Jefferson County

2025 WORKFORCE PROFILE

STATE OF WISCONSIN
DWD
Department of Workforce Development

WisConomy

DETI-17957-JEF-P (R. 05/2025)

State Narrative for County Profiles

Wisconsin's labor market experienced a strong year in 2024. Employment reached record levels, inflation appeared on the wane, and interest rates are accommodating a largely reconstrued supply chain. In addition, real wages turned positive, and consumer spending was robust.

The primary challenge still facing the future economic construct is the labor quantity challenge and its broader economic impacts.

Wisconsin Jobs

The 2024 employment picture was favorable for Wisconsin, reaching new records in December at 3,076,500. The state's low unemployment rates were also noteworthy registering 3.0% or below the entire year. Although setting new records is always a good sign, new highs in employment would be expected through new expansionary economic periods.

Total non-farm employment also reached new highs, climbing through the year to peak in August at a seasonally adjusted basis of 3,048,000 and consolidating high levels through the remainder of the year, ending in December at 3,042,100. That marks a 1.6% increase over the pre-pandemic highs set in December 2019.

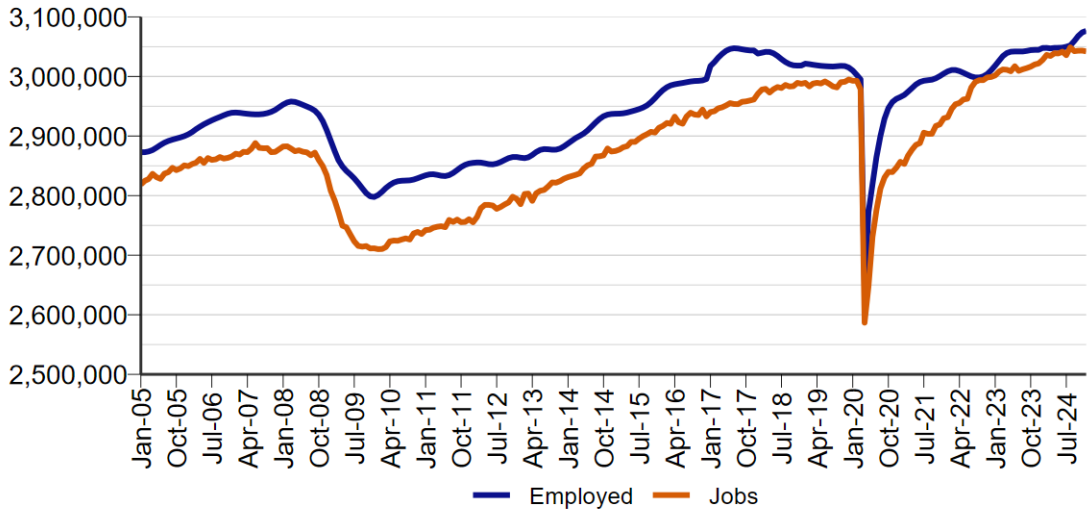


Figure 1: Wisconsin employment and jobs.

Economy

Wisconsin Gross Domestic Product (WGDP) reached new highs in nominal and real dollar terms in 2024[1], at $456 billion or $357 billion in real 2017 dollars. After a slower recovery coming out of the COVID-19 recession, Wisconsin's GDP growth rate has mimicked that of the country.

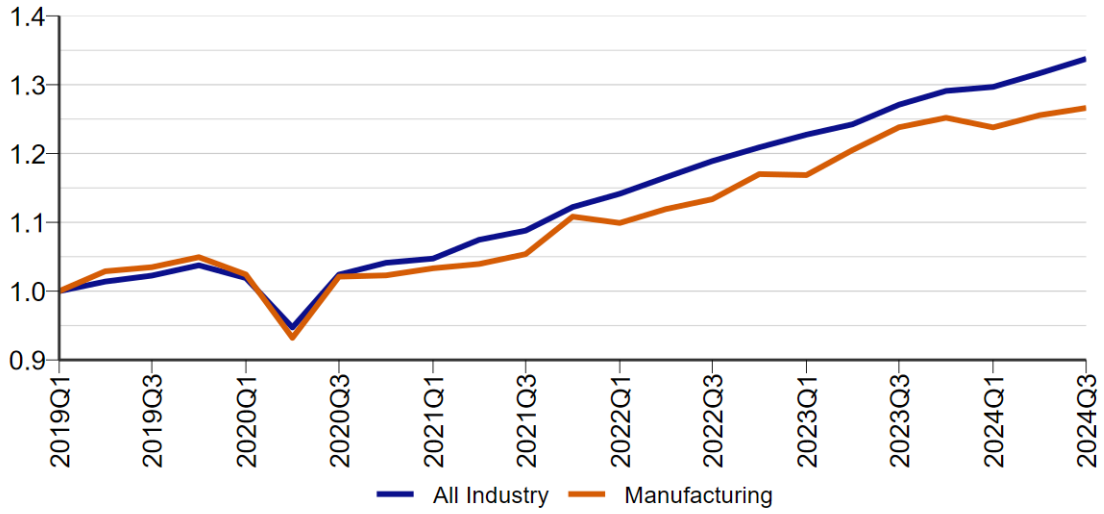


Figure 2: GDP growth index (2019Q1 = 100).

Many industry sectors were vibrant. Construction industry jobs hit new records, surpassing 140,000. Healthcare jobs also set new highs at 324,200. The leisure and hospitality sector recovered almost all the nearly 50% loss of jobs experienced during the COVID-19 recession, finishing with 285,200 jobs. Manufacturing jobs rose above 2023 levels to 481,200, but have not yet returned to pre-Covid19 levels.

Wisconsin ranks first in the number of manufacturing jobs per government job and second in manufacturing jobs share of total jobs. However, state-level manufacturing output was relatively weak against overall economic output. Two of the state's primary manufacturing industries, fabricated metal and machinery manufacturing, lost jobs through 2024. Fabricated metal manufacturing jobs peaked in July 2019, before the COVID-19 recession at 79,400 jobs, and ended 2024 with 74,300. Machinery manufacturing peaked in early 2023 with 68,800 jobs and finished 2024 with 67,200.

[1]Third quarter 2024 is latest data available.

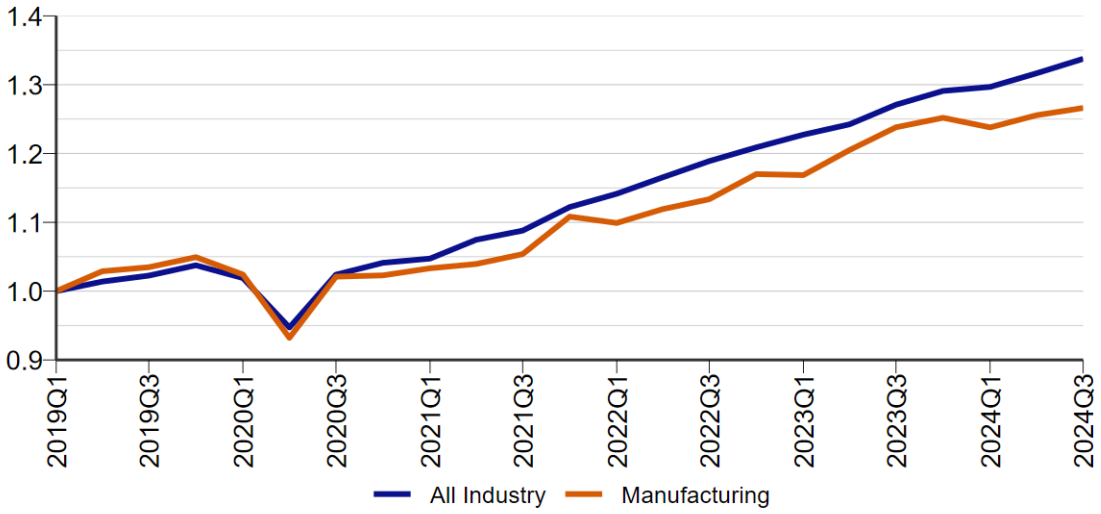


Figure 3: Wisconsin all industry v manufacturing growth (2019Q1 = 100).

While the durable goods manufacturing sector saw declines, non-durable goods manufacturing in Wisconsin has made headway. Jobs in the non-durables industries have increased since the pre-Covid high of 198,600 in July of 2019, to 201,000 in December 2024. Most of that has occurred in the food processing industry.

Labor Quantity Challenges

Employers continue to express challenges finding workers. This situation is being felt in all industries and most occupations – locally, regionally, and globally. Even China is experiencing population and workforce declines. Industries that are showing steady job growth, such as construction and healthcare, are limited by the number of workers available for positions.

As noted in studies dating back to 2000, there are not sufficient numbers of young workers to fill the jobs being vacated by the generation of baby boomers and the increased demand for workers associated with economic growth. The number of workers entering the labor market is essentially the same as the boomers exiting. A growing economy necessitates an increasing labor force or at least a more productive one. Wisconsin's labor force growth has remained close to zero.

The new high in Wisconsin's labor force reached in December 2024 of 3,170,300 is only 0.63% above the previous high in July 2017 and only 0.83% above the peak before that in June of 2009. That amounts to an annual average labor force growth rate of 0.08% per year, or about zero over 15 years.

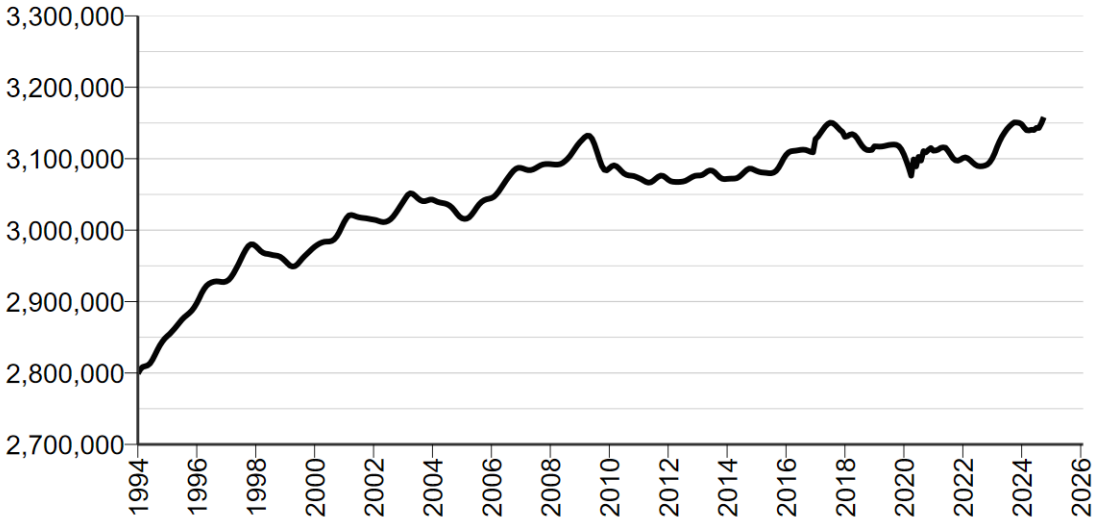


Figure 4: Wisconsin labor force.

This shift has long been anticipated and is well documented. The front edge of the baby boomers turned 63 years old in 2009. By 2024, the back edge of the boomers (those born in 1964) were 60 years old. And while the labor force participation rates of workers 65 and older has increased since the 1990s, the remaining tenure of the boomers is short.

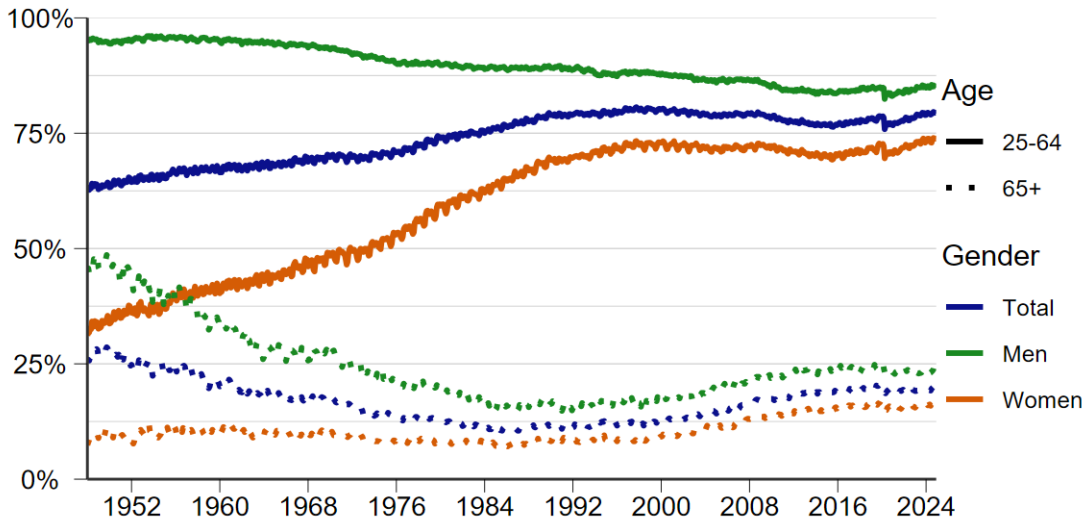


Figure 5: US labor force participation rate.

Below is a graph of Wisconsin's population and labor force projected out to 2040 based on the latest information from the Wisconsin Department of Administration Demographic Services. On a decennial basis, Wisconsin's population has already peaked. This suggests that the workforce will not experience substantial growth moving forward.

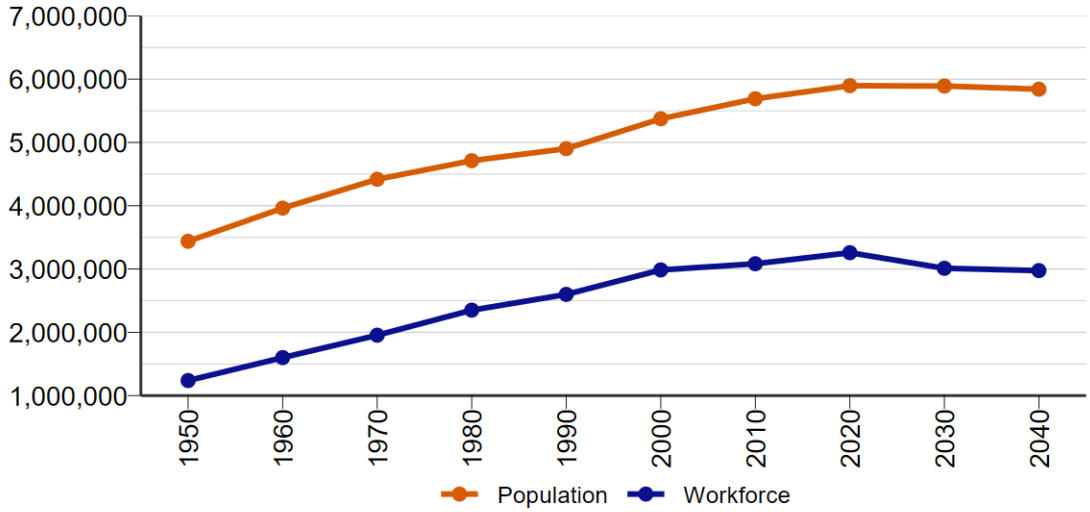


Figure 6: Wisconsin population and workforce projections.

While the overall situation has been realized for some time, the actual quantity of the shortfall has been undetermined until now. Staff at the Wisconsin Department of Workforce Development's Office of Economic Advisors estimate that by 2031, the state could face a labor shortage exceeding 241,000 workers. (See Labor Supply Projections for Wisconsin 2020 – 2040, Winters, Kaur, and Otis, Labor Supply Projections for Wisconsin).

New Construct

Human resource constraints affect the entire economic construct. As one of the three primary components of economic inputs – along with natural resources and capital – a compromise in the abundance of labor permeates the economy. Having never encountered a labor constraint before, it needs to be noted – old models and old policies do not apply.

Moreover, the labor quantity challenge is a macroeconomic phenomenon. It cannot be remedied with microeconomic solutions. Microeconomic attraction and retention incentives of higher wages, better benefits, early exposure, and more are, at best, short-term and limited symptom remedies.

Jobs will go unfilled. Macroeconomic solutions to the challenge include:

1. A workable immigration policy
2. Reducing barriers to employment (see 2023 Wisconsin County Profiles)
3. Expanding trade
4. Technology infusion

Altering a fundamental input of the macroeconomic construct will impact all sectors. The limited and shifting human resource segment will alter income streams, change demand for goods and services, and affect the provision of public goods and services.

Wisconsin's economic health and vigor has been illustrated in the employment and jobs data. However, record low unemployment rates signify two usually unassociated yet coupled performance indicators. On the one hand, low unemployment rates indicate an engaged labor force – a relatively large numerator. On the other hand, in today's environment, low unemployment rates indicate a scarce labor force – a relatively small denominator.

This is an unprecedented situation – and it is not likely to resolve itself quickly.

Yet to be explored are how the limited labor pool and aging population effects other critical economic drivers, such as personal income, as a significant portion of the population (Baby Boomers) shifts to transfer payments that are fixed in real dollar terms, housing stock, dependency ratios, and fiscal balances.

One major unknown on the horizon are the effects that Artificial Intelligence (AI) will have on the future of economic and workforce development. The Governor's Task Force on Workforce and Artificial Intelligence Advisory Action Plan (dwd.wisconsin.gov/ai-taskforce/pdf/ai-advisory-action-plan.pdf) outlines some of the expected effects of AI. For example, the chart below sheds some light on the extent that occupations may be affected by AI.

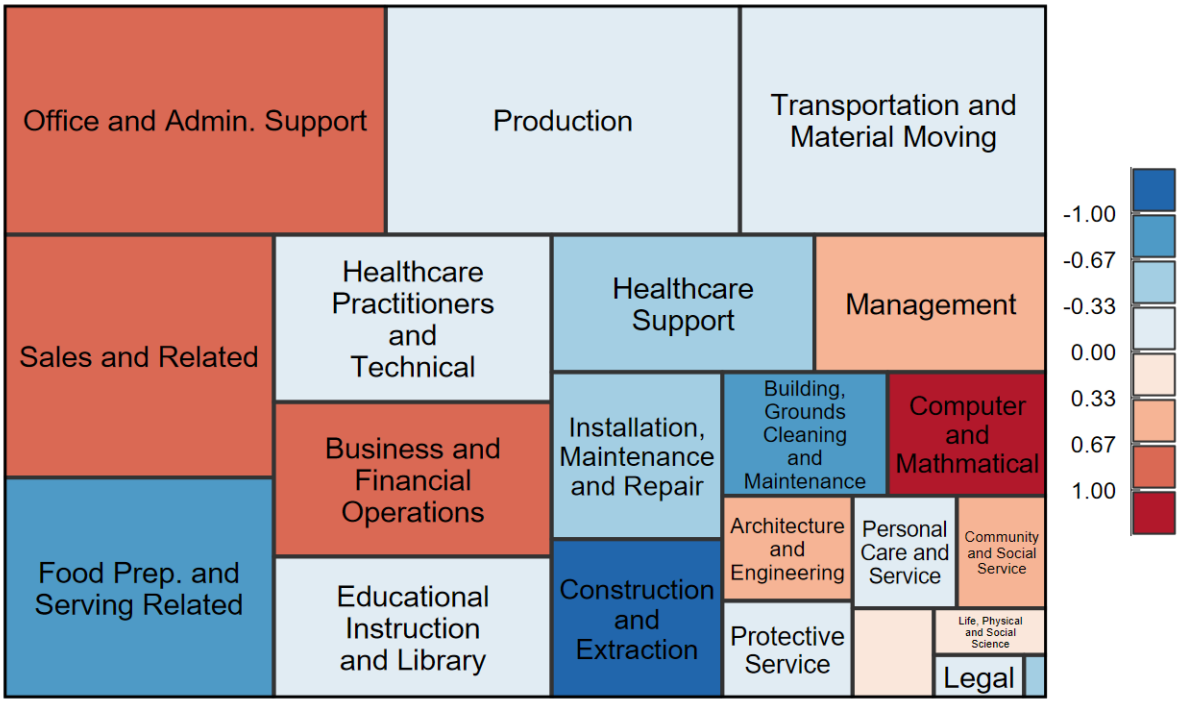


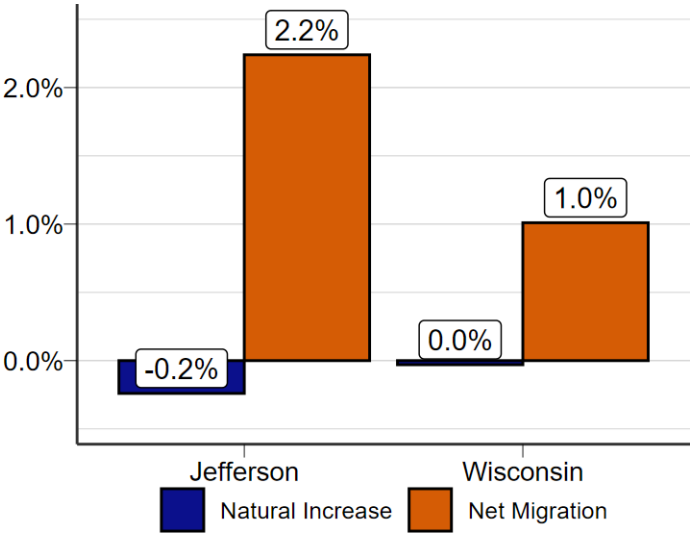
Figure 7: AI exposure per occupation group by number employed.

Fundamental changes are in store for Wisconsin's economy due primarily to two new influencers: workforce constraints and artificial intelligence technology. The degree to how each will affect the other and the whole is yet to be determined.

Population and Demographics

	2020 Census	2023 Final Estimate	Numeric Change	Percent Change
Watertown, City	14,674	14,667	-7	0.0%
Fort Atkinson, City	12,579	12,502	-77	-0.6%
Jefferson, City	7,793	7,747	-46	-0.6%
Lake Mills, City	6,211	6,693	482	7.8%
Ixonia, Town	5,120	5,095	-25	-0.5%
Whitewater, City	4,416	4,310	-106	-2.4%
Koshkonong, Town	3,763	3,775	12	0.3%
Waterloo, City	3,492	3,646	154	4.4%
Johnson Creek, Village	3,318	3,398	80	2.4%
Oakland, Town	3,231	3,224	-7	-0.2%
Jefferson, County	86,148	86,598	450	0.5%
Wisconsin, State	5,893,718	5,951,400	57,682	1.0%

Jefferson County is the 20th most populous county in Wisconsin with 86,598 residents. It is also the fifth fastest-growing county in the state. From 2020 to 2023, the population grew by 2.0%, compared to the 1.0% growth in Wisconsin. Jefferson County is located between Dane County and Waukesha County, both of which are large, fast-growing counties. This proximity to these two counties has contributed to Jefferson County's growth, especially in migration. This rate of net migration more than made up for the declines due to natural causes.



Components of Population Change

Population change is driven by natural increase and migration. Natural population increase occurs when there are more births than deaths, while migration increases when more people move into the county than leave. Natural increase is primarily influenced by the population's age structure, while migration has a more immediate and actionable impact on the county labor force.

Figure 8: Source: WI Department of Administration.

The fastest-growing municipality in Jefferson County is the City of Lake Mills, which added 482 people for a 7.8% growth rate. Lake Mills is along I-94, the interstate that runs east-to-west across the county and connects the cities of Madison and Waukesha. The largest cities in the county, Watertown and Fort Atkinson are not along this corridor but are along the south-flowing Rock River. These numbers underestimate the impact the City of Whitewater has on the county, as Whitewater spans across Jefferson and Walworth counties.

Population Projections

	2020	2030	2040	2050	2020-2050 Population Change
Jefferson	86,148	83,495	79,315	73,035	-15.2%
Wisconsin	5,893,718	5,890,915	5,841,620	5,710,120	-3.1%

Source: Demographic Services Center, Wisconsin Department of Administration.

While the last few years have been positive for Jefferson, demographic patterns indicate that the county's aging population will lead to population declines in the future. Recent projections by the Department of Administration's Demographic Services Center predict that Jefferson County's population will decline by 15.2% from 2020 to 2050, compared to the 3.1% decline for the state. However, Jefferson County has recently seen high rates of net migration. While birth rates are relatively stable, trends in net migration could easily improve this situation for Jefferson County.

Employment by Industry

	2023 Avg Monthly Employment	5-year Change	5-year % Change	% of Total Employment
Total, All Industries	33,797	554	1.7%	100.0%
Manufacturing	10,112	1,300	14.8%	29.9%
Trade, Transportation, and Utilities	5,987	-882	-12.8%	17.7%
Education and Health Services	5,819	463	8.6%	17.2%
Leisure and Hospitality	3,141	-146	-4.4%	9.3%
Professional and Business Services	2,727	-644	-19.1%	8.1%
Construction	1,823	372	25.6%	5.4%
Public Administration	1,413	43	3.1%	4.2%
Financial Activities	858	21	2.5%	2.5%
Natural Resources and Mining	835	92	12.4%	2.5%
Other Services	785	113	16.8%	2.3%
Information	297	-179	-37.6%	0.9%

Source: Quarterly Census of Employment and Wages, Bureau of Labor Statistics.

Jefferson County employment added 554 jobs (1.7%) from 2018 to 2023. Average employment levels were at 33,797 jobs in 2023. This five-year period includes a sharp decline in employment in 2020 due to the COVID-19 pandemic and the resulting public health measures. Employment bottomed out at 31,926 before steadily rebounding.

The manufacturing industry makes up 29.9% of all employment in the county. This industry is far more important to Jefferson County than it is to other counties. In contrast, manufacturing makes up 16.2% of all employment in Wisconsin. The fabricated metal product manufacturing is particularly important to Jefferson County. As firms across the United States search for resilient domestic supply chains, Jefferson County's metal fabrication industry has grown.

From 2018 to 2023, the fastest-growing industry was construction, adding 372 jobs for a 25.6% growth rate. Jefferson County's relatively rapid population growth and proximity to other rapidly growing urban areas have likely contributed to this concomitant increase in the construction industry.

Unemployment

Jefferson County's monthly average unemployment rate in 2023 was 2.8%, compared to the state's rate of 3.0%. This ranks the county 23rd in terms of its unemployment rate in 2023. Jefferson County's unemployment rate has closely matched the state. After recovering from the COVID-19 recession, Jefferson County saw unemployment rates reach near-record lows in late 2022. Since then, the unemployment rate has stabilized around the pre-COVID-19 pandemic rates. For example, Jefferson County had an unemployment rate of 2.8% in May 2024 compared to 2.9% five years prior. The consistently low unemployment rates of recent years point towards a tight labor market, ultimately driven by an aging population.

Unemployment Rate

The unemployment rate is the percentage of people who are not working but actively looking for work compared to the total number of people in the labor force.

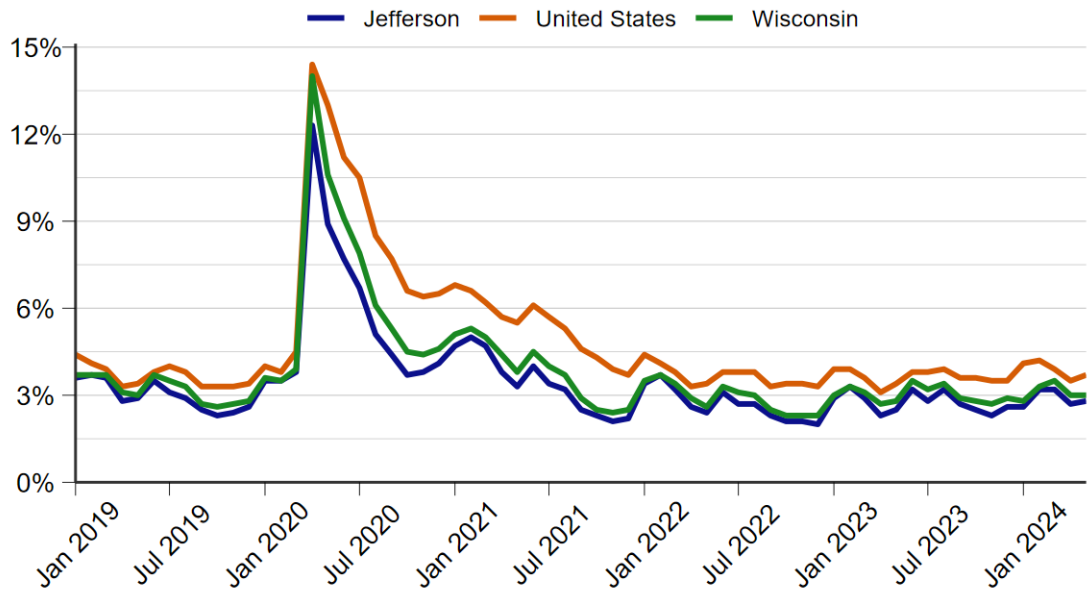


Figure 9: Source: Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics.

Labor Force Participation

Jefferson County's labor force participation rate (LFPR) was 64.3%, ranking 36th in the state. The trends in LFPR in Jefferson County have generally followed the state's trend. As Jefferson County's population closely matches Wisconsin's, the trends of an aging population of both the county and the state contribute to the overall decline in the LFPR over the past twenty years. This decline in the LFPR points towards the increasing workforce quantity challenges facing the county and state. Jefferson County employers will likely face increasing difficulty filling positions as this trend continues.

Labor Force Participation Rate

The labor force participation rate (LFPR) looks at the relative labor resources available and is expressed as the percentage of the civilian noninstitutional population 16 years and older that is working or actively looking for work.

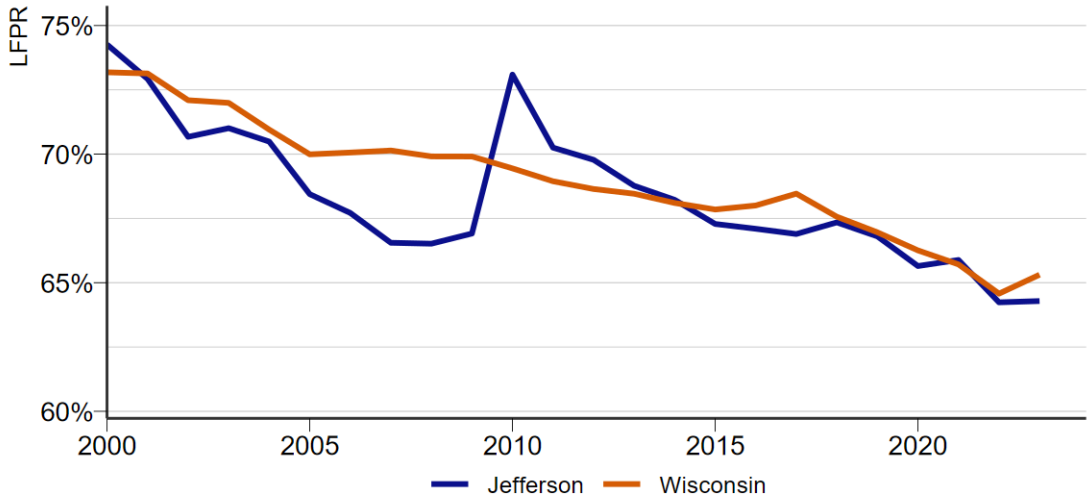


Figure 10: Source: WI Department of Workforce Development Office of Economic Advisors.

AI Impact

Occupation	Employment	% of Total Employment	AI Exposure Index
Fast Food and Counter Workers	11,110	2.3%	-1.00
Retail Salespersons	10,730	2.2%	0.40
Cashiers	10,680	2.2%	0.89
Registered Nurses	10,320	2.2%	0.04
Customer Service Representatives	8,830	1.8%	0.75
Laborers and Freight, Stock, and Material Movers, Hand	8,700	1.8%	-0.78
Office Clerks, General	7,700	1.6%	1.00
Stockers and Order Fillers	7,360	1.5%	-0.05
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	7,010	1.5%	-1.27
Waiters and Waitresses	6,160	1.3%	-0.78

Source: Governor's Task Force on Workforce and Artificial Intelligence.

AI Exposure

AI exposure, as computed by the Governor's Task Force on Workforce and Artificial Intelligence, is the median value across four different research paper's measures of exposure after normalizing each paper's measure to the same mean and variance. A positive value of AI exposure indicates placement in the top 50% of occupations for AI exposure, with higher values indicating greater exposure to AI. Conversely, negative numbers indicate exposure in the bottom 50%. For more information about AI exposure, refer to The Governor's Task Force on Workforce and Artificial Intelligence Advisory Action Plan (dwd.wisconsin.gov/ai-taskforce/pdf/ai-advisory-action-plan.pdf)

The largest occupation in the South Central Workforce Development Area (WDA) is fast food and counter workers, accounting for 2.3% of the area's employment. Jefferson County is part of the South Central WDA, which includes Columbia, Dane, Dodge, Marquette, and Sauk counties. This occupation has an artificial intelligence (AI) exposure index of -1.00. For context, the occupations with the highest potential AI exposure are bookkeeping, accounting, and auditing clerks, with an AI exposure index of 1.89.

Production-related occupations are the core occupations of manufacturing, Jefferson County's most important industry. In general, these occupations heavily involve physical work, where the recent wave of AI technology is less integrated. For example, molding, core making, and casting machine operators have an AI exposure index of -0.66, indicating a relatively low potential exposure to AI. However, not all manufacturing occupations have a low AI exposure index. For example, the inspectors, testers, sorters, samplers, and weighers occupations have a relatively high predicted AI exposure index of 0.41.

Industry Employment Projections

	Industry	2022 Employment	2032 Projected Employment	Employment Change 2022-2032	% Change 2022-2032
Highest Percent Growth	Information	17,853	21,530	3,677	20.6%
Most Jobs Added	Professional and Business Services	56,016	63,379	7,363	13.1%
Highest Number Employed	Education and Health Services	119,801	126,968	7,167	6.0%
Lowest Percent Growth	Government	36,633	37,319	686	1.9%
Total	Total All Industries	527,186	568,717	41,531	7.9%

Source: WI Department of Workforce Development Office of Economic Advisors.

DWD conducts employment projections for Wisconsin's 11 WDAs every two years. Employment in South Central WDA is expected to increase by 41,531 (7.9%), slightly faster than the state's growth rate of 7.1%.

In the South Central WDA, the information industry is projected to be the fastest-growing industry, increasing by 20.6% from 2022 to 2032. Software developers and publishers like Epic Systems contribute to this growth. Despite not being the fastest-growing industry, professional and business services are expected to add the most jobs in the region. Manufacturing is projected to grow by 4.7% by 2032.

For more information and detailed projections results for both occupations and industries, view Wisconomy's projections page (jobcenterofwisconsin.com/wisconomy/pub/projections).

Occupation Employment Projections

	Occupation	2022 Employment	2032 Projected Employment	Employment Change 2022-2032	% Change 2022-2032
Highest Percent Growth	Computer and Mathematical	23,528	27,764	4,236	18.0%
Most Jobs Added	Computer and Mathematical	23,528	27,764	4,236	18.0%
Lowest Percent Growth	Legal	3,481	3,391	-90	-2.6%
Highest Number Employed	Office and Administrative Support	63,491	62,767	-724	-1.1%
Total	Total, All	527,186	568,717	41,531	7.9%

Source: WI Department of Workforce Development Office of Economic Advisors.

Overall employment in the South Central WDA is projected to increase by 41,531, growing at a rate of 7.9%. In the South Central WDA, computer and mathematical occupations are projected to be the fastest-growing occupations, growing 18.0% from 2022 to 2032. This growth is driven by the growing information industry in the region, the high pay for computer-related occupations, and the increasing demand for software-driven business solutions. Additionally, the South Central WDA has a concentration of employers in highly technical industries, including biotechnology and computer systems, taking advantage of graduates from the area's postsecondary institutions. This is also exemplified by the second-fastest growing occupation group: life, physical, and social sciences.

While this occupation group added the most jobs, a shrinking occupation group can still provide occupational opportunities. For example, total employment in administrative and support occupations are projected to decline. Despite this overall decline, there will still be significant demand to fill positions in those occupations, primarily driven by labor force exits and occupational transfers. This occupations group is projected to have the second-most annual number of openings, with 7,040 openings annually.

Aging Population

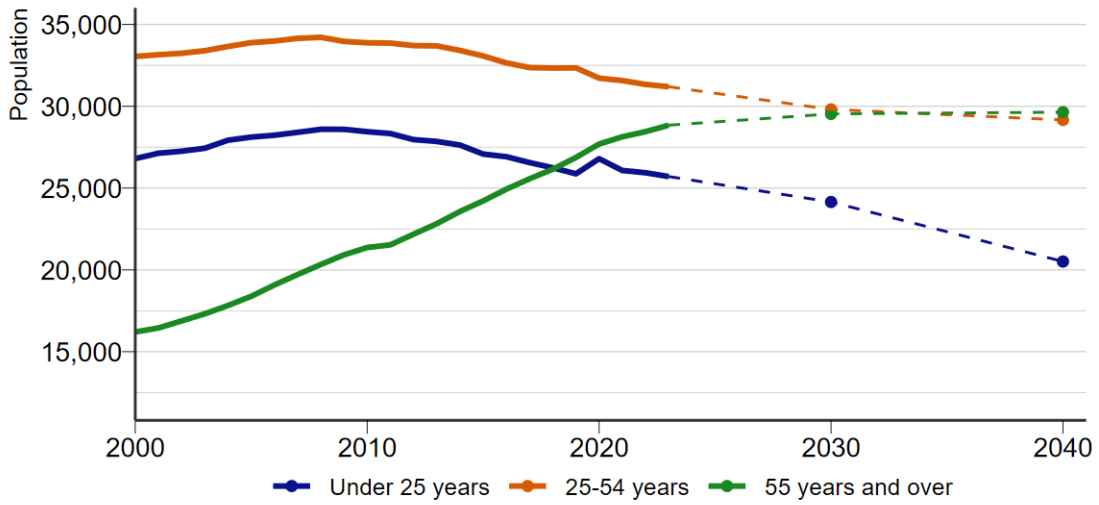


Figure 11: US Census Bureau, Population Estimates Program and
WI Department of Administration, Demographic Services Center.

The selected age groups, under 25, 25-54, and over 55, represent three broad life stages, each with unique social needs and impacts. Individuals under 25 are typically pursuing education or exploring early career options. The 25-54 age group represent the prime working years, often associated with career advancement and family formation. Those aged 55 and older are more likely to be transitioning out of the workforce and into retirement.

Jefferson County's population is slightly older than the state's population. The share of the population age 55 and older was 33.6% in 2023, growing from 27.1% in 2013. From 2017 to 2022, the median age in Jefferson County was 41.5, compared to Wisconsin's median age of 39.9. This is of concern because the labor force participation rate begins to decline around age 55. If trends continue, this older population will overtake the population of individuals 25 to 54, traditionally the population with the highest participation in the labor force. This will exacerbate worker shortages as an increasing share of the population retires. However, unlike other counties, Jefferson County's high rate of net migration may help to address this challenge.

Personal Income

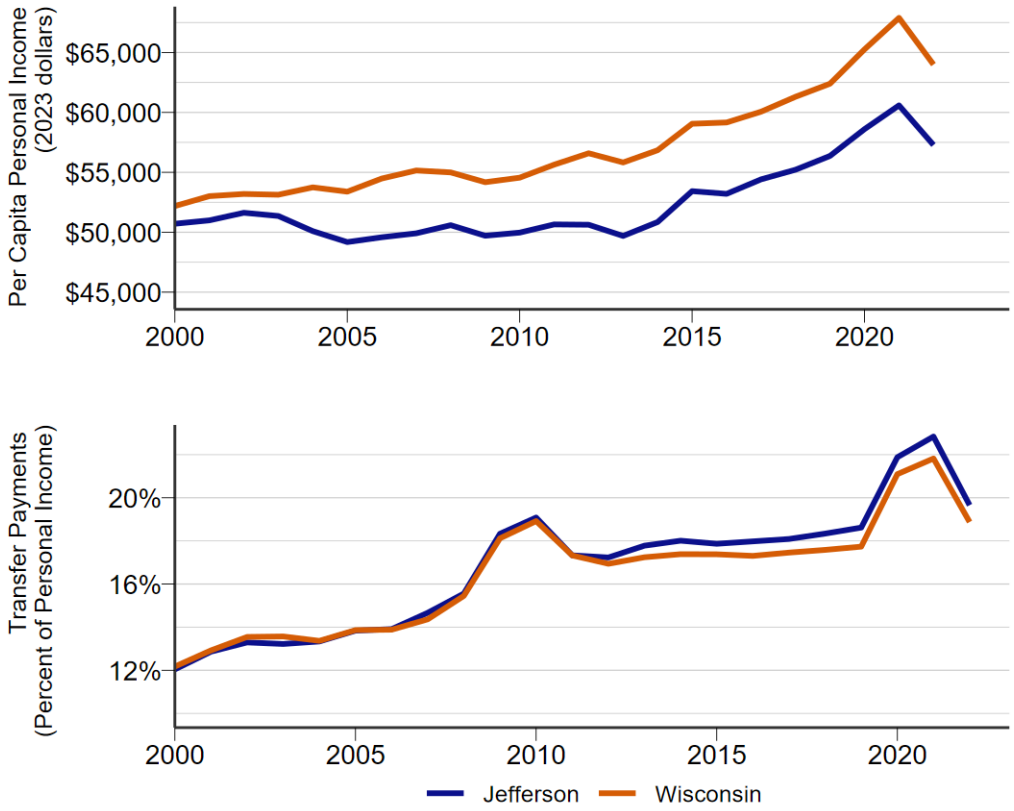


Figure 12: Source: United States Bureau of Economic Analysis.

Personal Income

Personal income includes income from all sources, such as wages, business income, rental income, investments, and government transfer payments. It excludes capital gains or losses, whether realized or unrealized. All dollar amounts are adjusted for inflation using 2023 dollars.

The per capita personal income (PCPI) in Jefferson County was $57,279 in 2022, compared to the statewide average of $63,996. Jefferson County faces an affordability challenge in this respect. Although Jefferson County's PCPI is lower than the state's, it is one of the more expensive Wisconsin counties to live in. According to the 2023 Self-Sufficiency Standard for Wisconsin, a family of two adults, one infant, and one school-age child needs an annual income of $77,437 to meet their basic needs at an adequate level. However, Jefferson County is much more affordable than its larger neighboring counties of Dane and Waukesha, which are the two counties with the highest costs. Compared to the state overall, Jefferson County is an expensive place to live. However, relative to its area, Jefferson County is more affordable, primarily driven by cheaper housing and childcare. Relative affordability can contribute to migration to the county.

In total, 19.7% of that income came from transfer payments rather than earned income in 2022. Jefferson County closely mirrors the state in terms of percentage of personal income from transfer payments. This is primarily driven by the aging population of the state. As residents age and retire, more of their income comes from government programs like Social Security.

Workforce Pipeline

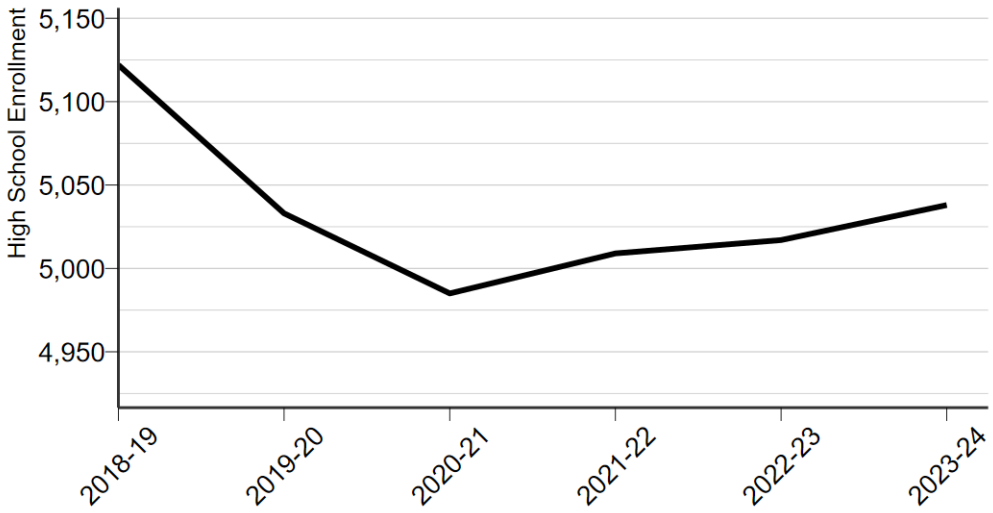


Figure 13: Source: Wisconsin Department of Public Instruction.

Education prepares the next generation of the labor force. As of the 2023-24 school year, 5,038 students were enrolled in grades 9-12. This includes public, private, and home-based schools. It is important to note that school district boundaries can extend into multiple counties, meaning that county-level enrollment figures may not precisely reflect the number of students residing within the county. Enrollment counts are based on the location of the school district's main office.

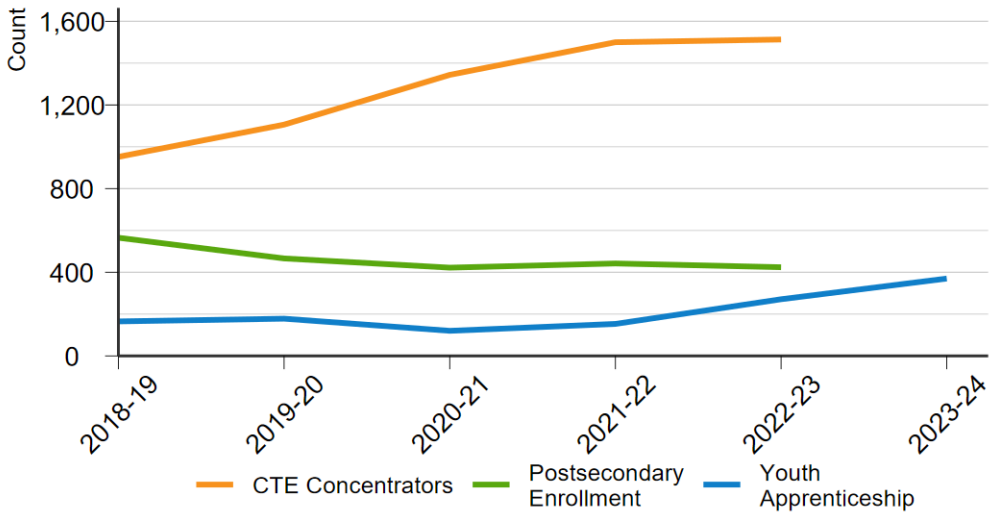


Figure 14: Source: Wisconsin Department of Public Instruction and Department of Workforce Development.

Career and Technical Education

Of 11th and 12th grade students, 60.5% were concentrators in career and technical education (CTE), compared to 44.3% for the state during the 2022-23 school year. Interestingly, the most popular CTE career cluster in the 2022-23 school year was not manufacturing, despite the importance of manufacturing to the county. The two most popular career clusters were business, management, and administration and hospitality and tourism.

i Career and Technical Education

Career and technical education (CTE) equips students for both the workforce and postsecondary education through work-based learning opportunities. CTE concentrators are 11th and 12th graders who have passed at least two CTE courses within a specific career pathway. Home-based students are not included in this data.

	CTE Concentrator	Percent of Grade 11 and 12
Jefferson	1,513	60.5%
Wisconsin	64,124	44.3%

School year 2022-23. Source: Wisconsin Department of Public Instruction.

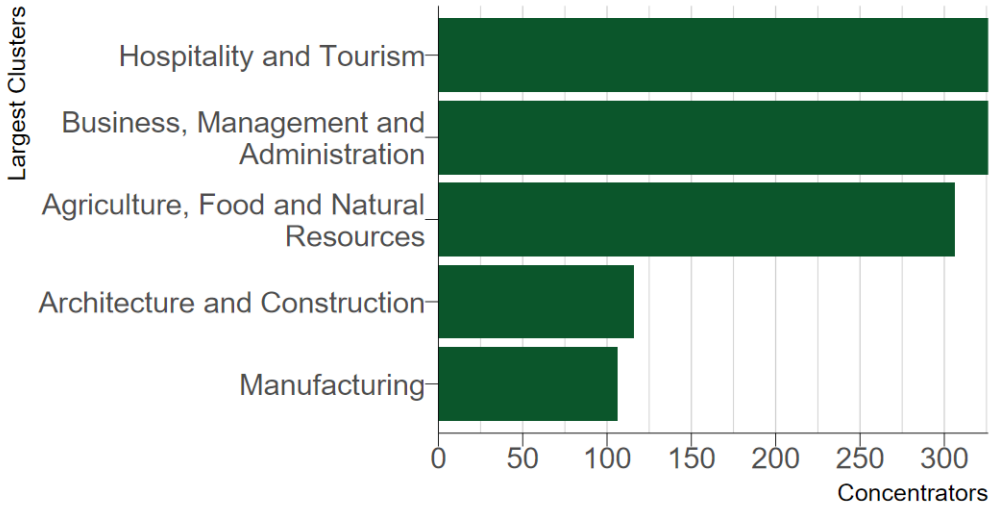


Figure 15: School year 2022-23. Source: Wisconsin Department of Public Instruction.

Postsecondary Enrollment

The percentage of high school completers who enrolled in a postsecondary institution as a percentage of all 12th-grade students in 2022-23 was 33.9%. In Wisconsin, it was 43.6%. Although Jefferson County has two Madison Area Technical College campuses in Watertown and Fort Atkinson as well as proximity to the University of Wisconsin-Madison in nearby Dane County, Jefferson County has a lower percentage of 12th-grade graduates enrolling in postsecondary institutions than

the state. Enrollment in programs like CTE and Youth Apprenticeship is higher in Jefferson County than in the state. This could indicate students are finding more value in nontraditional pathways.

Postsecondary Enrollment

Postsecondary enrollment tracks the percentage of high school graduates who attend a postsecondary school (public or private colleges, two- or four-year universities, technical colleges, or training programs) in the fall immediately following graduation. It is important to note that this data may slightly underrepresent actual enrollment due to limitations in how information is matched within the National Student Clearinghouse.

	Postsecondary Enrollment	Percent of Grade 12
Jefferson	424	33.9%
Wisconsin	31,893	43.6%

School year 2022-23. Source: Wisconsin Department of Public Instruction.

Youth Apprenticeship

The Youth Apprenticeship (YA) Program prepares participants for the workforce through direct, hands-on work experience. There were 271 youth apprentices in Jefferson County in the 2022-23 school year.

Youth Apprenticeship

Youth Apprenticeship (YA) Program is a school-supervised program that combines work and classroom learning to help high school students prepare for a career. Participants receive on-the-job training directly from the employer. The program helps students explore career paths and helps employers develop a qualified workforce.

	Youth Apprenticeship Participants	Percent of Grade 11 and 12
Jefferson	271	10.8%
Wisconsin	8,222	5.7%

School year 2022-23. Source: Wisconsin Department of Workforce Development.