



EMPLOYMENT GAP is important for understanding the number of workers prepared to fill jobs.



Nebraska is facing a supply crisis concerning the state's ability to fill the projected high-skills workforce needed in the future.

An imbalance in the workforce supply and demand, or an employment gap, can lead to long-term negative impacts for services and production, companies, and employees.¹

An employment gap is a mismatch between the number of workers with the knowledge, skills, and abilities to fulfill open job positions (i.e., supply) and the frequency of those open positions (i.e., demand).

The demand for a well-educated workforce is increasing nationally and in Nebraska.² However, while Nebraska ranks within the top five states for producing college-bound individuals,³ its annual net loss of individuals with a bachelor's degree or higher rose from 1,104 in 2010 to 4,548 in 2021.² Therefore, although educational attainment is increasing nationwide, Nebraska is facing a supply crisis concerning the state's ability to fill the projected high-skills workforce needed in the future.²

Further, the pandemic exacerbated the gap in job growth between strongest and weakest industries nationwide and in Nebraska, especially in rural areas. For example, from 2012 to 2022, the strongest industries in Nebraska (professional and business, health care, and manufacturing) increased job growth by 12.3 percent, while the weakest industries (financial accounting, education, and natural resources) decreased job growth by 5.2 percent.⁴ In addition, more than 82 percent of businesses in Nebraska reported having difficulty hiring over the past two years.⁵



Supply

Labor force participation in Nebraska exceeds the national average.

The Nebraska labor force is composed of 1,060,141 individuals and boasts a total of 1,039,001 employed individuals.⁶ While the national average labor force participation rate is 62.6 percent, Nebraska's rate is 69.5 percent,^{5,7} the highest in the nation.⁷ Further, Nebraska's unemployment rate (1.9 percent) is more than 1.5 percentage points below the national average (3.6 percent), making it one of the lowest in the nation.⁷

Still, the workforce supply chain is heavily influenced by demographic characteristics such as educational attainment, race/ethnicity, gender, and age.⁸⁻¹⁰



EDUCATION. Changes in educational attainment rates greatly influence the supply of highly-educated workers, who are increasingly in demand alongside a growing high-skills workforce. For example, 87 percent of individuals with a bachelor's degree or higher are employed, compared to 61 percent of individuals who did not complete high school.¹¹⁻¹² Further, the number of bachelor's and more advanced degrees has risen steadily since 2000 (leveling out at around 37 percent since 2020),¹³ while associate's degrees have remained relatively stable since 2012.¹⁴⁻¹⁵

- In 2021, 2,066,000 bachelor's degrees and 1,036,000 associate's degrees were conferred in the U.S.¹⁴⁻¹⁵ Roughly 58 percent of the obtained bachelor's degrees focused on the following six fields: business (391,400 degrees); health professions and related programs (268,000 degrees); social sciences and history (160,800 degrees); biological and biomedical sciences (131,500 degrees); psychology (126,900 degrees); and engineering (126,000 degrees).¹⁵ Two-thirds of the associate's degrees focused on three core fields: liberal arts and sciences, general studies, and humanities (400,400 degrees); health professions and related programs (181,000 degrees); and business (116,100 degrees).¹⁵
- The top five fields for all degrees granted in the U.S. (business, STEM, health care, liberal arts and sciences, and education, in order) can be further broken down into associate's and bachelor's degrees as a gauge of educational trends and workforce supply. There were 713,510 business degrees granted in 2021, making up 17.1 percent of all degrees attained.¹⁵ These business degrees included 116,090 (16.3 percent) associate's degrees and 391,380 (54.9 percent) bachelor's degrees.¹⁵ There were 700,080 degrees conferred in STEM fields, comprising 16.8 percent of all degrees; of those, 87,380 (12.5 percent) were associate's degrees and 437,300 (62.5 percent) were bachelor's degrees.¹⁵ Health care degrees comprised 16.3 percent of the higher education degrees conferred (676,670 degrees),

with 181,050 (26.8 percent) being associate's degrees and 268,020 (39.6 percent) being bachelor's degrees.¹⁵ There were 444,490 degrees conferred in liberal arts and sciences, making up 10.7 percent of degrees overall; of these, 400,450 (90.1 percent) were associate's degrees and 41,910 (9.4 percent) were bachelor's degrees.¹⁵ Lastly, 274,950 education degrees accounted for 6.6 percent of conferred higher education degrees overall.¹⁵ These education degrees were 18,140 (6.6 percent) associate's degrees and 89,400 (32.5 percent) bachelor's degrees.¹⁵

- Educational attainment is trending upward, particularly for younger individuals. In 2022, 95 percent of all 25- to 29-year-olds had obtained at least a high school diploma, compared to 89 percent in 2010.¹⁵ Similarly, associate's and bachelor's degree attainment increased from 41 percent and 32 percent, respectively, in 2010 to 49 percent and 40 percent, respectively, in 2022.¹⁵ When looking at all individuals over age 25, rates of obtained education are 28 percent high school degree, 10 percent associate's degree, and 23 percent bachelor's degree.¹³
- Nebraska bachelor's program graduates are most likely to have degrees in business.¹⁴ Of the 28,000 annual college graduates, 4,680 (16.7 percent) earn associate's degrees and 15,130 (54.0 percent) earn bachelor's degrees.¹⁴



RACE/ETHNICITY. Notably, the social and economic disadvantages that disproportionately affect racial/ethnic minorities and individuals from lower socioeconomic status lead to a lower likelihood of obtaining a higher education; in turn, this negatively affects the likelihood of their involvement in an increasingly high-skills workforce.

- Rates of college enrollment vary heavily across different racial/ethnic demographics. From lowest to highest, college enrollment rates for each racial/ethnic group are as follows: Black, 57 percent; Hispanic, 62 percent; White, 68 percent; and Asian, 82 percent.¹¹
- Likewise, rates of bachelor's degree attainment vary heavily across different racial/ethnic demographics. From lowest to highest, bachelor's degree attainment rates for each racial/ethnic group are as follows: Hispanic, 23 percent; Black 28 percent; White 46 percent; and Asian, 72 percent.¹¹



GENDER. Women compose a greater proportion of the labor supply nationally, yet they are less likely to be employed than men, for all levels of education.¹² Indeed, workforce participation of men exceeds that of women (88.6 percent compared to 76.4 percent).¹⁶ In Nebraska, 4.9 percent of women are unemployed,¹⁷ which is a notably higher percentage than the overall Nebraska unemployment rate of 2.0 percent.⁶ This discrepancy in women's versus men's labor supply utilization is noteworthy.

- In the 2020–2021 academic year, women earned more associate’s degrees than men (63 percent, or 653,400 degrees, compared to 37 percent, or 383,000 degrees).¹⁴⁻¹⁵ Of the six fields in which the most associate’s degrees were conferred in 2020–2021, three fields were led by women, while three were led by men. Women tended toward health, liberal arts, and business, comprising 84 percent of health professions and related program degrees; 65 percent of liberal arts and sciences, general studies, and humanities degrees; and 60 percent of business degrees.¹⁴⁻¹⁵ In contrast, men tended toward engineering, computer information, and security, comprising 88 percent of engineering technology degrees, 78 percent of computer and information sciences and support services degrees, and 52 percent of homeland security, law enforcement, and firefighting degrees.¹⁴⁻¹⁵
- Similarly, women earned more bachelor’s degrees than men in 2020–2021 (58 percent, or 1,205,700, degrees, compared to 42 percent, or 860,800, degrees).¹⁴⁻¹⁵ Of the six fields in which the most associate’s degrees were conferred in 2020–2021, four fields were led by women, while two were led by men.¹⁴⁻¹⁵ Women tended toward health, psychology, biological sciences, and social sciences, comprising 85 percent of health professions and related program degrees, 80 percent of psychology degrees, 66 percent of biological and biomedical sciences degrees, and 52 percent of social sciences and history degrees.¹⁴⁻¹⁵ In contrast, men tended toward engineering (earning 76 percent of degrees) and business (53 percent of degrees).¹⁴⁻¹⁵
- Trends in the gender of workers across industries have led to female- and male-dominated fields.¹⁸ Women are the most likely to work in finance, insurance, and real estate.¹⁸ While employment in health care, nongovernmental education, and leisure accounts for only one in four men’s jobs nationally (24.8 percent), it accounts for more than four in ten women’s jobs nationally (43.2 percent).¹⁸ Several industries tend to employ a greater proportion of men than women, including construction (1.3 percent of women and 11.1 percent of men), manufacturing (6.6 percent of women and 14.4 percent of men), and transportation and communications (3.0 percent of women and 7.8 percent of men).¹⁸ Women are more likely to work in professional and related occupations (26.2 percent of women compared with 17.5 percent of men), and managerial occupations also employ a greater proportion of women (39.9 percent of women and 33.0 percent of men).¹⁸
- Women are more likely than men to work in service occupations, particularly women who are also racial/ethnic minorities.¹⁸ Service occupations make up 32.2 percent of the employment for Hispanic women, 28.2 percent of the employment for Black women, 27.4 percent of the employment for Native American women, 20.6 percent of the employment for Asian/Pacific Islander women, and 18.3 percent of the employment for White women.¹⁸

- Women are less likely to go into STEM fields than men (4.6 percent of women versus 10.3 percent of men).¹⁸ However, the likelihood of women working in STEM is influenced by race/ethnicity; 11.3 percent of Asian/Pacific Islander women work in STEM, compared to 4.9 percent of White women, 2.8 percent of Black women, and 2.3 percent of Hispanic women.¹⁸



AGE. For some fields, a retirement cliff is projected to negatively impact the supply of workers within that industry. For example, nearly 30 percent of all engineering and science degree holders in the labor force are age 50 or over and expected to retire in the next 15 years.¹ Similarly, less than 25 percent of the insurance industry is under the age of 35.¹ As a consequence, 50 percent of the current insurance workforce is expected to retire over the next 15 years, leaving more than 400,000 positions unfilled.¹



Demand

National projections suggest employment trends will continue to favor a highly educated workforce.

The health care and social assistance sector and the computer systems design and related services sector are projected to add the most jobs from 2022 to 2032.¹⁶ However, there is a growing skills gap, leading to an imbalance in the workforce; while educational attainment has increased, it is still insufficient to meet the workforce demand of most industries. Further, filling unskilled jobs that pay less than \$19 per hour has become increasingly difficult.¹ Most industries, skilled or unskilled, are facing unmet demand which is largely attributed to a lack of skills/experience and/or willingness to work.¹

- The leisure and hospitality industry retains 3.1 million unfilled jobs that were originally lost during the pandemic; this represents more than one-third of all unemployed persons in the United States.¹
- The food and beverage industry notes a difficulty with finding employees who have both the skills and willingness to fill jobs, noting that the following are limitations to hiring: limited access to employment visas for highly technical positions, generous unemployment benefit payments, and lack of child care.¹
- The construction industry added 88,000 jobs in 2020, yet reports a 200,000 to 300,000 shortage of workers.¹

- The manufacturing industry notes a widening skills gap, attributable to five factors: (a) age demographics, where supply cannot keep up with the retirement cliff; (b) mismatch between workforce needs and educational curriculum; (c) technological advances creating jobs with new demands and skills; (d) regional economic dynamics, where new graduates prefer to remain in urban areas; and (e) a need for career advancement and other economic incentives.¹

While Nebraska has one of the lowest unemployment rates in the nation, there remains unmet demand (employee shortage) for certain jobs.

In Nebraska, employment is projected to grow by 8.1 percent from 2020 to 2030, with 89,498 new jobs by 2030; of these, 38,513 jobs (43 percent) are expected to be from pandemic recovery and 50,985 (57 percent) from economic growth.⁷

- Sectors with the highest projected positive employment change include management (projected change: +7,330 jobs), transportation and material moving (projected change: +8,899 jobs), and food preparation and serving (projected change: +15,137 jobs).¹⁹
- Sectors with the lowest projected positive employment change include legal (projected change: +666 jobs); life, physical, and social science (projected change: +878 jobs); and architecture and engineering (projected change: +991 jobs).¹⁹
- Sectors with negatively projected employment change include farming, fishing, and forestry (projected change: -129 jobs), as well as office and administrative support (projected change: -90 jobs).¹⁹

There is significant job opportunity (i.e., demand) remaining in Nebraska, particularly for high-skills positions. Nebraska's top H3 (high need, wage, and skill) jobs are registered nurses, and software developers and software quality assurance analysts and testers.¹⁹ This directly maps onto the top examples of jobs requiring a bachelor's degree or more (high skills) with unmet need in 2019.²⁰

- Unmet need among high-skills jobs, measured by job postings per month unfilled, includes registered nurses (72 postings per month; 1,618 current job openings¹⁹), software developers (73 postings per month), other computer occupations (79 postings per month), physicians and surgeons (92 postings per month), and family and general practitioners (92 postings per month).²⁰
- Unmet need among middle-skills jobs, measured by job postings per month unfilled, includes teachers (61 postings per month; 468 current job openings¹⁹), insurance agents (77 postings per month), and trailer truck drivers (79 postings per month).²⁰



Employment Gap Considerations

Unemployment rates, which can indicate the magnitude of an employment gap, suggest that Nebraska is well positioned nationally. Still, the state retains unmet demand, particularly for high-skills jobs.

While the unemployment rate in Nebraska is consistently lower than the national rate,^{6,20} more than 82 percent of businesses in Nebraska reported hiring difficulties over the past two years.⁵ Nebraska still faces many unmet needs, represented by four active job postings per unemployed person in the state in January 2019.²⁰ Indeed, there exist 34,769 job openings on NEworks as of early September 2023.¹⁹ In particular, there is unmet demand for high- and middle-skills jobs across the state (e.g., registered nurses, physicians, software developers).¹⁹ Therefore, these low unemployment rates could be an indicator of a deficit in the labor supply, as it indicates that Nebraska could absorb much more supply.

- Given Nebraska’s relatively high workforce participation rate, it might not be realistic to solve workforce supply problems by simply increasing in-state workforce participation. Rather, efforts to recruit highly-skilled workers from out of state should be considered. Additionally, loss of highly-skilled workers (e.g., college graduates moving to another state following graduation) may contribute to the unmet demand yet low unemployment rates within the state. Indeed, while Nebraska was recently listed as the eighth best state in the nation to launch a career when looking at a balance of influential factors (i.e., median rent, percentage of available jobs requiring a bachelor’s degree, employment growth projection, and historical unemployment rates and change over time),²¹ individuals are still most likely to leave Nebraska for a new job.²
- The Nebraska education system is well positioned to support a highly qualified workforce, with several state-led initiatives in place to bolster workforce participation. In 2019, the average educational attainment in Nebraska mirrored the national average: just above 30 percent of individuals above age 25 held a bachelor’s degree or more.¹¹ Further, Nebraska ranks in the top 10 states for high school (#4) and 2-year college (#10) graduation rates. However, Nebraska ranks 36th among all states for STEM graduates and 40th among all states for business start-up density.²⁰ These low rankings suggest a need to focus on supporting innovation and bolstering STEM education.²⁰ This is especially true given the existing and projected high demand for STEM careers in the state (e.g., nurses and physicians, computer occupations). Recent supply-side Nebraska initiatives include scaling internship programs, revolutionizing childhood-to-career education segments, and launching a campaign to promote “choosing” Nebraska.²⁰

Recent demand-side Nebraska initiatives include expanding agri-business clusters, building a pipeline of tech founders across Nebraska's core industries, and creating a manufacturing innovation center,²⁰ all of which are intended to bolster job opportunities for those with less education. Nebraska is also working to develop financial technology, banking, and insurance technology partnerships, which will help to promote high-skills jobs as well.²⁰

1. U.S. Chamber of Commerce. (2021). The America Works Report: Industry Perspectives. <https://www.uschamber.com/workforce/education/the-america-works-report-industry-perspectives>
2. Schafer, J. G. (2023). Changing education and workforce demographics impacting Nebraska. Presentations (University of Nebraska Omaha). 17. <https://digitalcommons.unomaha.edu/cparpresentations/17>
3. Winters, J. V. (2015). The production and stock of college graduates for U.S. States. (Working Paper 15-246). Upjohn Institute for Employment Research. <https://doi.org/10.17848/wp15-246>
4. Kauffman, N., McCoy, J., & Rodriguez, E. (2022). Pandemic widens gap in Nebraska labor markets. Nebraska Economist. <https://www.kansascityfed.org/omaha/nebraska-economist/pandemic-widens-gap-in-nebraska-labor-markets>
5. Nebraska Department of Labor. (2023, January). Nebraska workforce trends. <https://dol.nebraska.gov/webdocs/Resources/Trends/January%202023/Trends%20January%202023.pdf>
6. Nebraska Department of Labor. (2023). Nebraska employment data. <https://dol.nebraska.gov/infolink>
7. Nebraska Department of Labor. (2023, July-August). Nebraska workforce trends. <https://networks.nebraska.gov/admin/gsi-pub/htmlarea/uploads/Trends%20July-August%202023%20.pdf>
8. Kenan Institute of Private Enterprise. (2023). Labor supply: Inside the tight labor market. <https://kenaninstitute.unc.edu/kenan-insight/labor-supply-inside-the-tight-labor-market/>
9. Wiesner, M., Vondracek, F. W., Capaldi, D. M., & Porfeli, E. (2003). Childhood and adolescent predictors of early adult career pathways. *Journal of Vocational Behavior*, 63(3), 305–328. [https://doi.org/10.1016/S0001-8791\(03\)00028-9](https://doi.org/10.1016/S0001-8791(03)00028-9)
10. Witteveen, D. (2018). Precarious early careers: Instability and timing within labor market entry. In A. L. Kalleberg & S. P. Vallas, (Eds.), *Precarious work* (Vol. 31, pp. 365–398), Emerald Publishing Limited. <https://doi.org/10.1108/S0277-283320170000031012>
11. Ma, J., & Pender, M. (2023). Education pays 2023: The benefits of higher education for individuals and society. College Board. <https://research.collegeboard.org/trends/education-pays>
12. National Center for Education Statistics. (2023). Employment rates of young adults. U.S. Department of Education, Institute of Education Sciences. <https://nces.ed.gov/fastfacts/display.asp?id=561>
13. U.S. Census Bureau. (2023). Census Bureau releases new educational attainment data [Press release]. CB23-TPS.21. <https://www.census.gov/newsroom/press-releases/2023/educational-attainment-data.html>
14. Hanson, M. (2023). College graduation statistics. Education Data Initiative. <https://educationdata.org/number-of-college-graduates>
15. National Center for Education Statistics. (2023). Undergraduate Degree Fields. Condition of Education. U.S. Department of Education, Institute of Education Sciences. [https://nces.ed.gov/programs/coe/indicator/cta/undergrad-degree-fields#:~:text=In%202020%E2%80%9331%2C%20two%2D,181%2C000%20degrees\)%3B%20and%20business](https://nces.ed.gov/programs/coe/indicator/cta/undergrad-degree-fields#:~:text=In%202020%E2%80%9331%2C%20two%2D,181%2C000%20degrees)%3B%20and%20business)
16. U.S. Bureau of Labor Statistics. (2023). Employment projections: 2022–2032 summary [Economic news release]. USDL-23-1941. <https://www.bls.gov/news.release/ecopro.nr0.htm>
17. Nebraska Department of Labor. (2022, May). Nebraska workforce trends. <https://dol.nebraska.gov/webdocs/Resources/Trends/May%202022/Trends%20May%202022.pdf>
18. Status of Women in the States. (n.d.) Gender differences in sectors of employment. <https://statusofwomensdata.org/gender-differences-in-sectors-of-employment>
19. Nebraska Department of Labor. (n.d.) Labor market information. NEworks. <https://networks.nebraska.gov/vosnet/Default.aspx>
20. Blueprint Nebraska. (2019). Growing the good life: Working to create a new standard of sustainable economic prosperity for all Nebraskans. https://www.nechamber.com/uploads/1/3/1/6/131641147/bpne_full_report_073019.pdf
21. Wheelwright, T. (2020). Best states for new grads to start their career in 2020. Business.org. <https://www.business.org/hr/best-states-for-new-grads/>



This is an NSWERS **EXPLORE** product, an overview and background of the current state of knowledge surrounding the factors that contribute to **Employment Gap** in Nebraska.