Rock County

2023 WORKFORCE PROFILE









2022 Wisconsin Overview

Wisconsin's economy broke numerous records during 2022, as the rebound from the COVID-19 pandemic continued.

During January through April, the state achieved a record low seasonally adjusted unemployment rate of 2.8%, while also achieving record lows in initial and continuing weekly unemployment insurance claims. As the number of unemployed people trended downward, construction employment reached a record high, and the manufacturing industry also experienced strong growth.

By year end, the state had regained 99% of the 404,000 jobs lost during the COVID-19 pandemic, including the short, sharp recession of March and April 2020. In addition to the strong rebound in jobs during 2022, Wisconsin's real GDP reached record highs and the state concluded the year with a record high state surplus approaching \$7 billion.

While Wisconsin's year-ending labor force participation rate of 64.6% remained more than 2 percentage points above the national average, demographic trends including the aging and retirement of Baby Boomers contributed to the labor quantity challenge. Concerns over inflation, compounded by China's response to the COVID-19 pandemic and resulting supply chain disruptions, also defined the year.

As demand for workers grew throughout 2022, employers voiced concerns about their inability to attract talent and workers in general. This is unlikely to change in the foreseeable future. The primary underlying challenge is the demographic situation as Baby Boomers exit the workforce. This lifecycle event will continue to complicate employers' ability to find workers and talent. These demographic problems extend beyond Wisconsin and affect the upper Midwest, the U.S. as a whole, much of Western Europe, and in fact, the developed world. Even China faces a talent shortage.



EMPLOYMENT

Wisconsin's labor force held relatively steady through the pandemic, while employment dropped severely and then recovered quickly. See Graphic 1.

The employment gyrations pushed the unemployment rate to 14.1% in April 2020. As employment recovered, the unemployment rate fell to new lows of 2.8% in March and April of 2022. As of December 2022, Wisconsin's seasonally adjusted unemployment is 3.2%.



Graphic 1: Wisconsin's Labor Force and Employment

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

SHORT-RUN OUTLOOK

The short-run outlook for the state looks positive. Job levels continue at high levels, registering gains in 10 out of 12 months in 2022.

Job gains coupled with higher wages translate into healthy consumption, which makes up two-thirds of the economy. Wage gains have been robust. However, the surge in inflation brought about by supply chain disruptions and the war in Europe have undercut the gains in real terms. We expect high inflation to be transitory while wage gains will be permanent. With continued job and wage gains, consumption will be the underpinning of economic growth.

The most prominent economic risk is the Federal Reserve Bank (Fed) aggressively combatting inflation through higher interest rates. The Fed raised interest rates seven times in 2022 – going from essentially zero to 5%. They set a range of 25 basis points. As of March 1, 2023 the range is 4.7 – 5%. Interestingly, Fed fiscal policy contributed to inflation pressures over the last few years.

Experts expect that inflation pressures will ease as supply chains readjust. As inflation pressures ease, the Fed will be able to conduct a more accommodative monetary policy. Tighter fiscal policy will have an influence over the coming years as well.

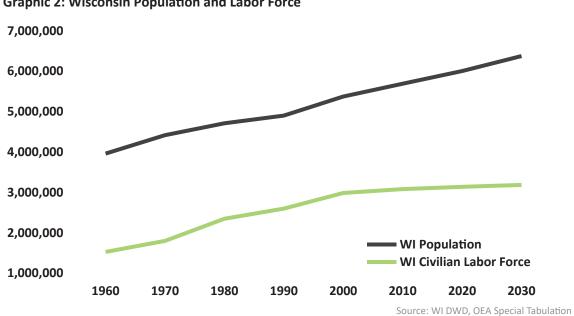
Businesses continue to voice lack of workforce talent as the primary constraint on production growth. Pursuit of workers has brought about wage and benefit increases, signing bonuses, and other incentives to attract workers. However, other workforce barriers such as transportation, dependent care, housing affordability, and the uncertainty of workplace safety surrounding COVID-19. Solutions to these barriers are discussed below.

LONG-RUN CHALLENGE

Workforce quantity is the primary challenge facing Wisconsin's economic future. The demographic dynamics facing the state, other upper-Midwest states, the U.S., and most of the developed economies will advance unaltered in the coming decades.

While Wisconsin's population will continue to grow over the next 20 years, the workforce faces serious constraints. The labor force trend began to seriously flatten in 2008 after slowing in the late 1990s as the first baby boomers (those born in 1946) reached age 62 and began to leave the workforce. Baby boomers continue to exit the workforce in great numbers and will continue to do so over the next 20 years.

The number of retiring baby boomers nearly match the influx of new workers, resulting in a slow-growing workforce. This constrains employers' ability to secure talent across industries. Many businesses report that the lack of available workers has hindered expansion, and in some cases, even curtailed the ability to meet current business needs.



Graphic 2: Wisconsin Population and Labor Force

There are four solutions to the macroeconomic labor quantity challenge: 1) offshoring production, 2) immigration, 3) mitigating barriers to employment of the chronically unemployed, and 4) technological advancement. Critical to the technology solution is the concomitant match of labor skills with technologies' sophistication. This is true for designing, building, installing, operating, and maintaining the advanced technology being put in place as well as for development of the infrastructure and facilities needed to support technological progress: broadband, power, water, transportation.

Worker skills must align with skills demanded by the position. If you have the talent and not the job, the talent goes elsewhere. If you have the job and not the talent, the job goes elsewhere. For Wisconsin to successfully compete in the global economy, the state needs to attract and retain every body it can and educate and train everybody to match the requirements of the new technologies.

FOUR SOLUTIONS



Rock County

POPULATION AND DEMOGRAPHICS

Rock County has 164,959 residents and is the ninth most populous county in Wisconsin. The overall population grew in the past two years of the 2020s, increasing by 1,272 individuals (0.8%). In terms of growth rate, this puts Rock County slightly lower than Wisconsin, which grew by 0.9% during the same period. A significant portion of that increase occurred in the City of Janesville, which grew by 591 individuals from 2020 to 2022. The 10 largest municipalities account for 85.9% of Rock County's total population. From 2020 to 2022, only one of those largest municipalities decreased in population. The overall growth rate of these top municipalities was 0.8%, just barely faster than the county overall.

Graphic 3: 10 Most Populous Municipalities in County

	2020 Census	2022 Final Estimate	Numeric Change	Percent Change
Janesville, City	65,615	66,206	591	0.9%
Beloit, City	36,657	36,760	103	0.3%
Beloit, Town	7,721	7,850	129	1.7%
Edgerton, City	5,799	5,849	50	0.9%
Evansville, City	5,703	5,821	118	2.1%
Milton, City	5,716	5,710	-6	-0.1%
Janesville, Town	3,665	3,692	27	0.7%
Fulton, Town	3,580	3,691	111	3.1%
Milton, Town	3,100	3,111	11	0.4%
Rock, Town	2,981	2,990	9	0.3%
Rock County	163,687	164,959	1,272	0.8%
Wisconsin	5,893,718	5,949,155	55,437	0.9%

Source: WI Dept. of Administration, Demographic Services Center

Natural increase and migration are the two components of population change. Natural population increase occurs when there are more births than deaths, while an increase through migration arises when more people enter the county than exit. Rock County gained population through net migration, with a rate only slightly lower than the state. Rock County's rate of natural increase was essentially flat, lower than the rate of 0.1% for the state. The rate of natural increase is primarily a function of a population's age. On the other hand, migration is more actionable than natural increase and more immediately impacts the county's labor force. Improving net migration could help mitigate workforce challenges that will continue as baby boomers age out of the workforce.

Rock

Graphic 4: Components of Population Change

Net Migration % Natural Increase %

0.8%

0.1%

Wisconsin

Source: Demographic Services Center, WI Dept. of Administration

EMPLOYMENT BY INDUSTRY

Rock County's employment levels across all industries increased by 1,322 jobs (2.1%) from 2020 to 2021. This growth, tied to the high unemployment during COVID-19, allowed Rock County to reach average monthly employment levels of 65,105 in 2021. However, it's more accurate to compare employment totals to 2019 as a pre-pandemic reference point. As of 2021, employment in the county was 3.8% below 2019 levels. In this respect, Rock County underperforms compared to the state overall, which was 3.1% below its 2019 employment level. Rock County's employment was impacted by the COVID-19 recession and has yet to fully recover.

Graphic 5: Employment Change by Industry

	2021 Average Monthly Employment	1-year Numeric Change	1-year Percent Change	2-year Numeric Change	2-year Percent Change	Percent of Total Employment
Construction	3,271	-2	-0.1%	-52	-1.6%	5.0%
Education & Health Services	14,551	257	1.8%	-759	-5.0%	22.4%
Financial Activities	1,777	3	0.2%	-49	-2.7%	2.7%
Information	986	-173	-14.9%	-417	-29.7%	1.5%
Leisure & Hospitality	6,388	365	6.1%	-706	-10.0%	9.8%
Manufacturing	10,547	277	2.7%	-80	-0.8%	16.2%
Natural Resources & Mining	655	28	4.5%	4	0.6%	1.0%
Other Services	1,544	55	3.7%	-192	-11.1%	2.4%
Professional & Business Servic	es 6,136	204	3.4%	-104	-1.7%	9.4%
Public Administration	2,947	20	0.7%	-43	-1.4%	4.5%
Trade, Transportation, Utilities	16,303	289	1.8%	-180	-1.1%	25.0%
All Industries	65,105	1,322	2.1%	- 2,578	-3.8%	100.0%

Source: WI DWD, Labor Market Information, QCEW 2021

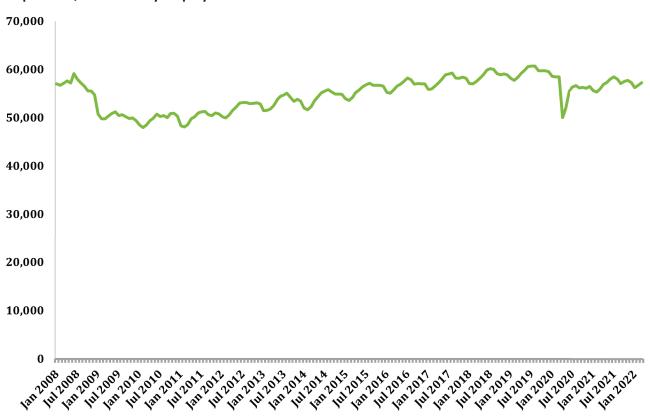
Nine of 11 industries in Rock County experienced employment growth between 2020 and 2021. Trade, transportation, and utilities; education and health services; and manufacturing are the county's largest industries, accounting for 63.6% of the county's total employment. All three of these top industries increased in employment from 2020 to 2021. While these top three industries combined were still below pre-pandemic employment levels by 2.4%, they outperformed the overall county average, which was 3.8% below the pre-pandemic level.

Leisure and hospitality was the fastest growing industry from 2020 to 2021, adding 365 jobs for a growth rate of 6.1%. Despite this rapid growth, its employment remains 10% below pre-pandemic levels. This highlights the dramatic effect COVID-19 has had – and continues to have – on the leisure and hospitality industry in Rock County. However, the information industry remains furthest from pre-pandemic levels, as it experienced a 29.7% decrease between 2019 and 2021. This is certainly a sharper drop than the information industry in the state overall, which experienced a 4.6% drop between 2019 and 2021.



TOTAL MONTHLY EMPLOYMENT

The economic disruption and volatility driven by COVID-19 complicates efforts to separate structural economic shifts from ephemeral changes. Monthly numbers also allow for commentary about seasonal employment patterns. COVID-19 shifted short-term economic outcomes, causing a dramatic dip in employment in April 2020. It also affected long-term economic outcomes, which are to be determined. Despite this, seasonal variation in employment occurs regardless of other economic conditions. For example, retail employment always ramps up for the holiday season. Likewise, construction activity is higher during the summer months. Comparing the same month year-over-year accounts for these seasonal patterns.



Graphic 6: QCEW Monthly Employment

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

Rock County's employment experienced a sharp drop in April 2020. Employment was lower by 9,179 jobs compared to April 2019, a 15.5% drop. The recovery was swift relative to the recovery from the Great Recession, however. Month-to-month employment change became positive by May 2020. By January 2021, employment was 5% lower than January 2020. Since then, employment has steadily returned, although never higher than 2% below pre-pandemic levels. By March 2022, Rock County was still 2.1% below March 2019. This is noticeably lower than Wisconsin overall, which by March 2022 was only 0.7% below March 2019. Like many other counties in Wisconsin, it is unclear whether employment levels will ever fully reach pre-pandemic levels.

Temporary cycles of boom and bust are a natural part of the economy. Beyond these short-term fluctuations, shifts in underlying markets and the economy are called structural changes. These structural changes can be significant transformations in industrial composition, directly affecting what skills and education are in-demand. Some of the changes resulting from COVID-19, such as telecommuting and work from home, will likely continue. Identifying workers disproportionately negatively impacted by these changes is critical to ensure continued gainful employment.

UNEMPLOYMENT AND LABOR FORCE PARTICIPATION

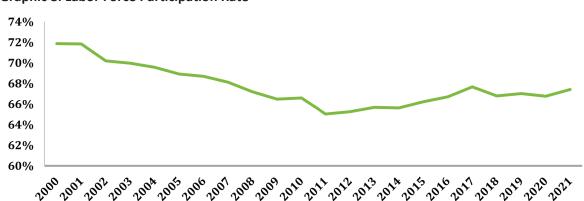
Rock County's unemployment rate spiked to 16.4% in April 2020, caused by the COVID-19 recession. This was slightly lower than the experience of the state overall, which had a 14.1% unemployment rate that same month. Unlike the slow recovery following the Great Recession, the period of high unemployment after the COVID-19 recession was significantly shorter. By January 2021, the unemployment rate was only higher by 1.1 percentage points than January 2020. In November 2021, the unemployment rate was 2.9%, dipping below November's pre-pandemic unemployment rate for the first time since the onset of COVID-19. These low unemployment rates near the end of 2021 and early 2022 point to the tight labor market observed at both the state and national levels.

18.0% 16.0% 14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% Aug 2014 Aug 2017 Apr 2011 Aug 2011 Apr 2012 Apr 2013 Apr 2022 Dec 2011 Aug 2012 Dec 2012 Aug 2013 Dec 2013 Apr 2014 Dec 2014 Apr 2015 Aug 2015 Dec 2015

Graphic 7: Unemployment Rate

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

The labor force participation rate (LFPR) measures the percentage of people working or looking for work relative to the total population of those who could work. In 2021, the LFPR in Rock County was 67.4%, following a trend of slow and steady increases in the 2010s. This trend of an increasing LFPR bodes well for Rock County's labor market. Many other Wisconsin counties are facing an aging workforce, causing a decline in LFPR. Addressing this labor market need at county, state, and national levels will require creative methods to engage marginally attached residents and eliminate barriers that deter otherwise qualified job candidates.



Graphic 8: Labor Force Participation Rate

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

BARRIERS TO FULL UTILIZATION

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

Transportation

Lack of reliable transportation can prevent individuals from pursuing opportunities and employers from filling positions. In Rock County, 92.1% of individuals rely on a car to get to work, with 83.2% of those driving alone. This is noticeably larger compared to the equivalent numbers for Wisconsin overall. Given Rock County's status as a relatively urban county, this indicates a

Graphic 9: Means of Transportation

	Wisconsin	Rock County
Drive Car	87.6%	92.1%
Drive Alone	79.9%	83.2%
Mean Commute Time - Residents	22.2	23.2
Mean Commute Time - Workers	21.9	21.3
% of Residents Working in another County	28.0%	29.6%
% of Workers Residing in another County	24.3%	23.0%

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

need for enhanced transportation options. 29.6% of Rock County residents work in another county and 23% of Rock County workers reside elsewhere. Rock County's rates mimic those at the state level. While COVID-19 may affect the long-term prevalence of remote work, many jobs will still require physical presence. Transportation as a condition of work leads to a conflict: qualified individuals could fill a job if they had transportation and could afford transportation if they had a job.

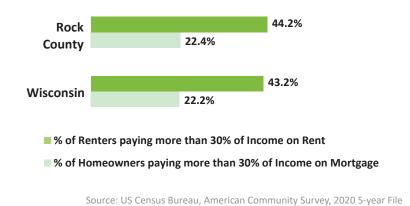


Housing

Housing affordability and availability are barriers making it difficult for workers to relocate for job opportunities. The Department of Housing and Urban Development uses 30% of income as a guideline for housing affordability. In Rock County, 44.2% of renters and 22.4% of homeowners allocate more than 30% of their income to housing. These rates are similar to those at the state level. Early data shows that this issue is worsening, as home values and monthly rent increased accelerated between 2020 and 2022. Two ways to reduce this share would be to 1) provide more housing at a lower cost and 2) increase earnings.

Not only is housing cost a barrier for Wisconsin workers, but so is housing availability. While difficult to quantify, one way to look at this is through the age distribution of housing stock in an area. Rock County contains a higher share of homes built before 1970 when compared to the state. Similarly, there is a lower share of new homes relative to the state. In Rock County, 13.3% of homes were built between 2000 and 2020 while 16.8% of housing was built in the first part of the century statewide. Given Rock County's population growth over the past 20 years, this could indicate potential for housing development. These statistics provide

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



Graphic 11: Housing Share by Year Built



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

context for further examination into whether existing housing stock can accommodate future expansion. Communities have a central role to play in improving the housing situation though updating zoning laws, building multi-family housing, and incentivizing the development of affordable single-family housing.



Childcare

Due to its high cost, childcare is a significant barrier to employment for families across Wisconsin. Despite Rock County's housing affordability, childcare remains expensive with monthly costs ranging from \$709 for a school-age child to \$928 for an infant. These costs are significantly higher than those costs statewide. For context, the cost of infant care is 23.2% of monthly median pre-tax income of a truck driver in Rock County. Childcare availability is also a barrier to employment for Wisconsin families. According to the YoungStar provider database, which tracks approximately 82% of providers in the state, Rock County has 89 childcare providers for a potential capacity of 2,745 children. When compared to the population of children under 14, Rock County has 10 childcare slots available for every 100 children. This level is lower than the state's capacity overall. Even families that have childcare struggle with disruptions to access. Easing the cost

Graphic 12: Childcare Capacity

	Wisconsin	Rock County
Providers	3,863	89
Maximum Capacity	132,075	2,745
Capacity/100 Children Under 14**	0.14	0.10

Source: Wisconsin Department of Children and Families, Youngstar Database

Graphic 13: Childcare Cost



Source: Center for Women's Welfare, Uni. of Washington, 2019 Self-Sufficiency Standards

and access burden would allow parents to attain their full employment potential. Employers could also improve participation by providing flexibility to employees with childcare responsibilities.

Broadband

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

Graphic 14 summarizes broadband internet access distribution across households. In Rock County, 16.1% of households have no access to broadband. Lack of access varies widely across income levels, with Rock County's distribution roughly mirroring the state overall. Lack of access is especially notable in households earning less than \$20,000, where 38.1% of Rock County households lacked access to broadband internet. Conversely, only 6% of households earning

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

	Wisconsin	Rock County
Total	14.8%	16.1%
Less than \$20,000:	38.4%	38.1%
\$20,000 to \$74,999:	17.5%	17.3%
\$75,000 or more:	4.6%	6.0%

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

\$75,000 or more did not have broadband. Lacking access to high-speed internet is a barrier to participation in virtual employment, training, and education opportunities. As a largely urban county, Rock County should have the infrastructure available to expand broadband access.

INDUSTRY EMPLOYMENT PROJECTIONS

Graphic 15: Industry Employment Projections

Industry	2020 Employment	Projected 2030 Employment	Employment Change	Percent Change (2020-2030)
Total All Industries	133,327	141,788	8,461	6.4%
Natural Resources and Mining	3,833	4,243	410	10.7%
Construction	5,428	5,923	495	9.1%
Manufacturing	20,485	21,965	1,480	7.2%
Trade, Transportation, and Utilities	28,479	30,160	1,681	5.9%
Information	1,985	2,060	75	3.8%
Financial Activities	3,659	3,749	90	2.5%
Professional and Business Services	7,988	8,208	220	2.8%
Education and Health Services	28,098	31,055	2,957	10.5%
Leisure and Hospitality	9,376	11,557	2,181	23.3%
Other Services (except Government)	5,082	4,915	-167	-3.3%
Public Administration	7,202	7,581	379	5.3%
Self Employed and Unpaid Family Workers	11,712	10,372	-1,340	-11.4%

The workforce is constantly evolving as workers retire, change careers, take promotion opportunities, or complete retraining. DWD's projection methodology accounts for these types of job changes. DWD splits the state into 11 workforce development areas (WDAs) and updates projections every two years. Rock County is part of the Southwest WDA along with Grant, Green, Iowa, Lafayette, and Richland counties. From 2020 to 2030, southwest regional employment is expected to grow by 6.4% from or 8,461 jobs. This growth is similar to the state, which is projected to grow 6.3% during the same period.

Broadly, service industries are projected to grow faster than produce industries in the Southwest WDA. One aspect of growth in the service industry is leisure and hospitality's bounce back from COVID-19. This area is projected to grow 23.2% from 2020 to 2030. Another fast-growing industry is education and health services, which is projected to grow 10.5% compared to the state's 6.5%. Note that these projections only forecast levels of filled positions rather than potential demand, which can further illustrate the issues associated with an aging population. Job growth is expected to continue, despite declines in growth rate and labor force levels in some counties. Employers find it difficult to replace workers even if overall the industry declines. This could constrain job growth by limiting expansion. Although solutions will be different for each business, they will likely include a combination of talent pipeline development, increased automation, and retention of retirees in non-conventional work arrangements.



OCCUPATIONAL EMPLOYMENT PROJECTIONS

Graphic 16: Occupational Employment Projections

Occupation Title	2020 Employment	Projected 2030 Employment	Occupational Openings	Percent Change (2020-2030)
Total All Occupations	133,327	141,788	16,097	6.4%
Management	8,446	8,662	743	2.6%
Business and Financial Operations	6,180	6,505	580	5.3%
Computer and Mathematical	2,883	3,099	231	7.5%
Architecture and Engineering	1,558	1,716	133	10.1%
Life, Physical, and Social Science	848	852	78	0.5%
Community and Social Service	1,641	1,820	188	10.9%
Legal	361	343	22	-5.0%
Education, Training, and Library	8,853	9,823	925	11.0%
Arts, Design, Entertainment, Sports, & Media	1,582	1,721	182	8.8%
Healthcare Practitioners and Technical	7,315	7,867	467	7.6%
Healthcare Support	5,750	6,600	833	14.8%
Protective Service	1,969	2,156	238	9.5%
Food Preparation and Serving Related	8,529	10,154	1,853	19.1%
Building & Grounds Cleaning & Maintenan	4,194	4,136	535	-1.4%
Personal Care and Service	3,158	3,221	439	2.0%
Sales and Related	12,577	13,056	1,788	3.8%
Office and Administrative Support	16,887	16,404	1,825	-2.9%
Farming, Fishing, and Forestry	2,435	2,608	408	7.1%
Construction and Extraction	6,048	6,459	648	6.8%
Installation, Maintenance, and Repair	5,377	5,777	567	7.4%
Production	13,742	14,435	1,603	5.0%
Transportation and Material Moving	12,994	14,374	1,813	10.6%

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

In total, these projections occupational employment indicate a higher need to fill roles for replacements rather than new positions. One such example are office and administrative support occupations. This group has the second-highest number of projected openings but a declining total number of jobs. The need for this group is entirely driven by labor force exits and occupational transfers. On the other hand, while not the largest in terms of openings, health care practitioners and technical occupations are projected to grow quickly, at a rate of 7.6% over 10 years. This growth is largely driven by an increasingly aging population requiring more health care.