

2022 – 2032 Minnesota Long Term Employment Projections



by [Carson Gorecki](https://deed.data/lmi-help/labor-market-experts/carson-gorecki.jsp) ([/deed/data/lmi-help/labor-market-experts/carson-gorecki.jsp](https://deed.data/lmi-help/labor-market-experts/carson-gorecki.jsp)).

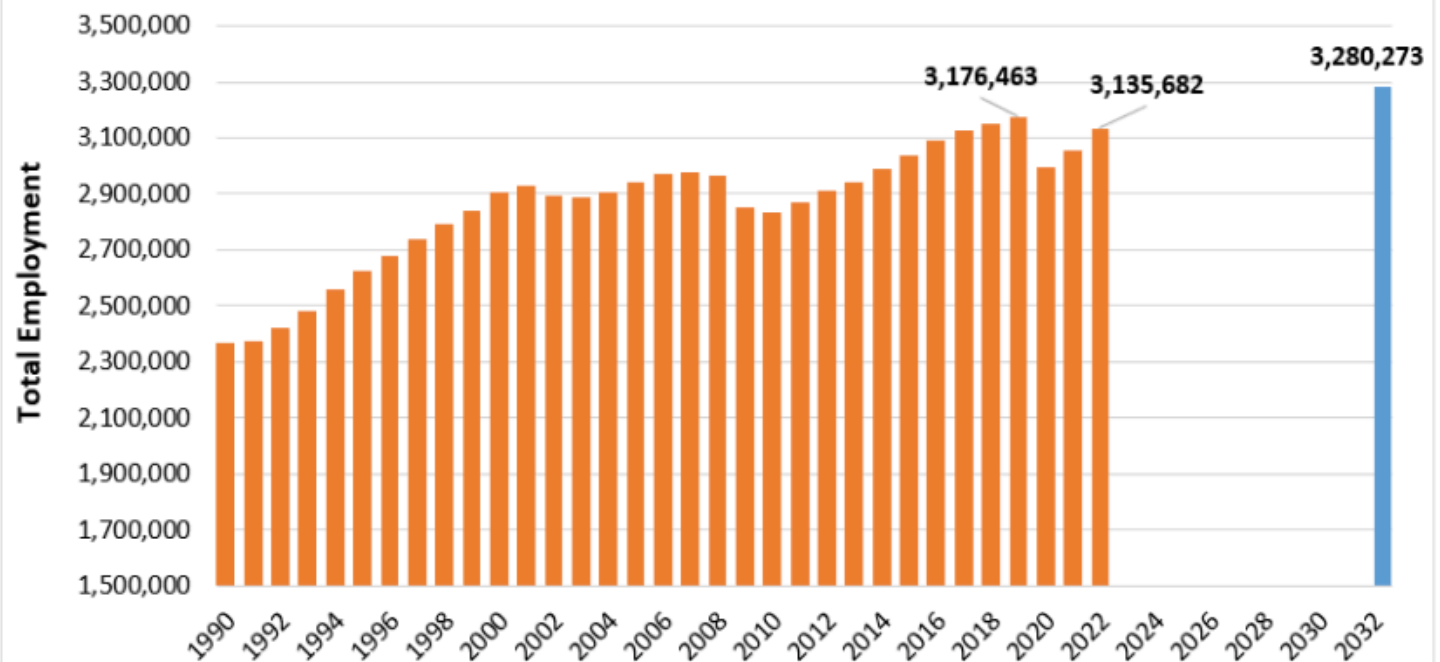
September 2024

Every two years, the Minnesota Department of Employment and Economic Development (DEED) Labor Market Information (LMI) Office issues long-term employment projections looking ten years into the future. These projections take into account multiple factors, from projected demand shifts to changes in labor force availability due to an aging population to impacts of government investments and the impacts of new technologies like [Artificial Intelligence \(AI\)](#).

([/deed/newscenter/publications/trends/september-2024/exposure.jsp](https://deed.newscenter/publications/trends/september-2024/exposure.jsp)). Considering all of these factors, and others, and with the caveat that some events are unpredictable (like global pandemics), LMI analysts project slower yet continued employment growth in Minnesota over the coming decade.

DEED's most recent round of ten-year [employment projections](https://deed.data/data-tools/employment-outlook/index.jsp) ([/deed/data/data-tools/employment-outlook/index.jsp](https://deed.data/data-tools/employment-outlook/index.jsp)) estimates the addition of nearly 145,000 new jobs between 2022 and 2032, a percent change equal to 4.6% (see Figure 1). These projected job gains reflect the demographic trends of an aging and more slowly growing population but are also indicative of broad changes in technology and the way we work.

Figure 1. Minnesota Actual and Projected Total Employment, 1990-2032



Source: DEED Employment Outlook

Compared to recent decades, both Minnesota's population and labor force are anticipated to grow more slowly over the coming decades. The [Minnesota State Demographic Center \(https://mn.gov/admin/demography/data-by-topic/population-data/\)](https://mn.gov/admin/demography/data-by-topic/population-data/) forecasts a 2.8% growth of the population and 4.3% growth of the labor force over the 2022-2032 period. An aging population means a larger share of our workforce will be retired in 10 years, without corresponding growth in the younger population about to enter the workforce, also constraining potential employment growth. Unemployment, which reached historic lows in 2021 and 2022, is expected to return to pre-pandemic rates of above 3%. Each of these demographic or macroeconomic factors works to constrain employment growth. On the other hand, it is possible that the number of workers holding multiple jobs will increase. Historically, the [multiple jobholder rate in Minnesota \(https://mn.gov/deed/newscenter/publications/trends/december-2022/jobholding.jsp#:~:text=According%20to%20the%20BLS%20estimates%2C%20the%20percent%20of,the%20rate%20nationally%20through%20the%20first%20ten%20years\)](https://mn.gov/deed/newscenter/publications/trends/december-2022/jobholding.jsp#:~:text=According%20to%20the%20BLS%20estimates%2C%20the%20percent%20of,the%20rate%20nationally%20through%20the%20first%20ten%20years,) has been higher than the national rate, but it is still below 10% and has decreased in recent years.

Employment growth outpaced labor force growth 12.1% to 5.7% from 2010-2019; meaning the state added more jobs than workers during that timeframe. While that seems counterintuitive, there has been a growing divergence between labor force and employment growth. The slow but steady recovery from the Great Recession and more than a decade of rising labor force participation among older workers also contributed to elevated employment growth until the pandemic arrested the trend. Overall labor force participation, which was near 70% before 2020, fell to below 68% in 2021, after which a slight recovery commenced. If labor force participation continues its rebound of the last few years, it would also mean less constraint on potential employment growth.

Additionally, the impacts of automation and AI are just beginning to play out. For this reason, it is difficult to say with certainty what their aggregate impacts on employment growth and change will be. However, we do know that [jobs that have more routine and repetitive tasks are more susceptible to automation \(/deed/newscenter/publications/trends/september-2024/exposure.jsp\)](https://mn.gov/deed/newscenter/publications/trends/september-2024/exposure.jsp), while at the same time AI has more impact on white collar jobs. Both technologies likely will eventually create new jobs and roles that did not exist, in some cases even a year ago. Pandemic-accelerated trends such as remote work, rising e-commerce, and changing skills requirements will also continue to influence the labor market for the foreseeable future, but [whether they lead to more or fewer jobs is less easy to predict \(https://www.bls.gov/opub/mlr/2022/article/growth-trends-for-selected-occupations-considered-at-risk-from-automation.htm\)](https://www.bls.gov/opub/mlr/2022/article/growth-trends-for-selected-occupations-considered-at-risk-from-automation.htm).

Industry Employment Projections

By industry, the largest percent employment growth is expected in Professional, Scientific & Technical Services and Arts, Entertainment & Recreation, which may both expand by over 10% (see Table 1). Growth in Professional, Scientific & Technical Services is expected to be driven by the continued evolution of technology as Computer Systems Design & Related Services (+16.4%), Other Professional & Technical Services (+16.3%) and Management & Technical Consulting Services (+12.9%) are all expected to see double-digit expansions.

Detailed industries in Arts, Entertainment & Recreation expected to grow the fastest are Agents & Managers for Public Figures (+18.3%), Performing Arts & Sports Promoters (+17.6%), and Amusement Parks & Arcades (+16.6%). These are industries that are continuing their recovery from large losses during the peak of the Pandemic Recession in 2020.

Health Care & Social Assistance, Transportation & Warehousing, Construction and Wholesale Trade are also projected to have growth exceeding 7% in the next decade. Demand for healthcare is expected to rise along with the aging population and advancements in medical technology, while Transportation & Warehousing growth is anticipated to continue along with the expansion of e-commerce.

The Construction sector in particular is expected to benefit from historic investments in infrastructure under the [Infrastructure Investment and Jobs Act and the Inflation Reduction Act \(https://mn.gov/mmb/budget/federal-investments/\)](https://mn.gov/mmb/budget/federal-investments/). As a result, the Highway, Street & Bridge Construction and Utility Construction subsectors are both projected to see growth over 10%.

Overall, the largest number of net new jobs is expected to be added in the Health Care & Social Assistance sector, with over 41,200 added by 2032. That figure is more than twice the next largest projected numeric change of 16,854 jobs in Professional, Scientific & Technical Services. At a more detailed level, Individual & Family Services is expected to lead health care growth by adding over 13,400 jobs over the decade.

Manufacturing, Construction and Accommodation & Food Services are each also projected to add more than 10,000 jobs over ten years, meaning the latter would be continuing its recovery from large losses experienced during the height of the pandemic. Manufacturing gains are driven by industries producing goods tied to other growing sectors, such as Aerospace Product & Parts Manufacturing (+22.6%), Beverage Manufacturing (+15.3%), Semiconductor & Electronic Components Manufacturing (+13.2%), Pharmaceutical & Medicine Manufacturing (+10.2%) and Medical Equipment & Supplies Manufacturing (+10.2%).

Table 1. Minnesota Employment Projections by Industry Sector, 2022-2032

Sector	Actual 2022 Employment	Projected 2032 Employment	Projected Percent Change	Projected Numeric Change
Professional, Scientific & Technical Services	166,480	183,334	+10.1%	+16,854
Arts, Entertainment & Recreation	52,793	58,123	+10.1%	+5,330
Health Care & Social Assistance	482,631	523,906	+8.6%	+41,275
Transportation & Warehousing	101,547	109,602	+7.9%	+8,055
Construction	133,130	143,291	+7.6%	+10,161
Wholesale Trade	131,627	141,239	+7.3%	+9,612
Management of Companies	87,198	93,580	+7.3%	+6,382
Information	45,517	48,292	+6.1%	+2,775
Accommodation & Food Services	211,568	222,473	+5.2%	+10,905
Total, All Industries	3,135,681	3,280,273	+4.6%	+144,592
Mining	5,648	5,891	+4.3%	+243
Finance & Insurance	156,293	162,063	+3.7%	+5,770
Other Services	112,983	116,906	+3.5%	+3,923
Agriculture, Forestry, Fishing & Hunting	24,620	25,450	+3.4%	+830
Manufacturing	323,919	334,924	+3.4%	+11,005
Real Estate & Rental & Leasing	35,160	36,276	+3.2%	+1,116
Administrative Support & Waste Mgmt. Svcs	133,432	137,662	+3.2%	+4,230
Educational Services	236,349	242,662	+2.7%	+6,313
Government	196,782	200,737	+2.0%	+3,955
Utilities	12,332	12,284	-0.4%	-48
Self-Employed & Unpaid Family Workers	204,312	203,332	-0.5%	-980
Retail Trade	281,360	278,246	-1.1%	-3,114

Source: DEED Employment Outlook

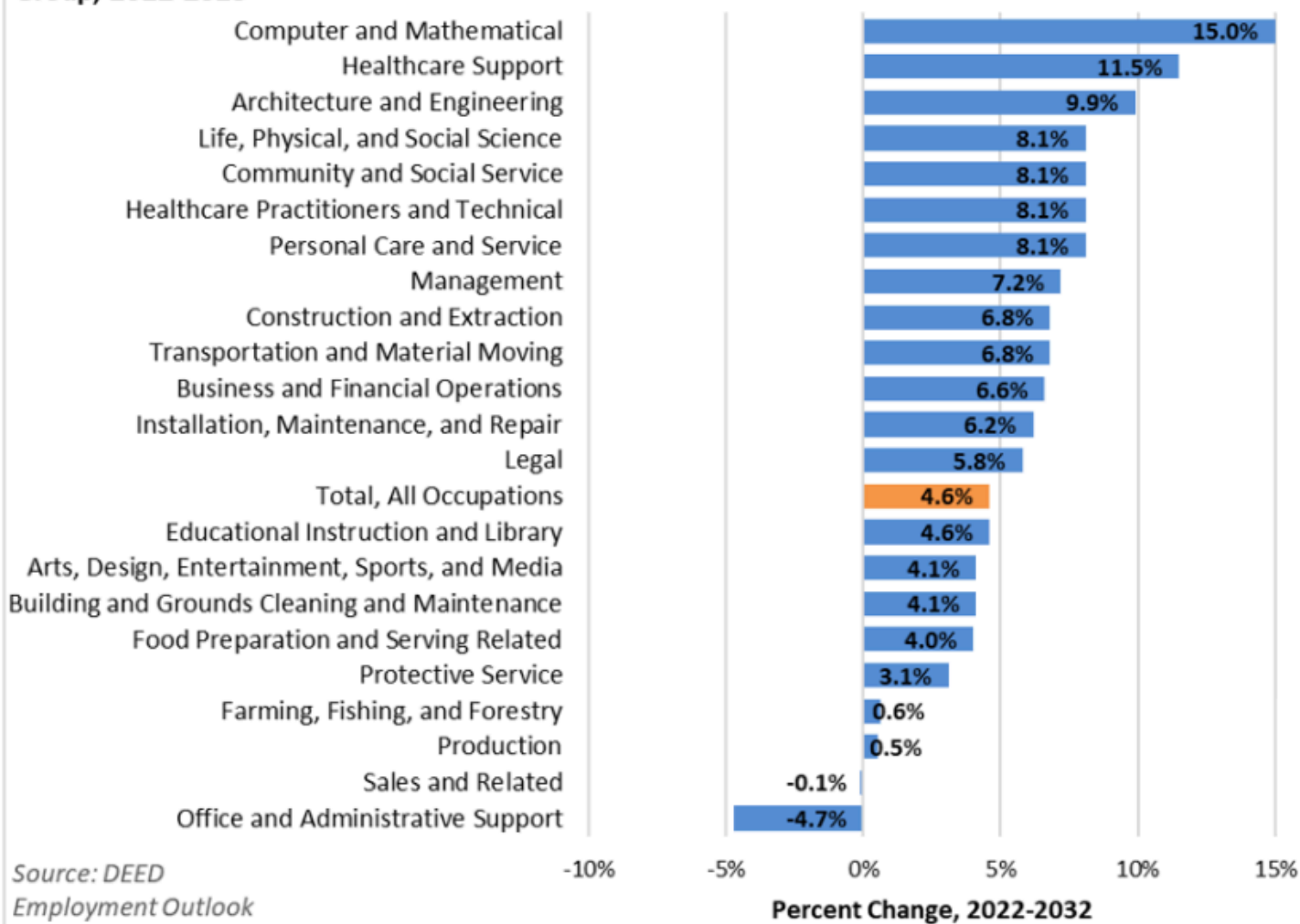
By contrast, two sectors – Utilities and Retail Trade – and self-employment are projected to cut jobs over the next decade. Retail employment is expected to continue to be impacted by the growth of e-commerce, as more people opt to shop online instead of at brick-and-mortar locations that typically require larger staffs. This, along with the increased integration of automation, point toward a need for relatively fewer workers. The losses in Utilities are expected to be minimal but are dependent on the details. Some of the fastest-growing areas of the economy are tied to renewable energy like solar and wind, but at the same time that transition includes the closing of large, fossil-fuel power plants that employ many workers.

Occupational Employment Projections

Employment by industry focuses on what businesses do. Employment by occupation focuses on what the people who work at those businesses do, and these occupational trends provide a different lens into the future of Minnesota's labor market. Projected employment changes by occupation indicate growth in several service-providing occupational groups such as Computer and Mathematical, Healthcare Support, Architecture & Engineering, Personal Care & Service, Healthcare Practitioners & Technical, Community & Social Service, and Life, Physical, & Social Science. Just two occupational groups were expected to lose jobs over the decade – Office & Administrative Support and Sales & Related – but those groups are among the largest in the state.

In addition to the second-highest projected percent change, Healthcare Support also is predicted to add the most jobs (19,985). Other occupational groups expected to add more than 15,000 jobs are Management (17,204), Transportation & Material Moving (16,087), Healthcare Practitioners & Technical (15,517), and Computer & Mathematical (15,061). By comparison, Office & Administrative Support is projected to lose 17,390 jobs and Sales & Related is expected to contract by 214 jobs. The projected decline in Office & Administrative Support reflects both the de-emphasis of the physical office as a place of work, as well as the increased integration of technology, like AI and automation, that reduces the need for workers in many traditional office jobs.

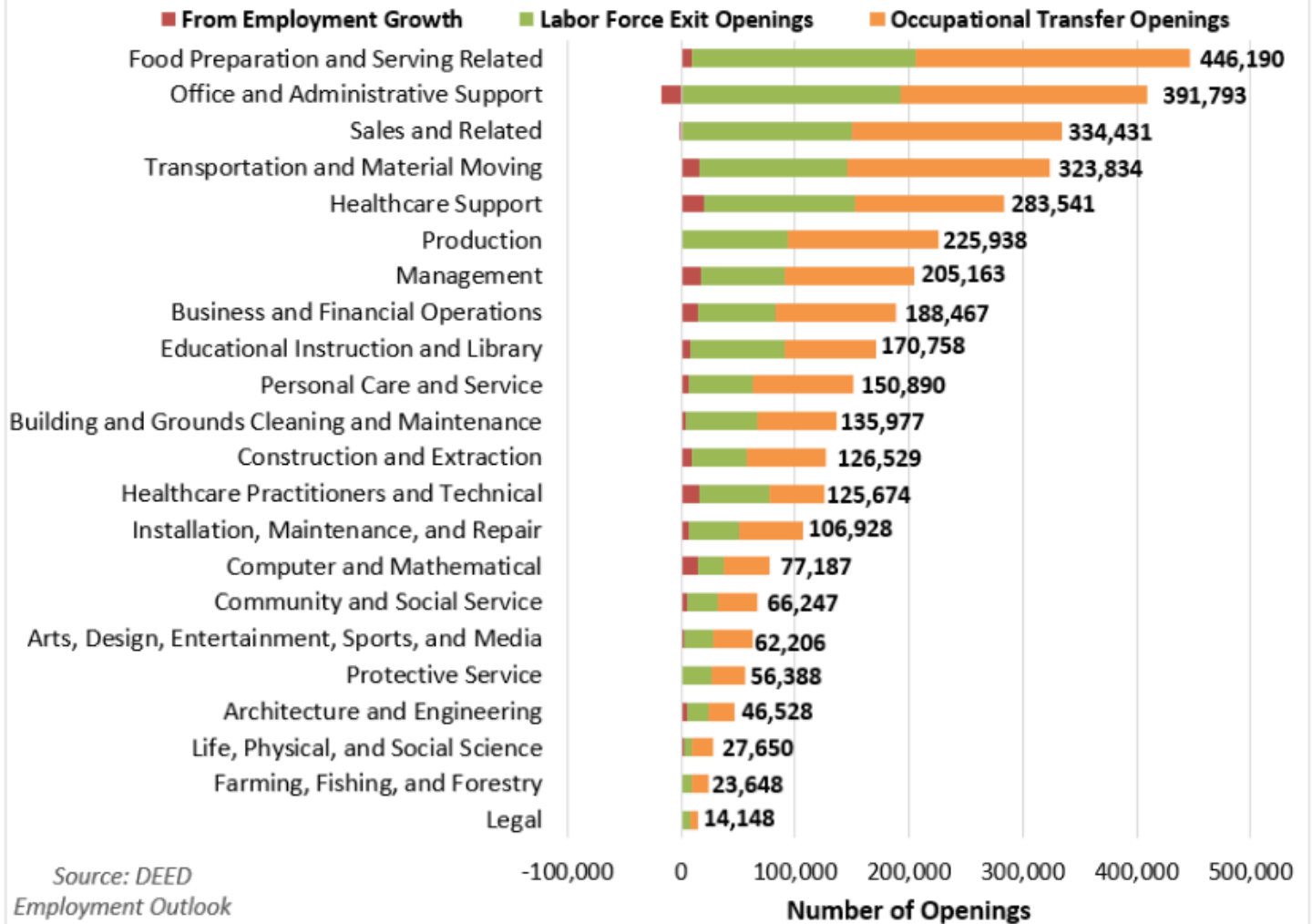
Figure 2. Minnesota Projected Percent Employment Change by Occupational Group, 2022-2032



Beyond the number of jobs projected to be created or lost, there are also measures of turnover that are helpful in measuring future demand for labor. Workers leaving the labor market to retire or for other reasons (such as education or training, caregiving responsibilities, disability, or more), as well as those changing careers open opportunities for others to fill in behind them. In fact, these latter two measures represent the bulk of the projected openings over the next decade. New jobs created are estimated at about 144,600, but total labor market exits (1,531,700) and occupational transfers (1,913,800) represent much larger shares of forecasted future job vacancies (see Figure 3).

The largest number of openings is projected to be created by Food Preparation & Serving Related, Office & Administrative Support, and Sales & Related occupations. Those three occupational groups alone are expected to account for nearly a third of all openings created over the next decade, reflecting both the large number of jobs in these fields as well as their higher-than-average turnover. Demand to fill positions in both Office & Administrative Support and Sales & Related is expected to remain high even as the net number of jobs in those groups is projected to decline. The occupational groups expected to have the largest share of openings via employment growth alone are Computer & Mathematical (19.5%), Architecture & Engineering (12.6%), and Healthcare Practitioners & Technical (12.3%).

Figure 3. Minnesota Projected Openings from Employment Growth, Labor Force Exits, and Occupational Transfers, 2022-2032



By detailed occupation, many different fields are represented among the fastest growing jobs, though Healthcare Practitioners & Technical and Computer & Mathematical claimed all of the top five and eleven of the top 20 (see Table 2). Also noteworthy is the fact that all but one of the 20 occupations with the highest projected percent growth paid above the statewide median wage of \$52,460, and each of the 20 required some form of postsecondary education. While most of the occupations on the list typically require at least a bachelor's degree, five typically ask for an associate or postsecondary non-degree award (vocational training).

Table 2. Projected Fastest Growing Occupations in Minnesota, 2022 - 2032 (Occupations with 500 plus employment in 2022)

Title	Projected Percent Change	Annual Median Wage	Typical Education Required
Nurse Practitioners	+44%	\$134,957	Doctoral or professional degree
Data Scientists	+34%	\$118,092	Bachelor's degree
Statisticians	+31%	\$91,431	Master's degree
Information Security Analysts	+28%	\$128,137	Bachelor's degree
Physician Assistants	+28%	\$135,256	Doctoral or professional degree
Medical and Health Services Managers	+26%	\$116,218	Bachelor's degree
Actuaries	+25%	\$107,162	Bachelor's degree
Physical Therapist Assistants	+24%	\$62,858	Associate degree
Software Developers	+24%	\$129,167	Bachelor's degree
Operations Research Analysts	+22%	\$102,001	Bachelor's degree
Veterinarians	+22%	\$109,047	Doctoral or professional degree
Veterinary Technologists and Technicians	+22%	\$47,771	Associate degree
Computer Numerically Controlled Tool Programmers	+21%	\$72,486	Postsecondary non-degree award
Financial Examiners	+21%	\$89,679	Bachelor's degree
Industrial Machinery Mechanics	+21%	\$67,738	Postsecondary non-degree award
Occupational Therapy Assistants	+20%	\$63,003	Associate degree
Logisticians	+20%	\$83,051	Bachelor's degree
Health Specialties Teachers, Postsecondary	+19%	\$89,051	Master's degree
Software Quality Assurance Analysts and Testers	+19%	\$104,700	Bachelor's degree
Speech-Language Pathologists	+19%	\$86,311	Master's degree

Source: DEED Employment Outlook, Occupational Employment & Wage Statistics

By contrast, of the 20 occupations expected to see the fastest employment declines, only three required more than a high school diploma and eight paid wages above the statewide median (see Table 3). Many of the fastest-declining occupations involve a lot of rote, repetitive tasks that are most susceptible to the trend of increased automation ([/deed/newscenter/publications/trends/december-2018/automation.jsp](https://deed.newscenter/publications/trends/december-2018/automation.jsp)). This is the case for the occupations expected to lose the most jobs numerically as well. Cashiers (-3,930), Secretaries & Administrative Assistants (-3,290), Customer Service Representatives (-2,790), and Office Clerks, General (-2,250) all entail larger than average shares of the types of activities most easily performed by machines.

A popular example is the rising frequency of self-checkout aisles in Retail Trade. This means one Cashier can now oversee four or more checkout kiosks, increasing the productivity of each worker while at the same time decreasing the overall demand for Cashiers. In this way, automation is not expected to fully eliminate entire occupations, but rather replace, complement or augment some of the tasks performed by some occupations (<https://www.bls.gov/opub/mlr/2022/article/growth-trends-for-selected-occupations-considered-at-risk-from-automation.htm>) often creating new, different roles in the process. The extremes of the employment growth spectrum indicate a shift away from lower-paying jobs with lower educational requirements toward higher-paying jobs that require more training or education.

Table 3. Projected Fastest Declining Occupations in Minnesota, 2022 - 2032 (Occupations with 500 plus employment in 2022)

Title	Projected Percent Change	2024 Annual Median Wage	Typical Education Required
Data Entry Keyers	-25%	\$40,489	High school diploma or equivalent
Legal Secretaries and Administrative Assistants	-22%	\$56,736	Associate degree
Executive Secretaries and Executive Administrative	-20%	\$75,181	High school diploma or equivalent
Floral Designers	-18%	\$35,954	High school diploma or equivalent
File Clerks	-18%	\$44,646	High school diploma or equivalent
New Accounts Clerks	-17%	\$48,009	High school diploma or equivalent
Order Clerks	-17%	\$45,977	High school diploma or equivalent
Tellers	-16%	\$39,912	High school diploma or equivalent
Payroll and Timekeeping Clerks	-15%	\$59,883	High school diploma or equivalent
Bill and Account Collectors	-15%	\$46,710	High school diploma or equivalent
Telemarketers	-14%	\$45,630	High school diploma or equivalent
Office Machine Operators, Except Computer	-14%	\$40,592	High school diploma or equivalent
Structural Metal Fabricators and Fitters	-14%	\$51,124	High school diploma or equivalent
Computer Programmers	-13%	\$103,855	Bachelor's degree
Prepress Technicians and Workers	-13%	\$46,562	High school diploma or equivalent
Postal Service Mail Sorters, Processors, and Processing Machine Operators	-11%	\$55,127	High school diploma or equivalent
Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	-11%	\$71,630	Bachelor's degree
Power Plant Operators	-11%	\$93,662	High school diploma or equivalent
Fallers	-11%	\$58,494	High school diploma or equivalent
Tailors, Dressmakers, and Custom Sewers	-10%	\$35,793	High school diploma or equivalent

Source: DEED Employment Outlook, Occupational Employment and Wage Statistics

Looking back, looking forward

Our 2010-2020 employment projections predicted growth of 13%, which was in line with actual employment growth that occurred between 2009 and 2019, but ended up being more than double the actual ten-year growth into 2020 due to job losses in the Pandemic Recession. The emergence of COVID-19 reminded us in a very stark fashion that it can be difficult to predict the future. With the exception of major unforeseen events like the Pandemic Recession and the Great Recession, our projections have been relatively close to how things really played out and continue to be important measures of where our labor market and economy are heading.

For our most recent round of long-term projections, slowing population and labor force growth are expected to act as the largest checks on future job growth. However, significant government investment is anticipated to spur opportunities for growth in sectors like Construction, Health Care, and Manufacturing, which are all long-time cornerstones of our economy.

At the same time, technology advancements in areas such as automation, AI, and increased remote work continue to change how and where Minnesotans work. Weaving together this complex and varied array of factors affecting employment, we begin to see the larger tapestry: one of slower, yet continued employment growth and evolution in the state of Minnesota over the next decade.

In addition to the statewide estimates, we also publish regional employment projections. If you would like to explore our employment projections, please visit our [Employment Outlook page \(/deed/data/data-tools/employment-outlook/index.jsp\)](https://mn.gov/deed/data/data-tools/employment-outlook/index.jsp).

