

June 2024 - Minnesota Economic Trends

The DEED Labor Market Information (LMI) Office's annual state-of-the-state Trends issue provides an overview of Minnesota's labor market changes and job growth over the past year, takes a closer look at each of the state's six regions, explores green jobs, looks at short term job projections and details updates to data in the LMI Cost of Living tool.



Year In Review: Minnesota’s Labor Market

Nick Dobbins and Oriane Casale
June 2024

Employment Trends

Payrolls continued to stabilize over the past year following several years with much greater than normal change. Nonfarm employment ultimately returned to pre-pandemic levels in June of 2023 following sharp losses in the spring of 2020 and three years of recovery. As Figure 1 shows, the shape of the recession and recovery was unbalanced, with a sharp decline followed by a long recovery with gradually slowing growth.

Following a short dip below pre-pandemic levels in July and August, employment returned to greater than 2,993,100, its pre-pandemic level, in September 2023 and has widened the gap since then. In November 2023, the state topped three million jobs for the first time and has remained above that benchmark from that point forward. In April 2024, the most recent month included in this analysis, preliminary employment was at 3,023,900 jobs (see Figure 1).

Figure 1: Minnesota Seasonally Adjusted Total Nonfarm Employment



While employment returned to pre-pandemic levels in 2023, the recovery was not consistent across industry groups. As Table 1 shows, some supersectors, such as Construction and Education & Health Services, have experienced strong growth over pre-pandemic levels, while others have not fully recovered in the intervening years. As of April 2024, five of eleven published supersectors had employment below pre-pandemic levels, including Mining & Logging, Information, Professional & Business Services, and Leisure & Hospitality. However, two of those supersectors, Mining & Logging and Professional & Business Services, previously reached their pre-pandemic employment levels before declining again.

Table 1: Seasonally Adjusted Minnesota Employment

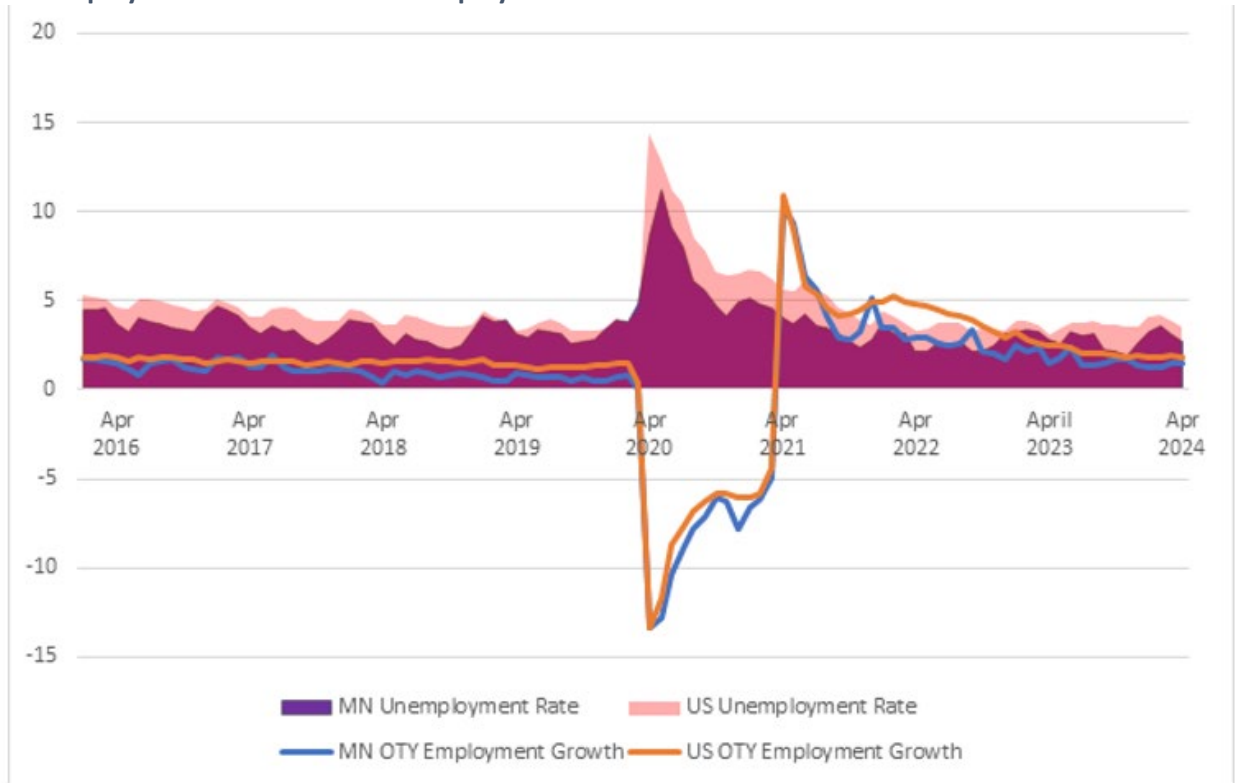
Industry	February 2020	April 2020	April 2024	Percent Change Feb 2020 to April 2020	Percent Change Feb 2020 to April 2024
Total Nonfarm	2,993,100	2,578,600	3,023,900	-13.8%	+1.0%
Total Private	2,565,800	2,181,700	2,587,500	-15.0%	+0.8%
Goods-Producing	457,600	426,100	467,100	-6.9%	+2.1%
Mining & Logging	6,700	6,400	6,600	-4.5%	-1.5%
Mining, Logging, & Construction	135,200	124,300	141,600	-8.1%	+4.7%
Construction	128,500	117,900	135,000	-8.2%	+5.1%
Manufacturing	322,400	301,800	325,500	-6.4%	+1.0%
Service-Providing	2,535,500	2,152,500	2,556,800	-15.1%	+0.8%
Private Service Providing	2,108,200	1,755,600	2,120,400	-16.7%	+0.6%
Trade, Transportation & Utilities	530,000	463,600	536,700	-12.5%	+1.3%
Information	46,100	42,300	42,500	-8.2%	-7.8%
Financial Activities	195,400	191,100	187,000	-2.2%	-4.3%
Professional & Business Services	382,600	345,500	379,700	-9.7%	-0.8%
Education & Health Services	562,100	506,900	584,700	-9.8%	+4.0%
Leisure & Hospitality	277,000	128,100	273,900	-53.8%	-1.1%
Other Services	115,000	78,100	115,900	-32.1%	+0.8%
Government	427,300	396,900	436,400	-7.1%	+2.1%

Source: [Current Employment Statistics](#) (CES)

One supersector, Financial Activities, largely escaped the immediate impacts of the lockdown, losing only 2.2% of employment when the state was off by 13.8%, presumably due to the nature of much of the work done in that industry and the ability to transition to remote work. However, since April of 2020 employment in Financial Activities was off by 2.1%, making it the only supersector to lose jobs since the low point of pandemic employment.

As total nonfarm payroll employment approached and surpassed pre-pandemic levels, growth at the state and national level has continued to flatten. As Figure 2 shows, growth appears to have settled into a more consistent baseline.

Figure 2: Unemployment Rate and Annual Employment Growth



Minnesota's annual employment growth fell behind the nation in the summer of 2021, and has stayed there consistently since then, though the gap has closed over the past year. For most of 2022, U.S. growth ran more than a full percentage point higher than statewide growth, but that gap shrunk to less than a percentage point for most of 2023. April 2024 national annual growth was at 1.8%, while Minnesota's growth was 1.5%. The persistent gap between the two may be due in part to Minnesota's labor market reaching a stable long-term employment level sooner than the nation. The state's unemployment rate has been lower than the national level for the entirety of the recovery period. These labor market pressures will be discussed in more depth later.

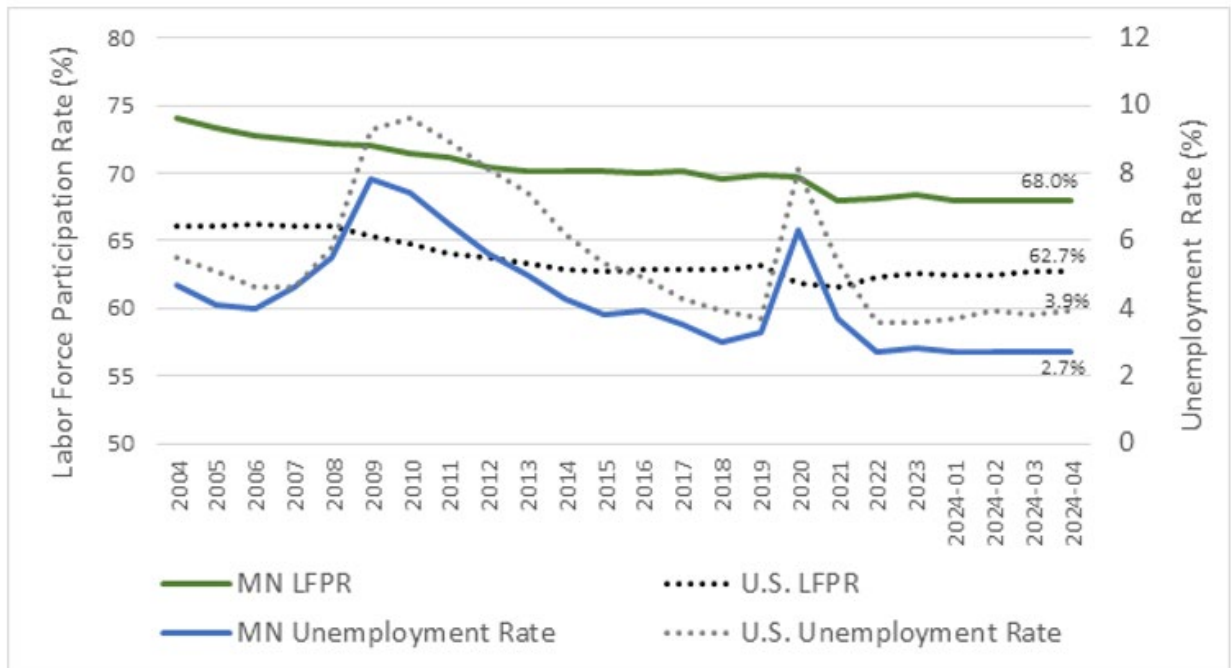
With total employment now above pre-pandemic levels, and new labor market trends beginning to appear, the utility of analyzing the market through the lens of recovery from the recent recession will likely continue to decrease.

Labor Force Trends

Minnesota's unemployment rate hovered between 2.7% and 3.0% over the last 12 months. To date, it has remained at 2.7% from November 2023 through April 2024 (subject to revision), indicating a very tight labor market that has, if anything, become tighter over the last 12-month period. Despite this, Minnesota does not have the lowest unemployment rate in the nation or the Midwest. At 2.7% in March 2024, Minnesota's rate ranked seventh lowest among states, tied with Kansas, coming in lower than our neighboring states of Iowa (2.9%) and Wisconsin (3.0%) but higher than North Dakota (2.0%), South Dakota (2.1%) and Nebraska (2.5%).

To put this in perspective, an unemployment rate below 3.5% indicates a tight labor market. Minnesota's unemployment rate has been below 3.5% since August 2021. This long-term tightness is causing hiring challenges for many employers and constraining job growth in certain industries in Minnesota.

Figure 3: Unemployment and Labor Force Participation Rate (LFPR) Trends, Annual Average 2004 to 2023 and monthly in 2024 to April



Source: Local Area Unemployment Statistics (LAUS)

Two forces are driving this long-term low unemployment rate. First, we have seen steady, if slowing, job growth coming out of the Pandemic Recession, as described above. Secondly, long-term demographic trends are leading to slowing population and labor force growth. Minnesota's labor market gained 23,500 people between 2022 and 2023 looking at annual average numbers, bringing us just 11,100 below the 2019 annual average size prior to the Pandemic Recession. The labor force size continued to tick up in 2024, to 3,101,383 in April, which is 470 people larger than the 2023 annual average size but still below 2019. Moreover, as Figure 1 illustrates, the labor force participation rate has stagnated at around 68% over the last 18 months. This very slow recent growth in the labor force, and long-term decline, which is not back to pre-pandemic levels, is resulting in falling numbers of unemployed.

Compared to our neighboring states, Minnesota has slower labor force growth than North and South Dakota and the U.S. overall, but we are ahead of Iowa, whose labor force also shrank between 2019 and 2023. Wisconsin's labor force is showing a similar trend to Minnesota's in that growth in the labor force from age 16 to 54 was almost entirely offset by declines in the labor force 55 and over, which pushed the labor force participation rate down.

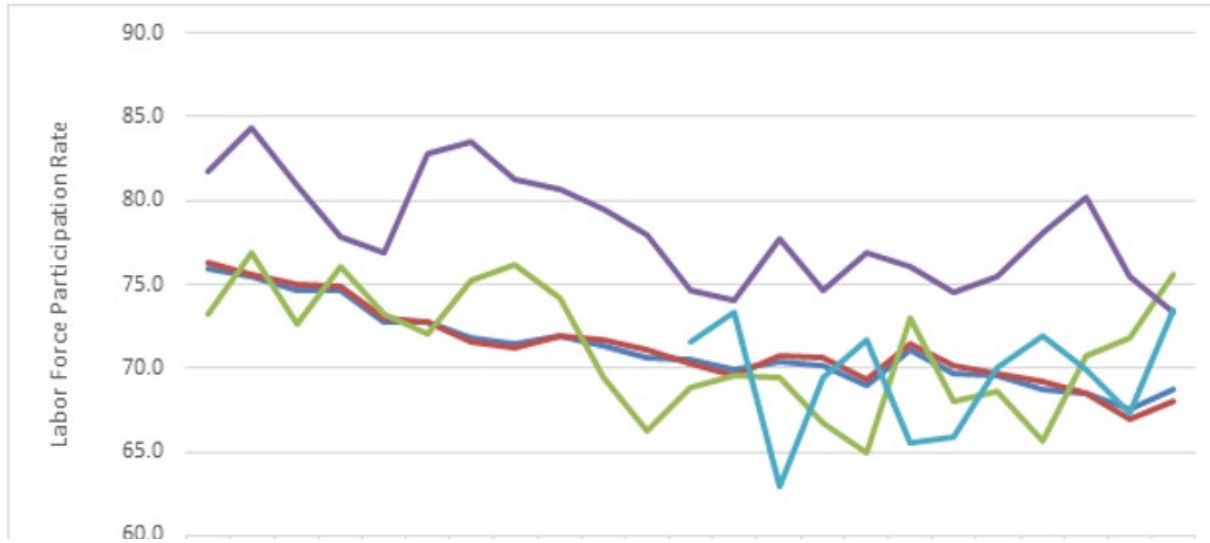
In large part, the negative labor force growth is being driven by an aging population. As Anthony [Schaffhauser](#) explains in his article in the March 2024 issue of Trends, while Minnesota's labor force in the 16 to 54 age groups grew by 57,000 people, this was offset by a decline in the labor force for age groups 55 and over, even though Minnesota's population age 55 years and over grew 6.8% between 2019 and 2023. Overall, the labor force declined by 1,000 people over this period.

As people enter their retirement years, labor force participation drops dramatically. Schaffhauser's analysis demonstrates how the aging population, in which the Baby Boom generation is deep into their retirement years, is holding back labor force growth overall, resulting in declining labor force participation and long-term low unemployment despite slowing economic growth.

At the same time, the tight labor market is encouraging more teens to work than we've seen in recent history. The teen (age 16-19) labor force participation rate was 65.9% and the employment to population ratio was 62.3% in April 2024 (12-month average), both at record highs for April going back to 2002, the beginning of this data series. At the same time, the teen unemployment rate was 5.5% in April, down 1.4 points over the year, and at a record low for April.

Breaking these numbers out by race is another demonstration of the role of age demographics in labor force trends. The labor force participation rate for white Minnesotans is now well below that of the other race groups. As Figure 4 shows, the labor force participation rate for white Minnesotans was 68.0% in April 2024 compared to 75.6% for Black, 73.5% for Asian and 73.3% for Hispanic Minnesotans (see Figure 4). These labor force participation rates are largely driven by the age of the population. Minnesota's white population is the oldest of these groups by a significant margin, with a median age of 42.8 compared to 28.6 for Black Minnesotans and 32.4 for Asian Minnesotans (American Community Survey, Table B01002A-E, 2022 1-year estimates). As a result, a much higher share of white workers is aging into retirement and leaving the labor market than other groups of workers.

Figure 4: Labor force participation rates by race or ethnicity, April 12-month moving averages, 2002 to 2024

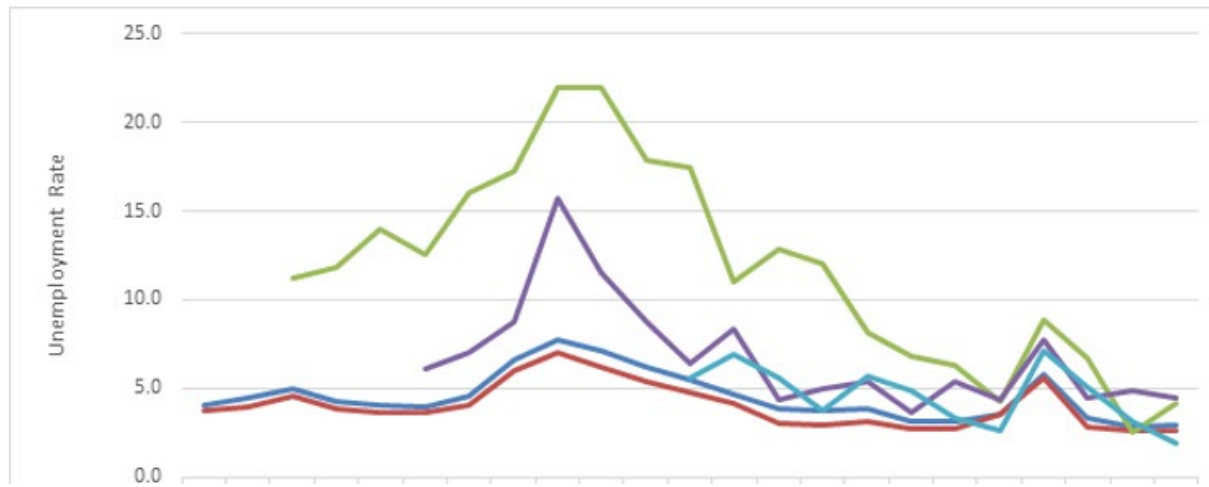


Race	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
All	76.0	75.5	74.7	74.7	72.8	72.8	71.8	71.5	71.9	71.3	70.6	70.5	69.9	70.4	70.2	69.0	71.1	69.7	69.6	68.7	68.5	67.5	68.7
White	76.3	75.6	75.0	74.9	73.0	72.7	71.6	71.2	71.9	71.7	71.1	70.3	69.6	70.8	70.6	69.3	71.5	70.2	69.7	69.2	68.5	67.0	68.0
Black	73.2	76.9	72.6	76.1	73.2	72.0	75.2	76.2	74.2	69.5	66.2	68.8	69.6	69.5	66.7	65.0	73.0	68.0	68.6	65.7	70.7	71.8	75.6
Hispanic	81.7	84.3	80.9	77.8	76.9	82.8	83.5	81.3	80.7	79.5	77.9	74.6	74.0	77.7	74.6	76.9	76.1	74.5	75.5	78.1	80.2	75.5	73.3
Asian												71.6	73.4	63.1	69.5	71.7	65.5	65.9	70.0	71.9	69.9	67.3	73.5

Source: Demecon from the Current Population Survey (CPS)

Unemployment rates remain higher for Black and Hispanic Minnesotans than for white or Asian Minnesotans, although rates have dropped dramatically, particularly for Black Minnesotans, over the past decade. Figure 5 shows that in Minnesota, the unemployment rate for Asian Minnesotans was 1.9%, white Minnesotans were at 2.6%, Black Minnesotans were at 4.2% and Hispanic Minnesotans were at 4.5%.

Figure 5: Unemployment rate by race or ethnicity, April 12-month moving averages, 2002 to 2024



Race	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
All	4.1	4.5	5.0	4.3	4.1	4.0	4.6	6.6	7.7	7.1	6.2	5.5	4.7	3.9	3.7	3.9	3.1	3.1	3.5	5.8	3.3	2.8	2.9
White	38	40	46	39	36	36	41	60	70	62	54	48	42	30	29	31	27	27	25	56	28	26	26
Black	10.4		11.2	11.8	14.0	12.5	16.0	17.2	21.9	22.0	17.9	17.5	11.0	12.9	12.0	8.1	6.8	6.3	4.3	8.9	6.7	2.5	4.2
Hispanic						6.1	7.0	8.8	15.7	11.5	8.8	6.4	8.4	4.4	5.0	5.4	3.6	5.4	4.4	7.7	4.5	4.9	4.5
Asian												5.6	6.9	5.6	3.8	5.7	4.9	3.3	2.6	7.1	5.1	3.1	1.9

Source: Demecon from the Current Population Survey (CPS)

Labor force statistics also tell an interesting story when comparing male and female workers (the only two categories included in the CPS). In Minnesota, women's labor force participation ticked up 2.4 points over the year, reaching 65.9% in April 2024. In comparison, men's labor force participation remained level over the year at 71.5%. Women also saw an increase in their employment to population ratio, up 1.9% points to 64.1% in April 2024 compared to only 0.3 points for men at 69.3%, and an increase in their unemployment rate, up 0.7 points to 2.7% in April 2024 compared to a decline of 0.4 points for men at 3.1%. This shows a more dynamic labor market situation for women over the last year than for men.

In his article on labor force trends, [Schaffhauser](#) makes the case that this pattern is a hangover from the Pandemic Recession when more women dropped out of the labor force to care for children and others who were unable to attend school or care outside the home. These data provide evidence that women were still moving back into paid work during the last half of 2023 and first part of 2024.

Job Vacancy Trends

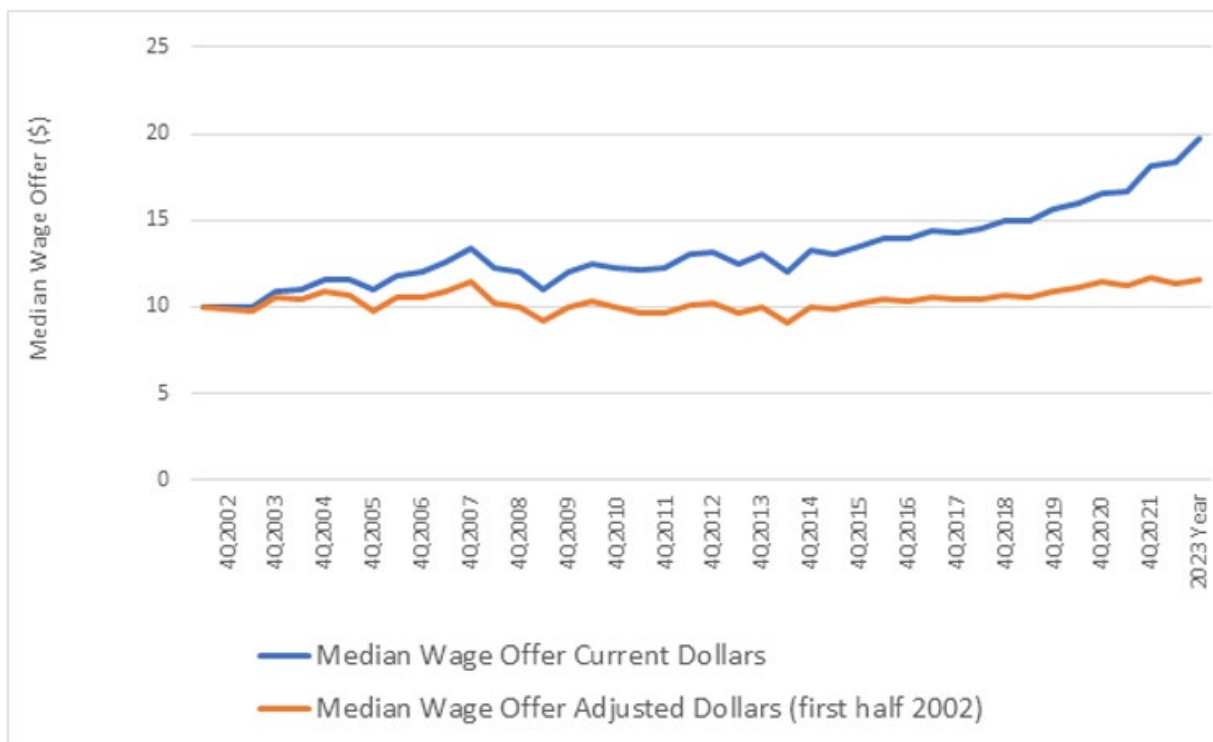
Job vacancies in Minnesota, like employment, have slowed. The number of vacancies in 2023, at 139,059, is 24.7% lower than during second quarter 2022. Despite this sharp decline, 2023 has the fifth highest number of vacancies on record in Minnesota dating back to 2002. Moreover, the ratio of unemployed people to job vacancies, at 0.6, still shows a very tight labor market with almost twice as many openings as unemployed workers in Minnesota. The vacancy rate, at 5.1%, is also one of the highest on record.

By occupation, vacancies have dropped somewhat in some of the occupations most impacted by the Pandemic Recession, namely Food Prep & Serving, Sales & Related, Healthcare Support and Healthcare Practitioners & Technical occupations; but of the four, only Food Prep & Serving and Sales & Related are close to their pre-pandemic levels. Healthcare occupations are still seeing very high levels of job vacancies, with a job vacancy rate of 8.1% in Healthcare Practitioners & Technical and 7.0% in Healthcare Support, as is Community & Social Service, which is at an all-time high number of job vacancies in 2023 and a high job vacancy rate of 8.9%. The increase was in part driven by vacancies in Substance Abuse & Behavioral Disorders Counselors and Mental Health & Substance Abuse Social Workers, which are both at all-time high levels.

Legal occupations have seen an uptick in job vacancies over the past few years and are also now at an all-time high, although they still have a moderate job vacancy rate of 3.3%. The survey also tracked a high level of internships and apprenticeships in 2023. This is good news for young workers and may be a strategy that employers are using to improve their workforce pipelines by recruiting employees right out of high school and college and offering "earn while you learn" training and experience opportunities.

The median (50th percentile) wage offer for all job vacancies is \$19.68 per hour in 2023. Figure 6 shows the median wage offers from 2002 to 2023 in current dollars as well as in inflation adjusted dollars. The 2023 median wage offer is easily the highest in the survey's history. Despite this, as the orange line in Figure 6 shows, wage offers have been just barely beating inflation over the 21-year data series and have been mostly flat over the last three years.

Figure 6: Job offers, current dollars and adjusted dollars, Minnesota, 2002 to 2023



Source: Minnesota Job Vacancy Survey and Consumer Price Index

Conclusion

The total number of payroll jobs in Minnesota reached pre-pandemic levels in the summer of 2023 and has continued to grow, albeit at a slower pace than the previous two years. An aging workforce, especially among Minnesota's white population, which caused the total labor force to shrink by 8,066 people over the last 12 months through April 2024, is likely constraining job growth. On the positive side, labor force participation rates for Black, Asian, women and teen workers in Minnesota continued to grow this year. Overall, labor force participation dropped by six-tenths of a point over the last 12 months to 68.0% in April 2024 (12-month average). This further tightened the labor market, pushing the unemployment rate down to 2.7% in the last six months through April 2024.

The number of job vacancies, down in 2023 by almost 25% from second quarter 2022, also indicate a slight slowing in the job market. Despite this, the ratio of unemployed workers to job vacancies is still extremely low, at only 0.6, which

means that some industries are continuing to experience hiring difficulties. Wage offers continued to grow but were essentially offset by inflation.

The picture over the last 12 months in Minnesota's labor market is in line with the Federal Reserve's goal to curb inflation with a "soft landing" with continued, albeit slowing, job growth and hiring, alongside continued low unemployment. This likely represents the new normal for Minnesota's job market for the foreseeable future.



Central Minnesota Holds Steadfast

By [Luke Greiner](#)

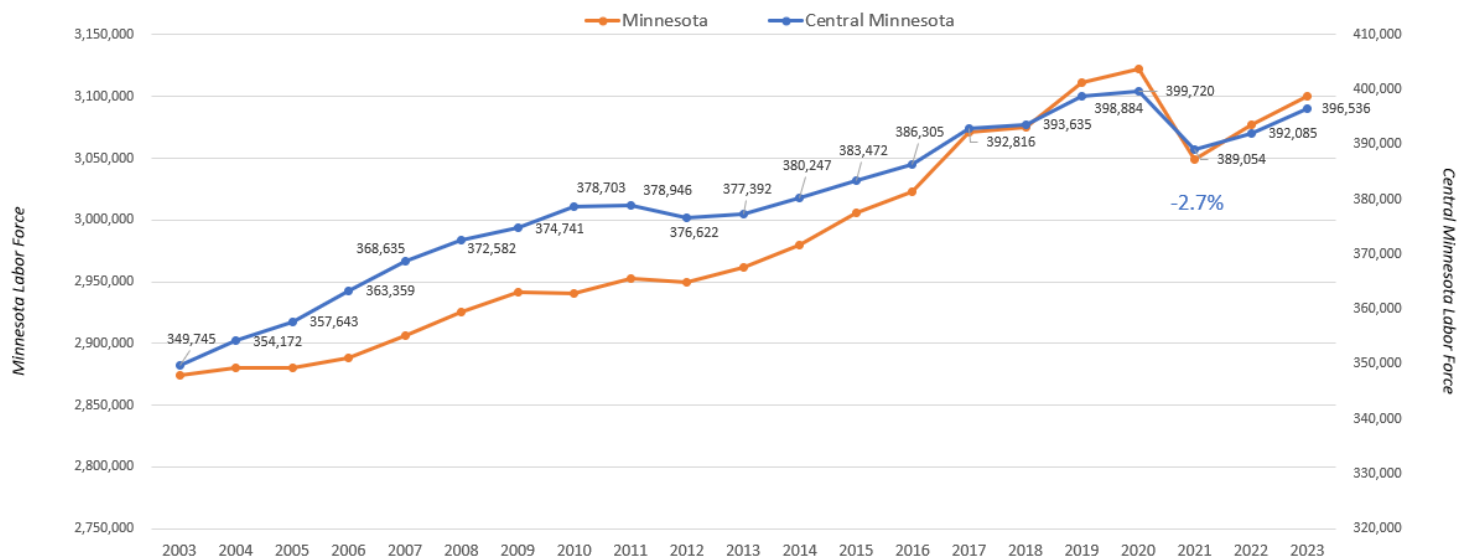
June 2024

With employment finally surpassing pre-pandemic levels, most data point to a strong and growing economy in Central Minnesota, although the shadow of the Pandemic Recession still looms. While inflation has slowed, prices for many consumer goods remain noticeably higher than a few years ago – and the labor market remains tight, mostly unfazed by federal monetary policy. This labor market is good news for job seekers, but the hiring and retention challenges for employers remain, almost becoming an accepted norm.

The past year brought a full recovery of jobs to Central Minnesota, but the number of workers remains below 2019 levels. It might sound conflicting to say the region has more jobs but fewer workers, but there are subtle differences in the datasets that can explain the divergence. DEED's [Local Area Unemployment Statistics](#) program counts the number of workers living in the region, regardless of where they are employed; while DEED's [Quarterly Census of Employment & Wages](#) counts the number of jobs at covered employer establishments located in the region, regardless of who is working there or where they live.

Thousands of workers in Central Minnesota commute to the Twin Cities and other regions for work, and likewise workers from outside the region also commute in for jobs inside the 13-county region, filling jobs without increasing the labor force. Other nuances include that a worker can be working in multiple jobs, thereby increasing the number of jobs without necessarily increasing the number of workers. Additionally, covered employment data does not include self-employment, but counts of the labor force do. This means a worker who leaves an employer to start their own business would produce a "job loss" but remain counted as a worker.

Figure 1: Labor Force Trends



After peaking in 2020 at 399,720 workers, Central Minnesota experienced what played out across the country—an incredible exodus from the labor market. By 2021, nearly 3% of workers had left the region's labor force, slightly worse than the -2.3% decline across Minnesota. But after losing roughly 10,700 workers in 2021, the region's labor force began clawing back some of that deficit. By 2023, net labor force levels were down just -0.8% from the peak in 2020, or 3,184 workers. Minnesota barely bested the region with its recovery, down -0.7% over the same period (see Figure 1).

Most counties in Central Minnesota also ended with fewer workers in 2023 than they had in 2020. Only Kanabec, Meeker, Wright, and Sherburne counties have managed to recover their labor force back to 2020 levels. Table 1 illustrates the variation in long-term labor force trends for counties in Central Minnesota, from long growth trajectories in counties like Sherburne, Wright, and Isanti, to modest growth in Mille Lacs, Meeker, and Pine, to declines in Kandiyohi, McLeod, and Renville counties.

Table 1: Labor Force Trends in Central Minnesota

County	2020-2023 Change		2014-2023 Labor Force Trends
	Numeric	Percent	
Benton	-345	-1.6%	
Chisago	-191	-0.6%	
Isanti	-45	-0.2%	
Kanabec	187	2.0%	
Kandiyohi	-1,342	-5.4%	
McLeod	-60	-0.3%	
Meeker	546	4.1%	
MilleLacs	-135	-1.0%	
Pine	-25	-0.2%	
Renville	-430	-5.0%	
Sherburne	-4	0.0%	
Stearns	-1,452	-1.6%	
Wright	112	0.1%	

Source: DEED, LAUS

Table 1 also shows how growth has occurred recently for every county except Renville. The upside for Renville County is that it avoided the steep losses found in most other counties. While the largest loss from 2020 to 2021 was in neighboring Kandiyohi, with a -5% loss, Renville managed a decline of just -2.3%.

Labor force numbers tell one aspect of the current labor market; but another important indicator is the utilization of the labor we have, using unemployment rates. The unemployment rate in Central Minnesota averaged 3.3% in 2023, the second lowest regional rate recorded in more than three decades. Rates through the first third of 2024 show no signs of loosening, so experiencing similar hiring challenges to last year is a reasonable expectation for employers. While the rate of unemployment is only a single measure, it says a lot about other aspects of the economy, such as consumer confidence, employment opportunities and bargaining power.

Labor Force vs. Jobs

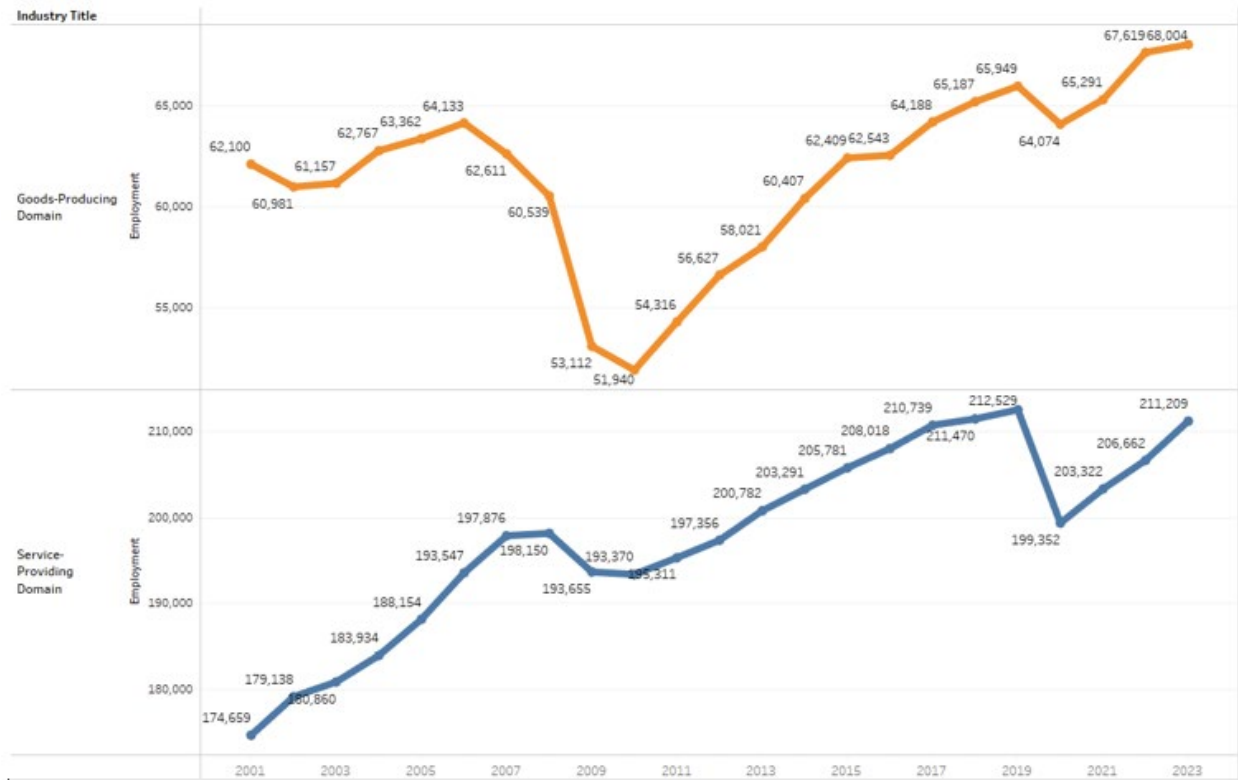
Understanding the economic condition of Central Minnesota requires more than just examining unemployment rates; employment numbers are equally crucial. Employment data differs from labor force data in several ways. Most importantly, it reflects not only employer demand for workers but also the ability of employers to fill job openings. Employment is recorded only when a position is filled, and the net changes represent shifts in the workforce.

Employment in Central Minnesota rebounded in 2023 to pre-pandemic levels, in line with Minnesota, but the rebound took three years and was still just 735 jobs higher than in 2019. This growth, which amounts to 0.3%, is a welcome sign of recovery, indicating a gradual but steady improvement in the region's economic health. However, employment recovery varies by industry domain and sectors within them.

Figure 2 illustrates net employment changes over the past two decades for the Goods-Producing domain and the Service-Providing domain in Central Minnesota. The Goods-Producing domain includes Natural Resources & Mining, Construction, and Manufacturing. All other industry sectors are contained within the Service-Providing domain.

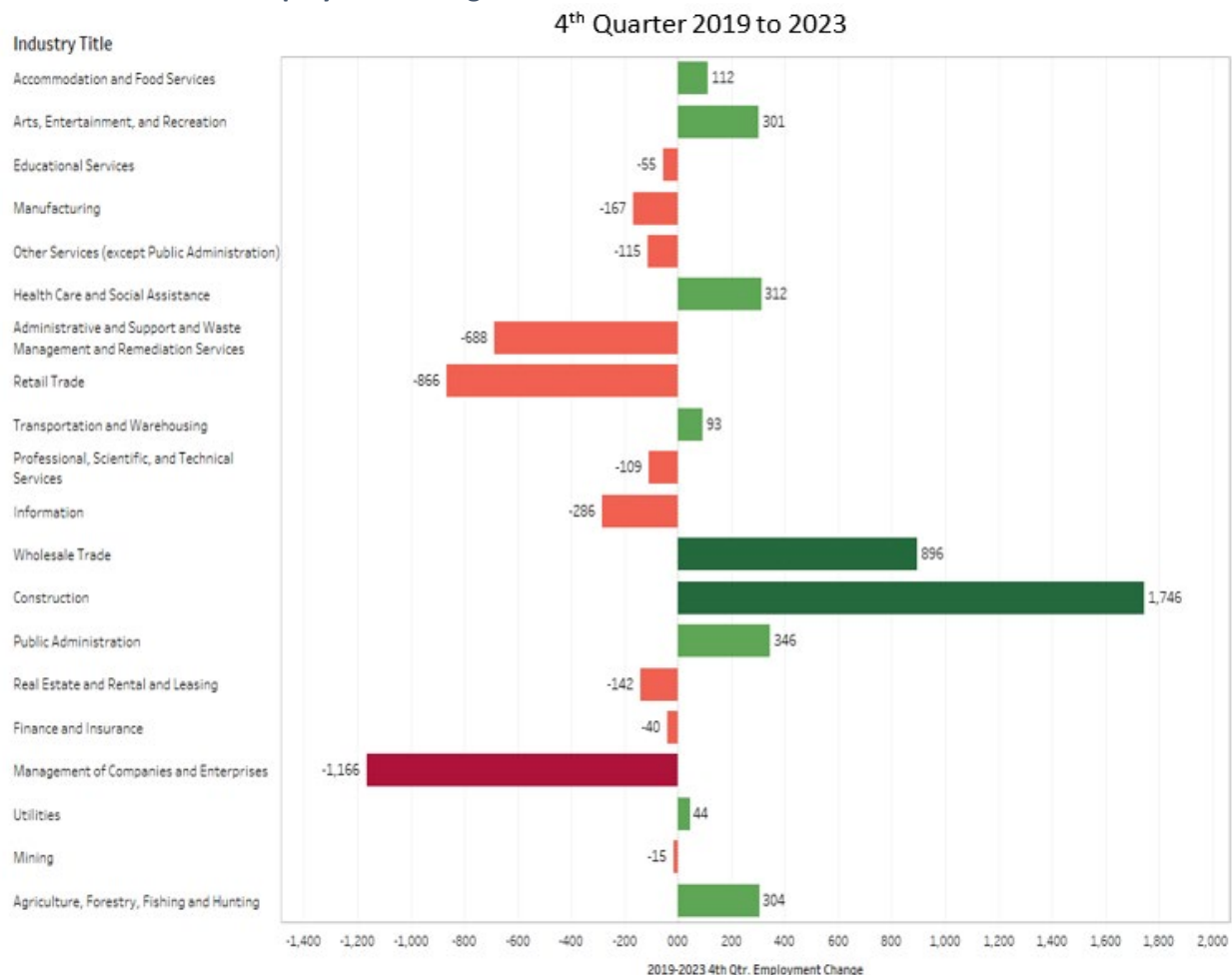
Unlike the Great Recession, the Goods-Producing component of the economy did relatively well in the recent recession and carried forward a 3% gain into 2024 compared to 2019, thanks to just over 2,000 net new jobs. In contrast, the Service-Providing domain still had 1,320 fewer jobs in 2023 compared to 2019, a loss of -0.6%. However, if the average growth from the five years leading up to the pandemic had held, the Service-Providing domain would have had more than 220,000 jobs by 2024. It would take a gain of more than 9,000 jobs to get there in Central Minnesota.

Figure 2: Employment Trends in Central Minnesota



Within the broad domains of the economy are much more divergent trends, even within the Goods-Producing domain. Figure 3 demonstrates how the largest component in Goods-Producing, Manufacturing, did not contribute to employment growth. Manufacturers have added about 2,200 jobs since 2020, but that was after losing about 2,400 jobs from 2019 to 2020. Instead, the domain was held afloat by large gains in Construction and Agriculture. From the fourth quarter of 2019 to 2023, Construction managed to grow employment by 9%, a remarkable feat considering the hiring difficulties. Agriculture added 300 jobs from 2019 to 2023, a 6.25% growth rate.

Figure 3: Central Minnesota Employment Change



Source: DEED, QCEW

Meanwhile, nine of the Service-Providing industry sectors were still at a net loss through the end of 2023. It should be noted that the large losses in Management of Companies are not reflective of physical employment change, but rather a classification change that artificially and temporarily boosted employment in 2019.

The Leisure & Hospitality sector, comprised of Accommodation & Food Services and Arts, Entertainment & Recreation, has made a remarkable recovery in the region. Central Minnesota is the only region in the state to have more employment in both sectors by the end of 2023 compared to 2019, with gains of 112 jobs in Accommodation & Food Services and 301 net new jobs in Arts, Entertainment & Recreation.

The related Retail Trade sector has been showing less favorable signs. The industry has been adding jobs since the dramatic losses of 2020 and is on track to recover, but at its current growth rate, it will take another two to three years barring significant shifts in the business cycle.

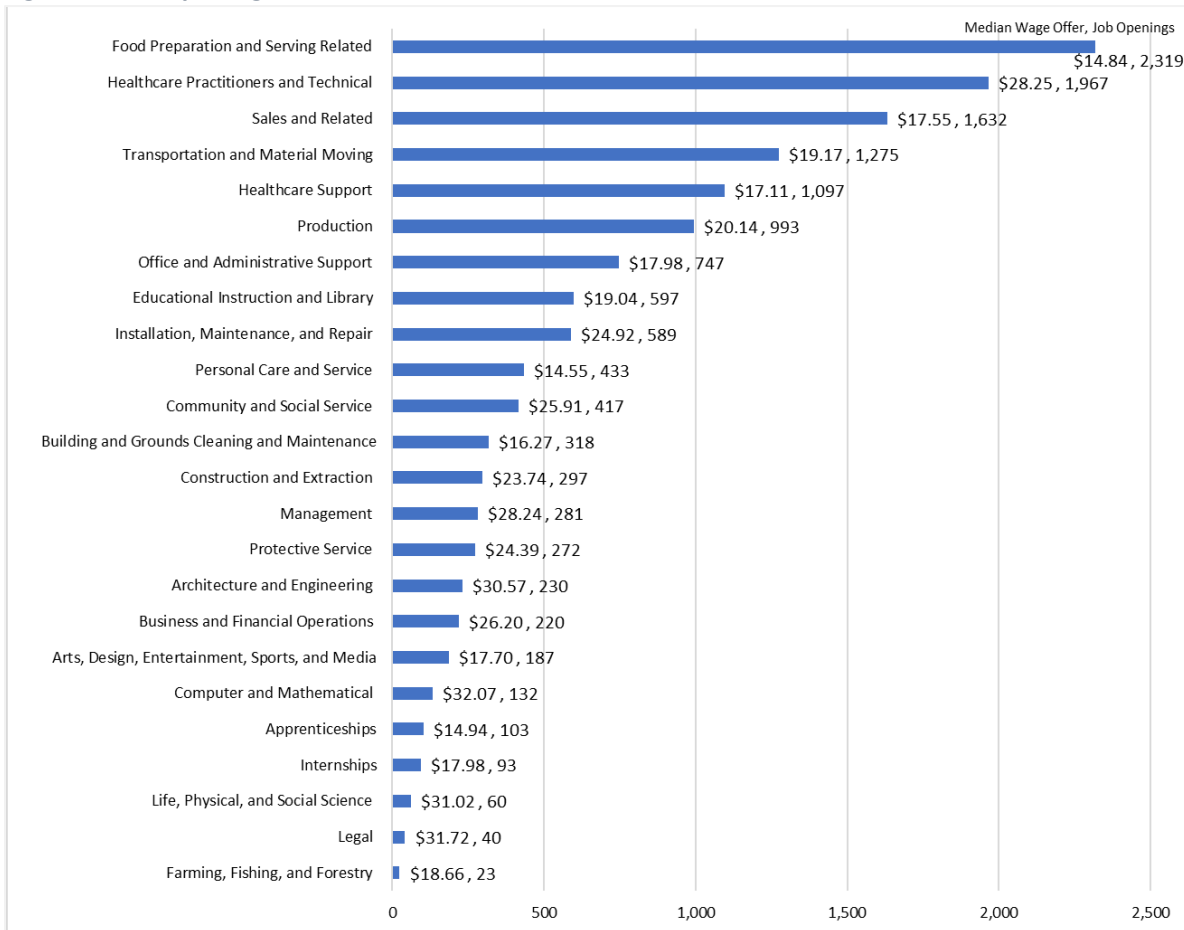
Jobs vs. Job Openings

The last piece of the recovery puzzle is contained in data about job openings, as detailed in the latest [Job Vacancy Survey](#) results. Through 2023, Central Minnesota employers posted just over 14,000 openings, a substantial decline from the record levels set in 2021 and 2022, but well above historical norms and matching the numbers posted leading up to 2020. If all 14,320 openings were immediately filled, Central Minnesota's employment would grow by 5%, and nearly every sector would be in the green compared to 2019.

For context, Retail Trade employment was down 866 jobs from the fourth quarter of 2019 to 2023 (see Figure 3), but retailers posted an average of 2,289 openings throughout 2023. With high numbers of job openings simultaneous with employment decline compared to 2019, it's likely that the tight labor market is holding back employers' ability to hire to the level they want to.

Food Prep & Serving-related occupations are the most common openings, with more than 2,300 openings and a median wage offer of \$14.84 per hour. Healthcare occupations also posted large numbers of openings and higher-than-typical starting wages. The highest wage offers were for Computer & Mathematical occupations, while Personal Care & Service occupations had the lowest median hourly wage offers at \$14.55 (see Figure 4).

Figure 4: Job Openings in Central Minnesota, 2023



Source: DEED, JVS

The Way Forward

Turning job openings into actual employment is crucial for Central Minnesota's economy to reach its pre-pandemic peak across all sectors. For this to happen, the labor force needs to continue growing and employer demand for labor must remain steady. Despite data indicating a robust job market for jobseekers, matching individuals with desirable employment remains a significant challenge. While abundant job openings are encouraging, it still requires candidates with the right skills and interests to fill these positions successfully.



The Metro Area's Labor Market in Motion

By [Tim O'Neill](#)
June 2024

Entering the summer months of 2024, the Seven-County Twin Cities Metro Area continues to witness a labor market in constant motion. With brand new labor force statistics, industry statistics, and hiring demand data, we can get a unique look at this motion over the months and years. The data allows us to see how the Metro Area's labor market fits into Minnesota's labor market, and how it has differed over time. Looking into the data, we can begin to understand how the region has recovered from the Pandemic Recession and where challenges persist.

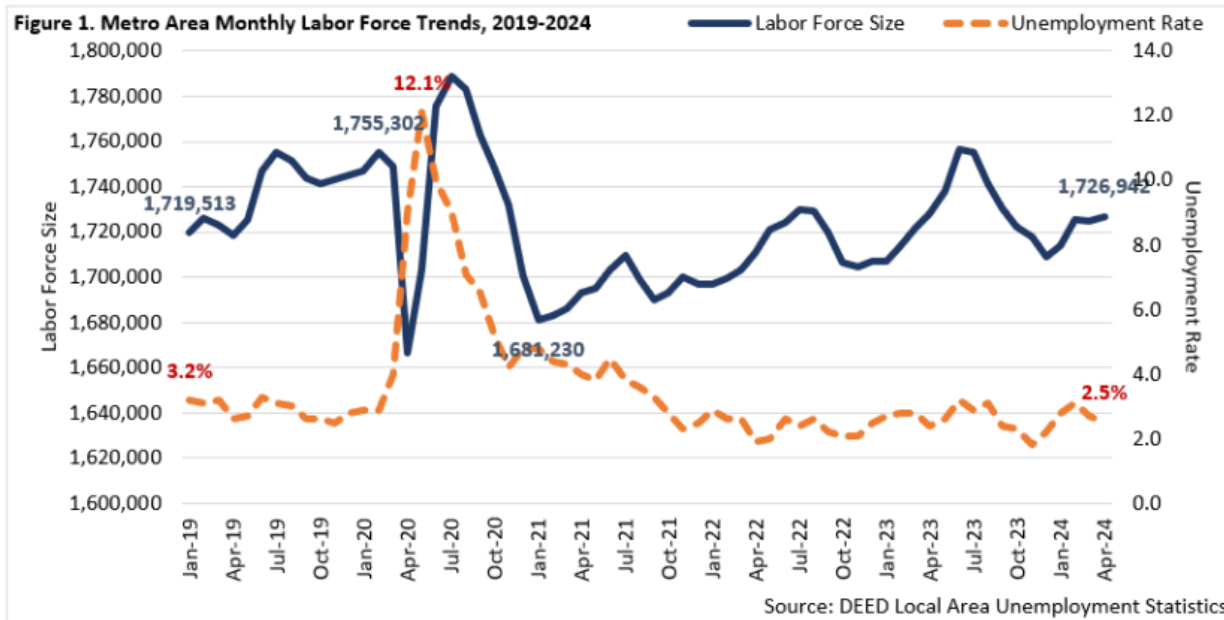
Labor Force Trends in the Metro Area

According to [Local Area Unemployment Statistics \(LAUS\)](#), the Metro Area's labor force reached an annual average of around 1,728,500 workers in 2023. The labor force includes all persons 16 years of age and older, living within a specified geographic area who are either employed or unemployed but who were available for work and made a specific effort to find work in the last four weeks. Additionally, unemployed persons include new entrants to the labor force, re-entrants, job losers and job leavers. The number includes many more people than just those who have filed claims for unemployment insurance. In sum, the labor force size is a count of persons, not jobs, and is available by location of residence and not by location of work.

The labor force size across Minnesota, including within the Metro Area, has been closely watched over the past years and decades. Much of this analysis is due to an aging population and labor force, as well as the lingering impacts of COVID-19. After seeing steady growth for decades, between February 2020 and April 2020, the Metro Area's labor force plummeted by 88,900 people (-5.1%). Then with some fluctuation, the labor force was able to recover 14,800 people (+0.9%) through January 2021.

Since that time, between January 2021 and April 2024, the region's labor force expanded by a further 45,700 people (+2.7%). While recent growth has been encouraging, there's no escaping the fact that the Metro Area's labor force is still down by nearly 28,400 persons since February 2020, immediately pre-pandemic (see Figure 1).

Figure 1: Metro Area Monthly Labor Force Trends, 2019-2024



Source: DEED Local Area Unemployment Statistics

This loss isn't unique to the Metro Area. Between February 2020 and April 2024, Minnesota's labor force is still down nearly 34,100 persons (-1.1%). [Recent articles and analysis](#) point to several reasons why the state's labor force has yet to match or exceed pre-COVID levels, including slower population growth rates, declines in labor force participation rates for older workers, and an aging population. Higher household incomes and more widespread access to retirement

accounts in Minnesota compared to neighboring states is also a likely factor leading to increased retirements for Minnesota workers.

Longer term, the Metro Area's labor force has grown by 6.2% between 2013 and 2023. This is equivalent to just over 101,500 additional workers in a ten-year period. Despite declines during the pandemic, more recent annual trends also showcase encouraging growth. Between 2022 and 2023, the Metro Area's labor force expanded by 0.9%. This was equivalent to nearly 15,800 people. The region's seven counties all experienced labor force growth during this period, led by Hennepin County's additional 6,400 workers. Scott County and Carver County witnessed the smallest but fastest labor force growth between 2022 and 2023, each expanding by 1.1% (Table 1).

Table 1. Metro Area Labor Force Statistics, Annual 2023 Sorted by Labor Force Size

Area	Labor Force Size	2022 – 2023 Labor Force Change	Unemployment	Unemployment Rate
United States	167,116,416	+2,829,250 (+1.7%)	6,079,916	3.6%
Minnesota	3,099,922	+22,422 (+0.7%)	87,215	2.8%
Metro Area	1,728,472	+15,766 (+0.9%)	44,877	2.6%
Hennepin County	708,159	+6,421 (+0.9%)	18,281	2.6%
Ramsey County	286,615	+2,276 (+0.8%)	7,705	2.7%
Dakota County	243,607	+2,302 (+1.0%)	6,215	2.6%
Anoka County	199,737	+1,830 (+0.9%)	5,511	2.8%
Washington County	145,662	+1,375 (+1.0%)	3,552	2.4%
Scott County	84,925	+897 (+1.1%)	2,151	2.5%
Carver County	59,767	+665 (+1.1%)	1,462	2.4%

Source: DEED Local Area Unemployment Statistics

As previously mentioned, the labor force, in part, consists of those unemployed persons actively searching for work. Over 2023, the Metro Area had approximately 44,900 unemployed persons, which equated to an unemployment rate of 2.6%. This was slightly lower than the statewide unemployment rate of 2.8% and a full percentage point lower than the national annual rate of 3.6%. By county, unemployment ranged from 2.4% in Carver and Washington counties to 2.8% in Anoka County (Table 1).

Industry Trends in the Metro Area

On an annual average basis in 2023, the Twin Cities had 93,760 establishments supplying 1,754,325 covered jobs. This is according to DEED's [Quarterly Census of Employment and Wages \(QCEW\)](#). Total annual payroll for the region equaled \$137.4 billion, with the average annual wage equal to \$78,364. That was the highest of the six planning regions in the state.

Health Care & Social Assistance is the Metro Area's largest-employing industry sector with 291,689 covered jobs at 13,854 establishments. Manufacturing is the second largest with 175,817 covered jobs at 4,031 establishments, and Retail Trade ranks third with 154,854 covered jobs at 8,263 establishments. Altogether, those three industries account for over one-third (35.5%) of the Metro Area's total employment. Other large-employing industry sectors with over 100,000 jobs in the region include: Educational Services; Accommodation & Food Services; Professional, Scientific, & Technical Services; and Finance & Insurance (Table 2).

Management of Companies is the major industry sector with the highest average annual wage in the Metro Area, at \$141,856. Other industries with significantly higher average annual wages include Finance & Insurance (\$140,920); Mining (\$135,356); Utilities (\$134,056); Professional, Scientific & Technical Services (\$121,680); Information (\$112,944); and Wholesale Trade (\$106,184). The industries with lower average annual wages include Accommodation & Food Services (\$29,120); Retail Trade (\$41,184); Agriculture (\$43,992); and Other Services (\$49,556).

Table 2. Twin Cities Metro Area Industry Statistics, Annual 2023 Sorted by Number of Jobs

Industry	Number of Establishment	Number of Jobs	Share of MN Jobs	Total Payroll (\$1,000s)	Avg. Annual Wage
Total, All Industries	93,760	1,754,325	60.4%	\$137,438,190	\$78,364
Health Care & Social Assistance	13,854	291,689	57.0%	\$18,810,573	\$64,428
Manufacturing	4,031	175,817	54.0%	\$15,587,650	\$88,660
Retail Trade	8,263	154,854	54.6%	\$6,381,791	\$41,184
Educational Services	2,415	134,138	58.3%	\$8,632,091	\$64,168
Accommodation & Food Services	6,498	132,817	58.7%	\$3,870,211	\$29,120
Professional, Scientific, & Technical Services	12,307	126,045	75.0%	\$15,333,156	\$121,680
Finance & Insurance	5,087	103,848	73.8%	\$14,641,763	\$140,920
Administrative & Support Services	4,622	88,559	68.0%	\$4,776,070	\$53,924
Construction	7,121	80,018	56.0%	\$7,338,998	\$91,832
Wholesale Trade	5,287	78,820	59.1%	\$8,371,123	\$106,184
Management of Companies	1,035	77,570	86.7%	\$11,000,111	\$141,856
Transportation & Warehousing	2,173	77,550	67.7%	\$5,587,550	\$72,072
Public Administration	807	74,495	54.3%	\$5,928,651	\$79,560
Other Services	11,436	55,509	61.5%	\$2,750,482	\$49,556
Arts, Entertainment, & Recreation	1,879	34,429	66.3%	\$1,898,837	\$55,380
Information	2,042	30,049	62.3%	\$3,395,003	\$112,944
Real Estate & Rental & Leasing	4,447	27,000	76.2%	\$1,973,863	\$73,164

Industry	Number of Establishment	Number of Jobs	Share of MN Jobs	Total Payroll (\$1,000s)	Avg. Annual Wage
Utilities	112	6,932	48.0%	\$927,646	\$134,056
Agriculture	306	3,614	15.5%	\$158,361	\$43,992
Mining	39	569	9.9%	\$74,261	\$135,356

Source: DEED Quarterly Census of Employment and Wages (QCEW)

DEED's QCEW data also zooms in on more detailed industry levels. At the 3-digit North American Industry Classification System (NAICS) level, the largest-employing industries in the Metro Area in 2023 include: Educational Services (134,138 jobs); Professional, Scientific & Technical Services (126,045 jobs); Food Services & Drinking Places (118,388 jobs); Ambulatory Health Care Services (91,575 jobs); Administrative & Support Services (84,465 jobs); Social Assistance (80,539 jobs); Management of Companies (77,570 jobs); Hospitals (66,539 jobs); Merchant Wholesalers, Durable Goods (53,184 jobs); and Nursing & Residential Care Facilities (53,034 jobs). These finer levels of industry analysis provide for a more complete understanding of what makes the Metro Area unique.

Overall, the Metro Area accounts for three-fifths (60.4%) of Minnesota's total employment. Along with analyzing those in-depth industries with high levels of employment in the region, we can also analyze industry concentrations. This type of analysis, using [location quotients](#), points to those industries that are especially concentrated in the Metro Area. Over 20 detailed industry subsectors in the Metro Area have location quotients of 1.2 or more, while also providing more than 2,000 covered jobs. All these industries have more than 70.0% of their respective statewide employment right within the Metro Area (listed in order based on highest location quotient):

- Petroleum & Coal Products Manufacturing
- Air Transportation
- Management of Companies
- Performing Arts, Spectator Sports, & Related Industries
- Securities, Commodity Contracts, & Other Financial Investments & Related Activities
- Computer & Electronic Product Manufacturing
- Warehousing & Storage
- Insurance Carriers & Related Activities
- Support Activities for Transportation
- Miscellaneous Manufacturing
- Rental & Leasing Services
- Administration of Housing Programs, Urban Planning, & Community Development
- Real Estate
- Professional, Scientific, & Technical Services
- Internet Service Providers, Web Search Portals, & Data Processing Services
- Administration of Economic Programs
- Chemical Manufacturing
- Couriers & Messengers
- Publishing Industries
- Personal & Laundry Services
- Museums, Historical Sites, & Similar Institutions
- Social Assistance

Altogether, these highly concentrated industries account for over 550,000 jobs in the Metro Area. Most of these industries are high-paying as well, with half of them paying out average wages of over \$100,000.

Table 3. Metro Area Industry Trends, Annual 2019 – 2023 Sorted by Number of Jobs

Industry	Number of Jobs, 2023	2019 – 2023 Job Change		2022 – 2023 Job Change	
		Numeric	Percent	Numeric	Percent
Total, All Industries	1,754,325	-22,114	-1.2%	+24,269	+1.4%
Health Care & Social Assistance	291,689	+12,742	+4.6%	+12,183	+4.4%
Manufacturing	175,817	+2,756	+1.6%	+1,148	+0.7%
Retail Trade	154,854	-9,964	-6.0%	+1,035	+0.7%
Educational Services	134,138	-1,018	-0.8%	+2,722	+2.1%
Accommodation & Food Services	132,817	-8,277	-5.9%	+5,729	+4.5%
Professional, Scientific, & Technical Services	126,045	+72	+0.1%	-894	-0.7%
Finance & Insurance	103,848	-11,228	-9.8%	-2,713	-2.5%
Administrative & Support Services	88,559	-8,726	-9.0%	-4,635	-5.0%
Construction	80,018	+4,305	+5.7%	+1,706	+2.2%
Wholesale Trade	78,820	+1,689	+2.2%	+629	+0.8%
Management of Companies	77,570	-1,338	-1.7%	+1,535	+2.0%
Transportation & Warehousing	77,550	+3,753	+5.1%	+318	+0.4%
Public Administration	74,495	+1,390	+1.9%	+2,711	+3.8%
Other Services	55,509	-1,836	-3.2%	+1,936	+3.6%
Arts, Entertainment, & Recreation	34,429	-2,098	-5.7%	+1,514	+4.6%
Information	30,049	-5,173	-14.7%	-1,300	-4.1%
Real Estate & Rental & Leasing	27,000	-448	-1.6%	+129	+0.5%
Utilities	6,932	+710	+11.4%	+437	+6.7%
Agriculture	3,614	+541	+17.6%	+116	+3.3%
Mining	569	+36	+6.8%	-37	-6.1%

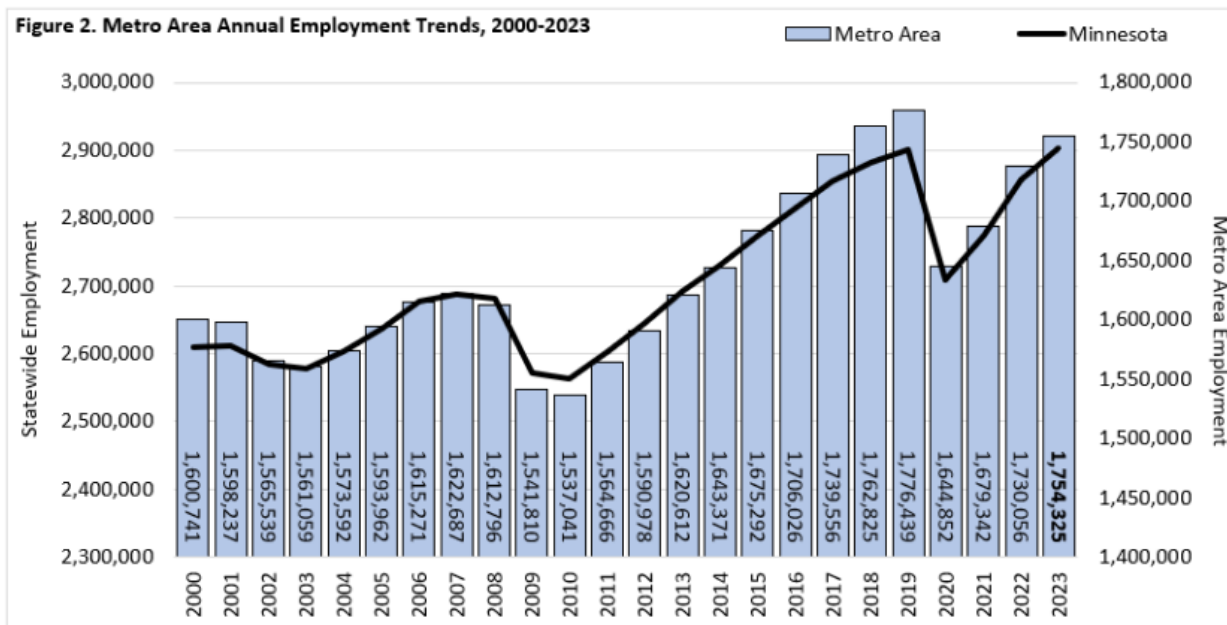
Source: DEED Quarterly Census of Employment and Wages (QCEW)

The Metro Area gained nearly 24,300 jobs between 2022 and 2023. The corresponding annual employment growth rate of 1.4% was slightly behind the statewide employment growth rate of 1.7% during that period. By industry, the biggest

gains over the year were in Health Care & Social Assistance (+12,183 jobs), Accommodation & Food Services (+5,729 jobs) and Public Administration (+2,711 jobs). Large job gains were also experienced in: Other Services; Construction; Management of Companies; Arts, Entertainment, & Recreation; Manufacturing; and Retail Trade. Overall, 15 of 20 major industries in the Metro Area added jobs between 2022 and 2023. Employment losses were experienced in Administrative & Support Services; Finance & Insurance; Information; Professional, Scientific, & Technical Services; and Mining (Table 3).

Even with the recent growth, the Metro Area is still down just over 22,100 jobs from 2019 to 2023. The corresponding employment decline of -1.2% was slightly behind the statewide employment growth rate of 0.1% during that period (Figure 2). Overall, 10 of 20 major industries are above their pre-COVID levels of employment. These industries include Health Care & Social Assistance, Construction, and Transportation & Warehousing. The industries experiencing the most significant declines during that period include Finance & Insurance, Retail Trade, Administrative & Support Services, Accommodation & Food Services, and Information.

Figure 2: Metro Area Annual Employment Trend, 2000-2023



Source: DEED Quarterly Census of Employment and Wages

By county, employment growth rates between 2022 and 2023 were slightly higher for Scott (+2.6%) and Carver County (+2.1%) and slightly lower for Dakota (+1.1%) and Hennepin County (+1.2%). Between 2019 and 2023, employment growth rates were led by Scott (+10.6%), Washington (+5.9%), Anoka (+3.3%), and Carver County (+1.9%). Employment losses during that period were experienced for Ramsey (-3.3%), Hennepin (-2.5%), and Dakota County (-2.0%).

Along with those employment trends by industry and geography, we can also analyze demographic shifts in the Metro Area's labor market over time. Utilizing the [Census Bureau's Quarterly Workforce Indicators \(QWI\)](#) program, data reveals the region's aging and diversifying labor force. For example, between the second quarters of 2019 and 2023, the number of Metro Area jobs held by workers 65 years of age and older increased by 15.6%, even while total employment in the region declined by 1.3% during that period.

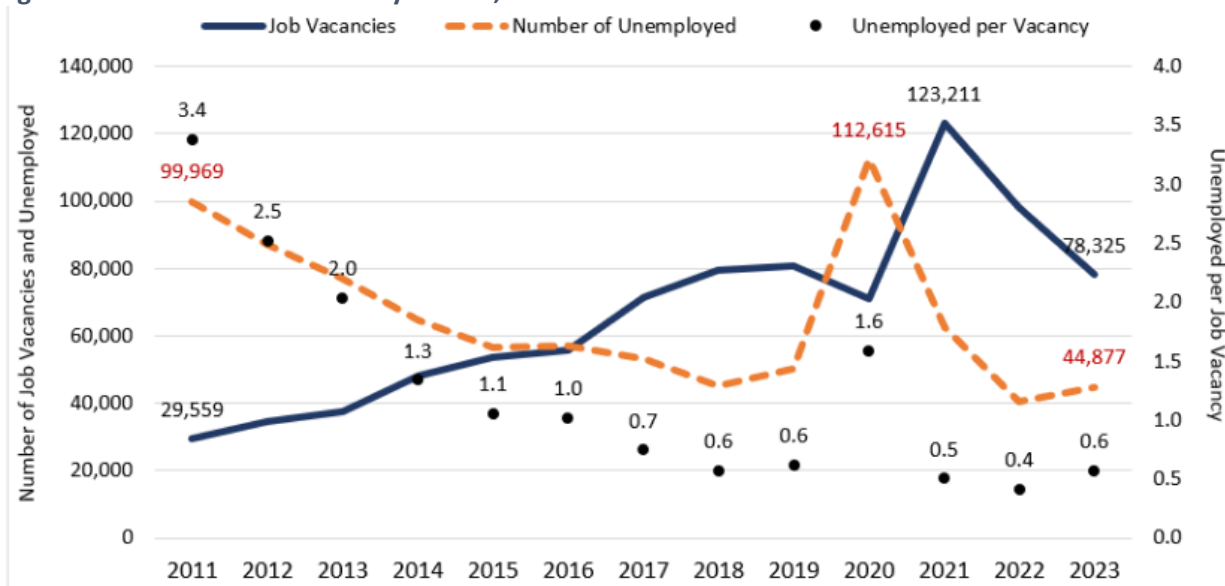
Meanwhile, where the number of jobs held by workers reporting as white declined by 3.3% between the second quarters of 2019 and 2023, all other race and ethnic groups witnessed growth. The number of jobs held by workers reporting Hispanic or Latino origin surged by 15.7%, compared to a 12.2% jump for workers reporting Two or More Races, a 6.7% increase for Black or African Americans, a 6.2% rise for workers reporting as Asian or Other Pacific Islander, and the number of jobs held by workers reporting as American Indian or Alaska Native increased by 5.9%.

Hiring Demand in the Metro Area

As the Metro Area's industry employment continues to recover the losses experienced during the COVID-19 recession, employers across the region are looking for workers to fill both new and replacement openings. According to DEED's [Job Vacancy Survey \(JVS\)](#), there were over 78,300 job vacancies in the Metro Area during 2023. This level of demand was

down about 20%, or just over 20,000 job vacancies, from the historically high levels witnessed in 2022. Despite this drop in hiring demand over-the-year, job vacancies reported in 2023 are still higher than average and are similar to the rising levels of hiring demand experienced in the regional labor market pre-COVID. In fact, the more than 78,300 job vacancies reported by Metro Area employers in 2023 were the fifth highest number of average annual vacancies recorded since DEED's JVS data first became available in 2001.

Figure 3: Metro Area Job Vacancy Trends, 2011-2023



Source: DEED Job Vacancy Survey, Local Area Unemployment Statistics

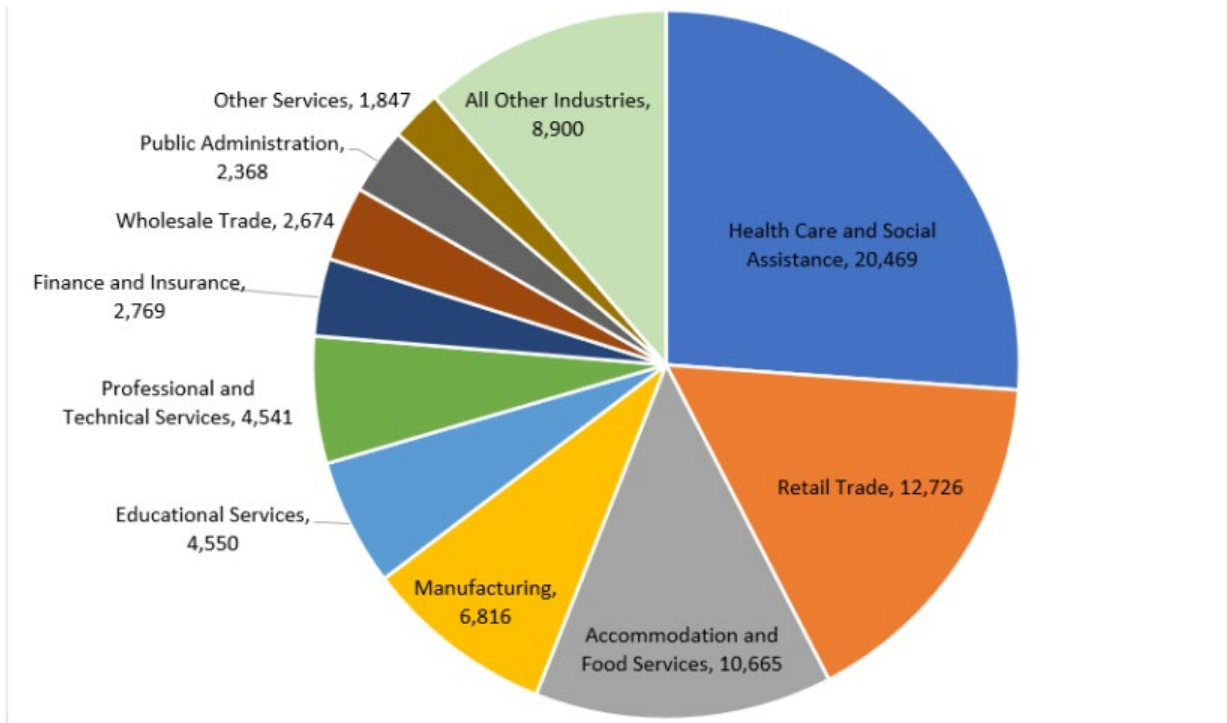
While hiring demand lessened over the year, comparing Metro Area job vacancies to the number of unemployed persons reveals the continued tightness of the labor market. The 0.6 unemployed persons per job vacancy in 2023 matches the number of unemployed persons per job vacancy in 2018 and 2019, meaning there are still nearly two vacancies for every one unemployed job seeker (Figure 3).

Health Care & Social Assistance led all industries in the Metro Area with nearly 20,500 job vacancies during 2023. In fact, this industry accounted for over one-quarter (26.1%) of the region's total job vacancies. Retail Trade and Accommodation & Food Services each had over 10,000 job vacancies during 2023. Altogether, these three industries accounted for well over half (56.0%) of the Metro Area's total job vacancies (Figure 4).

Other industries with a high share of job vacancies in the region include Manufacturing, Educational Services, Professional & Technical Services, Finance & Insurance and Wholesale Trade. It should be noted that the Metro Area accounted for over half (56.3%) of Minnesota's total job vacancies in 2023. Those industries with higher shares of job vacancies in the region included Finance & Insurance (86.9% of Minnesota's total job vacancies), Management of Companies (82.3%), Professional & Technical Services (79.9%), Real Estate & Rental & Leasing (66.6%), Information (64.5%) and Wholesale Trade (63.4%).

DEED's JVS data also reveals the occupational groups and specific occupations with the most hiring demand in the Metro Area. The major occupational groups with the most job vacancies in the region in 2023 included Food Preparation & Serving Related occupations, Sales & Related occupations, and Healthcare Practitioners & Technical occupations. Altogether, these three occupational groups accounted for over one-third (38.4%) of the region's total job vacancies. Other occupational groups with a high number of job vacancies included Healthcare Support, Office & Administrative Support, Business & Financial Operations, and Transportation & Material Moving occupations.

Figure 4: Metro Area Job Vacancies by Industry, 2023



The specific occupations with the most job vacancies in 2023 included Retail Salespersons, Fast Food & Counter Workers, First-Line Supervisors of Food Preparation & Serving Workers, Personal Care Aides and Registered Nurses. For the total of all vacancies, the median hourly wage offer was \$20.47 (Table 4). Of all vacancies, 27% were for part-time work, 5% were temporary or seasonal jobs, 50% required one or more years of work experience and 39% required some level of post-secondary education. Job seekers and employers can utilize the job vacancy data to look up these specific characteristics by industry, occupational group, and occupation.

Table 4. Metro Area Occupational Demand, 2023 Sorted by Number of Job Vacancies

SOC Code	Occupational Title	Number of Job Vacancies	Median Hourly Wage	Share Part-Time Work	Share Requiring Postsecondary Education
000000	Total, All Occupations	78,325	\$20.47	27%	39%
412031	Retail Salespersons	4,025	\$15.64	46%	4%
353023	Fast Food & Counter Workers	3,443	\$14.35	52%	0%
351012	First-Line Supervisors of Food Prep & Serving Workers	2,820	\$18.42	6%	2%
311122	Personal Care Aides	2,592	\$16.76	36%	3%
291141	Registered Nurses	2,488	\$36.11	41%	98%
411011	First-Line Supervisors of Retail Sales Workers	1,696	\$19.41	18%	9%
412011	Cashiers	1,587	\$15.82	43%	5%
537065	Stockers & Order Fillers	1,442	\$16.08	49%	9%

SOC Code	Occupational Title	Number of Job Vacancies	Median Hourly Wage	Share Part-Time Work	Share Requiring Postsecondary Education
311131	Nursing Assistants	1,432	\$18.13	51%	31%
434051	Customer Service Representatives	1,218	\$17.91	20%	12%
259045	Teaching Assistants, Except Postsecondary	950	\$18.16	55%	26%
132011	Accountants & Auditors	945	\$32.01	6%	96%
436013	Medical Secretaries & Administrative Assistants	936	\$19.96	47%	34%
911111	Internships	902	\$19.86	21%	88%
352021	Food Preparation Workers	870	\$16.98	35%	0%
151252	Software Developers	867	\$45.20	0%	83%
352014	Cooks, Restaurant	853	\$16.97	38%	3%
319092	Medical Assistants	815	\$19.15	16%	53%
292061	Licensed Practical & Licensed Vocational Nurses	800	\$25.93	30%	98%
499071	Maintenance & Repair Workers, General	776	\$20.94	8%	14%

Source: DEED Job Vacancy Survey

Conclusion

The Twin Cities Metro Area continues to experience very tight labor market conditions. Throughout 2023 and the beginning months of 2024, unemployment remained low, even as more workers joined the labor force. And while hiring demand dipped between 2022 and 2023, vacancy levels remain high, especially in industries like Health Care & Social Assistance, Retail Trade, Accommodation & Food Services and Manufacturing. Analyzing these trends reveals a regional labor market in constant motion. This is especially true as the Metro Area continues to recover from the impacts of the Pandemic Recession, and as the labor market continues to witness rapidly shifting demographics.



A New Equilibrium in Northeast?

By [Carson Gorecki](#)

June 2024

After four long years, Minnesota's labor force is nearing pre-pandemic levels, an indication of economic resilience and recovery. However, Northeast Minnesota is one of four regions that has not yet reached that milestone (see Table 1). According to DEED's [Local Area Unemployment Statistics](#), the labor force of the northeastern corner of the state remains 2.1% lower than in 2019, a deficit equivalent to just under 3,450 workers as of March of this year. The number of employed persons

had a slightly smaller deficit.

The good news is that the discrepancy between labor force and employment reflects a relatively large percent decline (-23.7%) in the number of unemployed persons. That decline represented an average of 1,760 fewer people who were looking but had not found work during the twelve-month period ending in March. By this measure the regional labor market remained tight at the beginning of 2024, but there were some signs of potential loosening.

Table 1. Labor Force, Employment, and Unemployment Percent Change by Area, 2019-2024*

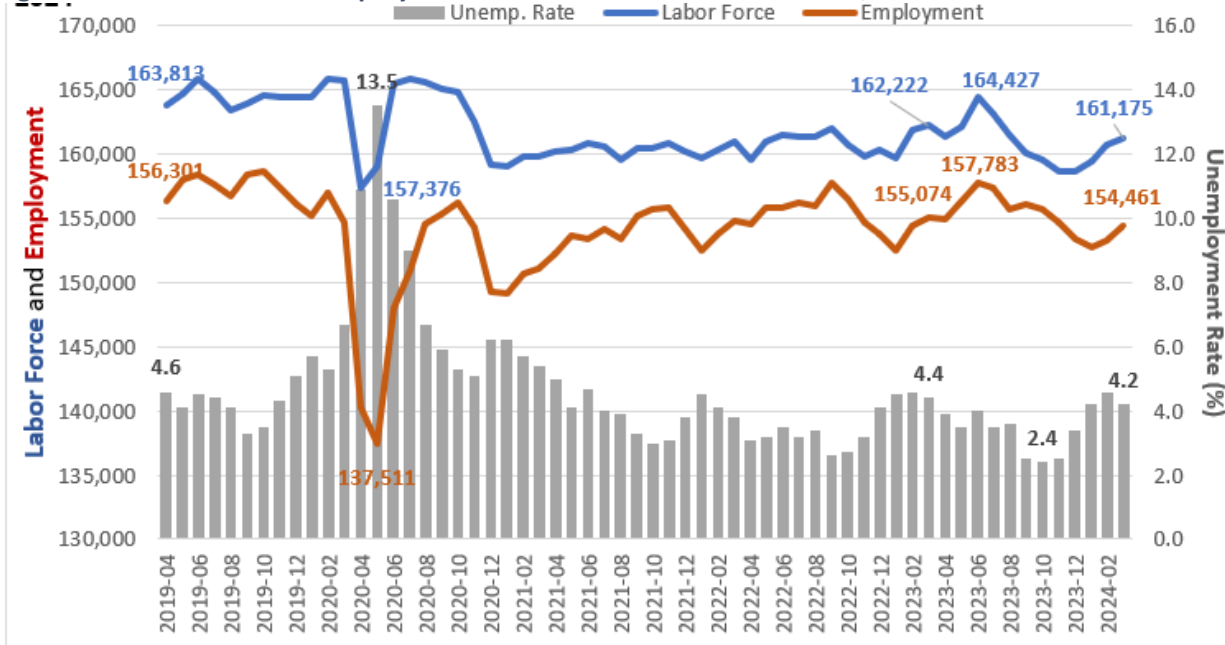
Measure	Minnesota	7- County Twin Cities Metro Area	Northwest Minnesota	Northeast Minnesota	Southeast Minnesota	Southwest Minnesota	Central Minnesota
Labor Force	-0.3%	-0.4%	1.7%	-2.1%	0.4%	-1.8%	-0.6%
Employment	0.2%	-0.1%	2.7%	-1.1%	1.0%	-1.2%	0.0%
Unemployment	-14.4%	-9.8%	-21.8%	-23.7%	-17.8%	-19.7%	-14.1%

*12 month rolling average ending March 2024, Source: DEED Local Area Unemployment Statistics

Detailed regional data shed some more light on recent labor force and unemployment trends. Since March 2021, when the pandemic labor force tumult began to calm, the labor force has added a net of just over 1,400 workers. That is an average monthly increase of 39 additional workers across the seven-county area. More recently, that growth slowed and even turned toward decline. Over the past year the labor force shrank by more than 1,000 workers, equivalent to an average monthly loss of 87 workers.

However, those that were in the labor force were less likely to be unemployed. The average unemployment rate for the 12 months ending in March 2024 was 3.5%. Even in the relatively tight labor market conditions of the three years leading up to the pandemic, the regional rate was on average a full percentage point higher (4.6% from 2017-2019). The 2.4% rate recorded in October 2023 holds the record as the lowest monthly rate in the history of the series for Northeast Minnesota, which dates back to 1990. The regional monthly unemployment rate has dipped below 3% just five times, all in the last two years (see Figure 1).

Figure 1: Labor Force & Unemployment Trends in Northeast Minnesota, 2019-2024



Source: Local Area Unemployment Statistics

The most recent unemployment rate was lower now than it was in 2019 in all seven counties (see Table 2). The regional rate was down a fifth from five years prior. Local labor force trends were slightly more mixed. Only Aitkin had more people in the labor force in March 2024 than in 2019, despite (or maybe due to) being the oldest county in the state. Compared to 2019, the largest remaining labor force deficits existed in Lake (-5.4%), Cook (-4.2%) and Koochiching (-3.4%) counties. Koochiching also had the largest over-the-year decline (-2.5%) while Itasca (+0.7%) had the largest relative labor force growth. Only two counties (Lake and Itasca) added workers over the year.

Table 2. Unemployment Rate and Labor Force by County in Northeast Minnesota, 2019-2024

Area	Unemployment Rate		Labor Force		
	Current Rate (Mar 2024)	Pre-Pandemic Rate (Mar 2019)	Current Labor Force (Mar 2024)	Difference from Pre-Pandemic (Mar 2019)	Over the Year Change
Northeast Minnesota	4.2%	5.3%	161,175	-3,124	-1,047
Duluth-Superior MSA	4.0%	4.8%	141,437	-2,728	-973
Aitkin Co.	6.5%	8.6%	7,535	+245	-20
Carlton Co.	4.4%	5.6%	17,715	-405	-177
Cook Co.	5.6%	6.0%	2,773	-121	-13
Itasca Co.	5.6%	7.0%	21,804	-65	+154
Koochiching Co.	4.6%	6.0%	5,703	-216	-140
Lake Co.	3.2%	4.6%	5,123	-294	+15
St. Louis Co.	3.6%	4.6%	100,522	-2,268	-866
City of Duluth	2.7%	3.5%	45,255	-707	-282

Source: Local Area Unemployment Statistics

Industry Employment and Wages

According to new 2023 annual averages from DEED's [Quarterly Census of Employment & Wages](#), Northeast Minnesota was home to 138,333 jobs at nearly 9,300 business establishments. In 2023, those jobs brought home over \$7.77 billion in total wages for an average annual wage of \$56,160.

Of the six planning regions in the state, Northeast Minnesota saw the largest percent employment decline in 2020 (-8.2%), due to the Pandemic Recession. After the loss of about 11,800 jobs from 2019 into 2020, regional employment has steadily recovered, but not fully. As of 2023, employment levels remained about 5,350 jobs short of pre-pandemic job counts, and the 3.7% deficit remained the largest among the planning regions (see Table 3).

More recently, the local economy added 1,817 jobs between 2022 and 2023, an increase of 1.3%. The rate of employment growth, beginning at 1.9% in 2020-2021 and dropping to 1.5% in 2021-2022, has slowed slightly each year following the initial downturn in 2020.

Table 3. Over-the-Year Percent Employment Change by Area, 2019-2023

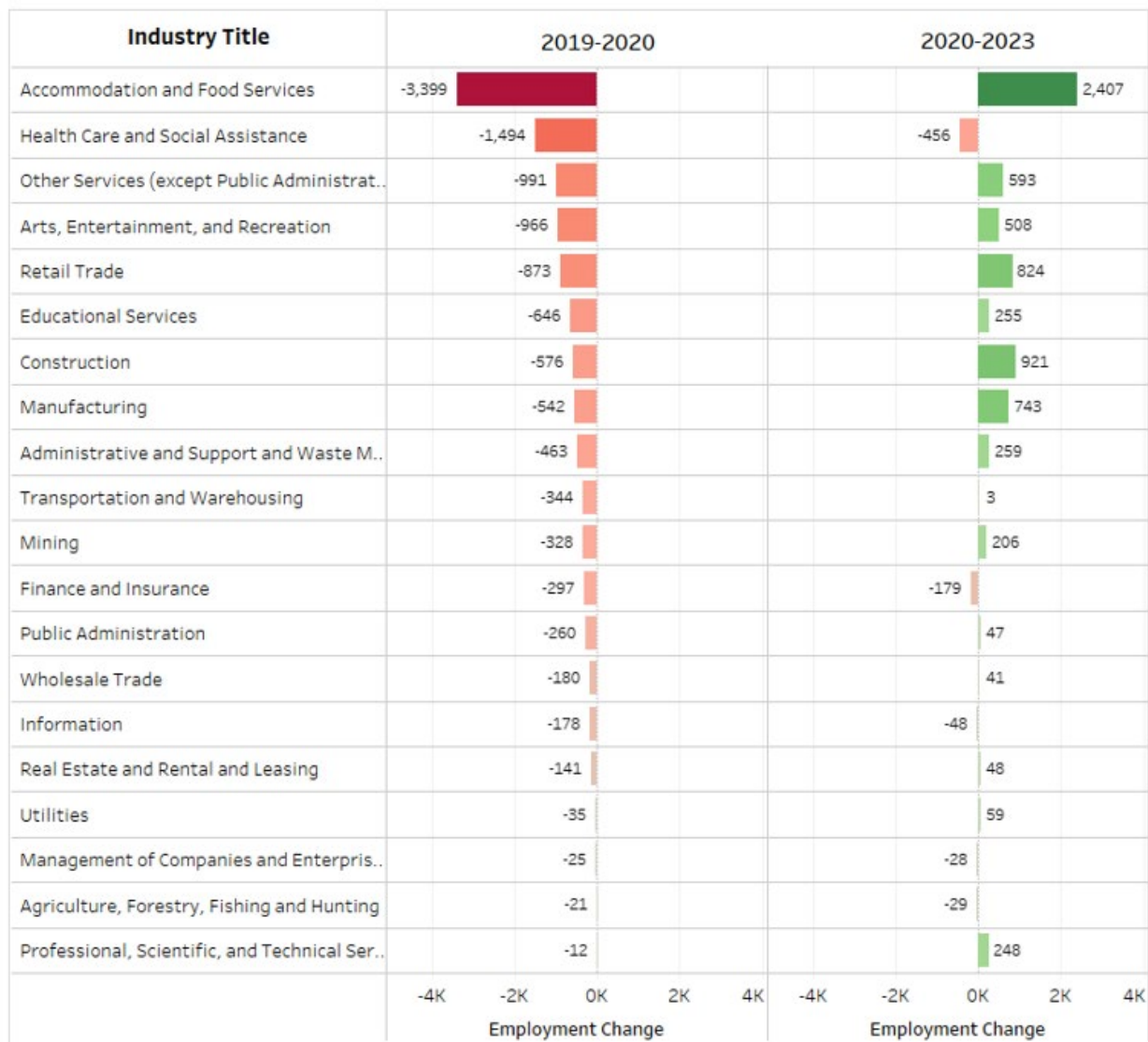
Area	2019-2020	2020-2021	2021-2022	2022-2023	2019-2023 Percent Change	2019-2023 Numeric Change
Northeast Minnesota	-8.2%	+1.9%	+1.5%	+1.3%	-3.7%	-5,350
Central Minnesota	-5.4%	+2.0%	+2.1%	+1.8%	+0.3%	+735
Northwest Minnesota	-5.5%	+3.5%	+1.6%	+1.4%	+0.7%	+1,631
Twin Cities Metro Area	-7.4%	+2.1%	+3.0%	+1.4%	-1.2%	-22,114
Southeast Minnesota	-5.5%	+2.1%	+0.9%	+1.5%	-1.3%	-3,141
Southwest Minnesota	-5.3%	+1.0%	+1.7%	+0.7%	-2.1%	-3,683
State of Minnesota	-6.7%	+2.5%	+2.9%	+1.7%	+0.1%	+1,632*

*Regions may not sum to state total due to unallocated statewide employment. Source: MN DEED Quarterly Census of Employment and Wages

Every industry sector in Northeast Minnesota experienced employment loss from 2019 into 2020. However, not all industries experienced severe employment losses, and individual trajectories since 2020 have varied. Service-providing sectors such as Accommodation & Food Services, Health Care & Social Assistance, and Other Services experienced large losses in 2020.

From that point their fates diverged. Accommodation & Food Services, Other Services, and most other service-providing sectors experienced recoveries to varying extents over the subsequent three years. Health Care & Social Assistance along with Finance & Insurance were notable exceptions. Their losses continued, albeit at a much slower pace compared to 2020. Only in 2022-2023 did Health Care & Social Assistance start to add jobs back, with 474 net new jobs. Likewise, Public Administration saw three years of consecutive employment loss followed by one year of growth, which was large enough to reverse the deficit (see Figure 2).

Figure 2: Over-the-year Employment Change, 2019-2020 and 2020-2023



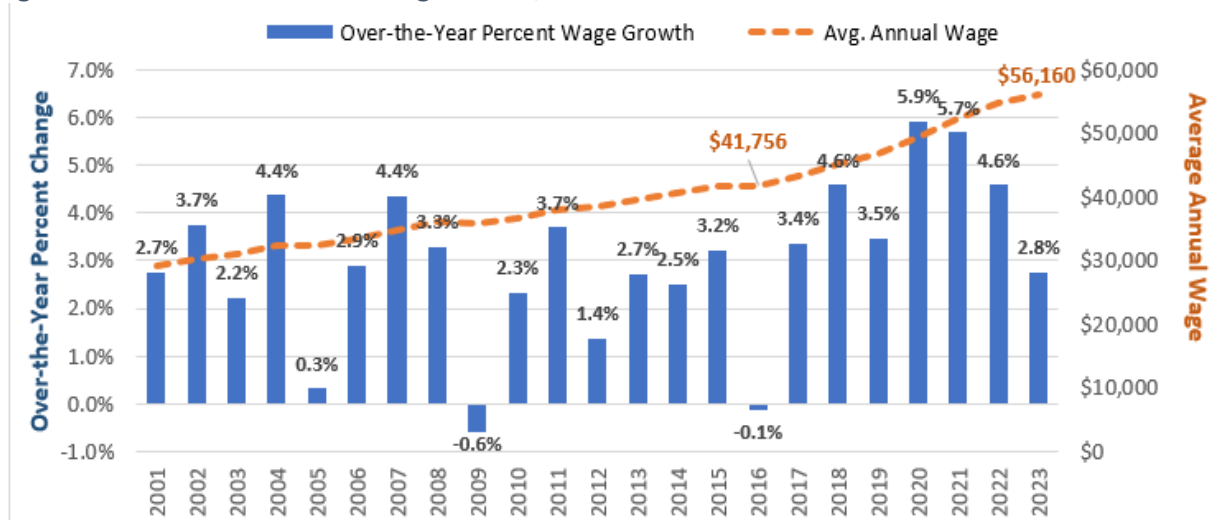
Source: MN DEED Quarterly Census of Employment and Wages

Retail Trade, the second-largest employing sector in the region, followed up a smaller-than-average decline in 2020 with above average growth in the subsequent three years. And while still in the red, Retail Trade had the smallest remaining employment deficits (-0.3%) among service-providing sectors when compared to 2019 levels.

The two service-providing sectors that bucked the trend and ended 2023 with more jobs than in 2019 were Professional, Scientific & Technical Services and Utilities. What these sectors share is a close association with the goods-producing sectors that largely fared well over the pandemic period, like Construction and Manufacturing. Almost all the employment growth in Professional, Scientific, and Technical Services occurred between 2020 and 2021. Utilities followed one year of relatively minor losses with three consecutive years of gains. The same trend occurred in Manufacturing and Construction, the two sectors that were in the top three for absolute and relative employment change over the last four years.

Wages were equally dynamic over the past several years. The average annual wage in 2023 in Northeast Minnesota was \$56,160. Up 2.8% from 2022, wage growth slowed from earlier, more robust increases. The regional average wage was up 7.4% from 2021, up 13.6% from 2020, and up 20.3% from 2019 (see Figure 3).

Figure 3: Northeast Minnesota Wage Trends, 2001-2023



Source: DEED Quarterly Census of Employment and Wages

Just like employment trends, wage outcomes varied greatly by sector. In general, lower-paying sectors saw larger wage gains. The lowest-paying sector, Accommodation & Food Services, saw the largest relative wage growth (+31.2%) since 2019. Arts, Entertainment & Recreation and Retail Trade – two more lower wage sectors – also saw above-average wage gains. Finance & Insurance, Health Care & Social Insurance and Professional, Scientific & Technical Services were the sectors with above average wages and above-average wage growth (see Table 4).

Table 4. Wage Trends by Sector in Northeast Minnesota, 2019-2023

Industry Title	2019-2023 Percent Change	2022-2023 Percent Change	2023 Annual Average Wage
Accommodation and Food Services	31.2%	5.9%	\$22,516
Finance and Insurance	30.3%	2.1%	\$77,012
Real Estate and Rental and Leasing	29.7%	7.7%	\$42,224
Arts, Entertainment, and Recreation	25.3%	6.7%	\$30,680
Retail Trade	22.7%	1.9%	\$33,436
Health Care and Social Assistance	22.3%	3.6%	\$63,232
Professional, Scientific, and Technical Services	21.8%	5.9%	\$79,300
Administrative Support and Waste Management Services	21.7%	5.5%	\$36,972
Total, All Industries	20.3%	2.8%	\$56,160
Agriculture, Forestry, Fishing and Hunting	19.8%	12.6%	\$47,840
Mining	19.3%	-8.5%	\$116,532
Construction	18.0%	4.7%	\$75,764

Industry Title	2019-2023 Percent Change	2022-2023 Percent Change	2023 Annual Average Wage
Wholesale Trade	18.0%	5.4%	\$73,788
Public Administration	16.5%	4.2%	\$62,452
Other Services (except Public Administration)	15.7%	2.4%	\$33,332
Transportation and Warehousing	14.8%	1.2%	\$61,620
Manufacturing	14.0%	2.5%	\$70,200
Educational Services	13.5%	2.4%	\$52,780
Information	11.9%	5.3%	\$53,144
Management of Companies and Enterprises	11.5%	-4.7%	\$95,732
Utilities	6.7%	4.8%	\$109,980

Source: MN DEED Quarterly Census of Employment and Wages

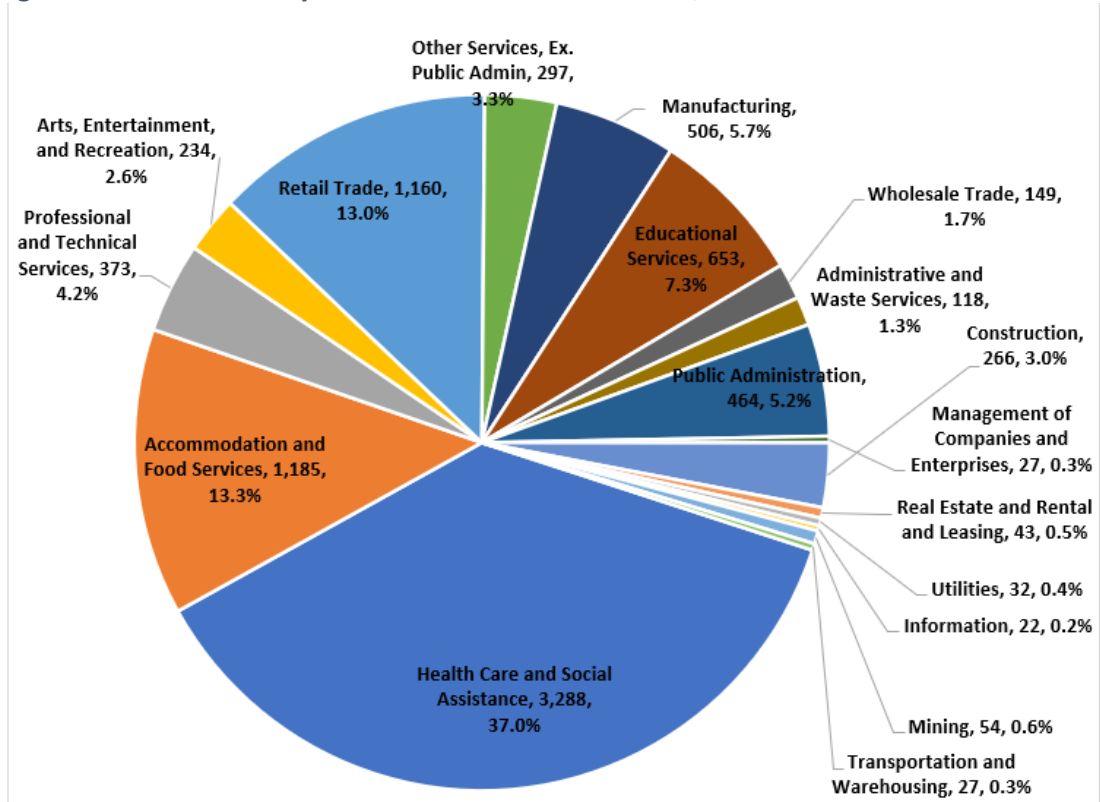
Conversely, the smallest relative wage gains from 2019-2023 occurred in two of the highest-paying sectors: Management of Companies and Utilities. Mining, the sector with the highest wages, had strong wage gains early on but experienced the largest wage losses over the last year. Other Services was one of the lowest-paying sectors that experienced below-average gains.

Job Vacancies

With an estimated 9,000 job vacancies in 2023, the number of job openings fell by more than a quarter from the previous year. While the number of vacancies fell to the lowest point since 2020, the overall level remained higher than pre-pandemic levels. From 2016-2019, regional job vacancies averaged around 7,750. Despite having the fewest total vacancies among the planning regions, at 6.6%, Northeast Minnesota had the highest vacancy rate, which is the comparison of open jobs to filled jobs. The statewide rate in 2023 was 5.1%.

As in previous years, the sector with the most vacancies was Health Care & Social Assistance, with nearly 3,300 regional openings or 37% (see Figure 4). Accommodation & Food Services (13.3% of vacancies) and Retail Trade made up the next largest shares. The share of vacancies in Health Care & Social Assistance and Accommodation & Food Services fell over the year, down from 48.1% and 18.6% respectively. Given the overall decrease, most sectors saw declines in the number of vacancies. The sectors with growth in vacancies were Construction, Manufacturing, Mining, Professional, Scientific & Technical Services, Public Administration, Other Services, Wholesale Trade and Management of Companies.

Figure 4: Job Vacancies by Sector in Northeast Minnesota, 2023



Source: DEED Job Vacancy Survey

The occupations with the most vacancies were Healthcare Practitioners & Technical (1,244), Food Preparation & Serving Related (1,043), Healthcare Support (982) and Sales & Related (826). The highest vacancy rates were for the Installation, Maintenance & Repair (11.9%), Legal (11.6%), Personal Care & Service (11.1%) and both Healthcare Practitioners & Technical and Healthcare Support occupational groups listed above (10.7%-10.9%). Conversely, Construction & Extraction (0.8%), Computer & Mathematical (1.6%) and Management (1.9%) had the lowest vacancy rates in the region.

The median wage offers for all vacancies in the region rose 6.5% to \$18.49 in 2023 from \$17.36 an hour in 2022. The 6.5% wage offer growth in Northeast Minnesota trailed the 7.4% statewide wage offer growth. The highest median wage offers were for Management (\$39.89), Architecture & Engineering (\$36.71), Computer & Mathematical (\$35.32) and Healthcare Practitioners & Technical (\$34.84) occupations. The lowest wage offers were for Personal Care & Service (\$14.10), Food Preparation & Serving Related (\$14.24), Healthcare Support (\$15.95) and Sales & Related (\$16.06) positions.

Part-time positions made up 30% of vacancies and temporary openings accounted for 10% of vacancies. Just over a third of all vacancies required some type of postsecondary education or training, and 45% required a certification. Vacancies for positions requiring certifications made up the highest shares among Legal (100%), Healthcare Practitioners & Technical (99%), Community & Social Service (91%) and Protective Service (90%) occupations.

Forty-one percent of vacancies required at least one year of work experience, but that varied significantly by occupational group. At the high end were Management (88%), Computer & Mathematical (79%), Architecture & Engineering (77%) and Business & Financial Operations (77%). At the low end were Internships (2%), Healthcare Support (3%) and Transportation & Material Moving Occupations (9%).

Conclusion

The decline in the number of job vacancies combined with slowing or reversing wage, employment, and labor force growth point toward a potential loosening of the historically tight labor market in Northeast Minnesota. At the same time, unemployment remains at record lows, indicating continued demand for workers in the region. Looking back a year from now, this period could prove to be one of transition from the years-long recovery from the Pandemic Recession into a new, post-pandemic equilibrium. Only time and the data available will tell.



The Northwest Minnesota Labor Market Is Driven by Long-Term Trends...Again

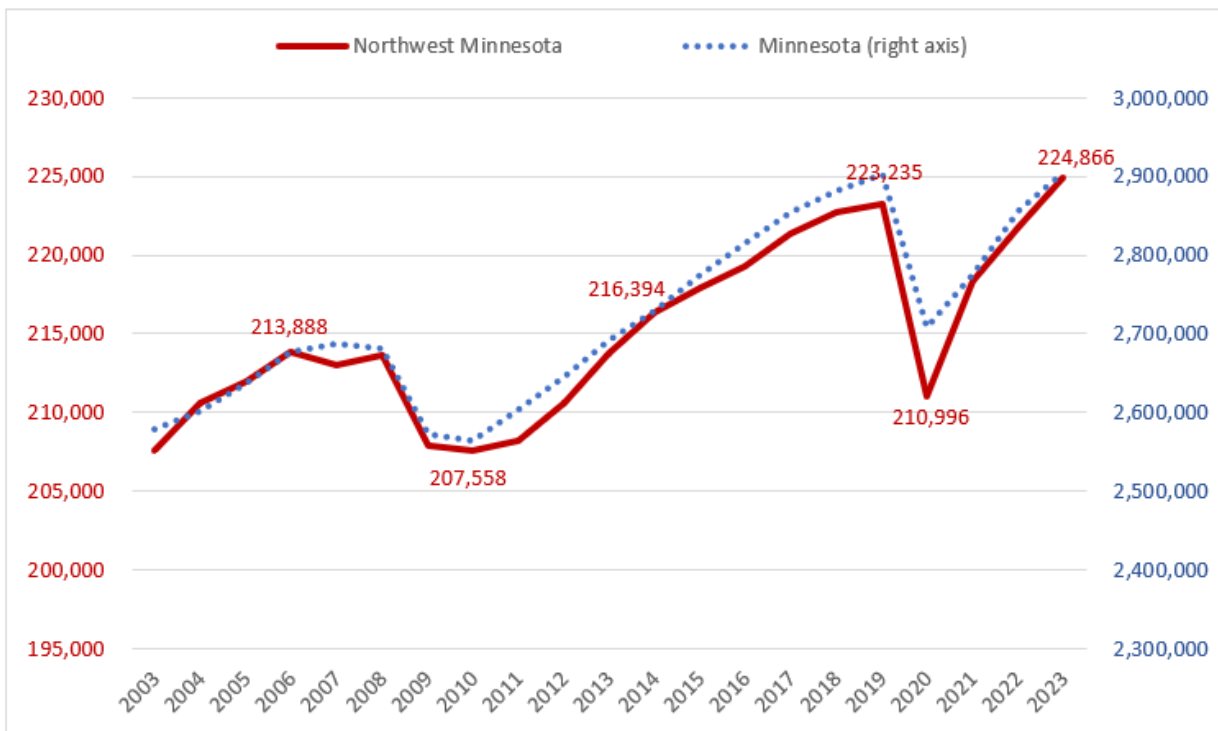
By [Anthony Schaffhauser](#)
June 2024

With employment now gaining ground – total employment has surpassed its prior high of 2019 both in Northwest Minnesota and in Minnesota statewide – it is natural to think of this as a new era. With that frame of mind, we assess the state of the Northwest Minnesota labor market from the long-term trend perspective.

Employment is back on trend

Employment in Northwest recovered from the Pandemic Recession by 2023 (Figure 1). This was a much faster recovery than after the Great Recession. Northwest Minnesota's annual employment was at its Great Recession low in 2007 at 207,548 jobs, and it took until 2014 to surpass the prior annual employment high of 213,888. So, while the economic expansion after the Great Recession was the longest in history, the labor market only started gaining ground about halfway through it.

Figure 1: Employment in the Northwest Minnesota Region and Minnesota Statewide, 2003 to 2023



Source: DEED, Quarterly Census of Employment and Wages

In contrast, at just two months long the Pandemic Recession was the shortest in history and was followed by a historically tight labor market with a record number of job vacancies and record low unemployment. In 2022, there were an estimated 2.5 vacancies for every job seeker in Northwest. So, even if every job seeker had been an immediate fit for an open job, 60% of jobs would still have gone unfilled. Clearly employment would have recovered even faster if there had been enough workers for all the open positions.

The Northwest has 1,631 more jobs in 2023 than in 2019, which is 0.73% growth. Remarkably, 0.73% happens to be the annualized job growth rate from 2013 to 2019. Job growth appears to have picked right back up where it left off. The 2023 employment recovery matches the growth trend from right about when the labor market recovered from the Great Recession up until the pandemic. Does this mean everything is back to normal?

While overall employment is back, employment for some industry sectors is drastically different. From 2015 to 2019, ten of the 20 industry sectors had significantly above average growth: Agriculture, Construction, Manufacturing, Finance & Insurance, Professional & Technical, Educational Services, Health Care & Social Assistance, Accommodation & Food

Services, Other Services and Public Administration. Of these ten, only Agriculture, Manufacturing, and Other Services, have continued 2015 to 2019 growth with similar growth from 2019 to 2023. The other seven had their trend altered by the pandemic (see Table 1).

Table 1: Northwest Minnesota Industry Employment Trends, 2015 to 2023, and 2023 Average Weekly Wages

NAICS Code	Industry Title	Employment			2015 to 2019 Change		2019 to 2023 Change		2023 Avg. Weekly Wages
		2015	2,019	2023	Jobs	Percent	Jobs	Percent	
0	Total, All Industries	217,864	223,235	224,866	+5,371	+2.5%	+1,631	+0.7%	\$988
11	Agriculture, Forestry, Fish & Hunting	5,046	5,288	5,502	+242	+4.8%	+214	+4.0%	\$1,023
21	Mining	243	210	214	-33	-13.6%	+4	+1.9%	\$1,349
23	Construction	10,856	11,370	12,983	+514	+4.7%	+1,613	+14.2%	\$1,303
31	Manufacturing	28,625	29,478	30,203	+853	+3.0%	+725	+2.5%	\$1,239
22	Utilities	1,318	1,283	1,289	-35	-2.7%	+6	+0.5%	\$1,945
42	Wholesale Trade	11,452	11,150	11,590	-302	-2.6%	+440	+3.9%	\$1,334
44	Retail Trade	27,907	27,844	28,114	-63	-0.2%	+270	+1.0%	\$647
48	Transportation & Warehousing	6,386	6,117	6,059	-269	-4.2%	-58	-0.9%	\$1,032
51	Information	2,885	2,600	2,602	-285	-9.9%	+2	+0.1%	\$1,202
52	Finance & Insurance	5,784	5,961	5,824	+177	+3.1%	-137	-2.3%	\$1,448
53	Real Estate & Rental & Leasing	1,469	1,510	1,563	+41	+2.8%	+53	+3.5%	\$890
54	Professional & Technical Services	4,414	4,751	4,590	+337	+7.6%	-161	-3.4%	\$1,291
55	Management of Companies	880	695	549	-185	-21.0%	-146	-21.0%	\$2,109
56	Admin. Support & Waste Mgmt	5,258	4,075	3,997	-1,183	-22.5%	-78	-1.9%	\$820
61	Educational Services	21,453	22,683	22,427	+1,230	+5.7%	-256	-1.1%	\$956
62	Health Care & Social Assistance	36,690	39,185	39,089	+2,495	+6.8%	-96	-0.2%	\$1,079
71	Arts, Entertainment & Recreation	4,815	3,539	3,730	-1,276	-26.5%	+191	+5.4%	\$450
72	Accommodation & Food Services	20,452	22,294	22,184	+1,842	+9.0%	-110	-0.5%	\$428
81	Other Services, Ex. Public Admin	6,534	6,731	6,912	+197	+3.0%	+181	+2.7%	\$585
92	Public Administration	15,397	16,466	15,444	+1,069	+6.9%	-1,022	-6.2%	\$1,115

Goods-producing industries fared best

The goods-producing industry sectors (Agriculture, Forestry, Fishing & Hunting, Mining, Construction and Manufacturing) generally fared better through the Pandemic Recession than the rest, which are services-producing sectors.¹ In fact, employment in the entire goods-producing domain grew 3.5% in the four years prior to the pandemic, then had faster 5.5% growth since 2019. Goods producing sectors also have above average paychecks, adding wealth to the Northwest region. In contrast, employment for all services sectors combined grew 2.2% from 2015 to 2019 and declined 0.5% from 2019 to 2023.

Agriculture has been on a mostly non-stop employment growth trend since the early 2000s. Employment declined slightly in 2021, but 2022 exceeded 2019, and growth continued for 2023. Manufacturing is the second largest employing industry sector in the region and the largest of the goods-producing sectors, so its 3% growth from 2015 to 2019 provided the largest job gains. Manufacturing declined in 2020 but resumed job growth in 2021 and employment was above 2019 levels by 2022. Manufacturing is nearing its job count from back in 2004, at 30,304 jobs, but [productivity increases have limited the need for greater numbers of workers](#).

Construction had declined from its 2004 peak of 11,943 jobs to 9,688 in 2011. Growth ensued from there through 2019, but nothing like the surge during the pandemic. In 2021, Construction reached a new peak of 13,474 jobs. Although it took a breather in 2022, dropping to 12,514 jobs, it grew 3.7% from 2022 to 2023. This construction boom also stabilized Mining employment, which had been declining. Mining in the Northwest mainly supplies sand and gravel for construction. The pandemic recovery substantially strengthened Construction's prior growth trend.

Some services sectors started new uptrends, some continued previous uptrends, and some slowed previous downtrends

Like Construction, Wholesale Trade exited the Pandemic Recession with a strong employment uptrend. However, it had been trending down from its prior peak of 11,491 jobs in 2014. Employment dropped to 10,977 in 2020, and it started an uptrend in 2021. Wholesale Trade is the pandemic recovery star of the services-providing domain, adding the most jobs and having the second fastest growth behind Arts, Entertainment & Recreation. With the highest average weekly wages of any services sector with an employment growth trend, Wholesale Trade is a driver of the region's prosperity.

Like Wholesale Trade, Retail Trade and Arts, Entertainment & Recreation made a turnaround from employment decline to growth in the pandemic recovery. Real Estate & Rental & Leasing and Other Services are the other two services sectors with growth, but rather than making a turnaround, both are continuing their prior uptrend.

Finally, the following four industries had their pre-pandemic downtrends moderate in the pandemic recovery: Utilities, Transportation & Warehousing, Information and Administrative Support & Waste Management. Only one sector, Management of Companies, was in a downtrend that continued unaltered by the pandemic.

Some industries are recovering more slowly or may not trend back

Educational Services, Health Care & Social Assistance, Accommodation & Food Services and Public Administration are four of the region's five largest services industries. Retail Trade is the fifth largest employing industry. You can read the [assessment of these industries in December 2023](#), which remains relevant and true.

Health Care & Social Assistance peaked in 2018 and has yet to reestablish a growth trend in Northwest, declining in 2022 and remaining below 2021 levels in 2023. Statewide, Health Care continued growing from 2018 to 2019, and in 2023 it exceeded 2019 levels. [The Nursing & Residential Care Facilities subsector has a larger share of employment in the Northwest, so challenges recruiting and retaining employees in this subsector is holding back employment](#). Thus, health care worker demand is intact, but is in large part unfilled. However, in 2023, Nursing & Residential Care employment had its first employment gain since 2018, perhaps signaling the start of a much-needed turnaround.

Educational Services and Accommodation & Food Services are on track to regain their pre-pandemic employment uptrends in the near future. Both increased employment every year since 2020, putting Educational Services just 1.1% below pre-pandemic employment while Accommodation & Food Services is within 0.5%.

The remaining three service sectors were in pre-pandemic uptrends but show little to no employment recovery: Finance & Insurance, Professional & Technical Services and Public Administration. Public Administration had anemic growth

since 2021 and is the furthest behind 2019 job counts of any sector. Not only does this reverse the above-average growth trend prior to the pandemic, it is also unique to the region. Statewide, job counts are now slightly above 2019.

Both Finance & Insurance and Professional & Technical Services are down from 2021, but those industries "[had some of the fastest wage growth since the pandemic, even while employment was declining.](#)" This implies that technology is allowing professionals in these two industries to be more productive while relying on fewer lower-paid support staff.

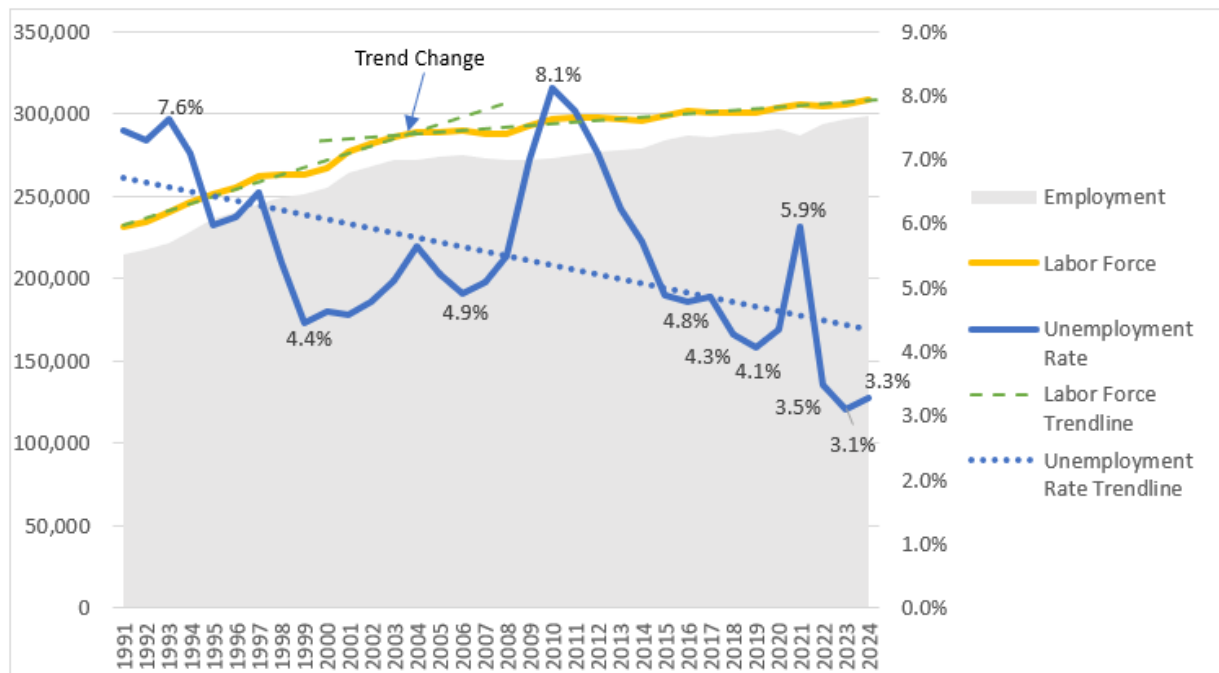
Pandemic impacts are fading, but long-term demographic trends are keeping tension on the labor market

Northwest Minnesota saw a record low 2.0% unemployment rate in September and October 2022, signaling the tightest labor market since the data became available on a regional basis in 1990. This record was tied the following year in October 2023. In March 2024, the unemployment rate was 4.2%, way down compared to 5.8% in March 2019. The acute impacts of the pandemic are largely behind us. [There are some chronic impacts such as increased retirements and people with long COVID symptoms not able to work or working fewer hours.](#) However, there is no sign these impacts are increasing, and Northwest's labor force has been growing.

The Northwest had an average of 303,284 workers in 2019 but grew to an average of 308,191 by 2023, increasing by 4,907 workers, or 1.6%. In comparison to the data shown in Table 1, total jobs increased 0.7% from 2019 to 2023. So, we would expect the labor market to have loosened with the additional workers.² However, [the long-term demographic trends, namely the retiring Baby Boomers,](#) are keeping Northwest's labor market remarkably tight. Note that retirees do not supply labor, but still demand goods and services.

Figure 2 shows the labor force growth trend and how the retiring Baby Boomers impact it. Note that to use the most recent data, the years in the figure are the 12 months ending with March of the named year. So, 2024 is actually representing April 2023 through March 2024. Drawing a best-fit trendline from 1991 to 2002 and extending this line forward in time shows how the labor force growth trend changes around 2002, primarily due to the impact of the Baby Boom generation. The trendline continues to rise above the labor force line below. Drawing another best-fit trendline from 2002 to 2024 and extending it backward in time illustrates the trend change from the other end.

Figure 2: Northwest Minnesota Labor Force, Employment, Unemployment Rate and Trendlines, 1991 to 2024 (years are 12 months ending in March)



Source: DEED, Local Area Unemployment Statistics (LAUS)

This trend change can also be expressed numerically. The annualized growth rate of the labor force from 1991 to 2002 was 1.8% per year. From 2002 to 2024 the annualized growth is 0.4%, meaning labor force growth was 4.5 times faster from 1991 to 2002 than in the past 20 years.

The trend change reflects the experience of the Baby Boomers, born between 1946 and 1964, aging out of the prime working years of age 25 to 54. The oldest Baby Boomers started turning age 55 in 2001. Back in 2000, the labor force participation rate (LFPR) for people aged 25 to 54 was 86.3%, while it dropped to 69.6% for people aged 55 to 59 (U.S. Census Bureau, [2000 Decennial Census SF3, Table PCT035](#)).

Moving forward in time by 15 years, the Baby Boomers continue to age and their LFPR continued to drop, down to 68.8% for people aged 55 to 64 and 24% for people aged 65 to 74 (U.S. Census Bureau, [2015 ACS 5-year estimates](#)). For age 75 years and over, which the Baby Boomers started reaching in 2021, the LFPR drops to 6.2% (U.S. Census Bureau, [2022 ACS 5-year estimates](#)).

What's more, the generations after the Baby Boomers are not replacing them. Generation X (formerly referred to as the Baby Bust) is not large enough; the Northwest has about a third more Baby Boomers than Gen Xers. Also, many Millennials moved away when they were in their 20s. There were 75,812 people aged 15 to 24 in 2000, but ten years later there were only 61,193 people aged 25 to 34 in 2010, representing a significant loss of people over a 10-year period. (U.S. Census Bureau, [Population Estimates](#))

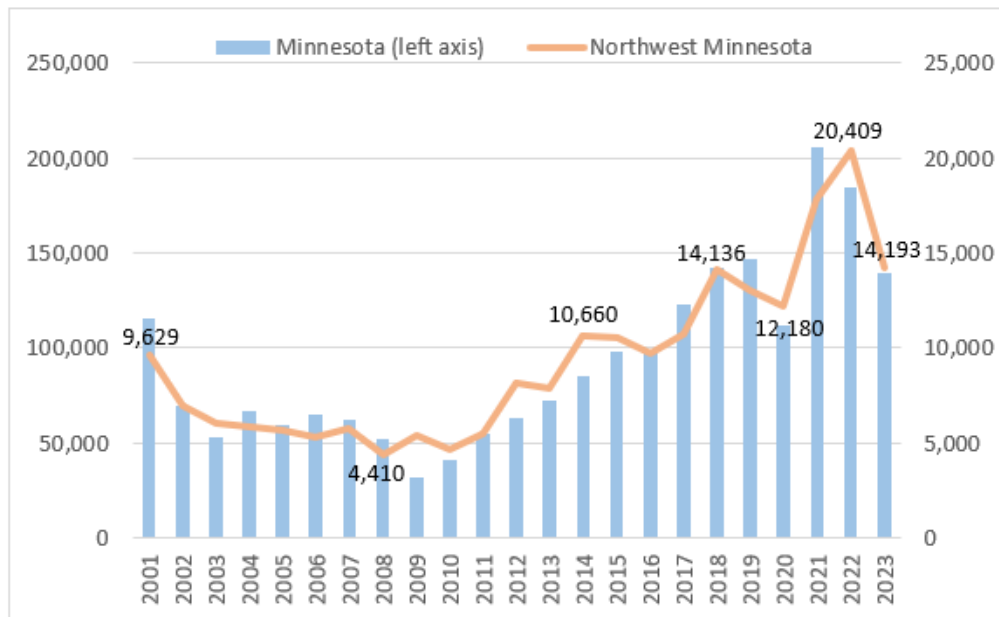
These demographic trends were masked by the Great Recession and only started to surface again in 2018 when the annual unemployment rate hit a then record low of 4.3% (Figure 2). More record low unemployment rates followed the pandemic. While it seems like the pandemic was the singular cause, the trends that led to the tight labor market started over two decades ago and continue today. The 2024 unemployment rate remains remarkably low at 3.3%, and the long-term unemployment rate downtrend is clearly shown in Figure 2.

That said, the national unemployment rate is higher for January through March 2024 than these same months in 2023. While this unemployment rate increase is not yet as noticeable in Minnesota nor the Northwest, we may be in store for some labor market loosening. However, we have five more years until the youngest Baby Boomers reach age 65, so we are predisposed to having a tight labor market for the foreseeable future.

Job vacancies are now off their peak but still indicate hiring demand, particularly in certain industries

Normalization of job vacancies is the clearest sign that the historic labor market tightness is easing. While the over 30% drop in Northwest job vacancies seems drastic, the number of job vacancies in 2023 is almost exactly at the 2018 pre-pandemic peak (Figure 3). Statewide it has eased back slightly below the pre-pandemic peak. Of course, the labor market prior to the pandemic was historically tight relative to the prior two decades.

Figure 3: Job Vacancies for the Northwest Region and Minnesota Statewide, 2001 to 2023



Source: DEED, Job Vacancy Survey

Like with the industry employment trends above, the job vacancy changes in 2023 are far from uniform (Table 2). Five of the 20 industry sectors had increased job vacancies compared to 2022, despite the overall drop. Construction and Utilities had rapid increases, indicating strong hiring demand. Arts, Entertainment & Recreation and Public Administration job vacancies also increased significantly, while Finance & Insurance saw little change.

Table 2: Northwest Minnesota Job Vacancies, Vacancy Rate, and Median Wage Offer, 2023

NAICS Industry Title	2023 Job Vacancies	Percent Change from 2022	2023 Vacancy Rate	2023 Median Wage Offer
Total, All Industries	14,193	-30.5%	6.4	\$17.77
Health Care & Social Assistance	3,428	-6.0%	8.9	\$19.89
Retail Trade	2,662	-49.5%	9.5	\$15.97
Accommodation & Food Services	2,121	-19.7%	10.0	\$14.82
Educational Services	1,283	-57.9%	5.5	\$17.97
Manufacturing	1,088	-41.2%	3.7	\$21.95
Construction	786	+125.2%	6.1	\$13.93
Public Administration	727	+47.5%	4.7	\$22.30
Wholesale Trade	466	-2.9%	3.9	\$22.85
Arts, Entertainment & Recreation	433	+39.7%	12.5	\$15.72
Transportation & Warehousing	380	-46.7%	6.2	\$19.58
Admin. Support & Waste Mgmt. Svcs.	259	-35.1%	8.0	\$15.99
Professional & Technical Services	131	-11.5%	2.9	\$34.10
Other Services	96	-71.0%	1.5	\$15.06
Management of Companies	86	-34.4%	15.0	\$23.41
Finance & Insurance	85	+1.2%	1.5	\$17.18
Agriculture, Forestry, Fishing & Hunting	59	-60.1%	1.0	\$21.89
Utilities	38	+322.2%	3.0	\$24.03
Information	38	-84.8%	1.5	\$21.17
Real Estate & Rental & Leasing	22	-57.7%	1.4	\$16.59
Mining	7	-89.1%	2.7	\$25.17

Source: DEED, [Job Vacancy Survey](#)

Besides Construction, vacancies dropped off in the goods-producing domain. However, wage offers for the vacancies remain well above average. Goods-producing industries also had below average job vacancy rates. Job vacancy rates are

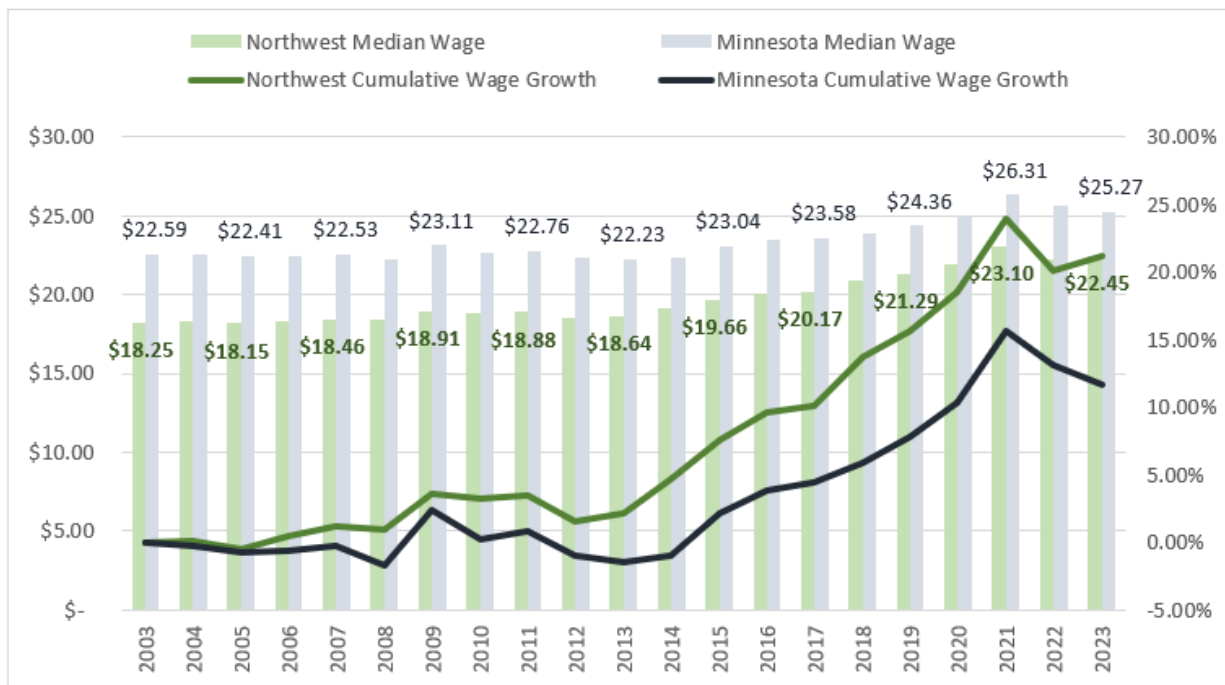
the number of vacancies relative to the number of people currently employed. They measure the magnitude of hiring demand relative to the size of the industry, and high rates can indicate more intense staffing needs.

The industries looking to staff up are those with above average job vacancy rates and increases in job vacancies, or below average decreases in job vacancies in the current situation where vacancies declined 30.5% overall. This includes Accommodation & Food services, Arts, Entertainment & Recreation, and Health Care & Social Assistance. The industry employment data (used for Table 1) backs this up as the number of jobs from 2022 to 2023 increased 3.0%, 5.2%, and 2.2%, respectively in these industries. Management of Companies is an anomaly with declining employment and declining job vacancies, yet the highest job vacancy rate.

The tight labor market brings wage growth, particularly for the Northwest

Increased wages are one of the most significant changes triggered by the tightening labor market. Wages in Minnesota and the U.S. were little changed from first quarter 2003 to first quarter 2014 (see Figure 1 for Minnesota and [The FRED Blog \(2/8/2018\), "What's Real about Wages?"](#) for U.S. data.) In contrast, Northwest Minnesota wages increased 4.6% over this time, but were \$19.10 in first quarter 2018, compared to \$22.32 for Minnesota (in inflation-adjusted first quarter 2023 dollars). That was less than 86% of the statewide wage.

Figure 4: Median Wage and Cumulative Wage Growth, First Quarter 2003 to First Quarter 2023 (Wages are inflation-adjusted first quarter 2023 constant dollars*)



*Inflation adjustment from the U.S Bureau of Labor Statistics, CPI-U, and author’s calculations.

Source: DEED, Quarterly Employment Demographics

Recall that in 2018, the unemployment rate in Northwest set a new record low of 4.3%, beating the prior record of 4.4% in 1999 (Figure 2). That's when the tightening labor market went to work on wages. From first quarter 2018 to 2023, cumulative real (inflation-adjusted) wage growth was 16.6% in the Northwest and 12.7% in Minnesota. Compare that five-year increase to the eleven-year increase of 4.6% for the Northwest, and a -1.0% decrease for Minnesota from first quarter 2003 to first quarter 2014. Note that the 2021 peak in wages reflects many lower-wage workers being unemployed while wages were paid to higher paid workers who remained employed. The tight labor market brought on a substantial increase to workers' purchasing power throughout the state. What's more, the increase brought Northwest wages to nearly 90% of the statewide wage.

Summary and Conclusions

The takeaway from this assessment of the state of Northwest Minnesota's labor market is how dissimilar the pandemic recovery has been compared to the labor market situation of the last three decades. During the past four years, we have set record lows for the unemployment rate and record highs for job vacancies. These short-term pandemic recovery

driven changes brought the longstanding demographic-driven workforce challenges to the forefront. However, the changes also rapidly boosted real wages which had already begun increasing. While there are recent signs of loosening, the labor market remains tight compared to the 30 years prior to 2021. With the more extreme conditions of the pandemic recovery behind us, we can start to see more lasting trends emerge.

Besides the speed, a key difference of the Pandemic Recession recovery from the Great Recession recovery is that employers' ability to recruit and retain workers became nearly as important to growth as the demand for the goods and services that the business produces. This creates a huge incentive to increase productivity, and advancements in automation, information technology and artificial intelligence are promising in this regard.

Some industries or some occupations within industries will experience staff decreases due to technology advancements. Others will be able to raise wages to recruit the needed workers due to worker productivity gains that make higher wages feasible. As long as businesses can figure out how to produce enough goods and services to meet demand, a new long-term trend of low unemployment and rising real wages is great for the region.

¹In the North American Industry Classification System (NAICS), the goods-producing sectors have lower-numbered codes and are listed first. Services-providing sectors have higher numbered codes, except for Utilities. The production operations of Utilities are more like the goods-producing industries, but Utilities are consumed as a service.

²That is assuming there was no large increase in Northwest Minnesota workers holding jobs outside the region, and no big increase in workers holding full-time jobs instead of part-time jobs, either of which would lower the region's job count relative to the resident labor force.



Southeast Minnesota Job Growth and Vacancy Trends in 2023

By [Amanda O'Connell](#)

June 2024

Recent data releases provide valuable insights into the economy and labor market of Southeast Minnesota. The region saw a gain of nearly 3,500 jobs from 2022 to 2023, indicating a continuing recovery from the impacts of the pandemic. Moreover, job vacancies have returned to pre-pandemic levels, signaling a normalization of the job market in the area. This article aims to explore these trends in greater detail, offering insights from the [Quarterly Census of Employment & Wages \(QCEW\)](#) and the [Job Vacancy Survey](#).

Job growth in Southeast Minnesota has shown positive trends over the past year, as detailed in the latest data from QCEW. In 2023, the region provided 243,667 jobs across 13,569 employer establishments, reflecting its ongoing recovery efforts from the economic challenges of the Pandemic Recession. The total payroll for the region reached an impressive \$15.5 billion, with an average annual wage of \$63,388, marking an increase of \$2,209 from the previous year, and was the second highest in the six planning regions in the state. However, average annual wages in Southeast Minnesota were about \$8,160 lower than the average annual wage statewide.

From 2022 to 2023, there was an increase of 248 employer establishments and 3,499 jobs. Among 20 industry sectors, 16 saw a growth in the number of establishments over the year. The sectors with the most significant growth in establishments was Health Care & Social Assistance (+83 establishments), followed by Accommodation & Food Services (+28 establishments), and Professional, Scientific, & Technical Services (+21 establishments). Conversely, four industries saw a decline in the number of establishments: Transportation & Warehousing (-5 establishments), Public Administration (-2 establishments), and Manufacturing and Utilities, each decreasing by one establishment.

Similar to the increase in establishments, there were widespread job gains from 2022 to 2023. The industry with the largest numeric increase in jobs was Health Care & Social Assistance (+916 jobs), followed by Accommodation & Food Services (+866 jobs). Manufacturing and Arts, Entertainment & Recreation both added about 320 jobs within the same time period. The industries with the largest losses in employment were Finance & Insurance (-87 jobs), Administrative & Support & Waste Management Services (-86 jobs), Transportation & Warehousing (-82 jobs), and Information (-51 jobs).

The three largest employing industries in Southeast Minnesota include Health Care & Social Assistance, Manufacturing, and Retail Trade, which combined account for 53% of total employment in the region. Health Care & Social Assistance had 66,409 jobs and 1,982 firms, accounting for 27.3% of total employment in the area. This industry has recovered all jobs since 2019 and has added jobs within the past year. The largest subsectors include Ambulatory Health Care Services, providing 33,770 jobs with 500 firms, followed by Hospitals (15,509 jobs and 23 firms), Nursing & Residential Care (10,613 jobs and 288 firms), and Social Assistance (6,516 jobs and 1,12 firms).

The next largest industry in Southeast Minnesota is Manufacturing, with 36,380 jobs and 662 firms. Although the industry has lost 2,354 jobs since 2019, it gained 321 jobs within the past year. The largest subsectors include Food Manufacturing (10,352 jobs and 104 firms), Machinery Manufacturing (4,403 jobs and 69 firms), and Computer & Electronic Product Manufacturing (4,306 firms and 28 firms).

The third largest industry in Southeast Minnesota is Retail Trade, with 26,347 jobs and 1,594 firms. The industry has recovered all jobs since 2019 and added 107 jobs within the past year. The largest subsectors include General Merchandise Retailers (5,841 jobs and 114 firms), Food & Beverage Stores (5,196 jobs and 215 firms), and Gasoline Stations & Fuel Dealers (3,958 jobs and 221 firms).

Table 1. Southeast Minnesota Industry Employment Statistics, 2023

Industry	2023 Annual Data				2022-2023		2019-2023	
	Number of Jobs	Number of Establishments	Total Payroll	Avg. Annual Wage	Change in Jobs	Percent Change	Change in Jobs	Percent Change
Total, All Industries	243,667	13,569	\$15,455,922,983	\$63,388	+3,499	+1.5%	-3,141	-1.3%
Health Care & Social Assistance	66,409	1,982	\$5,542,751,721	\$83,460	+916	+1.4%	+151	+0.2%
Manufacturing	36,380	662	\$2,627,236,225	\$72,228	+321	+0.9%	-2,354	-6.1%
Retail Trade	26,347	1,594	\$909,691,381	\$34,528	+107	+0.4%	+210	+0.8%
Accommodation & Food Services	19,911	1,174	\$465,509,526	\$23,348	+866	+4.5%	-159	-0.8%
Educational Services	19,683	280	\$1,050,938,340	\$53,456	+248	+1.3%	-13	-0.1%
Public Administration	11,225	363	\$729,969,449	\$65,052	+270	+2.5%	+33	+0.3%
Construction	10,150	1,495	\$723,169,007	\$71,084	+198	+2.0%	+165	+1.7%
Transportation & Warehousing	7,828	608	\$449,595,719	\$57,408	-82	-1.0%	+70	+0.9%
Admin. Support & Waste Mgmt. Svcs.	7,294	537	\$416,260,797	\$57,096	-86	-1.2%	-971	-11.7%
Wholesale Trade	6,670	505	\$543,557,320	\$81,484	+81	+1.2%	-22	-0.3%
Other Services	6,635	1,401	\$239,163,715	\$36,036	+242	+3.8%	+73	+1.1%
Management of Companies	4,497	59	\$486,445,327	\$108,264	+201	+4.7%	+1,581	+54.2%
Arts, Entertainment, & Recreation	4,226	283	\$119,174,029	\$28,288	+320	+8.2%	+127	+3.1%
Finance & Insurance	4,078	691	\$326,216,425	\$79,976	-87	-2.1%	-1,725	-29.7%
Professional & Technical Services	3,701	835	\$269,366,760	\$72,852	+5	+0.1%	+325	+9.6%
Agriculture, Forestry, Fish & Hunting	3,200	427	\$142,544,701	\$44,512	-38	-1.2%	+17	+0.5%
Information	2,434	215	\$142,176,821	\$58,396	-51	-2.1%	-700	-22.3%
Real Estate & Rental & Leasing	1,405	388	\$63,905,995	\$45,500	+14	+1.0%	-52	-3.6%
Utilities	1,390	50	\$192,659,377	\$138,632	+43	+3.2%	+65	+4.9%
Mining	200	22	\$15,590,348	\$75,816	+15	+8.1%	+39	+24.2%

Source: Quarterly Census of Employment & Wages

Of the 11 counties in Southeast Minnesota, Olmsted County was home to the most jobs (102,037 jobs) and the most firms (4,034) in the region. Olmsted, along with Fillmore and Mower County, have recovered all jobs that were lost since

2019. The counties farthest from recovery include Steele, Wabasha, and Dodge County. Over the past year, 9 of the 11 counties gained jobs, with the highest numeric increase in Olmsted (+1,493 jobs), Mower (+574 jobs), Rice (+451 jobs) and Goodhue (+438 jobs). Fillmore and Steele County both lost jobs from 2022 to 2023 (see Table 2).

Table 2. Southeast Minnesota Industry Employment, 2023

Geography	Number of Jobs	Number of Establishments	Total Payroll	Average Annual Wage	2022-2023		2019-2023	
					Change in Jobs	Percent Change	Change in Jobs	Percent Change
Southeast Minnesota	243,667	13,569	\$15,455,922,983	\$63,388	+3,499	+1.5%	-3,141	-1.3%
Dodge County	5,827	495	\$349,522,803	\$59,956	+72	+1.3%	-219	-3.6%
Fillmore County	6,260	783	\$267,283,662	\$42,692	-21	-0.3%	+150	+2.5%
Freeborn County	11,780	828	\$598,003,313	\$50,752	+78	+0.7%	-308	-2.5%
Goodhue County	21,126	1,360	\$1,243,810,397	\$58,864	+438	+2.1%	-532	-2.5%
Houston County	5,084	458	\$225,924,804	\$44,408	+103	+2.1%	-110	-2.1%
Mower County	16,731	887	\$970,532,535	\$57,980	+574	+3.6%	+410	+2.5%
Olmsted County	102,037	4,034	\$7,732,823,623	\$75,764	+1,493	+1.5%	+1,312	+1.3%
Rice County	25,531	1,762	\$1,440,715,729	\$56,368	+451	+1.8%	-50	-0.2%
Steele County	18,879	1,135	\$1,108,586,860	\$58,708	-81	-0.4%	-2,900	-13.3%
Wabasha County	6,510	595	\$296,726,929	\$45,604	+96	+1.5%	-277	-4.1%
Winona County	23,900	1,234	\$1,221,992,328	\$51,116	+295	+1.2%	-617	-2.5%

Source: Quarterly Census of Employment & Wages

Job Vacancy Survey

Recent data from the [Job Vacancy Survey](#) indicates that in 2023, Southeast Minnesota had 13,711 job vacancies with a median hourly wage of \$18.22, an increase of over \$2 compared to the past year. Of these vacancies, 27% were part-time positions, decreasing from 41% in the previous year. Additionally, just 6% of the vacancies were temporary or seasonal, suggesting a preference among employers for permanent staff.

Figure 1: Southeast Minnesota highest Job Vacancies (JV) by Occupational Group & Occupation

Sales & Related Occupations - 2,426 JV

- First-Line Supervisors of Retail Sales Workers (1,332 JV)
- Cashiers (391 JV)
- Retail Salespersons (312 JV)

Food Preparation & Serving Related Occupations - 1,856 JV

- First-Line Supervisors of Food Prep. And Serving Workers (1,703 JV)
- Waiters & Waitresses (877 JV)
- Fast Food & Counter Workers (511 JV)

Healthcare Support Occupations - 1,534 JV

- Personal Care Aides (772 JV)
- Nursing Assistants (215 JV)
- Home Health Aides (55 JV)

Transportation & Material Moving Occupations - 1,108 JV

- Laborers & Freight, Stock, & Material Movers (519 JV)
- Heavy & Tractor-Trailer Truck Drivers (345 JV)
- Drivers/Sales Workers (254 JV)

Healthcare Practitioners & Technical Occupations - 964 JV

- Registered Nurses (462 JV)
- Pharmacists (242 JV)
- Licensed Practical & Licensed Vocational Nurses (129 JV)

Source: DEED Job Vacancy Survey

Source: DEED Job Vacancy Survey

Furthermore, one-third of the jobs required postsecondary education and 36% required one or more years of work experience. Median hourly wage offers ranged from \$58 for Legal occupations like Lawyers to \$14 for Sales & Related occupations such as Cashiers or Retail Salespersons.

Of the 13,711 job vacancies in the region, the top five occupational groups—Sales & Related, Food Preparation & Serving Related, Healthcare Support, Transportation & Material Moving, and Healthcare Practitioners & Technical Occupations—comprised 57.5% of the total vacancies. Figure 1 provides a detailed breakdown of these top five occupational groups, highlighting occupations with the highest number of vacancies within each group.

Table 3: Job Vacancies in Southeast Minnesota, 2023

Occupational Group	Number of Job Vacancies	Median Wage Offer	Percent Part-Time	Requiring Postsecondary Education	Requiring 1 or More Years of Work Experience	Requiring Certificate or License	Job Vacancy Rate
Total, All Occupations	13,711	\$18.22	27%	32%	36%	49%	5.7%
Sales & Related	2,426	\$13.96	55%	12%	24%	17%	13.4%
Food Preparation & Serving Related	1,856	\$14.91	40%	1%	21%	5%	9.7%
Healthcare Support	1,534	\$16.49	30%	17%	7%	94%	10.9%
Transportation & Material Moving	1,108	\$20.14	15%	5%	40%	75%	5.9%

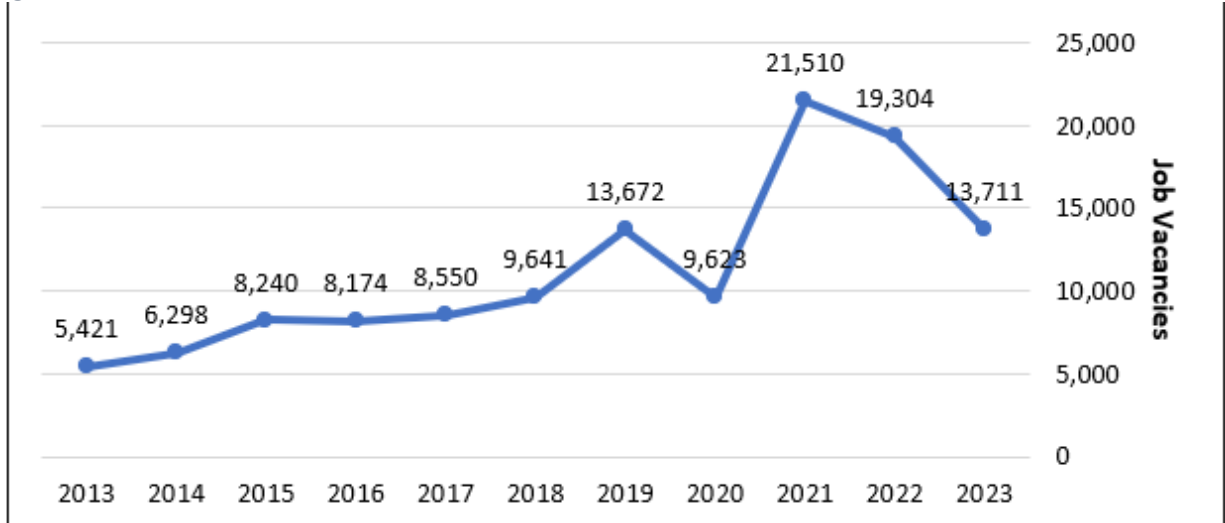
Occupational Group	Number of Job Vacancies	Median Wage Offer	Percent Part-Time	Requiring Postsecondary Education	Requiring 1 or More Years of Work Experience	Requiring Certificate or License	Job Vacancy Rate
Healthcare Practitioners & Technical	964	\$33.92	18%	93%	66%	97%	3.1%
Installation, Maintenance, & Repair	732	\$21.35	5%	32%	45%	28%	8.8%
Production	690	\$19.95	10%	10%	37%	21%	3.1%
Community & Social Service	608	\$21.43	8%	96%	63%	92%	13.6%
Office & Administrative Support	548	\$18.66	18%	17%	46%	31%	2.0%
Business & Financial Operations	467	\$25.49	2%	85%	90%	75%	5.0%
Personal Care & Service	455	\$14.98	24%	54%	19%	70%	10.2%
Educational Instruction & Library	418	\$19.67	27%	71%	29%	79%	2.9%
Building & Grounds Cleaning & Maint.	314	\$19.06	12%	0%	7%	17%	5.0%
Architecture & Engineering	297	\$27.42	1%	58%	94%	51%	8.8%
Management	212	\$37.73	15%	89%	98%	35%	1.7%
Protective Service	192	\$16.29	45%	21%	17%	76%	5.5%
Life, Physical, & Social Science	171	\$30.13	1%	94%	86%	87%	6.8%
Construction & Extraction	160	\$23.33	0%	17%	55%	79%	1.9%
Internships	159	\$17.46	22%	94%	4%	20%	N/A
Arts, Design, Entertainment & Media	138	\$19.74	58%	29%	52%	61%	6.5%
Computer & Mathematical	97	\$37.67	4%	77%	96%	63%	2.3%
Apprenticeships	77	\$19.18	15%	17%	69%	89%	N/A
Farming, Fishing, & Forestry	70	\$18.01	5%	0%	3%	4%	16.7%
Legal	19	\$58.31	0%	100%	94%	100%	2.5%

Source: DEED Job Vacancy Survey

The job vacancies in Southeast Minnesota indicate a recovery to pre-pandemic levels. There was a notable decline in 2020, where vacancies dropped to 9,623 due to the economic disruptions caused by the COVID-19 pandemic. Employers in the region then reported record high vacancy levels in 2021 and 2022, but by 2023, vacancies aligned closely with the

2019 figures, which stood at 13,672. The trend suggests a return to normalcy of hiring practices in Southeast Minnesota (Figure 2).

Figure 2: Job Vacancies in Southeast Minnesota, 2013 - 2023

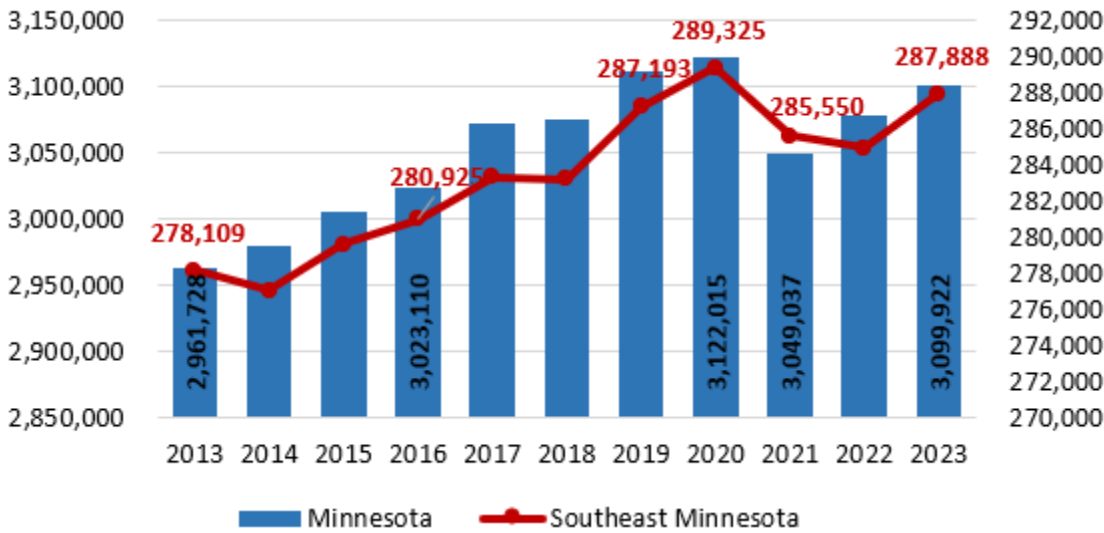


Source: DEED Job Vacancy Survey

Labor Force Trends, 2013-2024

From 2013 to 2023, Southeast Minnesota experienced labor force growth, mirroring broader trends observed in the state of Minnesota. In 2013, Southeast Minnesota had a labor force of 278,109 people, while the state had 2,961,728 workers. By 2023, these numbers had enlarged to 287,888 for Southeast Minnesota and 3,099,922 workers for the state, reflecting growth over the decade.

Figure 3: Annual Labor Force Estimates, 2013 - 2023



Source: Local Area Unemployment Statistics

Southeast Minnesota saw an overall rise in its labor force from 279,552 in 2015 to 289,325 workers in 2020, despite some fluctuations. The pandemic in 2020 caused a decline to 284,871 in 2022, but the labor force rebounded to 287,888 in 2023, surpassing its 2019 pre-pandemic level of 287,193 workers.

Recent estimates from 2023 to the first quarter of 2024 indicate that Southeast Minnesota's labor force has grown. The labor force expanded from 285,204 in January 2023 to 290,449 by March 2024, an increase of 5,245 workers. Interestingly, the number of unemployed people decreased by 869, while the number of employed individuals jumped by 6,114, leading to lower unemployment rates.

Conclusion

Southeast Minnesota's labor market demonstrates ongoing recovery and growth, as highlighted by the increase in jobs and establishments, the decrease in job vacancies, and the increase of the labor force within the past year. The region's key industries, particularly Health Care & Social Assistance, Manufacturing and Retail Trade, have shown growth, contributing significantly to the local economy.

Despite setbacks during the pandemic, the labor force has shown a positive trajectory, with significant growth observed in recent months. The decrease in the number of unemployed people and the increase in the number of employed people underscore the region's success in effectively reintegrating individuals into the workforce. Overall, these trends reflect a resilient and strong economy in Southeast Minnesota.



Back on Track in Southwest Minnesota

By [Cameron Macht](#)

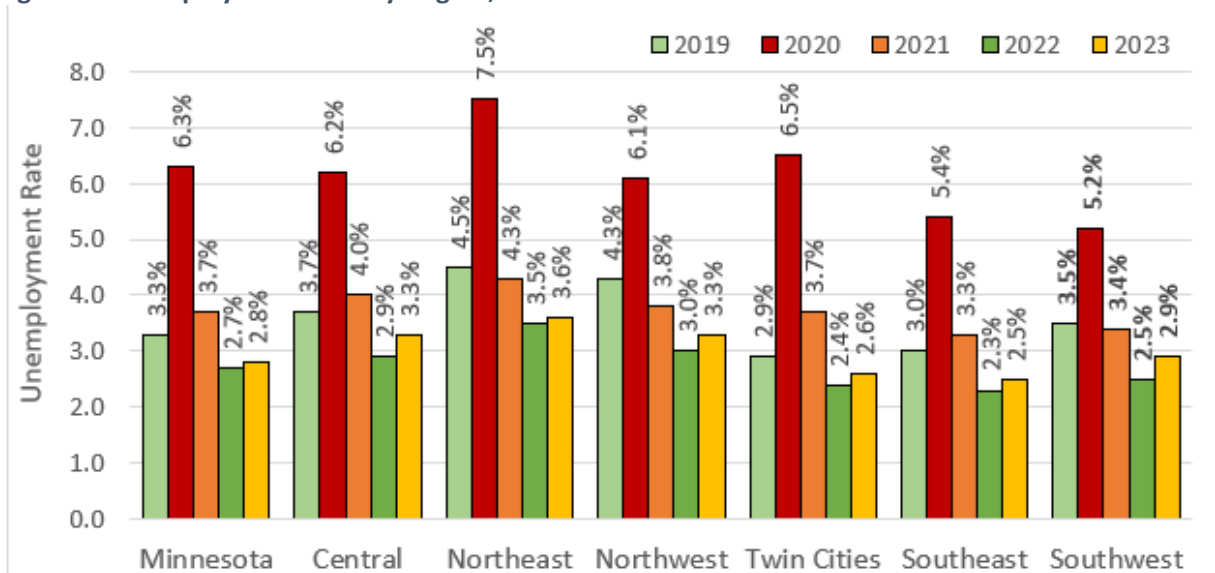
June 2024

Economic recovery continued in Southwest Minnesota, as the 23-county region welcomed more than 1,600 additional workers to the labor force over the past year, and nearly 1,200 net new jobs from 2022 to 2023. The region's unemployment rate ended 2023 at 2.9%, which is the second lowest annual rate recorded in the region going all the way back to 1990, slightly above the all-time low set last year in 2022 at 2.5%.

That is the equivalent of only about 6,250 unemployed workers in a labor force of just over 217,725 people, reflecting a tight labor market. With an estimate of around 9,600 job vacancies posted in 2023, Southwest still had less than one jobseeker available for every job opening, making it difficult for employers to find the workers they need. However, the recent growth in the labor force was making conditions better, both for employers and jobseekers.

While employers were not able to grow as fast as they would have liked to if they could have hired more workers, that is also a distinguishing feature of Southwest Minnesota's economy. The region does not have the same peaks or suffer the same valleys as other regions. Of the six planning regions in the state, Southwest suffered the smallest numeric and percentage employment drop from 2019 to 2020 in the Pandemic Recession. The region also reported the lowest unemployment peak in 2020 and had the smallest rise in rates from 2019 to 2020 (see Figure 1).

Figure 1: Unemployment Rate by Region, 2019-2023



Source: DEED Local Area Unemployment Statistics

Industry Concentrations

While Southwest Minnesota's economy did not suffer as badly during the Pandemic Recession, it also has not recovered as quickly. In 2023, there were an average of just under 173,000 jobs at nearly 13,000 employer establishments spread across the 23 counties, with a total payroll of nearly \$9.1 billion. Manufacturing is still the largest employing industry in the region, providing more than 31,275 jobs – accounting for 18% of total employment. That was the highest concentration of the six regions in the state, and about 7% above the statewide share of Manufacturing employment. Average wages were more than \$10,000 higher in Manufacturing than across the total of all industries.

The next largest industry is Health Care & Social Assistance, with 29,905 jobs at 1,730 establishments. This includes nearly 9,800 jobs at Nursing & Residential Care Facilities, almost 8,200 jobs at Hospitals, about 6,700 jobs at Ambulatory Health Care Services and 5,300 jobs in Social Assistance. Health Care & Social Assistance had the most job vacancies in the region in 2023, accounting for just under 18% of total openings.

With more than 19,000 jobs, Retail Trade is the third largest employing industry in Southwest but tends to offer lower wages and more part-time hours. Retail Trade has 11.1% of total employment in the region, but Retail openings were

15% of total vacancies in 2023. Southwest also had a high concentration of employment in Educational Services, with 15,605 jobs at 239 institutions. This primarily includes Elementary & Secondary Schools, which had about 11,700 jobs, as well as Junior Colleges and Universities, which provided about 3,325 jobs in 2023.

The region has just over 12,050 jobs in Accommodation & Food Services, including about 9,400 jobs at Restaurants, about 1,050 jobs at Drinking Places, and over 900 jobs at Hotels & Motels. Other important industries in Southwest include Public Administration, Construction, Wholesale Trade, Transportation & Warehousing, Finance & Insurance, Other Services, and Agriculture, Forestry, Fishing & Hunting (see Table 1).

Table 1. Southwest Minnesota Industry Employment Statistics

NAICS Industry Title	Quarterly Census of Employment & Wages 2023 Annual Data				Job Vacancy Survey 2023 Annual Data	
	Number of Firms	Number of Jobs	Total Payroll	Avg. Annual Wage	Number of Job Vacancies	Job Vacancy Rate
Total, All Industries	12,929	172,921	\$9,090,562,731	\$52,571	9,546	5.5%
Manufacturing	623	31,276	\$1,985,617,351	\$63,487	964	2.9%
Health Care & Social Assistance	1,730	29,905	\$1,572,365,143	\$52,579	1,718	5.9%
Retail Trade	1,438	19,151	\$608,781,425	\$31,788	1,469	7.3%
Educational Services	239	15,605	\$783,806,104	\$50,228	789	4.7%
Accommodation & Food Services	874	12,058	\$218,402,813	\$18,113	967	8.2%
Public Administration	579	10,247	\$547,585,078	\$53,439	447	4.4%
Construction	1,567	8,157	\$551,444,572	\$67,604	822	10.2%
Wholesale Trade	644	7,738	\$623,259,751	\$80,545	391	5.2%
Transportation & Warehousing	785	6,931	\$347,405,412	\$50,123	328	4.7%
Finance & Insurance	698	5,885	\$456,309,895	\$77,538	187	3.2%
Agriculture, Forestry, Fish & Hunting	733	5,173	\$268,352,377	\$51,876	110	2.1%
Other Services	1,114	5,022	\$174,435,624	\$34,734	369	7.6%
Professional & Technical Services	627	3,906	\$281,244,892	\$72,003	275	7.4%
Admin. Support & Waste Mgmt. Svcs.	411	3,880	\$186,022,767	\$47,944	366	13.0%

NAICS Industry Title	Quarterly Census of Employment & Wages 2023 Annual Data				Job Vacancy Survey 2023 Annual Data	
	Number of Firms	Number of Jobs	Total Payroll	Avg. Annual Wage	Number of Job Vacancies	Job Vacancy Rate
Information	198	2,042	\$126,493,510	\$61,946	27	1.3%
Arts, Entertainment, & Recreation	242	1,986	\$44,204,928	\$22,258	160	8.0%
Real Estate & Rental & Leasing	275	1,409	\$51,451,695	\$36,516	7	0.5%
Management of Companies	53	1,403	\$151,922,469	\$108,284	118	7.5%
Utilities	76	924	\$95,131,778	\$102,956	23	2.6%
Mining	24	218	\$16,325,147	\$74,886	-	-

Source: DEED Quarterly Census of Employment & Wages, Job Vacancy Survey

Employment Changes

With a total gain of nearly 1,200 jobs, 15 of the 20 main industry sectors added jobs in Southwest Minnesota over the past year, led by huge gains in Health Care & Social Assistance, Accommodation & Food Services, Wholesale Trade, Public Administration and Construction.

In contrast, the region's largest industry suffered the largest job loss, as Manufacturers cut 827 jobs over the year following three years of growth coming out of the Pandemic Recession. Almost all of this year's loss and the previous gain occurred in the Food Manufacturing subsector, which grew from 11,260 jobs in 2020 to 12,022 jobs in 2022, then back down to 11,331 jobs in 2023. One of the most distinguishing subsectors in the region is Machinery Manufacturing, which added over 525 jobs since 2020 to rise to nearly 3,675 jobs in 2023. Other key subsectors in the region include Printing & Related Support Activities, Fabricated Metal Product Manufacturing, and Electrical Equipment, Appliance & Component Manufacturing, which all have more than 2,000 jobs.

Though 15 industries added jobs in the past year, only three industries have fully recovered all the jobs lost during the Pandemic Recession: Public Administration, Professional & Technical Services, and Wholesale Trade are all up slightly compared to their 2019 employment levels. Even if not all the way back, though, several other industries are within one percent of their pre-pandemic job counts, including Manufacturing, Retail Trade, Finance & Insurance, and Other Services. The industry that remains furthest behind its 2019 employment level is Mining, which has cut almost one-third of its workforce (see Table 2).

Table 2. Southwest Minnesota Industry Employment Statistics

NAICS Industry Title	2023	2022-2023		2020-2023		2019-2023	
	Number of Jobs	Change in Jobs	Percent Change	Change in Jobs	Percent Change	Change in Jobs	Percent Change
Total, All Industries	172,921	+1,198	+0.7%	+5,734	+3.4%	-3,683	-2.1%
Manufacturing	31,276	-827	-2.6%	+1,211	+4.0%	-71	-0.2%

	2023	2022-2023		2020-2023		2019-2023	
NAICS Industry Title	Number of Jobs	Change in Jobs	Percent Change	Change in Jobs	Percent Change	Change in Jobs	Percent Change
Health Care & Social Assistance	29,905	+688	+2.4%	-140	-0.5%	-1,664	-5.3%
Retail Trade	19,151	-158	-0.8%	+705	+3.8%	-19	-0.1%
Educational Services	15,605	+88	+0.6%	+655	+4.4%	-493	-3.1%
Accommodation & Food Services	12,058	+336	+2.9%	+1,960	+19.4%	-193	-1.6%
Public Administration	10,247	+275	+2.8%	+442	+4.5%	+179	+1.8%
Construction	8,157	+219	+2.8%	+236	+3.0%	-133	-1.6%
Wholesale Trade	7,738	+276	+3.7%	+203	+2.7%	+12	+0.2%
Transportation & Warehousing	6,931	+19	+0.3%	-191	-2.7%	-348	-4.8%
Finance & Insurance	5,885	-18	-0.3%	-322	-5.2%	-7	-0.1%
Agriculture, Forestry, Fish & Hunting	5,173	+26	+0.5%	-377	-6.8%	-219	-4.1%
Other Services	5,022	+49	+1.0%	+561	+12.6%	-11	-0.2%
Professional & Technical Services	3,906	+166	+4.4%	+342	+9.6%	+91	+2.4%
Admin. Support & Waste Mgmt. Svcs.	3,880	-11	-0.3%	+347	+9.8%	-159	-3.9%
Information	2,042	+11	+0.5%	-157	-7.1%	-455	-18.2%
Arts, Entertainment, & Recreation	1,986	+24	+1.2%	+276	+16.1%	-28	-1.4%
Real Estate & Rental & Leasing	1,409	+37	+2.7%	+91	+6.9%	-18	-1.3%
Management of Companies	1,403	-37	-2.6%	-65	-4.4%	-24	-1.7%
Utilities	924	+24	+2.7%	-11	-1.2%	-24	-2.5%
Mining	218	+8	+3.8%	-34	-13.5%	-101	-31.7%

Source: DEED Quarterly Census of Employment & Wages

Labor Force Changes

Continuing growth in the region will depend on labor force availability. As noted earlier, Southwest Minnesota added over 1,600 new workers from 2022 to 2023 but was still down more than 3,600 workers compared to 2019, prior to the pandemic. Long-term labor force projections suggest that the region may lose another 1,950 workers over the next decade, based on [population projections by age group from the Minnesota State Demographic Center](#) and current labor force participation rates by age group from the Census Bureau's American Community Survey (see Table 3).

Much of the projected decline is related to the region's fading reliance on the Baby Boom generation, who will be between 71 and 89 years of age by the year 2035, and mostly out of the labor force. Generation X, which will be between 55 and 70 years of age in 2035, is much smaller, leading to a projected decline of nearly 6,250 fewer workers from 55 to 74 years of age in 2035. The region is also expected to lose nearly 1,775 workers between 25 and 44 years of age as Millennials move up the population pyramid.

However, Southwest Minnesota is expected to gain nearly 1,500 workers from 16 to 24 years of age, and by 2035, Generation Z would be the largest cohort in the labor force if current participation rates hold steady. The region would have just over 65,000 Generation Z workers and just under 65,000 Millennials, compared to 38,000 Generation X and about 8,200 Baby Boomers. There would also be almost 29,500 young workers from Generation Alpha already in the workforce.

Table 3. Southwest Minnesota Labor Force Projections, 2025-2035

Age	2025 Labor Force Projection	2035 Labor Force Projection	Projected Change 2025-2035	
			Numeric	Percent
16 to 19 years	13,651	13,117	-534	-3.9%
20 to 24 years	25,158	27,169	+2,011	+8.0%
25 to 44 years	79,757	77,979	-1,777	-2.2%
45 to 54 years	37,247	41,229	+3,982	+10.7%
55 to 64 years	34,932	30,838	-4,094	-11.7%
65 to 74 years	14,267	12,132	-2,135	-15.0%
75 years & over	2,747	3,344	+598	+21.8%
Total Labor Force	207,759	205,808	-1,951	-0.9%

Source: [calculated from Minnesota State Demographic Center population projections and 2018-2022 American Community Survey 5-Year Estimates](#)

Despite the constraints from an aging white population that is rapidly reaching retirement age, Southwest Minnesota's labor force has been growing increasingly racially diverse over time. About 90 percent of the region's workforce reported White alone as their race, even as the number of white labor force participants declined by more than 17,500 people over the past decade. In contrast, the number of Black, Indigenous, and People of Color (BIPOC) increased by nearly 12,000 workers from 2012 to 2022.

The number of workers reporting as Two or More Races quadrupled in just 10 years, rising to more than 7,300 workers in 2022, now accounting for 3.5% of the labor force, up from just 0.7% in 2012. There are also now 5,930 workers of Some Other Race, a 125% increase since 2012. Some of the growth in these race groups may be a result of people gaining a better understanding of the available categories and starting to identify their race more accurately. This may also be reflected in the decline in the white population.

The largest group in the region other than White Alone can be of any race, as the region has more than 14,900 workers of Hispanic or Latino origin. That was a gain of more than 5,500 workers over the past decade, and Hispanic or Latinos now account for 7.0% of the region's total workforce. That was 1.6% more than the statewide share (5.4%) and was the highest among the six planning regions in the state.

The region also had about 3,900 workers each identifying as Black or African American and Asian or Other Pacific Islander, both equaling 1.8% of the overall workforce. The smallest number of workers were American Indian or Alaska Native, with just under 1,100 workers in 2022 after rising by 21.5% over the last 10 years.

The region's overall labor force participation rate was 66.9%, and it has been declining over time due to the aging of the population. However, participation rates were close to 77% for the three largest and fastest growing BIPOC groups – with Hispanic or Latinos at 77.4%, Two or More Races at 76.8%, and workers of Some Other Race at 76.6% (see Table 4).

Table 4. Southwest Minnesota Labor Force Characteristics by Race, 2022

	2022 Labor Force	2022 Labor Force Partic. Rate	2012 Labor Force	Change from 2012-2022	
				Number	Percent
White Alone	190,274	66.4%	207,819	-17,545	-8.4%
Black or African American Alone	3,878	66.1%	2,121	+1,757	+82.8%
American Indian or Alaska Native Alone	1,086	58.5%	894	+192	+21.5%
Asian or Pacific Islander Alone	3,900	66.3%	3,087	+813	+26.3%
Some Other Race Alone	5,930	76.6%	2,635	+3,295	+125.0%
Two or More Races	7,332	76.8%	1,553	+5,779	+372.1%
Hispanic or Latino (of any race)	14,901	77.4%	9,355	+5,546	+59.3%
TOTAL	212,400	66.9%	218,109	-5,709	-2.6%

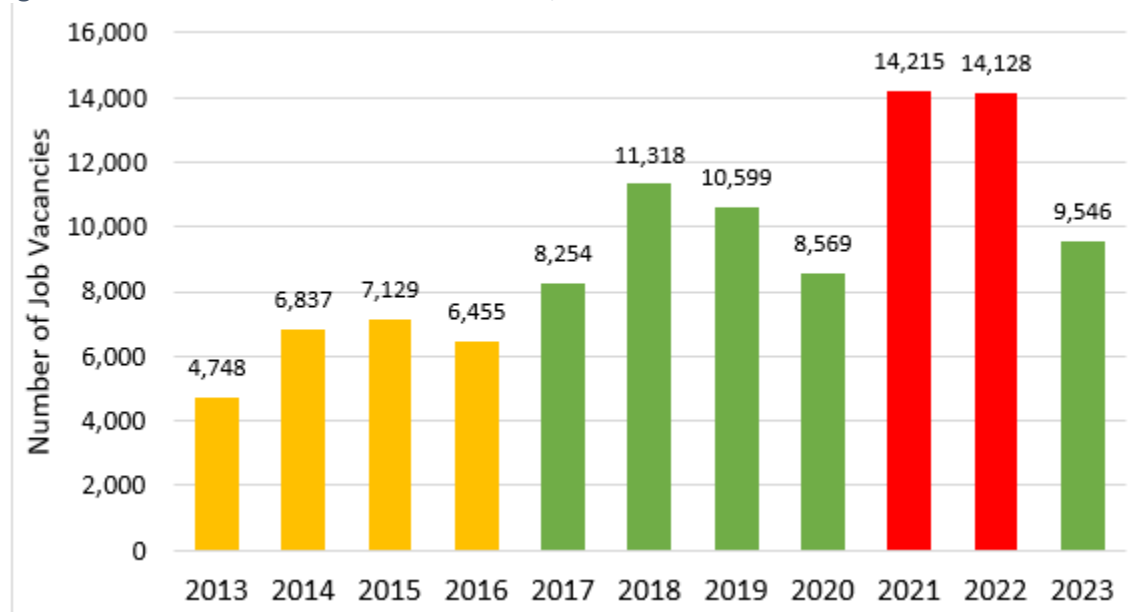
Source: 2018-2022 American Community Survey 5-Year Estimates

Filling Open Jobs

BIPOC workers have been critical to the region's economic expansion, filling open jobs across the economy. But even the rapid growth of several racial and ethnic groups with high labor force participation i has not been enough to keep pace with the number of job openings posted by employers in the region. Vacancies outstripped available jobseekers starting in 2017 – meaning that there were more job vacancies posted in the region than unemployed workers actively seeking jobs – and began piling up each year until 2020, when the Pandemic Recession disrupted everything.

With the resultant decline in labor force running against the economic recovery in 2021 and 2022, vacancies reached record levels in the region and the state, before finally returning to pre-pandemic levels in 2023. Employers reported just over 9,500 openings in 2023, which as noted earlier in the article, still means there are more vacancies than unemployed workers, but the gap is narrowing. The region still has a very tight labor market, but employers are enjoying a larger labor pool as they slow their hiring demand (see Figure 2).

Figure 2: Southwest Minnesota Job Vacancies, 2013-2023



Source: DEED Job Vacancy Survey

Opportunities for Optimism

The last year was filled with mostly positive economic and labor market data for Southwest Minnesota. The region gained workers, added jobs, and saw welcome moderation in the jobseeker-per-vacancy ratio. Demand for workers remains relatively high and the unemployment rate remains relatively low, but the region does not experience the same peaks and valleys that other regions face.

The region's distinguishing industries remain mostly healthy, with 15 of 20 main sectors picking up jobs over the past year. Significant gains were observed in Health Care & Social Assistance, Accommodation & Food Services, Wholesale Trade, Public Administration, and Construction. However, the region's largest industry, Manufacturing, experienced a substantial job loss, primarily in Food Manufacturing. While some subsectors like Machinery Manufacturing saw growth, overall, Manufacturing lost 827 jobs following several years of post-pandemic recovery.

Continued growth in Southwest Minnesota relies on labor force availability, which faces challenges due to demographic shifts. While the region saw some growth in workers between 2022 and 2023, it still lags behind pre-pandemic levels, with projections suggesting further declines over the next decade, particularly among older generations like Baby Boomers. However, there's a potential uptick in younger workers, notably from Generation Z.

Despite an aging white population, the region's workforce is diversifying, with significant increases in BIPOC representation, particularly among Hispanic or Latino workers, who now comprise 7.0% of the total workforce. However, overall labor force participation rates are declining, though remain higher among BIPOC groups, highlighting the need for strategies to address these demographic shifts.

Green and Clean Employment in Minnesota: A Starting Point

By Molly Ingram

June 2024

Over the past two decades, policy discussions about green jobs, clean economies and economic sustainability have increased dramatically, along with increased commercial demand for green goods and services and increased funding to support this economic transition. Developing a cleaner and more environmentally sustainable economy will generate new jobs, change the skills required of existing jobs, and reduce demand for other jobs. Governments, education institutions, businesses, community organizations and individuals will all need a better understanding of this changing industrial landscape to determine how to best take advantage of current and upcoming economic opportunities and meet their desired climate goals.

Minnesota has accelerated its climate change mitigation and adaptation efforts over the past few years. In 2019, Governor Tim Walz established the Climate Change Subcabinet and Governor's Advisory Council on Climate Change, bringing together government, business and community leaders. The Subcabinet released the state's [Climate Action Framework](#) in 2022 to guide Minnesota's approach to mitigate and adapt to a changing climate, along with a list of state-specific actions.

The framework has six main goal areas:

- clean transportation
- climate-smart natural and working lands
- resilient communities
- clean energy and efficient buildings
- healthy lives and communities
- clean economy.

The framework also comes with some specific targets, including reducing greenhouse gas (GHG) emissions by 50% relative to the state's 2005 emissions by 2030, achieving net-zero emissions by 2050, and attaining 100% carbon-free electricity and 55% renewable electricity by 2040. In 2020, Minnesota emissions were down 23% from 2005 levels and approximately 30% of electricity was generated by renewable sources.

To support the Climate Action Framework goals, Minnesota is leveraging federal and private funding in addition to state funds. As of May 2024, the state of Minnesota has secured just shy of \$3 billion for clean energy, resilience, and other climate-related investments from the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) which were signed into law in 2021 and 2022, respectively. This accounts for approximately 40% of all IIJA and IRA funds secured by Minnesota as of May 2024.

One source of funding is the planning grant that the state of Minnesota received from the Inflation Reduction Act's Climate Pollution Reduction Grant (CPRG) program, administered by the Environmental Protection Agency (EPA). This grant will support an update to the Climate Action Framework, as well as workforce analysis research by DEED's Labor Market Information office that contributes to the state's objective of completing "a clean economy workforce and economic development plan for the state that includes an assessment of future high-growth sectors and sectors at risk of job disruption, whether the jobs are inclusive of a diverse workforce, employers' workforce and skillset needs, and existing training resources, using an inclusive definition of clean jobs" ([pg. 26](#)).

Research is ongoing and the first full reports from the analysis won't be available until June 2025, but previews of the work will be shared in future Trends articles. This is the first article related to research supported by the CPRG to advance the Climate Action Framework goals. We begin by reviewing definitions of terms commonly used when discussing climate related topics and related statewide and regional employment measures.

Commonly Used Terms

There is no universal definition of the "green economy" or "green jobs", although there are some agreed upon components such as clean energy (however what employment counts as clean energy jobs can differ by institution or report). Because of the complex nature of transitioning to a clean economy, most reports focus on specific parts of the economy as opposed to the economy as a whole and thus define their area of focus on a case-by-case basis. Minnesota

wants to take an inclusive approach to better understand the economy-wide impacts of climate change adaptation and mitigation efforts.

The following definitions serve as building blocks for Minnesota's ongoing work to create a clean economy workforce and economic development plan. Unless otherwise specified, definitions are from [Minnesota's Climate Action Framework glossary and list of acronyms](#).

Adaptation: Taking action to prepare for and adjust to both the current and projected impacts from climate change. For both natural and built systems, humans may intervene to help adjustment.

Biofuel: A fuel produced from biomass. These include first-generation biofuels such as ethanol from corn sugars and biodiesel from soybean oil, second-generation biofuels from an array of source materials including lignocellulosic feedstocks and municipal solid waste, and any biofuels that may be developed in the future.

Biomass: 1. The mass of all living things. 2. Renewable material that comes from plants or animals. This organic material can be used as fuel to produce electricity or heat. Examples are wood, energy crops, and waste from forests, yards or farms.

Carbon-free Electricity: Electricity generation that either does not use fossil fuels or does not emit carbon. Examples include wind, solar and nuclear.

Carbon-neutral: Achieving net-zero carbon dioxide emissions at a global scale through the balance of residual carbon dioxide emissions with the same amount of carbon dioxide removal.

Carbon Sequestration (biological): The process by which atmospheric carbon dioxide is taken up by trees, grasses, and other plants through photosynthesis and stored as carbon in biomass (trunks, branches, foliage, and roots) and soils.

- The place sequestering the carbon, such as a forest, grassland, wetland, body of water, soil, etc. is often referred to as a **carbon sink**. It is important to note that sequestration is not permanent. Wildfires, harvesting of materials, and the natural decaying process all release the stored carbon back into the environment. This is one reason Minnesota is encouraging the use of more long-lived wood products and alternative disposal methods.
- Another type of carbon sequestration is [geological](#), which involves compressing carbon dioxide into a liquid and injecting it into rock formations. Although it [may not be feasible or cost-effective based on Minnesota's geology](#).
- There are also technological methods of removing and storing carbon, [such as graphene production which is used to make smartphone screens](#). Researchers are working to develop better methods and uses for technological sequestration.
- Carbon sequestration, biological or otherwise, is one component of the "carbon cycle". Inevitably carbon is stored in trees, fossil fuels, the ocean or through other means and that carbon will also be released back into the environment by natural or human-assisted processes. What is important for understand emissions relationship to the climate is the time scale on which the carbon is stored and then released. For example, carbon stored in and released from biomass such as leaves, trees or natural lands occurs over the time period of months or several years with or without human activity. In contrast, the natural cycle for carbon stored in and released from fossil fuels happens over millennia, and human use of fossil fuels speeds up the release portion of fossil fuels natural carbon cycle.

Clean Economy: An economy that is low-carbon and that produces goods and services with an environmental benefit.

Clean Energy: Energy generated from renewable or carbon-free sources, as well as energy saved through energy efficiency measures.

- The examples that may first come to mind are energy generated from wind, solar and water which are renewable and carbon-free sources. [Biofuels are considered clean because they are derived from renewable sources](#); they can in-theory be carbon-neutral, where the carbon generated in production and use is offset by the carbon absorbed by the biomass feedstocks used as production inputs (e.g., corn for ethanol), but they are likely not as low-carbon as one might hope. The flip side of this is nuclear energy. Nuclear energy is clean under this definition [because it is a carbon-free source](#), but it is not renewable because it depends on [a limited supply of uranium](#).
- Energy efficiency is often grouped with clean energy because, even though the energy need not come from a renewable or carbon-free source, improving efficiency reduces the amount of energy required and thus

emissions generated. Energy efficiency covers [a wide range of activities](#); common examples are household and building features such as heating, ventilation and air conditioning (HVAC) systems, insulation, appliances and electronics.

- The Department of Energy (DOE) produces [national, state, and county level data on energy and clean energy jobs](#). The Energy and Employment Jobs Report began in 2016. Jobs are reported by technology (solar, coal, biofuels, smart grids, etc.) and by sector. Sectors are grouped into three traditional sectors and two key end-use sectors: 1) Electric Power Generation, 2) Fuels, 3) Transmission, Distribution, and Storage, 4) Energy Efficiency, and 5) Motor Vehicles. Because the technologies and sectors of interest to DOE do not perfectly align with the industry definition by which employment data is organized, the DOE uses survey data to estimate what share of industry employment corresponds to their technology and sector definitions.
 - The DOE defines clean energy jobs as jobs in "net-zero emissions" technologies (see carbon-neutral) "including those related to renewable energy; grid technologies and storage; traditional electricity transmission and distribution for electricity; nuclear energy; a subset of energy efficiency that does not involve fossil fuel burning equipment; biofuels; and plug-in hybrid, battery electric, and hydrogen fuel cell vehicles and components" ([pg. 8](#)). Nationally, 3.1 million jobs were considered clean jobs by this definition in 2022, representing 40% of all energy jobs.
 - Distinctions that can be made in national data regarding clean energy efficiency or transmission, distribution, and storage jobs are not feasible with state level data, so the DOE provides estimates of clean energy jobs by state but doesn't indicate how they are split across technologies, sectors, or industries.
 - [Clean Jobs Midwest](#) and [Clean Jobs America](#) generate clean energy job numbers by state based on the state and technology specific employment estimated by the DOE. Clean Jobs Midwest reports that there were [approximately 60,000 clean energy jobs](#) in Minnesota in 2022.

Climate-smart: Aiming to increase climate resiliency and reduce greenhouse gas emissions.

Green: Contributing to preserving or restoring the environment.

- A clean economy is a specific type of green economy. The green economy includes the production of good and services that contribute to preserving or restoring the environment (see green jobs for examples of how), while the clean economy all focuses on production being low-carbon.

Green jobs: Jobs related to preserving or restoring the environment.

- There is no universally used definition, but most often studies use the definition [developed by the Bureau of Labor Statistics \(BLS\)](#) (or one very similar, like this [MN green jobs report](#) from 2011). It states:
 - Green jobs are either:
 - Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.
 - Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.
 - BLS classifies industries (and the associated employment) as green if they fit into one or more of the following five categories: producing energy from renewable sources, improving energy efficiency, preventing, and cleaning up pollution and greenhouse gases, conserving natural resources, and facilitating environmental compliance, education and training and public awareness. BLS found 325 industries meeting this definition. Because not all establishments within a given industry may produce green goods or services (GGS), the BLS collected data from business and government establishments to estimate what share of employment within an industry was green.
 - Although the BLS numbers are outdated, [last reported for 2011](#), it's still the most comprehensive industry-oriented view of green jobs currently available. Just over half of all green jobs were in industries where all jobs counted as green (i.e., directly associated with the production of GGS). The remaining jobs were in industries where establishments produced some or no GGS and green jobs accounted for approximately 20% of those industries' total employment.
- An alternative to classifying green jobs by industries is classifying them by occupation. The U.S. Department of Labor has [a list of "greened" occupations](#).

- The "greening" of occupations refers to the extent to which green economy activities and technologies increase the demand for existing occupations, shape the work and worker requirements needed for occupational performance, or generate unique work and worker requirements. ([pg. 4](#))
- Based on this definition 64 occupations were labeled "green increased demand" occupations, 62 were labeled "green enhanced skills" occupations, and 91 were labeled "green new and emerging" occupations.

Greenhouse Gas (GHG): Gases in the earth's atmosphere that trap heat, produced both naturally and through human activity. Excess GHG emissions cause climate change. Carbon dioxide (CO₂) is the primary GHG emitted through human activities, such as burning fossil fuels. Nitrous oxide (N₂O) and methane (CH₄) are also potent greenhouse gases emitted through human activities.

- Note GHG emissions are also referred to as **climate pollution**.

Low-carbon: Causing or resulting in only a relatively small net release of carbon dioxide or other GHG into the atmosphere.

Mitigation (of climate change): A human intervention to reduce emissions or enhance the removal of a GHG from the atmosphere (e.g., afforestation to increase carbon sequestration in plants).

Renewable Energy: Energy generated from resources that are naturally replenished on a human timescale . Examples include wind, wood, solar, hydropower and geothermal energy.

Renewable Materials: Products that can be replenished or regenerated after use.

Resilience (to climate change): The capacity of individuals, communities, businesses, buildings, infrastructure or the natural environment to prevent, withstand, respond to and recover from disruptive events and continue to perform despite persistent stresses imposed by climate change. Both mitigation and adaptation are necessary for long-term resilience.

Reskilling: Learning a new skill to do a different job or training people to do a different job.

Upskilling: Improving existing skills or learning additional skills to better perform a current job.

Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse and recovery of products, packaging, and materials without burning and with no discharges to land, water or air that threaten the environment or human health.

State and Regional Employment

Green Jobs

Using the [BLS definition of green jobs](#), Table 1 provides estimates of green employment in 2022 for all of Minnesota, the metro region, and Greater Minnesota. The estimates are generated using the GGS employment shares reported by the BLS for 2010 (in the second column). The share of green goods and services produced within an industry has likely increased since 2010, so these numbers should be thought of as a conservative estimate of green jobs in Minnesota.

In 2010, BLS found 3.1% of all Minnesota employment met their definition of green jobs. Government employment and private sector employment from seven industries had shares of green employment greater than the economy wide share. From largest to smallest green employment share, the seven industries with above average shares were:

- Transportation
- Construction
- Utilities
- Agriculture, forestry, and fishing
- Professional, scientific, and technical services
- Manufacturing
- Waste management and administrative services

Table 1 Green Employment by Industry in 2022

Industry	Green employment share	State Green Employment	Metro+ Green Employment	Greater MN+ Green Employment
Total Employment	3.1%	87,868	53,227	32,134
Total Government	4.3%	16,011	8,571	7,385
Total Private	2.9%	71,170	43,859	25,014
Agriculture, Forestry, Fishing and Hunting, private	7.4%	1,710	260	1,436
Mining, private	0.0%	0	0	0
Utilities, private	7.8%	965	462	492
Construction, private	11.4%	15,204	8,549	6,286
Manufacturing, private	6.0%	19,578	10,559	8,957
Wholesale Trade, private	1.4%	1,869	1,111	555
Retail Trade, private	0.7%	2,090	1,142	933
Transportation and Warehousing, private	13.3%	12,871	8,802	3,814
Information, private	--*	-	-	-
Finance and Insurance, private	--*	-	-	-
Real Estate and Rental and Leasing, private	0.0%	0	0	0
Professional, Scientific, and Technical Services, private	6.8%	11,306	8,579	1,555
Management of Companies and Enterprises, private	--*	-	-	-
Administrative and Support and Waste Management and Remediation Services, private	5.0%	6,696	4,646	1,379
Educational Services, private	--*	-	-	-
Health Care and Social Assistance, private	0.0%	0	0	0
Arts, Entertainment, and Recreation, private	--*	-	-	-
Accommodation and Food Services, private	0.0%	0	0	0
Other Services (except Public Administration), private	1.4%	1,242	766	444

* Suppressed in BLS GGS data

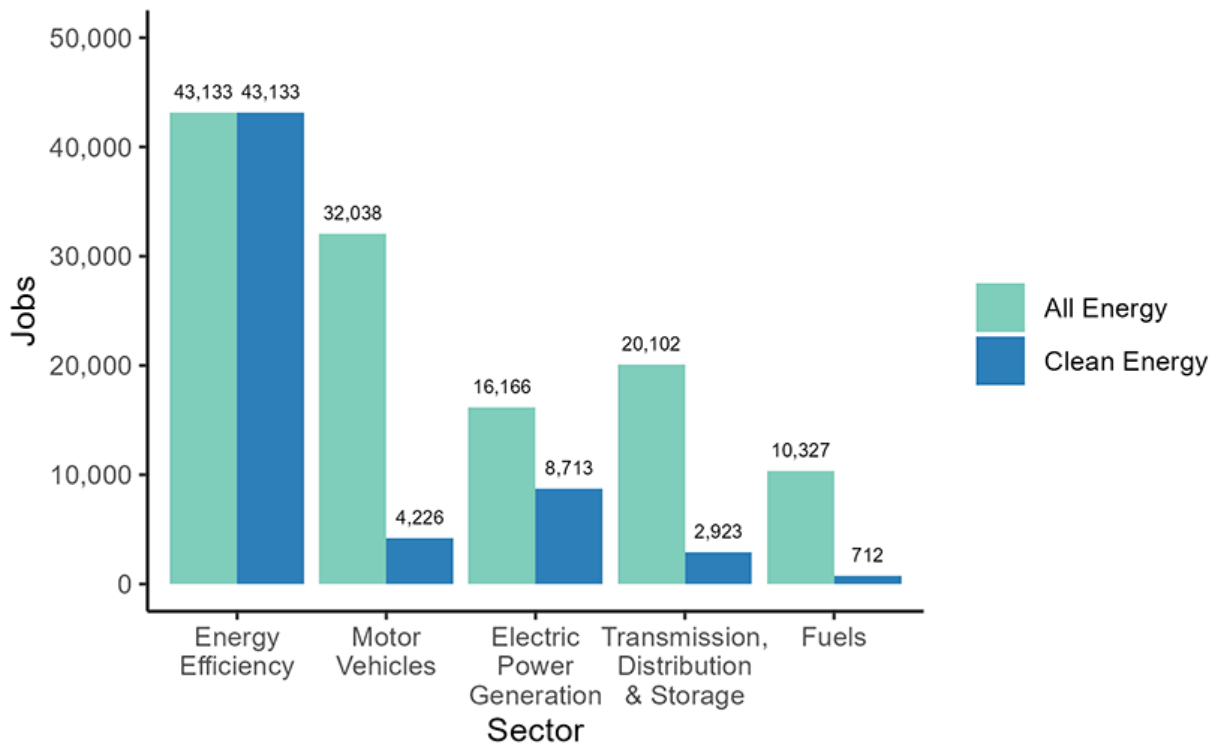
+ Differences in green jobs by region are due to differences in total employment and industry shares, not difference in the share of green jobs, which BLS only provides at the national and state levels.

Source: BLS Green Jobs and Minnesota Quarterly Census of Earnings and Wages

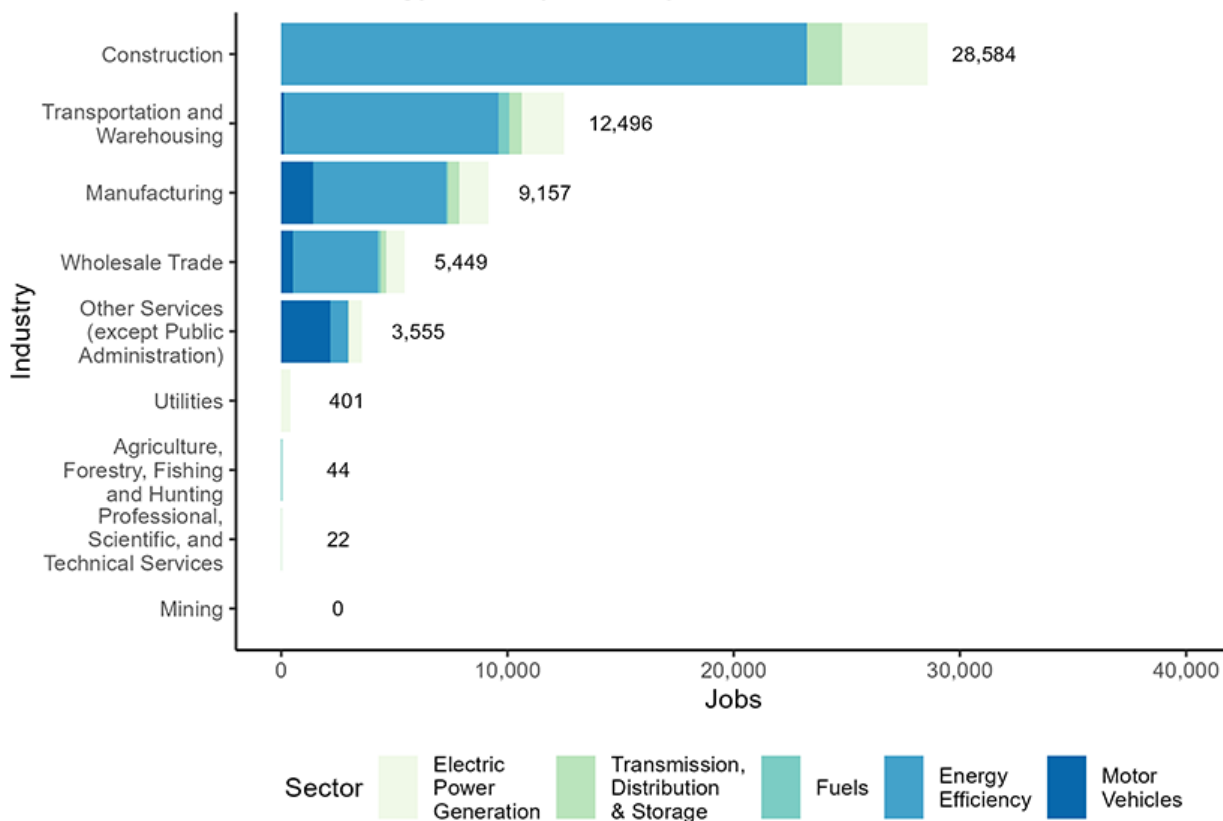
Clean Energy Jobs

Using the [energy employment data](#) generated by the U.S. Department of Energy and the clean energy jobs categories [reported by Clean Jobs America](#), Figure 1 reports jobs by energy sectors and Figure 2 reports clean energy jobs sector and by industry (e.g. construction, manufacturing). All numbers are for statewide employment in 2022. Clean energy jobs account for 49% of all energy jobs in Minnesota and are most prevalent in the construction and transportation industries, covering 79% and 72% of all industry energy jobs, respectively. Clean energy jobs are also well represented among wholesale trade and manufacturing energy specific employment, 42% and 37% respectively. The largest clean energy jobs sector is energy efficiency constituting 73% of all clean energy jobs in Minnesota. Energy efficiency is followed by power generation (15%), motor vehicles (7%), transmission, distribution, & storage (5%), and fuel production (1%). [Download a detailed table of clean jobs in Minnesota](#).

Jobs by Energy Sector



Clean Energy Jobs by Industry



Conclusion

In the U.S., and globally, climate-related concerns are changing how people work, whether that be through the creation of new jobs or by changing the processes or focus of existing jobs. Current discussions suggest that the demand for climate-related jobs and skills is growing, but information is not systematically available in a way that state, tribal and local governments or community organizations can easily use to inform their economic and workforce development efforts in regard to climate change mitigation and adaptation. Governments, businesses, community organizations, education institutions and individuals will need to weigh in on whether non-standardized definitions and intermittent collection of labor or economic data hamper their ability to meet their planning needs, and if so, how to address such challenges.

Over the next year, DEED's Labor Market Information office will compile and analyze existing climate and economic data to identify how Minnesota's economy and workforce has adapted to past climate change initiatives and technological shifts and to suggest how Minnesota can move forward to achieve its climate, economic and equity goals. As illustrated by the above tables, some industries, such as construction and transportation, play a large role in Minnesota's clean economy workforce, but the ongoing analysis seeks to improve our understanding for how climate action activities involve and impact Minnesota's economy and citizens beyond the currently defined clean or green industries and jobs. If you have questions related to Minnesota's economy, workforce, and climate change, feedback regarding what is or is not considered green/clean, or any other comments related to this topic, they can be sent to molly.ingram@state.mn.us.



Short Term Projections – More Measured Growth

By [Carson Gorecki](#) and [Cameron Macht](#)

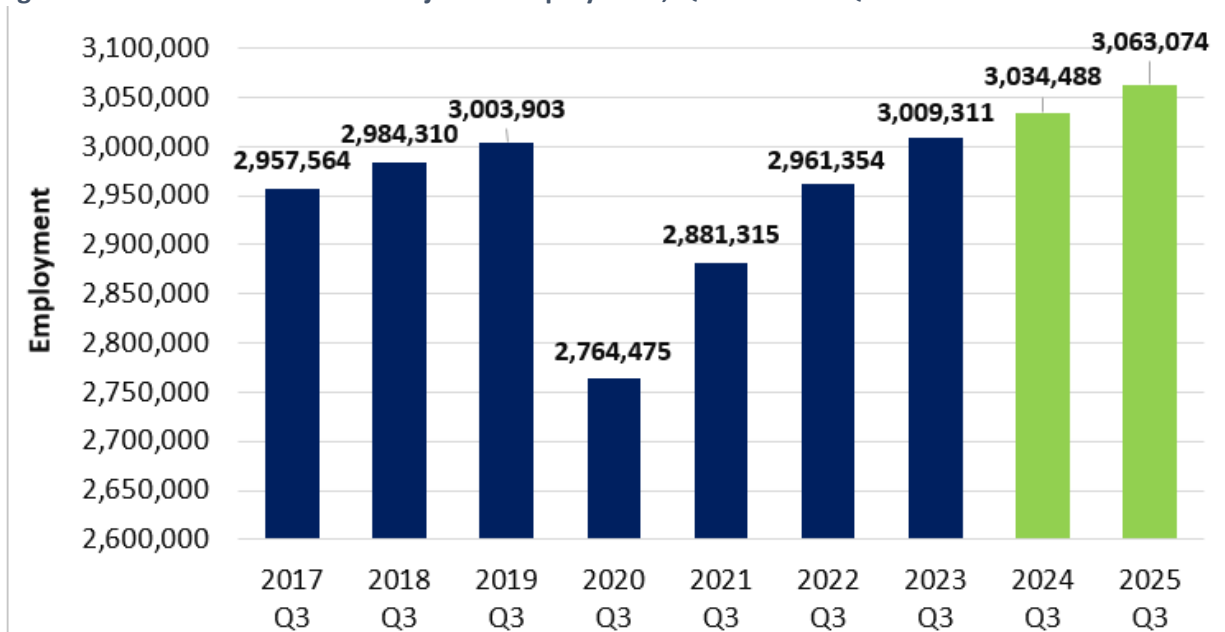
June 2024

The latest [employment projections](#) produced by DEED's [Labor Market Information Office](#) estimate a gain of 56,225 jobs over the next two years. That addition equates to a growth rate of 1.8% between the base period of third quarter 2023 to third quarter 2025, or average employment growth of 0.9% per

year. Moving forward, projected growth is more in line with typical economic expansion seen prior to the onset of the pandemic (see Figure 1).

These short-term projections predict a slow-down from the more [rapid employment growth](#) seen since 2020 as the economy recovered from the Pandemic Recession. From 2021 to 2023, the state added almost 128,000 jobs and grew 4.6%, though each year showed slower growth as the economy closed in on pre-pandemic employment levels. The one-year growth rate from 2022 to 2023 was 1.6%. In the two years from 2017 to 2019, total state employment grew 1.6%, with 46,300 jobs added. The slowing growth rates represent a slowing recovery and are informed by demographic and [labor force constraints](#).

Figure 1: Minnesota Actual and Projected Employment, Qtr. 3 2017 – Qtr. 3 2025



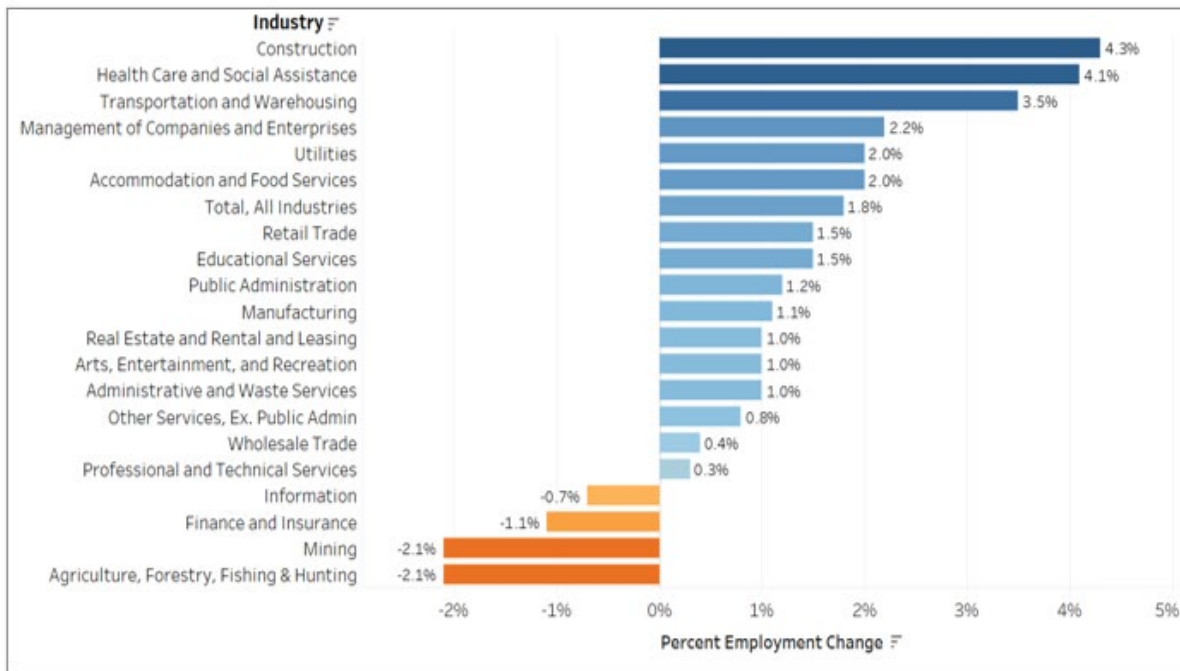
Note: Totals do not include self-employment. Source: DEED Employment Outlook

Industries

Construction, Health Care & Social Assistance, and Transportation & Warehousing are the sectors expected to see the fastest employment growth over the next two years. Boasting 4.4% employment growth from 2019 to 2023, Construction was one of the few sectors that fared relatively well over the pandemic period. That trend is expected to continue under [historic infrastructure investments](#) from state and federal governments.

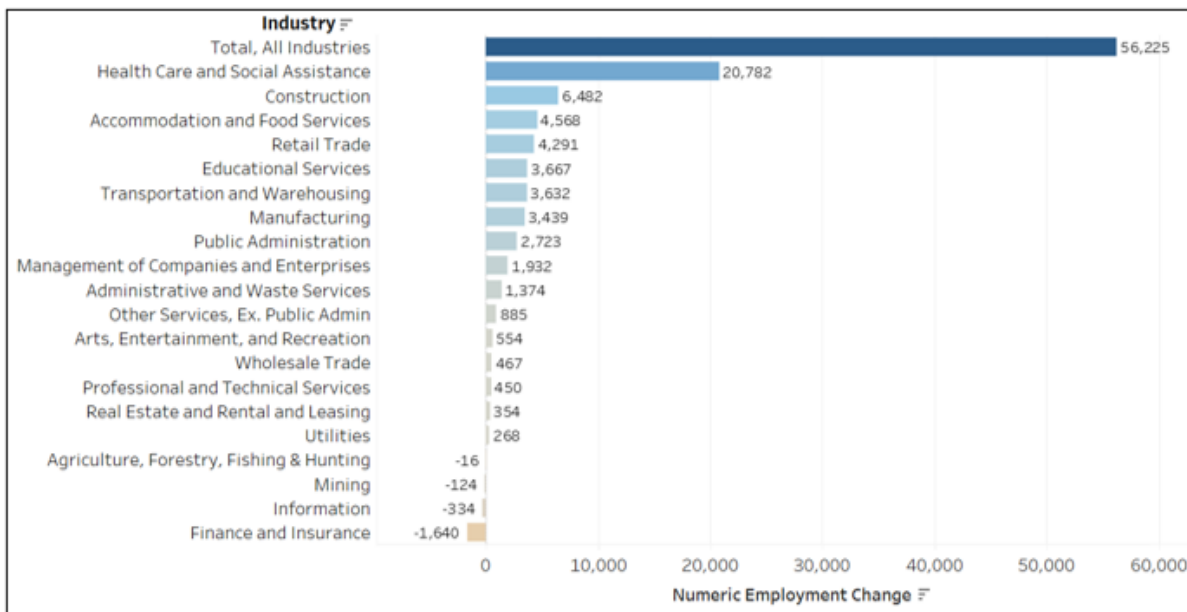
In contrast, Minnesota witnessed a notable decline in employment within the Health Care & Social Assistance sector during the Pandemic Recession. Employment growth in the sector picked up again more recently despite the enduring effects of the pandemic that continue to influence employment patterns within this sector. Benefiting from their close connections to goods-producing sectors like Construction as well as [changing preferences and practices in e-commerce and shipping](#), Transportation & Warehousing rebounded relatively quickly after a 2020 decline, averaging 4.1% employment growth from 2020 to 2023 (see Figure 2).

Figure 2: Minnesota Projected Percent Employment Change by Industry, Qtr. 3 2023 – Qtr. 3 2025



After averaging a pandemic-related employment decline from 2019 to 2022, Health Care & Social Assistance returned to robust annual growth of 3.9% into 2023. Already the largest industry in the state, Health Care & Social Assistance alone is expected to account for over a third (20,782) of all projected job gains (see Figure 3).

Figure 3: Minnesota Projected Numeric Employment Change by Industry, Qtr. 3 2023 – Qtr. 3 2025



Other sectors that are projected to have above average employment growth through 2025 include Management of Companies, Utilities, and Accommodation & Food Services. The latter was one of the hardest hit sectors during the pandemic (-24.6% from 2019 to 2020) but has also seen some of the highest percent employment growth since 2020, expanding 27.6% over three years. Even with continued projected growth, the Accommodation & Food Services sector is not expected to regain pre-pandemic levels yet for several years.

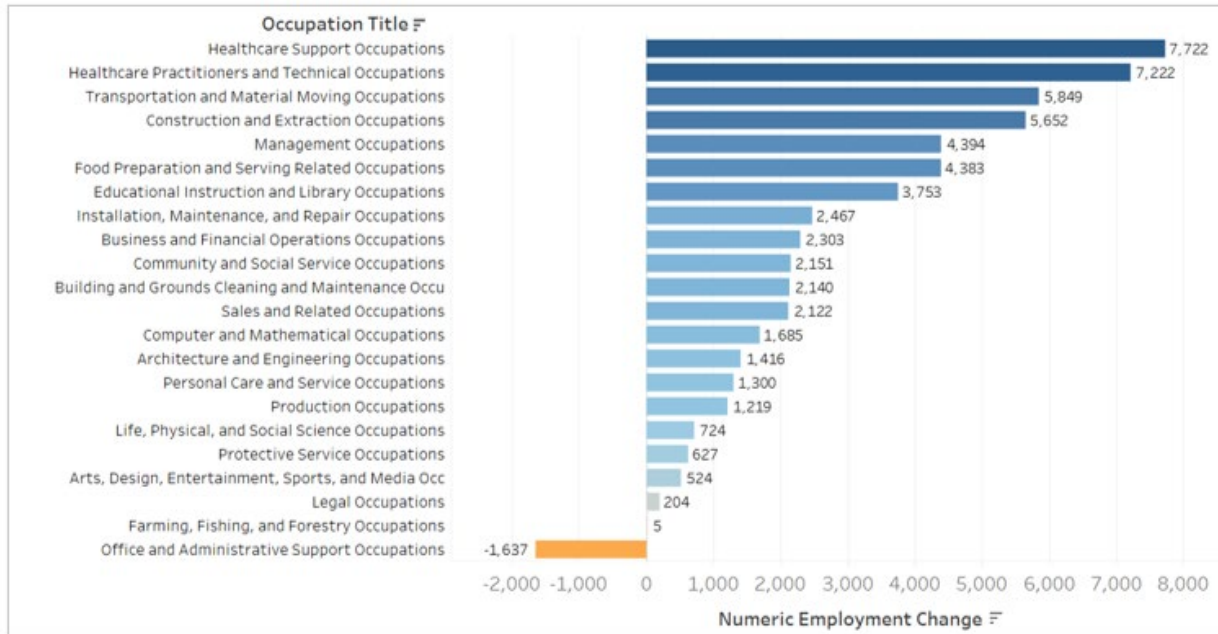
Four sectors were projected to decline over the short-term forecast period, including Information, Finance & Insurance, Mining, and Agriculture, Forestry, Fishing, & Hunting. Information is expected to continue its long-term decline, while Finance & Insurance has only recently seen employment losses after expanding relatively consistently coming out of the Great Recession. Mining, a notoriously difficult sector to predict, has oscillated between growth and decline for the past

five years. The sector remains slightly below pre-pandemic levels and 9.5% below the most recent employment peak in 2014. Still, projected declines amount to just over 120 jobs for the small sector. Similarly, the relatively small Agriculture, Forestry, Fishing & Hunting sector has seen fluctuations, but long-term growth overall.

Occupations

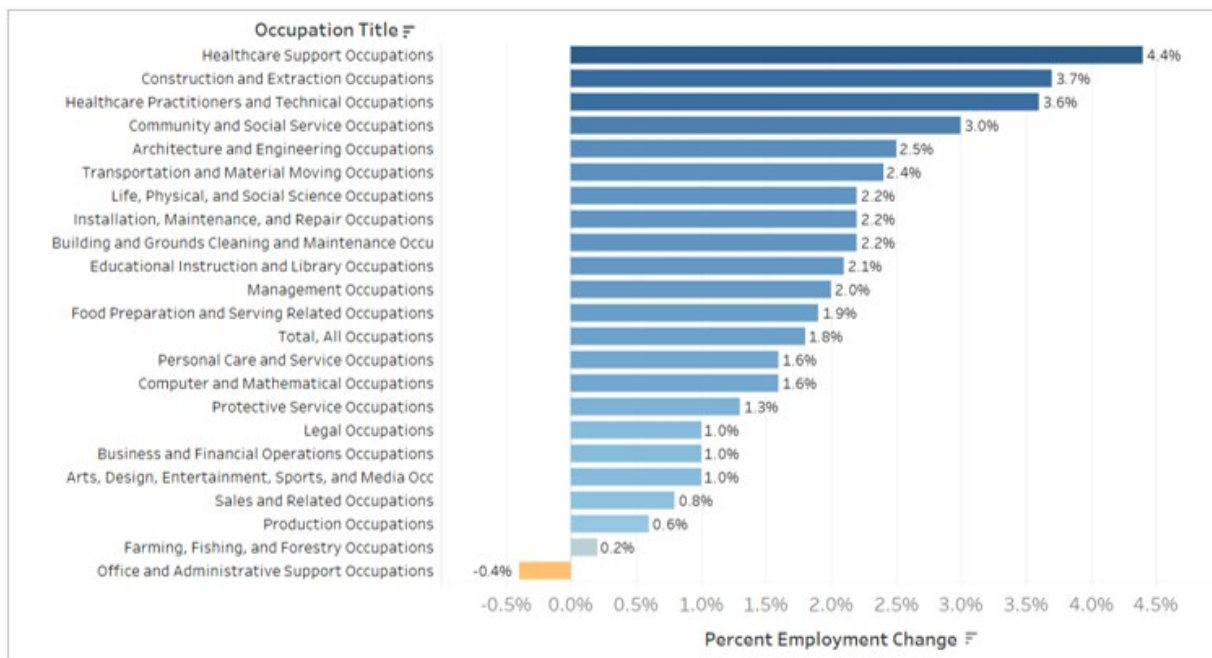
The trends in the industry projections are also evident in the short-term employment projections by occupational group. Healthcare Support (+4.4%) and Healthcare Practitioners & Technical (+3.6%) occupations were in the top three, along with the Construction & Extraction occupational group (+3.7%). Unsurprisingly, the two Healthcare occupational groups display the most projected job additions, combining for almost 15,000 new jobs between them (see figure 4). The projected fourth (Community & Social Service) and fifth (Architecture & Engineering) fastest occupational groups are also closely tied to the top three industries of growth.

Figure 4: Minnesota Projected Numeric Employment Change by Occupation, Qtr. 3 2023 – Qtr. 3 2025



Interestingly, there were many more occupational groups (12 out of 22) projected to have above-average growth than industry sectors (6 out of 20). This phenomenon demonstrates how occupations are unevenly distributed across industries. For example, the only occupational group projected to decline is Office & Administrative Support (-0.4%). Most industries contain some form of Office Clerks, Secretaries, Bookkeeping, Accounting, & Auditing Clerks, and Customer Service Representatives, which are the most common Office & Administrative Support occupations. However, these occupations also have a higher share of repetitive tasks making them more susceptible to automation (see Figure 5).

Figure 5: Minnesota Projected percent Employment Change by Occupation, Qtr. 3 2023 – Qtr. 3 2025



At a more detailed level, nine of the 20 occupations projected to grow the fastest are in or closely related to the two Healthcare occupational groups. Nurse Practitioners is expected to grow fastest, adding 615 new positions, or nearly 11% in just two years. The occupation expected to grow second fastest is Wind Turbine Service Technicians. While relatively small with under 300 jobs, the role is projected to grow rapidly as demand for carbon free sources of energy production rises. According to the [U.S. Wind Turbine Database](#), Minnesota is already home to over 2,700 wind turbines, which is eighth most among states.

Transportation & Material Moving occupations accounted for an additional three in the top 20, but were varied. Employment for Taxi Drivers may appear low, but that is likely because more rideshare drivers are now technically self-employed and contracted via companies like Lyft and Uber, and therefore do not show up in covered employment estimates. Flight Attendants show up because of a spike in air travel, while Crane & Tower Operators are expected to grow due to the growth in the Construction industry.

On that note, Construction & Extraction and Computer & Mathematical counted for another two occupations each among the top 20. With all of the highway, street and bridge construction projects scheduled for the next five years, this includes Paving, Surfacing & Tamping Equipment Operators and Operating Engineers & Other Construction Equipment Operators. Demand for Information Technology services, and more notably, analytics, remains high in Minnesota, with Statisticians and Data Scientists both in the top 15 (see Table 1).

Table 1. Employment Growth by Occupation in Minnesota, Qtr. 3 2023 to Qtr. 3 2025

Occupation Title	Qtr. 3 2023 Base Employment	Qtr. 3 2025 Projected Employment	Percent Change	Numeric Change
Nurse Practitioners	5,745	6,360	+10.7%	+615
Wind Turbine Service Technicians	261	287	+10.0%	+26
Taxi Drivers	617	673	+9.1%	+56
Physician Assistants	3,935	4,256	+8.2%	+321
Epidemiologists	357	385	+7.8%	+28

Occupation Title	Qtr. 3 2023 Base Employment	Qtr. 3 2025 Projected Employment	Percent Change	Numeric Change
Medical & Health Services Managers	10,709	11,486	+7.3%	+777
Paving, Surfacing, & Tamping Equipment Operators	1,221	1,305	+6.9%	+84
Orthotists & Prosthetists	337	360	+6.8%	+23
Physical Therapist Assistants	1,201	1,278	+6.4%	+77
Occupational Therapy Assistants	641	681	+6.2%	+40
Flight Attendants	2,720	2,882	+6.0%	+162
Statisticians	991	1,048	+5.8%	+57
Health Information Technologists & Medical Records Technicians	966	1,020	+5.6%	+54
Data Scientists	1,682	1,775	+5.5%	+93
Diagnostic Medical Sonographers	1,719	1,813	+5.5%	+94
Substance Abuse, Behavioral Disorder & Mental Health Counselors	7,810	8,225	+5.3%	+415
Cooks, Restaurant	27,912	29,397	+5.3%	+1,485
Crane & Tower Operators	229	241	+5.2%	+12
Speech-Language Pathologists	3,131	3,290	+5.1%	+159
Operating Engineers & Construction Equipment Operators	8,934	9,393	+5.1%	+459

Source: DEED Employment Outlook

There are about 90 occupations projected to have a negative percent employment change over the two years. One third of these are Production occupations and just under another third are Office & Administrative Support occupations. Many of these occupations have repetitive tasks that are more easily automatable, such as assembly, data entry, typing, file organization, and certain customer service duties. Reflecting this, the five occupations expected to decline the fastest are Word Processors & Typists (-7.7%), Tellers (-6.9%), New Accounts Clerks (-6.9%), Telemarketers (-4.9%), and Data Entry Keyers (-4.8%).

By Educational Attainment

By the education or training typically needed to enter an occupation, most jobs (61%) in Minnesota require a high school diploma equivalent or below. Collectively, the jobs requiring the lowest levels of education are projected to grow the slowest. However, given the sheer number of jobs in that category, demand will remain due to openings created by retirements and occupational transfers (see Table 2). Occupations in this group expected to grow the fastest represent diverse fields as mentioned earlier, including Taxi Drivers, Paving, Surfacing, & Tamping Equipment Operators, Flight

Attendants, Restaurant Cooks, and Crane Operators and Operating Engineers & Other Construction Equipment Operators.

By educational requirements, the occupations expected to grow the fastest are those typically requiring some form of graduate-level education. While only 4% of jobs in 2023 typically required a graduate degree, that share is projected to grow over the next two years. Of occupations requiring graduate-level training expected to grow the fastest, many are in the Healthcare Practitioners & Technical occupational group. The top five include Nurse Practitioners, Physician Assistants, Epidemiologists, Orthotists & Prosthetists and Statisticians. Occupations requiring graduate degrees have the smallest share of openings created by workers transferring to other fields, reflecting how a bigger investment in education may have an anchoring effect.

The group expected to grow second-fastest are those typically asking for vocational training, usually in the form of apprenticeships or formal structured on-the-job training programs. Traditionally, this category included many occupations in the trades, but has started to expand into all kinds of work including Healthcare and Manufacturing. Wind Turbine Service Technicians, Avionics Technicians, Health Information Technologists, Ophthalmic Medical Technicians, Medical Assistants, and Electricians are the occupations in this group expected to see the fastest growth (greater than 4.8% over two years).

Table 2. Minnesota Employment Projections by Typical Educational Requirement, Qtr. 3 2023 – Qtr. 3 2025

Typical Education Required	Percent of Occupations	Percent of Total Qtr. 3 2023 Employment	Projected Numeric Change	Projected Percent Change	Labor Market Exit Openings	Transfer Openings	Total Openings
High School or Less	53%	61%	+23,947	+1.3%	+204,314	+256,441	+484,702
Bachelor's Degree	22%	24%	+13,823	+1.9%	+42,340	+63,799	+119,962
Vocational Training	5%	6%	+4,992	+2.9%	+15,160	+20,130	+40,282
Associate degree	6%	5%	+3,696	+2.6%	+10,056	+10,450	+24,202
Graduate Degree	13%	4%	+4,269	+3.2%	+7,355	+6,606	+18,230
No Typical Education	0%	0%	+33	+1.3%	+197	+284	+514

Source: MN DEED Employment Outlook, Education Requirements for Occupations

Occupations requiring associate degrees are also expected to grow faster than average over two years. The occupations in this group with the highest projected percent employment growth include several Healthcare roles like Physical Therapist Assistants, Occupational Therapy Assistants, Diagnostic Medical Sonographers, Respiratory Therapists and Community Health Workers. In addition to Healthcare, several Architecture & Engineering, and Life, Physical & Social Science occupations are also represented among the fastest growing. Occupations typically requiring associate degrees have the largest share of projected new openings created from labor market exits.

Occupations typically needing bachelor's degrees represent the second largest share (24%) of jobs, behind only those requiring a high school diploma or less. Occupations requiring a bachelor's are projected to grow just above the overall average. Among those projected to grow the fastest are again often related to Healthcare: Medical & Health Services Managers, Substance Abuse, Behavioral Disorder & Mental Health Counselors, Exercise Physiologists and Athletic Trainers. Beyond Healthcare occupations there is a good variety of occupations including Data Scientists, Preschool

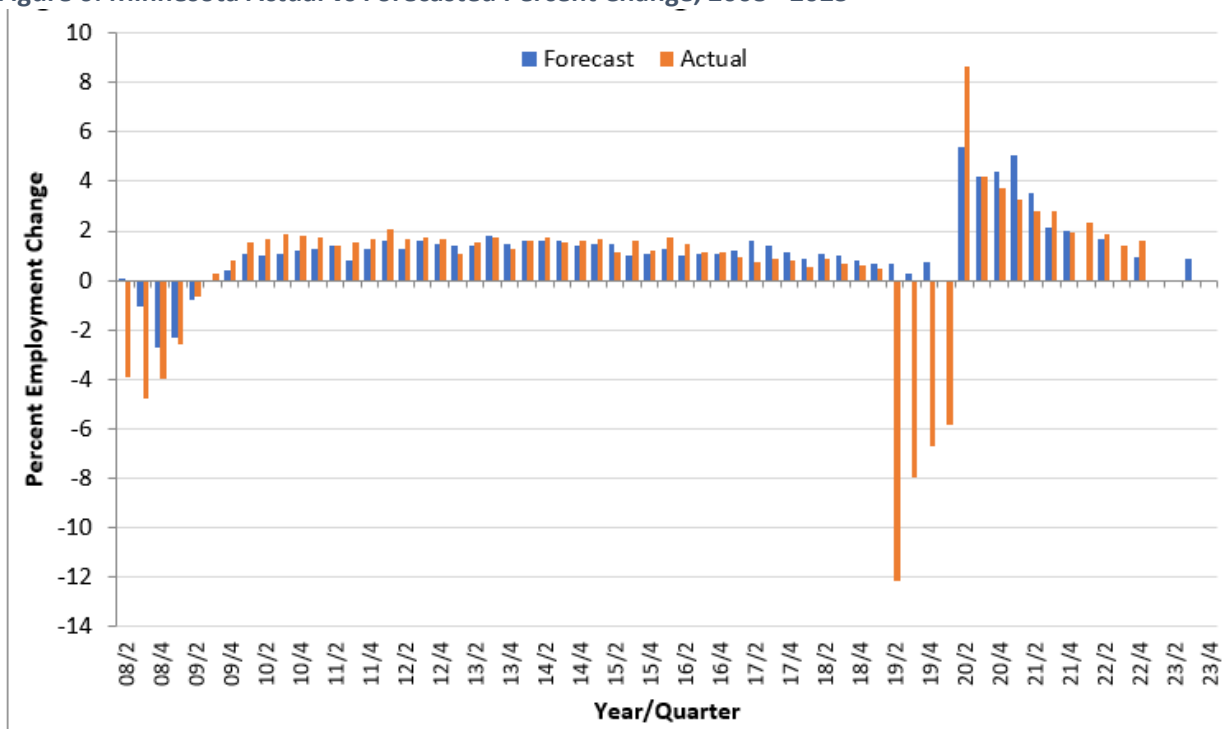
Teachers, Construction Managers and Logisticians. Occupations requiring bachelor's degrees are tied with those requiring high school or less for the highest share of openings projected to be created by occupational transfers.

Actual vs. Projected

Employment projections are a tricky business. Despite using the best information and methods available, they are still educated guesses and can at times miss the mark. For example, in 2018 and 2019 we had no idea that a global pandemic that would lead to an abrupt loss of tens of thousands of jobs was on the horizon. Our projections are much better at predicting how a current trend will evolve, accelerate, or change. For this reason, our two-year forecasts tend to perform better in periods of consistent decline or growth, such as the decade leading out of the Great Recession (see Figure 6). Sudden turns (switching from employment growth to decline or vice versa) in the trajectory are trickier to predict and may take a couple projection periods to re-adjust to the change in direction.

You can see this difficulty in capturing directional change in the comparison between projected and actual percent employment change in the period beginning with second quarter 2019 and ending in fourth quarter 2019. Each of those projections were created before we knew about the impact of COVID. When it was time to create the projections with a base period in first quarter 2020, uncertainty reigned. When we projected in the second quarter of 2020, the recovery had already begun, and then it was a matter of how fast and for how long. We initially underestimated, and then overestimated the rate of recovery as the economy suffered a [historic loss followed by an unprecedented rebound](#).

Figure 6: Minnesota Actual vs Forecasted Percent Change, 2008 - 2023



In sum, DEED's Labor Market Information office anticipates Minnesota will gain 56,225 jobs over the next two years, marking a 1.8% growth rate, reminiscent of pre-pandemic economic growth trends. Sectors like Construction, Health Care & Social Assistance, and Transportation & Warehousing are poised for notable employment increases, driven by historic infrastructure investments and evolving consumer behaviors post-pandemic.

However, challenges remain in accurately predicting employment trends, as evidenced by the unpredictable impact of the COVID-19 pandemic. While projections provide valuable insights, their accuracy can be influenced by unforeseen events, underscoring the complexity of forecasting in a dynamic economic landscape. Even if not perfect, forecasts offer valuable guidance for understanding and adapting to evolving labor market dynamics, particularly in navigating periods of significant change.

Minnesota Cost of Living Update

By [Amanda Rohrer](#)

June 2024

Despite inflation falling from the [peaks set in 2022](#), the current rate still surpasses the [Federal Reserve's 2% target](#). Certain goods and services are experiencing continued price hikes, while others are holding steady but remain elevated compared to previous years. All of these increases are factored into the Minnesota Department of Employment & Economic Development's newly released [Cost of Living study](#).

Mandated by [Minnesota Statute 2013, Chapter 116J, section 013](#), the Cost of Living estimates are designed to provide a metric of the cost of basic needs – what it takes to make ends meet for an individual or family – in Minnesota. Each year the estimates are released for [various family compositions and regions](#), using a variety of inputs from other agencies. Current inflationary pressures have had impacts on the Cost of Living inputs. While no [methodological adjustments](#) were made this year, there are some specific trends and their impacts on the numbers that are worth noting.

Housing

The biggest category in household budgets as estimated by the Cost of Living is housing. For that, our input is the [Department of Housing and Urban Development's Fair Market Rents](#). Those are released annually by county, so they're used without any need to adjust geographically. In the aggregate, housing costs went up by 5.7%, but the Twin Cities metro area tended to have more moderate increases of about 4.5%.

When calculating state averages, county values are weighted by population, so the more populous metro area has a disproportionate impact. Outside the metro, increases in housing costs were much higher – mostly around 7% to 9% with 12 counties surpassing 10% increases over the year. The metro area continues to have much higher housing costs, but in percentage terms costs are increasing more slowly. Increases have been consistent through the years and larger in the last few.

Taxes

In 2021 there were major tax cuts that reduced the tax burden for most Americans, particularly in the income brackets estimated by the Cost-of-Living calculation. These affected the numbers published last year because we incorporate taxes for the year in which they're paid. Although some adjustments were made to account for the one-time nature of those credits, there was still a substantial across-the-board reduction in cost of living as a result of taxes. For this year's calculation, those credits are no longer in place and the rate of taxes is on par with two years ago.

There were also cost of living increases in the last few years due to increased costs in other categories. Housing and transportation have trended up. Food in particular has seen unusually high increases three of the last four years. The base income from which taxes are calculated has increased, and as a result the taxes for which the hypothetical families in the calculation are responsible have also gone up.

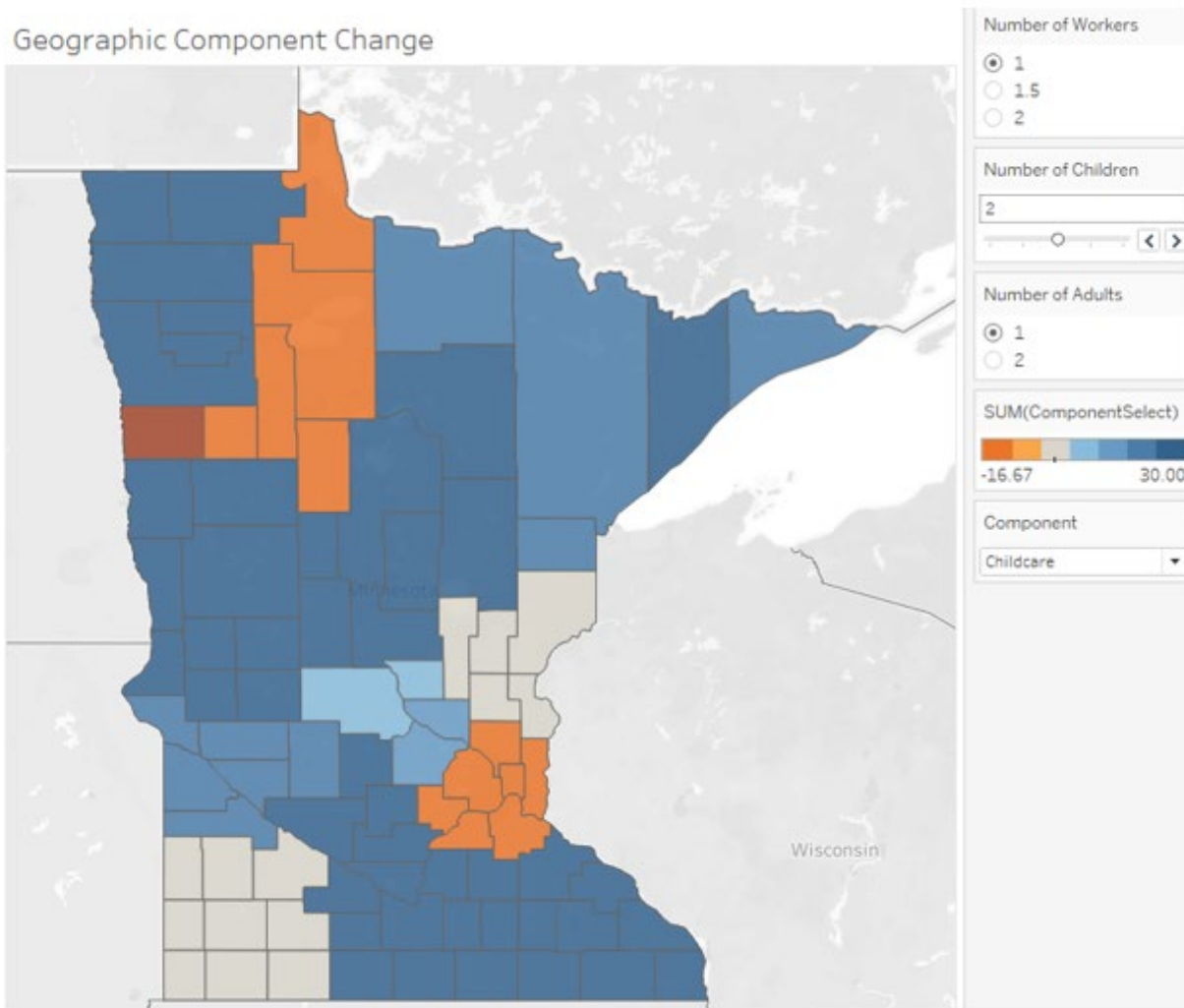
This means that across the board the amount calculated for taxes is higher this year than last by quite a lot, but also that compared to even a few years ago it's moderately higher. However, it's important to point out that for the most part, that change (from years immediately prior to the data released in 2023) is due to the higher income required from other categories, rather than a higher rate of taxation.

Childcare

Childcare costs come from [Childcare Aware of Minnesota](#), which conducts a survey of providers every three years. They have just completed a new survey and have fresh responses. Their collection method has changed and as part of that we began aggregating responses to the [Economic Development Region](#) last year to better represent areas with small numbers of providers and longer average commutes. The combination of the new data and the larger areas of aggregation has resulted in some fluctuation in childcare costs in our calculation.

In the map below, percentage change in estimated childcare costs for households needing full-time care for two children is displayed. The orange areas saw cost declines, grey areas were essentially unchanged, and blue were increases. The Twin Cities metro is still by far the highest cost area for childcare, but in our newer numbers the gap is closing.

Map 1: Percentage Change in Estimated Child Care Costs for Two Children, 2023



Transportation

Variable transportation costs are established by Vehicle Miles Traveled (VMT) by family size and number of workers from the [National Household Travel Survey \(NHTS\)](#), adjusted geographically by [commute times by county from the American Community Survey](#). The NHTS is conducted every five years, and this is the first post-pandemic update we've been able to incorporate.

The new survey results show substantial shifts in the base VMT numbers for required trips (i.e. health care, school, work, etc.). Regardless of household size, single worker households drove dramatically less in 2022 than 2017, while dual-income households drove slightly more.

The fixed costs went up by nearly 25%, while variable costs declined slightly, which softened this trend a little bit, but the effect was to increase the cost of transportation for two worker households and decrease it for single worker households.

It's worth noting that despite the increases in transportation costs this has precipitated, we're still estimating a lower cost for transportation than in the earliest years of the calculation. The recent increases are more challenging as other categories are a lot higher than they were then, but the estimated cost level is not unprecedented.

Conclusion

The latest [Cost of Living](#) study reveals persistent inflationary pressures affecting various aspects of daily expenses. Despite a decrease from peak inflation in 2022, goods and services are still being impacted in different ways. Housing costs, which constitute a significant portion of household budgets, experienced a 5.7% increase overall, with higher spikes outside the Twin Cities metro area. Tax adjustments following major cuts in 2021 influenced this year's

calculations, resulting in higher overall tax burdens compared to previous years, notably affecting hypothetical families' income brackets.

Additionally, childcare costs, based on fresh data from Childcare Aware of Minnesota, showed fluctuations due to methodological changes and geographic aggregations. While the Twin Cities metro remains the highest-cost area for childcare, the gap is narrowing. Transportation costs, determined by VMT and adjusted for commute times, experienced shifts post-pandemic, with fixed costs rising by nearly 25%. Despite these increases, the overall transportation cost estimate remains lower than in earlier years, though recent spikes pose challenges amidst elevated costs in other categories, highlighting the ongoing complexities of assessing the cost of living in Minnesota.