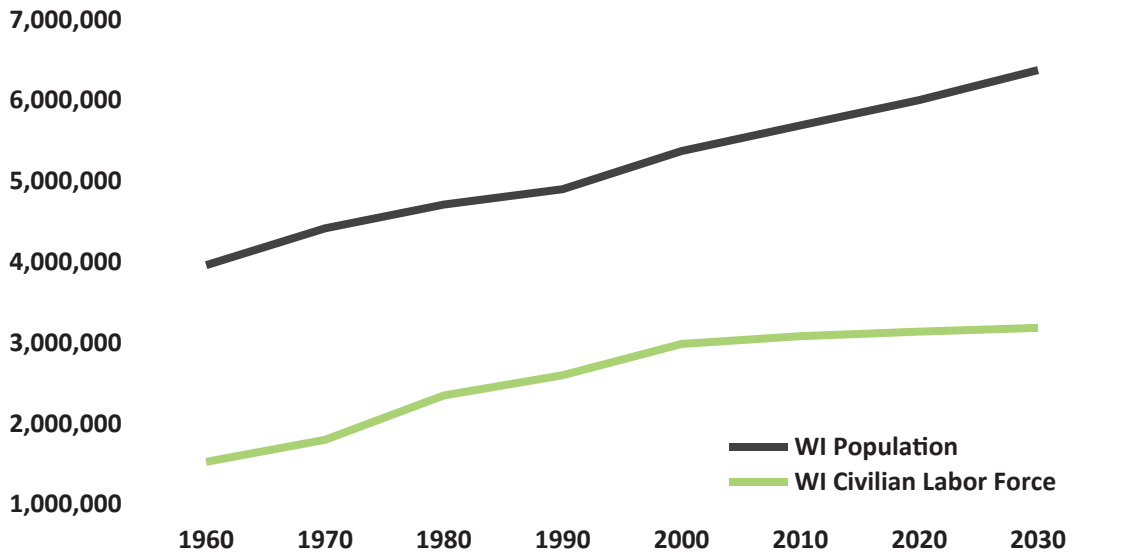
LONG-RUN CHALLENGE

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

Brown County

POPULATION AND DEMOGRAPHICS

In recent years, population growth in Brown County has outpaced both state and national rates. Since the 2020 Census, the county's population increased 1.6% or 4,420 residents. The City of Green Bay's population remained virtually unchanged (-26), while the Villages of Howard, Ashwaubenon, and Bellevue each gained 600 or more residents. These three suburbs collectively accounted for over 54% of Brown County's overall population growth. Along with Green Bay, the Village of Allouez was the only other major municipality in Brown County whose population declined.

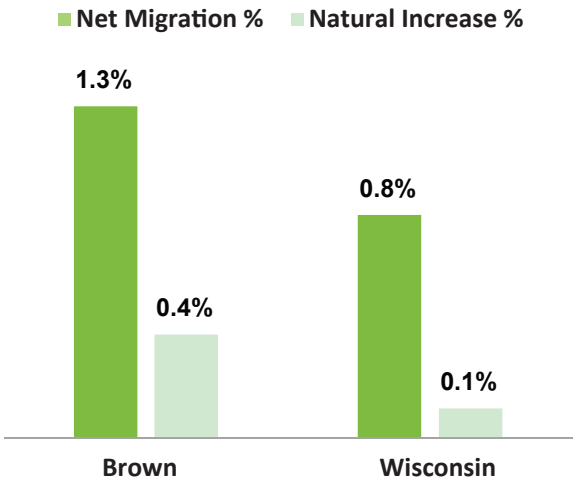
Graphic 3: 10 Most Populous Municipalities in County

	2020 Census	2022 Final Estimate	Numeric Change	Percent Change
Green Bay, City	107,395	107,369	-26	0.0%
De Pere, City	25,410	25,525	115	0.5%
Howard, Village	19,950	20,952	1,002	5.0%
Ashwaubenon, Village	16,991	17,757	766	4.5%
Bellevue, Village	15,935	16,568	633	4.0%
Allouez, Village	14,156	14,014	-142	-1.0%
Suamico, Village	12,820	13,230	410	3.2%
Hobart, Village	10,211	10,486	275	2.7%
Ledgeview, Town	8,820	9,373	553	6.3%
Lawrence, Town	6,306	6,724	418	6.6%
Brown County	**268,740**	**273,160**	**4,420**	**1.6%**
Wisconsin	**5,893,718**	**5,949,155**	**55,437**	**0.9%**

Source: WI Dept. of Administration, Demographic Services Center

Natural increase and 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 migration arises when more people enter the county than exit. Similar to the state, the majority of Brown County's recent population growth (76.2%) can be attributed to net migration. The county's level of net migration, 3,367 residents, was the third highest in the state, behind Dane and Waukesha Counties. Despite the relatively high local rate of natural increase, population trends continue to point to decelerating growth and workforce quantity challenges.

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 2020, but nevertheless jobs totals will also be compared to 2019 to provide a pre-pandemic benchmark. Employment in Brown County increased by 1.3% or 2,029 jobs across all industries from 2020 to 2021. In comparison, Wisconsin's total employment grew by 2.4%. As of 2021, employment in the county was still 4.3% below 2019, while the state's employment was 3% 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	7,153	-265	-3.6%	3	0.0%	4.7%
Education & Health Services	32,769	385	1.2%	-1,230	-3.6%	21.5%
Financial Activities	10,945	-329	-2.9%	-540	-4.7%	7.2%
Information	1,499	12	0.8%	-53	-3.4%	1.0%
Leisure & Hospitality	14,470	1,147	8.6%	-2,596	-15.2%	9.5%
Manufacturing	26,954	521	2.0%	-416	-1.5%	17.7%
Natural Resources & Mining	926	-16	-1.7%	-66	-6.7%	0.6%
Other Services	3,493	31	0.9%	-791	-18.5%	2.3%
Professional & Business Services	17,870	-59	-0.3%	-745	-4.0%	11.7%
Public Administration	4,520	-148	-3.2%	-230	-4.8%	3.0%
Trade, Transportation, Utilities	31,644	750	2.4%	-224	-0.7%	20.8%
All Industries	**152,244**	**2,029**	**1.4%**	**- 6,888**	**-4.3%**	**100.0%**

Source: WI DWD, Labor Market Information, QCEW 2021

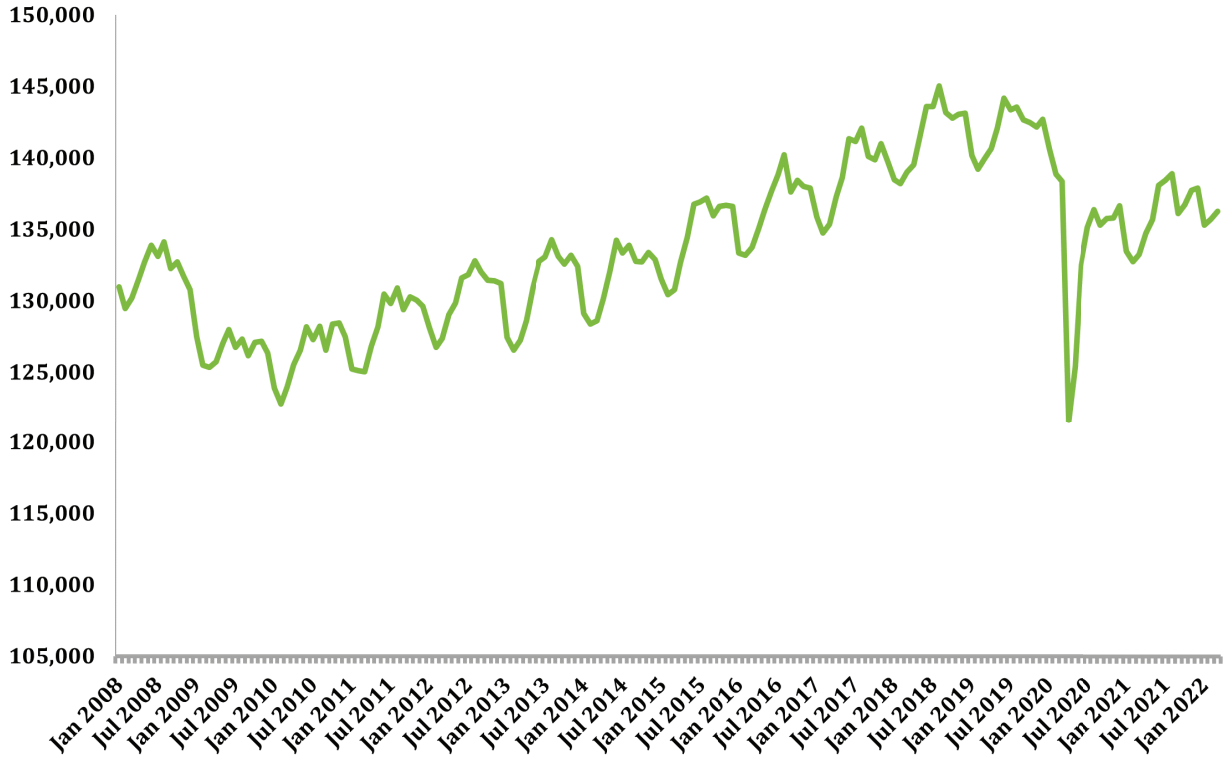
Six of 11 industries registered growth between 2020 and 2021. However, every industry except for construction remained below 2019 levels. The three largest industries in terms of employment share are education and health services; trade, transportation, utilities; and manufacturing. These three industries make up about 60% of total employment but only accounted for 27.2% of the overall decline in employment from 2019 to 2021.

The leisure and hospitality industry still stands out in terms of disproportionate employment losses since 2019. This industry accounted for 37.7% of the county's jobs decline despite only having 9.5% of total employment. However, with 8.6% annual growth in 2021, leisure and hospitality also experienced the most rapid employment recovery last year. Relative to 2019, the natural resources and mining; public administration; and financial activities industries also experienced high rates of employment decline.

TOTAL MONTHLY EMPLOYMENT

The monthly employment data in Graphic 6 provides an updated look at local employment trends, featuring data through March 2022. In addition, Graphic 6 displays seasonal patterns, with employment typically reaching a bottom in February and peaking in August. Even with those caveats in mind, the story remains largely unchanged. Brown County's annual employment grew by about 1,700 jobs on average over the course of the 2010s, but economic volatilities since then have interrupted that relative stability.

Graphic 6: QCEW Monthly Employment



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

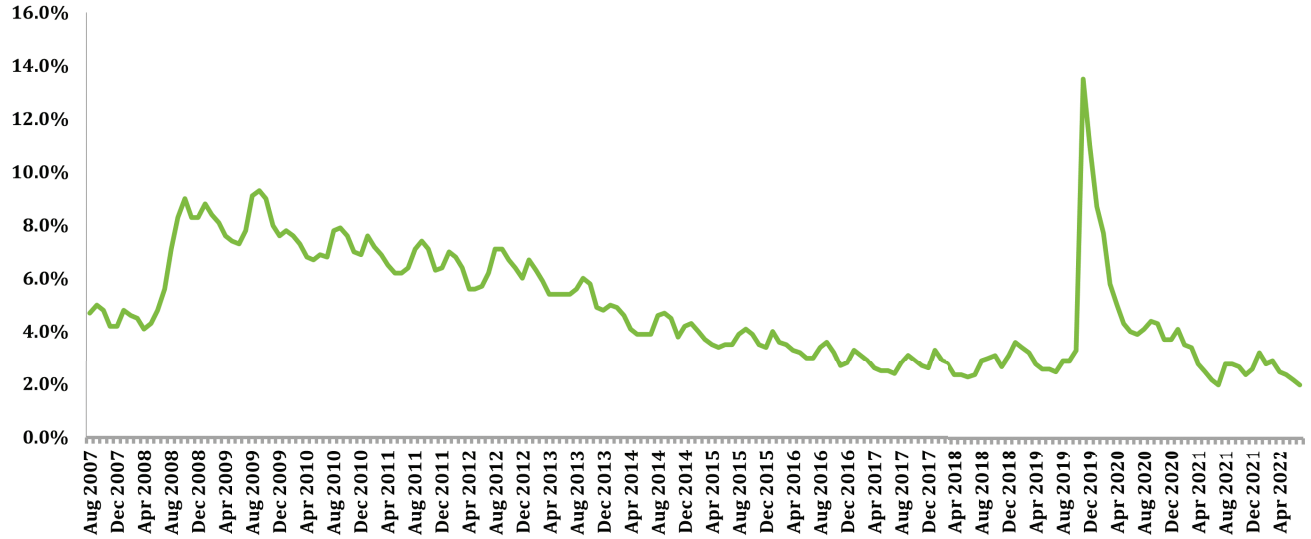
Local employment declined by 16,823 jobs (12.2%) in April 2020, and the subsequent recovery period has been inconsistent. The most rapid rebound occurred in the spring and early summer of 2020, but then the pace of the recovery noticeably slowed down in the following fall and winter. Job growth continued throughout much of 2021 and into 2022 as well. As of March 2022, local employment stood at 136,218, representing a 12-month gain of 3,031. However, that is 2,138 jobs lower than the March 2020 level of 138,356.

Brown County's labor market recovery is not complete. Local employment totals are still short of those in early 2020, even without considering the pre-pandemic growth trend. In the short term, job outlook remains uncertain amid continued concerns over issues such as inflation, international supply chain disruptions, pandemic-induced behavioral changes, and subsequent monetary policy responses. 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 increase in unemployment at the onset of COVID-19 was more severe but less persistent. While Brown County's unemployment rate never exceeded 10% in the aftermath of the financial crisis, in April 2020 it climbed up by over 10 percentage points to 13.5%. The subsequent recovery was most rapid in the immediate aftermath as the most stringent lockdowns were lifted; however, the local unemployment rate has still been trending toward pre-pandemic levels throughout 2021 and 2022. The August 2022 rate of 3% was 0.4 percentage points lower than August 2021, which is notable given the economic uncertainties fueled by recent inflation trends.

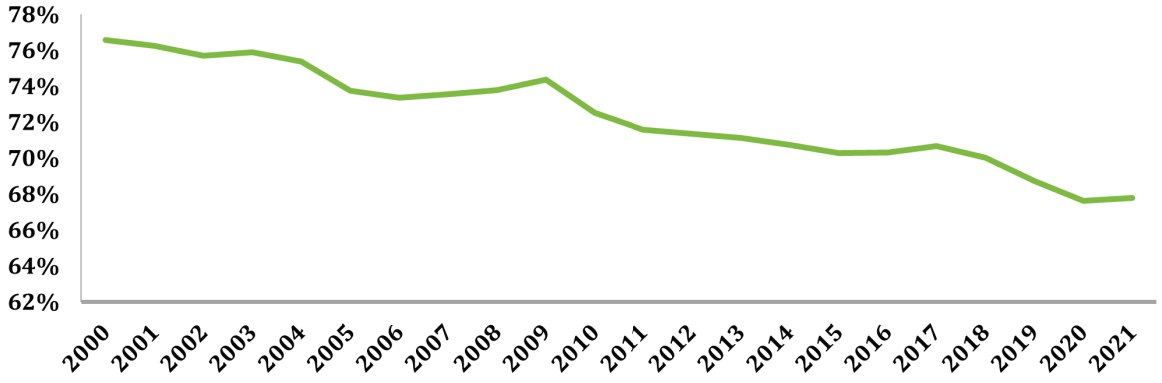
Graphic 7: Unemployment Rate



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

Many of the current labor market challenges existed before COVID-19. Brown County's labor force participation rate (LFPR) has been trending steadily downward since 2000, when the oldest members of the Baby Boomer generation were in the late stages of their prime working years. When comparing 2020 to 2021, the local LFPR of 67.8% was essentially unchanged. This recent bump is relatively minor compared to the 8.8 percentage point decline since 2000.

Graphic 8: Labor Force Participation Rate



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

BARRIERS TO FULL UTILIZATION

As Brown 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 participating or fully participating in the labor market. Although there is no single solution to demographically driven staffing challenges, four common barriers persist across areas and industries. These barriers are transportation, housing, child care, and access to broadband.

Transportation

Job and residence location don't always line up. Lack of reliable transportation can prevent individuals from pursuing opportunities and employers from filling good-paying positions. In Brown County, 90.7% of employed residents rely on a car to get to work, with over 80% driving alone. The average commute time for residents is 18.9 minutes.

Graphic 9: Means of Transportation

	Wisconsin	Brown County
Drive Car	87.6%	90.7%
Drive Alone	79.9%	83.2%
Mean Commute Time - Residents	22.2	18.9
Mean Commute Time - Workers	21.9	N
% of Residents Working in another County	28.0%	10.8%
% of Workers Residing in another County	24.3%	10.4%

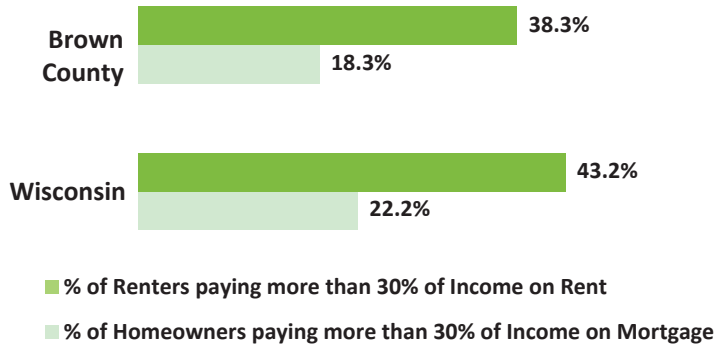
Source: US Census Bureau, American Community Survey, 2020 5-year File

Inter-county commuting dynamics are much less apparent in Brown County compared to the state, as evidenced by the significantly lower shares of residents commuting out of the county (10.8%) and workers who live in a different county (10.4%). While COVID-19 may affect the long-term prevalence of remote work, many jobs will still require physical presence. Transportation as a condition of work leads to a difficult conundrum: qualified individuals could fill jobs if they had transportation, and could afford transportation if they had jobs.

Housing

Affordability and availability of housing are barriers 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 Brown County are more likely than homeowners to spend more than 30% of their income on housing costs. Early data show that home values and monthly rent increased at an accelerated rate between 2020 and 2022, suggesting that the issue could worsen. Two ways to reduce this share would be to 1) provide more housing at a lower cost and 2) increase earnings.

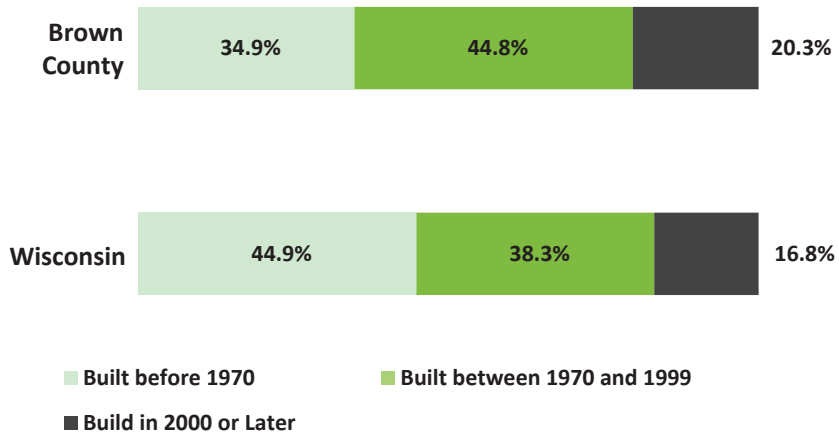
Graphic 10: % Paying more than 30% of Income on Housing



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

Lack of availability can make it difficult for individuals to find housing even if cost isn't an issue. Housing availability is difficult to quantify, but one way to look at it is through the age distribution of housing stock in an area. Over 65% of Brown County's housing stock was built since 1970, which is 10 percentage points above the statewide rate. It is important to note that the county's population growth over the past 50 years (72.6%) was much higher than the state (34.7%), which likely necessitated more housing construction. These statistics provide context for further examination into whether existing housing stock is ready to accommodate future expansion.

Graphic 11: Housing Share by Year Built



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

Child Care

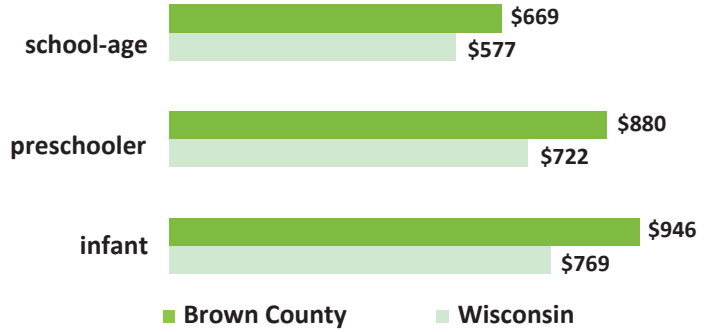
Due to its high cost, child care is a significant barrier to employment for families across Wisconsin. Child care is especially expensive in Brown County, with monthly costs ranging from $669 for a school-aged child and $946 for an infant. In addition to cost, child care availability is also a barrier to employment. The YoungStar provider database tracks 82% of child care providers in the state. According to the database, Brown County has 105 total providers with a potential capacity of 4,630 children. This capacity is relatively low capacity in comparison to the state. There are 10 child care slots for every 100 children under the age of 14 in Brown County compared to 14 statewide. Even families that have child care struggle with disruptions to access. Easing the cost and access burden would allow parents to more fully participate in the labor market. Employers could also improve participation by providing flexibility to employees with child care responsibilities.

Graphic 12: Child Care Capacity

	Wisconsin	Brown County
Providers	3,863	105
Maximum Capacity	132,075	4,630
Capacity/100 Children Under 14**	0.14	0.10

Source: Wisconsin Department of Children and Families, Youngstar Database

Graphic 13: Child Care Cost



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

Broadband

Elements of the work-from-home economy and virtual learning environment will remain after the pandemic is over. Employers can use 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 potential 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 13% of households in Brown County do not have internet, which is 1.7 percentage points lower than the state. Lack of access is especially notable in households earning less than $20,000, where 34.8% of households do not have broadband access. It is more difficult for individuals living in these households to take advantage of virtual employment, training, or education opportunities.

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

	Wisconsin	Brown County
Total	14.8%	13.1%
Less than $20,000:	38.4%	34.8%
$20,000 to $74,999:	17.5%	16.3%
$75,000 or more:	4.6%	3.6%

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. Brown County is part of the Bay Area WDA, which includes 11 counties in northeast Wisconsin. DWD's projections methodology takes into account various ways the local workforce continuously evolves: including retirements, career changes, and changing demand.

Regional employment is expected to grow by 8% or 35,219 jobs from 2020 to 2030. Statewide employment is projected to grow at a slower rate during the same timeframe (6.2%). Growth is projected to be stronger in service industries than product industries, due in large part to a projected rebound in leisure and hospitality. Note that these projections only forecast levels of filled positions rather than potential demand, which can further illustrate 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 & Maintenan..	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%

While industry projections have their uses and provide more of a broad view of employment expectations, a more functional approach is occupational projections. Occupational projections separate openings into three categories: growth, labor force exits, and occupational transfers. Retirements are a key driver in the labor force exits category. While actual retirement age varies among individuals, age 65 can be used as a rough proxy for expected retirement. Considering this benchmark, Wisconsin baby boomers are approximately halfway through retiring. Occupational transfers can include workers that advance in careers or make lateral movements into different occupations. Generally, a higher need for replacements due to transfers can be expected in lower-paying occupations.

Analysis of projected occupational employment reveals that hiring replacements will be a greater need than filling new positions created by growth. One such example is office and administrative support occupations, as this occupation group has the third highest number of projected openings but a declining number of total jobs. The need for this group is entirely driven by labor force exits and occupational transfers. While not the largest in terms of openings, the computer and mathematical category stands out as a growing field. Jobs in this group are typically high paying, and growth in this area could complement the more established business and financial operations field, which is also expected to grow.