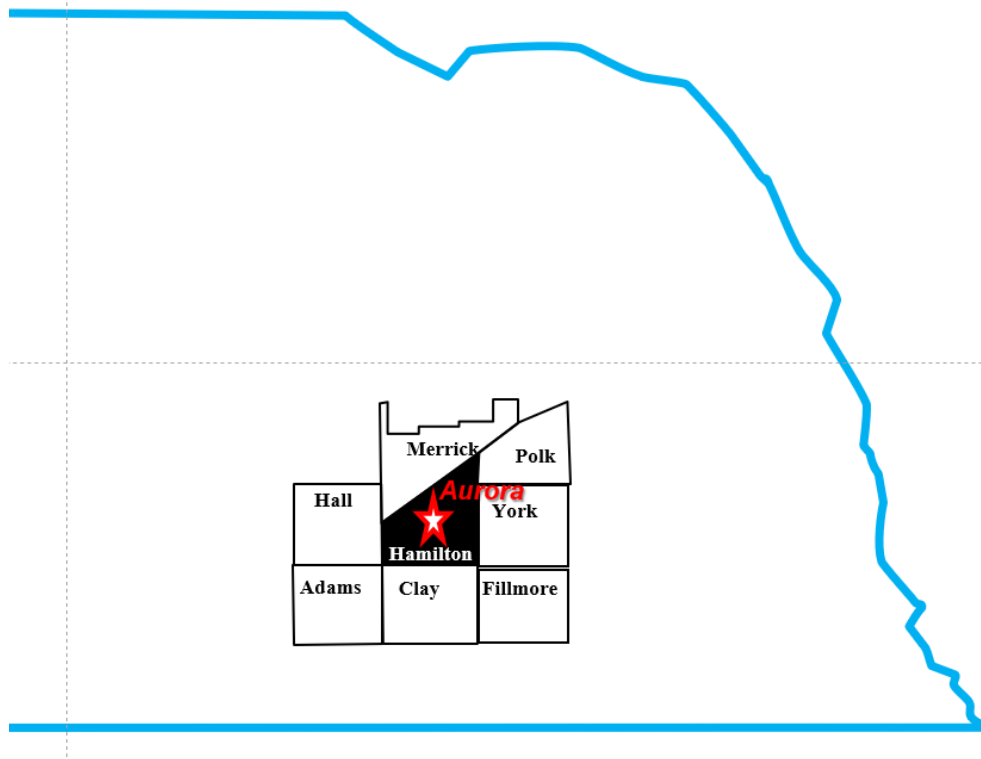


Target Industry Study, City of Aurora, Hamilton County, Nebraska



January 2021

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Executive Summary

This study identifies a core set of industries as likely candidates for future retention, expansion, and possible recruitment efforts by the Aurora Development Corporation (ADC). The area included in the study, 2020 Hamilton County Study Area, consists of Hamilton County and seven contiguous counties. Key findings of this report include:

- NAICS 31 Manufacturing, with 12,314, is the largest 2-digit, NAICS industry in the 2020 Hamilton County Study Area, has experienced a large increase in jobs, 645, during the latest five-years, and has an average annual wage, \$48,498, significantly higher than the regional average of \$41,027.
- NAICS 90 Government with 12,086 workers, is the second largest 2-digit, NAICS industry in the 2020 Hamilton County Study Area, has average annual wages, \$44,501, higher than the regional average, and has recently experienced a decrease in workers.
- NAICS 22 Utilities, has the highest average annual wages, \$85,397, and the lowest number of jobs, 45.
- The Hamilton County Study Area has relatively high employment in NAICS 31 Manufacturing, 16.9 percent vs. Nebraska's 10.2 percent, and NAICS 11 Agriculture, Forestry, Fishing and Hunting, 3.0 percent vs. Nebraska's 1.5 percent.
- The 2020 Hamilton County Study Area has relatively low employment when compared to Nebraska in NAICS 54 Professional, Scientific, and Technical Services, 1.9 percent vs. 4.8 percent for Nebraska, and NAICS 52 Finance and Insurance, 3.7 percent vs. 5.8 percent for Nebraska.
- Standard occupational code (SOC) 51-0000 Production Occupations is the largest 2-digit category when measured by jobs, 8,685, and is the second largest, 8,283, when measured by the number of residents living in the Hamilton County Study Area.
- The number of jobs within the Hamilton County Study Area, 72,967, is slightly higher than the number of working residents. On net, there are 307 more in-commuters than out-commuters.
- The Hamilton County Study Area is a net importer of workers in SOC 51-0000 Production Occupations. This suggest a potential constraint on the ability of manufacturing firms to make further expansions.
- Occupations with the largest growth during the most recent five-year period were SOC 43-0000 Office and Administrative Support Occupations, 958; SOC 41-0000 Sales and Related Occupations, 794; SOC 17-0000 Architecture and Engineering Occupations, 61; and SOC 13-0000 Business and Financial Operations Occupations, 43.
- Occupations with the largest declines were SOC 11-0000 Management Occupations, 450; SOC 51-0000 Production Occupations, 356; SOC 31-0000 Healthcare Support Occupations, 345; SOC 53-0000 Transportation and Material Moving Occupations, 207; and SOC 47-0000 Construction and Extraction, 187.
- During the next five years, the largest employment growth is expected to occur in SOC 35-0000 Food Preparation and Serving Related Occupations, 323; SOC 25-0000 Educational Instruction and Library Occupations, 218; SOC 29-0000 Healthcare Practitioners and Technical Occupations, 149; SOC 11-0000 Management Occupations, 136; and SOC 31-0000 Healthcare

In this study, information on recent and projected labor force, workforce, and industry trends, plus data on occupational and industry wages is used to identify the relative strengths and importance of existing industries and occupations in the study area. Location quotient analysis is used to identify an initial, set of industries for further study as possible future drivers of the study area economy. Shift-share analysis for the recent period 2015-2020 and projected values for the period 2020-2025 is used to identify detailed, 3-digit North American Industrial Classification System (NAICS) code, industries as possible future drivers of the Hamilton County Target Area economy. Sales to these core industries by other local businesses are compared to exports and this supply chain analysis identifies possible opportunities for local input substitution.

The two, core 2-digit NAICS industries identified as recent drivers of the area economy in the location quotient analysis are:

NAICS 31 Manufacturing

NAICS 62 Health Care and Social Assistance

Shift share analysis is used to identify 13 more detailed, 3-Digit NAICS codes industries likely to be highly important to the current and future economic vitality of Hamilton County. These 17, 3-digit NAICS industries are:

NAICS 238 Specialty Trade Contractors

NAICS 311 Food Manufacturing

NAICS 325 Chemical Manufacturing

NAICS 326 Plastics and Rubber Products Manufacturing

NAICS 332 Fabricated Metal Product Manufacturing

NAICS 333 Machinery Manufacturing

NAICS 339 Miscellaneous Manufacturing

NAICS 423 Merchant Wholesalers, Durable Goods

NAICS 424 Merchant Wholesalers, Nondurable Goods

NAICS 484 Truck Transportation

NAICS 517 Telecommunications

NAICS 621 Ambulatory Health Care Services

NAICS 622 Hospitals

A total of five industries are identified as targets for import substitution:

NAICS 541 Professional, Scientific, and Technical Services

NAICS 551 Management of Companies and Enterprises

NAICS 524 Insurance Carriers and Related Activities

NAICS 621 Ambulatory Health Care Services

NAICS 236 Construction of Buildings

Introduction

The purpose of this study is to provide Aurora Development Corporation (ADC) with information to be used as part of a process to identify industries for future retention, expansion, and possible recruitment efforts. Additional information that may be used in this targeting process includes insights of ADC and community members plus possible further investigations conducted by ADC.

This report contains information on the relative sizes and trends, both recent and projected, of area industries and their labor force, plus information on interactions between the Hamilton County economy and the economies of counties linked to it by commuting patterns. Industries that are key drivers of Hamilton County's recent economic growth, that are expected to be future drivers of economic growth, and that appear to have potential to become drivers of the area economy are identified in this study. Also identified are industries that are currently highly important to the area's economic health but may be at risk due to expected declines in overall national employment.

Methodology

U.S. Census Department's Bureau of the Census and Economic Modeling Specialists International (EMSI) are the primary sources of information for this study. EMSI, a private data vendor, collects and analyzes data from a variety of public and private sources such as the U.S. Census Department, the U.S. Department of Labor, and the U.S. Department of Education. EMSI uses this information to derive estimates of local data suppressed by government agencies to protect proprietary information. Data from EMSI enables a level of analysis that would not be possible in many Nebraska counties due to high levels of data suppression common in areas of relatively small population. Nebraska Public Power District (NPPD) subscribes to EMSI data services and provides this information to wholesale and retail customers as part of its economic development services to these communities.

Data from the U.S. Census Bureau's OnTheMap Application is used to identify counties closely linked to Hamilton County based on proximity and commuting patterns. The seven adjacent counties were selected for analysis. OnTheMap data for Cedar and these seven adjacent counties is reported in this study.

One of the eight counties in this study (Hall) is a central metropolitan county, one (Adams) is a central micropolitan County, and one (Merrick) is an outlying county of the Grand Island Metropolitan Statistical Area; collectively these three counties are referred to as non-rural in this study. The other five counties (Clay, Fillmore, Hamilton, Polk, and York) are referred to as rural. Until recently, Hamilton County was part of the Grand Island Metropolitan Statistical Area.

Analysis of area industries, workforces, and labor forces were conducted separately for the rural and non-rural (metropolitan and micropolitan). For this study, data are generally reported for both the 2020 Hamilton County Study Area (all eight counties) and for Hamilton County.

Information on recent and projected labor force, workforce, and industry trends plus data on occupational and industry wages are reported for the 2020 Hamilton County Study Area. This information is used to identify the relative strengths and importance of existing industries and occupations.

Location quotient analysis, using past, present, and projected future employment and current wages, is used to identify an initial set of industries for further study as possible drivers of the study area economy. Shift share analysis for the periods 2015–2020 and 2020–2025 is used to classify a set of 4-digit North American Industrial Classification (NAICS) code, industries as: (a) important drivers (Key industries) of area economies, (b) potential drivers (Potential industries) of area economies, (c) important local industries with national trends of declining employment (Mature industries), and

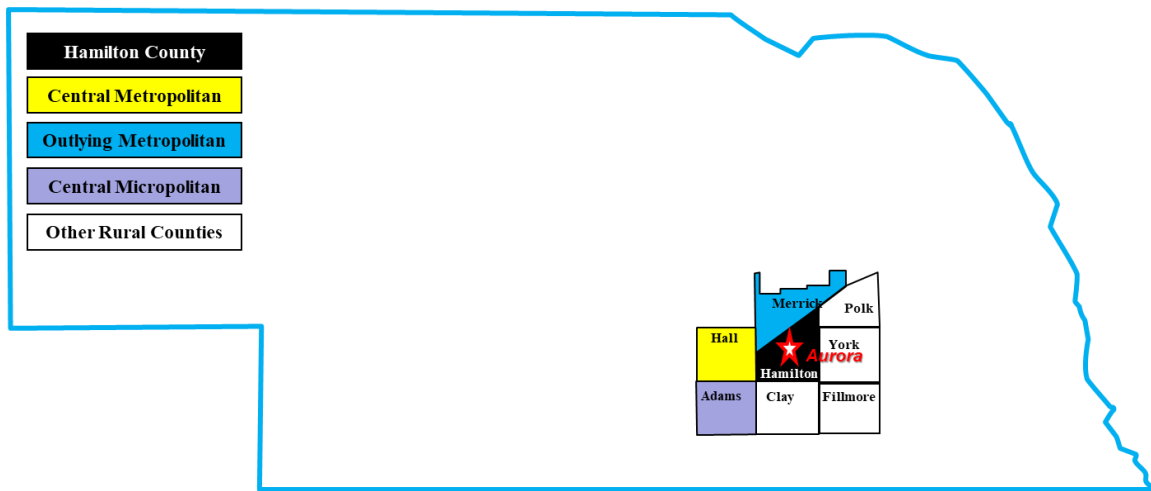
(d) Other industries. Industries primarily supporting local population, such as retail trade, most construction, personal services, and education, are automatically assigned to the Other industries category.

Lastly, sales to Key industries and to industries identified as having the potential to become key industries (Potential industries) by businesses outside the study area are compared to purchases from similar local businesses. This supply chain analysis identifies possible opportunities for local input substitution.

Study Area Identification

The geographic area selected for this study is based upon proximity to Hamilton County. As shown in Figure One below, seven Nebraska counties border Hamilton County. Together these eight counties make up the Hamilton County Study Area.

Figure One
City of Aurora, Hamilton County, Study Area



Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

Study Area – Workforce

Analysis of an area’s workforce provides information about workers at local businesses, regardless of where they live. Analysis of workforce data provides insights into the types of businesses that have been and are likely to be successful within a region. Table One below provides information on the relative size as measured by 4th Quarter 2020 employment, compensation paid, and the most recent five-year change in employment for very broad categories of Hamilton County businesses.

As shown in Table One below, **NAICS 31 Manufacturing, with 12,314, is the largest 2-digit, NAICS industry in the 2020 Hamilton County Study Area, has experienced a large increase, 645, in jobs during the latest five-years, and has an average annual wage, \$48,498, significantly higher than the regional average of \$41,027. NAICS 90 Government with 12,086 workers, is the second largest 2-digit, NAICS industry in the 2020 Hamilton County Study Area, has average annual wages, \$44,501, higher than the regional average, and has recently experienced a decrease in workers. NAICS 22 Utilities, has the highest average annual wages, \$85,397, and the lowest, 45, number of jobs.**

Table One
2020 Hamilton County Study Area Workforce (Local Jobs)
Average Wages and 5-Year Job Change by Industry
Preliminary Data, 2020 Q4

NAICS	Jobs	Avg Ann Wages (\$)	5-Year Change	
			Jobs	Percent
NAICS 31 Manufacturing	12,314	48,498	645	5.5%
NAICS 90 Government	12,086	44,501	-289	-2.3%
NAICS 62 Health Care and Social Assistance	9,005	45,291	277	3.2%
NAICS 44 Retail Trade	8,317	27,463	-646	-7.2%
NAICS 72 Accommodation and Food Services	5,631	15,430	228	4.2%
NAICS 23 Construction	3,765	48,859	-69	-1.8%
NAICS 42 Wholesale Trade	3,312	57,385	-359	-9.8%
NAICS 81 Other Services (except Public Administration)	2,954	24,947	-47	-1.6%
NAICS 48 Transportation and Warehousing	2,827	51,291	24	0.9%
NAICS 52 Finance and Insurance	2,731	56,168	203	8.0%
NAICS 56 Administrative and Support and Waste Management and Remediation Services	2,624	34,143	226	9.4%
NAICS 11 Agriculture, Forestry, Fishing and Hunting	2,220	43,265	154	7.5%
NAICS 54 Professional, Scientific, and Technical Services	1,383	53,123	-115	-7.7%
NAICS 61 Educational Services	1,278	22,934	-29	-2.2%
NAICS 71 Arts, Entertainment, and Recreation	719	17,844	19	2.7%
NAICS 55 Management of Companies and Enterprises	643	59,805	-17	-2.6%
NAICS 51 Information	562	44,650	-72	-11.4%
NAICS 53 Real Estate and Rental and Leasing	495	35,930	17	3.6%
NAICS 21 Mining, Quarrying, and Oil and Gas Extraction	55	52,412	5	10.0%
NAICS 22 Utilities	45	85,397	-18	-28.3%
Total	72,967	41,027	135	0.2%

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

Table Two below provides a comparison of employment distributions at the 2-digit NAICS level for industries in the 2020 Hamilton County Study Area and Nebraska. **The Hamilton County Study Area has relatively high employment in NAICS 31 Manufacturing, 16.9 percent vs. Nebraska's 10.2 percent, and NAICS 11 Agriculture, Forestry, Fishing and Hunting, 3.0 percent vs. Nebraska's 1.5 percent. Table Two also shows the 2020 Hamilton County Study Area has relatively low employment when compared to Nebraska in NAICS 54 Professional, Scientific, and Technical Services, 1.9 percent vs. 4.8 percent for Nebraska, and NAICS 52 Finance and Insurance, 3.7 percent vs. 5.8 percent for Nebraska.**

**Table Two
2020 Hamilton County Study Area and Nebraska Workforce
Total Jobs and Percent Distribution, Preliminary Data, 2020 Q4**

NAICS	Jobs		Percent All Jobs	
	Hamilton County Study Area	Nebraska	Hamilton County Study Area	Nebraska
NAICS 31 Manufacturing	12,314	99,982	16.9%	10.2%
NAICS 90 Government	12,086	161,597	16.6%	16.4%
NAICS 62 Health Care and Social Assistance	9,005	128,935	12.3%	13.1%
NAICS 44 Retail Trade	8,317	104,849	11.4%	10.6%
NAICS 72 Accommodation and Food Services	5,631	78,880	7.7%	8.0%
NAICS 23 Construction	3,765	54,705	5.2%	5.6%
NAICS 42 Wholesale Trade	3,312	40,156	4.5%	4.1%
NAICS 81 Other Services (except Public Administration)	2,954	25,618	4.0%	2.6%
NAICS 48 Transportation and Warehousing	2,827	41,502	3.9%	4.2%
NAICS 52 Finance and Insurance	2,731	56,999	3.7%	5.8%
NAICS 56 Administrative and Support and Waste Management and Remediation Services	2,624	52,753	3.6%	5.4%
NAICS 11 Agriculture, Forestry, Fishing and Hunting	2,220	14,838	3.0%	1.5%
NAICS 54 Professional, Scientific, and Technical Services	1,383	46,881	1.9%	4.8%
NAICS 61 Educational Services	1,278	10,288	1.8%	1.0%
NAICS 71 Arts, Entertainment, and Recreation	719	15,289	1.0%	1.6%
NAICS 55 Management of Companies and Enterprises	643	21,637	0.9%	2.2%
NAICS 51 Information	562	17,186	0.8%	1.7%
NAICS 53 Real Estate and Rental and Leasing	495	10,535	0.7%	1.1%
NAICS 21 Mining, Quarrying, and Oil and Gas Extraction	55	1,013	0.1%	0.1%
NAICS 22 Utilities	45	1,060	0.1%	0.1%

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

Major Occupations and Wages

The composition of occupations, including associated skill levels, employed within a region is determined by the mix of existing industries. An analysis of average area compensation relative to national averages provides information on the relative skill levels and the attractiveness of an area for retention and growth of industries dependent upon specific skills.

Table Three
Hamilton County Study Area Workforce (Local Jobs) and
Labor Force (Resident Jobs) Net In-Commuters, and Average Wages
Preliminary Data, 2020 Q4

Standard Occupational Code	Local Jobs	Location Quotient	Residents Working in Occupation	Net In-Commuters	Average Hourly Wage (\$)
51-0000 Production Occupations	8,685	2.00	8,283	402	\$18.50
43-0000 Office and Administrative Support Occupations	8,480	0.87	8,813	-333	\$16.69
53-0000 Transportation and Material Moving Occupations	7,714	1.27	7,757	-43	\$17.75
41-0000 Sales and Related Occupations	7,155	1.02	7,086	69	\$18.64
35-0000 Food Preparation and Serving Related Occupations	5,967	0.93	6,084	-117	\$12.15
25-0000 Educational Instruction and Library Occupations	4,565	1.07	4,851	-286	\$26.77
29-0000 Healthcare Practitioners and Technical Occupations	4,151	0.99	4,004	147	\$39.18
49-0000 Installation, Maintenance, and Repair Occupations	3,668	1.28	3,549	119	\$21.93
47-0000 Construction and Extraction Occupations	3,502	1.16	3,188	313	\$19.68
11-0000 Management Occupations	3,242	0.81	3,194	48	\$40.40
31-0000 Healthcare Support Occupations	3,065	0.96	3,010	54	\$14.68
37-0000 Building and Grounds Cleaning and Maintenance Occupations	2,473	1.09	2,601	-128	\$14.07
13-0000 Business and Financial Operations Occupations	2,027	0.50	2,002	24	\$31.40
45-0000 Farming, Fishing, and Forestry Occupations	1,667	3.09	1,753	-86	\$18.08
39-0000 Personal Care and Service Occupations	1,322	0.77	1,340	-19	\$12.40
33-0000 Protective Service Occupations	1,256	0.72	1,204	52	\$23.74
21-0000 Community and Social Service Occupations	1,252	0.97	1,239	13	\$22.50
27-0000 Arts, Design, Entertainment, Sports, and Media Occupations	663	0.64	584	78	\$22.66
17-0000 Architecture and Engineering Occupations	593	0.47	504	89	\$33.63
15-0000 Computer and Mathematical Occupations	582	0.26	669	-87	\$31.18
19-0000 Life, Physical, and Social Science Occupations	513	0.80	469	44	\$30.69
23-0000 Legal Occupations	202	0.36	178	24	\$41.03
00-0000 Total	72,967		72,660	308	\$21.12

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

As shown in Table Three on the previous page, **the largest 2-digit, standard occupational code (SOC) category when measured by jobs within the 2020 Hamilton County Study Area, 8,685, is SOC 51-0000 Production Occupations. SOC 51-0000 Production Occupations is also the second largest occupation, 8,283, when measured by the number of residents living in the Hamilton County Study Area.**

The next six largest occupations when measured by jobs within the 2020 Hamilton County Study Area are SOC 43-0000 Office and Administrative Support Occupations 8,480; SOC 53-0000 Transportation and Material Moving Occupations 7,714; SOC 41-0000 Sales and Related Occupations 7,155; SOC 35-0000 Food Preparation and Serving Related Occupations 5,967; SOC 25-0000 Educational Instruction and Library Occupations 4,565; and SOC 29-0000 Healthcare Practitioners and Technical Occupations 4,151. Among the top seven occupations, only two have average annual local hourly wages greater than the 2020 Hamilton County Study Area average of \$21.12 (SOC 25-0000 Educational Instruction and Library Occupations, \$26.77 and SOC 29-0000 Healthcare Practitioners and Technical Occupations, \$39.18).

The large proportion of jobs in SOC 43-0000 Office and Administrative Support Occupations is a very common occurrence as the need for these skills is common to a very large number of industries. The large proportion of jobs in SOC 51-0000 Production Occupations and SOC 53-0000 Transportation and Material Moving Occupations is due to the large manufacturing sector within the study area.

As shown in Table three the number of jobs within the Hamilton County Study Area, 72,967, is just slightly higher than the number of working residents. On net, there are 307 more in-commuters than out-commuters.

Also shown in Table three, the Hamilton County Study Area is a net importer of workers in SOC 51-0000 Production Occupations. This suggest a potential constraint on the ability of manufacturing firms to make further expansions.

Table Four on the following page shows employment, recent and projected employment change, estimated 2020 hires, and average hourly wages as a percent of the US average at the 2-digit SOC level. Over half (12) of occupations experienced employment losses during the last five years and 10 experienced employment gains.

The large number of occupations with job declines is at least partially due to the Covid-19 pandemic. Covid-19 and the resulting turmoil in the labor markets is also a likely cause for some of the large number of 2020 hires. The large number of hires in SOC 35-0000 Food Preparation and Serving Related Occupations is primarily due to a combination of low wages and the large number of part-time workers in the hospitality industry. In 2020, only one occupation SOC 45-0000 Farming, Fishing, and Forestry Occupations, had local wages higher than the US Average.

Occupations with the largest growth during the most recent five-year period were SOC 43-0000 Office and Administrative Support Occupations, 958; SOC 41-0000 Sales and Related Occupations, 794; SOC 17-0000 Architecture and Engineering Occupations, 61; and SOC 13-0000 Business and Financial Operations Occupations, 43. Occupations with the largest declines were SOC 11-0000 Management Occupations, 450; SOC 51-0000 Production Occupations, 356; SOC 31-0000 Healthcare Support Occupations, 345; SOC 53-0000 Transportation and Material Moving Occupations, 207; and SOC 47-0000 Construction and Extraction, 187.

Also shown in Table Four, 20 of the 22 occupations are expected to see employment growth over the next five years. Only SOC 43-0000 Office and Administrative Support Occupations, decline of 143 and SOC 41-0000 Sales and Related Occupations, decline of 98, are projected to experience declines in employment. **The largest employment growth is expected to occur in SOC 35-0000 Food Preparation and Serving Related Occupations, 323; SOC 25-0000 Educational Instruction and Library Occupations, 218; SOC 29-0000 Healthcare Practitioners and Technical Occupations, 149; SOC 11-0000 Management Occupations, 136; and SOC 31-0000 Healthcare**

**Table Four
Hamilton County Study Area Workforce (Local Jobs), 2015-2020 Change in Workforce,
2020-2025 Projected Change, 2020 Hires, and Area Wage as a Percent of US Average
by Occupation, Preliminary Data, 2020 Q4**

SOC	Jobs 2020	Job Change 2015-20	Projected Job Change 2020-25	2020 Hires	Local Wage Percent US Average
51-0000 Production Occupations	8,685	-356	112	5,221	95.8%
43-0000 Office and Administrative Support Occupations	8,480	958	-143	4,957	84.6%
53-0000 Transportation and Material Moving Occupations	7,714	-207	118	6,393	97.7%
41-0000 Sales and Related Occupations	7,155	794	-99	4,906	89.5%
35-0000 Food Preparation and Serving Related Occupations	5,967	39	323	7,110	94.7%
25-0000 Educational Instruction and Library Occupations	4,565	-20	218	2,048	96.4%
29-0000 Healthcare Practitioners and Technical Occupations	4,151	-233	149	999	97.3%
49-0000 Installation, Maintenance, and Repair Occupations	3,668	19	64	1,925	91.1%
47-0000 Construction and Extraction Occupations	3,502	-187	109	2,923	77.9%
11-0000 Management Occupations	3,242	-450	136	1,842	69.0%
31-0000 Healthcare Support Occupations	3,065	-345	135	1,928	98.7%
37-0000 Building and Grounds Cleaning and Maintenance Occupations	2,473	-57	83	2,390	94.0%
13-0000 Business and Financial Operations Occupations	2,027	43	97	959	83.5%
45-0000 Farming, Fishing, and Forestry Occupations	1,667	-37	72	6,139	120.5%
39-0000 Personal Care and Service Occupations	1,322	15	26	1,363	82.9%
33-0000 Protective Service Occupations	1,256	-145	1	818	99.0%
21-0000 Community and Social Service Occupations	1,252	31	56	647	92.8%
27-0000 Arts, Design, Entertainment, Sports, and Media Occupations	663	-98	40	547	76.0%
17-0000 Architecture and Engineering Occupations	593	61	39	214	78.6%
15-0000 Computer and Mathematical Occupations	582	-51	31	230	69.0%
19-0000 Life, Physical, and Social Science Occupations	513	35	6	282	82.2%
23-0000 Legal Occupations	202	25	1	48	77.9%
00-0000 Total	72,967	-135	1,560	53,890	82.2%

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

Analysis of Potential Targets

The 2-digit NAICS industries NAICS 31 Manufacturing, NAICS 90 Government, and NAICS 62 Health Care and Social Assistance make up 45.8 percent of the 2020 Hamilton County Study Area economy when measured by employment. Additionally, all three pay average wages higher than the overall average for the Hamilton County Study Area.

Information in this section provides a more detailed analysis of 2020 Hamilton County Study Area industries at the 4-digit NAICS level. This information is used to assess the suitability of individual industries as potential targets for retention, expansion, and recruitment efforts.

Excluded from this analysis are industries whose development is usually highly dependent on local population growth. These include Government, Utilities, and the Real Estate and Rental and Leasing industry. The Accommodation and Food Service and Retail Trade industries are excluded due to low average wages. Construction industries are usually excluded from further analysis; however, because of the importance of this industry to local growth, it was retained for further analysis. Additionally, only industries with average annual total earnings (wages and benefits) of at least \$42,000, just above the average for the Hamilton County Study Area, are included.

Location Quotient (LQ) Analysis

In this section, LQ analysis is used to identify study area industries that have performed better than the national average. Superior performance by area industries often indicates the presence of substantial competitive advantages or regional strengths. These advantages and/or strengths, such as access to skilled labor or specialized resources, are critical to an industry and provide a rationale for a region's expected future growth.

LQs indicate whether the percentage of total employment¹ by an area industry is greater than the national average ($LQ > 1$), is equal to the national average ($LQ = 1$) or is less than the national average ($LQ < 1$). An $LQ > 1$ often indicates the presence of a comparative advantage within a region.

As shown in Table Five on the following page, NAICS 11 Agriculture, Forestry, Fishing and Hunting, 3.22, has the highest LQ; followed by NAICS 31 Manufacturing, 2.05; NAICS 42 Wholesale Trade, 1.20; and NAICS 44 Retail Trade, 1.14. Three of these four industries (NAICS 11 Agriculture, Forestry, Fishing and Hunting, NAICS 31 Manufacturing, and NAICS 42 Wholesale Trade) have average wages exceeding the regional average of \$41,027 and all employ over 2,000 workers.

¹ In addition to employment, location quotients can be calculated for other factors, such as total sales and taxes. For this report LQs are reported for employment only.

Table Five
Hamilton County Study Area Workforce (Local Jobs),
Average Wages and Change in Job Last 5 Years by Industry and LQs
2-Digit NAICS Industries, Preliminary Data, 2020 Q4

NAICS Industry	Jobs	Wages	Change in Jobs 2015 to 2020	LQ
NAICS 11 Agriculture, Forestry, Fishing and Hunting	2,220	43,265	154	3.32
NAICS 21 Mining, Quarrying, and Oil and Gas Extraction	55	52,412	5	0.18
NAICS 22 Utilities	45	85,397	-18	0.17
NAICS 23 Construction	3,765	48,859	-69	1.04
NAICS 31 Manufacturing	12,314	48,498	645	2.05
NAICS 42 Wholesale Trade	3,312	57,385	-359	1.20
NAICS 44 Retail Trade	8,317	27,463	-646	1.14
NAICS 48 Transportation and Warehousing	2,827	51,291	24	1.04
NAICS 51 Information	562	44,650	-72	0.42
NAICS 52 Finance and Insurance	2,731	56,168	203	0.90
NAICS 53 Real Estate and Rental and Leasing	495	35,930	17	0.44
NAICS 54 Professional, Scientific, and Technical Services	1,383	53,123	-115	0.30
NAICS 55 Management of Companies and Enterprises	643	59,805	-17	0.57
NAICS 56 Administrative and Support and Waste Management and Remediation Services	2,624	34,143	226	0.60
NAICS 61 Educational Services	1,278	22,934	-29	0.69
NAICS 62 Health Care and Social Assistance	9,005	45,291	277	0.94
NAICS 71 Arts, Entertainment, and Recreation	719	17,844	19	0.63
NAICS 72 Accommodation and Food Services	5,631	15,430	228	0.85
NAICS 81 Other Services (except Public Administration)	2,954	24,947	-47	1.03
NAICS 90 Government	12,086	44,501	-289	1.04
Total - All Industries	3,737	\$44,140	60	

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

The information in Table Five shows industries in NAICS 31 Manufacturing, NAICS 62 Health Care and Social Assistance, NAICS 72 Accommodation and Food Services and NAICS 52 Finance and Insurance have been major drivers of the 2020 Hamilton County Study Area's economy when measured by recent job growth.

Table Six, below, provides employment, wage, employment growth and LQ information for 10, 4-digit NAIC industries², with average 2020 employment of 200 or more workers, average wages greater than \$42,000 and LQs greater than 1.1. These more narrowly defined industries are sub-sectors of the 2-digit industries in Table Five. Four are subsectors of the NAICS 31 Manufacturing; two are subsectors of NAICS 23 Construction; two are subsectors of NAICS 42 Wholesale Trade; and one each, total of two are subsectors of NAICS 48 Transportation and Warehousing and NAICS 52 Finance

Table Six
Hamilton County Study Area Workforce (Local Jobs),
Average Wages and Change in Job Last 5 Years by Industry and LQs,
Select* 4-Digit NAICS Industries, Preliminary Data, 2020 Q4,

Industry	Jobs	Wages	Change in Jobs 2015 to 2020	LQ
NAICS 2373 Highway, Street, and Bridge Construction	445	\$58,655	68	2.67
NAICS 2382 Building Equipment Contractors	1248	\$48,484	173	1.14
NAICS 3116 Animal Slaughtering and Processing	4155	\$45,204	538	16.62
NAICS 3261 Plastics Product Manufacturing	467	\$43,589	137	1.68
NAICS 3329 Other Fabricated Metal Product Manufacturing	958	\$56,279	130	7.38
NAICS 3334 Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	459	\$50,430	83	7.09
NAICS 4231 Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	284	\$51,233	2	1.69
NAICS 4249 Miscellaneous Nondurable Goods Merchant Wholesalers	528	\$60,061	9	3.44
NAICS 4842 Specialized Freight Trucking	525	\$50,279	-6	2.37
NAICS 5221 Depository Credit Intermediation	1258	\$51,539	34	1.51

* Industries other than NAICS 92 Public Administration and NAICS 90 Government Enterprises with average wages greater than \$42,000, employment greater than 200, employment increases from 2015 to 2020, and LQ greater than 1.10.

Source: EMSI Q4 2020 Data Set | www.economicmodeling.com

² Does not include industries in NAICS Public Enterprises (primarily education and medical services) or NAICS 92 Public Administration.

Shift Share Analysis

Further analysis and refinement of the study area industries is accomplished using shift share analysis. Shift share analysis decomposes actual or projected changes in a local industry's employment into three components. These are the:

National effect: the local industry's starting employment multiplied by the percent change in national average employment for all industries—this shows the change in local employment attributable to the change in economy-wide employment;

Industry effect: the local industry's starting employment multiplied by the percent change in national employment for the industry minus the national effect—this shows the change in local employment attributable to an industry's employment trends after adjusting for national employment trends; and

Competitive effect: the difference between a local industry's ending and starting employment minus the national effect and the industry effect—this is an indication of the change in local employment attributable to an area's relative advantage or competitiveness.

The following is an example of a shift share decomposition:

Local Industry A grows by 10.0 percent from 1,000 to 1,100.

The average of all industry employment change in the U.S. is a 3.0 percent increase; the national effect is 30 or 1,000 times .03.

Average U.S. growth for Industry A is 5.0 percent.

The industry effect is .05 (5.0 percent) times 1,000 minus the national effect of 30; this is 50 minus 30 and the industry effect equals 20.

The competitive effect is 100 minus 30, the national effect, minus 20, the industry effect, and is equal to 50 or 5.0 percent. The industry has grown twice as fast as the average of similar industries across the U.S.

If a local industry's employment changes by the same percentage as the U.S. average for that industry, 5.0 percent in the above example, the competitive effect is zero. The change in employment for a US industry is also referred to as the **expected effect** for a local industry.

If the competitive effect is very strong, a local industry can grow when the national and industry effects are both negative. Likewise, if a national industry is experiencing strong growth, the expected effect can be positive when the national effect is negative. Industries with positive industry and local competitive shift share effects are either key drivers or are likely to become key drivers of the local economy.

The criteria used to evaluate 4-digit NAICS industries are shown in Table Seven on the following page. Industries with a $LQ > 1$, experiencing recent local employment growth, with expected future growth and paying good wages (at least \$42,000 per year) are key to the future growth of a region. Industries with low LQs but increasing levels of local or national employment and good wages may have the potential to become key drivers of the economy. Industries with an $LQ > 1$ and stable or declining local and/or national employment are considered mature or declining industries. Mature or declining industries may command significant retention efforts when they employ large numbers of area workers. Other combinations of LQs and growth are typically not of interest and are not considered for further analysis in this study.

Table Seven
Initial Classification of Industries by Potential to Drive Local Growth

Category	LQ	Recent Growth	Projected Growth	Compensation
Key to Future Growth (Key)	1+	+	+	>\$42,000
Potential to Drive Future Growth (Potential)	<1	US+	US+/Local(+/-)	>\$42,000
Mature or Declining (Mature)	1+	US-/Local(+/-)	US-/Local(+/-)	>\$42,000
Not Further Considered (Other)	>1/<1	+/-	-/+	> or < \$40,000

Source: Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District.

Table Eight on the following page contains information on employment, average annual wage, LQ, plus recent and forecast employment growth for seven, 3-digit NAICS industries identified as possible “Key” future growth targets, one industry identified as “Mature” or declining targets and five industries identified as possible “Potential” future growth targets. These 13 possible industry targets are recommended for further examination and evaluation for future expansion and retention efforts.

The seven Key industry targets are concentrated in three, 2-digit NAICS industries. Five are sub-industries of NAICS 31 Manufacturing and one each are sub-industries NAICS 42 Wholesale Trade and NAICS 48 Transportation and Warehousing.

Table Eight
Key, Potential & Mature Target Industries 2019 Hamilton County Study Area
Workforce, Average Wages, LQ, Job Growth 2015-2020 &
Forecast Job Growth 2020-2025, Preliminary Data, 2020 Q4

NAICS & Industry	Jobs	Wages	LQ	2015 - 2020		2020 - 2025	
				Job Change	Competitive Effect	Job Change	Competitive Effect
Key Target Industries							
NAICS 311 Food Manufacturing	4,804	\$46,285	6.24	207	-188	160	-52
NAICS 325 Chemical Manufacturing*	467	\$58,628	1.17	-20	-47	-8	-21
NAICS 326 Plastics and Rubber Products Manufacturing	588	\$43,929	1.72	151	124	3	-3
NAICS 332 Fabricated Metal Product Manufacturing	1,862	\$53,178	2.69	102	78	106	74
NAICS 339 Miscellaneous Manufacturing	340	\$48,482	1.17	135	125	118	109
NAICS 424 Merchant Wholesalers, Nondurable Goods*	1,646	\$58,341	1.63	-126	-235	-64	-98
NAICS 484 Truck Transportation*	1,598	\$52,324	2.23	-37	-129	-17	-86
Mature Target Industries							
NAICS 517 Telecommunications	238	\$60,099	0.72	21	48	10	37
Potential Target Industries							
NAICS 238 Specialty Trade Contractors	2,264	\$47,490	0.99	119	-239	151	-25
NAICS 333 Machinery Manufacturing	2,083	\$51,323	3.97	-278	-283	-134	-157
NAICS 423 Merchant Wholesalers, Durable Goods	1,625	\$56,654	1.08	-220	-391	-78	-110
NAICS 621 Ambulatory Health Care Services	3,008	\$60,882	0.83	140	-234	328	-98
NAICS 622 Hospitals	2,314	\$54,981	0.96	233	97	-8	-120

* NAICS 325 Chemical Manufacturing, NAICS 424 Merchant Wholesalers, Nondurable Goods, and NAICS 484 Truck Transportation have experienced recent growth and are projected to experience growth at the national level.

Source: Values calculated by Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District from data in EMSI Q4 2020 Data Set | www.economicmodeling.com

Supply Chain Opportunities

Table Nine below contains information on six, local area, 4-Digit NAICS industries currently supplying a large portion of the total inputs purchased locally by industries in Table Eight. These industries may be able to increase their sales to Key, Potential, and Mature area industries and may also be considered potential targets for retention, expansion, and recruitment efforts.

Table Nine
Potential Target Industries 2020 Hamilton County Study Area
Employment, Average Wages, LQ, Job Growth 2015–2020 &
Forecast Job Growth 2020-2025, Preliminary Data, 2020 Q4

NAICS Industry	Jobs	Average Annual Wage	LQ	Purchased Within Region	Imported Into Region
NAICS 541 Professional, Scientific, and Technical Services	1,383	\$53,123	0.30	\$53,024,519	\$140,182,921
NAICS 551 Management of Companies and Enterprises	643	\$59,805	0.57	\$38,558,592	\$153,089,961
NAICS 524 Insurance Carriers and Related Activities	1,116	\$51,276	0.85	\$17,935,384	\$43,914,094
NAICS 621 Ambulatory Health Care Services	3,008	\$60,882	0.83	\$4,834,995	\$8,008,345
NAICS 236 Construction of Buildings	708	\$45,336	0.88	\$1,133,407	\$702,598

Source: Values calculated by Kenneth M. Lemke, PhD, Economist, Nebraska Public Power District from data in EMSI Q4 2020 Data Set | www.economicmodeling.com

Appendices:

A. Economic Overview EMSI



8 Nebraska Counties

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Historic & Projected Trends	5
Population Characteristics	10
Industry Characteristics	12
Business Characteristics	18
Workforce Characteristics	20
Educational Pipeline	27
In-Demand Skills	28

Report Parameters

8 Counties

31001 Adams County, NE

31035 Clay County, NE

31059 Fillmore County, NE

31079 Hall County, NE

31081 Hamilton County, NE

31121 Merrick County, NE

31143 Polk County, NE

31185 York County, NE

Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen geographical areas.

Economy Overview

140,439

Population (2020)

Population decreased by 16 over the last 5 years and is projected to decrease by 6 over the next 5 years.

78,471

Total Regional Employment

Jobs decreased by 132 over the last 5 years but are projected to grow by 1,543 over the next 5 years.

\$50.6K

Avg. Earnings Per Job (2020)

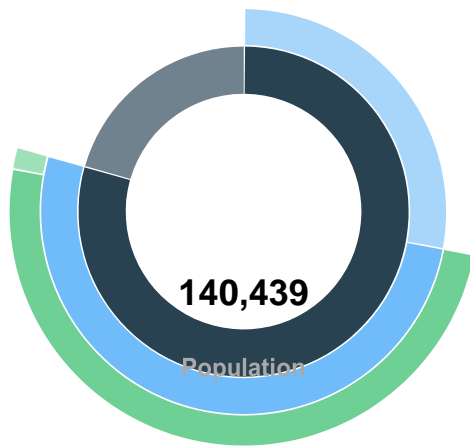
Regional average earnings per job are \$19.0K below the national average earnings of \$69.6K per job.

Takeaways

- As of 2020 the region's population declined by 0.0% since 2015, falling by 16. Population is expected to decrease by 0.0% between 2020 and 2025, losing 6.
- From 2015 to 2020, jobs declined by 0.2% in 8 Nebraska Counties from 78,603 to 78,471. This change fell short of the national growth rate of 6.2% by 6.4%. As the number of jobs declined, the labor force participation rate decreased from 65.2% to 64.8% between 2015 and 2020.
- Concerning educational attainment, 14.8% of the selected regions' residents possess a Bachelor's Degree (4.3% below the national average), and 11.0% hold an Associate's Degree (2.8% above the national average).
- The top three industries in 2020 are Education and Hospitals (Local Government), Restaurants and Other Eating Places, and Animal Slaughtering and Processing.

	Population (2020)	Labor Force (2020)	Jobs (2020)	Cost of Living	GRP	Imports	Exports
Region	140,439	72,239	78,471	98.7	\$8.09B	\$11.39B	\$12.31B
Holt Targeting Rurals	32,042	18,425	15,725	105.0	\$1.63B	\$2.43B	\$2.24B
Nation	330,354,682	161,053,178	166,243,585	100.0	\$21.12T	\$0	\$8.97T

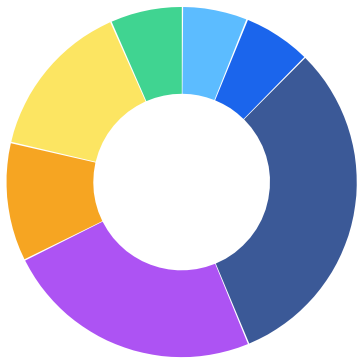
2020 Labor Force Breakdown



	Population
● Total Working Age Population	111,397
● Not in Labor Force (15+)	39,158
● Labor Force	72,239
● Employed	70,153
● Unemployed	2,086
● Under 15	29,042

Educational Attainment

Concerning educational attainment, 14.8% of the selected regions' residents possess a Bachelor's Degree (4.3% below the national average), and 11.0% hold an Associate's Degree (2.8% above the national average).

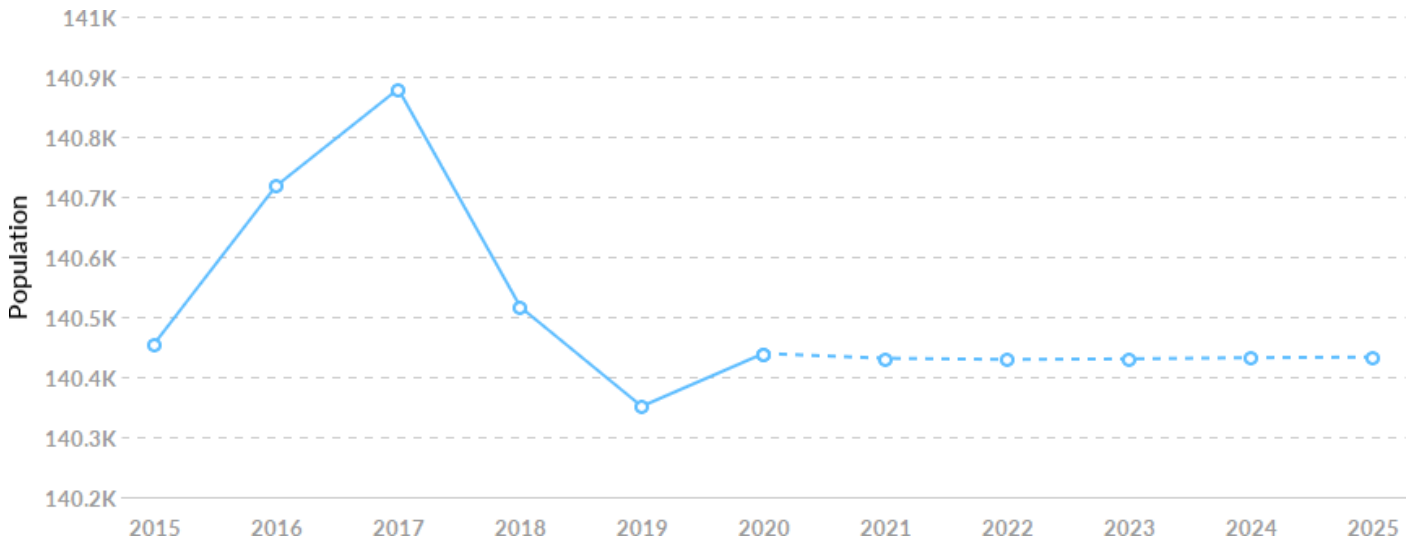


	% of Population	Population
● Less Than 9th Grade	6.0%	5,618
● 9th Grade to 12th Grade	6.3%	5,874
● High School Diploma	31.4%	29,234
● Some College	23.9%	22,289
● Associate's Degree	11.0%	10,217
● Bachelor's Degree	14.8%	13,751
● Graduate Degree and Higher	6.7%	6,240

Historic & Projected Trends

Population Trends

As of 2020 the region's population declined by 0.0% since 2015, falling by 16. Population is expected to decrease by 0.0% between 2020 and 2025, losing 6.

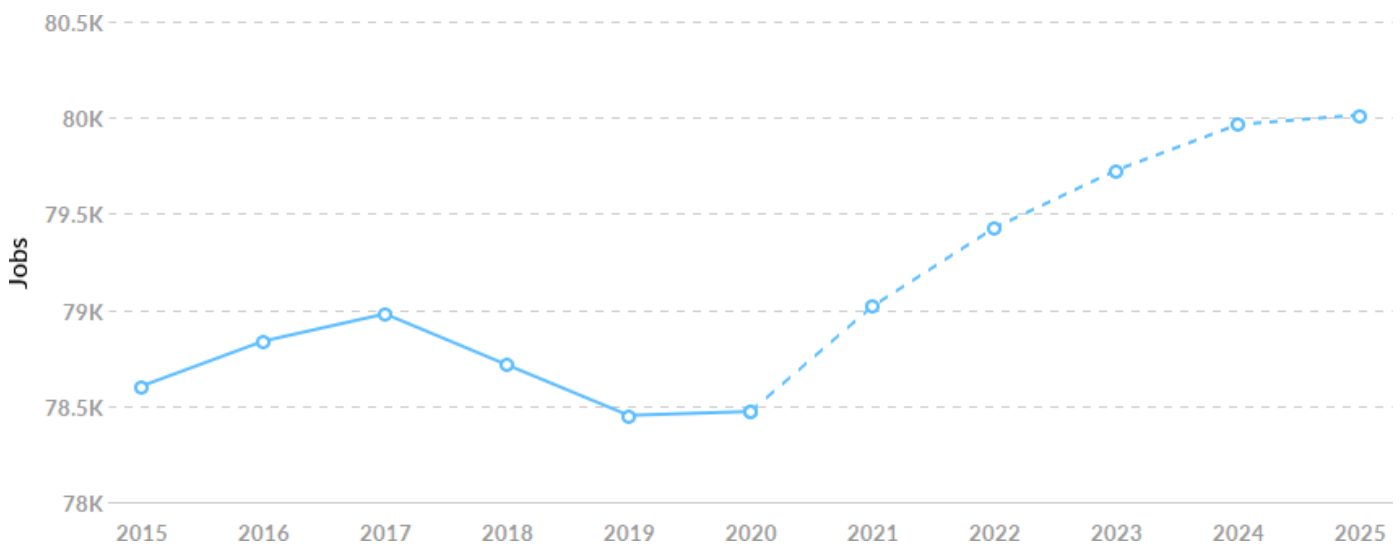


Timeframe	Population
2015	140,455
2016	140,718
2017	140,879
2018	140,517
2019	140,351

Timeframe	Population
2020	140,439
2021	140,431
2022	140,429
2023	140,430
2024	140,432
2025	140,433

Job Trends

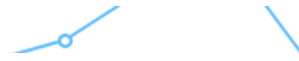
From 2015 to 2020, jobs declined by 0.2% in 8 Nebraska Counties from 78,603 to 78,471. This change fell short of the national growth rate of 6.2% by 6.4%.



Timeframe	Jobs
2015	78,603
2016	78,837
2017	78,979
2018	78,714
2019	78,451
2020	78,471
2021	79,018
2022	79,426
2023	79,726
2024	79,964
2025	80,014

Labor Force Participation Rate Trends



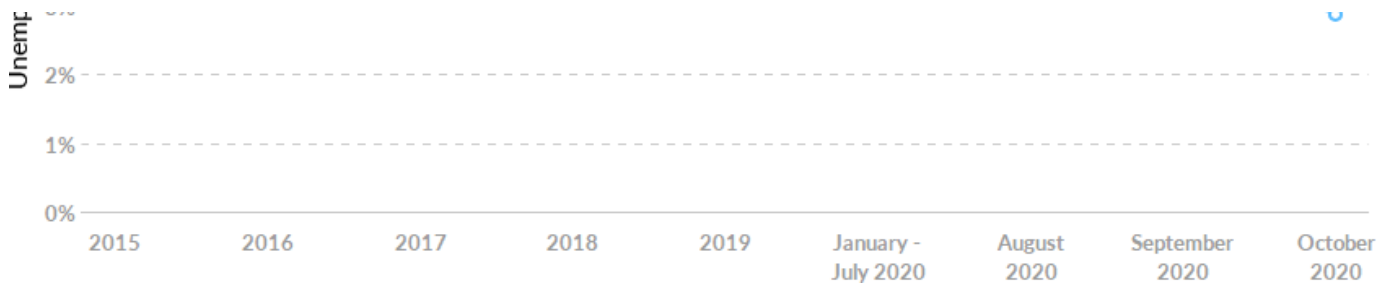


Timeframe	Labor Force Participation Rate
2015	66.24%
2016	65.93%
2017	65.91%
2018	66.33%
2019	66.69%
January - July 2020	67.51%
August 2020	65.80%
September 2020	64.80%
October 2020	64.85%

Unemployment Rate Trends

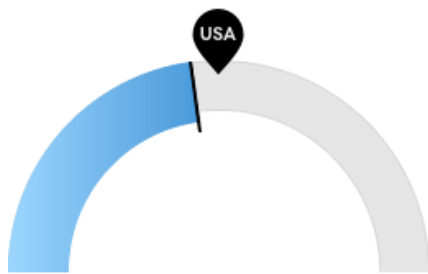
Your areas had an October 2020 unemployment rate of 2.89%, decreasing from 3.42% 5 years before.





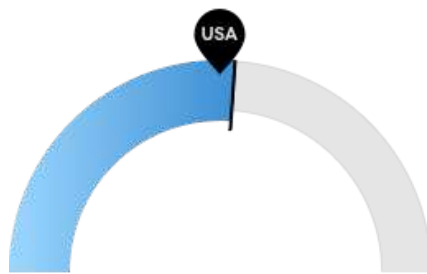
Timeframe	Unemployment Rate
2015	3.42%
2016	3.28%
2017	3.06%
2018	3.02%
2019	3.19%
January - July 2020	5.44%
August 2020	4.08%
September 2020	3.52%
October 2020	2.89%

Population Characteristics



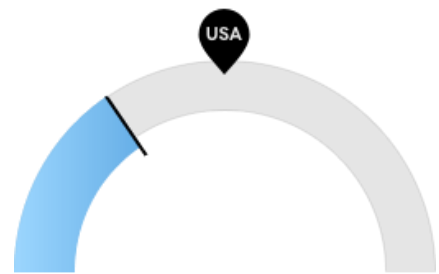
Millennials

Your area has 25,514 millennials (ages 25-39). The national average for an area this size is 28,938.



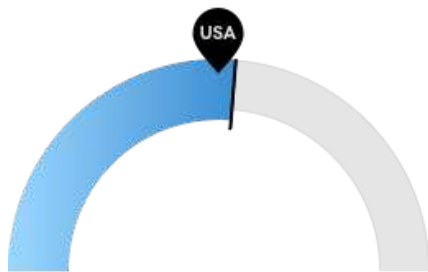
Retiring Soon

Retirement risk is about average in your area. The national average for an area this size is 41,265 people 55 or older, while there are 44,022 here.



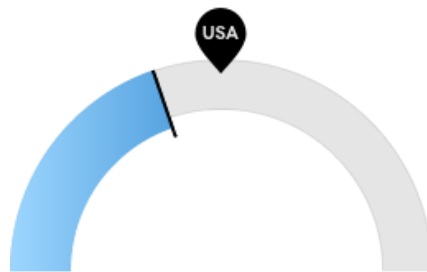
Racial Diversity

Racial diversity is low in your area. The national average for an area this size is 55,984 racially diverse people, while there are 29,981 here.



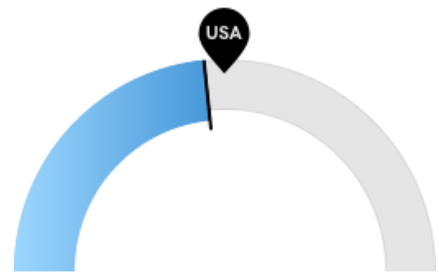
Veterans

Your area has 8,622 veterans. The national average for an area this size is 8,005.



Violent Crime

Your area has 2.56 violent crimes per 1,000 people. The national rate is 3.53 per 1,000 people.

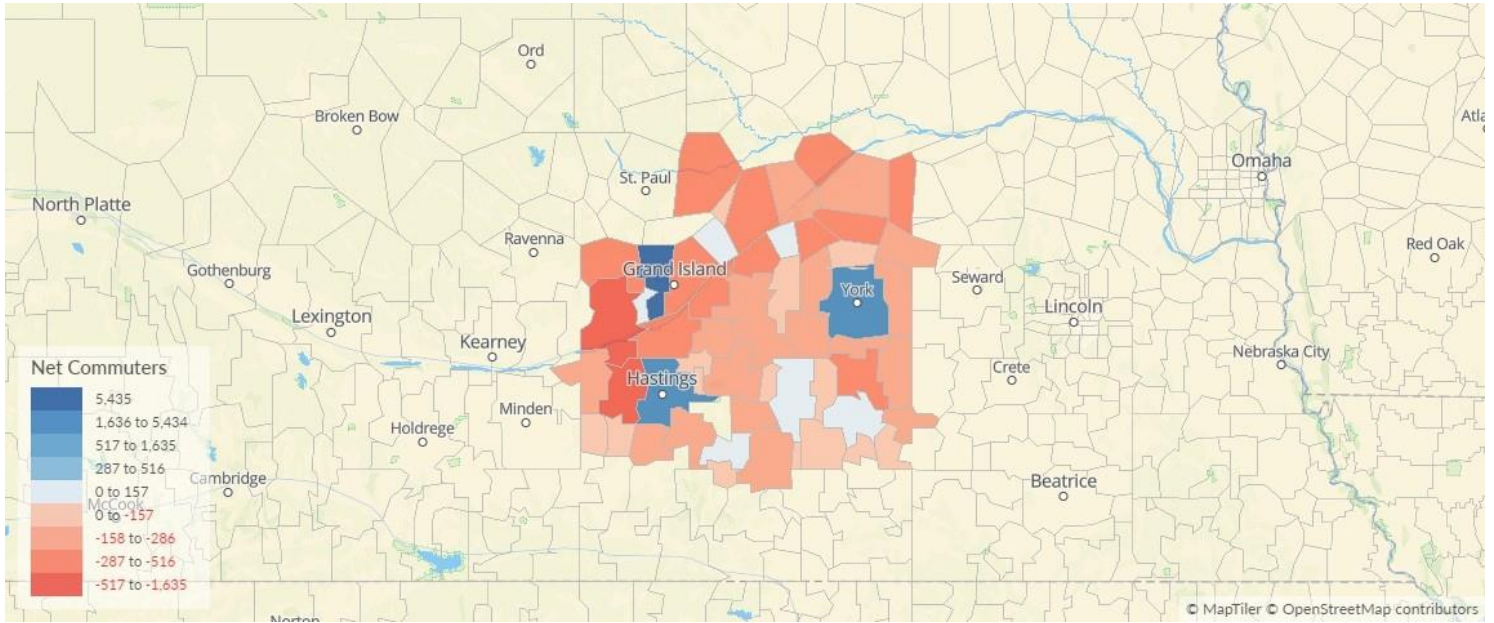


Property Crime

Your area has 18.05 property crimes per 1,000 people. The national rate is 19.79 per 1,000 people.

Place of Work vs Place of Residence

Understanding where talent in the region currently works compared to where talent lives can help you optimize site decisions. For example, the #1 ranked ZIP for employment ranks #3 for resident workers. The top ZIP for resident workers is 68801.



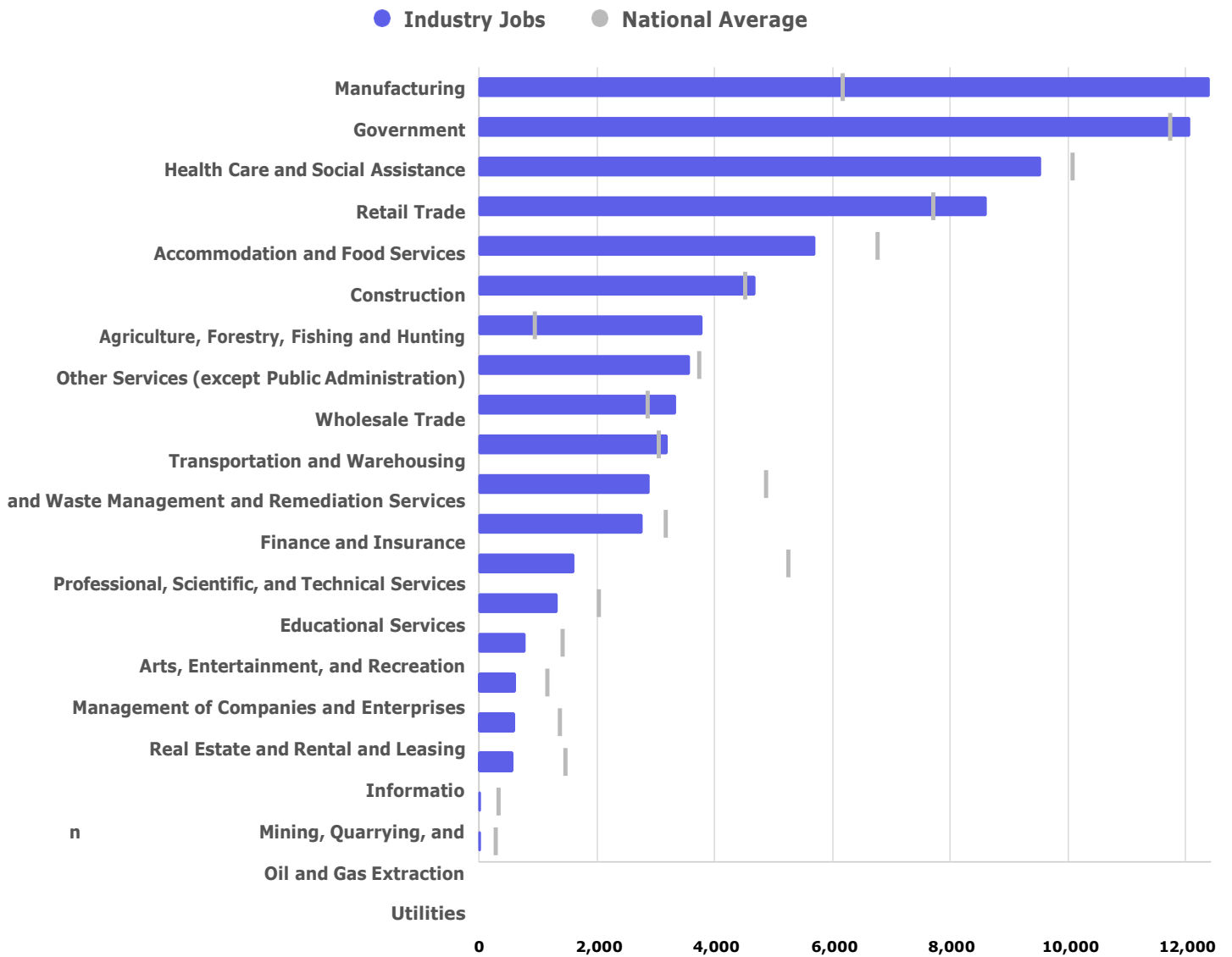
Where Talent Works

Where Talent Lives

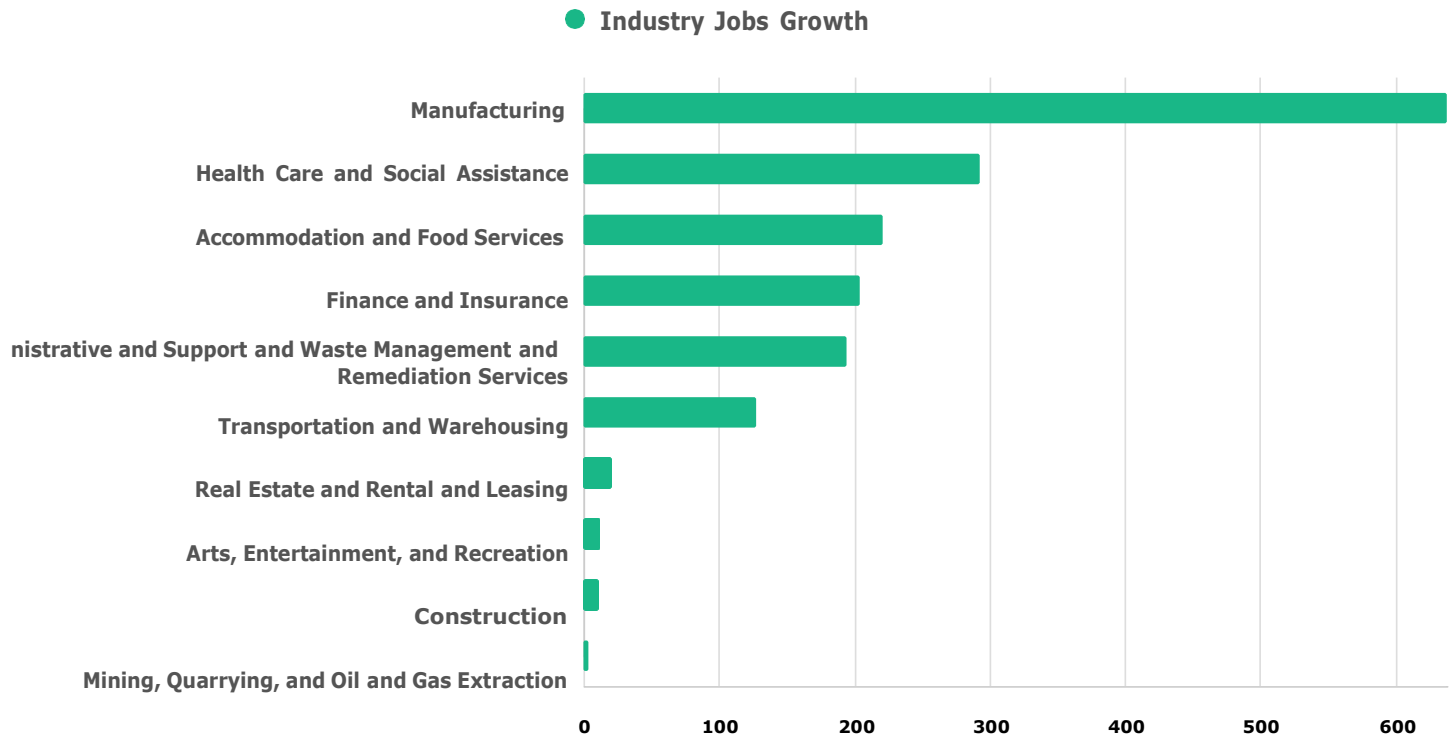
ZIP	Name	2020 Employment	ZIP	Name	2020 Workers
68803	Grand Island, NE (in ...	17,952	68801	Grand Island, NE (in ...	15,681
68901	Hastings, NE (in Ada...	15,540	68901	Hastings, NE (in Ada...	13,680
68801	Grand Island, NE (in ...	15,346	68803	Grand Island, NE (in ...	12,517
68467	York, NE (in York cou...	7,290	68467	York, NE (in York cou...	5,654
68818	Aurora, NE (in Hamil...	2,878	68818	Aurora, NE (in Hamil...	3,111

Industry Characteristics

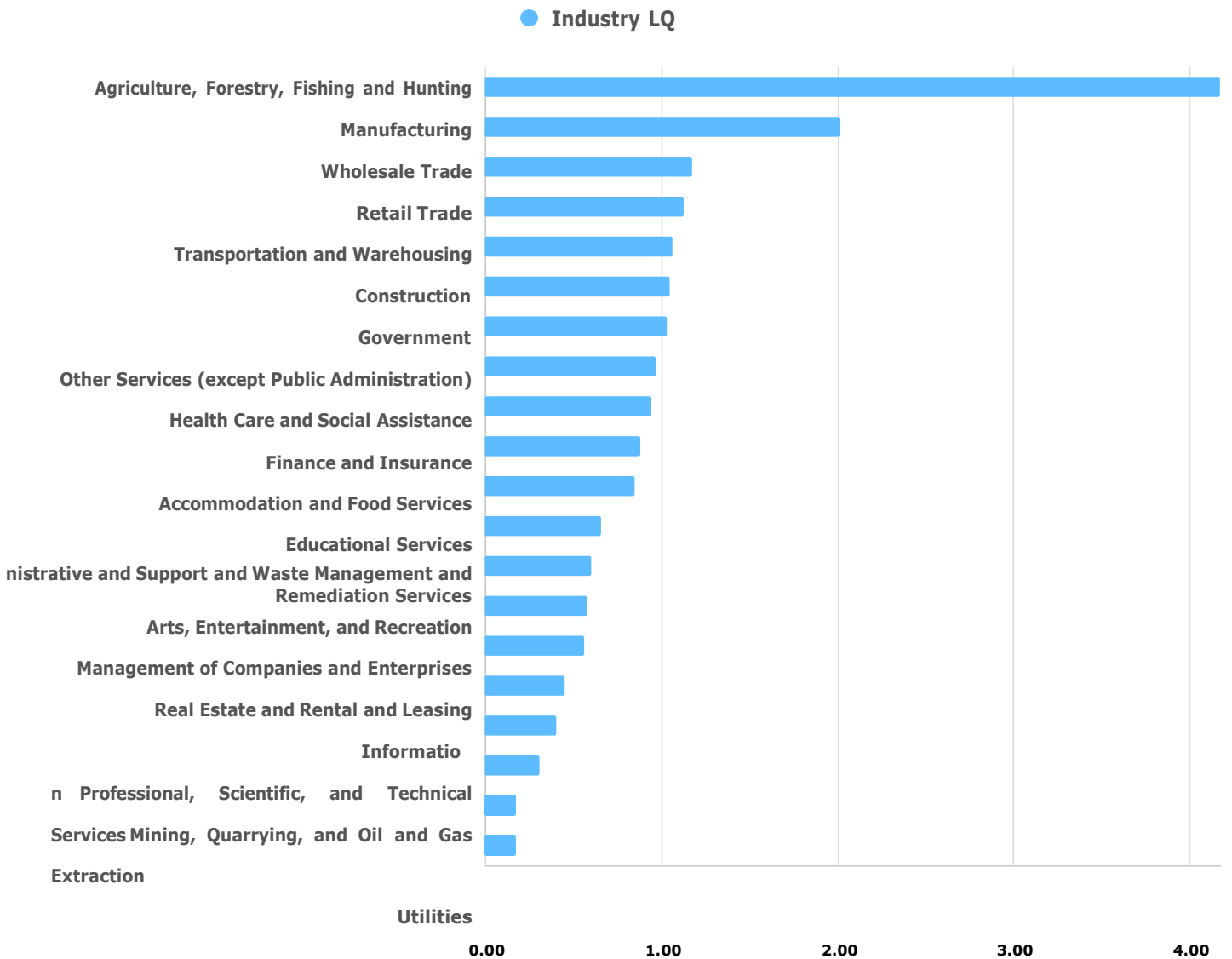
Largest Industries



Top Growing Industries



Top Industry LQ



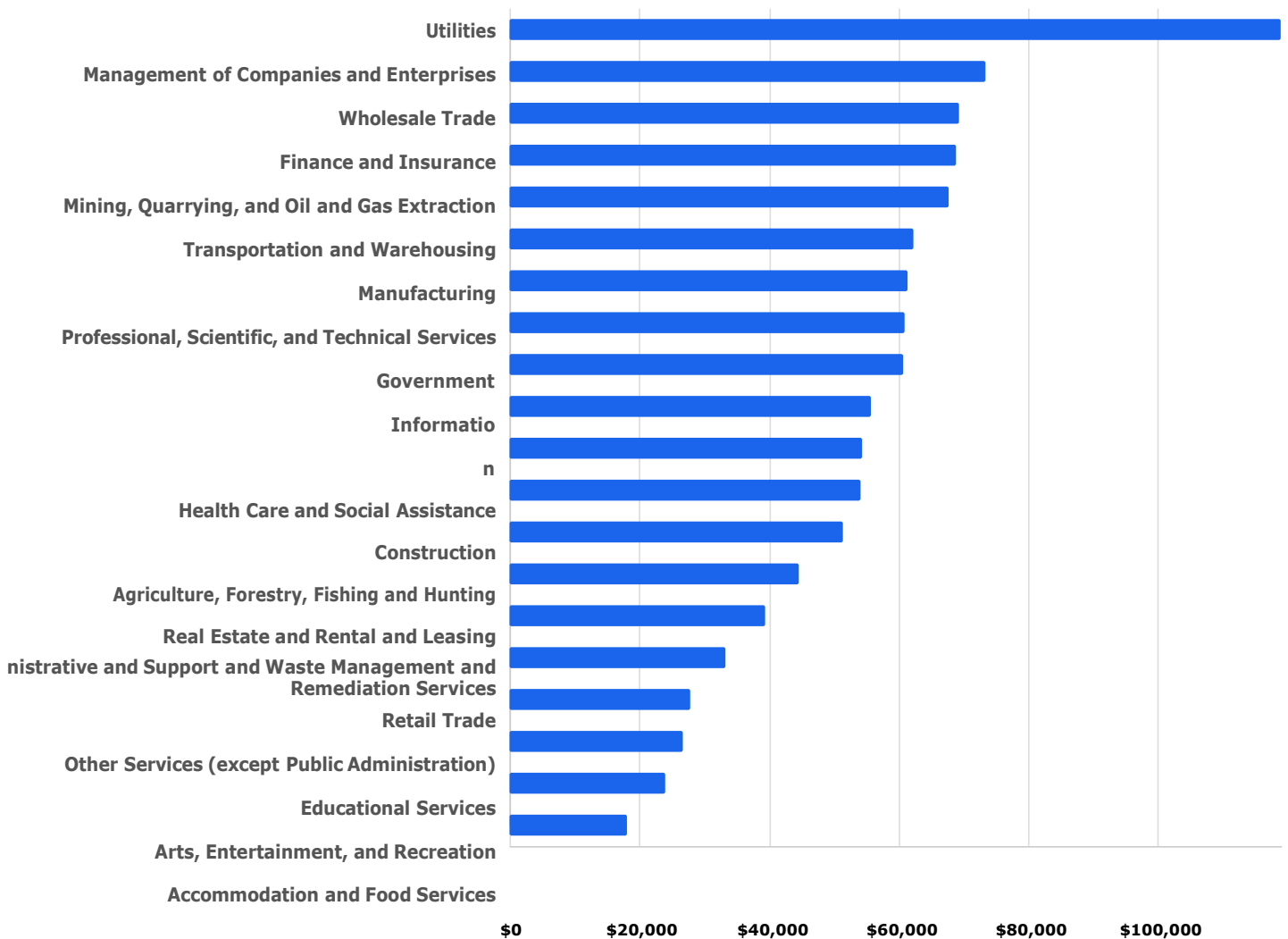
Top Industry GRP

● 2019 Gross Regional Product

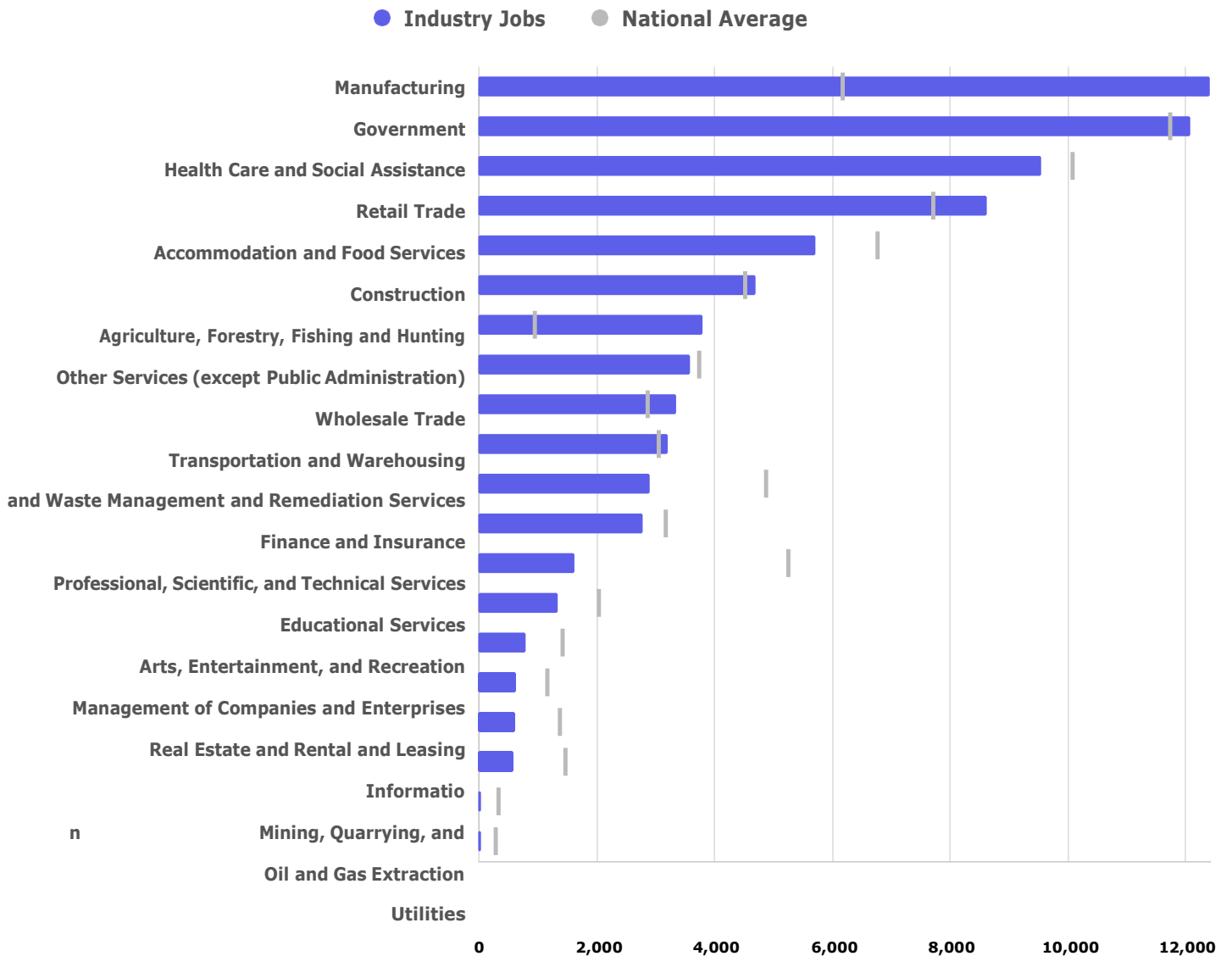


Top Industry Earnings

● 2020 Earnings Per Worker























Largest Industries



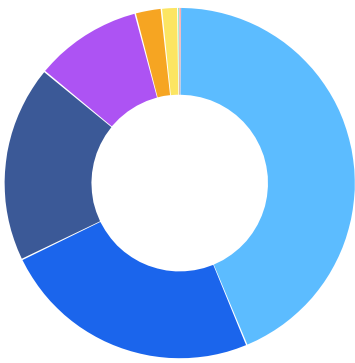
Business Characteristics

5,763 Companies Employ Your Workers

Online profiles for your workers mention 5,763 companies as employers, with the top 10 appearing below. In the last 12 months, 2,540 companies in your area posted job postings, with the top 10 appearing below.

Top Companies	Profiles	Top Companies Posting	Unique Postings
National Association of Elem...	390 	Associated Staffing Inc	711 
Central Community College	206 	Essential Personnel, Inc.	653 
Mary Lanning Healthcare Fo...	196 	Platinum Supplemental Insu...	529 
State of Nebraska	150 	Army National Guard	477 
Hastings College	136 	Evangelical Lutheran Good ...	328 
Cnh Industrial America LLC	120 	U.S. Xpress, Inc.	328 
Jbs	116 	CRST International, Inc.	303 
Hastings Public Schools	112 	Hansen Agri-placement	297 
Chief Industries, Inc.	109 	C.R. England, Inc.	289 
Wal-Mart, Inc.	106 	State of Nebraska	287 

Business Size

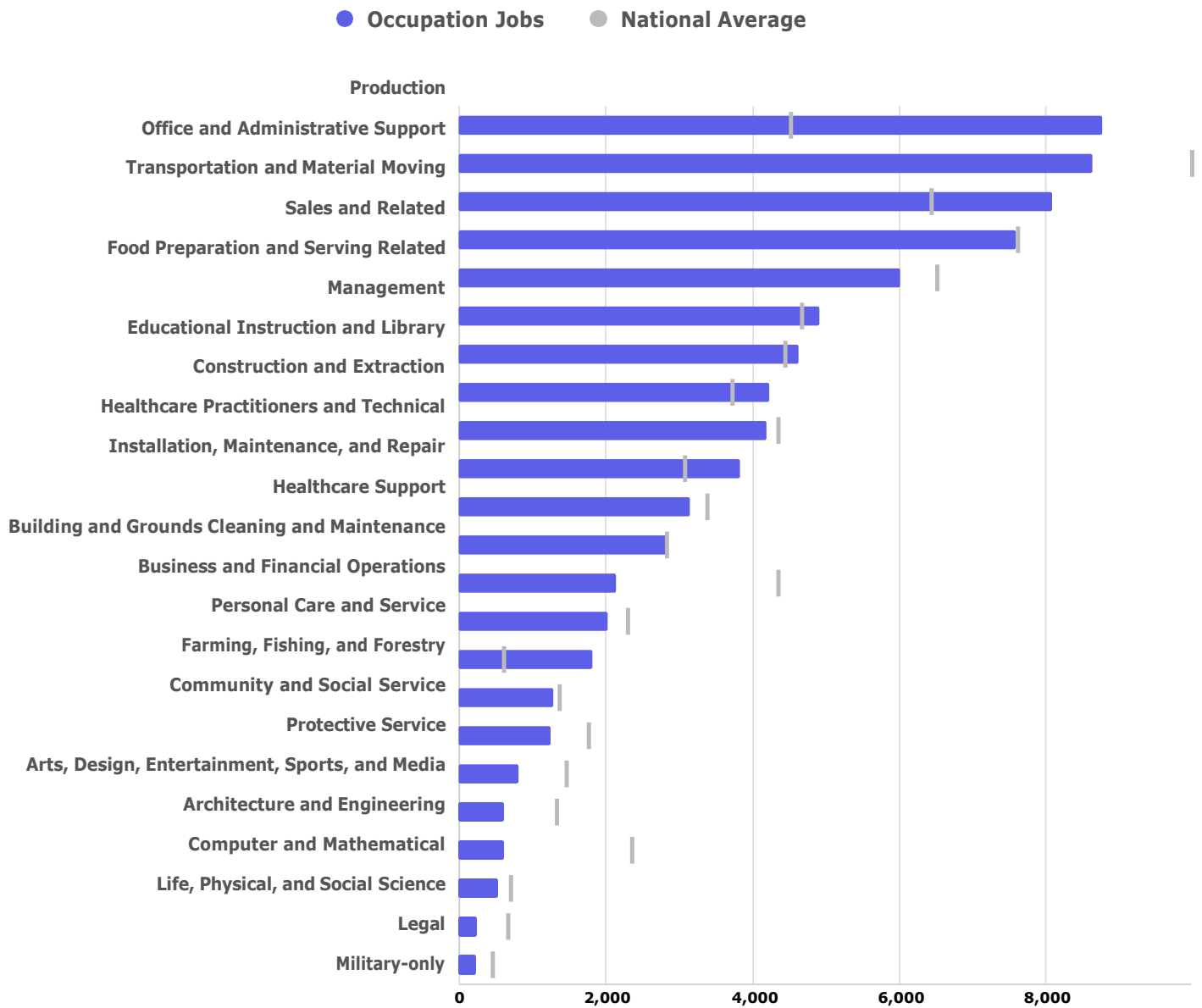


	Percentage	Business Count
● 1 to 4 employees	43.7%	3,496
● 5 to 9 employees	24.1%	1,927
● 10 to 19 employees	18.2%	1,453
● 20 to 49 employees	9.9%	795
● 50 to 99 employees	2.4%	193
● 100 to 249 employees	1.5%	120
● 250 to 499 employees	0.2%	15
● 500+ employees	0.1%	5

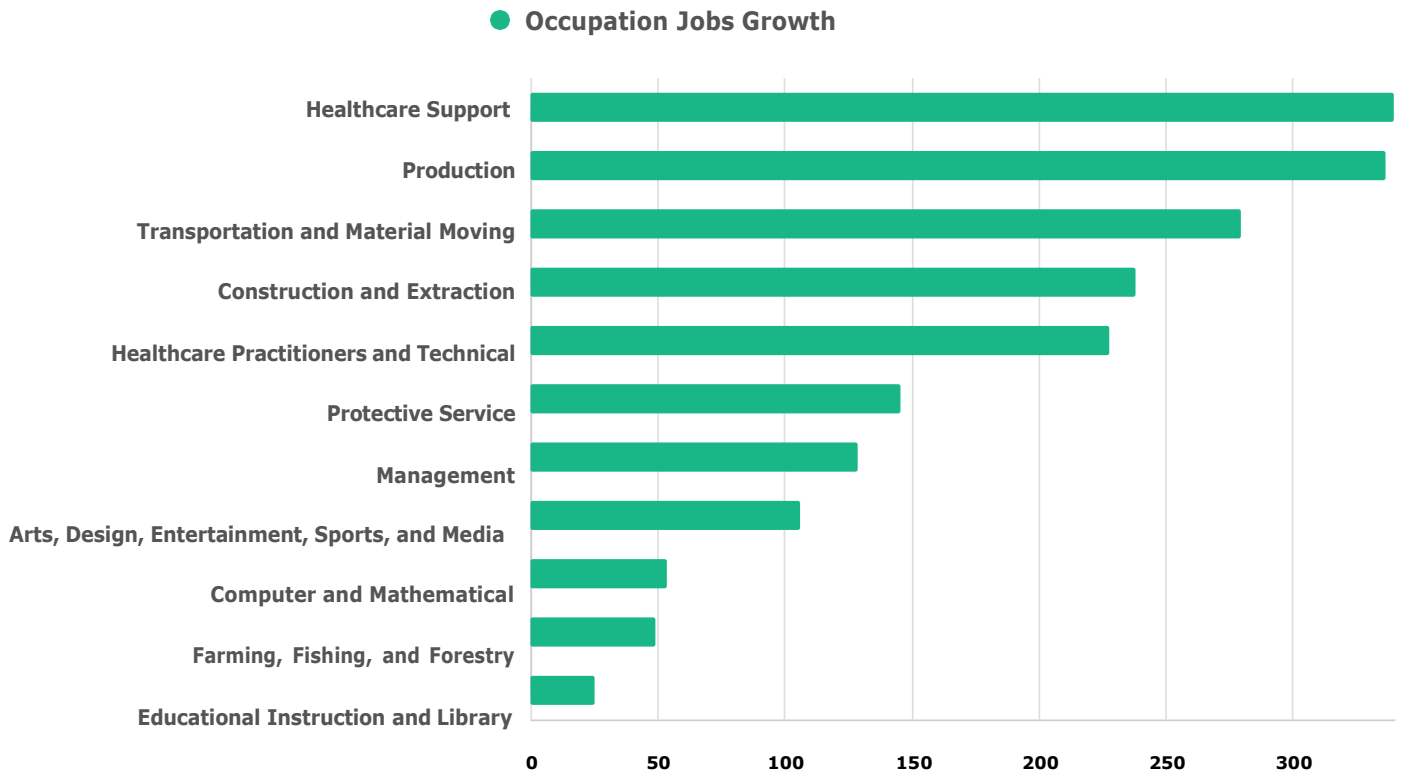
*Business Data by DatabaseUSA.com is third-party data provided by Emsi to its customers as a convenience, and Emsi does not endorse or warrant its accuracy or consistency with other published Emsi data. In most cases, the Business Count will not match total companies with profiles on the summary tab.

Workforce Characteristics

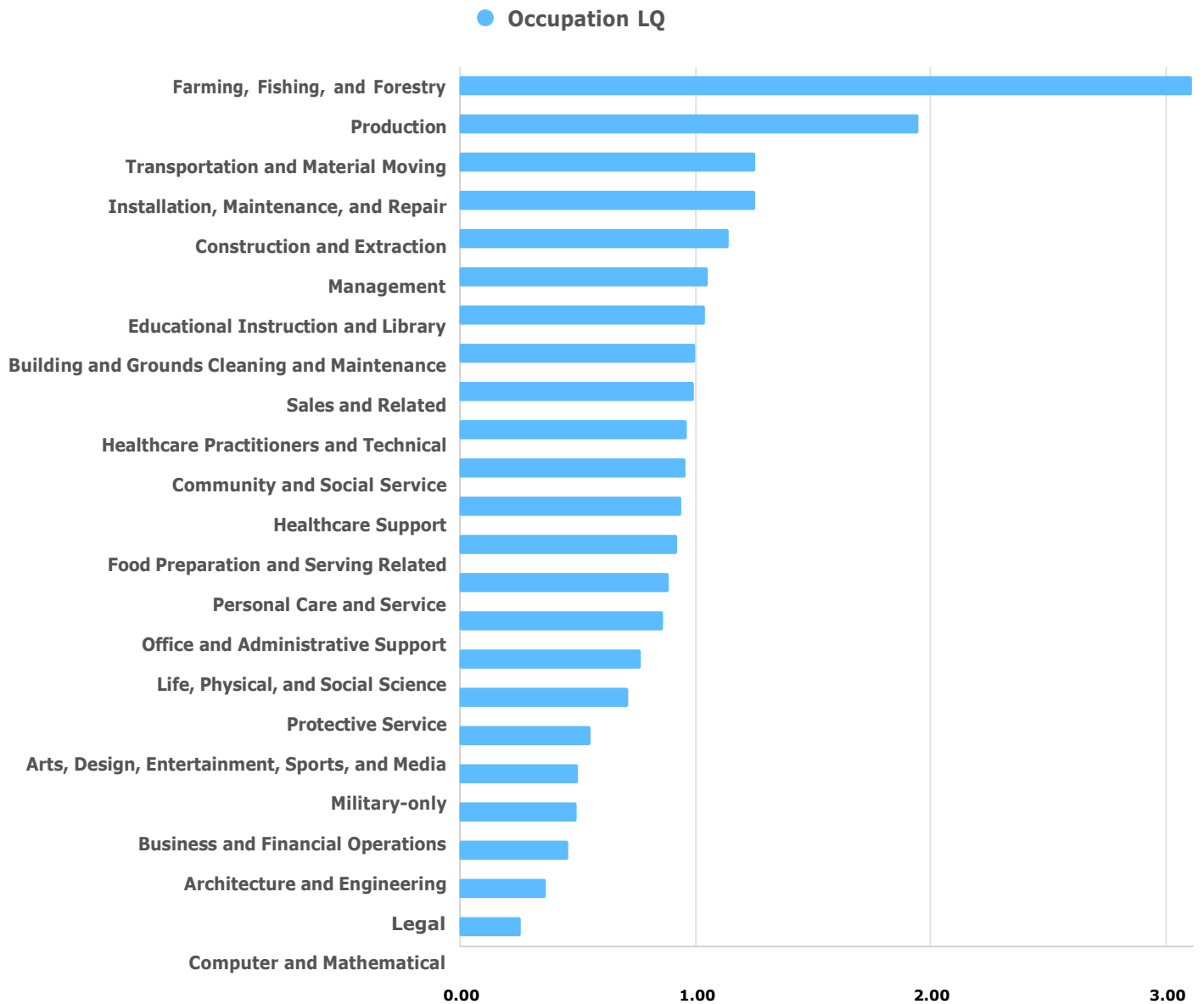
Largest Occupations



Top Growing Occupations

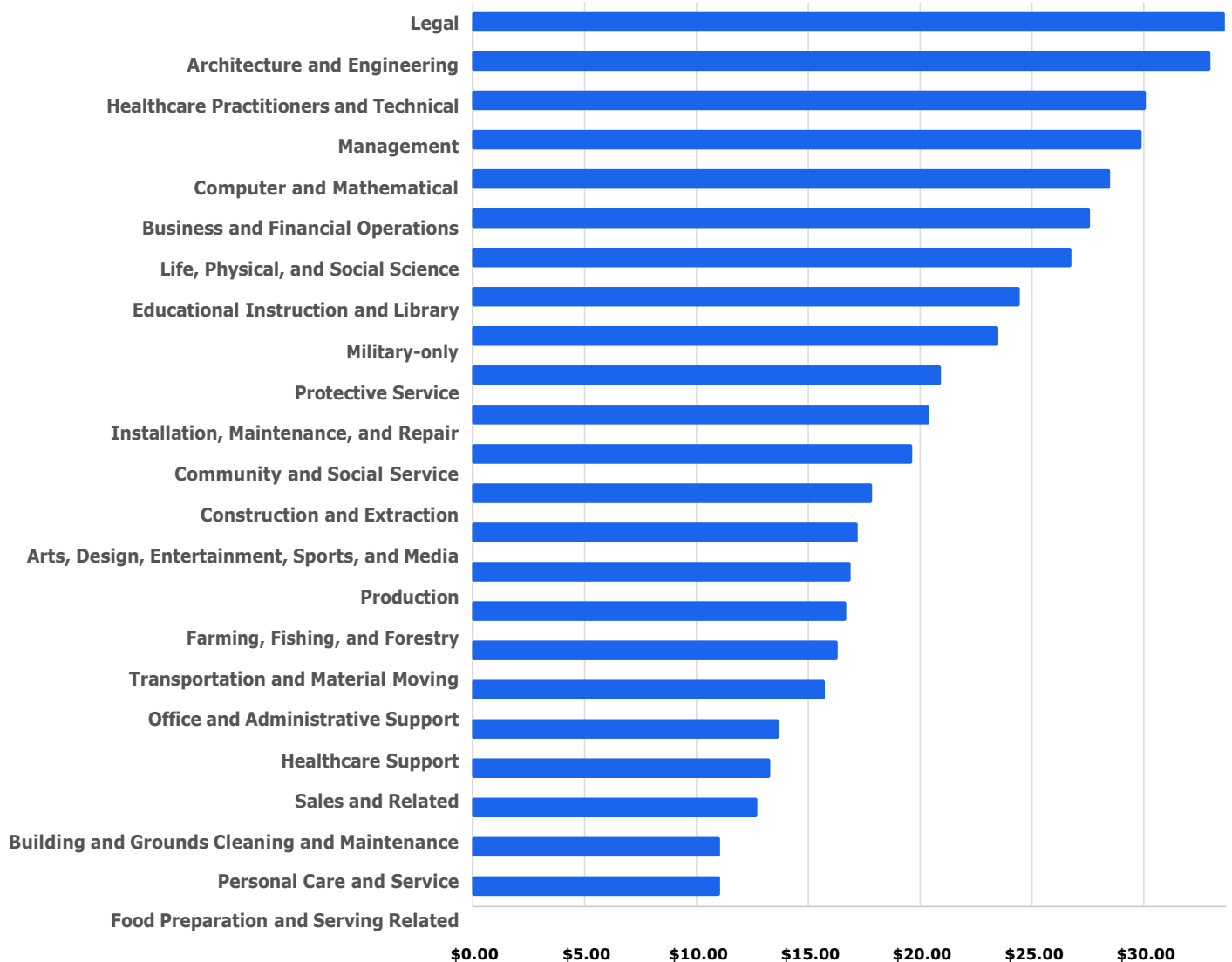


Top Occupation LQ



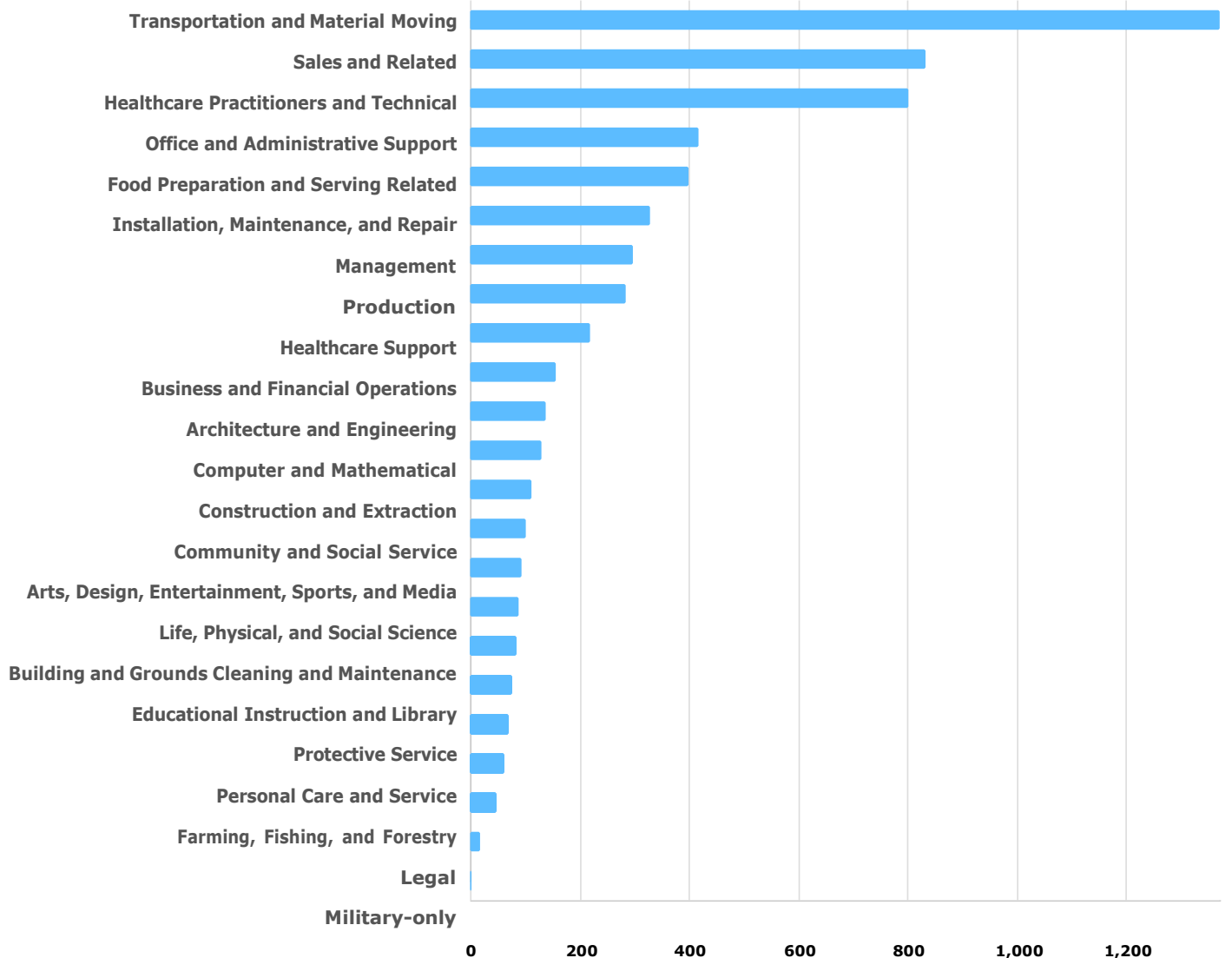
Top Occupation Earnings

● 2019 Median Hourly Earnings

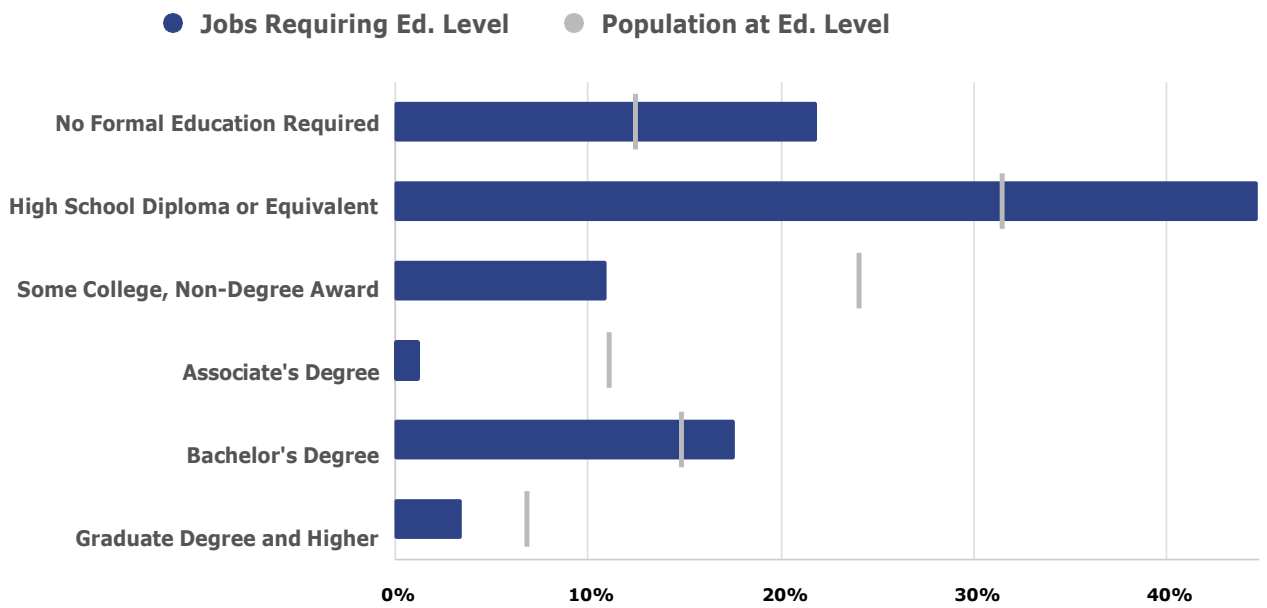


Top Posted Occupations

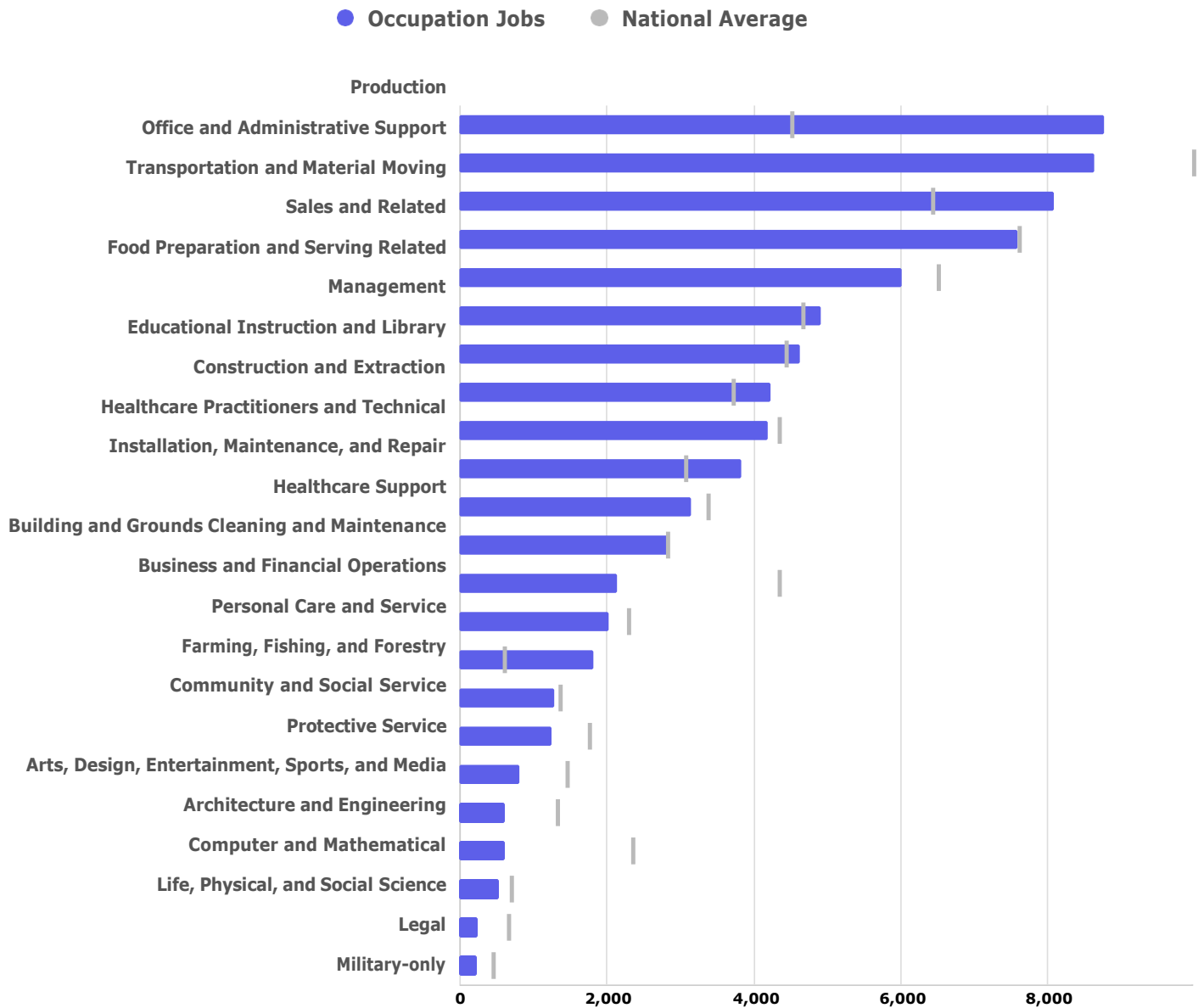
● Unique Average Monthly Postings



Underemployment

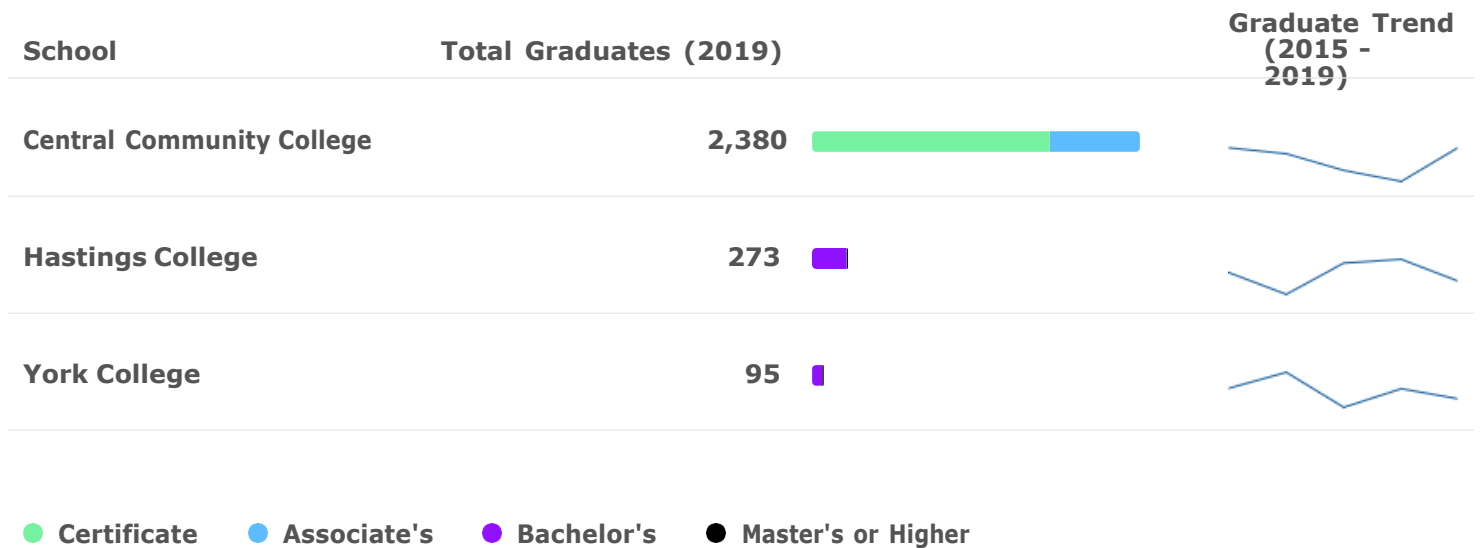


Largest Occupations



Educational Pipeline

In 2019, there were 2,748 graduates in 8 Nebraska Counties. This pipeline has shrunk by 2% over the last 5 years. The highest share of these graduates come from "Business Administration and Management, General", Liberal Arts and Sciences/Liberal Studies, and Diesel Mechanics Technology/Technician.



In-Demand Skills

