Columbia County

2025 WORKFORCE PROFILE

STATE OF WISCONSIN
DWD
Department of Workforce Development

WisConomy

DETI-17957-COL-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.

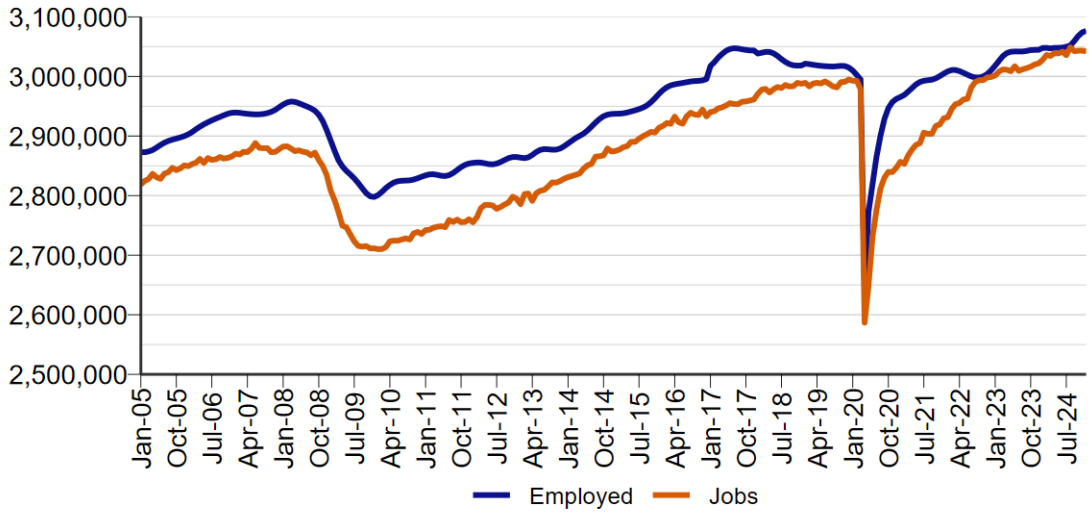


Figure 1: Wisconsin employment and jobs.

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.

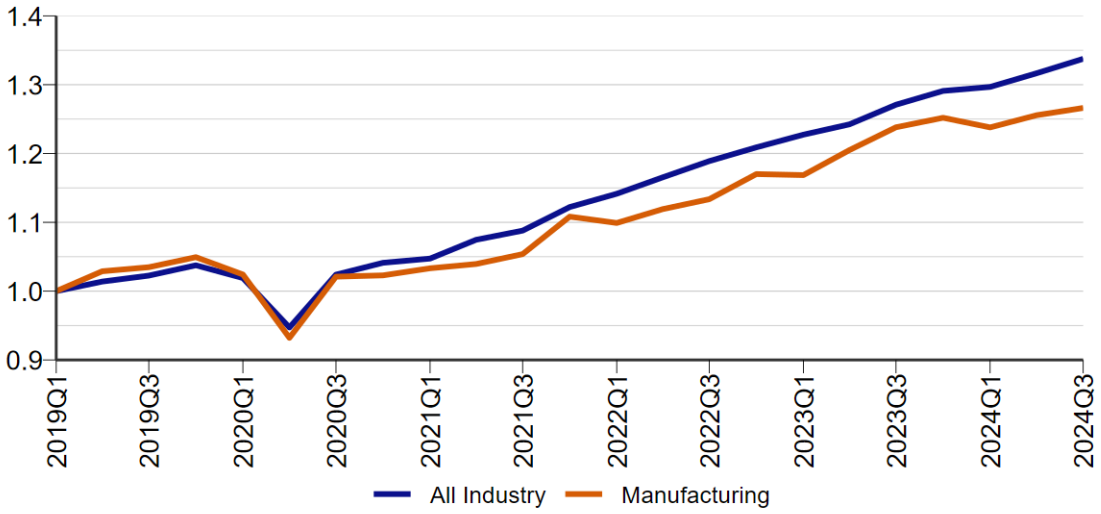


Figure 2: GDP growth index (2019Q1 = 100).

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.

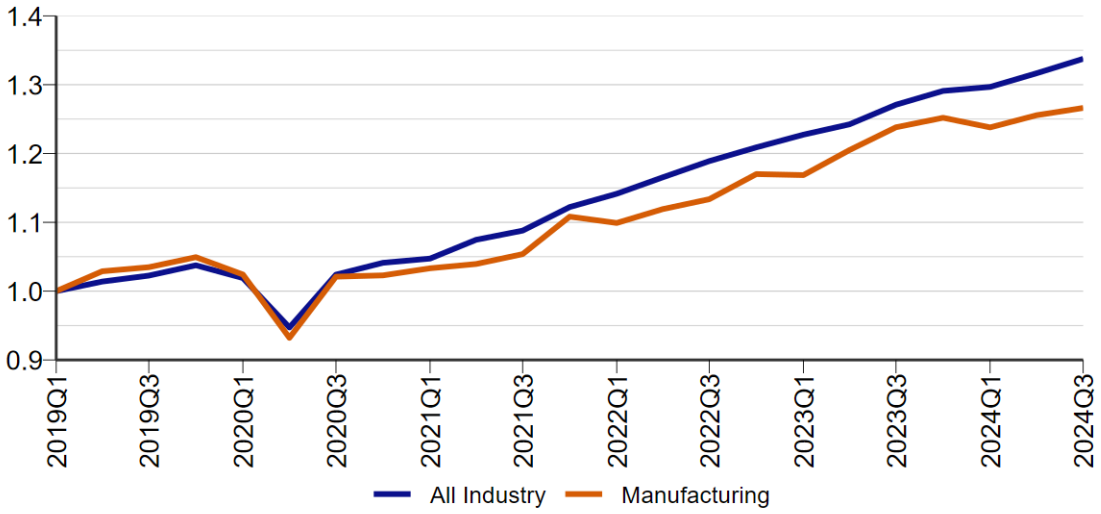


Figure 3: Wisconsin all industry v manufacturing growth (2019Q1 = 100).

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.

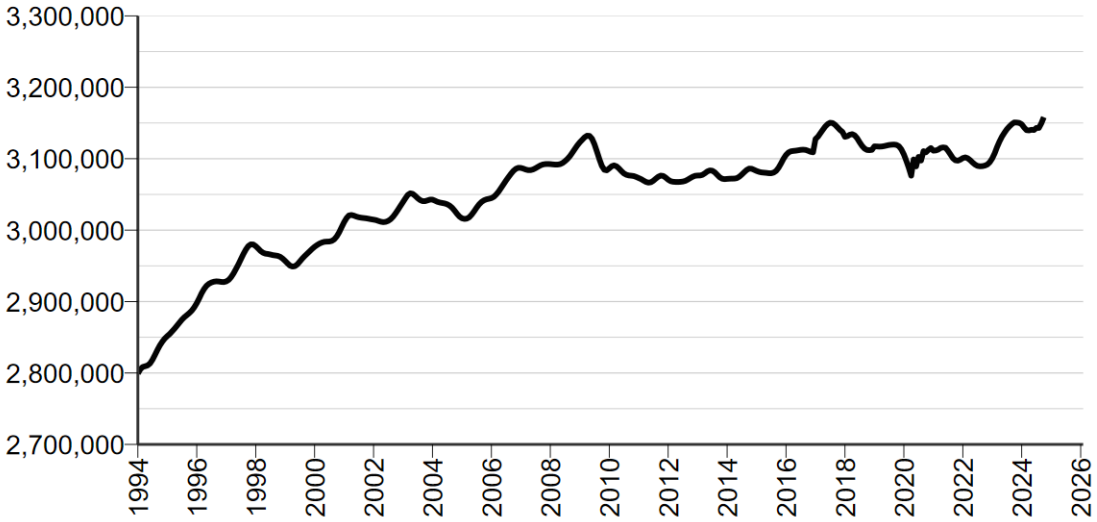


Figure 4: Wisconsin labor force.

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.

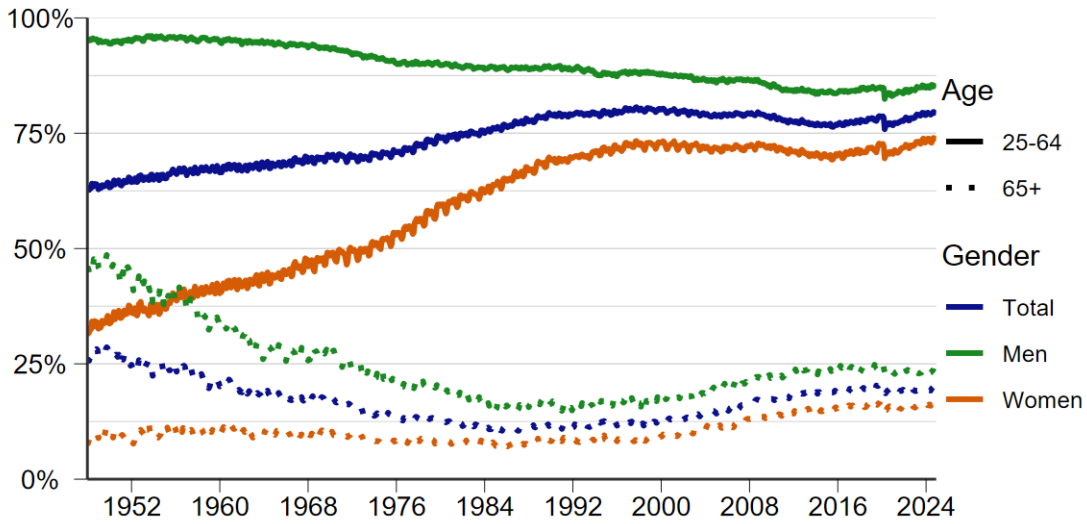


Figure 5: US labor force participation rate.

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.

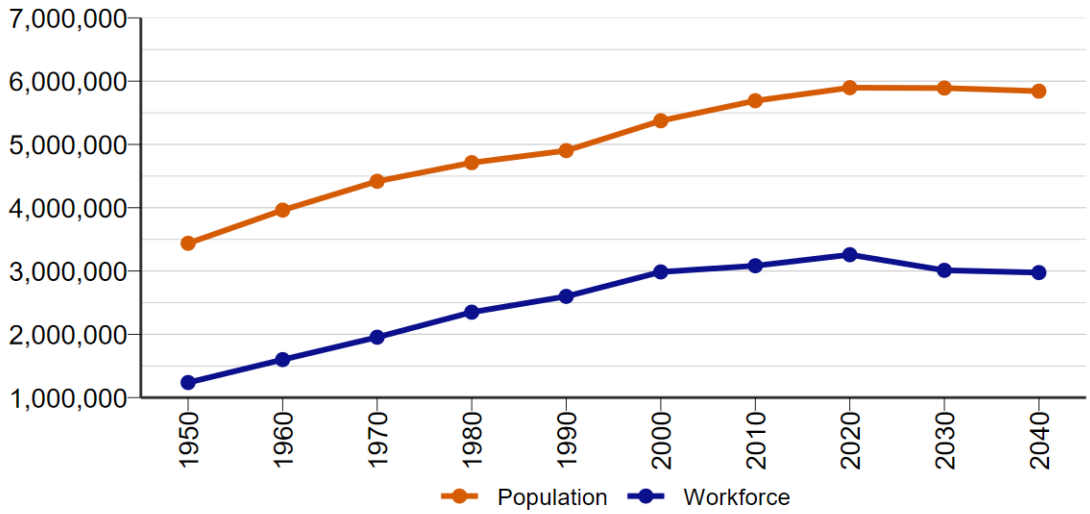


Figure 6: Wisconsin population and workforce projections.

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.

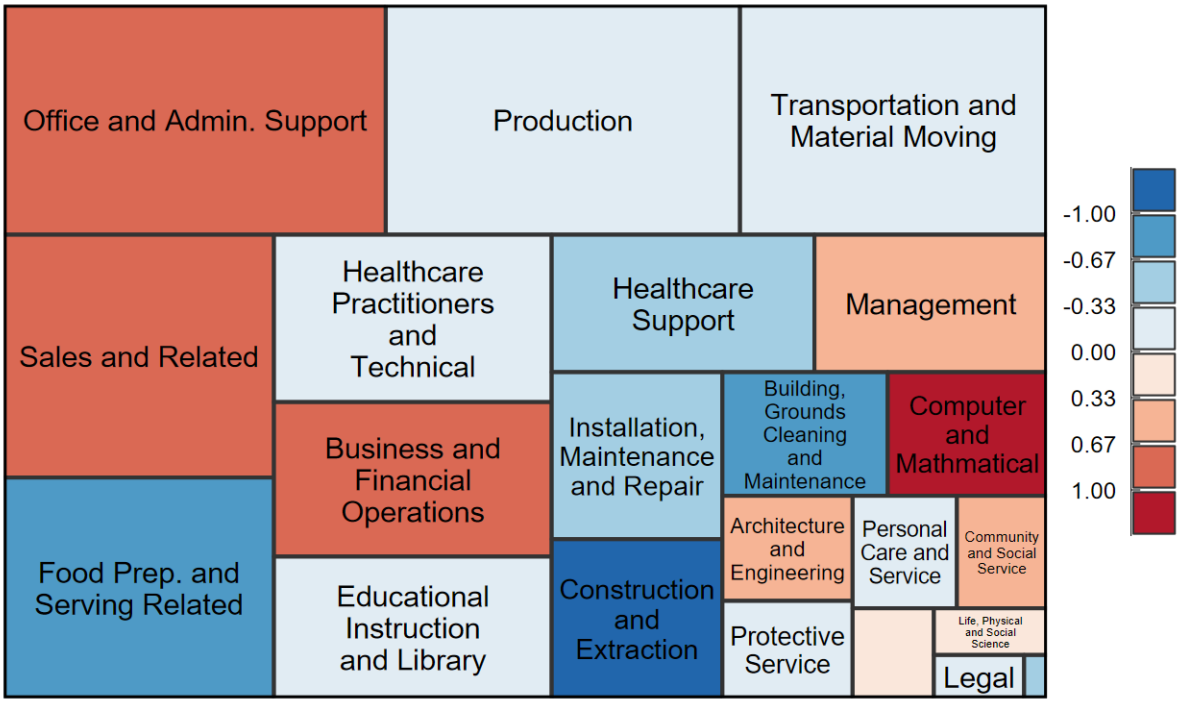


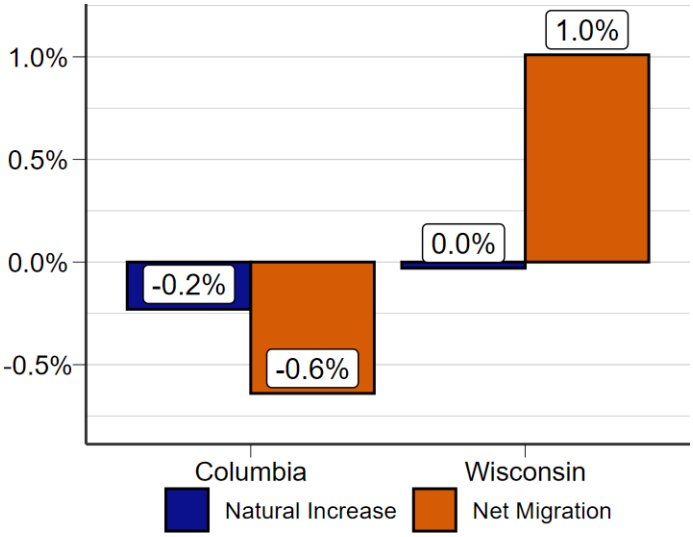
Figure 7: AI exposure per occupation group by number employed.

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
Portage, City	10,581	9,915	-666	-6.3%
Columbus, City	5,540	5,484	-56	-1.0%
Lodi, Town	3,282	3,276	-6	-0.2%
Lodi, City	3,189	3,216	27	0.8%
Pacific, Town	2,791	2,795	4	0.1%
Poynette, Village	2,590	2,578	-12	-0.5%
Wisconsin Dells, City	2,449	2,557	108	4.4%
Dekorra, Town	2,500	2,509	9	0.4%
West Point, Town	2,028	2,070	42	2.1%
Pardeeville, Village	2,074	2,056	-18	-0.9%
Columbia, County	58,490	57,979	-511	-0.9%
Wisconsin, State	5,893,718	5,951,400	57,682	1.0%

Columbia County is the 26th most populous county in Wisconsin, with 57,979 residents. Between 2020 to 2023, the population decreased by -0.9%, compared to a 1.0% increase statewide. The largest municipality, the city of Portage, is located on I-39 and the Wisconsin River.



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 Columbia County is the city of Wisconsin Dells, which experienced a 4.4% growth rate, adding 108 residents. Known for its waterparks and natural beauty, this popular tourist destination spans multiple counties, including Adams, Columbia, Juneau, and Sauk.

Columbia County ranked 30th in Wisconsin for natural increase (-0.2%) and 66th for net migration (-0.6%). The city of Portage experienced the largest decline, losing 666 residents.

Population Projections

	2020	2030	2040	2050	2020-2050 Population Change
Columbia	58,490	57,305	55,160	51,620	-11.7%
Wisconsin	5,893,718	5,890,915	5,841,620	5,710,120	-3.1%

Source: Demographic Services Center, Wisconsin Department of Administration.

Going forward, state and county population are both projected to decline. The county is projected to decline at a faster rate than the state. This is a concerning outlook, but it is important to remember that projections are not set in stone. The outlook will change if the actual components of change are different then the underling rates in the projections. Although Columbia's fertility rate has often been higher than the state's, fertility rates have declined over time. In 2010, the rate was 62 births per 1,000 women ages 15 to 50. It had dropped to 56 by 2023. A reversal in this trend would positively impact long-term population growth

Net migration is another area where improvement is possible. Retaining current residents and attracting new ones could shift the trajectory. Strategies might include revising zoning codes to allow for greater housing density, expanding access to family-supporting jobs, and making the county a more desirable place to live overall.

While net migration is often considered a short-term factor, it can also contribute to long-term, sustainable population growth. In particular, improving net migration among younger residents would likely lead to a stronger natural increase over time.

Employment by Industry

	2023 Avg Monthly Employment	5-year Change	5-year % Change	% of Total Employment
Total, All Industries	21,934	-811	-3.6%	100.0%
Manufacturing	5,352	-350	-6.1%	24.4%
Trade, Transportation, and Utilities	4,241	-108	-2.5%	19.3%
Education and Health Services	4,103	-863	-17.4%	18.7%
Leisure and Hospitality	2,609	23	0.9%	11.9%
Public Administration	1,617	-41	-2.5%	7.4%
Professional and Business Services	1,377	377	37.7%	6.3%
Construction	1,100	149	15.7%	5.0%
Other Services	577	73	14.5%	2.6%
Financial Activities	482	-25	-4.9%	2.2%
Natural Resources and Mining	334	-41	-10.9%	1.5%
Information	141	-6	-4.1%	0.6%

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

Between 2018 and 2023, Columbia County lost 811 jobs (-3.6%), with total employment averaging 21,934 in 2023. COVID-19 caused a very steep job loss in 2020, interrupting a multi-year growth trend, from which the county is still recovering.

Manufacturing remains the largest industry, accounting for 24.4% of all employment in the county, significantly higher than the state average of 16.2%. Within manufacturing, food production is a key subsector, comprising 22% of manufacturing employment.

The fastest-growing industry was professional and business services, with a 37.7% increase, adding 377 jobs. Conversely, education and health services experienced the largest decline, losing 863 jobs (-17.4%), likely due to the impacts of the COVID-19 pandemic on healthcare systems.

Unemployment

In 2023, Columbia County's unemployment rate averaged 2.6%, ranking 11th statewide and remaining below the state's rate of 3.0%. This ranks the county 11th in terms of the rate of unemployment in 2023. Although Columbia County's unemployment rate reached record lows in 2022, rates have slightly increased but remain indicative of a tight labor market. The county's aging population further constrains the available workforce.

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.

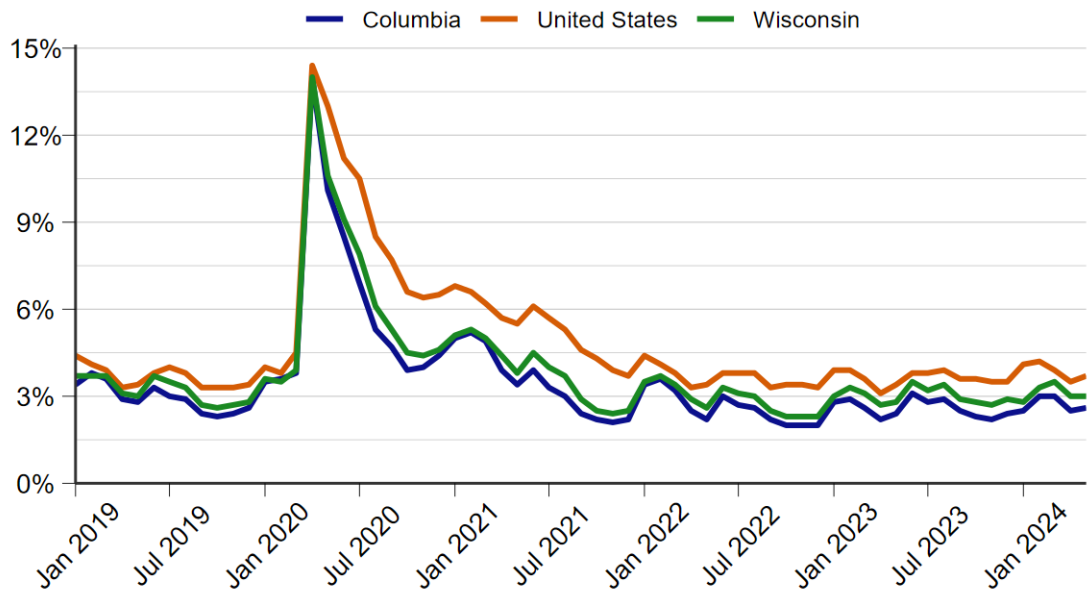


Figure 9: Source: Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics.

Labor Force Participation

Columbia County's labor force participation rate (LFPR) was 69.0%, ranking eighth in the state. Both the county and Wisconsin have experienced declines in the LFPR over the past two decades due to aging populations and worker retirements. This downward trend is not unique to Columbia County but reflects a broader county, state, and national trend associated with an aging population exiting the labor market. With a higher median age than the state, Columbia County may be delaying retirement compared to other parts of the state. This trend underscores the importance of attracting younger workers to maintain a robust labor force.

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.

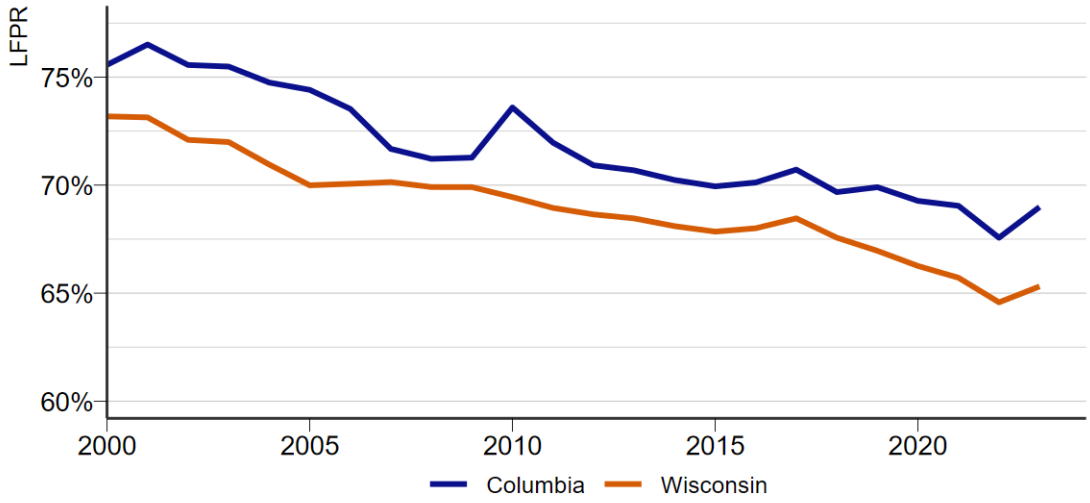


Figure 10: Source: WI Department of Workforce Development Office of Economic Advisors.

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)

In the South Central Workforce Development Area (WDA), which includes Dane, Dodge, Green, Jefferson, Marquette, and Sauk counties, the largest occupation is fast food and counter workers, accounting for 2.3% of the area's employment. This occupation has a low artificial intelligence (AI) exposure index of -1.00. For comparison, bookkeeping, accounting, and auditing clerks have the highest AI exposure index of 1.89.

Production-related occupations, which are core to Columbia County's dominant manufacturing industry, generally involve physical tasks less susceptible to AI automation. For instance, molding, coremaking, and casting machine operators have low AI exposure index of -0.66. However, some roles within manufacturing, such as testers, sorters, samplers, and weighers, are moderately exposed, with an index of 0.41. These variations highlight how AI's impact on the workforce depends not only on the industry but also on the specific tasks associated with each occupation.

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 produces employment projections for Wisconsin's 11 WDAs every two years. Employment in the South Central WDA is expected to grow by 41,531 (+7.9%) between 2022 to 2032, slightly outpacing the statewide growth rate of 7.1%.

The information sector is projected to grow the fastest, with a 20.6% increase driven primarily by employers like Epic Systems and other software developers and publishers in the region. While not the fastest-growing industry, professional and business services is expected to add the most jobs (7,363), reflecting the growing importance of technical and professional roles to the area's economy.

Manufacturing, Columbia County's largest industry, is projected to grow at a slower rate of 4.7%, below the regional average. However, the continued demand for highly technical skills in industries like biotechnology and computer systems points to a shift toward knowledge-based sectors. This evolution underscores the importance of workforce training and education to meet the demands of these emerging industries.

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.

In the South Central WDA, employment is projected to grow by 41,531 jobs (+7.9%), between 2022 to 2032. Computer and mathematical occupations are expected to be the fastest growing, with an 18.0% growth over the decade. This growth is fueled by the expanding information industry in the region, higher wages for computer-related occupations, and increasing demand for software-driven business solutions. The South Central also benefits from a concentration of employers in highly technical fields, such as biotechnology and computer systems, which capitalize on the region's highly educated workforce. The second-fastest growing occupation group, life, physical, and social sciences, further reflects the area's emphasis on advanced industries.

Administrative and support occupations are projected to experience an overall decrease in employment. However, the demand to fill these roles will be primarily driven by labor force exits and occupational transfers. This group is projected to have the second-highest number of annual openings, with 7,040 openings each year.

Aging Population

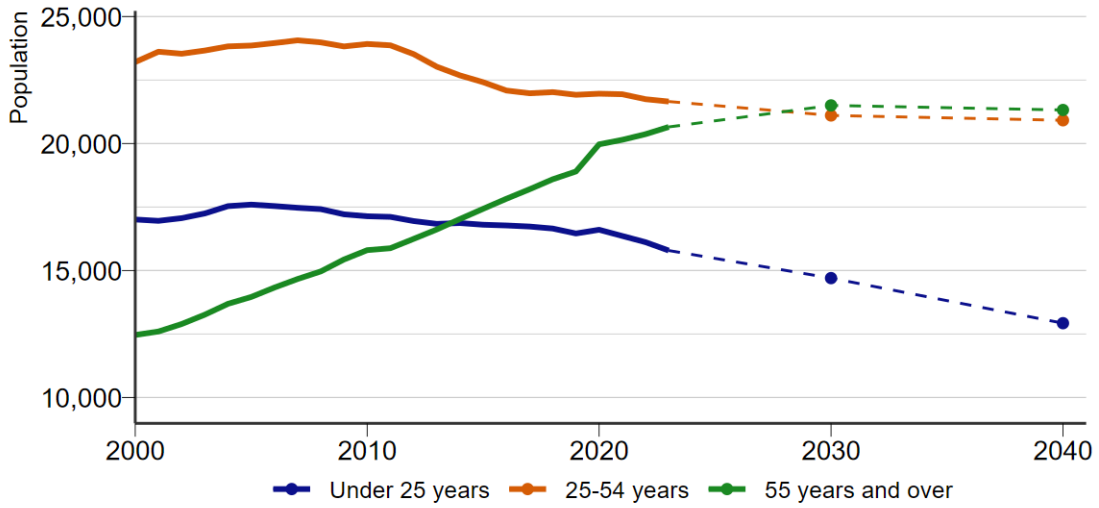


Figure 11: US Census Bureau, Population Estimates Program and WI Department of Administration, Demographic Services Center.

The selected age groups (under 25, 25-54, and over 55) represent three broad life stages, each with unique societal 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. Individuals 55 and older are more likely to transition from the workforce to retirement.

In 2023, residents aged 55 and older comprised 35.6% of Columbia County's population, up from 29.4% in 2013. From 2017 to 2022, the county's median age was 42.8, compared to the state's median age of 39.9, according to the Census Bureau's American Community Survey. This trend is concerning because the labor force participation rate begins to decline around age 55. If these patterns continue, this older population is expected to surpass the number of individuals 25 to 54, who traditionally have the highest labor force participation. This demographic shift will likely exacerbate worker shortages as retirements increase. Columbia County's trend of negative net migration may further compound challenges in maintaining a sufficient workforce.

Personal Income

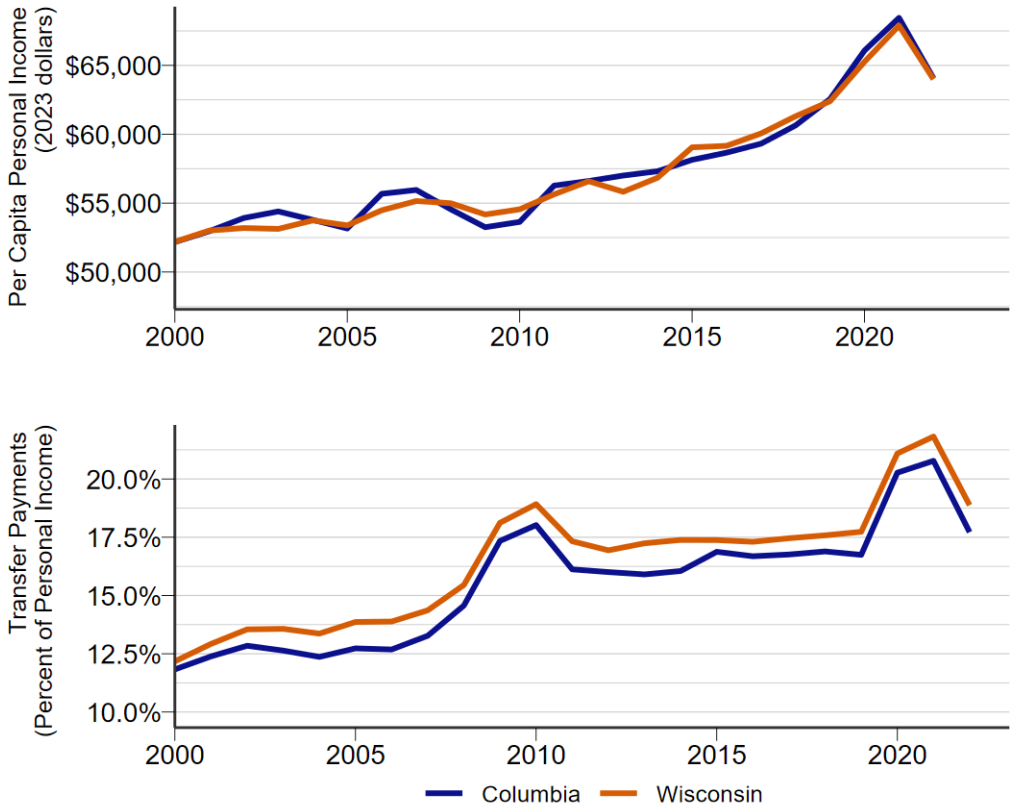


Figure 12: Source: United States Bureau of Economic Analysis.

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 per capita personal income (PCPI) in Columbia County was $64,065 in 2022, slightly above the statewide average of $63,996. Both the trend and value of Columbia County's per capita personal income have closely aligned with the state's, indicating that wages and employment in the county have kept pace over time.

In 2022, 17.7% of Columbia County's income came from transfer payments rather than earned income. This percentage is slightly lower than the statewide rate but has risen over the past two decades in both the county and the state. This increase is largely due to an aging population; as individuals retire, their income shifts from wages to transfer payments like Social Security. Transfer payments also tend to rise during economic downturns, as seen during the 2008-2009 Great

Recession and the COVID-19 pandemic. The significant decline in real per capita income from 2021 to 2022 was driven by the end of stimulus checks and inflationary pressures, which eroded purchasing power.

Workforce Pipeline

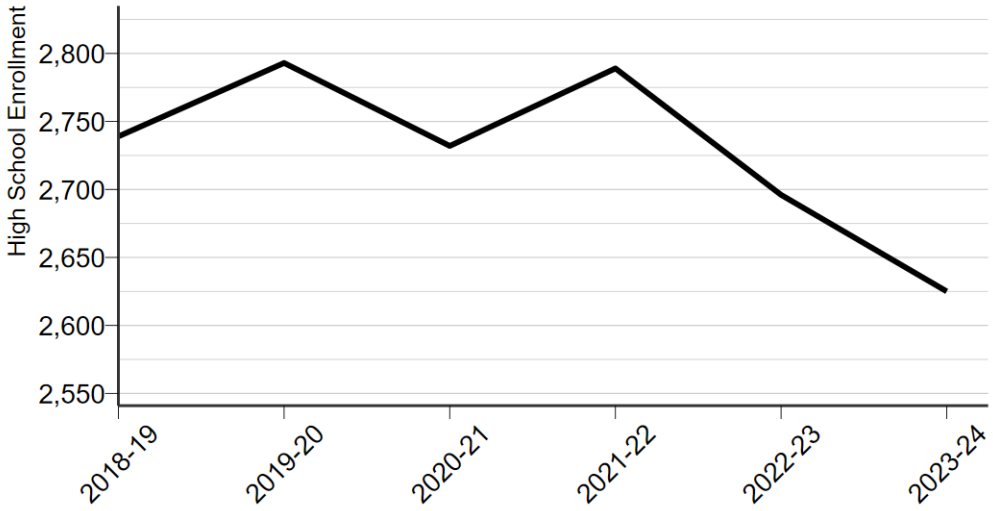


Figure 13: Source: Wisconsin Department of Public Instruction.

Education plays a vital role in preparing the next generation of the labor force. As of the 2023-24 school year, 2,625 students were enrolled in grades 9-12 across public, private, and home-based schools. It is important to note that school district boundaries often extend into multiple counties, meaning county-level enrollment figures may not perfectly reflect the number of students within Columbia County. These counts are based on the location of the main office for each school district.

As Columbia County's population continues to decline and age, high school enrollment has followed a similar downward trend over recent years. With a shrinking workforce, the quality of education and training becomes increasingly critical to meet the county's economic needs and ensure a skilled labor force.

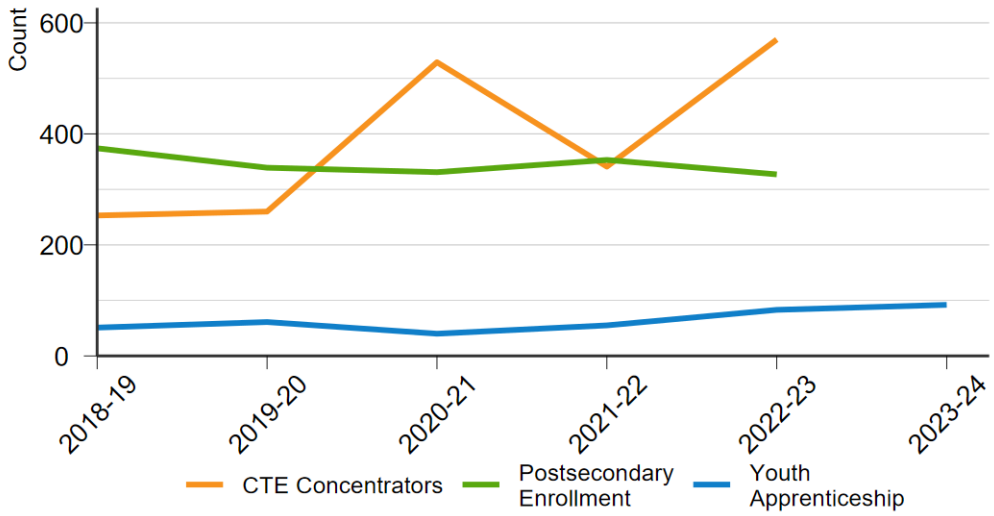


Figure 14: Source: Wisconsin Department of Public Instruction and Department of Workforce Development.

Career and Technical Education

Among students in grades 11-12, 41.9% were enrolled as concentrators in career and technical education (CTE) during the 2022-23 school year, slightly below the state average of 44.3%. Despite the overall declines in high school enrollment, CTE participation has seen a slight increase, reflecting continued interest in career-focused learning opportunities.

While manufacturing is the county's largest industry, it is not the most selected career pathway among CTE participants. The career pathway with the largest number of participants was the business, management, and administration pathway reflecting interest in the fast-growing professional and business services sector in the region.

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
Columbia	570	41.9%
Wisconsin	64,124	44.3%

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

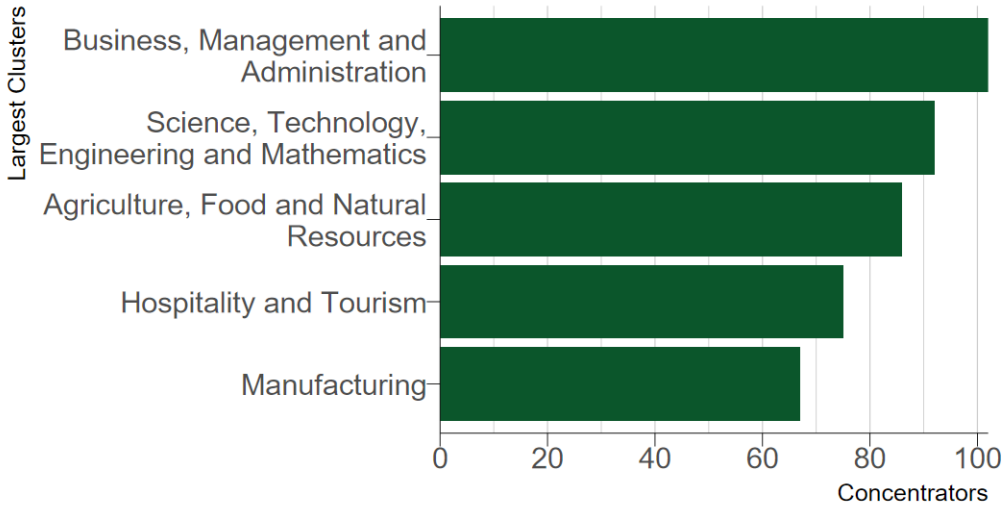


Figure 15: School year 2022-23. Source: Wisconsin Department of Public Instruction.

Postsecondary Enrollment

In the 2022-23 school year, 46.7% of high school graduates in Columbia County enrolled in a postsecondary institution, compared to the statewide average of 43.6%. This includes enrollment in public and private colleges, universities, and technical schools. The county benefits from close proximity to postsecondary institutions in neighboring Dane County, including the University of Wisconsin-Madison and the Madison Area Technical College System, which provide accessible opportunities for higher education and training.

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
Columbia	327	46.7%
Wisconsin	31,893	43.6%

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

Youth Apprenticeship

Youth apprenticeship programs provide students with hands-on experience to prepare them for the workforce. In the 2022-23 school year, 83 students in Columbia County participated in youth apprenticeship opportunities, gaining valuable skills and practical training.

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
Columbia	83	6.1%
Wisconsin	8,222	5.7%

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