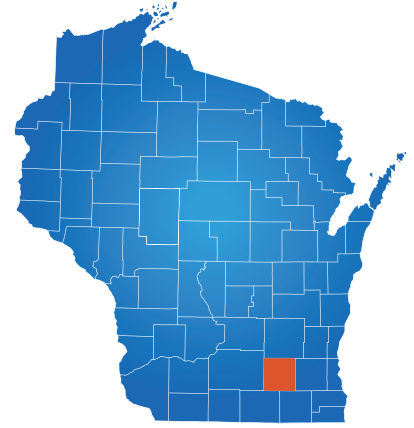


# Jefferson County

## 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 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.

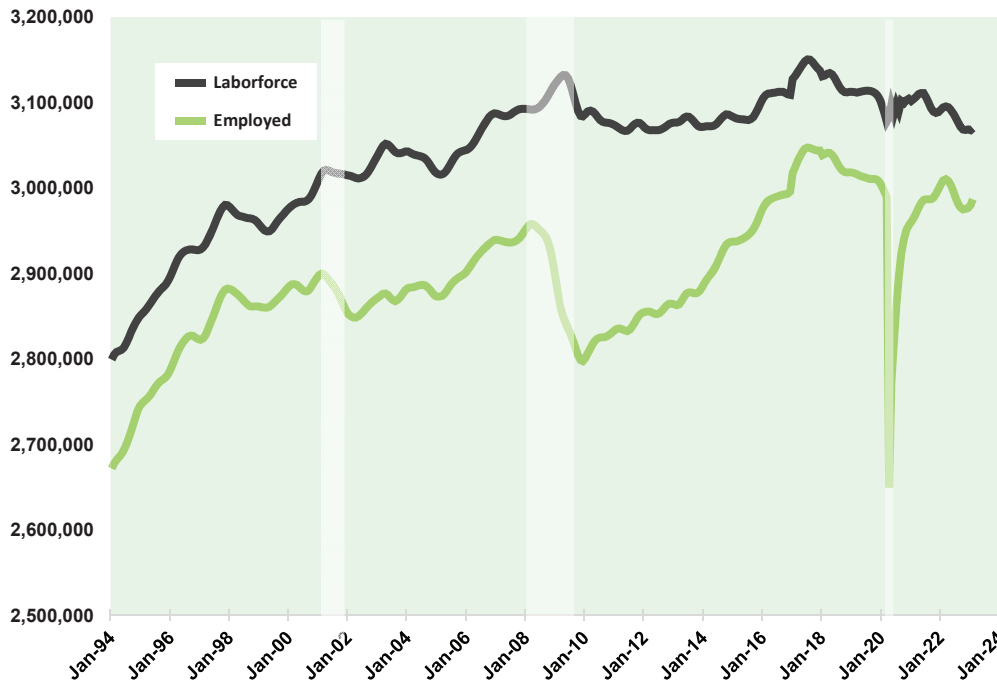


## EMPLOYMENT

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.

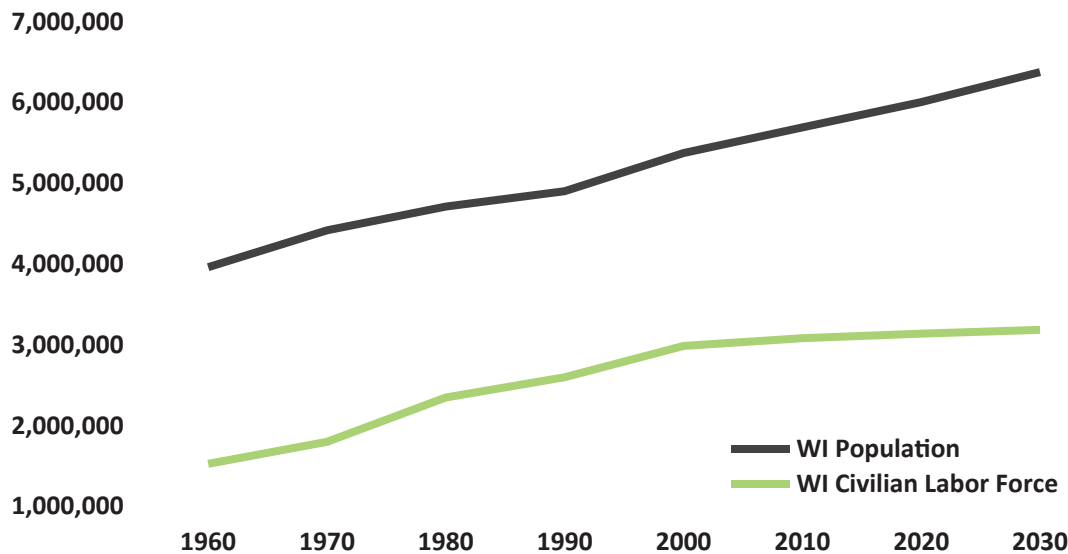
**LONG-RUN CHALLENGE**

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**



## Jefferson County

### POPULATION AND DEMOGRAPHICS

With a population of 86,576, Jefferson County is the 20th most populous county in Wisconsin. It added 1,676 residents from 2020 to 2022 (2%). The growth rate ranks 5th out of the state's 72 counties. The 10 most populous municipalities overall account for 76% of Jefferson County's total population of the county in 2022. Eight of the municipalities grew in terms of population while three declined. Although Jefferson County grew rapidly overall, the ten most populous municipalities only grew by 342 individuals (0.5%). The fastest growing of these municipalities was the city of Waterloo, which added 139 individuals (4%). The city of Lake Mills also grew quickly, adding 241 individuals for a growth rate of 3.9%.

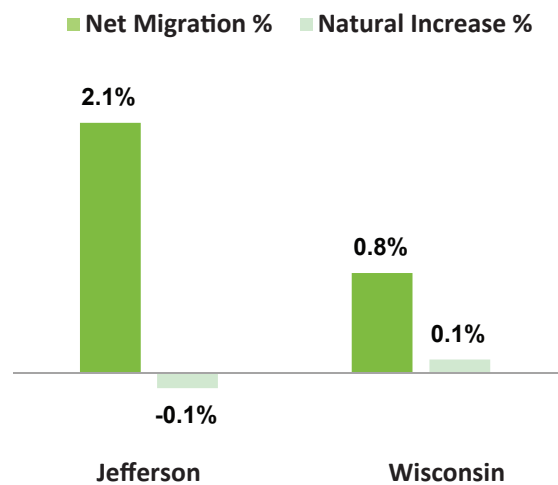
**Graphic 3: 10 Most Populous Municipalities in County**

	2020 Census	2022 Final Estimate	Numeric Change	Percent Change
Watertown, City	14,674	14,758	84	0.6%
Fort Atkinson, City	12,579	12,583	4	0.0%
Jefferson, City	7,793	7,747	-46	-0.6%
Lake Mills, City	6,211	6,452	241	3.9%
Ixonia, Town	5,120	5,135	15	0.3%
Whitewater, City	4,416	4,200	-216	-4.9%
Koshkonong, Town	3,763	3,790	27	0.7%
Waterloo, City	3,492	3,631	139	4.0%
Johnson Creek, Village	3,318	3,402	84	2.5%
Oakland, Town	3,231	3,241	10	0.3%
<b>Jefferson County</b>	<b>84,900</b>	<b>86,576</b>	<b>1,676</b>	<b>2.0%</b>
<b>Wisconsin</b>	<b>5,893,718</b>	<b>5,949,155</b>	<b>55,437</b>	<b>0.9%</b>

Source: WI Dept. of Administration, Demographic Services Center

Natural increase and migration are the two components of population change. A natural increase of the population occurs when there are more births than deaths, while an increase from migration arises when more people enter the county than exit. Jefferson County gained population overall, through net migration and despite population loss through negative natural increase. Natural increase is largely a function of age. Jefferson County ranked 5th in terms of net migration and 27th in terms of natural increase. Net migration is the more actionable of the two components and has the more immediate impact on the county's labor force. Improving net migration could help mitigate workforce challenges that will continue as baby boomers age out of the workforce.

**Graphic 4: Components of Population Change**



Source: Demographic Services Center, WI Dept. of Administration

## EMPLOYMENT BY INDUSTRY

Total employment for Jefferson County was just slightly above 2019 levels. Between 2020 and 2021, six of 11 industries experienced growth in total employment. Comparing employment to 2019 levels is a useful benchmark to a pre-pandemic economy. By 2021, employment was just barely above 2019 levels, indicating a recovery from pandemic-related downturns. The three largest industries in terms of employment share are manufacturing; trade, transportation, and utilities; and education and health services. These three industries comprise approximately 65.3% of the total employment in the county. All three of these industries experienced employment growth from 2020 to 2021.

**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	1,843	205	12.5%	389	26.8%	5.5%
Education & Health Services	5,193	21	0.4%	-267	-4.9%	15.6%
Financial Activities	845	-35	-4.0%	13	1.6%	2.5%
Information	331	-43	-11.5%	-115	-25.8%	1.0%
Leisure & Hospitality	2,861	282	10.9%	-338	-10.6%	8.6%
Manufacturing	10,289	1,011	10.9%	1,037	11.2%	30.9%
Natural Resources & Mining	757	-1	-0.1%	27	3.7%	2.3%
Other Services	689	0	0.0%	-5	-0.7%	2.1%
Professional & Business Services	2,846	-166	-5.5%	-591	-17.2%	8.6%
Public Administration	1,371	10	0.7%	15	1.1%	4.1%
Trade, Transportation, Utilities	6,252	68	1.1%	-160	-2.5%	18.8%
<b>All Industries</b>	<b>33,276</b>	<b>1,350</b>	<b>4.2%</b>	<b>6</b>	<b>0.0%</b>	<b>100.0%</b>

Source: WI DWD, Labor Market Information, QCEW 2021

Between 2020 and 2021, the fastest growing industry was construction, which added 205 jobs (12.5%). The construction industry has kept pace with its 2019 to 2020 growth rate of 12.7%. Unlike many other industries, COVID-19 did not severely impact the construction industry. This continued rapid employment growth is likely driven in part by Jefferson County's rapid population growth; more residents require more housing and infrastructure.

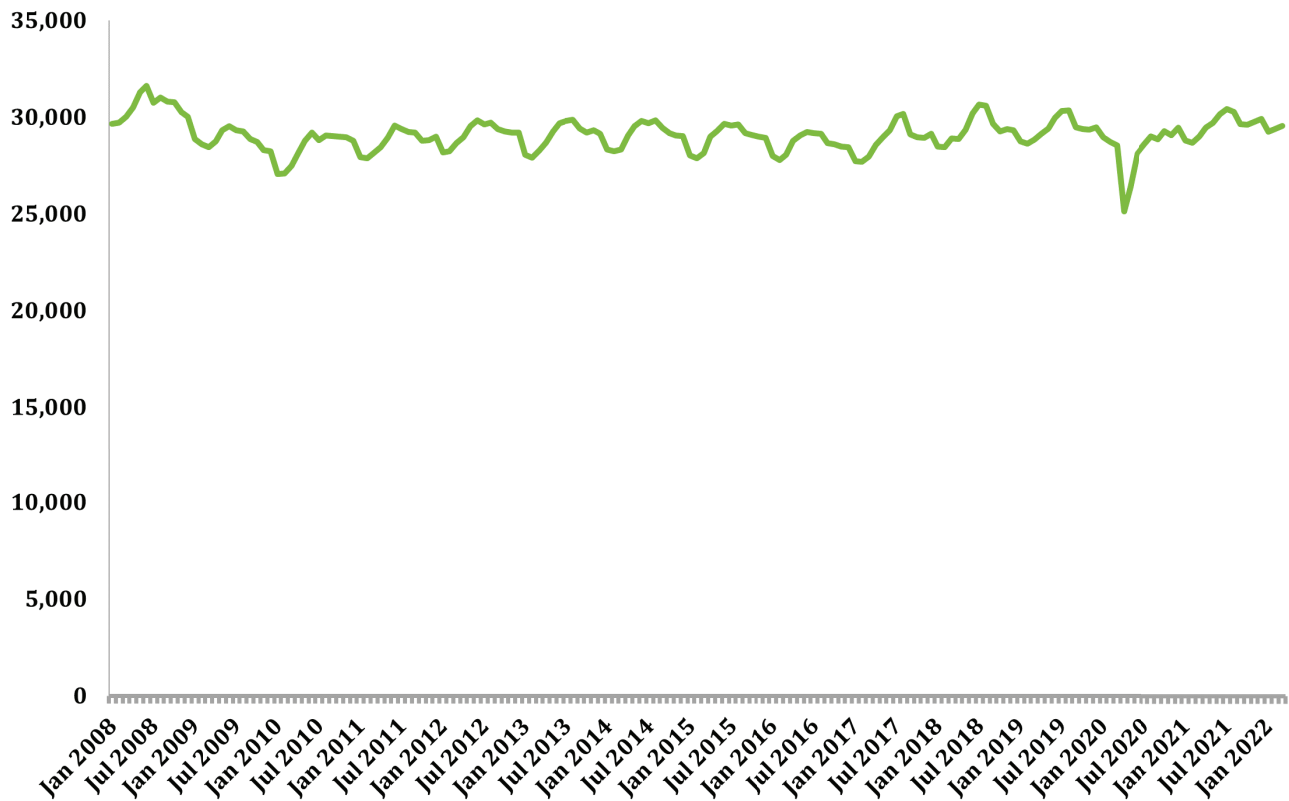
Manufacturing remained by far the dominant industry in terms of employment level with 30.9% of total employment. Additionally, it had the third-fastest rate of growth 10.9% between 2020 and 2021. This is much faster than the 2019 to 2020 growth rate, which was only 0.3%. This contrasts with other similar counties, like Sauk or Dodge, which have experienced significant declines in the manufacturing employment over the past three decades. While only representing 5.5% of total employment in 2021, construction was the only industry which maintained a positive level of employment growth in both 2020 and 2021, highlighting the recent growth in housing construction.



## TOTAL MONTHLY EMPLOYMENT

Economic disruption and volatility driven by COVID-19 complicate efforts to separate structural economic shifts from ephemeral changes. Monthly numbers also allow for commentary about seasonal employment patterns. The volatility and disruption caused by COVID-19 shifted the pattern in short-term economic outcomes, with a dramatic dip in employment in April 2020. Long term effects, on the other hand, will be revealed over time. Despite this, seasonal variation in employment occurs regardless of other economic conditions. For example, retail employment always ramps up for the winter holiday season and construction activity is higher during the summer months. For this reason, year-over-year comparisons using the same month accounts for these seasonal patterns.

**Graphic 6: QCEW Monthly Employment**



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

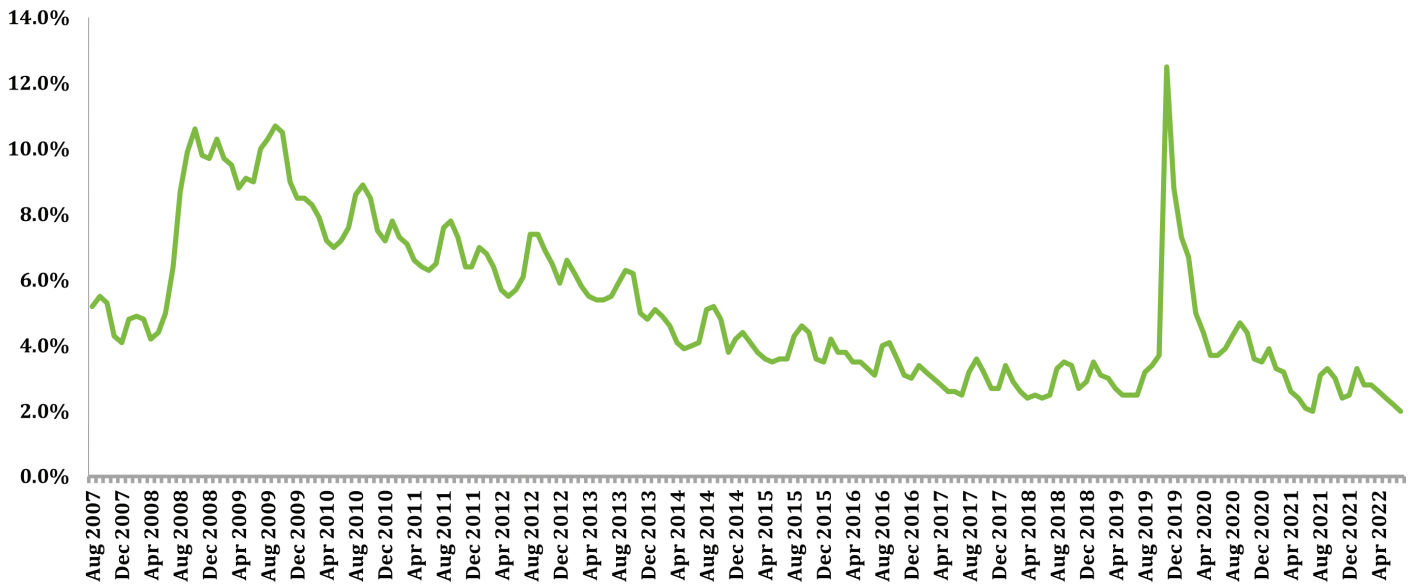
Employment in Jefferson County bottomed out in April 2020 at 25,123 – a drop of 4,025 jobs or 13.8% compared to April 2019. While this decline was sharp, it was also relatively short, with month-to-month employment gains in May 2020. Between April 2020 and April 2021, Jefferson County regained 4,313 jobs. This strong recovery puts Jefferson County ahead of pre-pandemic employment levels. As of March 2022, employment was 3.6% above the level in March 2020. This is quite a rapid recovery from a recession. For context, it took about half a decade for the country to recover employment lost during the Great Recession. Many Wisconsin counties have yet to reach pre-pandemic employment levels; total employment for Wisconsin in March 2022 was 0.7% below March 2020.

Temporary cycles of boom and bust are a natural part of the economy. Beyond these short-term fluctuations, the shifts in the underlying functioning of markets and the economy are referred to as structural changes. These structural changes can be significant transformations in industrial composition, which directly affects what skills and education are in demand. The structural changes at play here are less obvious than something like a manufacturing plant closure necessitating retraining. Some of the sudden changes resulting from the pandemic are likely to continue; for example, telecommuting and work from home will continue to become more common fixtures of the labor market. Identifying the workers that are negatively impacted by these changes is important to ensure continued gainful employment.

### UNEMPLOYMENT AND LABOR FORCE PARTICIPATION

Jefferson County's unemployment rate spiked to 12.5% in April 2020, coinciding with the onset of COVID-19. Previously, the recent highest period of unemployment was in February 2010, when the unemployment rate was 10.7%. However, unlike during the Great Recession's extended period of elevated unemployment, the spike in unemployment after the COVID-19 recession was relatively short. While the unemployment rate was higher in the months following April 2020, by April 2021 the unemployment rate was at pre-pandemic levels. By September 2021, the unemployment rate was lower than what it was relative to 2019, pointing to the tight labor market observed at the state and national level in late 2021 and 2022. By December 2022, the unemployment rate in Jefferson County was 2%.

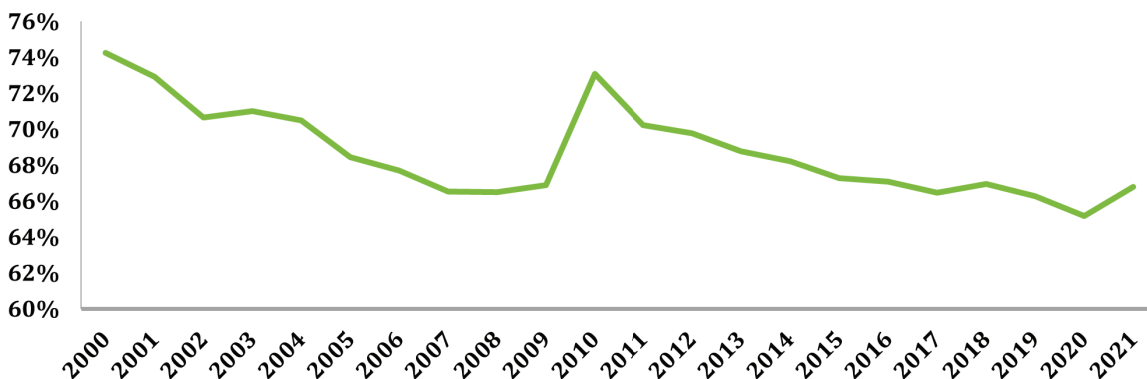
**Graphic 7: Unemployment Rate**



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

The labor force participation rate (LFPR) measures the percentage of people working or looking for work relative to the total population who could work. In Jefferson County, the LFPR has been largely declining since 2010. This decline is largely a product of an aging workforce; the oldest baby boomers turned 54 in 2000. However, from 2020 to 2021, Jefferson County's LFPR increased by 1.6 percentage points to 66.8%. This increase more than makes up for the previous year's decline of 1.1 percentage points. For context, Jefferson County's LFPR has been declining since 2010 when the LFPR was 73.1%. As of 2021, Jefferson County ranked 26th highest among Wisconsin counties.

**Graphic 8: Labor Force Participation Rate**



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



## BARRIERS TO FULL UTILIZATION

Wisconsin's population age demographics mean staffing difficulties will be a long-term challenge. Therefore, it is increasingly important to address barriers that prevent people from fully participating in the labor market. Although there is no single solution to demographically driven staffing challenges, four common barriers persist across regions and industries. These barriers are transportation, housing, childcare, and broadband access.

### Transportation

In an unrealistically ideal world, the workforce and job location would match geographically. Addressing the challenge of convenient and reliable transportation to the workforce can allow individuals to fully participate in the labor market. In Jefferson County, 90% of individuals drove a car to work, a higher percentage than in the state. Most of those residents, 81.9%, drove alone.

**Graphic 9: Means of Transportation**

	Wisconsin	Jefferson County
Drive Car	87.6%	90.0%
Drive Alone	79.9%	81.9%
Mean Commute Time - Residents	22.2	25.5
Mean Commute Time - Workers	21.9	19.8
% of Residents Working in another County	28.0%	46.8%
% of Workers Residing in another County	24.3%	46.1%

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

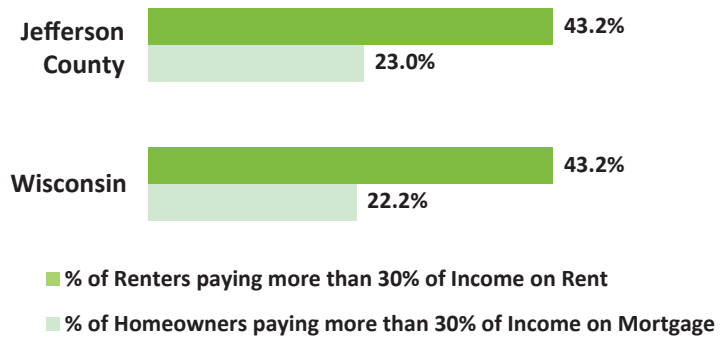
Additionally, a significant percentage of Jefferson County residents work outside the county and vice-versa. This makes sense given Jefferson County's position between the larger Dane and Waukesha counties. While COVID-19 may affect the long-term prevalence of remote work, many jobs will still require physical presence. Transportation as a condition of work leads to a conflict: qualified individuals could fill a job if they had transportation and could afford transportation if they had a job.



## Housing

Housing affordability and availability 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. The percentage of Jefferson County renters and homeowners who allocate more than 30% of their income to housing mirrors the state overall. However, early data shows that this issue is worsening, as home values and monthly rent increased at an accelerated rate between 2020 and 2022. Two ways to bring this share down would be to 1) provide more housing at a lower cost and 2) increase earnings.

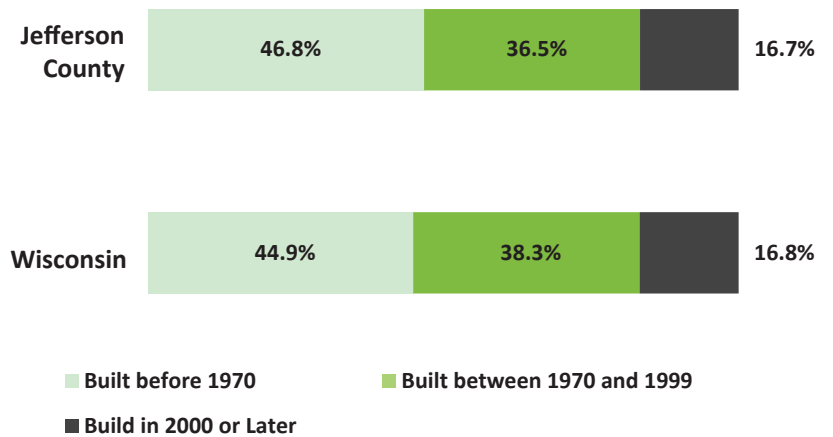
Graphic 10: % Paying more than 30% of Income on Housing



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

Not only is housing cost a barrier for Wisconsin workers, but so is housing availability. While difficult to quantify, one way to look at housing availability is through the age distribution of housing stock in an area. Much like with affordability, the age profile of Jefferson County's housing stock is like the state's, with only slightly more of Jefferson's housing stock being built before 1970 than the state. These statistics provide context for further examination into whether existing housing stock is ready to accommodate future development. Communities have a central role to play in improving the housing situation through updating zoning laws, building multi-family housing, and incentivizing single-family housing developments that are affordable to the workforce.

Graphic 11: Housing Share by Year Built



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



### Child Care

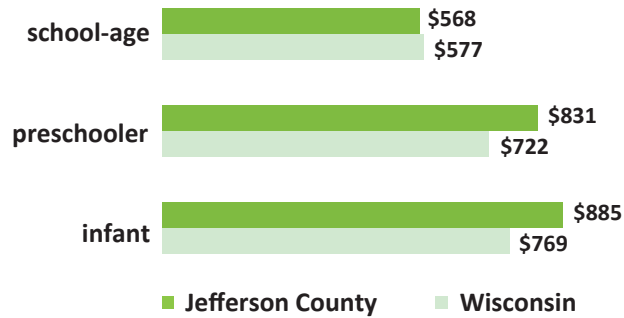
Although Jefferson County is more affordable in terms of housing relative to the state, that is not the case for most childcare. In Jefferson County, the monthly cost of care ranges from \$568 for school age children to \$885 for infant care. For context, this is 19.5% of the average monthly wage of the median truck driver in Jefferson County. Like housing, price is only one barrier to childcare. Childcare availability is also a barrier to employment for Wisconsin families. According to the YoungStar provider database, which tracks 82% of childcare providers in the state, Jefferson County has 36 childcare providers for a potential capacity of 1,157 children. When compared relative to the population of children under 14, Jefferson County has a slightly lower capacity than the state overall, with nine childcare slots available for every 100 children. Even families that have a means to afford childcare still struggle with disruptions to access. Easing the cost and access burden would allow parents to achieve their full employment potential. Employers could help improve participation by providing flexibility to employees with childcare responsibilities.

Graphic 12: Child Care Capacity

	Wisconsin	Jefferson County
Providers	3,863	36
Maximum Capacity	132,075	1,157
Capacity/100 Children Under 14**	0.14	0.09

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

Innovations in the work-from-home economy and virtual learning environment arose during the pandemic. Employers can use these innovations to meet Wisconsin's workforce needs and alleviate talent shortages. Employees benefit from flexible schedules and varied geographic locations. Despite these benefits, broadband internet availability issues limit employers and employees who need high-speed internet to make remote operations possible.

The information below summarizes the distribution of broadband internet access across households. Across all income groups, Jefferson County has a slightly higher percentage of households without access to internet than the state. This lack of access varies widely across income levels. This difference in access is especially notable in those households earning below \$20,000. In Jefferson County, 43.5% of those lower income households do not have broadband internet compared to 38.4% statewide. Only 4.2% of households earning \$75,000 or more went without high speed internet access. Lacking access to high-speed internet is a serious impediment to participation in virtual employment, training, or education opportunities.

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

	Wisconsin	Jefferson County
Total	14.8%	14.9%
Less than \$20,000:	38.4%	43.5%
\$20,000 to \$74,999:	17.5%	18.5%
\$75,000 or more:	4.6%	4.2%

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	499,791	555,692	55,901	11.2%
Natural Resources and Mining	5,120	5,714	594	11.6%
Construction	21,828	24,116	2,288	10.5%
Manufacturing	56,216	59,779	3,563	6.3%
Trade, Transportation, and Utilities	74,318	79,221	4,903	6.6%
Information	17,045	20,865	3,820	22.4%
Financial Activities	27,323	28,485	1,162	4.3%
Professional and Business Services	56,958	64,097	7,139	12.5%
Education and Health Services	112,033	128,729	16,696	14.9%
Leisure and Hospitality	37,990	49,464	11,474	30.2%
Other Services (except Government)	30,679	32,945	2,266	7.4%
Public Administration	37,053	38,867	1,814	4.9%
Self Employed and Unpaid Family Workers	23,228	23,410	182	0.8%

The workforce is constantly evolving as workers retire, change careers, take promotion opportunities, or complete retraining. The projection methodology accounts for these types of job changes. The state is split in 11 Workforce Development Areas (WDAs) and projections are updated every two years. Jefferson County is part of the South Central WDA along with Columbia, Dane, Dodge, and Marquette counties. Regional employment is expected to grow by 11.2% from 2020 to 2030, amounting to 55,901 jobs. This growth outpaces the state, which is projected to grow by 6.3% during the same period.

Broadly, the service industry is projected to grow faster than the product industry in the south central WDA. One aspect of growth in the service industry is the leisure and hospitality industry's rebound from COVID-19; this industry is projected to grow by 30.2% over the 10-year period. Notably, the education and health services industry is projected to grow at a rate of 14.9% compared to the state's 6.5%. 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 growth rate and labor force levels in some counties. Employers find it difficult to replace workers even if overall the industry declines. 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 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	499,791	555,692	61,891	11.2%
Management	25,169	28,018	2,386	11.3%
Business and Financial Operations	37,543	40,722	3,691	8.5%
Computer and Mathematical	27,016	32,922	2,701	21.9%
Architecture and Engineering	9,877	10,856	826	9.9%
Life, Physical, and Social Science	8,329	9,821	993	17.9%
Community and Social Service	6,718	7,503	771	11.7%
Legal	3,231	3,497	245	8.2%
Education, Training, and Library	34,625	41,878	4,099	21.0%
Arts, Design, Entertainment, Sports, & Media	8,211	9,276	987	13.0%
Healthcare Practitioners and Technical	30,568	33,689	2,106	10.2%
Healthcare Support	21,424	24,531	3,069	14.5%
Protective Service	8,450	9,512	1,237	12.6%
Food Preparation and Serving Related	32,669	40,688	7,282	24.6%
Building & Grounds Cleaning & Maintenan..	15,994	17,941	2,396	12.2%
Personal Care and Service	14,463	17,294	2,532	19.6%
Sales and Related	41,898	43,987	5,765	5.0%
Office and Administrative Support	61,869	61,708	6,868	-0.3%
Farming, Fishing, and Forestry	3,449	3,687	578	6.9%
Construction and Extraction	20,702	22,903	2,338	10.6%
Installation, Maintenance, and Repair	17,083	19,014	1,905	11.3%
Production	38,525	39,865	4,388	3.5%
Transportation and Material Moving	31,978	36,380	4,724	13.8%

While industry projections have their uses, a more functional approach is to project occupational need. Occupational projections are separated into three categories: growth, labor force exits, and transfers. Retirements are a key driver in the labor force exits category. While actual retirement age varies among individuals, age 65 is used as a rough proxy for expected retirement. Considering this benchmark, Wisconsin is approximately halfway through baby boomer retirement. Transfers can include workers that advance in careers or make lateral movements into different occupations. As a rule, a higher need for replacements due to transfers can be expected in lower paying jobs as workers leave for higher-paying ones.

In total, these employment projections indicate a higher need for replacement hires rather than new hires. One such example are office and administrative support occupations. This occupation group has the highest number of projected openings but a declining total number of jobs. The need for this group is entirely driven by labor force exits and transfers. While not the largest in terms of openings, computer and mathematical occupations are projected to grow quickly, at a rate of 21.9% over 10 years. This growth rate is driven by the high pay for computer-related occupations and the increasing demand for software-driven business solutions.