

State of the State 2019

A record long expansion and aging workforce have led to employment conditions that are as tight as any Minnesota has experienced.

June 2019 marks the 10th anniversary of the current expansion, just matching the expansion of the 1990s as the longest in our history. From here on in, we are in uncharted territory. So this annual issue on the state of Minnesota's economy comes at an auspicious time, giving us a review of conditions as we hit this historic threshold and providing an opportunity to speculate on what the future might bring.

These articles present employment conditions that are as tight as any we have experienced, with unemployment persistently near levels as low as any on record. They also emphasize that while the duration of the current expansion has been a major factor in producing these conditions, the demographic trends have also contributed extensively.

A number of developments

will impact employment conditions in the years ahead. One is the continuation of demographic trends that are reducing workforce availability. Baby boomers will age into retirement throughout the next 10 years, thereby continuing to put pressure on an economy increasingly desperate for workers to start and expand businesses. Exacerbating these pressures is the fact that Minnesota's relatively low



unemployment rate, including the broader U6 measure and high labor force participation rate, leaves less slack to offset the impact of our aging population.

Addressing the worker shortage will require a multi-pronged approach. For example, much has been said in previous issues of Trends about the growing importance that our immigrant population has had and will have when it comes to providing the workers we need. Clearly, any solution will require that we promote Minnesota as a destination of abundant employment opportunities for those coming from other countries.

We have also said much about the stark disparities along racial and ethnic lines that unfortunately persist today. Here, too, a continuation of our efforts to resolve these racial gaps is a necessary part of any successful effort. Effectively connecting job seekers to opportunities, removing the multitude of barriers to employment that many face, providing assistance to succeed in an increasingly dynamic and demanding economy, and many other efforts are needed as much or more now than ever before.

A second event that we should anticipate is the inevitable downturn that finally brings this historic expansion to an end. While the 1990s led some to claim the business cycle was all but dead, they were eventually proven wrong, and we shouldn't be so naïve as to think that this time around. But while we know we will eventually enter a recession, when, how and what it will look like are still unknown. Lacking these details does not, however, suggest we can wait for them to emerge before we start to develop a response. DEED leadership and the LMI Office are already taking steps to design our response to this inevitability to best prepare Minnesota to weather the storm when it does arrive.

A third inescapable event sure to have significant consequences is the ongoing and accelerating application of artificial intelligence (AI) to our world of work. Machine learning technology has clearly demonstrated its potential to change the way we perform many job-related tasks, but we also know that we have only seen the tip of a huge technological iceberg. Exactly which applications of AI will advance most rapidly and expansively, and how the jobs impacted will change is another great unknown, but here again we can't afford to wait until these changes are revealed before developing strategies to mitigate disruptions and exploit opportunities that

AI promises. We need to start now to develop policies and practices that will yield an agile and appropriately skilled workforce through responsive training programs, social safety net protections, better employer/worker engagement, and other responses to the coming changes, even if we don't know exactly what they are yet.

As with previous Trends issues on State of the State, this issue provides a good snapshot of the current conditions of our labor markets and a guide to navigating the challenges we face in the years ahead. Those challenges, outlined here, represent a few of the most significant on the horizon. And these alone are enough to guarantee exciting times ahead, if one likes a challenge!

Payroll Employment

Minnesota nonfarm payroll employment growth slowed through 2018 and into the first part of 2019. Over-the-year job growth slid from 1.1 percent in January down to 0.3 percent in December 2018. In February 2019 Minnesota briefly lost jobs over the year before bouncing back to 0.5 percent growth in preliminary April estimates. At 0.7 percent, annual average employment growth in 2018 was the first time the state dipped below 1 percent since 2010.



Growth was concentrated among service providing industries, averaging 1.3 percent for the year. Growth in goods production actually improved in 2018, from 1.1 percent in January to 2.2 percent in December, and all the way up to 2.7 percent in April.

Employment among service providing industries fell precipitously, averaging 0.6 percent in 2018, ending the year with 0.0 percent over the year growth, and reaching a low of -0.3 percent in February 2019, before rebounding slightly in April preliminary estimates.

Education and health services, the state's largest supersector, had one of its most notable slowdowns. Over the year growth in the sector dropped from 2.3 percent at the end of 2017 to 0.3 percent at the end of 2018, and fell to -0.5 by April. This was the largest over-the-year decline of any supersector during that time, save for the smaller and perennially declining Information supersector.

The only other supersector with over-the-year declines as of April 2019 was Trade, Transportation and Utilities, where growth fell from 1.1 percent in 2017 to 0.3 percent in 2018, and has been negative in every month since December 2018. Declines were concentrated in Transportation, Warehousing and Utilities.

Employment services, which is primarily comprised of temporary workers and is often considered a leading indicator for the labor market, had the largest over-the-year decline of any published series, dropping 13.6 percent in April.

Labor Force and Employment

The annual average number of unemployed Minnesotans fell below 100,000 for the first time since 2000 last year as the state's annual unemployment rate dropped to 2.9 percent. The state's annual unemployment rate has only been lower in 1998 (2.7 percent) and 1999 (2.8 percent) and was the eighth lowest nationwide in 2018. The declining unemployment rate was not due to strong job growth, which continued to wane, but due more to Minnesota's labor force growth rate tailing off to 0.4 percent in 2018 from 0.8 percent in 2017.

So far in 2019 seasonally adjusted (SA) labor market numbers have moved in unexpected directions with unemployment increasing, employment flattening, and labor force growth accelerating. All the numbers will be revised at the end of the year, but trends so far in 2019 suggest that Minnesota's economy has slowed considerably from last year. The unemployment rate has climbed

slightly to 3.3 percent, job growth has been minimal, and the number of unemployed has jumped to more than 100,000 for the first time in 19 months.

The positive news is that labor force growth has picked up in 2019, which in light of little job growth may explain why the unemployment rate and unemployed levels are up. The tight job market may be drawing discouraged workers back into the labor force and attracting workers to move to the state. Some states with unemployment rates similar to or lower than Minnesota have experienced recent spurts in labor force and job growth.

Labor force participation rose slightly during 2015 and 2016 before gradually slipping in 2017 and for most of 2018, reaching a low of 69.7 percent last November before ticking up to 69.9 percent in March and April 2019. If the uptick in labor force growth holds, the net result may be a moderate rebound in job growth over the rest of the year. Any uptick is likely to be moderate and short term given the long-term prospects of labor force growth in the state. Minnesota's labor force growth will continue to trend along historically low levels unless immigration into the state accelerates.

Labor force growth is unlikely

to come from higher labor force participation, which is still possible in many states, because Minnesota already had the third highest participation rate last year. The labor force participation rate measures the percent of individuals 16 and older who are employed or unemployed.

By race, black unemployment stood at 6.3 percent in April, a 0.5 percentage point decrease over the year in Minnesota. Despite this improvement, the black unemployment rate continues to be more than double the white unemployment rate (2.7 percent in April) in Minnesota. Hispanic unemployment stood at 5.4 percent in April having jumped by 1.5 percentage points from last year.

What about individuals, 16 years and older, who are neither employed nor unemployed and not counted as part of the labor force? Some of the individuals not included in the labor force are captured in the broadest unemployment measure, U-6. The U-6 rate includes discouraged workers who have given up looking for work because they think they cannot find it, marginally attached who have looked for work in the past year but not the past month, and workers who are working fewer than 35 hours per week but want to work a full-time job. Possible labor force growth from

Minnesota's U-6 unemployed pool is limited relative to most states as Minnesota's current U-6 rate was fifth lowest among states. Room for Minnesota's labor force to pick up is extremely small compared to most other states.

Job Vacancies

The number of job vacancies in Minnesota reached another fourth quarter record last year at 136,917. The result of this, combined with very low unemployment, is that there are more job vacancies than unemployed workers in both Greater Minnesota and the Metro Area.

and personal care and service (\$12.00).

The top seven occupations with the most vacancies accounted for 25 percent of all vacancies in Minnesota during fourth quarter 2018. In order of size, they are: retail salespersons with a median wage offer of \$12.32 per hour; personal care aide (\$12.00); combined food preparation and serving worker (\$11.39); cashier, janitors and cleaners (\$13.25); nursing assistants (\$13.28); and heavy and tractor-trailer truck drivers (\$21.21). Six of these seven occupations had wage offers below the statewide median of \$15.01, with truck drivers being the exception.

Addressing the worker shortage will require a multi-pronged approach.

The number of vacancies was up in every industry except utilities and public administration compared to one year ago. The occupational groups with the highest number of openings were food preparation and serving with a median wage offer of \$11.88 per hour, followed by sales and related (\$13.20)

The vast majority of these jobs required no post-secondary education with two exceptions: The most common educational requirement for nursing assistants is vocational training, and heavy and tractor-trailer truck drivers are required to have a specialized license.



Over a five-year period, fourth quarter 2013 to 2018, vacancies requiring a high school diploma or less were up by 52,318 or 140 percent, those requiring vocational training or an associate degree were up by 10,569 or 108 percent, and those requiring a bachelor's or advanced degree were up by 13,641 or 104 percent.

The overall median wage offer for vacancies during fourth quarter 2018, at \$15.01 per hour, was up 4.7 percent from one year ago. This compares to 2.4 percent inflation (based on the Consumer Price Index). About 37 percent of the openings were for part-time work and nine percent for temporary or seasonal work. Overall, 56 percent offered health insurance, but the share was much higher for full-time vacancies at 86 percent.

Median wage offers rose in 264 occupations and decreased in 148 occupations over the past year. Median wage offers are higher than they have ever been for vacancies requiring no education, a high school diploma or vocational training.

Over a five-year period, fourth quarter 2013 to 2018, median wage offers rose most for vacancies with no educational requirement, up 32.6 percent, or that required a high school

diploma, up 23.5 percent and less for vacancies that required post-secondary education. Wage offers were up 20.6 percent for vacancies requiring vocational training, 13.7 percent for those requiring an associate degree, and 16.6 percent for those requiring a bachelor's degree. In comparison, median wage offers for all vacancies rose 15.5 percent, and the consumer price index rose 8.0 percent over the same five-year period.

Overall, job vacancy survey results present a picture of very high labor demand, particularly in lower skilled and/or lower wage occupations, resulting in growth in wage offers and increasing numbers of openings. The data show that median wage offers are up at a rate exceeding inflation and that this increase is widespread across occupations.

lob Growth Forecast

Last year job growth got off to its slowest start since 2010, averaging only a 0.8 percent over-the-year gain through the first four months of 2018. Job growth over the same period in 2019 is even slower, averaging only 0.3 percent.

A tightening labor market, rather than waning labor demand, is curbing job growth as Minnesota employers find it increasingly difficult to fill their job openings. Job vacancy levels, the best proxy for labor demand, continue to set record highs, while initial claims, the best proxy for labor supply, continue to set record lows. Both proxies point toward job growth being constrained by the shrinking pool of individuals looking for jobs while demand for labor remains robust.

Job growth is expected to be 0.7 percent in 2019, roughly matching job growth last year. The forecasted job growth rate is roughly half the 1.4 percent average annual pace achieved between 2011 and 2018.1 The last eight years have been a relatively robust period of job growth compared with the 2001 to 2010 period when job growth averaged -0.2 percent annually. During the 68-year period of the wage and salary job data used here, Minnesota averaged 2.0 percent annual job growth.

The predicted 20,600 new wage and salary jobs in 2019 will be spread across most industries, but payroll numbers are anticipated to shrink in six industries (Table 1). Small job loss is expected in utilities, retail trade, transportation and warehousing, information, administrative and support, and nursing and residential care. Job growth in 2019 will be slower in most industries

¹The forecast presented here is for the 12-month period between the first quarter of 2019 and first quarter 2020.

Table 1. Minnesota Industry Forecast to 2020 First Quarter*

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Industries	2011	2019	2020	Average Annual Percent Change 2011 - 2019	Percent Change 2019-2020
Total All Industries	2,610,784	2,906,488	2,927,071	1.4	0.7
Goods Producing	372,641	433,401	440,755	1.9	1.7
Natural Resources and Mining	6,085	6,451	6,558	0.7	1.7
Construction	73,805	111,031	116,488	5.2	4.9
Manufacturing	292,750	315,919	317,709	1.0	0.6
Service Providing	2,238,144	2,473,087	2,486,316	1.3	0.5
Utilities	12,752	12,069	11,997	-0.7	-0.6
Wholesale Trade	120,125	129,749	130,762	1.0	0.8
Retail Trade	270,035	293,680	292,797	1.1	-0.3
Transportation and Warehousing	77,494	92,347	92,149	2.2	-0.2
Information	53,361	47,652	47,102	-1.4	-1.2
Finance and Insurance	129,957	150,239	151,530	1.8	0.9
Real Estate and Rental and Leasing	32,417	33,864	34,086	0.5	0.7
Professional, Scientific, and Technical Services	133,250	162,737	164,139	2.5	0.9
Management of Companies and Enterprises	72,625	80,881	81,600	1.4	0.9
Administrative and Support and Waste Management and Remediation Services	119,402	124,766	122,986	0.6	-1.4
Private Educational Services	64,659	67,595	68,572	0.6	1.4
Ambulatory Health Care Services	126,325	155,878	158,675	2.7	1.8
Hospitals	98,716	115,306	117,100	2.0	1.6
Nursing and Residential Care Facilities	100,610	105,470	104,316	0.6	-1.1
Social Assistance	73,057	94,493	95,307	3.3	0.9
Arts, Entertainment, and Recreation	32,385	43,908	45,235	3.9	3.0
Accommodation, including Hotels and Motels	23,630	26,668	26,959	1.5	1.1
Food Services and Drinking Places	165,649	193,115	195,377	1.9	1.2
Other Services (except Government)	113,091	112,455	112,876	-0.1	0.4
Government	418,604	430,215	432,751	0.3	0.6
Federal Government	32,529	31,738	32,799	-0.3	3.3
State Government, Excluding Education	37,155	41,059	41,700	1.3	1.6
State Government Higher Education	64,953	62,109	62,400	-0.6	0.5
Local Government, Excluding Education	141,356	144,418	144,552	0.3	0.1
Local Government Education	142,610	150,891	151,300	0.7	0.3

^{*}All employment data is unadjusted Current Employment Statistics (nonfarm wage and salary employment) jobs for the first quarter of each year. Source: DEED, Employment Outlook, Short-Term Forecast to 2020 First Quarter, Industry



compared to the average annual rate achieved between 2011 and 2019. However, a few industries will see faster job growth in 2019 than the average annual rate recorded over the last eight years.

Federal government employment will expand by 3.3 percent in 2019 with a boost from hiring for the 2020 Census. Natural resources and mining hiring will also be higher this year (1.7 percent) than annual average hiring during the past eight years. Private educational service employment growth will also pick up from recent years as job reductions in private colleges and professional schools will level off.

This will also be the case for state government (public colleges and universities) education payrolls. Post-secondary enrollment initially soared when the recession hit but slumped as the economy improved over the last eight years. Enrollment numbers will likely increase slightly in 2019 leading to a slight increase in post-secondary education employment.

Sixteen industries are projected to expand payrolls faster than overall job growth. The construction, federal government, and arts, entertainment, and recreation industries are expected to see the fastest job growth.

Construction jobs will increase the fastest but at a rate slightly below the post-recession annual average. Home-building permits are off to their best start since 2006 through the first four months this year as the housing market continues to be strong. Publicly funded construction activity is also expected to be up this year with the fiscal shape of all levels of government continuing to improve as recovery from the Great Recession turns into the longest expansion on record. Construction employment is still one or two years off from reaching its 2005 pre-recession peak, but by the end of 2019 it will have recovered over 90 percent of the jobs lost during the home-building bust.

The next four fastest-growing industries will be ambulatory health care services, natural resources and mining, state government (excluding education) and hospitals. Job growth in ambulatory health care services and hospitals will be slower compared to average growth during the previous eight years while job growth in state government and natural resources and mining will be faster this year than during recent years.

Table 2 displays forecasted job growth in 2019 from the



Table 2. Minnesota Occupation Forecast to 2020 First Quarter*

	2011	2019	2020	Average Annual Percent Change 2011-2019	Percent Change 2019-2020
Total	2,610,784	2,906,488	2,927,071	1.4	0.7
Management	148,052	175,129	176,777	2.1	0.9
Business and Financial Operations	147,360	175,375	176,821	2.2	0.8
Computer and Mathematical	79,996	98,045	98,466	2.6	0.4
Architecture and Engineering	46,211	55,674	56,352	2.4	1.2
Life, Physical, and Social Science	22,829	26,122	26,344	1.7	0.8
Community and Social Service	61,316	64,083	64,443	0.6	0.6
Legal	17,013	19,839	19,994	1.9	0.8
Education, Training, and Library	189,156	204,878	206,012	1.0	0.6
Arts, Design, Entertainment, Sports, and Media	41,368	38,100	38,249	-1.0	0.4
Healthcare Practitioners and Technical	155,394	179,987	181,917	1.9	1.1
Healthcare Support	95,177	86,268	86,688	-1.2	0.5
Protective Service	45,195	50,902	51,102	1.5	0.4
Food Preparation and Serving Related	204,916	237,091	239,505	1.8	1.0
Building and Grounds Cleaning and Maintenance	79,380	81,491	82,710	0.3	1.5
Personal Care and Service	100,274	135,071	136,491	3.8	1.1
Sales and Related	258,003	269,157	269,324	0.5	0.1
Office and Administrative Support	402,745	418,836	421,057	0.5	0.5
Farming, Fishing, and Forestry	4,222	2,884	2,876	-4.7	-0.3
Construction and Extraction	69,423	95,980	99,745	4.1	3.9
Installation, Maintenance, and Repair	83,280	96,723	97,659	1.9	1.0
Production	205,187	216,024	215,452	0.6	-0.3
Transportation and Material Moving	154,287	178,829	179,087	1.9	0.1

^{*}All employment data is unadjusted Current Employment Statistics (nonfarm wage and salary employment) jobs for the first quarter of each year. Source: DEED, Employment Outlook, Short-Term Forecast to 2020 First Quarter, Occupation

occupational side of jobs. Job growth is predicted to be positive in all but two of the 22 major occupational groups with 11 of the groups adding positions faster than overall job growth. Job growth will top one percent

in five major groups with construction and extractive and building and grounds cleaning and maintenance jobs expanding the fastest. Jobs are expected to decline slightly in production and farming, fishing and forestry occupations. Farming, fishing and forestry job loss will be lower than in recent years. Employment in sales and related and transportation and material moving occupations is expected to be essentially flat.

Job growth this year will be higher than average growth over the previous eight years in three occupational groups: healthcare support; arts, design, entertainment, sports and media; and building and grounds cleaning and maintenance. All the other occupational groups will see slower growth in 2019 compared to their average annual growth over the last eight years.

Hiring for all industries and for most occupations will remain a struggle given that Minnesota had the fifth lowest U-6 (broadest measure of unemployment) unemployment rate and the second highest labor force participation rate among states last year. This combination means that Minnesota has one of the smallest pools of potential job seekers (as a percent of the population age 16 and up) that feasibly could fill numerous job openings and boost job growth.

Minnesota's job growth outpaced national job growth 62 percent of the years between 1950 and 2000 but only 44 percent of the years between 2000 and 2018. The state's job growth has lagged behind the national pace for the last five, with 2019 making six, years in a row. Employment is expected to increase at 0.7 percent this year compared to the nation's 1.5 percent forecasted job growth.

The following writers contributed to this article: Steve Hine, Dave Senf, Nick Dobbins, and Oriane Casale.

