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Labor Market Publications
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NEworks.nebraska.gov
Reader Feedback Survey

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Image by Wokandapix from Pixabay
# Openings & Expansions

**July**

Kermit Spade, Research Analyst

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<tr>
<td><strong>Food &amp; Entertainment</strong></td>
<td>Culver’s (Opening)</td>
<td>Grand Island</td>
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<td>Forever Addicted to Fun (Opening)</td>
<td>Beatrice</td>
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<td></td>
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<td>Cortland</td>
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<td>The O Lounge (New Ownership/Expansion)</td>
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<td><strong>Health &amp; Fitness</strong></td>
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<tr>
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<td>DB Trailer Sales (Opening)</td>
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</tr>
<tr>
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<td>Lauby Plumbing, Heating, &amp; Air (New Location)</td>
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<td><strong>Manufacturing</strong></td>
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<td><strong>Other</strong></td>
<td>A &amp; J Automotive (Opening)</td>
<td>Norfolk</td>
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<tr>
<td></td>
<td>Comfort Inn (Expansion)</td>
<td>North Platte</td>
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<td>Heads to Tails Dog Grooming (Opening)</td>
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<tr>
<td></td>
<td>UST Global (Expansion)</td>
<td>Sidney</td>
</tr>
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</table>

Source: Nebraska Department of Labor

Openings and expansions listed are a sampling of activity reported for that month. Some activity may have occurred outside the month. If you have an opening or expansion to report, contact us at LMI_NE@nebraska.gov.
This fall, young Nebraskans will pack up their book bags and head back to school, with the majority attending classes in one of the state’s 244 public school districts. According to data from the 2010 U.S. Census, 76.7% of Nebraska school districts were comprised entirely of populations living in rural areas, while just two districts (Ralston Public Schools and Westside Community Schools, both in Douglas County) were located completely within urban areas. The remaining 22.5% of public school districts throughout the state represented a mix of rural and urban populations. David City Public Schools in Butler County had the most even distribution, drawing in students from an urban population of 2,879 (50.7%) and a rural population of 2,797 (49.3%). (1)

There were approximately 334,505 students enrolled in Nebraska’s K-12 schools statewide in 2017. This represented nearly one-fifth (18.4%) of Nebraska’s total population, slightly above the national average of 17.4%. There were about 26,410 kindergarteners, representing about 1.5% of the state’s population; 102,935 students enrolled in grades 1 to 4 (5.7%); 103,948 in grades 5 to 8 (5.7%); and 101,212 enrolled in grades 9 to 12 (5.6%). (2)
Of course, every classroom needs a teacher. As of the second quarter of 2019, according to data from the Nebraska Department of Labor’s Occupational Employment Statistics (OES) program, there were approximately 14,300 K-12 teachers (excluding vocational and special education teachers) employed in schools throughout Nebraska. Of these, about 920 taught kindergarten (6.4% of all K-12 teachers); 9,920 taught in the state’s elementary schools (44.7%); and 11,340 (51.1%) taught middle and/or high school students. An additional 610 Nebraskans were employed as vocational education teachers at the middle or high school level, and about 2,800 taught special education classes to students in kindergarten through grade 12. Substitute teachers made up another 3,670 workers in Nebraska’s educational system. (3)

Sources:
Each fall, as students around Nebraska head back to school, many of last year’s teachers do not. National statistics from the Department of Education suggest that almost 8% of America’s public school teachers leave the profession annually—a rate that substantially exceeds turnover in most occupations requiring a similar level of education. This article draws on a variety of data points to explore that phenomenon, identify which industries tend to attract the most former teachers, and consider what the future may hold for labor markets in the education sector, both around the country and here in Nebraska. (1)

What are Job-to-Job Flows?

Job-to-job (J2J) flows are statistics, collected by the U.S. Census Bureau, on transitions between jobs, such as new hires and separations. J2J data are based on longitudinal job histories linking an individual with an employer at various points in time. The individual’s job at the beginning of a quarter can then be compared to his or her job at the end of the same quarter to determine whether any job transitions have occurred. If a transition does occur, J2J data can provide detail about the origin job (the individual’s job at the beginning of the quarter) and the destination job (the individual’s job at the end of the quarter).

In this article, we focus on job-to-job hires, meaning situations in which an individual separates from a job and are subsequently hired into a different job, with only a short or no observed period of nonemployment between the two. Although J2J data are also available for individuals who become nonemployed following separation from a job, as well as those who are hired into a new job following a sustained period of nonemployment, the analysis in this article focuses solely on individuals who transition directly from one job into another.

For additional information on J2J data and its associated methodology, consult the Census Bureau’s Job-to-Job (J2J) Flows 101 publication.

Industry vs. Occupation

Because J2J data is based on links between individuals and employers, it provides job information classified by industry sector, not by occupation. A job’s industry classification relates to the primary business activities of the employer, while its occupational classification describes the role of the individual worker. For example, while accountants (occupation) primarily perform finance-related job duties, not all accountants work in the finance industry sector. An accountant working at a bank would be considered to hold a job in the finance sector, but accountants might also be employed by a department store (retail trade sector), a meat-packing plant (manufacturing sector), a school (educational services sector), etc. Similarly, a school nurse would be classified as working in the educational services industry sector, not the healthcare sector, despite nursing being a healthcare-providing occupation.

In the context of this article, it is important to keep in mind that not all jobs in the educational services industry sector correspond to the occupation of teaching. Administrators, bus drivers, custodians, and anyone else employed by an educational provider are also included within this sector, regardless of the specific type of work they individually perform. However, while not all education-industry workers are teachers, nearly all teachers work in the education industry, due to the unique overlap between the occupation of teaching and the activities of education-industry employers. The Bureau of Labor Statistics’ Standard Occupational Classification (SOC) system defines primary and secondary school teachers as workers who instruct students “in public or private schools,” meaning a teacher is necessarily an individual employed by a school. While people employed in other kinds of occupations may have job duties that involve some component of educating others, such as a restaurant manager instructing new employees on how to work the grill, or an athletic trainer showing clients how to safely perform exercises on their own, only a person employed by a school to educate students in a classroom would be properly considered to be a teacher by occupation. The occupation of teaching, therefore, has a special connection to the educational services industry sector that is not present for most other occupations, where workers may be employed by firms in a wide variety of industries.

According to second-quarter 2019 figures from the Nebraska Department of Labor’s Occupational Employment Statistics (OES) program, about 99% of people employed in K-12 teaching occupations in Nebraska worked for employers within the educational services industry sector. Moreover, K-12 teachers accounted for roughly one in ten of all educational services employees. (2) Since virtually all teachers worked in educational services, and a significant share of all education-industry employees were teachers, this article treats J2J flows from the educational services sector as a reasonable proxy for overall teacher behavior. However, it is important to remember that not all workers who experienced job transitions from educational services would have previously held teaching occupations.

The caveats above refer only to sections of the analysis based on Census Bureau J2J data. Where other sources are cited, such as the Department of Education, the data is specifically in the context of teachers as an occupation, and should be understood as such.
Job-to-Job Flows

Throughout the past ten years of data, total annual job-to-job (J2J) flows to sectors outside of educational services have exceeded the number of transfers within educational services, both in Nebraska and around the country. In other words, when education workers take new jobs, they are more likely to be moving into a different industry than to be remaining within the education sector. (3, 4)

As illustrated in the chart below, educational services was not the only industry in which total out-flows to all other sectors exceeded intra-sector transfers during the second quarter of 2016, but educational services did see the largest percentage (85.0%) of its J2J flows leaving the industry. The next-largest was other services (except public administration), where just 16.6% of J2J transfers remained within the same industry sector, followed by public administration, at 28.3%. (4)

Out of 20 industry sectors, educational services was one of just three in which the number of J2J flows to any other single sector surpassed the number of transfers within the industry. (4) Almost 17% of Q2 2016 flows originating in educational services went to health care and social assistance, above the 15.0% who remained in education. Although they are not pictured in the chart, management of companies and enterprises and mining, quarrying, and oil and gas extraction also had more J2J exits than intra-sector transfers during this quarter; however, mining, quarrying, and oil and gas extraction had just 31 total J2J flows, too small of a sample size to provide much confidence in the results’ significance. For management of companies and enterprises, the largest share of J2J flows (13.3%) went to the administrative and support and waste management and remediation services industry sector, which includes businesses engaged in activities highly similar to those in the management of companies and enterprises sector, such as office administration, clerical services, hiring and employment placement, and personnel management. (5)
All of these job changes add up. The most recent available data from the U.S. Department of Education’s National Center for Education Statistics (NCES) suggests that, across the United States, nearly 8% of teachers working in public schools left the profession from one year to the next. This was up from 5.1% in 1991-1992 and 7.4% in 2000-2001, but down slightly from a high of 8.4% in 2004-2005. (1)

Teachers who had 25 years or more of experience had the highest rates of leaving the profession (16.1%), presumably, in most cases, in order to retire. Outside of those nearing retirement, teachers with two years of experience or less were the group most likely to quit teaching (7.6%). After two years in the classroom, attrition rates began to drop off, reaching their lowest at 11 to 20 years’ experience (5.2%). (1)

Unfilled Teaching Positions
With so many teachers choosing to pursue alternate careers, some have raised concerns about a looming teacher shortage. Could Nebraska be at risk?

A study conducted by the Nebraska Department of Education found that, at the start of the 2018-2019 school year, there were 302 positions in Nebraska’s K-12 schools that went unfilled, defined as “filled by someone other than a fully qualified teacher or…left vacant.” Of these, 36 (11.9%) were vacant, meaning not filled at all. (6)

Despite some teaching positions going unfilled, Nebraska so far appears to face less of a risk of a teacher shortage than many other areas of the country. To estimate the scope of the problem around the country, the Learning Policy Institute (LPI), a nonpartisan education policy research organization, aggregated state-level reports on unfilled teaching positions between 2015 and 2017. Of the 39 states with publicly available data for 2015-2016 and/or 2016-2017, Nebraska ranked in the bottom fifth nationally in terms of the size of its teacher deficit. An estimated 0.9% of Nebraska teaching positions went unfilled during the years analyzed for this report. The only states that reported fewer unfilled education jobs during these years were Kentucky (0.8%), South Dakota (0.7%), Utah (0.5%), Mississippi (0.3%), Maryland (0.1%), Tennessee (0.1%), Iowa (0.0%), and North Dakota (0.0%). The top five states with the most severe shortages were Montana (7.7%), Virginia (7.4%), New York (7.2%), Texas (6.7%), and Idaho (5.9%). However, due to inconsistencies in state-level survey methodologies, these data are an imperfect vehicle for direct comparisons. (7)
According to LPI's estimates, an average of 3.5% of all teaching positions in the United States were either left vacant or given to candidates who lacked the appropriate qualifications (such as those missing a subject-area endorsement or with an incomplete or expired license), for an approximate total of 108,757 unfilled teaching jobs nationwide. (7) According to third-quarter 2018 data from the Nebraska Department of Labor’s Occupational Employment Statistics (OES) program, the 302 unfilled teaching jobs reported in fall 2018 would have represented about 1.2% of the state’s K-12 teaching workforce, which was less than half LPI’s estimated national average. (6; 2)

LPI also found that Nebraska had a significantly smaller share of uncertified teachers working in its schools than the United States as a whole (0.3% versus 2.6%), as well as fewer inexperienced teachers (11.8% versus 12.7%). However, a slightly higher percentage of Nebraska teachers reported that they planned to leave teaching as soon as possible, with 7.7% of teachers in Nebraska indicating that they planned to change occupations, compared to 7.3% of teachers nationwide. (8)

Work Conditions & Wages

What factors might be driving teachers to change occupations? The data suggest a variety of factors can influence this choice.

Some departing teachers may be motivated to seek out more lucrative career options. According to NCES, the national average annual teaching salary in 2017-2018 was $60,483, about $2,400 less than the overall national average earnings of $62,905 for full-time, year-round workers in 2017. In Nebraska, K-12 educators were paid an average of $53,473 annually, which was 11.6% less than the U.S. average, and about $1,500 below Nebraska’s overall average wage for full-time, year-round workers ($55,019 in 2017). (9; 10)

However, Nebraska outperformed the national average in terms of wage growth for teachers. Nebraska teachers saw a 9.8% increase in inflation-adjusted earnings from 1999-2000 to 2017-2018. During the same time period, the national average teaching salary dropped by 1.3%. (9) Additionally, the remaining gap between Nebraska’s and national average salaries in 2017-2018 closes significantly when considering that the third-quarter 2018 cost of living in Nebraska was calculated to be about 6% (depending on city of residence) lower than the national average. (11)

Unfilled NE Teaching Positions by Endorsement Area, Fall 2018

Money, of course, isn’t everything. When surveyed by the U.S. Department of Education in 2013 (the most recent time this series of questions was asked), only about 6.8% of K-12 public school teachers who left the profession cited salary and/or job benefits as most important to their decision to quit. The most commonly identified reason was “personal life factors” (38.4%). Those who changed jobs were asked to rate their new occupation as better, worse, or not better or worse than teaching on a number of work satisfaction criteria; those most frequently reported as being better in another job than in teaching were “ability to manage personal life and work” (60.8%), “influence over workplace policy and practices” (58.5%), and “autonomy or control over own work” (57.4%). Benefits were the most likely to be rated as better in teaching (25.7%). (1)

Overall, about 90% of all departing teachers surveyed said they left the profession voluntarily, and 61.7% left for reasons other than retirement. (1) This seems to support research published by LPI, which indicates that preretirement attrition is the most significant driver of demand in the teaching labor market. (12)

Future Projections

Even as some teachers are choosing to leave the classroom, the number of K-12 students enrolled in America’s schools is expected to continue to grow. The U.S. Department of Education projects that there will be more than 56.8 million students enrolled in public and private K-12 schools nationwide by the fall of 2026, which will require almost 3.8 million total teachers. This would constitute a 5.7% percent increase in U.S. teacher employment over 2016 levels. (13)

In Nebraska, enrollment in K-12 public schools is expected to increase from about 318,300 in fall 2016 to 332,900 by fall of 2026, a 4.6% increase during this decade. (9) The Nebraska Department of Labor projects that the state will require a 6.4% rise in K-12 teacher employment by between 2016 and 2026, from an estimated 28,117 up to 29,903. (14)

Despite the expected rise in demand for teachers, some indicators suggest that the supply of workers qualified to fill these positions may be at risk of lagging behind. In addition to the loss of experienced teachers as they change jobs, data also suggest that the nation’s teaching workforce could face further shrinkage, as fewer workers are training to become new teachers. From the 2008-2009 to the 2016-2017 academic years, according to U.S. Department of Education data, there was a 35.1% drop in nationwide participation in postsecondary teacher preparation

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**Projected Growth in Student Enrollment & Teacher Employment in NE & U.S. Public & Private K-12 Schools, 2016 – 2026**

That means roughly 319,000 fewer new teachers were preparing to enter the labor market during the 2016-2017 academic year than in 2008-2009. (15)

In Nebraska, the decline was even more pronounced. Between 2008-2009 and 2016-2017, overall participation in Nebraska’s postsecondary teacher preparation programs decreased by 43.8% statewide. (15)

However, the total number of new initial teaching credentials issued in Nebraska actually increased by 42.8% from 2009-2010*** to 2016-2017, and the percentage of new initial credential recipients who obtained their teacher training out-of-state fell by 60.2%. During this same time period, the number of new initial teaching credentials issued nationwide dropped by 10.3%. Out of the 50 states and Washington, D.C., 22 saw gains in total new initial teaching credentials issued over these seven years, with Nebraska ranking #9 for most growth. Pennsylvania experienced the largest decline, at -71.2%. (15)

It is difficult to determine what might have caused participation in teacher training programs to decline in Nebraska at the same time as new initial teaching credentials increased. It may be that, while fewer people enrolled in teacher preparation programs, most of the overall decline came from people who would have eventually dropped out or changed majors, but instead simply never entered a teacher prep program in the first place. Another possibility could be that a greater number of graduates who did complete teaching programs chose to remain and receive their credentials in Nebraska; this theory may also be supported by the observed increase in the share of new credential recipients who attended in-state preparation programs. It seems likely that numerous factors played a role, but the existing data is inadequate to confidently identify a primary cause.
The Final Word

With the number of K-12 students set to rise both in Nebraska and around the country, it will continue to be essential for school systems to fill their classrooms with high-quality teachers. However, many teachers are choosing to leave the profession, participation in postsecondary teacher preparation programs is dropping, and a significant share of teaching jobs are left unfilled by a fully qualified professional.

While these patterns may be concerning, Nebraska currently appears to be in a generally better position than many states nationwide. In recent years, Nebraska has enjoyed growth in several key areas where the U.S. as a whole has seen declines, including issuance of new initial teaching credentials and real wages for teachers. Nebraska also had less than half the rate of teaching positions remaining unfilled as the national average.

A robust educational system staffed with knowledgeable teachers is indispensable for ensuring Nebraska continues to have a highly skilled workforce and innovative ideas well into the future. It will therefore be important to continue monitoring the trends identified within this article. In the meantime, it never hurts to tell a veteran teacher “thank you!” for returning this fall for another year in the classroom.

* Throughout this article, the second quarter (Q2) of a given year is used as the reference period whenever possible, in an attempt to target J2J flows involving teachers to the greatest feasible extent. Regular patterns of seasonal variation can affect labor markets in a variety of ways. Because Q2 closes at the end of June, which is within about a month of the end of the typical K-12 academic calendar, this was determined to be the quarter most likely to capture the job transition behavior of teachers, who are often subject to contracts that run the length of the academic year. While total transfers out of educational services also exceeded intra-sector transfers when evaluated at the annual level, Q2 was consistently the quarter in which the greatest amount of relevant activity took place.

For additional information about the methodology used for the analysis in this article, please contact the author.

** Department of Education data separates individuals into “enrollments” (defined as an individual who has been admitted into a teacher preparation program, but who has not yet completed the program) and “completions” (defined as individuals who complete their program during the academic year reported). Enrollment totals do not include completions. For the purposes of this article, the term ‘participation’ is used to refer to the sum of all individuals within both categories.

*** Data on new initial teaching credentials issued was not available for the 2008-2009 academic year.

Sources:

Employment Data | July

July 2019 County Unemployment Rates

NEBRASKA
July Non-Farm
Total Employment: 1,031,545
Manufacturing: 101,061

Nebraska
(Smooth Seasonally Adjusted)
July Unemployment Rate: 3.1%
Change (OTM): 0.1
Change (OTY): -0.4

Economic Region
(Not Seasonally Adjusted)
Central: 3.2%
Mid Plains: 3.5%
Northeast: 3.2%
Panhandle: 3.7%
Sandhills: 3.2%
Southeast: 3.6%

OMAHA MSA
(Not Seasonally Adjusted)
July Unemployment Rate: 3.2%
July Total Non-Farm Employment: 513,600
Manufacturing: 33,151

Largest OTM Increase (Private)
Trade, Transportation & Utilities: 596 (0.6%)
Mining & Construction: 446 (1.4%)

Largest OTY Increase (Private)
Professional & Business Services: 3,839 (5.3%)
Mining & Construction: 2,618 (10.6%)

GRAND ISLAND MSA
(Not Seasonally Adjusted)
July Unemployment Rate: 3.4%
July Total Non-Farm Employment: 42,205
Change (OTM): 528 (1.2%)
Change (OTY): 69 (0.2%)

LINCOLN MSA
(Not Seasonally Adjusted)
July Unemployment Rate: 3.1%
July Total Non-Farm Employment: 189,477
Manufacturing: 13,624

Largest OTM Increase (Private)
Trade, Transportation & Utilities: 596 (0.6%)
Mining & Construction: 446 (1.4%)

Largest OTY Increase (Private)
Professional & Business Services: 3,839 (5.3%)
Mining & Construction: 2,618 (10.6%)

Sources:
   Statistics Program
2. Bureau of Labor Statistics Local Area
   Unemployment Statistics Program
Fast Facts
Rachel Stevens, Research Analyst

Back to School – Education in NE

$12,299
Amount per pupil spent on educating Nebraska’s K-12 public school students in 2016. Nebraska ranked #12 out of the 50 states and Washington, D.C. in per-pupil educational spending during this year. (3)

88.7%
Share of Nebraska public high school students who graduated within four years, as of 2018 data. About 93.1% of students statewide received their diploma within seven years of beginning high school. (1)

1,004
K-12 public schools operating throughout Nebraska during the 2017-2018 academic year. They were overseen by a total of 244 school districts and 17 Educational Service Units. (1)

323,291
Students enrolled in Nebraska’s public schools as of September of the 2017-2018 academic year. (1)

$41.34
Amount Nebraska spent on K-12 public education per $1,000 of personal income in 2016. (3)

15.9%
Percentage of Nebraska students in kindergarten through twelfth grade who attended private schools in 2017. This was slightly higher than the 12.8% nationwide private school enrollment rate. (2)

1,004
K-12 public schools operating throughout Nebraska during the 2017-2018 academic year. They were overseen by a total of 244 school districts and 17 Educational Service Units. (1)

323,291
Students enrolled in Nebraska’s public schools as of September of the 2017-2018 academic year. (1)

15.9%
Percentage of Nebraska students in kindergarten through twelfth grade who attended private schools in 2017. This was slightly higher than the 12.8% nationwide private school enrollment rate. (2)
89.8%

Share of Nebraska public school districts that offered some form of prekindergarten (preK) program during the 2017-2018 school year. (1)

45.8%

Percentage of Nebraska public school students in prekindergarten through twelfth grade who qualified for free or reduced lunches in 2017-2018. (1)

14.03

Average number of years of teaching experience reported by Nebraska's K-12 public school teachers at the beginning of the 2017-2018 academic year. (1)

54.9

Percentage of K-12 public school teachers in Nebraska who had a master's degree or higher as of the 2017-2018 school year, according to the Nebraska Department of Education. This was up from 51.7% in 2013-2014. (1)

$58,140

Median annual salary for an elementary school teacher in Nebraska, according to second-quarter 2019 data collected by the Nebraska Department of Labor's Occupational Employment Statistics (OES) program. (4)

Sources:
The Nebraska Department of Labor (NDOL) Graduate Outcomes Project is an effort to develop a system of consumer information about Nebraska’s postsecondary educational institutions and the employment patterns of recent graduates. This collaborative project involves NDOL, the University of Nebraska system, all six Nebraska Community Colleges, Iowa Western Community College, Western Iowa Tech Community College, Omaha Code School, Interface Web School, Bryan College of Health Sciences, Custom Diesel Driver Training, JTL Truck Driver Training, Central States Safety and Driver Training, Bellevue University, Clarkson College, Doane University’s Colleges of Arts & Sciences and Graduate & Professional Studies, and the College of Saint Mary.

Results from the Graduate Outcomes Project give a clear picture of recent graduates’ work location, earnings, and industry of employment. Prospective students planning their education can use this information to help select a college and major most suited to their desired career path. Likewise, colleges and regulatory commissions can use data on graduate outcomes to gain insights necessary to improve educational programs in the state and best meet students’ needs. Employers, workforce investment boards, economic developers, and policymakers can also use this information to help match labor supply and demand within the local workforce.

Graduate Demographics

During the 2016-2017 academic year, 16,349 graduates of postsecondary educational programs were reported to NDOL. Of these, 9,895 (60.5%) were found to be working in Nebraska by the first quarter of 2018. They earned an overall average wage of $9,434 during this quarter.

There were more women than men in the graduating classes of 2016-2017. Female graduates were also more likely to be found working in Nebraska (62.8%), as compared to their male counterparts (57.7%). When examining wages by gender, male graduates tended to earn more. On average, female graduates made about 91.1% of the average quarterly wage for males during this fiscal quarter.
Looking at the data by race and ethnicity, white, non-Hispanic graduates were the most likely to be found working in Nebraska post-graduation, with 61.1% employed within the state during the first quarter of 2018. The racial demographic least-often found working in Nebraska after graduation was the Native Hawaiian or Other Pacific Islander group, with just one in ten (10.0%) of these graduates accepting in-state employment by Q1 2018. For almost one-fourth of graduates (24.3%), race and ethnicity information was either unknown, not collected, or not reported. This group of unclassified graduates were found to be working in Nebraska 60.9% of the time.

Of those analyzed, white, non-Hispanic graduates earned the highest average quarterly wage in Q1 2018, at $9,651. Asian graduates earned the next-highest wage, at $9,563, or about 99.1% of the earnings of their white, non-Hispanic counterparts. Graduates whose race was reported as American Indian or Alaska Native received the lowest quarterly wages during the first quarter of 2018, at $7,919. Wage data for the Native Hawaiian or other Pacific Islander racial group were not publishable for confidentiality reasons, due to the small number of graduates in this demographic.

Of graduates reporting Hispanic or Latino ethnicity, regardless of race, 59.8% were found to be working in Nebraska in Q1 2018, a rate similar to that for all graduates overall (60.5%). However, the average quarterly wage for Hispanic or Latino graduates was $7,956, about 15.6% lower than the average for all graduates.
Graduates by Award Type

Most 2016-2017 graduates (46.5%) received a bachelor’s degree, followed by associate degrees (20.0%), and master’s degrees (16.6%).

Bachelor Degree Graduates

<table>
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<tr>
<th>Field of Study</th>
<th>Total Graduates</th>
<th>Graduates Working in Nebraska</th>
<th>Percentage of Graduates Working in Nebraska</th>
<th>Average Quarterly Earnings</th>
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<tbody>
<tr>
<td>Business Administration &amp; Management, General</td>
<td>746</td>
<td>527</td>
<td>70.6%</td>
<td>$9,785</td>
</tr>
<tr>
<td>Registered Nursing/Registered Nurse</td>
<td>462</td>
<td>371</td>
<td>80.3%</td>
<td>$14,001</td>
</tr>
<tr>
<td>General Studies</td>
<td>372</td>
<td>239</td>
<td>64.2%</td>
<td>$9,144</td>
</tr>
<tr>
<td>Psychology, General</td>
<td>348</td>
<td>232</td>
<td>66.7%</td>
<td>$6,522</td>
</tr>
<tr>
<td>Elementary Education &amp; Teaching</td>
<td>300</td>
<td>235</td>
<td>78.3%</td>
<td>$8,834</td>
</tr>
<tr>
<td>Criminal Justice/Safety Studies</td>
<td>235</td>
<td>167</td>
<td>71.1%</td>
<td>$8,194</td>
</tr>
<tr>
<td>Biology/Biological Sciences, General</td>
<td>225</td>
<td>127</td>
<td>56.4%</td>
<td>$5,658</td>
</tr>
<tr>
<td>Foods, Nutrition, &amp; Wellness Studies, General</td>
<td>180</td>
<td>100</td>
<td>55.6%</td>
<td>$5,560</td>
</tr>
<tr>
<td>Family &amp; Consumer Economics &amp; Related Services, Other</td>
<td>176</td>
<td>119</td>
<td>67.6%</td>
<td>$6,798</td>
</tr>
<tr>
<td>Public Relations, Advertising, &amp; Applied Communication</td>
<td>171</td>
<td>102</td>
<td>59.6%</td>
<td>$8,700</td>
</tr>
</tbody>
</table>

The graduates who had the highest rates of employment in Nebraska by Q1 2018 were recipients of post-master’s certificates (71.9%); certificates of at least one, but less than two years (65.2%); bachelor’s degrees (64.4%); and associate degrees (63.3%).

Of all types of postsecondary awards, recipients of doctorates (other) received the highest average quarterly wages ($21,296) in Nebraska during the first quarter of 2018. The most popular field of study for this type of award was perfusion technology (a perfusionist is a healthcare professional who operates a cardiopulmonary bypass machine during surgeries in order to manage the patient’s blood flow and oxygen levels).

Recipient of post-master’s certificates and certificates of at least two, but less than four years also earned comparatively...
high wages (quarterly averages of $19,912 and $15,059, respectively). The two most common disciplines for post-master’s certificates were school counseling and guidance service, and educational leadership and administration. Popular subjects for certificates of at least two, but less than four years were information science, computer systems, nursing administration, and public health.

## Graduates by Industry

Nebraska’s postsecondary graduates were found working in a variety of industries statewide. The most common sectors of employment for 2016-2017 graduates working in Nebraska during Q1 of 2018 were healthcare and social assistance (24.8%); educational services (18.8%); and professional, scientific, and technical services (8.6%).

The industries where 2016-2017 graduates earned the highest average quarterly wages were utilities ($15,157), management of companies and enterprises ($13,029), and finance and insurance ($11,274). The table below shows Nebraska graduates and their average quarterly earnings by industry.

### Industry of Employment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>480</td>
<td>$4,421</td>
</tr>
<tr>
<td>Administrative &amp; Support &amp; Waste Management &amp; Remediation Services</td>
<td>374</td>
<td>$7,728</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing &amp; Hunting</td>
<td>93</td>
<td>$8,300</td>
</tr>
<tr>
<td>Arts, Entertainment, &amp; Recreation</td>
<td>138</td>
<td>$4,790</td>
</tr>
<tr>
<td>Construction</td>
<td>303</td>
<td>$8,464</td>
</tr>
<tr>
<td>Educational Services</td>
<td>1749</td>
<td>$10,337</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>592</td>
<td>$11,274</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>2306</td>
<td>$10,247</td>
</tr>
<tr>
<td>Information</td>
<td>246</td>
<td>$10,578</td>
</tr>
<tr>
<td>Management of Companies &amp; Enterprises</td>
<td>138</td>
<td>$13,029</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>522</td>
<td>$10,868</td>
</tr>
<tr>
<td>Mining, Quarrying, &amp; Oil &amp; Gas Extraction</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>203</td>
<td>$6,633</td>
</tr>
<tr>
<td>Professional, Scientific, &amp; Technical Services</td>
<td>799</td>
<td>$10,653</td>
</tr>
<tr>
<td>Public Administration</td>
<td>376</td>
<td>$9,950</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>71</td>
<td>$7,807</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>686</td>
<td>$6,141</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>157</td>
<td>$8,416</td>
</tr>
<tr>
<td>Utilities</td>
<td>59</td>
<td>$15,157</td>
</tr>
</tbody>
</table>
Graduates and Wages by Field of Study & Industry

The top five fields of study among Nebraska’s 2016-2017 postsecondary graduates were business administration and management (1,342 graduates), liberal arts and sciences (924 graduates), registered nursing (807 graduates), general studies (556 graduates), and elementary education and teaching (418 graduates).

The graduates who earned the highest average quarterly wages during Q1 of 2018 received their degrees or certificates in biochemistry and molecular biology ($27,142), nursing administration ($25,177), pharmacy ($24,961), nursing practice ($24,788), and dentistry ($23,276).

Graduates may not necessarily always go on to work in an industry typically seen as related to their field of study. A good example of this would be a school nurse. While the expectation might be that someone with a nursing degree would work in the health care sector, in the case of a school nurse, we would see someone with a nursing degree working in the educational services sector. For this reason, the connection between an individual’s educational background and their industry of post-graduation employment may not always be immediately obvious.

Some fields of study supplied graduates to numerous industries. Business administration and management graduates were found working in every industry sector in Nebraska, with the sole exception of mining, quarrying, and oil and gas extraction. Other fields of study, on the other hand, can be highly specialized. For example, out of the 25 total graduates in construction management that were found to be working in Nebraska in Q1 of 2018, all but two were working in the construction industry sector.

Graduates by County of Employment

The following map shows where graduates were found to be working in the first quarter of 2018. Unsurprisingly, the state’s most populated areas tended to receive the greatest numbers of recent graduates, perhaps because of their relatively high concentration of employment opportunities. However, 2016-2017 graduates were found working in all but five of Nebraska’s 93 counties.
To some extent, this map may overstate the extent to which graduates congregated around the state’s urban areas. A review of the list of institutions currently participating in the Graduate Outcomes Project reveals that the vast majority are located in Lincoln or Omaha, while many schools based in other areas of Nebraska remain missing. For example, data from Nebraska State College System schools for 2018 was not available, which means many graduates who may have accepted jobs in communities like Chadron, Peru, or Wayne are not reflected on this map.

The Final Word

Graduate Outcomes Project data provide a glimpse into what Nebraska’s postsecondary graduates pursue following completion of their educations, including their locations, earnings, and industry of employment. This information is helpful for anyone with an interest in Nebraska’s labor market conditions, whether they are prospective students planning to enroll in college, school officials who hope to track and improve program offerings, employers seeking to hire qualified workers, or economic developers working to grow local economies.

It is important to remember that these data are not perfect. Despite our best efforts, not all graduates can be matched within NDOL records. Employers do not report employees’ occupations or hours worked on a consistent basis, and to comply with privacy laws, not all data can be published. Despite these shortcomings, however, the data is still useful for a variety of purposes.

About the Data

All data used in this article was collected by the Nebraska Department of Labor Graduate Outcomes Project, in cooperation with partnering postsecondary educational institutions. Employment and wage data is produced using administrative data from the educational institutions and the Nebraska Department of Labor, and complies with all applicable employment security and student data confidentiality laws. Under the Workforce Innovation and Opportunity Act (WIOA), the Graduate Outcomes Project system will also be used for federal performance reporting.

It is important to note some limitations of the Graduate Outcomes Project data. First, data is only available for graduates who can be matched against NDOL’s unemployment insurance database. If a graduate cannot be located in these records, it does not necessarily mean they are unemployed. Individuals unlikely to be found in the database include those who are self-employed, who work in industries not covered by unemployment insurance, who are outside the workforce due to fulltime enrollment in other postsecondary educational programs, and those who are working outside Nebraska or are employed by the federal government. Students who graduated from institutions not currently participating in the Graduate Outcomes Project will also not be reflected in the data.

Data confidentiality protections create additional constraints. When there are small numbers of students in a particular program, major, or industry, a few unusual results can dramatically affect percentages. To protect individual confidentiality, programs with fewer than four graduates are not published.

Next, the wage information provided by the Graduate Outcomes Project relates to all individuals found working in Nebraska, and may be influenced by strong regional variation. Wages tend to be higher in some regions than others. Moreover earnings reported in the database may be for full- or part-time work, and include wages, salaries, bonuses, commissions, and other income designated as earnings under Nebraska unemployment law. These factors may create some variation, and perhaps distortion, within the data.

Finally, it is not possible to tell if graduates are employed in occupations related to their education, since employers do not report employees’ occupations to NDOL. However, graduates can be identified by field of study using the six-digit Classification of Instructional Program (CIP) code for each educational program, as well as by industry of employment post-graduation.

The analysis in this article was based on the data from institutions reporting graduates in the 2016-2017 academic year, which ran from July 1, 2016 through June 30, 2017. Students graduating during this time period were matched against NDOL’s first-quarter 2018 administrative records to determine if they were employed during that quarter. This means graduates had between six months and a year to find a job following completion of their educational programs.
**Economic Indicators**  
*Dillon Cornett, Research Analyst*

### Initial Unemployment Claims
**Monthly Avg. Number of Claims per Week**

- **3,500**
  - NE 10-Year High (Dec. 2009)
- **1,386**
  - NE 10-Year Avg.
- **605**
  - Nebraska Current 2019
- **579**
  - NE 10-Year Low (Apr. 2018)

- DOWN -11.5%
  - NE Vs. Last Year
- DOWN -23.2%
  - NE Vs. Last Month

An initial claim is a request for determination of UI program eligibility filed by an unemployed individual following a separation from an employer. It can serve as an indicator of emerging labor market conditions in the area.¹

**Data Sources:** [Retrieved: August 2019.]


### Avg. Weekly Earnings
**All Private Employees Not Seasonally Adjusted**

- **$871.94**
  - Nebraska Current 2019
- **$755.05**
  - NE 10-Year Avg.
- **$781.77**
  - NE 10-Year High (June 2019)
- **$671.90**
  - NE 10-Year Low (July 2009)

- UP +2.6%
  - NE Vs. Last Year
- DOWN -0.8%
  - NE Vs. Last Month

Average weekly earnings represents the mean pay received by workers for services performed over the course of one week.²

**Data Sources:** [Retrieved: August 2019.]


### Gas Prices
**Avg. Retail Price per Gallon (Regular-Grade Unleaded Gasoline)**

- **$3.93**
  - NE 10-Year High (May 2011)
- **$2.87**
  - NE 10-Year Avg.
- **$2.61**
  - Nebraska Current 2019
- **$2.74**
  - United States Current 2019
- **$1.68**
  - NE 10-Year Low (Feb. 2016)

- DOWN -5.1%
  - NE Vs. Last Year
- DOWN -0.4%
  - NE Vs. Last Month

This figure represents the average price consumers paid at the pump for a gallon of regular-grade, unleaded gasoline during the specified timeframe. The main components affecting the retail price of gasoline are crude oil prices; costs and profits associated with refining, distribution, and marketing; fluctuations in supply and demand; and federal, state, and local taxes.³

**Data Sources:** [Retrieved: August 2019.]


Economic Indicators

Labor Force Participation Rate
Seasonally Adjusted

The labor force is comprised of all persons age 16 and over in the civilian, noninstitutional population who are either employed or unemployed but available for work and actively seeking employment. It excludes people doing unpaid homemaking or volunteer work, retired people, and people who are not employed and not actively seeking work. The labor force participation rate measures the labor force as a percentage of the total civilian, noninstitutional population, age 16 and over.¹

Data Sources: [Retrieved: August 2019.]

Consumer Price Index
12-Month % Change
Not Seasonally Adjusted

The consumer price index (CPI) is a measure of the average change over time in the prices paid by consumers for goods and services. It is used to determine the real purchasing power of consumers’ dollars, and as a measure of inflation.⁶

Data Sources: [Retrieved: August 2019.]

Housing Prices
4-Quarter % Change
Seasonally Adjusted

The housing price index (HPI) measures the movement of single-family house prices, based on purchases involving conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac. “Four-quarter” change is relative to the same quarter one year earlier. HPI data are often considered useful for estimating housing affordability and projecting future changes in mortgage default rates.⁷

Data Source: [Retrieved: August 2019.]

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¹ Data Source: [Retrieved: August 2019.]

² Data Source: [Retrieved: August 2019.]

³ Data Source: [Retrieved: August 2019.]

⁴ Data Source: [Retrieved: August 2019.]
Nebraska Workforce Trends is published by the Nebraska Department of Labor in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

This workforce product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

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