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# Omaha Area Skills Gap Report

## Final Report

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## Executive Summary

In 2014 and 2015, the Nebraska Departments of Labor and Economic Development led efforts to conduct two surveys regarding the skills of workers and skill needs of employers in the Omaha area: the *Nebraska Metro Area Labor Availability Survey* and the *Greater Omaha Survey of Workforce Needs*. The surveys also asked about training requirements and needs.

The current study utilizes the results of both surveys as well as secondary data about the Omaha area economy to summarize information about job skills and whether a skills gap is found within the region. A skills gap is present if it is difficult for a large share of employers to hire in a particular occupation and there is also a persistent gap between the demand for new workers and the number of individuals entering that occupation. Key questions include: In what part of the labor force, if any, is a skills gap present? And, is the skills gap the result of a lack of education and training opportunities, or are other factors at work? For the analysis, the Omaha area is defined as the Omaha Metropolitan Statistical Area.

Results of the study suggest that the aggregate annual flow of individuals into the workforce in the Omaha area is slightly less than the projected annual needs of businesses due to net job growth and turnover (i.e., exits from the workforce). These annual deficits of workers are found for select white collar occupations such as business and financial operations workers and computer and mathematical workers, and are more widespread in skilled blue collar occupations. Annual deficits are most severe in service occupations, especially sales and related workers, food preparation service related workers and office and administrative workers. These annual deficits are further magnified because a significant share workers in service and skilled blue collar occupations are difficult to hire due to a “poor work history” (which typically means frequent job changes) or an inability to pass a background check.

For the more highly skilled occupations with a deficit of workers, potential employees can be prepared through enhanced training, education, internship and (in some cases) apprenticeship opportunities developed through collaboration between employers, training entities and other education institutions. These enhanced learning opportunities should be combined with additional efforts to inform secondary school students, and their parents, about the earnings and other opportunities afforded by these occupations. The specific occupations are listed below, along with the standard occupation code from the U.S. Bureau of Labor Statistics:

- Computer Systems Analysts (SOC CODE 15-1121)
- Computer Programmers and Software Developers (SOC Code 15-1131, 15-1132, 15-1133)
- Network and Computer Systems Administrators (SOC Code 15-1142)
- Computer User Support Specialists (SOC CODES 15-1151) Carpenters (SOC Code 47-2031)
- Electricians (SOC Code 47-2111)
- Plumber, Pipefitters and Steamfitters (SOC Code 47-2152)
- Industrial Machinery Mechanics (SOC Code 49-9041)
- Maintenance and Repair Workers, General (SOC Code 49-9071)
- Machinist (SOC Code 51-4041)
- Welders, Cutters, Solderers and Brazers (SOC Code 51-4121)

Results of the research also support another potential initiative. In particular, many employers indicate that a poor work history or elements of worker's personal history are a factor in hiring. There appears to be a large group of applicants who have some or all of the relevant occupation-specific skills, but who are still not appealing to employers due to work history or an inability to pass a background check. This raises two key questions: is there a subset of workers in these occupations with potential to change, that is, to become more committed to and a better team member at work? And, how would workers who are able to change be identified and separated from the others? To answer these questions, there should be extensive discussion with human resources representatives and direct supervisors of workers regarding what practical steps workers can take, if any, over time to change a poor work history into an adequate work history.

Finally, our survey of Omaha households found that local wage levels are sufficient for most Omaha area job seekers. Specially, survey results reveal that the wage requirements of Omaha area residents seeking work: 1) represent only a moderate increase over their current wage and 2) are within the prevailing wages found within the Omaha Metropolitan Area job market. Further, in the handful of occupations where desired wage increases are high in percentage terms, relatively few employers report that hiring is difficult. These results, however, apply only to the internal Omaha labor market. It is possible that wage levels in the Omaha area are insufficient to attract required workers from outside of the region.

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## 1. Introduction

During 2014 and 2015, the Nebraska Departments of Labor and Economic Development led efforts to survey both households and businesses in the Omaha, Nebraska area. Surveys were designed to examine the skills and work preferences of regional residents and the skill needs and training practices of local employers. These surveys were the *Nebraska Metro Area Labor Availability Survey* and the *Greater Omaha Survey of Workforce Needs*. The surveyed area included the Omaha Metropolitan Statistical area and select adjacent counties

Survey results yield detailed information about the skills of the local workforce and the hiring and training activities of area businesses. These results provide significant insight into whether there are skills gaps present in individual occupations within the Omaha area labor market. Such skills gaps are present if a high share of employers find that it is difficult to hire workers for an occupation and there is a persistent gap between the demand for workers and the number of workers entering that occupation.

Survey results also indicate that skills gaps have potential to limit growth of the Omaha Metropolitan Area economy. In particular, 41.1 percent of employers responding to the *Greater Omaha Survey of Workforce Needs* indicate that there would be issues with labor availability if a major expansion was being considered for the Omaha area while another 32.7 percent indicate labor availability might be an issue. Among these respondents, 38.9 percent report that labor availability would limit their ability to make a major expansion.

Measuring the skills gap is challenging. After all, both businesses and workers are likely to cite difficulties in the labor market with some frequency. For employers, finding and maintaining a productive work force is one of the key challenges of running a business. Likewise, finding and keeping meaningful employment is one of the key career challenges faced by workers. Sure enough, survey results show that these are key concerns. For example, results from the *Nebraska Metro Area Labor Availability Survey* indicate that 60.4 percent of potential job seekers report that a lack of job opportunities in the local area is an obstacle to finding new employment. At the same time, 63.9 percent of employers responding to the *Greater Omaha Survey of Workforce Needs* indicate that it is difficult to hire workers.

Do these survey responses mean that a broad-based skills gap is present in the Omaha Metropolitan Area economy? Not necessarily. After all, as noted above, we would anticipate a certain level of concern by businesses and people given the rigor of the labor market. A more interesting question is: for which occupations is it most difficult to find a worker, or to find a job? Further, to identify a skills gap in a particular occupation, we also must identify factors which are causing a lingering shortfall in the number of qualified and employable workers available to employers.

There are many potential reasons why a skills gap could develop within an occupation.

**Structural change** – Structural change refers to changes in technology, customer demand, or international competition which expand the demand for workers in select occupations (and reduce the demand in others). Time may be required for workers to prepare for these emerging occupations, either through retraining for existing workers or by providing appropriate degree and certificate programs for college, community college and high school students.

**Education and Training Programs** – Appropriate degree and certificate programs are needed to help workers build skills required in the economy. Local education institutions, many of which are part of the public sector, may struggle to identify needed programs or change program offerings to meet the needs of students and employers. Degree and certificate programs also must be sufficiently rigorous to prepare students to meet employer needs.

**Appeal of Occupations** – Even when adequate degree and training programs are available, occupations may fail to attract workers at prevailing wages. The combination of wages, benefits and working conditions at a particular occupation may fail to attract workers relative to other work options available within the economy. Such conditions can arise or grow worse as the economy evolves and can also occur because potential workers have inadequate information about the benefits of a particular occupation, or are steered away from occupations by family members, mentors, or public perception. At the same time, competitive conditions may prevent local employers from raising pay and benefits in order to enhance the appeal of a particular occupation.

**Taxes on Middle Class Workers** – At prevailing wages, taxes may discourage workers from making investments in their skills through education and training programs. Such monetary investments may not be appealing if too large a share of incremental earnings go to federal, state and local government (either directly through income taxes or indirectly through sales and property taxes). In other words, if the tax burden is too high, workers may not choose to enter skilled occupations where work opportunities are abundant, even when local education and training opportunities are adequate.

**Career Destruction** – A portion of workers at all skill levels may engage in behavior which reduces their employment potential. These workers may have adequate skill and experience for an occupation, but still not appeal to employers. For example, worker may have a criminal record, or fail to pass a drug test or may have a poor work history, as evidenced by frequent job changes or other indicators of an inability to fit into the workplace. In these cases, a skill gap can arise because worker skills cannot or will not be utilized by employers, rather than a lack of skill.

**Social Safety Net** – Public benefits such as Medicaid, TANF or Social Security Disability Income may create a significant disincentive for some workers, particularly lower skills workers, to fully participate in the workforce. This may make it very challenging for employers hiring in some occupations to find an adequate workforce.

**Net Outmigration** – While workers are constantly moving in and out of cities, some cities develop a pattern of sustained net outmigration of workers (the difference between in-migrants and out-migrants) in a wide variety of occupations. Net outmigration may be especially severe in those skilled occupations which are typically filled with younger workers (for example, computer and mathematical occupations), given that younger, educated workers are also the most mobile.

These phenomena can limit the local supply of workers in selected skill groups, leaving employers to note a lack of adequately trained workers, or workers who have a poor work history or wage demands which are too high. This report will utilize data from a variety of sources to identify where a skills gap may be present, including data from the *Nebraska Metro Area Labor Availability Survey* and the *Greater Omaha Survey of Workforce Needs* and data on projected job openings, the flow of graduates and prevailing wages. We began by comparing the annual job openings generated in each occupation, due to

retirements and other exits and net job growth, with the potential annual supply of new workers to the occupation, due to local graduates, local residents who are not currently working, and net migration.

We also consider the share of existing employed workers who are open to or pursuing a change in jobs, and compare their wage requirements with prevailing market wages. Such “churn” in the labor market is important to provide employers with the best match of experienced, skilled workers. Lastly, the study evaluates the post-hire training practices of employers and the willingness of workers to participate in training.

## 2. Supply and Demand for Workers in the Omaha Metropolitan Area by Occupation

The most basic measure of the balance between supply and demand in an occupation is whether there is a gap of between the number of workers being prepared each year for the occupation and the annual need for new workers to enter that occupation. Over time, the annual flow into and out of the occupation will influence how scarce, and difficult to find, workers become. This chapter compares the number of individuals joining an occupation each year after leaving school (either as a graduate or a non-graduate) or through net immigration with the number of net openings in an occupation each year due to net job growth or individuals exiting the occupation. This chapter further examines the potential for individuals who are not working to reenter the labor force. This provides an additional source of potential new workers for Omaha Metropolitan Area employers.

Lastly, the level of “churn” among the existing workers within each occupation is examined. Churn is the rate at which workers in an occupation move between jobs. It is critical since jobs within a single occupation can differ in terms of requirements for skill and experience. An abundance of new graduates can help fill entry level positions but existing, more experienced workers (i.e. former entry level workers) also are needed to fill some openings. We estimate the percent and number of experienced workers within each occupation who are searching for employment, and what factors influence the probability of active job search by employed workers.

### A. Supply versus Demand for Workers by Occupation

The first step is to compare the annual net openings and new entrants to each major occupation group within the Omaha area. Net openings in an occupation is a function of net job growth in that occupation and openings created by individuals leaving the occupation. In most occupations, individuals primarily leave because of retirement but other causes include death, disability or changing occupations. Changing occupations is a large share of exits in the case of a handful of lower wage occupations including food preparation and serving related occupations and sales and related occupations.

New entrants to an occupation come from local individuals who are leaving schooling and net migration to the Omaha area. Individuals who leave schooling include both graduates and non-graduates. Graduates are high school graduates (and GED completers), community college graduates or college graduates each year. Non-graduates include individuals who drop out of high school, college, or community college. College and community college graduates are assigned to occupations based on their major field of study. High school graduates and non-graduates are assigned to occupations which do not require a college degree based on the number of annual openings. Analysis also adjusts for the share of graduates and non-graduates who are likely to be active participants in the labor force in any given year. This provides the best estimate of how many “workers” are being added in the area economy each year.

Net openings in the Omaha area labor market are based on projections developed by the Office of Labor Market Information (LMI) of the Nebraska Department of Labor. Specifically, the Nebraska LMI generates projections of the demand for additional workers in an occupation based on net job growth and replacement openings, as part of its *Nebraska 2012-2022 Long-Term Occupational & Industry Projections* publication. In that publication, replacement openings refer to individuals permanently leaving an occupation due to retirements as well as death, disability or changing occupations.

Projections are cumulative for 10 years. Annual openings are estimated by taking one-tenth of the 10 year projection. This estimate of the annual growth in demand is shown in Table 2.1 below.

Table 2.1 also contains estimates of the number of local individuals finishing college or community college in a given year with a potential match to each occupation. Individuals completing a degree at a post-secondary institution in the Omaha Metropolitan Area are assigned to a particular occupation based on the match between their degree program and the occupation. The number of graduates by degree program for University of Nebraska Omaha, University of Nebraska Medical Center, Metropolitan Community College, Creighton University, College of Saint Mary, Clarkson College, Grace University, ITT Tech, Kaplan Omaha and Nebraska Methodist College was obtained from the IPEDS data base (the *College Navigator* web portal) maintained by the U.S. Department of Education. There were approximately 9,200 graduates in 2014-15, the most recent year for which data is available through IPEDS.

Most of these college or community college graduates are expected to participate in the labor force in any given year while they are in the prime working age of 25 to 64. In particular, data from the National Center for Education Statistics found that, in 2014, 72.6 percent of 25 to 64 year olds who completed an Associate's Degree were in the formal labor market.<sup>1</sup> This compares to 87.0 percent of 25 to 64 year olds who completed a Bachelor's degree. This participation rate for college and community college graduates was combined with the approximately 9,200 graduates to estimate that 7,900 graduates would be available to participate in the labor force during a given year.

The next question is how many non-graduates leave school each year and how many of them participate in the labor force in a given year- based on their labor force participation rates. These non-graduates entering the labor force are divided into three distinct categories: individuals leaving college before graduating, those finishing high school and those dropping out of high school. The annual number of each type of school leaver is estimated for the Omaha Metropolitan Area, as described below.

**High School Graduates.** The number of high school graduates in the Omaha Metropolitan Statistical Area is estimated based on the annual number of high school graduates in Nebraska (22,350) reported in the *2014 Nebraska High Education Progress Report* from the Nebraska's Coordinating Commission on Postsecondary Education, and the ratio of 14- to 17-year olds in the metropolitan area to the number in Nebraska, based on data from the United States Census. This age range was used in order to produce a multiyear average; 18 year-olds already excluded since some are already attending college. The estimated annual number of high school graduates in the Omaha Metropolitan Area area is approximately 11,100. How many of those individuals decided not to attend college or community college? According to the Commission report 65.1 percent of those students attended a degree-granting institution (either in-state or out-of-state) within one-year of completing high school. Therefore, the annual flow of individuals who potentially enter the job market as high school graduates is approximately 34.9 percent of 11,100, or 4,000. A portion of these individuals will participate in the labor force in a given year. The National Center for Education Statistics found that 72.0% of 25 to 64 year olds those who completed high school but did not participate in post-secondary education were in the labor market in 2014. This is 72 percent is applied to 4,000 to yield 2,870 in additional labor force participants with a high school degree only.

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<sup>1</sup> Institute for Education Sciences, 2015. "Employment Rates and Unemployment Rates by Educational Attainment," National Center for Education Statistics, U.S. Department of Education (May). Accessed at [nces.ed.gov/programs/coe/indicator\\_cbc.asp](https://nces.ed.gov/programs/coe/indicator_cbc.asp)

**High School Dropouts.** The *Nebraska Higher Education Progress Report* from the Nebraska’s Coordinating Commission on Postsecondary Education Commission indicated that Nebraska has a four-year high school graduation rate of 90 percent. This graduation rate implies that there is one non-completer for each nine high school graduates. This yields an estimate of approximately 1,270 dropouts potentially joining the Omaha Metropolitan Area labor market in any particular year (although some of these individuals will ultimately obtain a GED). The National Center for Education Statistics report found that 59.9 percent of those who did not complete high school were participating in the labor market in 2014. Applying this rate to the population of 1,270 indicates that high school dropouts contribute 760 additional labor force participants each year.

Table 2.1: Annual Net Openings and School Leavers by Occupation Group

Occupation	Annual Net Openings NDOL	Annual Entrants		
		College or Community College Graduates	Others	Total
Management	543	676	0	676
Business and Financial Operations	968	648	0	648
Computer and Mathematical	645	264	0	264
Architecture and Engineering	198	99	0	99
Life, Physical and Social Sciences	119	1,266	0	1,266
Community and Social Service	261	363	0	363
Legal	64	164	0	164
Education, Training and Library	916	509	0	509
Arts, Design, Entertainment, Sports, and Media	313	458	0	458
Healthcare Practitioners and Technical Workers	970	2,241	0	2,241
Healthcare Support	377	141	219	360
Protective Services	283	323	165	488
Food Preparation and Serving Related	1,590	0	925	925
Building and Grounds Cleaning and Maintenance	423	0	246	246
Personal Care and Services	673	207	391	598
Sales and Related	1,912	15	1,113	1,127
Office and Administrative Report	2,288	362	1,332	1,693
Farming, Fishing, and Forestry	70	5	40	46
Construction and Extraction	920	12	536	547
Installation, Maintenance and Repair	604	96	351	447
Production	659	47	383	431
Transportation and Material Movers	1,402	0	816	816

Sources: Nebraska Department of Labor for job openings and IPEDS, U.S. Department of Education for graduates, and BBR calculations

Notes: 1) Others includes high school dropouts, high school graduates (GED completers) or college or community college non-completers. 2) college or community college graduates and others may not sum to total leavers due to rounding

**College and Community College Non-Completers.** The *Nebraska Higher Education Progress Report* indicates that overall graduation rate from post-secondary institutions in Nebraska is approximately 50% in a typical year. Applying this rate to the 65.1 percent of 11,100 high school graduates who attend college yields an estimate that 3,720 individuals will potentially enter the local labor market each year without a completing a post-secondary degree. The National Center for Education Statistics report indicates that 77.6 percent of these will enter the labor force, implying 2,890 additional labor force participants each year.<sup>2</sup>

Altogether, approximately 6,520 high school only completers, high school dropouts, and college dropouts enter the labor market in the Omaha Metropolitan Area each year. These individuals do not have specific community college or college degree to match with any particular occupation, so the individuals are distributed among the occupations which do not **require** a college or community college degree (although workers may have a degree) including: healthcare support; protective services; food preparing and serving; building and grounds; personal care and services; sales, office and administrative support; farming, fishing and forestry; construction and extraction; installation, maintenance and repair; production; and transportation and material moving occupations. The 6,520 individuals are allocated to these occupations based on the share of annual openings in each occupation.

Results in Table 2.1 show that there is a deficit of school leavers relative to annual net openings in select white collar occupations and most service occupations and skilled blue collar occupations. Occupations with a significant deficit include food preparation and serving related, office and administrative, sales and related, construction and extraction and transportation and material movers. Across all occupations there are an estimated 1,700 fewer school leavers than projected openings each year.

Table 2.1., however, does not represent the final assessment of the flow of workers into and out of the economy each year. In particular, the Omaha Metropolitan Area gains nearly 1,300 **workers** each year due to net immigration from other communities. Estimates of entrants and net openings after net migration are provided in Table 2.2. Estimates for migration are based on U.S. Bureau of Census data for total population. Estimates of total population are converted to estimates of migration by workers utilizing employment to population ratios. Estimates of net in-migration by workers (1,260 each year) are allocated to 5 civilian major occupation categories and for military personnel: 1) management, business, science, arts, 2) service occupations, 3) sales and office occupations, 4) natural resources, construction, and maintenance, 5) production, transportation and material moving and 6) military specific occupations. The Bureau of Census also has data on the frequency of migration within these occupation categories.

Net in-migration nearly closes the gap between annual job openings and annual entrants to the workforce in the Omaha Metropolitan Area. After factoring in net outmigration, across all occupations there are an estimated 520 fewer labor market entrants than projected openings each year.

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<sup>2</sup> This estimate assumes that individuals who fail to complete a college or community college degree at an Omaha area institution will return to the community where they completed high school. Similarly, Omaha area high school graduates who attend post-secondary education in another city would return to the area.

Table 2.2: Annual Net Openings and Entrants by Occupation Group, Including Migrants

Occupation	Annual Entrants			
	Annual Net Openings NDOL	Total Finishers	Net Migration	Total
Management	543	676	10	686
Business and Financial Operations	968	648	18	666
Computer and Mathematical	645	264	12	277
Architecture and Engineering	198	99	4	103
Life, Physical and Social Sciences	119	1,266	2	1,268
Community and Social Service	261	363	5	368
Legal	64	164	1	166
Education, Training and Library	916	509	17	526
Arts, Design, Entertainment, Sports, and Media	313	458	6	464
Healthcare Practitioners and Technical Workers	970	2,241	77	2,319
Healthcare Support	377	360	30	390
Protective Services	283	488	23	510
Food Preparation and Serving Related	1,590	925	127	1,052
Building and Grounds Cleaning and Maintenance	423	246	34	280
Personal Care and Services	673	598	54	652
Sales and Related	1,912	1,127	187	1,314
Office and Administrative Report	2,288	1,693	223	1,916
Farming, Fishing, and Forestry	70	46	11	56
Construction and Extraction	920	547	140	687
Installation, Maintenance and Repair	604	447	92	539
Production	659	431	61	491
Transportation and Material Movers	1,402	816	129	945

Sources: Nebraska Department of Labor for job openings and IPEDS, U.S. Department of Education for graduates, and BBR calculations

Notes: 1) Others includes high school dropouts, high school graduates (GED completers) or college or community college non-completers. 2) college or community college graduates and others may not sum to total leavers due to rounding

Beyond these figures, there is further reason to be concerned about the rate of entrants among skilled workers. In particular, an assumption throughout the analysis so far has been that skilled workers entering the labor market would remain viable to work in those occupations over their lifetime. Yet, in some cases, workers with appropriate training will diminish their ability to utilize those skills by developing a poor work history or personal issues which discourage employers from hiring them. Table 2.3 show the potential size of this problem. The table lists the percentage of business respondents to the *Greater Omaha Survey of Workforce Needs* who indicated it was difficult to hire workers in part due to: 1) poor work history and 2) failure to pass background checks. These percentages are significant, especially given that net openings are slightly more than annual entrants.

Table 2.3: Total Annual Net Openings and Entrants and Problems with Work History

	Balance And Problems
Annual Net Openings	16,197
Annual Entrants	15,676
Share of Applicants with	
Poor Work History	37.5%
Failed Background Check	20.5%

Sources: IPEDS, U.S. Department of Education for graduates and *Nebraska Metro Area Labor Availability Survey* and BBR calculations

**Potential Supply from Area Residents Who Are Not Currently Employed**

While Tables 2.1 through 2.3 addressed the long-term balance between annual net openings and entrants in each occupation, it should be noted that there is another potential source to source to bring new workers into the Omaha Metropolitan Area economy over the next few years. That sources is area residents who are not currently employed. These individuals can be drawn back into the work force by: 1) providing job opportunities to unemployed workers; and 2) drawing back individuals who are currently out of the labor force, such as retirees or homemakers.

Table 2.4 provides information on the population of Omaha Metropolitan Area residents who are not currently employed but are actively seeking work. Data in the table is assembled using responses of individuals in the *Nebraska Metro Area Labor Availability*. That survey included a significant number of responses from individuals who indicated that they were unemployed, retired, or were currently homemakers. Respondents provided information both about their previous occupation when they worked in the past and whether they are actively seeking a job at the moment. Approximately 11.1 percent indicated that they were “actively searching for a job.” This percentage is obviously higher than might be expected given the 3 percent to 3.5 percent unemployment rates that prevail in the Omaha Metropolitan Area. However, the difference makes sense given that the criteria for being classified as unemployed are not as strict in the *Nebraska Metro Area Labor Availability*. In particular, persons do not need to demonstrate that they have been actively searching beyond a minimum level in recent weeks.

This broader 11.1 percent of individuals who are reporting some active steps to search for work implies a chance to add a significant number of new workers to the labor force. In particular, there are approximately 185,000 adults age 16 and above in the Omaha Metropolitan Area who are classified as out of the labor force or unemployed. The 11.1 percent figure indicates that there are potentially up to 20,500 additional workers for the Omaha Metropolitan Area economy. Table 2.4 shows the occupations for which these potential workers might be available, based on the previous occupation.

As seen in Table 2.4, a significant share of these workers are in key blue collar occupations, including production workers, and transportation and material moving workers. There also are nearly 2,550 former business and financial operations workers and 1,050 computer and mathematical workers. These are two of the white collar occupations where annual openings exceed annual entrants. The largest number of active searchers, however, are in sales and related and office and administrative support occupations. These are two other occupations with the large gap between annual opening and entrants. Results therefore show the potential over the next few years to plug some of the annual gap between openings and entrants through drawing the unemployed, retired workers and homemakers back into the workforce.

**Table 2.4: Number of Jobless Individuals Actively Searching for a Job by Previous Occupation**

Occupation	Number
Management	944
Business and Financial Operations	2,549
Computer and Mathematical	1,048
Architecture and Engineering	282
Life, Physical and Social Sciences	209
Community and Social Service	0
Legal	539
Education, Training and Library	367
Arts, Design, Entertainment, Sports, and Media	330
Healthcare Practitioners and Technical Workers	0
Healthcare Support	241
Protective Services	700
Food Preparation and Serving Related	682
Building and Grounds Cleaning and Maintenance	241
Personal Care and Services	0
Sales and Related	4,122
Office and Administrative Support	4,492
Farming, Fishing, and Forestry	0
Construction and Extraction	141
Installation, Maintenance and Repair	0
Production	1,195
Transportation and Material Movers	2,367

Source: *Nebraska Metro Area Labor Availability Survey*

### **B. Job Search among the Currently Employed**

Beyond the overall balance of net openings and entrants in an occupation, employers have a need for hiring experienced workers. Such positions are often filled by workers who are currently employed. While this can be frustrating for employers who lose workers, this “churn” of workers can be beneficial. In particular, job search by the employed helps experienced workers find the best match between their job and their skills and experience. Finally, workers who are hired away, in turn, leave open positions which create an opportunity, and potentially a better job match, for another worker.

The *Nebraska Metro Area Labor Availability Survey* asked employed workers whether they were actively searching for work, along with questions about their experience and occupation. Survey results indicate that 14.3 percent of currently employed workers are actively searching for a job. This implies that approximately 65,000 employed workers are actively searching at a moment in time. Survey results also can be used to generate statistics about the share and number of employed workers in each occupation who are actively searching for a job. These shares are presented in Table 2.5.

Results in Table 2.5 show great variation in the share of employed workers who are actively seeking a new job. The highest shares are found for select blue collar and service workers. The highest shares, by far, were protective service and transportation and material mover occupations. Higher shares also are

found for food preparation and serving related (21.8%), personal care and service (17.5%), sales and related (16.2%), legal (16.1%) and production (15.6%) occupations.

The largest number of employed workers who are actively seeking a new job are found in blue collar and service occupations. There were an estimated 11,271 employed office and administration support workers who are actively seeking a new job plus 8,244 sales and related workers and 7,319 food preparation and serving related workers. There are an estimated 10,996 employed transportation and material mover workers actively seeking a new job.

**Table 2.5: Percent and Number of Employed Individuals Who Report Actively Searching for a Job By Occupation**

Occupation	% Actively Search For A Job	# Actively Search For A Job
Management	6.1%	1,144
Business and Financial Operations	7.6%	2,043
Computer and Mathematical	8.5%	1,506
Architecture and Engineering	2.3%	141
Life, Physical and Social Sciences	4.4%	122
Community and Social Service	14.5%	890
Legal	16.1%	445
Education, Training and Library	10.1%	2,787
Arts, Design, Entertainment, Sports, and Media	14.3%	1,253
Healthcare Practitioners and Technical Workers	9.1%	2,508
Healthcare Support	11.4%	1,253
Protective Services	32.6%	2,314
Food Preparation and Serving Related	21.8%	7,319
Building and Grounds Cleaning and Maintenance	3.9%	537
Personal Care and Services	17.5%	2,901
Sales and Related	16.2%	8,244
Office and Administrative Support	14.8%	11,271
Farming, Fishing, and Forestry	0.0%	0
Construction and Extraction	9.4%	2,063
Installation, Maintenance and Repair	10.5%	1,855
Production	15.6%	3,378
Transportation and Material Movers	30.6%	10,996

Source: *Nebraska Metro Area Labor Availability Survey*

As is evident from Table 2.5, there is a significant number of employed workers actively seeking new employment at any moment in time. In fact, the number of employed workers actively searching for a job typically dwarfs the number of annual entrants to each occupation. Table 2.6 compares the estimated number of employed workers actively searching for a work at a given moment (Table 2.5) with the estimated number of annual of entrants, by occupation (Table 2.2). For most occupations, there are more experienced workers actively searching for work than new entrants. This highlights the critical role that job search by experienced workers plays in operation of the Omaha Metropolitan Area labor market.

**Table 2.6: Relative Abundance of Currently Employed Job-Seekers by Occupation**

Occupation	School Finishers and Net Migrants	Employed But Actively Searching For Work
Management	686	1,144
Business and Financial Operations	666	2,043
Computer and Mathematical	277	1,506
Architecture and Engineering	103	141
Life, Physical and Social Sciences	1,268	122
Community and Social Service	368	890
Legal	166	445
Education, Training and Library	526	2,787
Arts, Design, Entertainment, Sports, and Media	464	1,253
Healthcare Practitioners and Technical Workers	2,319	2,508
Healthcare Support	390	1,253
Protective Services	510	2,314
Food Preparation and Serving Related	1,052	7,319
Building and Grounds Cleaning and Maintenance	280	537
Personal Care and Services	652	2,901
Sales and Related	1,314	8,244
Office and Administrative Support	1,916	11,271
Farming, Fishing, and Forestry	56	0
Construction and Extraction	687	2,063
Installation, Maintenance and Repair	539	1,855
Production	491	3,378
Transportation and Material Movers	945	10,996

Sources: IPEDS, U.S. Department of Education for graduates and Source: *Nebraska Metro Area Labor Availability Survey* and BBR calculations

### 3. Barriers to Employment and the Local Labor Market

The preceding chapter found that there are a significant group of currently employed workers who are actively looking for new work. In many occupations, there are also workers who are not currently working who are actively seeking looking for new work. These workers represent an important skill resource for employers in the Omaha Metropolitan Area. Two questions about these workers come to mind. First, what challenges or barriers do these workers foresee in seeking new employment? Second, do these challenges appear to represent a skills gap? These two questions are discussed below.

Survey results reported in the *Omaha Labor Availability Report* show the types of barriers perceived by potential job seekers. The various criteria fall into categories including working conditions, suitability for employment, work schedule, and compensation.

More than three in five potential job seekers (60.4%) cite a lack of job opportunities in the area. This result is perhaps surprising given that projected openings slightly exceed new entrants in the Omaha Metropolitan Area, as reported in Chapter 2. However, the result may simply mean that potential job seekers perceive a lack of appropriate job opportunities, that is, job opportunities which match their skills and their ambitions. This perspective is bolstered by the finding that nearly one in three job seekers (30.5%) report facing a barrier to finding new employment because they are “overqualified.” Other common obstacles perceived by potential job seekers relate to compensation and work hours available from local employers. Nearly two in three (63.3%) cite “inadequate pay offered by local employers” as an obstacle. Inadequate benefits are cited by 53.0 percent of potential job seekers. Inadequate hours are cited by 45.6 percent.

Potential seekers also perceive that their own background may limit their potential to find employment. Just over three in ten (30.2%) cite a lack of training while 28.3 percent cite a lack of education. Besides skill, workers also are concerned about elements of their work history or personal history which create a perceived barrier. Poor credit history is noted by 13.0 percent of workers. Credit history is sometimes used as a screen by potential employers. A criminal record is cited as a barrier by 6.9 percent of workers.

Results also showed that family considerations create a barrier for some workers. In particular, a lack of childcare is noted by 11.2 percent of potential job seekers and family commitments are noted by 26.3 percent. Currently employed workers may have found a position which can accommodate their family commitments, a feature which binds them to that position. For others, family commitments may keep them out of the workforce.

Do these obstacles suggest the presence of a skills gap in the Omaha Metropolitan Area? Potentially so, if potential job seekers perceive they have inadequate education or training, or have a life history such as a criminal record which will dissuade employers from utilizing their skills, or if employers offer inadequate wages to attract potential job seekers into the new jobs where their skills are needed.

However, these issues need to be examined further, and on an occupation-by-occupation basis. Below we examine this evidence of a skills gap in more detail, by comparing worker assessments with those of employers, and comparing wage expectations with market wages in the Omaha Metropolitan Area.

Table 3.1 compares employer perceptions of worker skill with the perceptions of potential job seekers. Employer perceptions come from the report *Survey of Omaha Business about Skill and Training*

*Requirements.* In particular, employers were asked whether a series of factors, including occupation skills, make it difficult to hire workers in particular occupations. Employer perceptions of a lack of occupations specific skills from whatever source (a lack of education, lack of training) is higher than the perceptions of potential job seekers. However, this is hardly surprising. The key point is both potential job seekers and employers perceive a significant problem. The question is in which specific types of occupations is this lack of skill most severe.

Table 3.1: Employer and Potential Worker Perceptions of Skill and Training

Issue	Potential Job Seekers	Employers Hiring for Specific Occupations
Percent Indicating a Lack of Training is an Obstacle to Employment	30.2%	
Percent Indicating a Lack of Education is an Obstacle to Employment	28.3%	
Percent Indicating that Lack of Occupation Specific Skills Makes It Difficult to Hire		40.8%
Percent Indicating that Lack of Required Licenses/Certificates Makes It Difficult to Hire		12.0%

Sources: *Survey of Omaha Business about Skill and Training Requirements* and *Omaha Labor Availability Report*

Table 3.2 looks at other workforce issues which influence employability; in particular, facts or tendencies in the background of workers which may reduce or prohibit employability even if workers have the necessary skills for an occupation. The table shows that employers indicate 20.5 percent of the time that failed background checks make it difficult to hire. A background check can include a variety of factors including criminal record, substance abuse, or evidence of credit problems, among other issues. Results from the *Omaha Labor Availability Report* indicate that some potential job seekers also see difficulties with their background which could be a barrier to employment.

Table 3.2: Employer and Potential Worker Perceptions of Worker Background and History

Issue	Potential Job Seekers	Employers Hiring for Specific Occupations
Percent Indicating Criminal Record is an Obstacle to Employment	6.9%	
Percent Indicating Poor Credit History is an Obstacle to Employment	13.0%	
Percent Indicating Failed Background Check Makes It Difficult to Hire		20.5%
Percent Indicating that Poor Work History Makes It Difficult to Hire		37.5%

Sources: *Survey of Omaha Business about Skill and Training Requirements* and *Omaha Labor Availability Report*

Table 3.2 also shows that 37.5 percent of employers indicate that a poor work history makes it difficult to hire, as reported in the *Survey of Omaha Business about Skill and Training Requirements*. Follow-up discussions with employers suggests that poor work history refers to evidence of frequent “job-hopping,” or other indicators that workers do not fit in well at their workplace. Such problems can

certainly discourage hiring, even when workers have the required skills. Note that there is no analogous question on work history in the *Nebraska Metro Area Labor Availability Survey*. It would be difficult for workers to self-report on this topic since they may have a very different perception of their own work history.

The final issue pertains to the wages and benefits of potential jobs. This is an area where workers and employers have very different perceptions. As was noted above, a majority of potential job seekers see wages and benefits available from local employers as an obstacle to finding a new job. But, just three in ten employers (30.4%) saw wage demands from workers which were “too high” as a cause of difficulty in hiring, according to the results in the report *Survey of Omaha Businesses about Skill and Training Requirements*. Taken together, potential employees were unsatisfied with available compensation but employers in most cases did not see employee wage demands as a difficulty.

This issue is worthy of further study. Fortunately, a wealth of information is available about local wages, including detailed information about the wage desires of workers from the *Nebraska Metro Area Labor Availability Survey* and information about the average wages by occupation in the Omaha Metropolitan Area from the U.S. Bureau of Labor Statistics. The information can be used to assess whether job seekers have realistic expectations regarding wages in potential new jobs; with realistic expectations suggesting that differences in wage expectations among employees and employers do not rise to the level of being a source of a skills gap in the local economy. In particular, the question is whether job seekers expect to see a very large increase in wages compared to their current job in the case of employed workers, or compared to a past job in the case of workers who are unemployed, retired, or are homemakers. A related question is whether the desired wages are high relative to the average wages of workers in that occupation in the Omaha Metropolitan Area. While the *Nebraska Metro Area Labor Availability Survey* found that potential job seekers desired flexibility and other beneficial job characteristics in new employment, some increase in wages would be expected in order to draw workers to a new job or back into the labor force.

Results in Table 3.3 show current (past) wages and desired wages for all potential job seekers by education attainment category.<sup>3</sup> This is a comparison between the current (past) wage reported by respondents to the *Nebraska Metro Area Labor Availability Survey* and the minimum wage which would be required for respondents to improve their job situation, assuming a new position met their other most important job condition requirements. Results are presented for potential job seekers who report hourly wages or report annual wages and work at least 35 hours per week. Results show that most potential job seekers hope for a position which pays \$1.50 to \$2.50 per hour more than their current position. Desired percent wage increases are relatively modest among workers in other education attainment categories. Potential job seekers with less than a high school degree seek an 11.3 percent wage increase, on average. Potential job seekers with an Associate’s degree seek a 13.4 percent wage increase while those with a high school degree (or equivalent) seek a 9.1 percent increase. Potential job seekers with a Bachelor’s degree (6.4%) or a Masters’ Degree or Higher (7.5%) seek only small wage increases. These differences between current (past) and desired wages of 6 to 14 percent are significant but manageable, that is, in-line with the opening ask of a worker who is being recruited to change positions.

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<sup>3</sup> Similar results are obtained when comparing the current (past) and desired wages of active job seekers.

Table 3.3: Current and Desired Wages of All Potential Job Seekers by Educational Attainment

Highest Level of Education	Weighted N	Average Current (Past) Wages	Average Desired Wages	Average Wage Differential	Percent Wage Differential
Less than high school	24	13.01	14.48	1.47	11.3%
High School graduate or GED	295	16.32	17.79	1.48	9.1%
Less than 2 year award	84	16.95	19.15	2.19	12.9%
Associate's Degree	111	19.12	21.69	2.57	13.4%
Bachelor's Degree	352	24.14	25.68	1.54	6.4%
Master's Degree or Higher	254	28.82	30.99	2.17	7.5%

Source: *Nebraska Metro Area Labor Availability Survey*

Additional insights can be generated by comparing the current (past) and desired wages of potential job seekers by occupation. This is done in Table 3.4. Results in Table 3.4 show wide variety in desired wage increases. Average desired wages are below current (past) wages for management (SOC 11) and life, physical and social science (SOC 19) workers.

The gap is positive for other skilled blue collar occupations. The average desired wage is \$3.20 per hour higher (14.5%) for construction and extraction workers (SOC 47). The biggest difference in percentage terms is for installation, maintenance and repair workers (SOC 49). Average desired wages are \$3.06 per hour higher (15.8%) for these workers.

The gap between desired and current (past) hourly wages is often larger for service occupations. Desired wages are \$4.22 per hour higher (34.1%) for personal care and service workers (SOC 39), \$3.53 higher (34.0%) for food preparation and serving related workers (SOC 35). Smaller increases are desired for other service occupations, such as sales and related workers (SOC 41), office and administrative workers (SOC 43), or health care support workers (SOC 31).

The gap between desired and current (past) wages is modest for white collar workers. The gap is just \$1.22 per hour (4.3%) for engineers and architects (SOC 17), \$1.82 per hour (7.3%) for business and financial operations workers (SOC 13), \$1.87 per hour (6.2%) for legal workers (SOC 23), \$2.01 per hour (10.4%) for teaching, training and library workers (SOC 25), \$2.41 per hour (12.6%) for community and social service workers (SOC 21), \$2.67 per hour (9.1%) for computer and mathematical workers (SIC 15), \$2.76 per hour (13.4%) for arts, design, entertainment, sports and media workers (SOC 27) and \$4.34 (13.9%) for health care practitioners (SOC 29).

Overall, the gap between desired and current (past) wages is lower in percentage terms for white collar workers than service workers and skilled blue collar workers. Further, there are select service and blue collar occupations where there is a larger wage gap; in particular, personal care and services workers (SOC 39), food preparation and service related workers (SOC 35) and construction and extraction workers (SOC 47).

Table 3.4: Current and Desired Wages of All Potential Job Seekers by Occupation Group

SOC Job Code	Weighted N	Avg. Current (Past) Wages	Avg. Desired Wages	Average Wage Differential	Percent Wage Differential
11 – Management	70	43.73	39.19	-4.54	-10.4%
13 – Business & Financial	128	24.99	26.80	1.82	7.3%
15 – Computer and Math	52	29.41	32.07	2.67	9.1%
17 – Engineering	31	28.56	29.79	1.22	4.3%
19 – Sciences	23	22.40	22.09	-0.31	-1.4%
21 – Social Service	22	18.60	21.00	2.41	12.9%
23 – Legal	19	30.30	32.16	1.87	6.2%
25 – Education	88	19.40	21.41	2.01	10.4%
27 – Arts and Design	23	20.55	23.31	2.76	13.4%
29 – Health Practitioners	69	31.28	35.62	4.34	13.9%
31 – Health Support	33	13.07	15.62	2.54	19.5%
33 – Protective	21	20.96	23.20	2.24	10.7%
35 – Food Preparation	39	10.39	13.92	3.53	34.0%
37 – Building & Grounds	15	14.30	16.08	1.77	12.4%
39 – Personal Care	23	12.38	16.60	4.22	34.1%
41 – Sales & Related	130	19.55	21.73	2.18	11.1%
43 – Office & Admin	155	15.87	18.05	2.18	13.7%
45 – Farming	3	20.70	21.12	0.42	2.0%
47 – Construction	24	22.04	25.24	3.20	14.5%
49 – Installation	39	19.33	22.39	3.06	15.8%
51 – Production	45	17.12	17.46	0.34	2.0%
53 – Transportation	47	15.32	16.50	1.18	7.7%

Source: *Nebraska Metro Area Labor Availability Survey*

Large desired increases in select occupations suggest that wage expectations could be a source of mismatch in the labor market. Before reaching this interpretation, however, it is worthwhile to examine how desired wages compare with the actual wages found in various occupation groups within the Omaha Metropolitan Area labor market. The difference between the desired wages in each occupation group and the average hourly wage in that occupation in the Omaha Metropolitan Area, according to U.S. Bureau of Labor Statistics, can be observed in Table 3.5.

Table 3.5: Average Desired and Actual Wages of All Potential Job Seekers by Occupation Group

SOC Job Code	Weighted N	Avg. Current (Past) Wages	Avg. Desired Wages	Average Wage Differential	Omaha Nebraska Average Wage (\$) 2015
11 – Management	70	43.73	39.19	-4.54	\$51.48
13 – Business & Financial	128	24.99	26.80	1.82	\$32.42
15 – Computer and Math	52	29.41	32.07	2.67	\$36.48
17 – Engineering	31	28.56	29.79	1.22	\$33.77
19 – Sciences	23	22.40	22.09	-0.31	\$31.15
21 – Social Service	22	18.60	21.00	2.41	\$19.32
23 – Legal	19	30.30	32.16	1.87	\$40.12
25 – Education	88	19.40	21.41	2.01	\$22.06
27 – Arts and Design	23	20.55	23.31	2.76	\$21.59
29 – Health Practitioners	69	31.28	35.62	4.34	\$33.75
31 – Health Support	33	13.07	15.62	2.54	\$13.90
33 – Protective	21	20.96	23.20	2.24	\$21.28
35 – Food Preparation	39	10.39	13.92	3.53	\$10.34
37 – Building & Grounds	15	14.30	16.08	1.77	\$12.53
39 – Personal Care	23	12.38	16.60	4.22	\$12.45
41 – Sales & Related	130	19.55	21.73	2.18	\$18.47
43 – Office & Admin	155	15.87	18.05	2.18	\$16.65
45 – Farming	3	20.70	21.12	0.42	\$15.44
47 – Construction	24	22.04	25.24	3.20	\$21.80
49 – Installation	39	19.33	22.39	3.06	\$21.30
51 – Production	45	17.12	17.46	0.34	\$16.43
53 – Transportation	47	15.32	16.50	1.18	\$16.53

Sources: Nebraska Metro Area Labor Availability Survey and U.S. Bureau of Labor Statistics

Desired wages are often well below the average hourly wage in the Omaha Metropolitan Area in occupations which typically require a college degree (SOC 11-29). In a few cases, desired wages are just \$1 to \$2 higher per hour than the average hourly wage. This may occur because potential job seekers are on average younger, and therefore, have not yet gained sufficient experience to command the average wage in their occupation. However, the results still suggest that the desired wage increases of college education potential job seekers are modest and manageable.

In most cases, the same can be said of occupations which do not typically require a college degree (SOC 31-53). For many such occupations, the gap between desired and current (past) wages are quite small or even negative. Key examples include production workers (SOC 51), transportation and material moving workers (SOC 53), installation, maintenance and repair workers (SOC 49), health care support workers

(SOC 31), protective service workers (SOC 31) and office and administrative workers (SOC 43). For these workers, the gap between desired and current (past) wages is consistent with the raise that workers might request, at least initially, when negotiating a move to a new job.

Four remaining occupations are of note. For these occupations, potential job seekers desire significant wage increases, hoping for hourly wages which significantly exceed the local average for workers in their occupation, in both dollar and percentage terms. In some cases, the current (past) wages of workers are already above occupation averages, but a significant wage increase is still desired. There also were at least 20 observations for the occupations. These occupations include food preparation and serving related (SOC 35), personal care and service (SOC 39) workers, sales and related workers (SOC 41) and construction and extraction workers (SOC 47).

The gap between desired and actual wages in these occupations may make it especially difficult for employers to find needed workers.<sup>4</sup> But, are employers having difficulty? In other words, are these the occupations where employers note that it is most difficult to find workers? This question is addressed in Table 3.6. For each of the four occupations, results are presented regarding the percentage of employers who found that it is difficult to hire workers in the occupation and the percentage of employers who felt that applicant wage demands are “too high.” Employers reported that it was less difficult than average (63.9%) to find workers in the food preparation and serving related (SOC 35), personal care and service (SOC39) and sales and related (SOC 41) occupations. Employers also reported that a smaller than average (30.4%) share of applicants in the food preparation and serving related occupation and the construction and extraction occupation make wage requests which are “too high.” If wages were a true barrier to hiring in an occupation, employers would be expected to report both that it was especially difficult to hire workers in the occupation and that applicant wage demands were too high. None of the occupations in Table 3.6 met these criteria.

Table 3.6: Share of Business Respondents in the Survey of Omaha Area Businesses about Skill and Training Requirements Reporting It Was Difficult to Find Workers, By Selected Occupation

SOC Job Code	SOC Title	Percent of Employers Indicating Wage Demands for Occupation Were “Too High” (Average = 30.4%)	Percent of Employers Indicate It is “Difficult” To Find Workers in Occupation (Average=63.9%)
35	Food Preparation and Serving Related	24.7%	58.4%
39	Personal Care and Service	39.8%	56.4%
41	Sales and Related	35.4%	61.9%
47	Construction and Extraction	22.5%	75.8%

Source: *Survey of Omaha Business about Skill and Training Requirements*

In summary, both employers and potential employees perceive some common sources of difficulty in hiring. Both perceive that some potential employees lack occupation-specific skills (lack of education,

<sup>4</sup> Recall from Chapter 2 that these also were some of the same occupations where the annual flow of new high school graduates for the occupation was less than anticipated annual net openings. Unmet demand could be met with college graduates unable to find work in their field of study, but again this would suggest dissatisfaction with current wages.

lack of training). Both groups also perceive that a significant number of potential employees have factors in their background which can make hiring difficult even when applicants have appropriate skills for a job. In particular, a significant share of employers report that applicants have a “poor work history” or would have a difficult time passing a background check.

Finally, results suggest that local wage levels are sufficient for most Omaha area job seekers. Specially, survey results reveal that the wage requirements of Omaha area residents seeking work: 1) represent only a moderate increase over their current wage and 2) are within the prevailing wages found within the Omaha Metropolitan Area job market. Further, in the handful of occupations where desired wage increases are high in percentage terms, relatively few employers report that hiring is difficult. These results suggest that wage levels are not a source of skills gap within the local labor market. However, particularly for skilled workers, the labor market is regional and national rather than local. It is possible that wage levels in the Omaha area are insufficient to attract enough workers from outside of the region.

These findings reinforces the idea that the challenges for finding workers are about more than money and vary on an occupation-by-occupation basis. Therefore, there is a need to look at the specific supply, demand and training conditions in each occupation group. This is done in Chapter 4, for those occupation groups which employers indicate it is most difficult to find workers.

#### 4. Detailed Evaluation of Select Occupation Groups

This section compares information from the employer and household surveys and secondary data from government sources to develop a profile of skill supply and demand in specific occupation groups.

Analysis should reveal the nature of the skills gap, if any, found in different occupations. Further, given this focus on the skills gap, a detailed analysis is provided only for those occupations where employers report that it was most difficult to find workers, in particular:

- Installation, Maintenance and Repair Occupations (SOC CODE 49)

- Construction and Extraction Occupations (SOC CODE 47)

- Computer and Mathematical Occupations (SOC CODE 15)

- Transportation and Material Moving Occupations (SOC CODE 53)

- Healthcare Practitioners and Technical Occupations (SOC CODE 29)

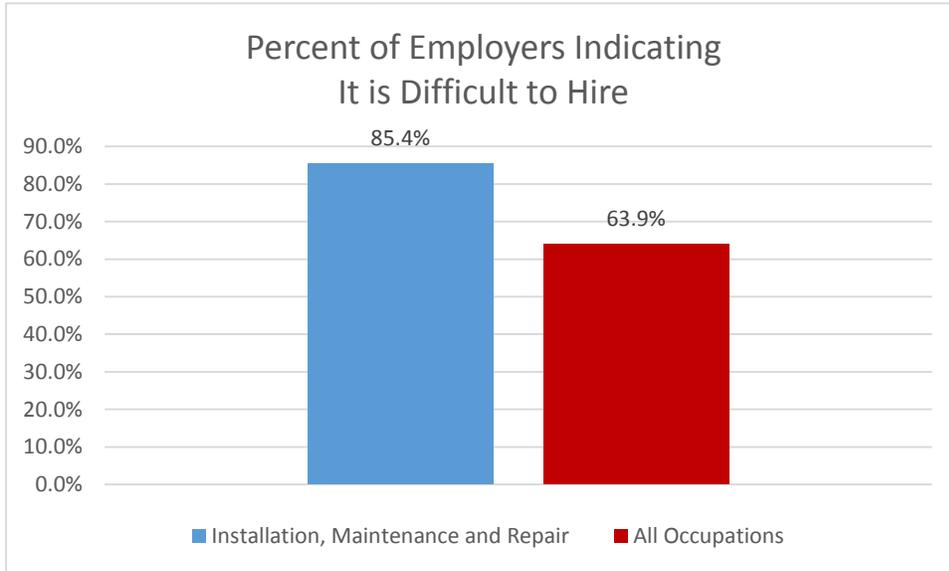
- Production Occupations (SOC CODE 51)

A. Installation, Maintenance and Repair Occupations (SOC CODE 49)

This occupation contains workers in manufacturing, construction and services involved in the installation, maintenance, and repair of machines and equipment used in factories, buildings, and the home. This is the occupation which employers report it is most difficult to hire. As seen in Figure 4A.1 below, 85.4 percent of employers indicate that it is difficult to hire workers in this occupation, compared to 63.9 percent for all occupations.

Figure 4A.1

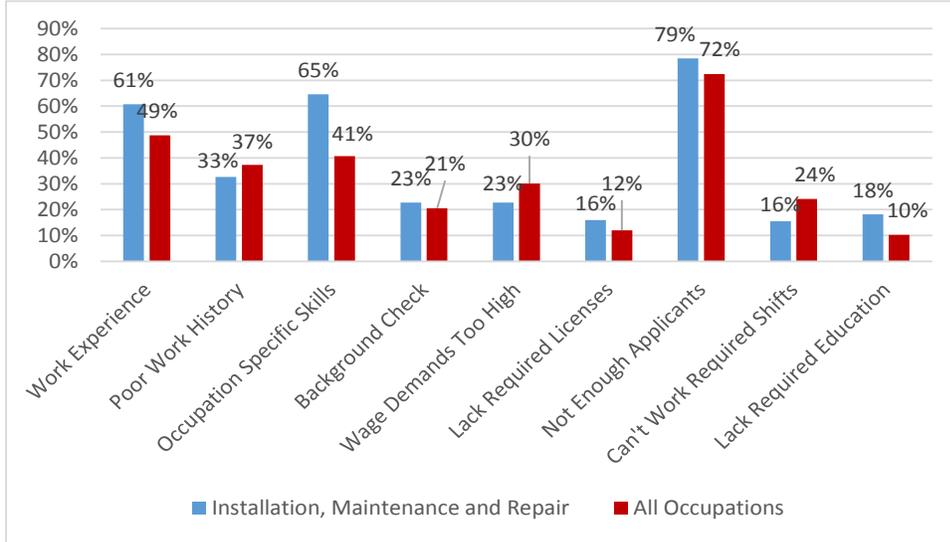
Percent of Employers Indicating It is Difficult to Hire, Installation, Maintenance and Repair Occupations



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Employers report a variety of reasons why it is difficult to hire. A lack of applicants is an issue for employers who hire installation, maintenance and repair workers. This is a concern for 79 percent of employers while 16 percent of employers a lack of applicants who can work required shifts. There is also elevated concerns regarding work experience and occupation-specific skill for installation, maintenance and repair occupations. The level of concern about poor work history or an inability to pass a background check is similar with occupations overall.

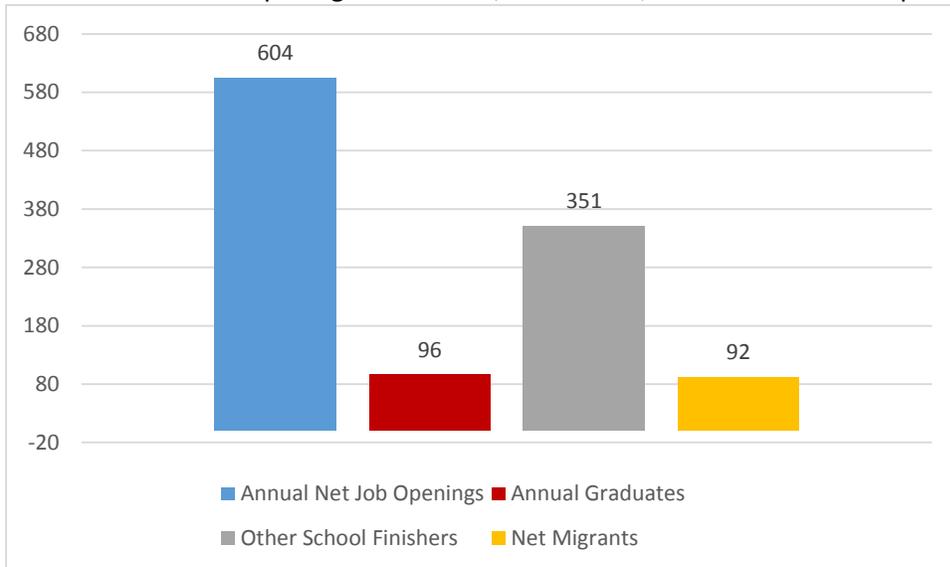
**Figure 4A.2**  
Reasons Why It Was Difficult to Hire, Installation, Maintenance and Repair Occupations



Source: Survey of Omaha Businesses about Skill and Training Requirements

Figure 4A.3 examines the fundamental balance between net job openings and new entrants on an annual basis. Data on annual net job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual graduates from local community colleges and colleges are from the U.S. Department of Education, and summarized in the Department's IPEDS data base. Net migration figures are from the Bureau of Census. Results show annual net job openings exceed graduates and other school finishers.

**Figure 4A.3**  
Ratio of Annual Net Openings to Entrants, Installation, Maintenance and Repair Occupations

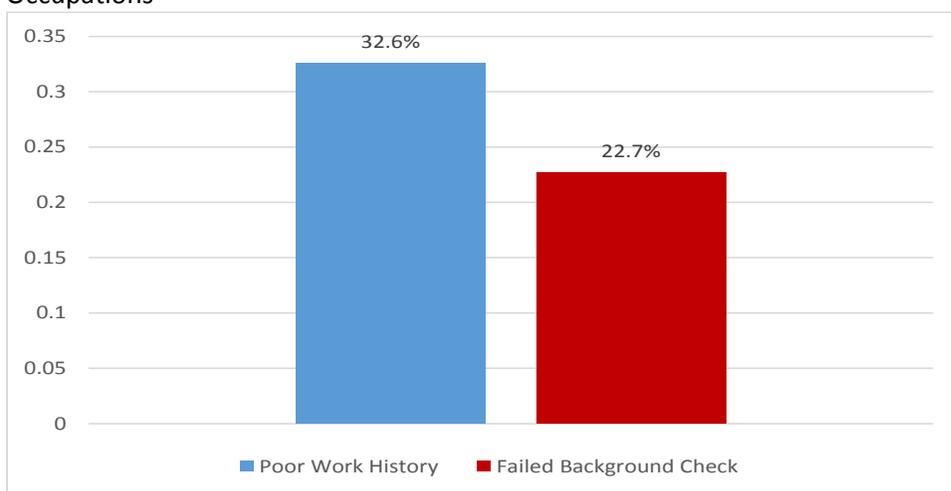


Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

Comparing openings with graduates other school finishers is just the first step in the underlying worker supply and demand analysis for an occupation. After all, workers are mobile and the Omaha Metropolitan Area receives more migrants than it loses. As seen in Figure 4A.3, net migration is estimated to lead to an annual gain of 92 installation, maintenance and repair workers.

After net migration, the gap between annual job openings and annual entrants in the installation, maintenance and repair occupation is fairly small, at about 60 workers a year, or 10 percent of all openings. However, the challenge may grow further if some installation, maintenance and repair workers have issues in their background, such as a poor work history, which will make them difficult to hire. Such issues are examined in Figure 4A.4.

Figure 4A.4  
Applicants with Background Factors That May Influence Hiring, Installation, Maintenance and Repair Occupations

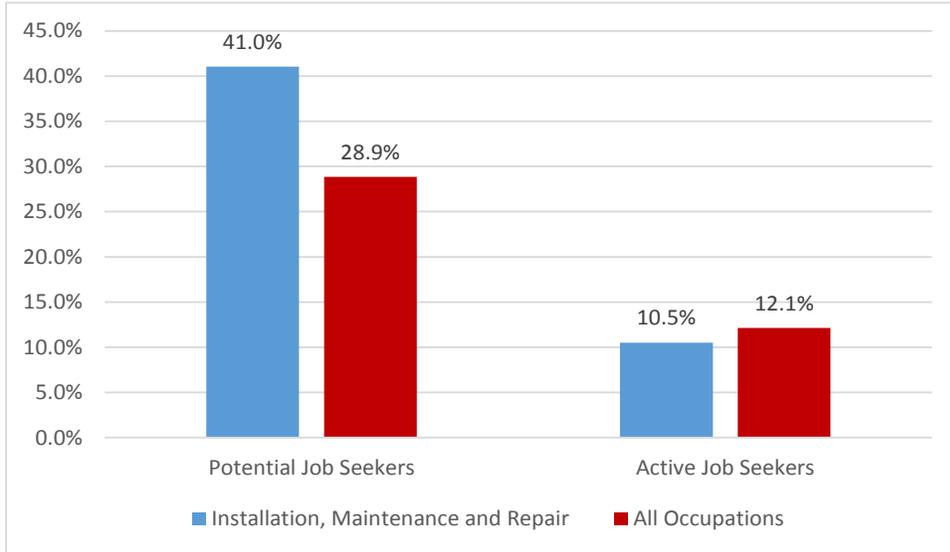


Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Figure 4A.4 shows the percentage of employers who indicate that issues in the background of applicants are a factor in making it difficult to hire installation, maintenance and repair workers. These issues imply that some of the annual new workers in Table 4A.3 may not be strong candidates for employment over the long-run due to background issues such as poor work history. Background issues may make it difficult for workers to remain viable for the occupation throughout their career. One implication is that the number of viable workers entering this occupation each year may be less than the 541 reported in Table 4A.3. In particular, 32.6 percent of employers indicate that a poor work history makes it difficult to hire installation, maintenance and repair workers, while 22.7 percent cite a failed background check. One caution, however, should be considered when evaluating this data. These shares of 32.6 percent and 22.7 percent apply to job applicants rather than job holders. The share of workers with a poor work history is likely lower among workers who remain with same employer for a long period.

Figure 4A.5 below looks at the extent to which employed installation, maintenance and repair workers are willing to consider a change in employers, or are even actively seeking work. Such “churn” of workers is important for employers who need to fill positions with experienced employees who are a good match for a business’ needs. Results show that installation, maintenance and repair workers are more likely than workers in all occupations to consider a new position and are equally likely to be actively seeking work.

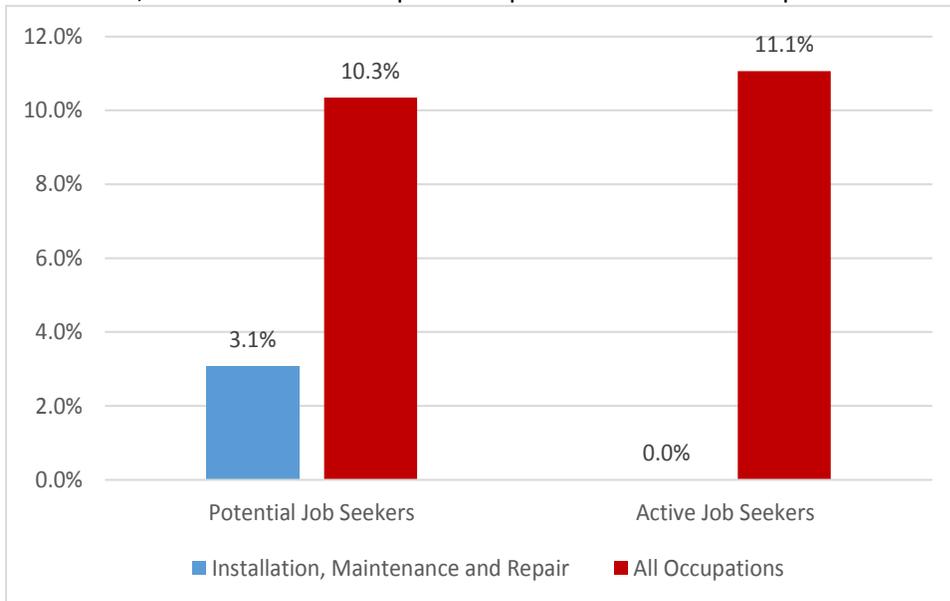
**Figure 4A.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Installation, Maintenance and Repair Occupations versus All Occupations**



Source: Nebraska Metro Area Labor Availability Survey

Figure 4A.6 shows information for survey respondents who are not currently employed. This includes workers who are unemployed or voluntarily out of the labor force, such as homemakers or retirees. Installation, maintenance and repair workers appear reluctant to reenter employment. Just 3.1 percent would consider a new position and no survey respondents were actively seeking work.

**Figure 4A.6**  
**Share of Workers Not Currently Employed with Potential to Take or Actively Search for a New Job**  
**Installation, Maintenance and Repair Occupations versus All Occupations**

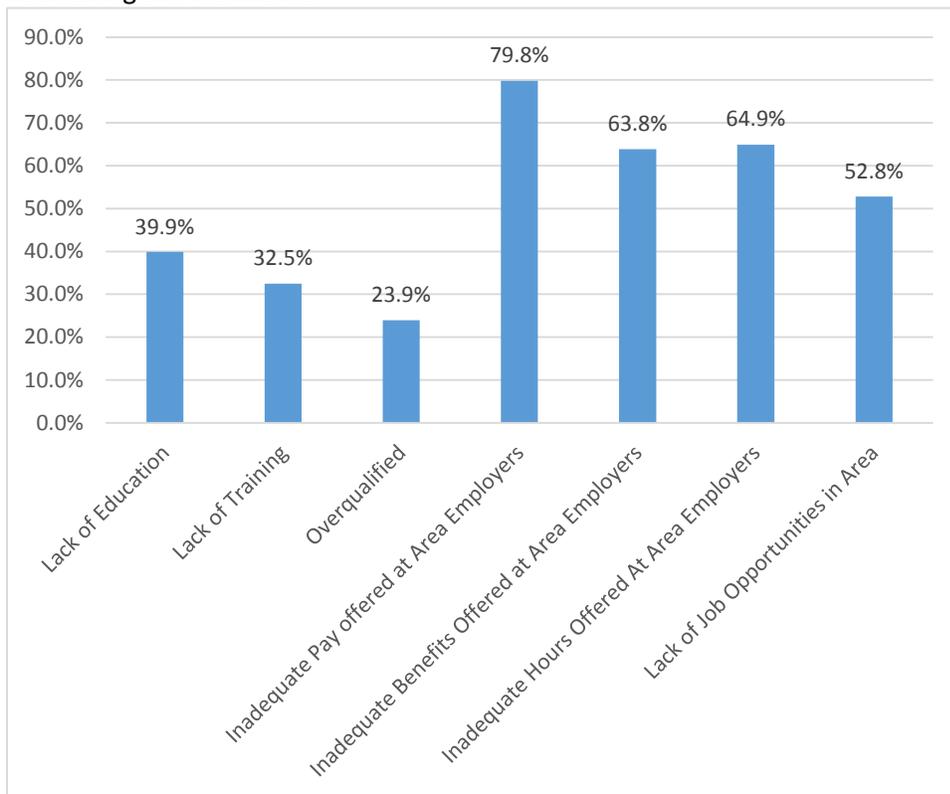


Source: Nebraska Metro Area Labor Availability Survey

These results raise the question of what installation, maintenance and repair workers are looking for in new employment. This information is presented in Figure 4A.7, which shows the most common obstacles mentioned by installation, maintenance and repair workers when considering a change in job or whether to re-enter the workforce. The figure only lists those obstacles which are mentioned more than 20 percent of the time. Preparation and skill are central issues. Nearly 40 percent of workers mention a lack of education as an obstacle to changing jobs or reentering the labor force while 32.5 percent of workers cite a lack of training.

The quantity and quality of local employment opportunities also seems to be an issue. Nearly 53 percent of installation, maintenance and repair workers indicate that a lack of job opportunities is an obstacle to changing jobs or reentering the labor force. In terms of the quality of jobs, 79.8 percent of respondents report inadequate pay at local employers while 63.8 percent cite inadequate benefits and 64.9 percent mention inadequate hours.

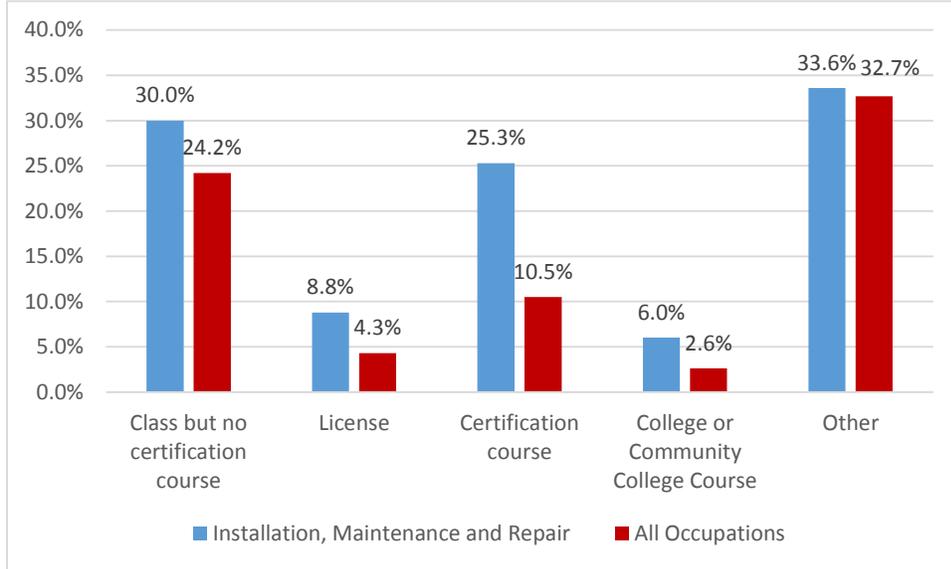
**Figure 4A.7**  
Share of Installation, Maintenance, and Repair Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce



Source: *Nebraska Metro Area Labor Availability Survey*

As seen in Figure 4A.8, employers are willing to provide post-hire training to installation, maintenance and repair workers, providing a higher share of classes, training for licenses and full college or community college courses and a much higher share of certification courses. The share of “other” training, which often refers to on-the-job training. Is similar to the share for all occupations.

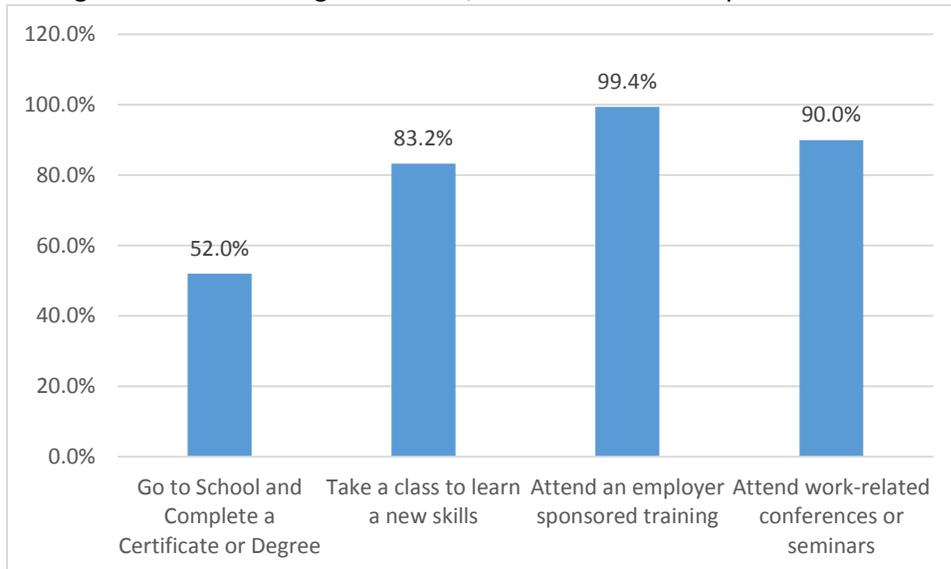
**Figure 4A.8**  
Types of Training Provided to Newly Hired Installation, Maintenance and Repair Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Nearly all installation, maintenance and repair workers are willing to take steps to improve their employment situation, as seen in Figure 4A.9. Fifty-two percent indicate a willingness to go to school and complete a certificate or degree. Eighty-three percent would take an individual class to learn new skills and nearly 100 percent would attend an employer sponsored training. Nine in ten would attend a work related conference or seminar.

**Figure 4A.9**  
Willingness to Train among Installation, Maintenance and Repair Workers



Source: *Nebraska Metro Area Labor Availability Survey*

The overall picture is that there is a modest net deficit of new workers entering the installation, maintenance and repair occupations each year. Further, while there is a strong “churn” of experienced workers into new job opportunities, there is also only limited potential to draw individuals with experience back into the workforce. The skill and training of the workforce appears to be the primary source of why it is difficult to find workers in this occupation.

There is a need upgrade the skill of the workforce and to fill the remaining annual gap between openings and entrants into the installation, maintenance and repair occupation. There are four specific recommendations:

- 1) There should be a selected expansion of certificate and degree programs for installation, maintenance and repair workers, in the most in-demand specific occupations (see below)
- 2) There should be expanded internship programs and incentives for firms to hire new workers in these in-demand occupations, in order to address firms concerns with inexperienced workers
- 1) Firms should to develop a system to identify experienced, existing workers they are willing to train for in-demand installation, maintenance, and repair occupations.
- 2) There should be ongoing and enhanced efforts in the secondary education setting to inform students about career opportunities in installation, maintenance and repair occupations, coordinating directly with employers when feasible.

Training programs should be concentrated in the two specific occupations with a need for expanded certificate and degree programs and the most projected openings, according to the Nebraska Department of Labor. These occupations are:

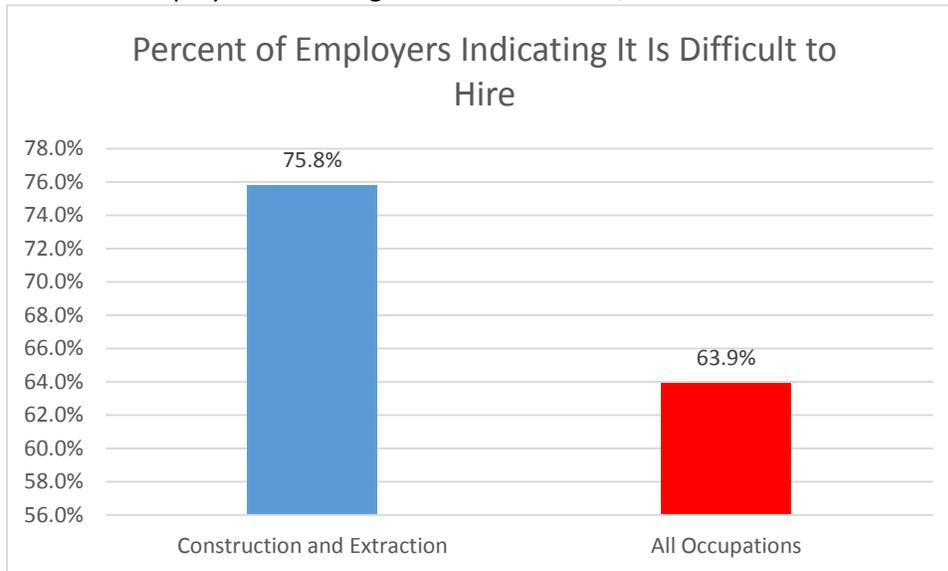
- 1) Industrial Machinery Mechanics (SOC Code 49-9041) - Repair, install, adjust, or maintain industrial production and processing machinery (U.S. Bureau of Labor Statistics)
- 1) Maintenance and Repair Workers, General (SOC Code 49-9071) - Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment working (U.S. Bureau of Labor Statistics)

## B. Construction and Extraction Occupations (SOC CODE 47)

This occupation contains workers employed in the construction trade or in the operating, driving and maneuvering of heavy construction machinery. Omaha Metropolitan Area employers were second most likely to report that it is difficult to hire workers in this occupation. As seen in Figure 4B.1 below, three quarters of employers indicate that it is difficult to hire construction and extraction workers, compared to 63.9 percent for all occupations.

Figure 4B.1

Percent of Employers Indicating It is Difficult to Hire, Construction and Extraction Occupations

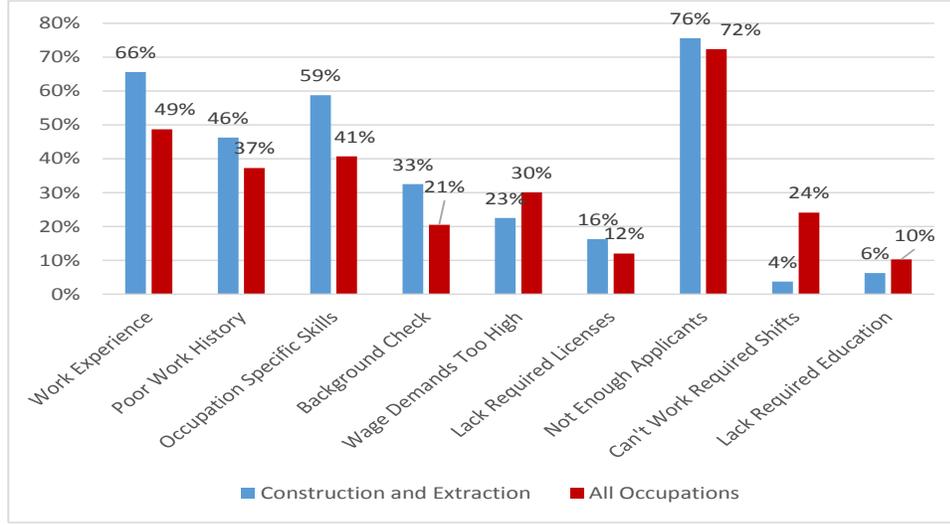


Source: *Survey of Omaha Businesses about Skill and Training Requirements*

A lack of applicants, work experience and occupation specific skills are the primary reasons it is difficult to hire construction and extraction workers. Seventy-six percent of employers cite a lack of applicants, which is above the average across all occupations. Similarly, sixty-six percent of employers note that it is difficult to hire due to applicants who lack work experience. This share is 17 percentage points above the all occupation average. Fifty-nine percent of employers cite applicants who lack of occupation-specific skills, which is 18 percent above the all occupations average.

Workers also are difficult to hire because applicants have a poor work history or problems passing a background check. Forty-six percent of employers report applicants with a poor work history, which is 9 percentage points above the all occupation average, while 33 percent of employers cite applicants who cannot pass a background check.

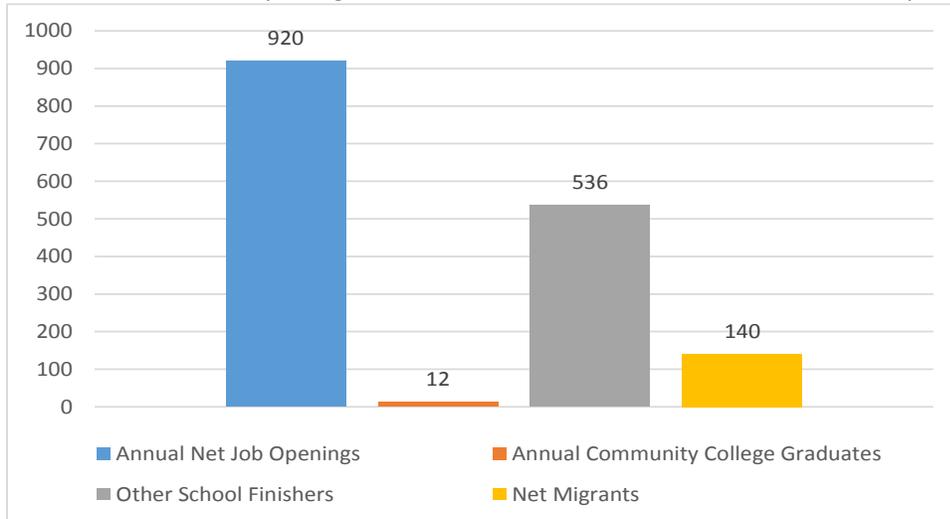
**Figure 4B.2**  
Reasons Why It Was Difficult to Hire, Construction and Extraction Occupations



Source: Survey of Omaha Businesses about Skill and Training Requirements

Figure 4B.3 examines the fundamental balance between net job openings and entrants each year for construction and extraction workers. Data on annual net job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual college and community college graduates from the region are from the 2013-14 IPEDS data base of the U.S. Department of Education. Data on net migration by occupation are from the U.S. Census. Results show that the number of annual entrants to the occupation, after adjusting for net outmigration, is approximately 230 less than annual net openings.

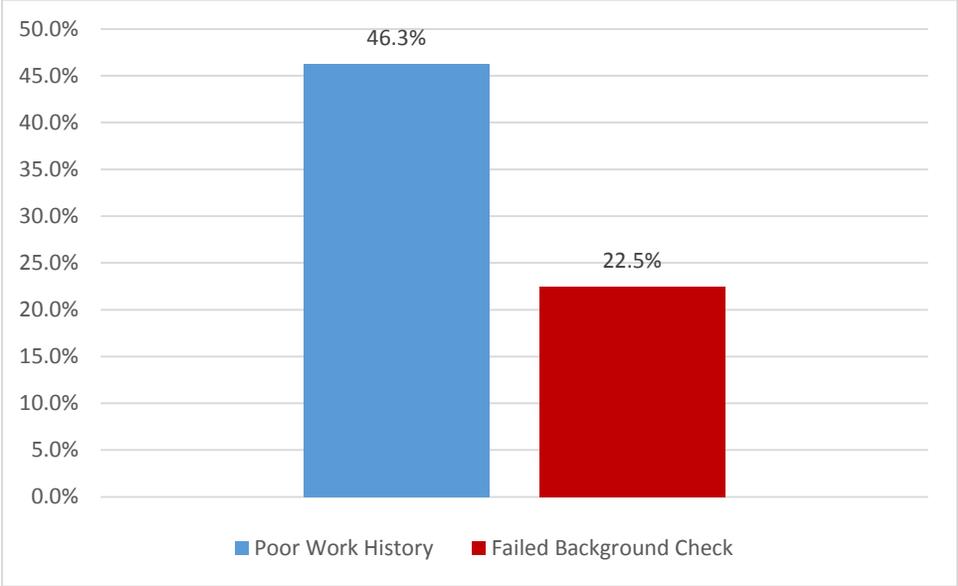
**Figure 4B.3**  
Ratio of Annual Net Openings to Entrants, Construction and Extraction Occupations



Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

This amounts to a substantial 25 percent gap between entrants and openings. Concerns about the underlying supply and demand relationship are heightened further after reviewing Figure 4B.4. The figure shows the percentage of employers who indicate that issues in the background of applicants are a factor in making it difficult to hire construction and extraction workers. In particular, 46.3 percent of employers indicate that applicants with a poor work history make it difficult to hire, while 22.5 percent cite applicants who cannot pass a background check. These concerns imply that the number of viable workers entering this occupation each year is less than the figures reported in Table 4B.3. However, one caution should be considered when evaluating this data. These shares of 46.3 and 22.5 percent apply to job applicants rather than job holders. The share of workers with a poor work history is likely lower among workers who remain with same employer for an extended period.

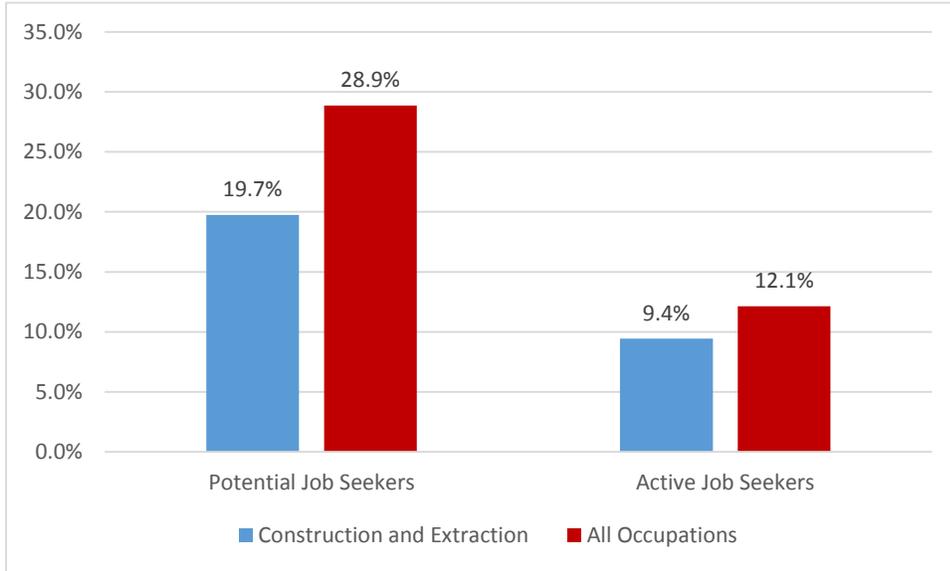
Figure 4B.4  
Applicants with Background Factors That May Influence Hiring, Construction and Extraction Occupations



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Figure 4B.5 looks at the extent to which employed workers in construction and extraction occupations are willing to consider a change in employers, or are actively seeking work. The figure also compares these shares with the average for all occupations. Employed workers in construction and extraction occupations are less likely to be potentially interested in a new job or actively seeking new work. Such “churn” of workers is helpful for the labor market. Employers who need to fill positions with experienced employees are more likely to find a good match for a business’ specific needs. Experienced employees are more likely to find a job which fully utilizes their skills.

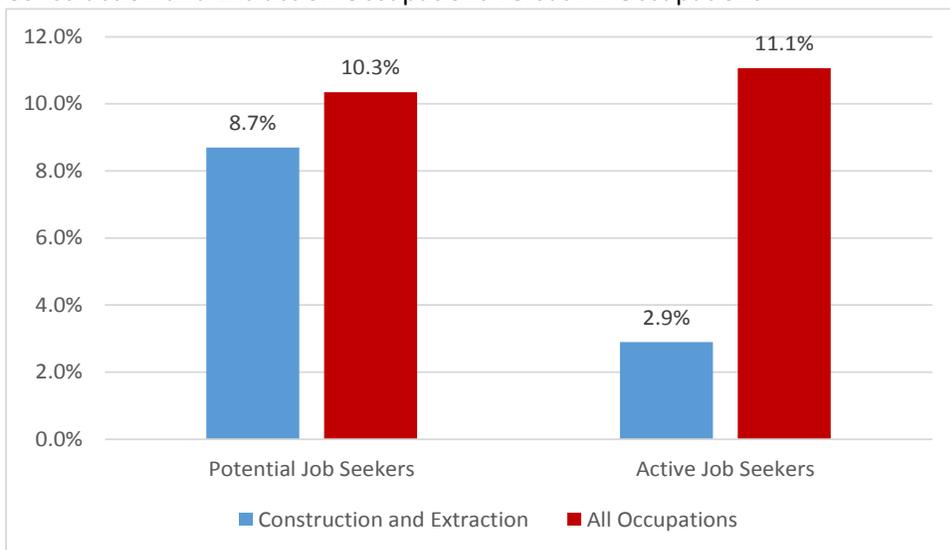
**Figure 4B.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Construction and Extraction Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

Figure 4B.6 shows information for survey respondents who are not currently employed. This includes individuals who are unemployed or voluntarily out of the labor force, such as homemakers or retirees. Just 2.9 percent of these individuals are actively seeking to return to the labor force. Further, more than 90 percent plan to remain out of the workforce, even if a suitable job was presented to them. These results show that there is limited potential to draw construction and extraction workers back into employment, even relative to the all occupation average.

**Figure 4B.6**  
**Share of Workers Not Currently Employed with Potential to Take or Actively Search For a New Job**  
**Construction and Extraction Occupations versus All Occupations**



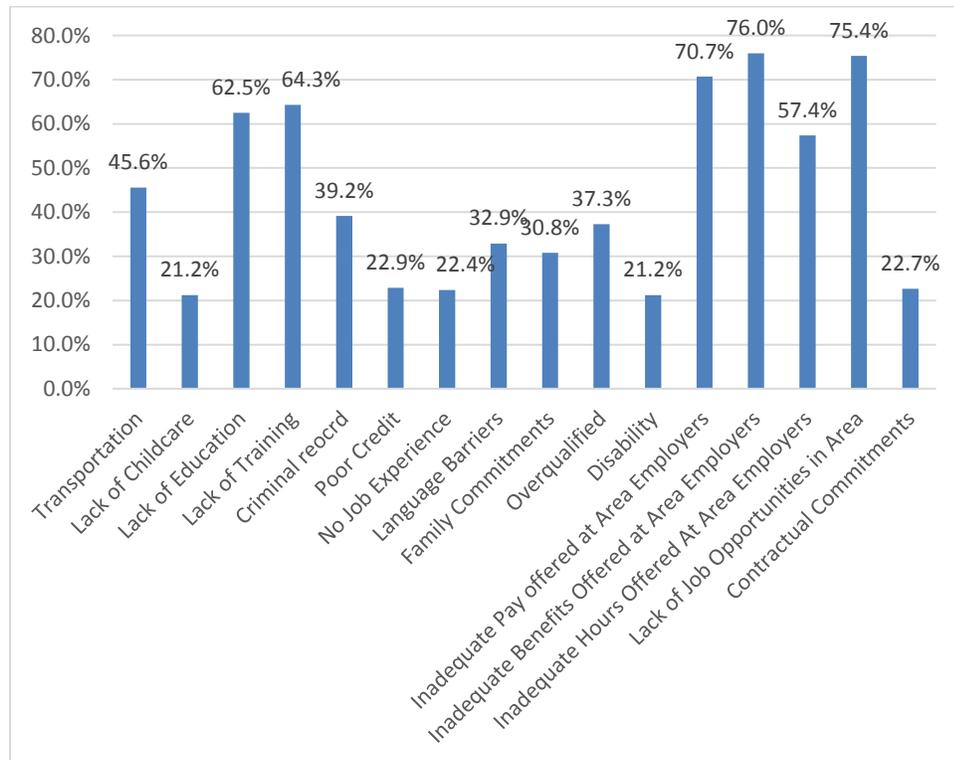
Source: *Nebraska Metro Area Labor Availability Survey*

What is keeping these individuals out of the workforce, or keeping these workers in the same job? Some insights are presented in Figure 4B.7, which shows the most common obstacles to seeking a new job mentioned by construction and extraction workers. The figure only lists those obstacles which are mentioned more than 20 percent of the time. Construction and extraction workers clearly perceive a large set of obstacles to changing jobs or reentering the workforce.

There are a variety of family and resource issues. Forty-six percent of workers mention transportation obstacles, while 21.2 percent cite a lack of childcare and 30.8 percent mention family commitments in general. Another set of issues related to skills and disability. Nearly two-thirds of individuals mention a lack of education (62.5%) or a lack of training (64.3%) as obstacles to changing jobs or reentering the workforce while 21.2 percent cite disabilities. Twenty-two percent note that they have no job experience while 32.9 percent mention language barriers. Workers also cite a variety of personal or professional obstacles. Nearly 40 percent of workers mention a criminal record as an obstacle while 22.9 percent cite a poor credit. Credit is used as a screening mechanism by some employers.

The most common obstacles related to the quantity and quality of available job opportunities. Three out of four workers indicate there is a lack of job opportunities in the area. There also are concerns about the quality of jobs, with 37.3 percent reporting that they are overqualified for available positions. Seventy-one percent report inadequate pay at available jobs while 76.0 percent report inadequate benefits and 57.4 percent cite inadequate hours. 75.4 percent cite inadequate hours.

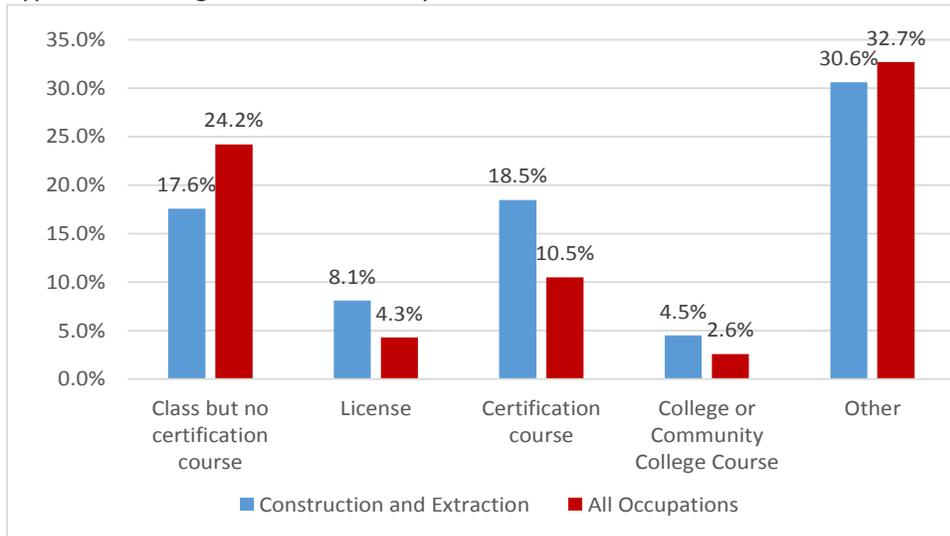
**Figure 4B.7**  
Share of Construction and Extraction Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce



Source: *Nebraska Metro Area Labor Availability Survey*

As seen in Figure 4B.8, employers are willing to provide post-hire training to construction and extraction workers. Compared to all occupations, employers are more likely to provide training for a license, a certification course and a college or community college courses. Individual classes and “other” training, which typically refers to on-the-job training, are less common for construction and extraction workers.

**Figure 4B.8**  
Types of Training Provided to Newly Hired Construction and Extraction Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

As seen in Figure 4B.9, construction and extraction workers are enthusiastic about education and training opportunities. Nearly all potential job switchers in the occupation are willing to take a class to learn new skills and all are willing to participate in employer-sponsored training or attend a work-related conference or seminar. Seventy-two percent even indicate a willingness to go to school to complete a certificate or degree program.

**Figure 4B.9**  
Willingness to Train among Construction and Extraction Workers



Source: *Nebraska Metro Area Labor Availability Survey*

The overall picture is that there is a significant annual deficit of entrants to net job openings in construction and extraction occupations. Further, the potential for new entrants to work in the occupation over the long-run is also in doubt. A significant share of workers report developing a poor work history and other characteristics which impact their potential to be hired. Further, employers indicated significant concerns about the share of applicants who have sufficient experience and occupation-specific skills. There is even evidence of lower levels of “churn” among experienced workers.

This situation leads to three recommendations for construction and extraction occupations:

- 1) An expansion of certificates and degree programs for electricians and construction trades, in the most in-demand occupations (see below)
- 2) Where funds are available, new or expanded financial support for on-the-job training opportunities and formal apprenticeship programs in the most in-demand occupations (see below).
- 3) There should be ongoing and enhanced efforts in the secondary education setting to inform students about career opportunities in Construction and Extraction occupations, coordinating directly with employers when feasible.

The specific occupations with the most projected openings, according to the Nebraska Department of Labor, and an accompanying description of their duties, are:

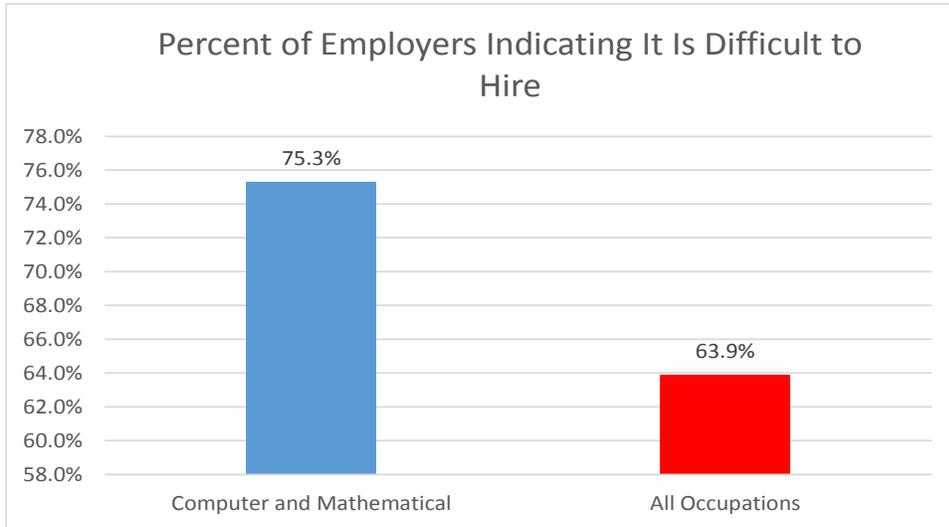
- 1) Carpenters (SOC Code 47-2031) - Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; and wood stairways, window and door frames, and hardwood floors. (U.S. Bureau of Labor Statistics)
- 2) Electricians (SOC Code 47-2111) - Install and maintain electrical power, communications, lighting, and control systems in homes, businesses, and factories. (U.S. Bureau of Labor Statistics)
- 3) Plumber, Pipefitters and Steamfitters (SOC Code 47-2152) - Install and repair pipes that carry liquids or gases to and in businesses, homes, and factories.

### C. Computer and Mathematical Workers (SOC CODE 15)

This occupation group contains computer and information research scientists and information analysts, software developers and programmers, data base and systems administrators, and network architects as well as actuaries, mathematicians and statisticians. Omaha Metropolitan Area employers were third most likely to say it is difficult to hire workers in this occupation. As seen in Figure 4BC1 below, three quarters of employers indicate that it is difficult to hire workers in this occupation, compared to 63.9 percent for all occupations.

Figure 4C.1

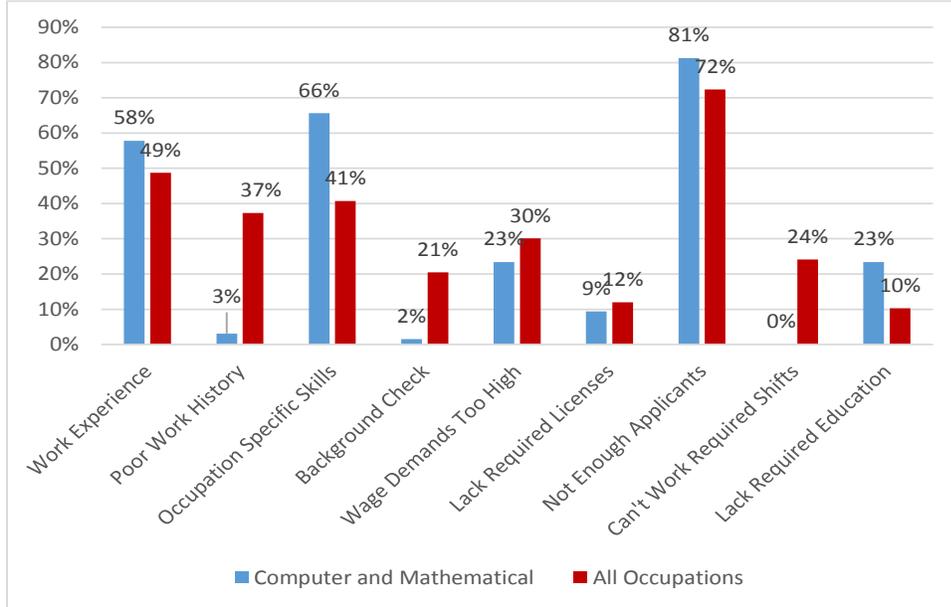
Percent of Employers Indicating it is Difficult to Hire, Computer and Mathematical Occupations



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Table 4C.2 displays responses by Omaha Metropolitan Area employers on why it was difficult to hire computer and mathematical workers. The issues appear to be skill, experience and a general lack of applicants. Eighty-one percent of employers report that there is a lack of applicants. Fifty-six percent of employers report that applicants lack work experience, while 66 percent indicated that applicants lack occupation-specific skills. This share is 25 percentage points greater than the all occupation average. Twenty-three percent of employers report applicants lack the required education, 13 points above the all occupation average. While skill and experience are an issue, there are few concerns with worker background. Just 3 percent of employers report that applicants for computer and mathematical jobs have a poor worker history and just 2 percent cite difficulty passing a background check.

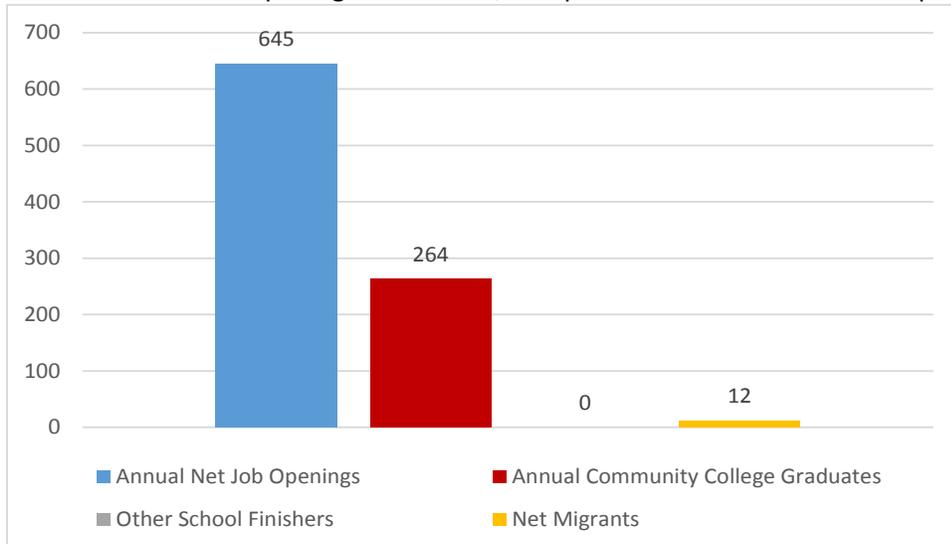
**Figure 4C.2**  
Reasons Why It Was Difficult to Hire, Computer and Mathematical Occupations



Source: Survey of Omaha Businesses about Skill and Training Requirements

Figure 4C.3 examines the fundamental balance between annual net job openings and new entrants into computer and mathematical occupations. Data on annual job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual college and community college graduates are from the 2013-14 IPEDS database of the U.S. Department of Education. Data on net migration are from the U.S. Bureau of Census.

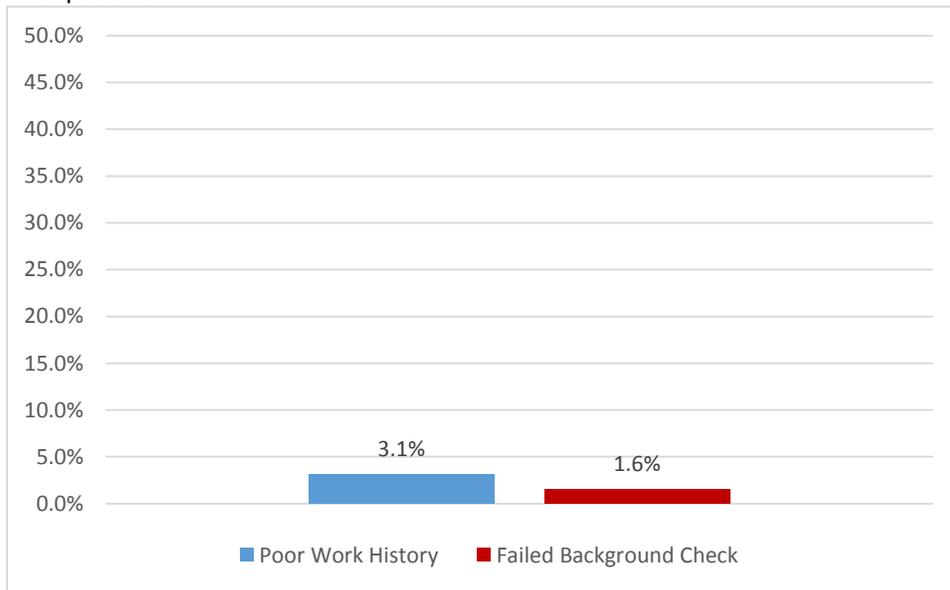
**Figure 4C.3**  
Ratio of Annual Net Openings to Entrants, Computer and Mathematical Occupations



Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

Results show that annual entrants to this occupation are less than half of the annual openings. There is an annual deficit of approximately 370 computer and mathematical workers. One positive is that graduates in this occupation do not appear to develop problems with poor work history or background checks. This is seen in Figure 4C.4, just 3 percent of employers report applicants with a poor work history and 2 percent report applicants who cannot pass a background check. These low percentages imply that graduates in the field will be able to remain in computer and mathematical work throughout their career.

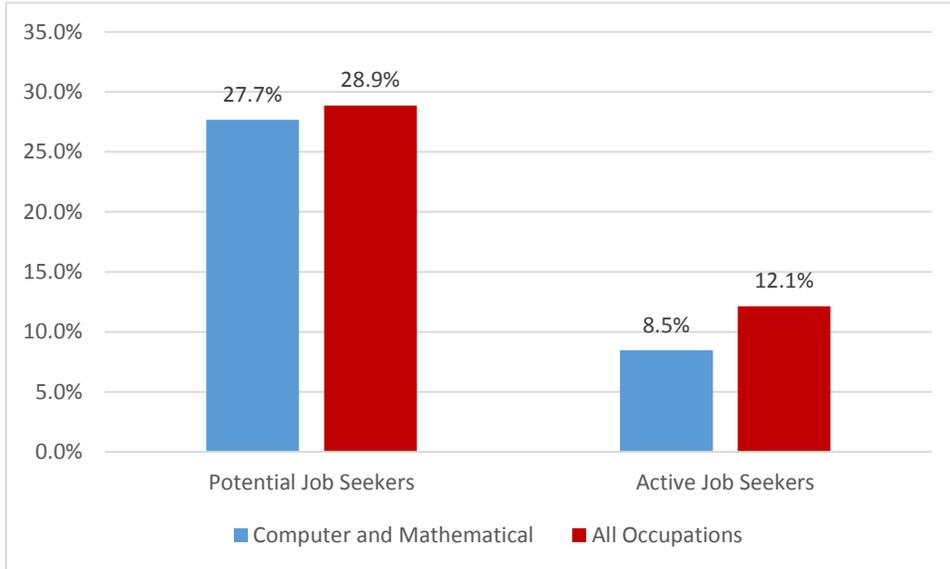
Figure 4C.4  
Applicants with Background Factors That May Influence Hiring, Computer and Mathematical Occupations



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Comparing openings with graduates is just the first step in the underlying supply-demand analysis for an occupation. There is also a need to consider the supply of experienced workers. Figure 4C.5 below looks at the extent to which employed workers in computer and mathematical occupations are willing to consider a change in employers, or are even actively seek new work. The figure also compares these shares with the average for all occupations. Employed workers in the computer and mathematical occupation are slightly less willing to consider a new job if one were available or to be actively seeking work. There is less than average “churn” among experienced workers in computer and mathematical occupations.

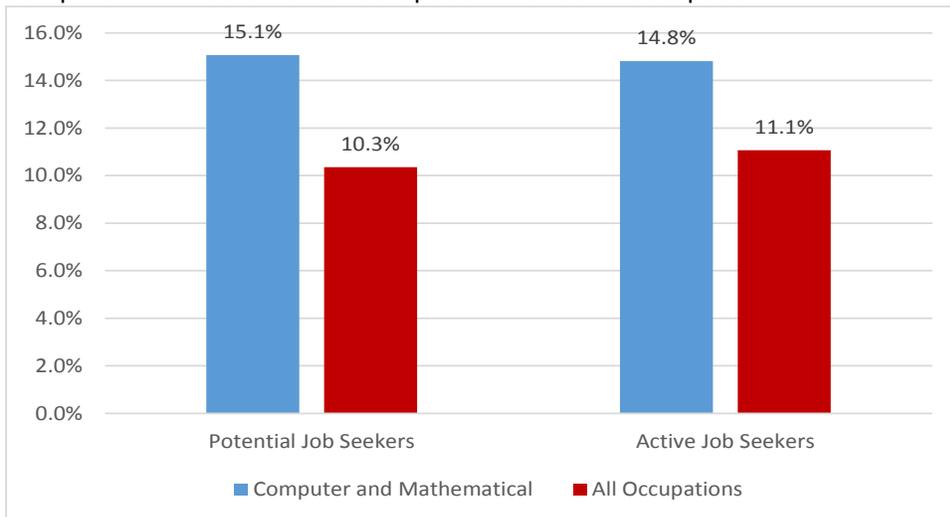
**Figure 4C.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Computer and Mathematical Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

Figure 4C.6 shows information for survey respondents who are not currently employed. This includes individual who are unemployed or voluntarily out of the labor force, such as homemakers or retirees. Compared to all occupations, computer and mathematical workers who are not employed are more likely to have an interest in available positions and are more likely to be actively seeking new work. Results in Chapter 2 suggest that there are 1,050 of these workers. These workers can help fill a portion of the 370 person annual deficit in Omaha area computer and mathematical workers, although a significant deficit clearly will remain.

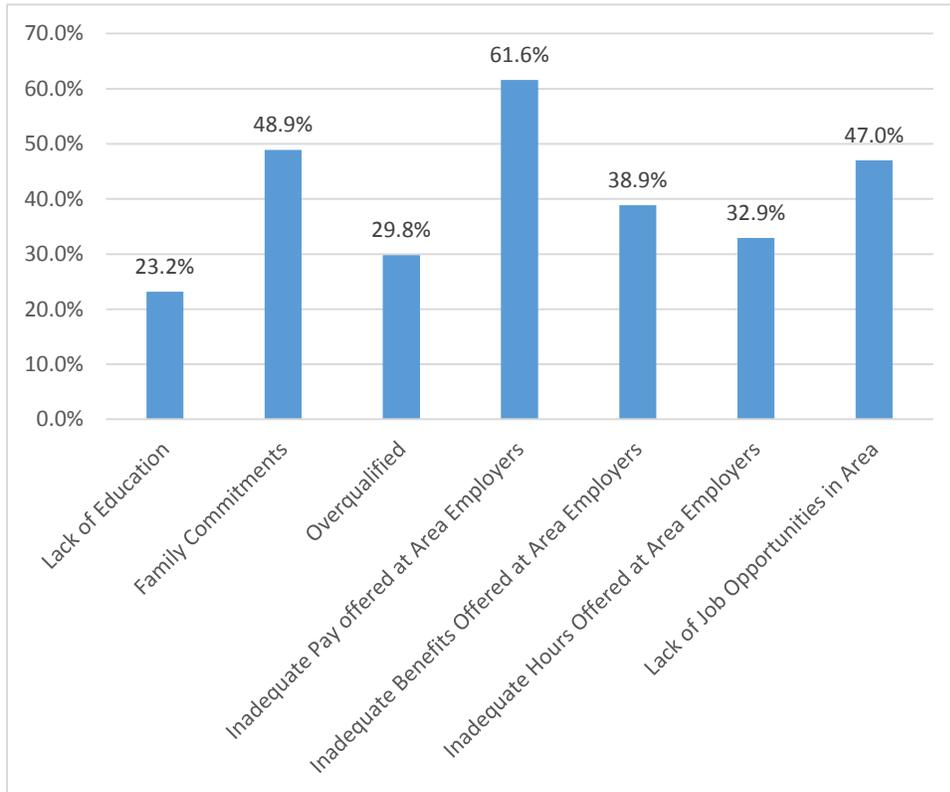
**Figure 4C.6**  
**Share of Workers Note Currently Employed with Potential to Take or Actively Search for a New Job**  
**Computer and Mathematical Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

More generally, this raises the question of what computer and mathematical workers are looking for in new employment. Relevant information is presented in Figure 4C.7, which shows the most common obstacles mentioned by computer and mathematical workers when considering a change in job or reentering the workforce.

Figure 4C.7  
Share of Computer and Mathematical Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce

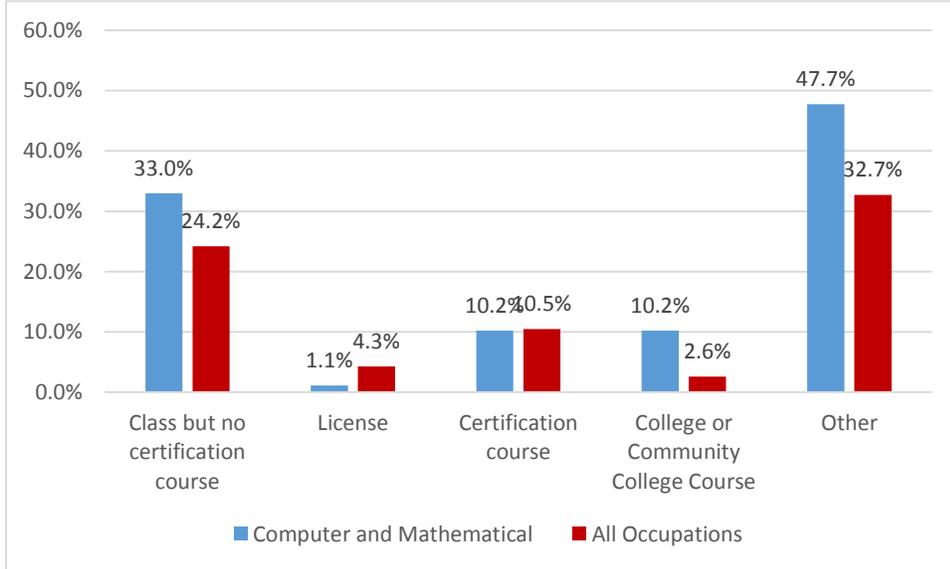


Source: *Nebraska Metro Area Labor Availability Survey*

The figure only lists those obstacles which are mentioned more than 20 percent of the time. The primary issues are lack of education, family commitments and a lack of adequate job opportunities. Like employers, 23 percent of employed workers also noted a lack of education is an obstacle to finding a new job. Nearly one-half of workers indicate that family commitments are an obstacle to seeking new employment. This may reflect an inability to change work hours or an inability to move. Forty-seven percent of employed workers cite a lack of job opportunities in the Omaha Metropolitan Area. There are also concerns about the quality of the positive. Nearly 30 percent of workers report they are overqualified for available positions. Sixty-two percent of workers indicate that there is inadequate pay in available positions, while 38.9 percent report inadequate benefits and 32.9 percent inadequate hours.

As seen in Figure 4C.8, employers prefer to provide more individual training classes and full community college or college courses to new hires in computer and mathematical occupations, compared to occupations overall. A much large share of employers also provide “other” training, which typically refers to on-the-job training.

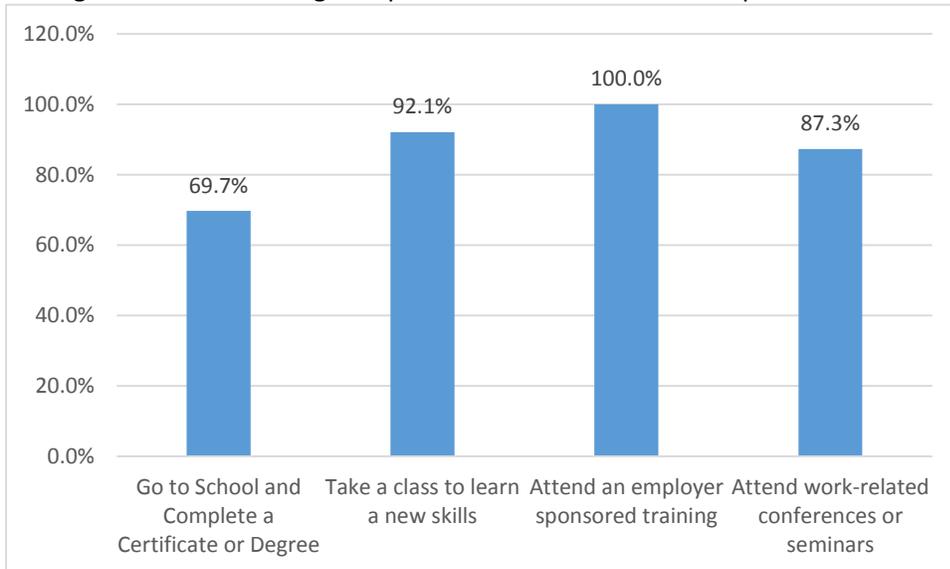
**Figure 4C.8**  
Types of Training Provided to Newly Hired Computer and Mathematical Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Computer and mathematical workers also show an interest in education and training to improve their job situation. Nearly seven in ten are interested in schooling to complete a certificate or degree, and more than 92 percent are willing to take a class to learn a new skill. This is consistent with employer preferences for training new workers, as reported in Figure 4B.8. All computer and mathematical workers reported a willingness to attend employer sponsored training and 87.3 percent are willing to attend work-related conferences or seminars.

**Figure 4B.9**  
Willingness to Train among Computer and Mathematical Occupations



Source: *Nebraska Metro Area Labor Availability Survey*

The overall picture is that there is an annual deficit of 370 workers entering the computer and mathematical occupation each year relative to annual position openings. While a portion of this gap can be met through attracting computer and mathematical workers back into the labor force, a significant annual gap will remain. As might be expected, employers report a lack of applicants to computer and mathematical occupations. Employers also report that it is difficult to hire because applicants lack experience, education, and occupation-specific skills. Employers also may be having trouble finding experienced workers. The rate of “churn” among experienced computer and mathematical workers into new job opportunities is somewhat lower than in occupations overall.

To begin to address this situation, there is a need to expand the number of students who are preparing for computer and mathematical occupations at regional colleges, community colleges and training academies. There is also a need to better match student learning with the needs of employers.

This leads to specific recommendations:

- 1) There should be an expanded business internship program for students in computer and mathematical fields, in order to improve the match between student learning and employer skill needs.
- 2) There should be a continued push to encourage students to pursue a career in computer and mathematical occupations. There should be additional efforts to inform primary and secondary school students about career opportunities in computer and mathematical occupations, and if necessary, and expansion of courses and degree programs at the secondary and post-secondary level.
- 3) There should be an effort to attract or retain more graduates in the computer and mathematical operations occupation through the use of business internship programs for college or community college students, such as the Intern Nebraska program.

Programs and training should be expanded across the broad group of specific computer occupations.

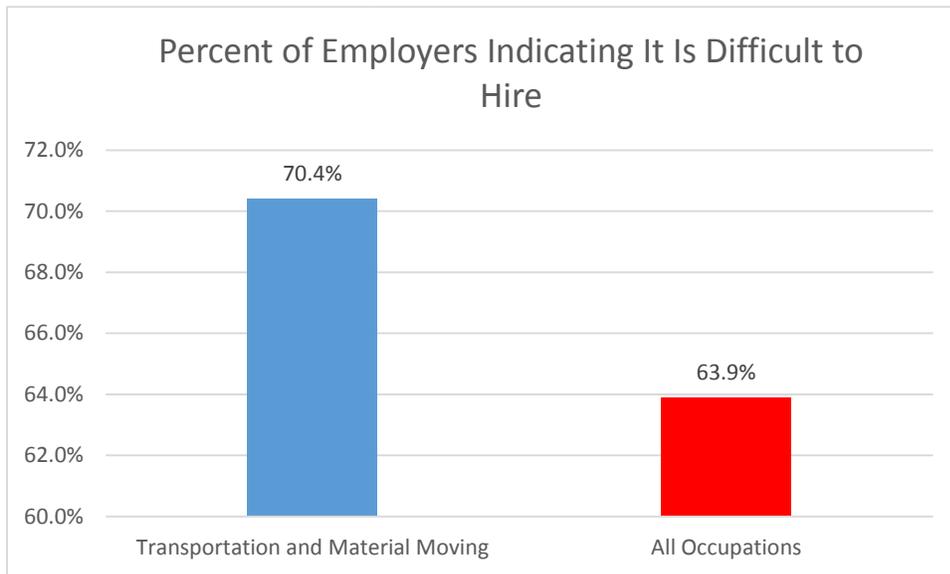
The specific occupations, and an accompanying description of their duties, are:

- 1) Computer Systems Analysts (SOC CODE 15-1121) - study an organization’s current computer systems and procedures and design information systems solutions to help the organization operate more efficiently and effectively (U.S. Bureau of Labor Statistics)
- 2) Computer Programmers and Software Developers (SOC Code 15-1131, 15-1132, 15-1133) - develop the applications that allow people to do specific tasks on a computer or other devices and write the code to implement the software design. (U.S. Bureau of Labor Statistics)
- 3) Network and Computer Systems Administrators (SOC Code 15-1142) – work with the physical computer networks of organizations with responsibility for the day-to-day operation of these networks (U.S. Bureau of Labor Statistics)
- 4) Computer User Support Specialists (SOC CODES 15-1151) - provide help and advice to people and organizations using computer software or equipment (U.S. Bureau of Labor Statistics)

#### D. Transportation and Material Moving Occupations (SOC CODE 53)

This occupation contains workers who provide services to individuals employed in packing, unpacking, moving, and facilitation the movement of materials both between and within premises. Omaha Metropolitan Area employers were fourth most likely to say that it is difficult to hire workers in this occupation. As seen in Figure 4D.1 below, 70.4 percent of employers indicate that it is difficult to hire workers in the transportation and material moving occupation, compared to 63.9 percent for all occupations.

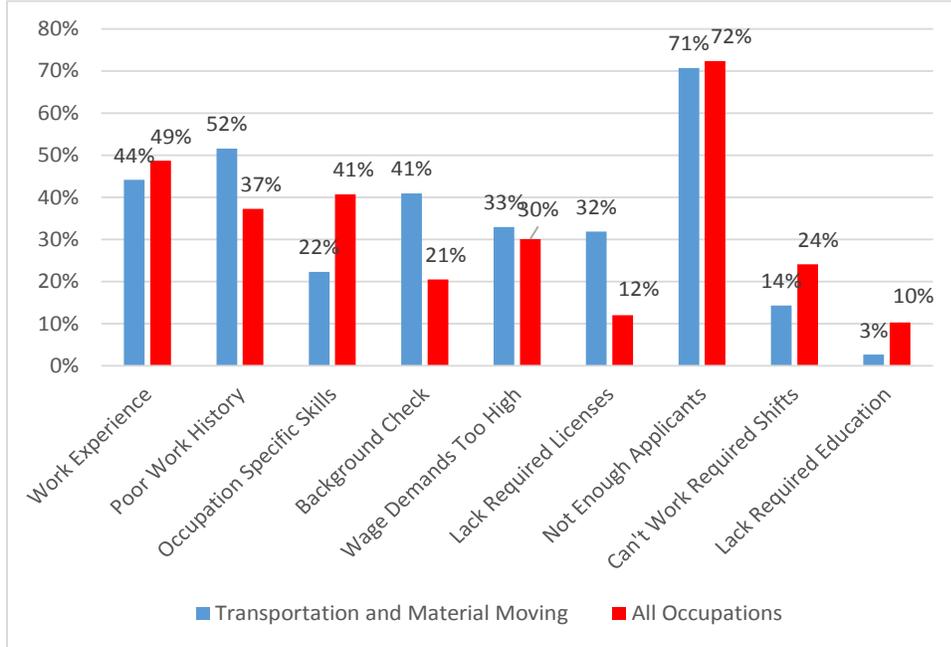
Figure 4D.1  
Percent of Employers Indicating it is Difficult to Hire, Transportation and Material Moving Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Table 4D.2 displays responses by Omaha Metropolitan Area employers on why it is difficult to hire transportation and material moving workers. Many of the usual issues are present. There is a lack of applicants and many of the applicants lack sufficient work experience. There is also an elevated share of applicants who lack needed licenses, in many cases an appropriate commercial driver license. However, the primary issues for transportation and material moving workers appear related to the personal characteristics of applicants. Fifty-two percent of employers report that it is difficult to hire because applicants have a poor work history. This share is 15 percentage points higher than the all occupation average. Forty-one percent of employers report that applicants cannot pass a background check. This share is 20 percentage points higher than the all occupation average. The challenges with hiring transportation and material moving workers appear to be less related to the background of the workers themselves.

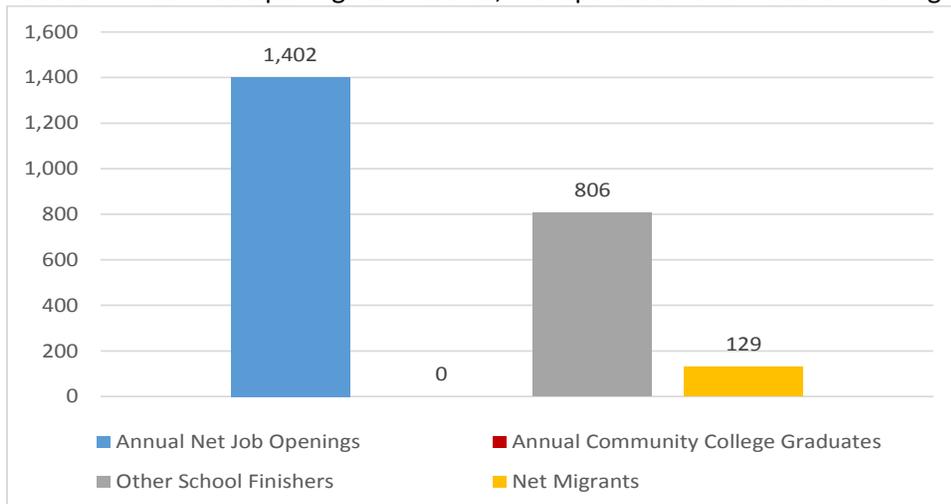
**Figure 4D.2**  
Reasons Why It Was Difficult to Hire, Transportation and Material Moving Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Figure 4D.3 examines the fundamental balance between annual net job openings and entrants for transportation and material moving workers. Data on annual net job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual degree graduates from area colleges and community colleges are from 2013-14 IPEDS reports from the U.S. Department of Education. Migration data is from the U.S. Bureau of Census. Results show that annual entrants are about two-third of annual openings. There is an annual deficit of 460 workers.

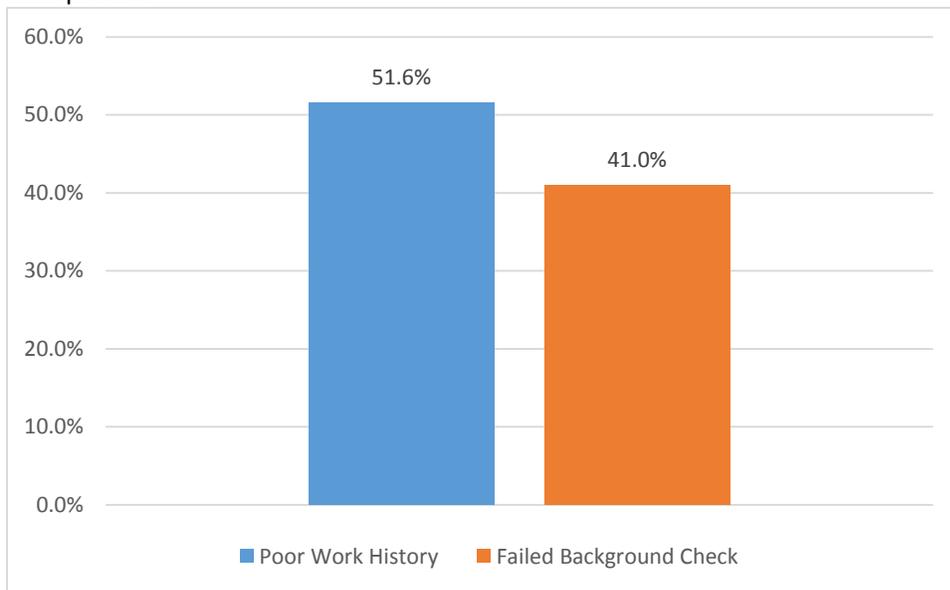
**Figure 4D.3**  
Ratio of Annual Net Openings to Entrants, Transportation and Material Moving Occupations



Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

Further, concern about the underlying supply and demand relationship is heightened after reviewing Figure 4D.4. Figure 4D.4 shows the percentage of employers who indicate that the background of applicants is a factor in making it difficult to hire. Fifty-two percent of employers report applicants with a poor work history make it difficult to hire while 41 percent report that applicants have difficulty passing a background check. These percentages suggest that a significant portion of annual entrants into the transportation and material moving occupation will develop a work history or other issues which will make them difficult to employ in that work. As a result, the deficit between annual openings and entrants may be even larger than the 460 worker annual deficit presented in Figure 4D.3. However, as with all occupations, it is important to remember that the shares in Figure 4D.4 refer to applicants rather than job holders. The share of workers with a poor work history is likely lower among workers who remain with same employer for an extended period.

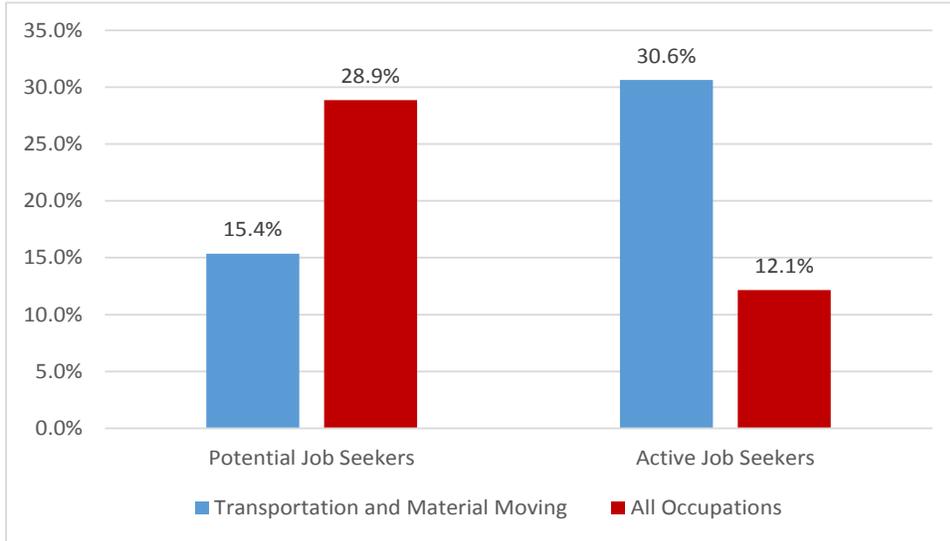
Figure 4D.4  
Applicants with Background Factors That May Influence Hiring, Transportation and Material Moving Occupations



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Comparing openings with graduates is just the first step in the underlying supply-demand analysis for an occupation. There is also a need to consider the supply and demand for experienced workers. Figure 4D.5 looks at the extent to which employed workers in transportation and material moving occupations are willing to consider a change in employers, or are even actively seeking work. The figure also compares these shares with the average for all occupations. Employed workers in the transportation and material moving occupation are more than twice as likely to be actively seeking new work. There is an elevated level of “churn” occurring among experienced workers in the occupation.

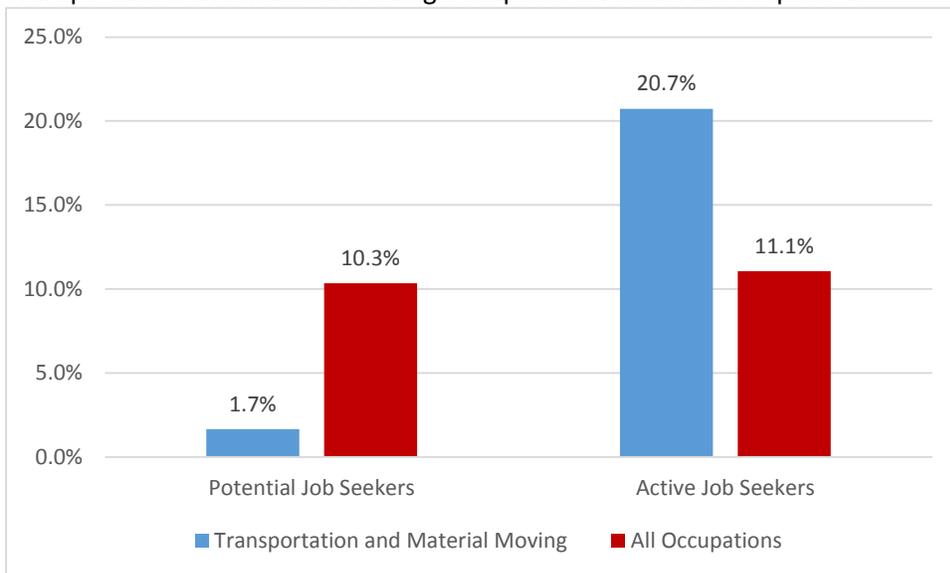
**Figure 4D.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Transportation and Material Moving Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

Figure 4D.6 shows information for survey respondents who are not currently employed. This includes whether they are unemployed or voluntarily out of the labor force, such as homemakers or retirees. An elevated 20.7 percent share of transportation and material moving workers also are actively seeking a new job. Given that results in Chapter 2 showed that there are 2,400 unemployed, retirees and homemakers with experience in this occupation, there is potential to reduce the 460 worker annual deficit of new entrants into the field, although a significant gap would remain.

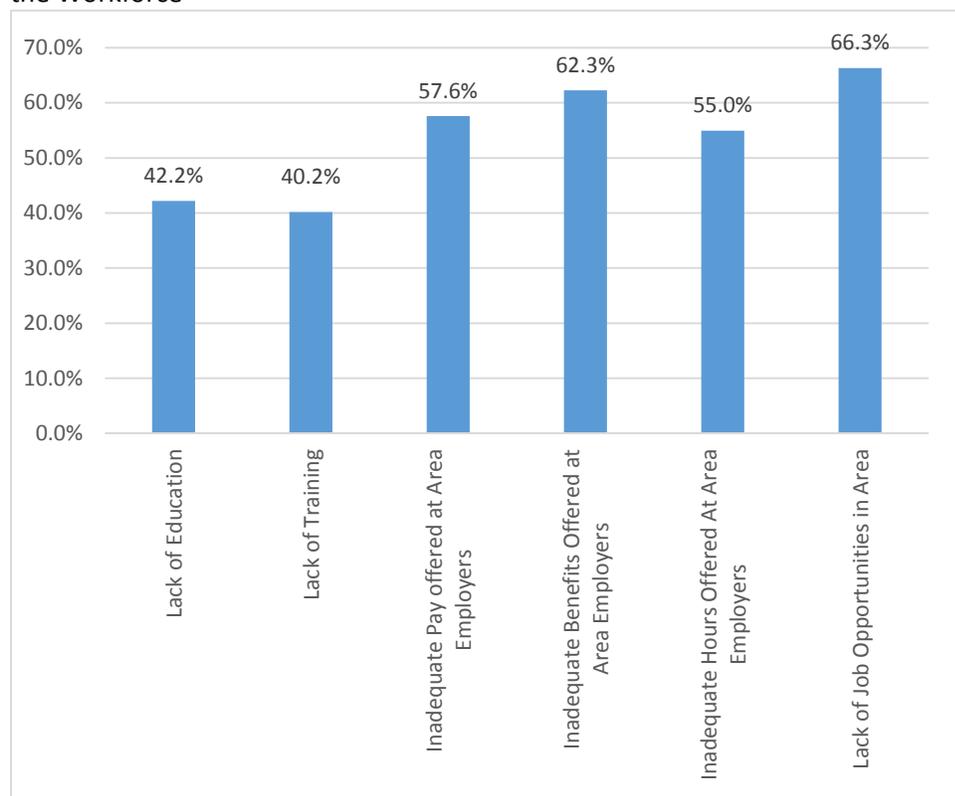
**Figure 4D.6**  
**Share of Workers Note Currently Employed with Potential to Take or Actively Search for a New Job**  
**Transportation and Material Moving Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

More generally, this raises the question of what transportation and material moving workers are looking for in new employment. This information is presented in Figure 4D.7, which shows the most common obstacles mentioned by transportation and material moving workers when considering a change in job or reentering the workforce. The figure only lists those obstacles which are mentioned more than 20 percent of the time. A significant share of workers cite that a lack of experience and training is an obstacle to finding new employment. Forty-two percent of workers mention a lack of education as an obstacle to finding work while 40.2 percent cite a lack of training. 62.3 percent cite inadequate benefits offered at area employers, 57.6 percent cite inadequate pay offered at area employers, 55.0 percent cite inadequate hours offered at area employers, and 66.3 percent cite a lack of job opportunities in the area.

Figure 4D.7  
Share of Transportation and Material Moving Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce

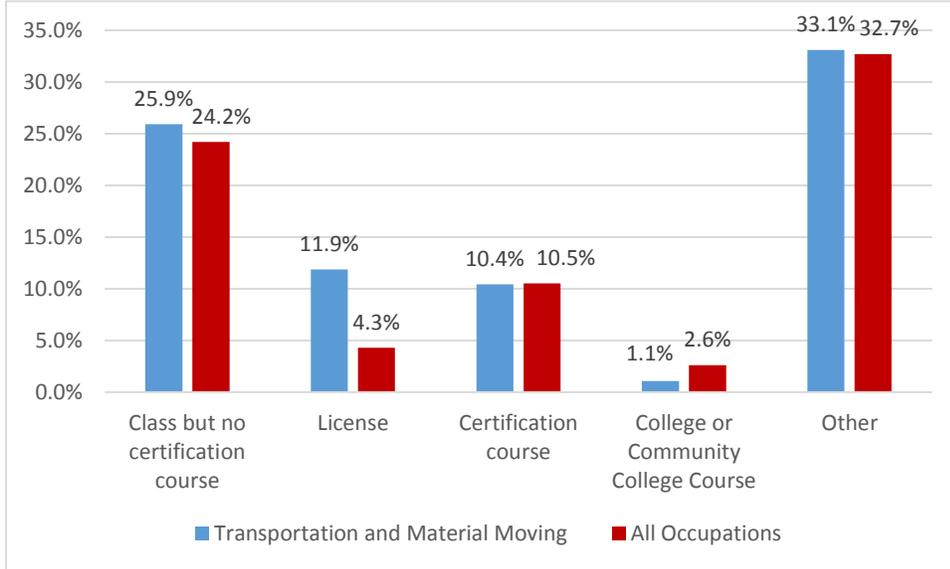


Source: *Nebraska Metro Area Labor Availability Survey*

The availability and quality of jobs for transportation and material moving workers also is an issue. Two-thirds of potential job seekers cite a lack of job opportunities in the area as an obstacle to employment. In terms of job quality, 57.6 percent of workers note that available jobs offer inadequate pay, while 62.3 percent cite inadequate benefits and 55.0 percent mention inadequate hours.

Employers, however, are willing to provide post-hire training opportunities to transportation and material moving workers, as seen in Figure 4D.8. The types of training provided are very similar to all occupation averages. Around one quarter of employers provide a training class but certification courses and community college or college courses are not common. About one-third of employers provide “other” training, which typically refers to on-the-job training. Employers hiring transportation and material moving workers are more likely to provide training for a license, presumably a license for operating a vehicle.

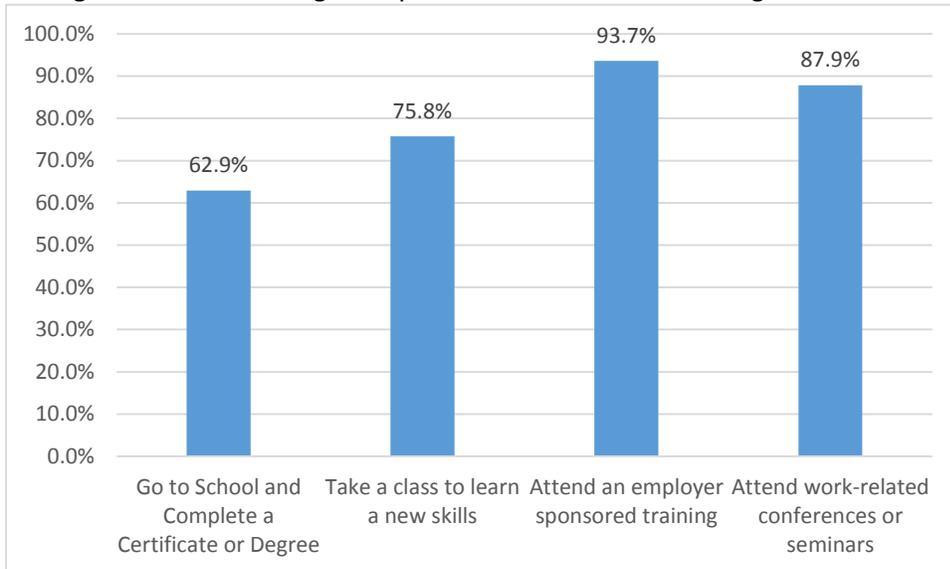
**Figure 4D.8**  
Types of Training Provided to Newly Hired Transportation and Material Moving Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

A majority of potential job seekers in the transportation and material moving occupation are willing to participate in training to improve their employment prospects, as seen in Figure 4D.9. Sixty-three percent are willing to attend school and earn a certificate or degree while 75.8 percent are willing to take a class to learn a new skill. Ninety-four percent are willing to attend an employer sponsored training while 87.9 percent are willing to attend work-related conferences and seminar.

**Figure 4D.9**  
Willingness to Train among Transportation and Material Moving Workers



Source: *Nebraska Metro Area Labor Availability Survey*

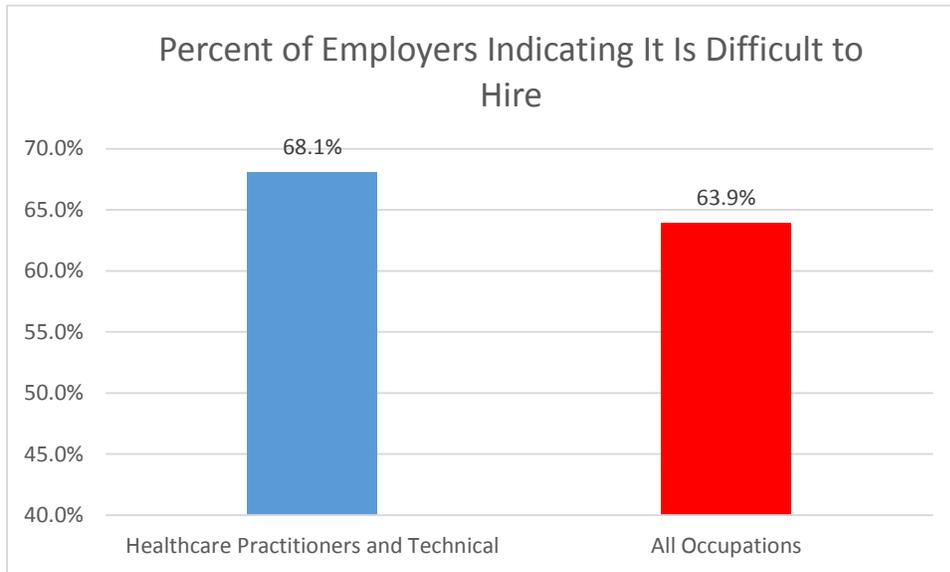
The overall picture is that there is a significant 470 new worker deficit in the transportation and material moving occupation in the Omaha area each year. A portion of this annual deficit can be met through attracting the unemployed, retirees, and homemakers with experience in the occupation back into the labor force. An elevated share of these former workers are actively seeking work. However, even after accounting for returning workers, a significant annual deficit is likely to remain. Further, the annual deficit may be even larger given that a large share of workers in the transportation and material moving occupation appear to develop a poor work history of other problems that impact employment during their lifetimes.

Special steps may be needed to place qualified workers into open jobs and draw potential workers back into the labor force to fill open positions. Employers will need to continue to improve working conditions, while workers will need to take steps to improve their work history and, where feasible, issues which cause them to fail a background check. There also may be a need to expand opportunities to train for vehicle operator licenses, given that a lack of required licenses and certificates also was a difficulty for hiring in this occupation group.

### E. Healthcare Practitioners and Technical Occupation (SOC CODE 29)

This occupation contains workers who are involved in evaluating patients or their medical records as well as diagnosing and treating patients. Omaha Metropolitan Area employers were fifth most likely to say it is difficult to hire healthcare practitioners and technical workers. As seen in Figure 4E.1 below, 68.1 percent of employers indicate that it is difficult to hire workers in this occupation, compared to 63.9 percent for all occupations.

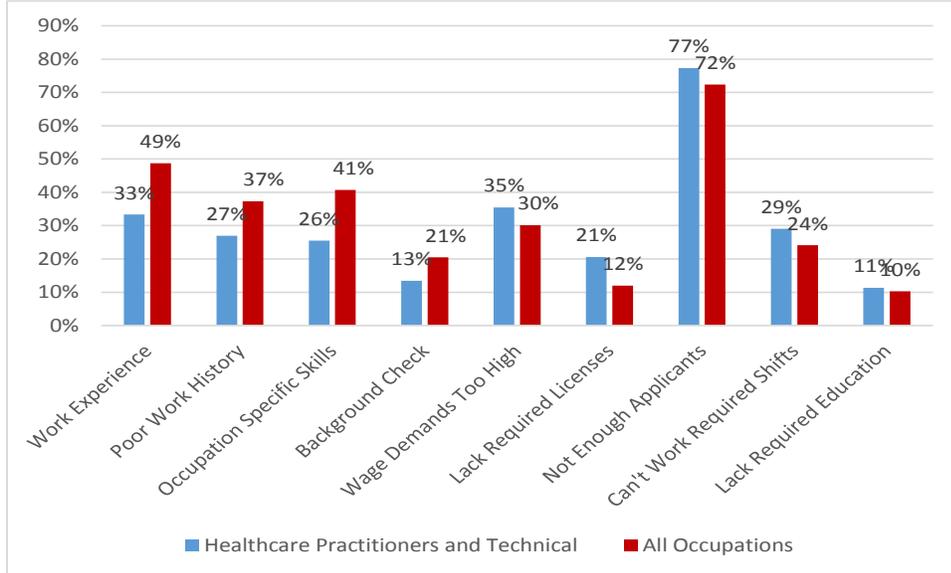
Figure 4E.1  
Percent of Employers Indicating it is Difficult to Hire, Healthcare Practitioner and Technical Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Table 4E.2 displays responses by Omaha Metropolitan Area employers about why it is difficult to hire healthcare practitioners and technical workers. The key issues is a lack of applicants. Seventy-seven percent of employers report it is difficult to hire these workers because there are not enough applicants. This share is 5 percentage points above the all occupation average. In addition, a slightly higher share of employers note that it is difficult to hire because applicants cannot work required shifts or make wage demands which are “too high.” But, in most cases, employers face fewer barriers when hiring healthcare practitioners and technical workers.

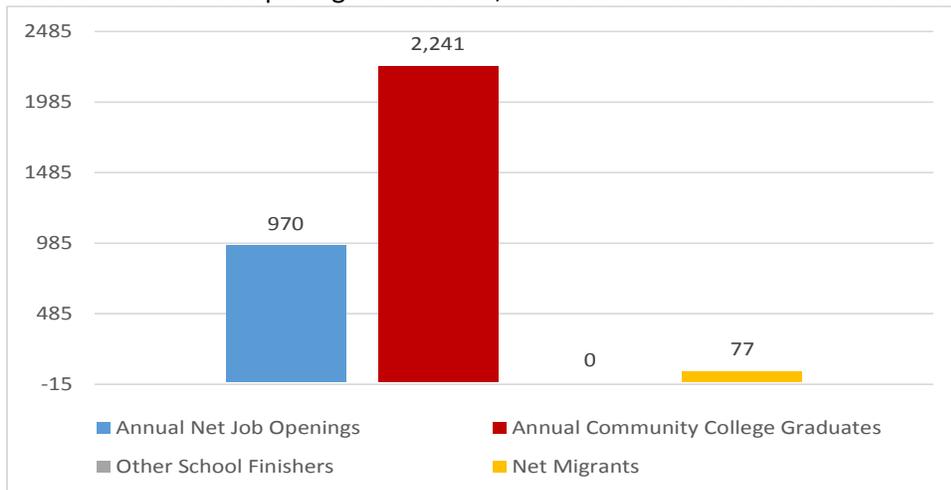
Figure 4E.2  
Reasons Why It Was Difficult to Hire, Healthcare Practitioners and Technical Occupation



Source: Survey of Omaha Businesses about Skill and Training Requirements

Figure 4E.3 examines the fundamental balance between annual net job openings and entrants into the healthcare practitioner and technical occupation in the Omaha area. Data on annual job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual college and community college graduates are based on the 2013-14 IPEDS database from the U.S. Department of Education. Net migration data are from the U.S. Census Bureau. Results show that annual entrants are nearly twice as large as annual openings. Schools in the Omaha Metropolitan Area are training a large number of healthcare practitioners and technical workers. Workers in the occupation, however, also are very mobile, meaning there is great competition for doctors, nurses and other practitioners.

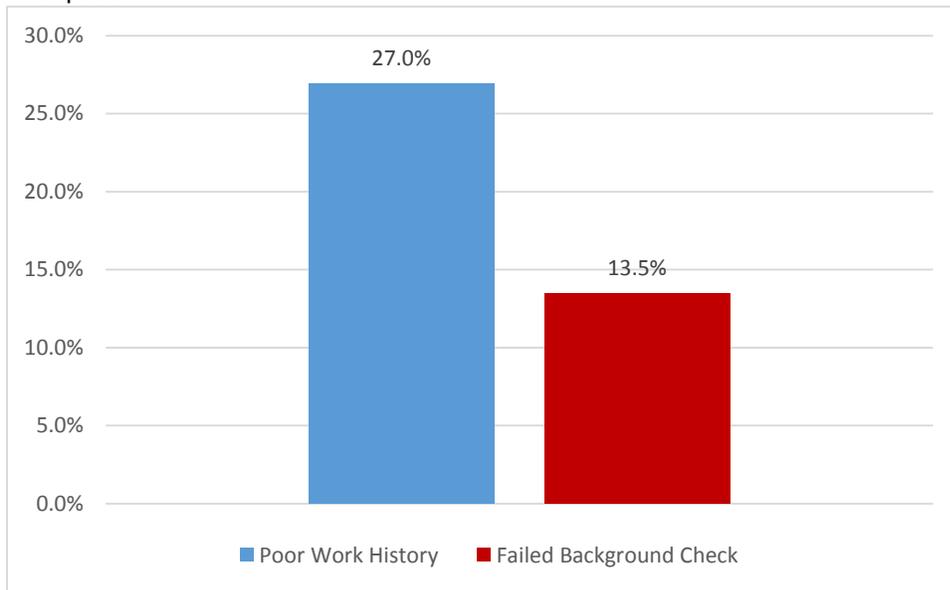
Figure 4E.3  
Ratio of Annual Net Openings to Entrants, Healthcare Practitioners and Technical Occupations



Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

Figure 4E.4 shows the percentage of employers who indicate applicants for healthcare practitioner and technical positions have a poor work history or have difficulty passing a background check. Twenty-seven percent of employers report that applicants have a poor work history and 13.5 percent that applicants have difficulty passing a background check. These percentages imply that some entrants will have difficulty remaining employed as a healthcare practitioner or technical worker during their career. However, the number of impacted workers is not large enough upend the very large annual surplus of healthcare practitioners graduating in Omaha area schools each year.

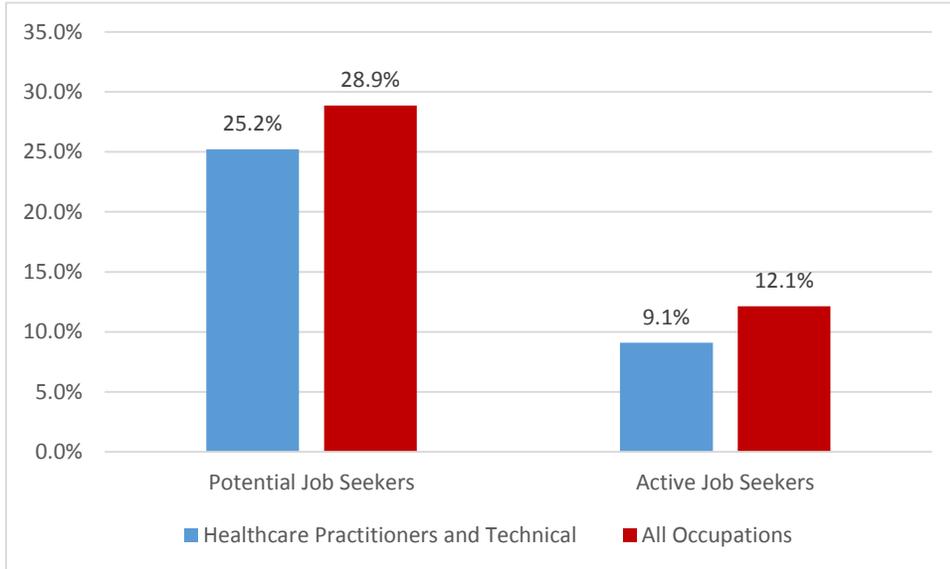
Figure 4E.4  
Applicants with Background Factors That May Influence Hiring, Healthcare Practitioners and Technical Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Comparing annual net job openings with entrants is just the first step in the underlying supply-demand analysis for an occupation. Figure 4E.5 looks at the extent to which employed workers in the healthcare practitioner and technical occupation are willing to consider a change in employers, or are even actively seeking work. The figure also compares these shares with the average for all occupations. Employed workers in business and the healthcare practitioners and technical occupation are less likely be potentially interested in a new position or to be actively seeking new work. This suggests that there is somewhat less “churn” among employed workers, suggesting some difficulty in finding experienced workers.

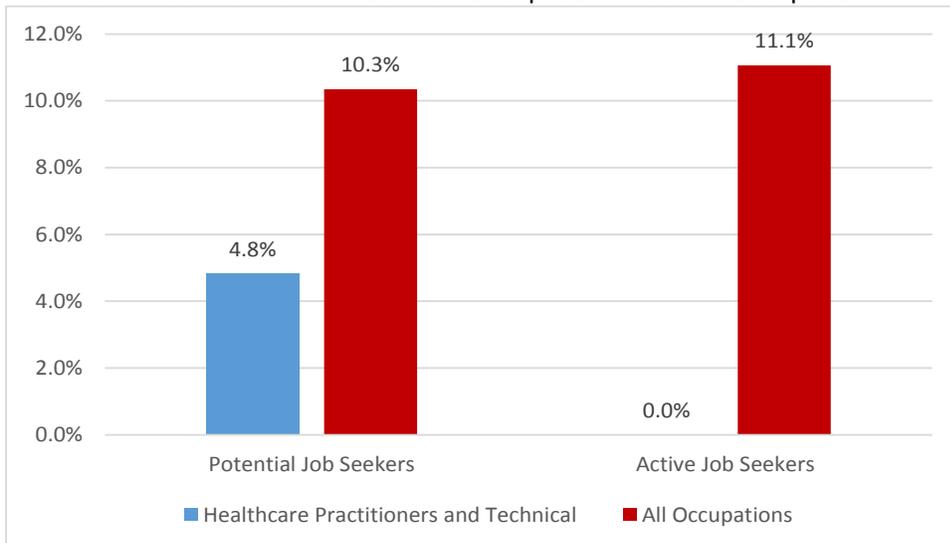
**Figure 4E.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Healthcare Practitioners and Technical Occupations versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

Figure 4E.6 shows information for survey respondents who are not currently employed. It includes individuals who are unemployed or voluntarily out of the labor force, such as homemakers or retirees. There is very little interest among former healthcare practitioners in returning to the workforce. Just 4.8 percent of individuals with experience in the occupation have an interest in potential positions and none are actively seeking new work.

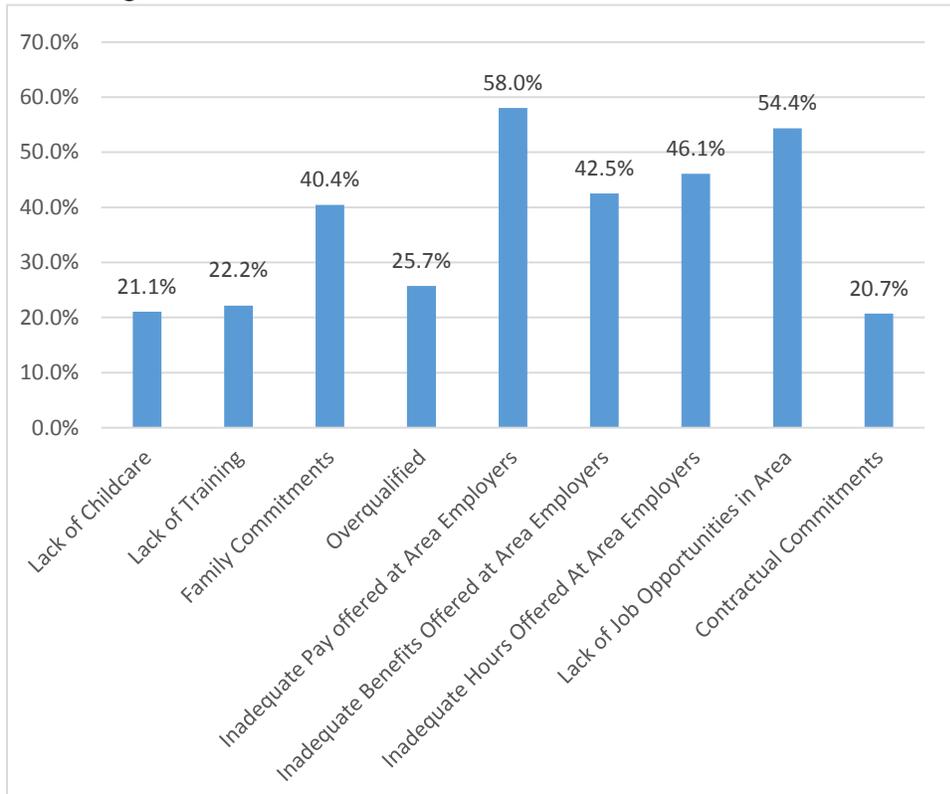
**Figure 4E.6**  
**Share of Workers Not Currently Employed with Potential to Take or Actively Search for a New Job**  
**Healthcare Practitioners and Technical Occupation versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

What barriers do healthcare practitioners and technical workers face when looking for new employment? This information is presented in Figure 4E.7, which shows the most common obstacles mentioned when considering a change in job or reentering the workforce.

Figure 4E.7  
Share of Healthcare Practitioner and Technical Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce



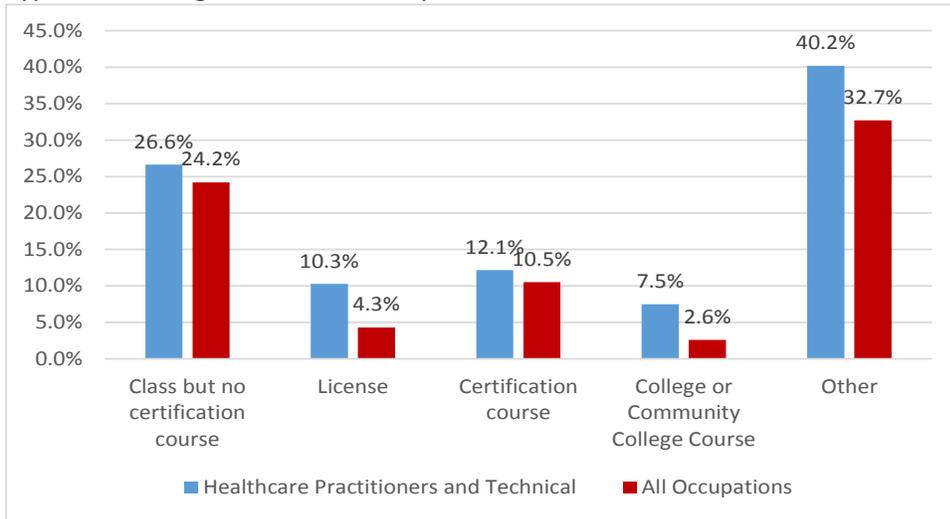
Source: *Nebraska Metro Area Labor Availability Survey*

The figure only lists those obstacles which are mentioned more than 20 percent of the time. The primary obstacles are related to commitments that may limit job mobility, a lack of job opportunities and the quality of job opportunities. A lack of childcare is an obstacle mentioned by 21.1 percent of healthcare practitioners and technical workers while 40.4 percent note family commitments in general. These factors could limit both geographic mobility and the ability to change to a new job with different requirements for work hours. Interestingly, 20.7 percent also mention contractual commitments that are an obstacle to changing jobs. A lack of training also is mentioned as an obstacle by 22.2 percent of workers in the occupation.

A lack of job opportunities is mentioned as an obstacle by 54.4 percent of workers. There are also concerns about the quality of employment opportunities for healthcare practitioners and technical workers. Twenty-six percent of workers report that they are overqualified for available positions. Fifty-eight percent report that inadequate pay is an obstacle to seeking new employment or reentering the labor force, while 42.5 percent cite inadequate benefits, and 46.1 percent inadequate hours.

As seen in Figure 4E.8, employers are willing to provide training to post-hire healthcare practitioners and technical workers. Employers, in fact, provide more training opportunities in this occupation. In particular, more training for licensing and more college and community college courses are offered than for occupations overall. “Other” training, which typically refers to on-the-job training, also is more common.

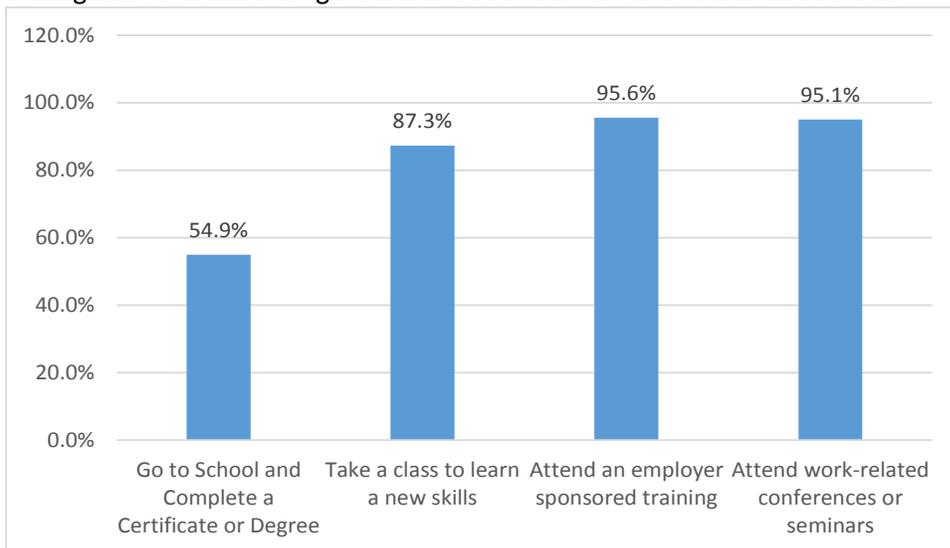
**Figure 4E.8**  
Types of Training Provided to Newly Hired Healthcare Practitioners and Technical Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Workers in health practitioner and technical occupations are willing to participate in a variety of training opportunities to improve their employment situation. Fifty-five percent are willing to complete a certificate or degree program, while 87.3 percent are willing to take a class to learn new skills. More than 95 percent would attend an employer sponsored training or a work-related conference or seminar.

**Figure 4E.9**  
Willingness to Train Among Healthcare Practitioners and Technical Workers



Source: *Nebraska Metro Area Labor Availability Survey*

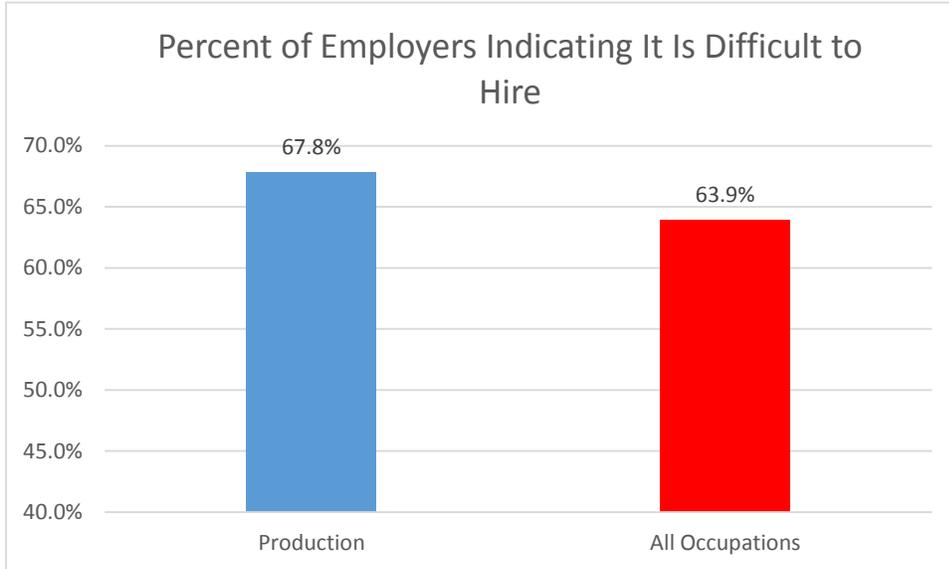
The overall picture is that there is a large annual surplus of healthcare practitioners and technical workers trained in the Omaha Metropolitan Area each year. While there may be specific specialties and technical areas which are not trained locally, the overall situation is of an abundance of entry level workers. The challenge is in keeping new and experienced workers in the community, and attracting workers when needed.

It may simply be that hiring healthcare practitioners and technical workers is always a challenge. Employers will continue to balance a need to offer competitive opportunities with the challenge of operating a competitive organization or business. The Omaha Metropolitan Area will need to continue to work hard to improve its quality of life, in order to compete for these highly mobile workers.

#### F. Production Occupations (SOC CODE 51)

This occupation group contains workers who are engaged in inspection, precision cutting, machine setting and operating, assembling, fabricating, extruding, and plant and system operations. Omaha Metropolitan Area employers were sixth most likely to say it is difficult to hire production workers. As seen in Figure 4F.1 below, 67.8 percent employers indicate that it is difficult to hire workers in this occupation, compared to 63.9 percent for all occupations.

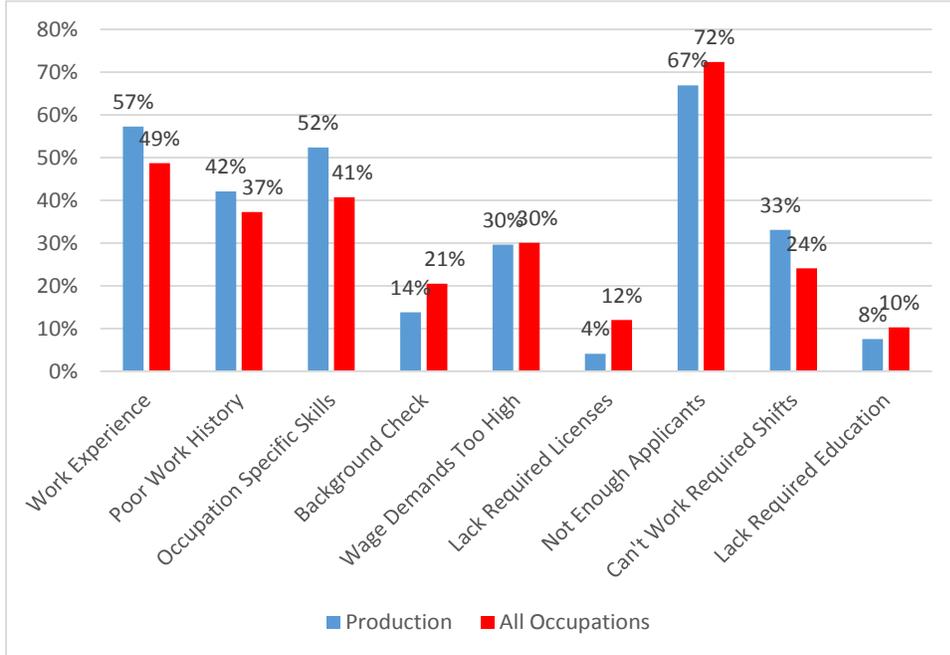
Figure 4F.1  
Percent of Employers Indicating It is Difficult to Hire, Production Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Table 4F.2 displays responses by Omaha Metropolitan Area employers on why it is difficult to hire production workers. By far, the primary difficulties are that there are not enough applicants and that applicants cannot work the required shifts. But, these problems collectively are not more difficult than for occupations overall. The two areas where challenges are greater for production workers are work experience and occupation-specific skill. The share of employers who indicate it is difficult to hire because applicants lack work experience is 57 percent, which is 8 percentage points above the all occupation average. The share of employers who indicate it is difficult to hire because applicants lack occupation-specific skill is 52 percent, which is 11 percentage points above the all occupation average.

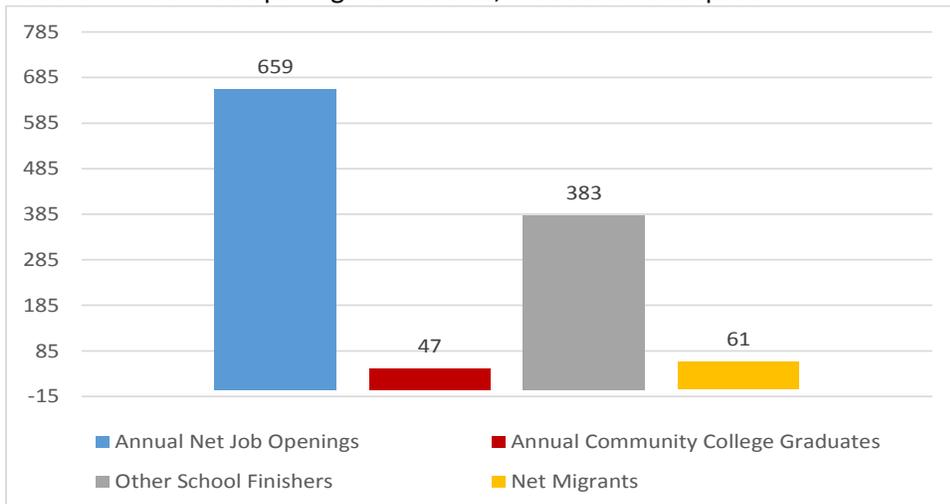
Figure 4F.2  
Reasons Why It Was Difficult to Hire, Production Occupation



Source: Survey of Omaha Businesses about Skill and Training Requirements

Figure 4F.3 examines the fundamental balance between net job openings and entrants in the production occupation, on an annual basis. Data on annual job openings are based on estimates prepared by Labor Market Information of the Nebraska Department of Labor. Data on annual college and community college graduates are from the 2013-14 IPEDS database of the U.S. Department of Education. Net migration data are from the U.S. Census Bureau. Results suggest a significant gap of 170 persons between annual openings and entrants, or about one-quarter of annual openings.

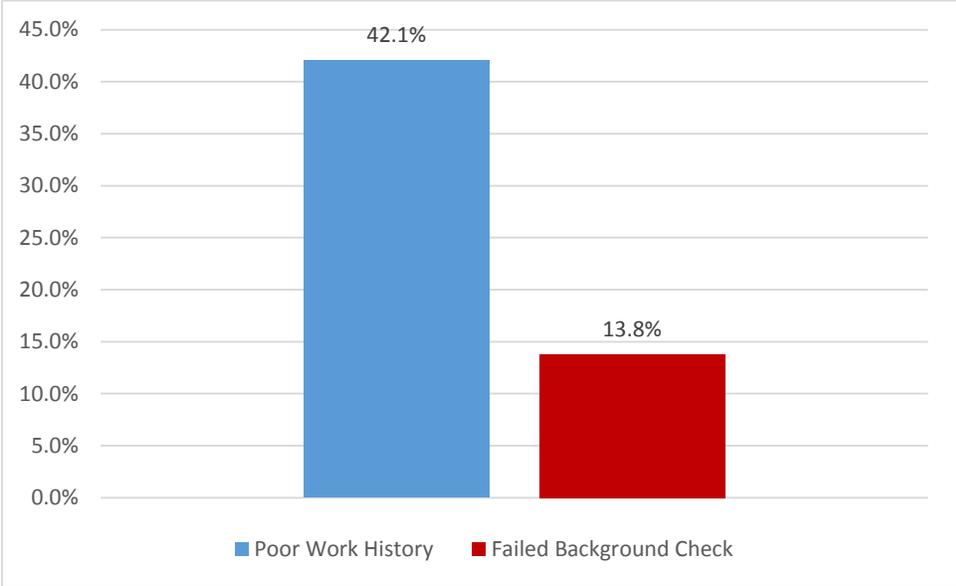
Figure 4F.3  
Ratio of Annual Net Openings to Entrants, Production Occupation



Source: Labor Market Information, Nebraska Department of Labor and IPEDS, U.S. Department of Education, and U.S. Bureau of Census

As was noted earlier, the work history and personal history of production workers are a concern, although no worse of a concern than for all occupations. This is seen again in Figure 4F.4. These results imply that the annual shortage of workers for this occupation may be even greater than the 170 which was reported in Figure 4F.3. Some employers may be unwilling to hire applicants with a poor work history or an inability to pass a background check.

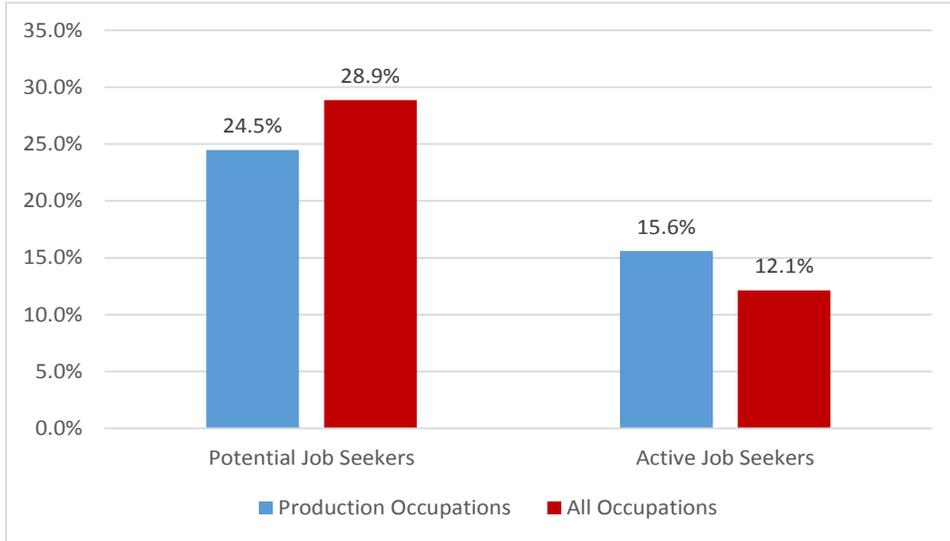
Figure 4F.4  
Applicants with Background Factors That May Influence Hiring, Production Occupation



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Figure 4F.5 below looks at the extent to which employed workers in the production occupation are willing to consider a change in employers, or are even actively seeking work. Results for the production occupation overall are quite similar to the all occupation average. The share of potential job seekers is a bit below the share for all occupations while the share of active job seekers is above. This suggests that there is significant “churn” among employed workers in this occupation. Such churn should help ensure a good match between employers and experienced workers.

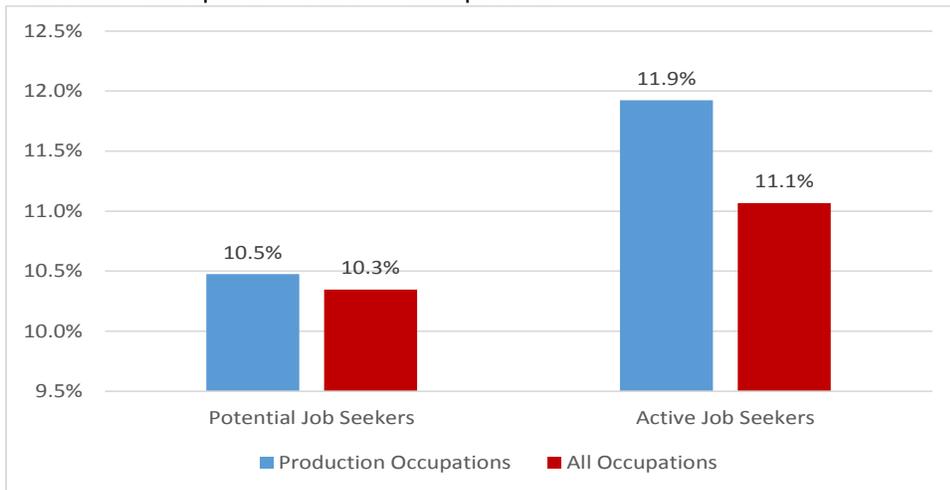
**Figure 4F.5**  
**Share of Employed Workers with Potential to Take or Actively Search For a New Job**  
**Production Occupation versus All Occupations**



Source: *Nebraska Metro Area Labor Availability Survey*

Figure 4F.6 shows information for survey respondents who are not currently employed, whether they are unemployed or voluntarily out of the labor force, such as homemakers or retirees. The share of the unemployed, retirees, or homemakers with a background in production work who are interested in a new job or actively searching for a new job is slightly above the all occupation average. The percentage who are actively searching for work is 11.9 percent. This is significant given that in Chapter 2 it was estimated that there are 1,195 such workers in the Omaha metropolitan area. Over the next few years, there is potential to partially close the 170 annual deficit in the number of new production workers by drawing these individuals back into the workforce.

**Figure 4F.6**  
**Share of Workers Note Currently Employed with Potential to Take or Actively Search for a New Job**  
**Production Occupation versus All Occupations**

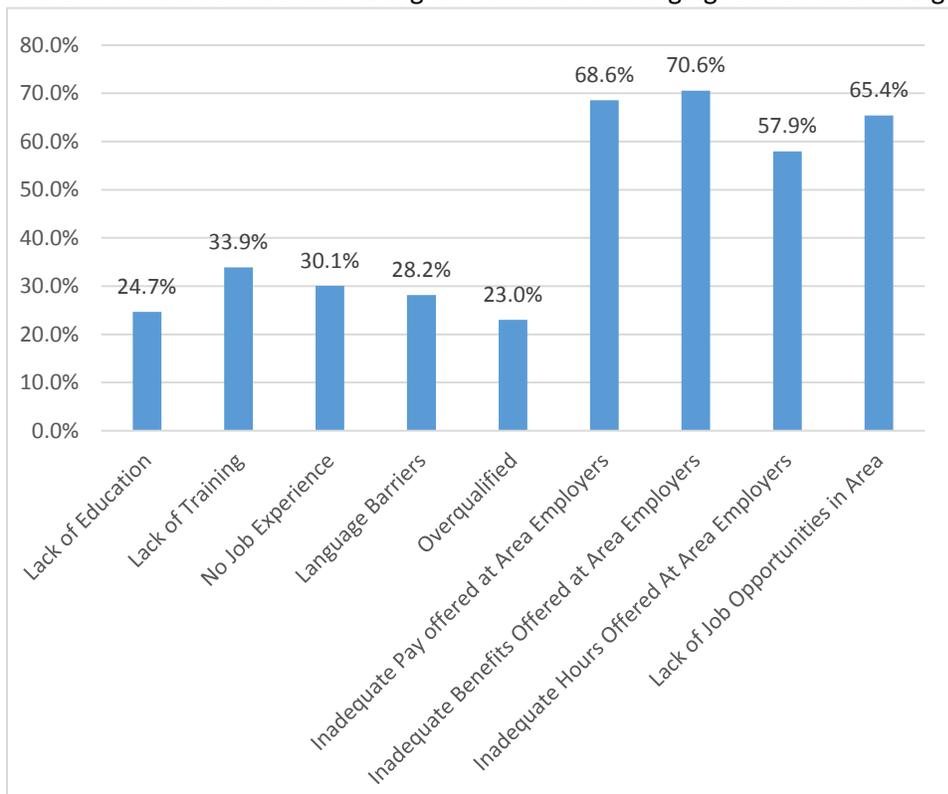


Source: *Nebraska Metro Area Labor Availability Survey*

What barriers do production workers face in looking for new employment? This information is presented in Figure 4F.7, which shows the most common obstacles mentioned by production workers when considering a change in job or reentering the workforce. The figure only lists those obstacles which are mentioned more than 20 percent of the time.

Results show that the obstacles are related to education, training, experience, language barriers and the number and quality of job opportunities available in the Omaha Metropolitan Area. Twenty-five percent of production workers cite a lack of education as an obstacle to finding a new job or reentering the workforce while 33.9 percent cite a lack of training and 30.1 percent a lack of job experience. Language barriers are an obstacle for 28.2 percent of production workers. Sixty-five percent of production workers cite a lack of employment opportunities in the Omaha Metropolitan Area. The quality of employment opportunities is also an issue. Twenty-three percent of production workers claim to be overqualified for available positions. Sixty-nine percent of production workers cite inadequate pay offered at area employers while 70.6 percent note inadequate benefits and 57.9 percent inadequate hours.

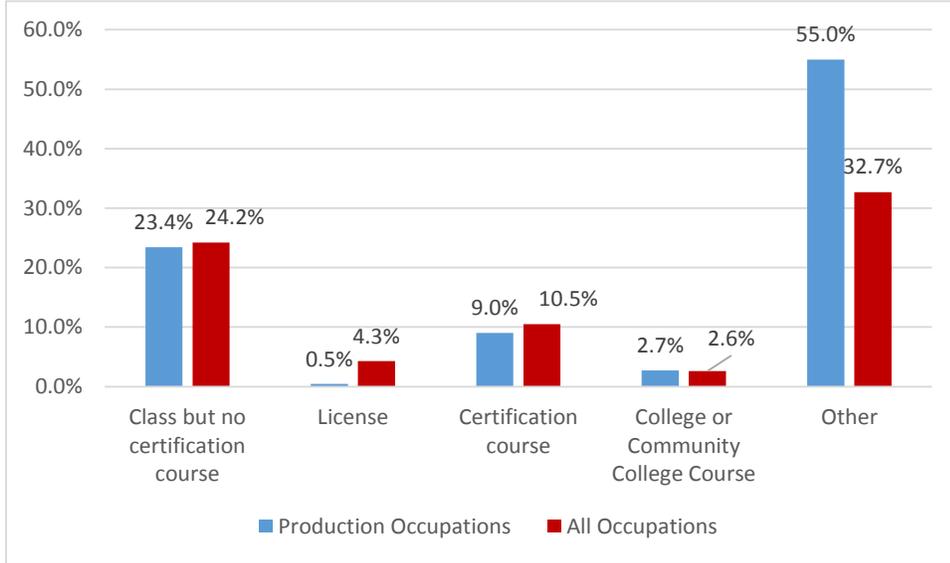
Figure 4F.7  
Share of Production Workers Citing an Obstacle to Changing Jobs or Reentering the Workforce



Source: *Nebraska Metro Area Labor Availability Survey*

As seen in Figure 4F.8, employer provide a variety of training opportunities to production workers. The share of employers providing each type of training is quite similar to the share for occupations overall. The exception is “other” training, which typically refers to on-the-job training. Fifty-five percent of employers of production workers report providing on-the-job training which is 12.3 percentage points above the all occupation average.

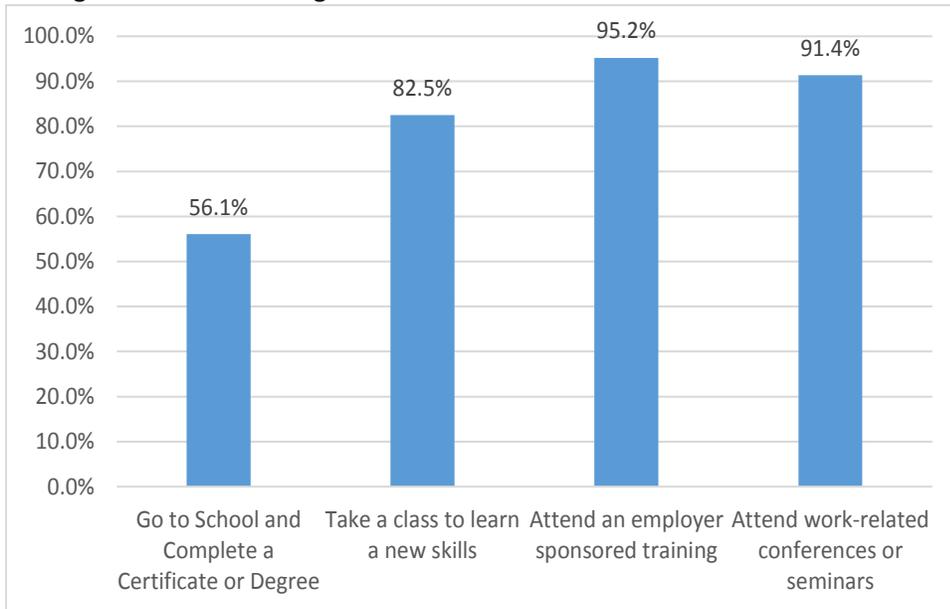
**Figure 4F.8**  
Types of Training Provided to Newly Hired Production Workers



Source: *Survey of Omaha Businesses about Skill and Training Requirements*

Most production workers are willing to take steps to improve their employment situation. Fifty-six percent are willing to attend school to complete certificate or degree, while 82.5 percent are willing to take a class to learn new skills. In terms of employer sponsored training, 95.2 percent are willing to attend an employer sponsored training while 91.4 percent are willing to attend a work related conference or seminar.

**Figure 4F.9**  
Willingness to Train among Production Workers



Source: *Nebraska Metro Area Labor Availability Survey*

The overall picture is that there is a deficit of 170 annual entrants relative to net job openings for production occupations. A portion of that annual deficit potentially can be filled by drawing production workers back into the workforce, but an annual deficit will remain. There also is significant “churn” among employed workers in production occupations. This is a positive sign suggesting that there is ongoing improvement in the match between workers and employers.

This situation leads to four sets of recommendations for production occupations:

- 1) There should be a selected expansion of certificate and degree programs for production workers, especially in the most in-demand occupations (see below)
- 2) There should be expanded internships and incentives for firms to hire new workers in these in-demand occupations, in order to address firms concerns with inexperienced workers.
- 3) Firms should further emphasize training programs to identify experienced, existing workers that are willing to train for in-demand production occupations.
- 4) There should be ongoing and enhanced efforts in the secondary education setting to inform students about career opportunities in production occupations, coordinating directly with employers when feasible.

We do not recommend an expansion of specific training programs, other than on-the-job-training, for several of the most in-demand production occupations; specifically, production helpers, team assemblers, and meat cutters and trimmers. However, training programs, degree programs and internships should be expanded for several other in-demand production occupations. These occupations, and an accompanying description of their duties, are:

- 1) **Machinist (SOC Code 51-4041)** - Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. (U.S. Bureau of Labor Statistics)
- 2) **Welders, Cutters, Solderers and Brazers (SOC Code 51-4121)** - weld or join metal parts and fill holes, indentions, or seams of metal products, using hand-held metal joining equipment (U.S. Bureau of Labor Statistics)