# Fremont Area Skills Gap Report Final Report

Prepared for the Nebraska Department of Labor

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# Executive Summary

In the fall of 2017, 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 Northeast Nebraska, which includes the Fremont, Columbus and Norfolk areas. The two surveys were the *Northeast Nebraska Labor Availability Survey* and the *Northeast Nebraska Survey of Hiring and Training Needs*.

The current study utilizes the results of both surveys as well as secondary data about the Fremont area economy to summarize information about job skills and whether a skills gap is present. 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? The Fremont area includes all or part of Burt, Cuming and Dodge counties, and Fremont receives commuters from Washington and Douglas counties.

Results of the study suggest that the annual flow of individuals into the workforce in the Fremont area exceeds the projected annual needs of businesses due to net job growth and worker replacement. This positive flow is evident in other survey findings. For example, relative to Columbus and Norfolk, Fremont employers are 10 percentage points less likely to report difficulty with finding workers. Despite these positive overall trends, employers face imbalances for select occupations. In particular, there are more job openings than entrants among sales and related workers and food preparation and serving related workers. In other occupations, applicants for job openings may lack experience or training, or exhibit a "poor work history" (which typically means frequent job changes).

When hiring is difficult for high skill occupations, 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. A list of specific occupations is below, along with the standard occupation code from the U.S. Bureau of Labor Statistics. These occupations are analyzed in more detail in the final chapter of this report.

Registered Nurses (SOC CODE 29-1141) Maintenance and Repair Workers, General (SOC CODE 49-9071) Welders, Cutters, Solderers and Brazers (SOC CODE 51-4121) Computer-Controlled Machine Tool Operators, Metal and Plastic (SOC CODE 51-4011) Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032)

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. Applicants may have some or all of the relevant occupation-specific skills, but 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 these workers be identified? 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 a good work history.

Finally, this research does not find that the level of wages in the Fremont area is a significant challenge for hiring. Specifically, in nearly all occupations the wage requirements of individuals seeking work: 1) represent only a moderate increase over their current wage and 2) are within the prevailing wages found within the Fremont area job market. Evidence of a wage-based skills-gap is found in just two occupations, health care support and transportation and material moving. The first occupation is critical to the health care industry while the second occupation is key for the logistics industry.

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## 1. Introduction

During the fall of 2017, the Nebraska Departments of Labor and Economic Development led efforts to survey both households and businesses in Northeast Nebraska. 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 *Northeast Nebraska Labor Availability Survey* and the *Northeast Nebraska Survey of Hiring and Training Needs*. The surveyed area included significant portions of Northeast Nebraska including Antelope, Boone, Burt, Butler, Colfax, Cuming, Dodge, Madison, Merrick, Nance, Pierce, Platte, Polk, Saunders, Stanton, Washington and Wayne counties. Surveys also were gathered from a portion of Douglas County. Results of the survey can be used to assess the demand for and supply of labor in the Fremont area, which is primarily composed of all or part of Burt, Cuming and Dodge counties. The Fremont area also receives some workers from Douglas, Saunders and Washington 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 Fremont 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 the occupation.

Survey results also indicate that skills gaps have potential to limit growth of the Fremont area economy. In particular, a large percent of respondents to the *Northeast Nebraska Survey of Hiring and Training Needs* indicate that labor availability would be an issue if they were asked to consider a local 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, results from the *Northeast Nebraska Labor Availability Survey* indicate that 73.9 percent potential job seekers in the Fremont area report that a lack of job opportunities is an obstacle to finding new employment. At the same time, 68.8 percent of Fremont area employers responding to the *Northeast Nebraska Survey of Hiring and Training Needs* Indicate that it is difficult to hire workers.

Do these survey responses mean that a broad-based skills gap is present in the Fremont 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 a 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 an occupation 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, a 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 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 Northeast Nebraska Labor Availability Survey, the Northeast Nebraska Survey of Hiring and Training 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 net job growth or the replacement of workers, 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.

# 2. Supply and Demand for Workers in the Norfolk 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 annual number of workers being prepared 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 in-migration with the number of openings in an occupation each year due to job growth or the replacement of workers. 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 Fremont area employers.

Lastly, the level of "churn" among the existing workers is examined within each occupation. 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) are needed to fill some openings. Churn is the process which improves the skill match for workers and employers in an occupation. This chapter estimates the percent and number of experienced workers within each occupation who are searching for employment.

## 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 Fremont area. Net openings in an occupation is a function of net job growth in that occupation and the need to replace workers.

New entrants to an occupation include local individuals who leave school and net migrants to the Fremont area. Individuals who leave school 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, community college, or 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 Fremont 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 worker replacement, as part of its *Nebraska 2014-2024 Long-Term Occupational & Industry Projections* publication. Projections are made for the State of Nebraska, metropolitan areas and economic development districts. The Fremont area includes counties which are part of the Northeast Economic Development District. Occupation projections for the Northeast region are shared down to the relevant Fremont area counties and summed in order to generate an occupation projection specifically for the Fremont area. Projections are cumulative for 10 years. Annual openings due to net job growth and worker replacement are estimated by taking one-tenth of the 10-year projection. This estimate of annual job openings 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. The degrees of college graduates are estimated based on fields of study at a set of regional universities, in particular Midland University and Wayne State College. Data on degrees was obtained from the IPEDS data base (the *College Navigator* web portal) maintained by the U.S. Department of Education. There were approximately 810 regional college graduates in 2016-17, the most recent year for which data is available through IPEDS.

		Annual School Leavers			
		College			
	Annual	and			Fremont
	Net Openings	Community College			Area Share of
Occupation	NDOL	Graduates	Others	Total	Total
Management	36	22	0	22	7
Business and Financial Operations	12	115	0	115	37
Computer and Mathematical	3	39	0	39	13
Architecture and Engineering	4	35	0	35	11
Life, Physical and Social Sciences	5	110	0	110	36
Community and Social Service	7	58	0	58	19
Legal	1	1	0	1	0
Education, Training and Library	28	194	0	194	63
Arts, Design, Entertainment, Sports, and Media	4	60	0	60	19
Healthcare Practitioners and Technical Workers	25	150	0	150	49
Healthcare Support	12	30	40	70	23
Protective Services	5	74	15	89	29
Food Preparation and Serving Related	44	1	141	143	46
Building and Grounds Cleaning and Maintenance	13	0	42	42	14
Personal Care and Services	15	5	48	53	17
Sales and Related	51	0	164	164	53
Office and Administrative Support	48	54	155	210	68
Farming, Fishing, and Forestry	30	20	98	119	39
Construction and Extraction	15	22	49	70	23
Installation, Maintenance and Repair	28	28	91	119	39
Production	65	23	210	233	76
Transportation and Material Movers	43	14	139	153	50

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

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

Most of these college graduates are expected to participate in the labor force in any given year, at least 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 87.0 percent of 25 to 64 year olds who completed a Bachelor's degree were in the formal labor market. This participation rate for college graduates was combined with the approximately 810 graduates to estimate that 700 graduates would be available to participate in the labor force during a given year.

The number of high school graduates in Northeast Nebraska is estimated based on the number of 2016-2017 high school graduates in Nebraska (23,970), and the share of Nebraska's 15- to 17-year olds who live in Northeast Nebraska counties (9.2%). Data on the share of 15- to 17- year olds comes from the U.S. Bureau of Census. The 15- to 17- age range is used since such estimates are regularly generated by the U.S. Bureau of Census for counties and since some 18 year-olds are already attending college. The annual number of high school graduates in Nebraska is based on 23,395 graduates reported in the 2018 Nebraska Higher Education Progress Report from the Nebraska's Coordinating Commission on Postsecondary Education and national data form the U.S. Department of Education's Digest of Education Statistics indicating that 2.5% of high school-age students attend home school.<sup>1</sup> Multiplying the annual number of Nebraska high school graduates by the percent of state 15- to 17-year olds in the Northeast Nebraska area yields an estimated of 2,210 annual high school graduates (including a GED for home school students) in the potential labor market of Fremont.

How many of those 2,210 high school graduates decide to attend college or community college? According to the *2018 Nebraska Higher Education Progress Report* 64.7% of the students attend a degree-granting institution (either in-state or out-of-state) within one-year of completing high school. That percentage includes individuals who attend a college or a community college. Therefore, the annual flow of individuals who attend a post-secondary institution is approximately 64.7 percent of 2,210, or 1,430. Those 1,430 individuals include persons who are attending 2-year and 4-year colleges. Data provided in the *2018 Nebraska Higher Education Progress Report* suggests that 28.6% of high school graduates attend 2-year public colleges (community colleges) with the remaining 71.4% attending public 4-year colleges or private colleges. Applying this 71.4% rate to the 1,430 graduates attend college. The *Nebraska Higher Education Progress Report* indicates that overall graduation rate for individuals who begin at a post-secondary institution in Nebraska is 51.3 percent. This implies 520 potential 4-year college graduates each year who attended high school in Northeast Nebraska. This is less than the 810 graduates from Northeast Nebraska colleges, indicating that the area is a net importer of college students.

Metropolitan Community College serves Dodge and Washington counties as well as Douglas and Sarpy County. Many of the remaining counties in Northeast Nebraska are served by Northeast Community College. Central Community College serves the Columbus region, as well as several other parts of Nebraska. Individuals completing a degree at these three Community Colleges are assigned to the Northeast Nebraska region based on the share of 15-17 year olds in the service territory of each college who live in Northeast Nebraska. Graduates are then assigned to a particular occupation based on the match between their degree program and the occupation. The number of graduates by degree program

<sup>&</sup>lt;sup>1</sup> National Center for Education Statistics (not dated). *Digest of Education Statistics*, Table 206.10: Number and percentage of homeschooled students ages 5 through 17 with a grade equivalent of kindergarten through 12th grade, by selected child, parent, and household characteristics: 2003, 2007, and 2012. Available at: https://nces.ed.gov/fastfacts/display.asp?id=91. Accessed January 21, 2017.

for Metropolitan Community College, Northeast Community College and Central Community College also was obtained from the IPEDS data base (the *College Navigator* web portal) maintained by the U.S. Department of Education. We assume that the graduates in the general fields of study of life, physical and social sciences will ultimately continue onto college. The remaining fields of study contribute to an estimate of 455 associate's degree graduates.

Most of these 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 77.6 percent of 25 to 64 year olds who completed an Associate's Degree were in the formal labor market.<sup>2</sup> This compares to 87.0 percent of 25 to 64 year olds who completed a Bachelor's degree. This participation rate for community college graduates was combined with the approximately 455 graduates to estimate that 350 community college graduates would be available to join the labor force during a given year.

The next task is to estimate the annual number of school leavers in three categories: individuals leaving college before graduating, those finishing high school but not pursing a two- or four-year college degree and those who drop out of high school. Methods for each estimate are described below.

<u>High School Graduates Not Continuing to College or Community College.</u> Calculations above estimated that there are 2,210 annual high school graduates (including a GED for home school students) in the Northeast Nebraska region. How many of those individuals decided not to attend college or community college? The *2018 Nebraska Higher Education Progress Report* indicated that 64.7 percent of those students attended a degree-granting college or community college (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 35.3 percent of 2,210, or 780. 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 percentage is applied to 780 to yield 560 additional labor force participants with a high school degree only.

<u>High School Dropouts.</u> The 2018 Nebraska Higher Education Progress Report indicated that Nebraska has a six-year high school graduation rate of 92 percent. This graduation rate implies that there is one non-completer for each 11.5 high school graduates. This yields an estimate of approximately 190 high school dropouts in Northeast Nebraska 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 190 indicates that high school non-completers contribute 115 additional labor force participants each year.

<u>College and Community College Non-Completers.</u> As noted earlier, the 2018 *Nebraska Higher Education Progress Report* indicates that overall graduation rate for individuals who begin at a post-secondary institution in Nebraska is 51.3 percent implying that 48.7 percent are non-completers. Applying this noncompletion rate to the 64.7 percent of 2,210 high school graduates who attend college yields an estimate that 695 individuals will potentially enter the local labor market each year without a

<sup>&</sup>lt;sup>2</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

completing a post-secondary degree. Of these, there were 48 graduates of certificate programs for Licensed Practical Nurse and Certified Driver's License programs which were counted among the community college graduates. Adjusting for this, there were an estimated 650 individuals potentially entering the labor market without a degree (or one of those two certificates). The National Center for Education Statistics report indicates that 77.6 percent of these will enter the labor force, implying 520 additional labor force participants each year.<sup>3</sup>

Altogether, approximately 1,195 high school only completers, high school non-completers, and college non-completers (who did not earn a certificate as a Licensed Practical Nurse or a certificate for a Commercial Driver's License) enter the Northeast Nebraska labor market each year. These 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 preparation and serving-related; 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 1,195 individuals are allocated to these occupations based on the share of annual job openings.

Results in Table 2.1 show that there is a surplus of school leavers in Northeast Nebraska relative to annual openings in the Fremont area in most white collar and all blue collar and service occupations. Across all occupations there are an estimated 1,760 more school leavers in Northeast Nebraska than projected openings in the Fremont area each year.

However, not all Northeast Nebraska school leavers will choose to work in the Fremont area. After all, the Northeast Nebraska region also includes other large employment centers such as Columbus and Norfolk, as well as many other mid-size and small employment centers. Table 2.1 also shows the number of school leavers by occupation which would be available to the Fremont area economy based on its past share of Northeast Nebraska employment; that is, following historic commuting patterns. In this case, across all occupations there is an estimated annual surplus of 240 school leavers. Surpluses are present for most while collar occupations, although there is an annual deficit for managers. Small surpluses also are common for blue collar and service occupations, including skilled construction and installation, maintenance and repair workers. Surpluses also are common among service occupations. However, the number of openings and school leavers are roughly the same for sales workers and food preparation and serving related workers. Finding workers may be more challenging in these occupations.

Further, Table 2.1 does not reflect the flow of workers into and out of the Northeast Nebraska region each year. In particular, Northeast Nebraska area loses 300 *workers* each year due to net immigration to other regions. Estimates of entrants and 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. After factoring in net outmigration, across all occupations there is an annual surplus of 140 school leavers who will work in the Fremont market area relative to projected openings each year.

<sup>&</sup>lt;sup>3</sup> This estimate assumes that individuals who fail to complete a college or community college degree at Northeast Nebraska post-secondary institution will return to the community where they completed high school. Similarly, Northeast Nebraska high school graduates who attended but did not complete post-secondary education in another city would return to the area.

		Annual Entrants			
	Annual Net				Fremont Area
	Openings	Total	Net		Share of
Occupation	NDOL	Finishers	Migration	Total	Total
Management	36	22	-35	-13	-4
Business and Financial Operations	12	115	-12	103	34
Computer and Mathematical	3	39	-2	37	12
Architecture and Engineering	4	35	-4	31	10
Life, Physical and Social Sciences	5	110	-5	106	34
Community and Social Service	7	58	-7	51	17
Legal	1	1	-1	0	0
Education, Training and Library	28	194	-27	167	54
Arts, Design, Entertainment, Sports, and Media	4	60	-4	56	18
Healthcare Practitioners and Technical Workers	25	150	-12	138	45
Healthcare Support	12	70	-6	64	21
Protective Services	5	89	-2	87	28
Food Preparation and Serving Related	44	143	-22	121	39
Building and Grounds Cleaning and Maintenance	13	42	-6	36	12
Personal Care and Services	15	53	-7	46	15
Sales and Related	51	164	-42	122	40
Office and Administrative Support	48	210	-40	170	55
Farming, Fishing, and Forestry	30	119	-22	97	31
Construction and Extraction	15	70	-11	59	19
Installation, Maintenance and Repair	28	119	-20	99	32
Production	65	233	-6	227	74
Transportation and Material Movers	43	153	-4	148	48

Table 2.2: Annual Openin	gs and Entrants by	<b>V</b> Occupation Group	. Including Migrants
	55 and Entrants N	y occupation droup	

Sources: Nebraska Depart 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

Net outmigration also influences the balance between openings and labor market entrants in specific occupation groups. In Table 2.2., estimates of net out-migration by workers 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.

After making this adjustment, the underlying pattern continues. Annual surpluses are present for many white collar, blue collar and service occupations; however, small annual deficits develop for sales and related and food preparation and serving related occupations.

Despite these surpluses, there is reason to be concerned about the available supply of new workers. In particular, an assumption throughout the analysis has been that workers entering the labor market would remain viable to work 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 shows the potential size of this problem. The table lists the percentage of Fremont area business respondents to the *Northeast Nebraska Survey of Hiring and Training Needs* who indicated it was difficult to hire workers in part due to: 1) poor work history and 2) failure to pass a background check. These percentages are significant.

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

	Balance And Problems
Annual Openings Fremont Area	493
Annual Entrants Northeast Nebraska	1,949
Annual Entrants Fremont Area	633
Share of Applicants with	
Poor Work History	41.7%
Failed Background Check	18.6%

Sources: IPEDS, U.S. Department of Education for graduates and *Northeast Nebraska Survey of Hiring and Training Needs* and BBR calculations

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

While Tables 2.1 through 2.3 address the long-term balance between annual openings and entrants in each occupation, it should be noted that there is another potential source to bring new workers into the Fremont 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 both by providing job opportunities to unemployed workers and 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 the Northeast Nebraska who are not currently employed but are actively seeking work. Data in the table are assembled using responses of individuals in the Fremont labor market to the *Northeast Nebraska Labor Availability Survey*. That survey included a significant number of responses from individuals who indicated that they were unemployed, retired, or were currently homemakers. Respondents from the Fremont labor market 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 6.4 percent indicated that they would "re-enter the workforce next year if a suitable job is available." This percentage is much higher than might be expected given the 2% to 3% unemployment rate that prevails in the Fremont area. However, the difference makes sense given that the criteria for being classified as unemployed are not as strict in the *Northeast Nebraska Labor Availability Survey*. In particular, persons do not need to demonstrate that they have been actively searching beyond a minimum level in recent weeks.

This broader 6.4 percent of individuals who are open to rejoining the workforce implies a chance to add a significant number of new workers to the labor force. In particular, there are approximately 44,020 adults age 16 and above in Northeast Nebraska classified as out of the labor force or unemployed, including 15,520 from the Fremont area or expected to commute into the Fremont area. The 6.4 percent figure indicates that there are potentially up to 2,800 additional workers for the Northeast Nebraska economy with 990 specifically for the Fremont area economy. Table 2.4 shows the occupations for which these potential workers might be available, based on the previous occupation. Table 2.4 also shows that, among those surveyed individuals who did not have previous work experience, none reported that there are actively search for a new job.

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

	Northeast	
Occupation	Nebraska	Fremont Area
Management	101	35
Business and Financial Operations	161	57
Computer and Mathematical	0	0
Architecture and Engineering	55	19
Life, Physical and Social Sciences	193	68
Community and Social Service	96	34
Legal	0	0
Education, Training and Library	84	30
Arts, Design, Entertainment, Sports, and Media	180	64
Healthcare Practitioners and Technical Workers	215	76
Healthcare Support	342	121
Protective Services	84	30
Food Preparation and Serving Related	150	53
Building and Grounds Cleaning and Maintenance	0	0
Personal Care and Services	0	0
Sales and Related	54	19
Office and Administrative Support	747	263
Farming, Fishing, and Forestry	161	57
Construction and Extraction	0	0
Installation, Maintenance and Repair	0	0
Production	146	52
Transportation and Material Movers	28	10
Never Worked	0	0

Source: Northeast Nebraska Labor Availability Survey

As seen in Table 2.4, a significant share of these workers are in production occupations and in agriculture (farming, fishing and forestry), but not in other blue collar occupations. Among white collar occupations, in Northeast Nebraska there are approximately 100 individuals with management

experience, 160 former business and financial operations workers, 220 health care practitioners and technicians, and 340 health care support workers. The largest number of potential reentrants, however, are in office and administrative support occupations. Counts of potential workers available for the Fremont area economy are about one third as large. 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.

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

Beyond the overall balance of 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 Northeast Nebraska Labor Availability Survey asked employed workers whether they were actively searching for work, along with questions about their experience and occupation. Survey results for households located in the Fremont labor market indicate that 9.6 percent of currently employed workers are actively searching for a job. This implies that approximately 8,380 employed workers are actively searching at any 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. In most occupations, between 3% and 18% of workers were actively seeking new work. The highest shares were computer and mathematical workers (30.0%) and community and social services workers (27.6%). At least 9% of workers were actively seeking a new job among blue collar occupations, with 17.0% of transportation and material moving workers seeking new work. The shares are less consistent for other groups of workers. Among white collar workers, the share searching for work is much higher for computer and mathematical workers than for managers (3.8%) and business and financial operations workers (2.5%). For service occupations, the share of workers searching for work is elevated for personal care and service workers (11.3%), health care support workers (11.5%) and building and grounds cleaning and maintenance workers (9.1%).

The largest number of employed workers who are actively seeking a new job are found in select white collar and service occupations. Among white collar workers, the largest number of workers searching for work were in community and social services, education and computer and mathematical occupations. Note that farmers and ranchers typically would be classified as farm and ranch managers. Among service workers, there are nearly 1,460 office and administrative support workers actively seeking new work in the Northeast Nebraska region. There are a large number of employed blue collar workers actively seeking other work including an estimated 900 transportation and material moving workers and 860 production workers.

As seen in Table 2.5, the total number of employed workers searching for work is more limited if counts are restricted to workers who reside in the Fremont area. However, there are still hundreds of experienced workers available in many occupations.

Occupation	Percent Actively Seeking a Job	Number Actively Seeking a Job Northeast Nebraska	Number Actively Seeking a Job Fremont Area
Management	3.8%	413	134
Business and Financial Operations	2.5%	90	29
Computer and Mathematical	30.0%	371	121
Architecture and Engineering	0.0%	0	0
Life, Physical and Social Sciences	16.5%	206	67
Community and Social Service	27.6%	790	257
Legal	6.3%	44	14
Education, Training and Library	8.9%	659	214
Arts, Design, Entertainment, Sports, and Media	3.2%	32	10
Healthcare Practitioners and Technical Workers	3.3%	264	86
Healthcare Support	11.5%	245	80
Protective Services	3.9%	32	10
Food Preparation and Serving Related	7.9%	141	46
Building and Grounds Cleaning and Maintenance	9.1%	109	35
Personal Care and Services	11.3%	281	91
Sales and Related	6.7%	433	141
Office and Administrative Support	11.4%	1,462	475
Farming, Fishing, and Forestry	18.4%	376	122
Construction and Extraction	9.2%	276	90
Installation, Maintenance and Repair	10.5%	395	128
Production	10.4%	861	280
Transportation and Material Movers	17.0%	902	293

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

Source: Northeast Nebraska 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 Northeast Nebraska as a whole. 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 labor market.

Occupation	School Finishers and Net Migrants Northeast Nebraska	Employed But Actively Seeking Work Northeast Nebraska	Employed But Actively Seeking Work Fremont Area
Management	-13	413	134
Business and Financial Operations	103	90	29
Computer and Mathematical	37	371	121
Architecture and Engineering	31	0	0
Life, Physical and Social Sciences	106	206	67
Community and Social Service	51	790	257
Legal	0	44	14
Education, Training and Library	167	659	214
Arts, Design, Entertainment, Sports, and Media	56	32	10
Healthcare Practitioners and Technical Workers	138	264	86
Healthcare Support	64	245	80
Protective Services	87	32	10
Food Preparation and Serving Related	121	141	46
Building and Grounds Cleaning and Maintenance	36	109	35
Personal Care and Services	46	281	91
Sales and Related	122	433	141
Office and Administrative Support	170	1,462	475
Farming, Fishing, and Forestry	97	376	122
Construction and Extraction	59	276	90
Installation, Maintenance and Repair	99	395	128
Production	227	861	280
Transportation and Material Movers	148	902	293

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

Sources: IPEDS, U.S. Department of Education for graduates and *Northeast Nebraska 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 a new job. In many occupations, there are also individuals who are not currently working who would be likely to enter the workforce if a suitable job is available. These workers represent an important skill resource for Fremont area employers. Two questions about these potential workers come to mind. First, what challenges or barriers do they 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 *Northeast Nebraska Labor Availability Survey* show the types of barriers perceived by employed workers who would consider changing jobs. The various criteria fall into categories including working conditions, suitability for employment, work schedule, and compensation. Analysis focuses on the currently employed. Workers who are unemployed, retired or otherwise out of the labor force generally did not respond to the question.

Nearly three in four employed potential job seekers (73.9%) cite a lack of job opportunities in the area as a barrier to changing jobs. The result may 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 over one quarter of employed potential job seekers (28.7%) 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. More than two-thirds (69.2%) cite "inadequate pay offered by local employers" as an obstacle. Inadequate benefits are cited by 57.4 percent of employed potential job seekers. Inadequate hours are cited by 47.6 percent.

Potential job seekers also perceive that their own background may limit their potential to find employment. Approximately one in four (27.4%) cite a lack of training while 22.6 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 14.7 percent of employed potential job seekers. Credit history is sometimes used as a screen by potential employers. Work history is cited by 4.7 percent, while a criminal record is cited as a barrier by 2.9 percent of job seekers.

Results also showed that family considerations create a barrier for some workers. In particular, a lack of childcare is noted by 11.6 percent of employed potential job seekers and family commitments are noted by 26.1 percent. Currently employed workers may have found a position which can accommodate their family commitments, a feature which binds them to that position.

Do these obstacles suggest the presence of a skills gap in the Fremont 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. 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 Fremont area.

Table 3.1 compares employer perceptions of worker skill with the perceptions of potential job seekers in the Fremont area. Employer perceptions come from the report *Northeast Nebraska Survey of Hiring and Training Needs*. 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 occupation specific skills from whatever source (a lack of education, lack of training) is similar to the perceptions of potential job seekers, in the sense that both perceive a significant problem. However, Fremont area employers are twice as likely as local job seekers to cite this issue.

	Employed Potential	Employers Hiring for
Issue	Job Seekers	Specific Occupations
Percent Indicating a Lack of Training is an		
Obstacle to Changing Jobs	27.4%	
Percent Indicating a Lack of Education is an		
Obstacle to Changing Jobs	22.6%	
Percent Indicating that Lack of Occupation		
Specific Skills Makes It Difficult to Hire		48.1%
Percent Indicating that Lack of Required		
Licenses/Certificates Makes It Difficult to Hire		20.3%

Table 3.1: Employer and Employed Potential Job Seekers Perceptions of Skill and Training

Sources: Northeast Nebraska Survey of Hiring and Training Needs and Northeast Nebraska Labor Availability Survey

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 Fremont area employers indicate 18.6 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. Results from the *Northeast Nebraska Labor Availability Survey* indicate that some potential job seekers also recognize that difficulties with their background which could be a barrier to employment.

Table 3.2: Employer and Employed Potential Job Seekers Perceptions of Worker Background and
History

	Employed Potential Job	Employers Hiring for
Issue	Seekers	Specific Occupations
Percent Indicating Criminal Record is an		
Obstacle to Employment	2.9%	
Percent Indicating Employment History is		
an Obstacle to Employment	4.7%	
Percent Indicating Poor Credit History is an		
Obstacle to Employment	14.7%	
Percent Indicating Failed Background Check		
Makes It Difficult to Hire		18.6%
Percent Indicating that Poor Work History		
Makes It Difficult to Hire		41.7%

Sources: Northeast Nebraska Survey of Hiring and Training Needs and Northeast Nebraska Labor Availability Survey

Table 3.2 also shows that 41.7 percent of Fremont area employers indicate that a poor work history makes it difficult to hire, as reported in the *Northeast Nebraska Survey of Hiring and Training Needs*. Follow-up discussions with employers suggest that poor work history refers to evidence of frequent

"job-hopping," or other indicators that workers do not fit in well at their workplace. Note that there is a large opinion gap between Fremont area employers and workers with regards to work history. Over two in five employers indicate that applicants with a poor work history make it difficult to hire but only 4.7 percent of employed job seekers feel that employment history is an obstacle to finding a new job. Such problems can certainly discourage hiring, even when workers have the required skills. This is the largest difference among any of the issues presented in Tables 3.1 and 3.2.

The final issue pertains to the wages and benefits of potential jobs. This is another area where workers and employers have very different perceptions. As was noted above, a majority of potential job seekers see wages or benefits available from local employers as an obstacle to finding a new job. But, just 33.1 percent of employers see wage demands from workers which are "too high" as a cause of difficulty in hiring, according to the results in the report *Northeast Nebraska Survey of Hiring and Training Needs.* 

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 *Northeast Nebraska Labor Availability Survey* and information about the average wages by occupation in Northeast Nebraska from the U.S. Department of Labor. The information can be used to assess whether job seekers have realistic expectations regarding wages in potential new jobs; in particular, whether job seekers expected large wage increases or wages which are well above the occupation average in the regional economy. While some increase in wages would be expected in order to draw workers to a new job, unrealistic expectations could be a source of a skills gap.

Results in Table 3.3 show current wages and desired wages for employed potential job seekers by education attainment category. This is a comparison between the current wage reported by Fremont labor market area respondents to the *Northeast Nebraska 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.

Results show that potential job seekers hope for a position which pays \$0.41 to \$2.68 per hour more than their current position. The desired wage increase in percentage terms ranges between 2.6 percent and 9.3 percent for most education categories. These percentage differences between current and desired wages are manageable, that is, in-line with the opening ask of a worker who is being recruited to change positions. Vocational and technical degree holders, however, seek at 14.9 percent increase.

Table 3.3: Current and Desired Wages of Employed Job Seekers by Educational Attainment					
		Average	Average	Average	Percent
	Weighted	Current	Desired	Wage	Wage
Highest Level of Education	Ν	Wages \$	Wages \$	Differential \$	Differential
Less than High School	28	\$15.38	\$15.94	\$0.56	3.6%
High School Graduate or GED	274	\$17.21	\$18.78	\$1.56	9.1%
Some College	22	\$15.90	\$16.31	\$0.41	2.6%
Vocation or Technical Degree	58	\$17.96	\$20.63	\$2.68	14.9%
Associate's Degree	134	\$19.26	\$21.05	\$1.79	9.3%
Bachelor's Degree	134	\$23.16	\$25.27	\$2.11	9.1%
Master's Degree or Higher	28	\$30.61	\$32.85	\$2.24	7.3%

#### Table 3.3: Current and Desired Wages of Employed Job Seekers by Educational Attainment

Source: Northeast Nebraska Labor Availability Survey

Additional insights can be generated by comparing the current 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, with the largest desired increases in service occupations. Among blue collar workers, the biggest differences are for construction and extraction workers (SOC 47) and production workers (SOC 51). For construction and extraction workers, average desired wages are \$2.39 per hour higher (11.3%). Average desired wages are \$2.01 per hour higher (10.6%) for production workers. The gap between desired and current hourly wages is larger for service occupations. Desired wages are \$4.26 per hour higher (37.8%) for food preparation and serving related workers (SOC 35) and \$4.16 per hour higher (27.6%) for personal care and services occupations (SOC 39). The gap is smaller for sales and related, health care support and office and administrative workers. Among white collar workers, the gap is \$2.82 per hour (12.3%) for architects and engineers (SOC 17) and \$1.65 per hour (11.7%) for education, training and library workers (SOC 25). The gap is substantially lower in other occupations, while several white collar occupations have too few observations to comment on the measured gap.

The larger wage gaps observed in some cases 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 Fremont labor market area. The difference between the desired wages in each occupation group and the average hourly wage in that occupation in the Fremont area can be observed in Table 3.5. Current average hourly wage data for the Norfolk area are based on U.S. Bureau of Labor Statistics occupation wage data for the Norfolk-area counties, Fremont does receive some workers from the Omaha Metropolitan Area.

For occupations which typically require a college degree (SOC 11-29), desired wages are often well below the average hourly wage in Northeast area occupations. While 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, the results suggest that the desired wage increases of college educated potential job seekers are modest and manageable. Even among business and financial operations workers (SOC 15), where wage expectations are above regional averages, the difference is manageable, in line with the wage increases workers would hope for when changing jobs.

In most cases, the same cannot be said of occupations which do not typically require a college degree (SOC 31-53). Wage expectations, and even current wages, are often well above regional averages. Wage expectations are above regional averages for all blue collar occupations, especially construction and extraction workers (SOC 47). Among service occupations, wage expectations are above regional averages for health care support workers (SOC 31), food preparation and serving related workers (SOC 35), personal care and service workers (SOC 39) and office and administrative support workers (SOC 43).

		Average	Average	Average	Percent
	Weighted	Current	Desired	Wage	Wage
Occupation	N	Wages \$	Wages \$	Differential \$	Differential
Management	15	\$32.10	\$31.38	(\$0.73)	-2.3%
Business and Financial Operations	9	\$30.97	\$32.15	\$1.17	3.8%
Computer and Mathematical	4	\$28.51	\$34.07	\$5.56	19.5%
Architecture and Engineering	13	\$22.87	\$25.70	\$2.82	12.3%
Life, Physical and Social Science	12	\$22.36	\$23.25	\$0.89	4.0%
Community and Social Service	32	\$18.53	\$18.91	\$0.38	2.1%
Legal	4	\$18.36	\$16.73	(\$1.63)	-8.9%
Education, Training, and Library	23	\$14.14	\$15.79	\$1.65	11.7%
Arts, Design, Entertainment, Sports,					
and Media	3	\$17.89	\$20.00	\$2.11	11.8%
Health Care Practitioners and Technical	87	\$26.73	\$28.58	\$1.85	6.9%
Health Care Support	26	\$15.90	\$17.61	\$1.71	10.8%
Protective Service	8	\$23.12	\$29.60	\$6.48	28.0%
Food Preparation and Serving Related	25	\$11.26	\$15.53	\$4.26	37.8%
Building and Grounds Cleaning and					
Maintenance	7	\$11.44	\$13.22	\$1.78	15.6%
Personal Care and Service	18	\$15.08	\$19.24	\$4.16	27.6%
Sales and Related	43	\$13.95	\$15.39	\$1.44	10.3%
Office and Administrative Support	129	\$16.54	\$17.88	\$1.34	8.1%
Farming, Fishing and Forestry	18	\$14.87	\$17.56	\$2.69	18.1%
Construction and Extraction	35	\$21.07	\$23.46	\$2.39	11.3%
Installation, Maintenance and Repair	39	\$21.98	\$23.34	\$1.36	6.2%
Production	82	\$18.94	\$20.95	\$2.01	10.6%
Transportation and Material Moving	47	\$19.38	\$20.02	\$0.64	3.3%

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

Source: Northeast Nebraska Labor Availability Survey

			-		Northeast Nebraska
	<b>XA</b> ( . <sup>1</sup> . ]. ]]	Average	Average	Average	Average
Occupation	Weighted N	Current Wages \$	Desired Wages \$	Wage Differential \$	Wage (\$) (May 2017)
Management	15	\$32.10	\$31.38	(\$0.73)	(Way 2017) \$40.22
Business and Financial Operations	9	\$32.10 \$30.97	\$31.38 \$32.15	(30.73) \$1.17	\$40.22 \$29.30
		\$30.97 \$28.51	\$32.15 \$34.07	\$1.17 \$5.56	\$29.50 \$28.96
Computer and Mathematical	4	•	•	•	
Architecture and Engineering	13	\$22.87	\$25.70	\$2.82	\$31.39
Life, Physical and Social Science	12	\$22.36	\$23.25	\$0.89	\$28.73
Community and Social Service	32	\$18.53	\$18.91	\$0.38	\$19.72
Legal	4	\$18.36	\$16.73	(\$1.63)	\$35.76
Education, Training, and Library	23	\$14.14	\$15.79	\$1.65	\$22.96
Arts, Design, Entertainment, Sports,		A 4 <b>-</b> 00	400.00	40.44	<b>.</b>
and Media	3	\$17.89	\$20.00	\$2.11	\$16.63
Health Care Practitioners and Technical	87	\$26.73	\$28.58	\$1.85	\$33.46
Health Care Support	26	\$15.90	\$17.61	\$1.71	\$14.81
Protective Service	8	\$23.12	\$29.60	\$6.48	\$19.97
Food Preparation and Serving Related Building and Grounds Cleaning and	25	\$11.26	\$15.53	\$4.26	\$10.90
Maintenance	7	\$11.44	\$13.22	\$1.78	\$13.16
Personal Care and Service	18	\$15.08	\$19.24	\$4.16	\$11.19
Sales and Related	43	\$13.95	\$15.39	\$1.44	\$16.63
Office and Administrative Support	129	\$16.54	\$17.88	\$1.34	\$15.47
Farming, Fishing and Forestry	18	\$14.87	\$17.56	\$2.69	\$16.64
Construction and Extraction	35	\$21.07	\$23.46	\$2.39	\$18.39
Installation, Maintenance and Repair	39	\$21.98	\$23.34	\$1.36	\$21.60
Production	82	\$18.94	\$20.95	\$2.01	\$17.24
Transportation and Material Moving	47	\$19.38	\$20.02	\$0.64	\$17.33

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

Source: Northeast Nebraska Labor Availability Survey and U.S. Bureau of Labor Statistics

The gap between desired and actual wages in these occupations may make it especially difficult for employers to find needed workers. 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 8 occupations, results are presented regarding the percentage of employers who found that it is difficult to hire workers and the percentage of employers who felt that wage demands are "too high." Employers reported that it was less difficult than average (68.8%) to find workers in the food preparation and serving related (SOC 35), personal care and services (SOC 39), administrative and office support (SOC 43) and construction and extraction (SOC 47) occupations. By contrast, 100.0 percent of employers reported that it is difficult to hire workers in the health care support occupation (SOC 31) (31% above the all-occupation average), while 94.0 percent of employers report the same for installation, maintenance and repair occupations (SOC 49), 80.9 percent for the production (SOC 51) and 78.5 percent for transportation and material moving (SOC 53). However, for two of these four occupation groups, a below average share of employers report that wage demands

are "too high." In other words, there were only two occupations, health care support and transportation and material moving, where it is especially difficult to find workers, where desired wages are well-above occupation averages and where employers report an elevated challenge with wage demands which are too high. In these two occupations, results suggest that wages demands may be contributing to the skills gap.

	Percent of	
	Employers	Percent of Employers
	Indicating That	Indicating That It Is
	Wage Demands for	"Difficult" To Find
	the Occupation	Workers in
	Were "Too High"	Occupation
Occupation	(Average = 33.1%)	(Average = 68.8%)
Health Care Support	40.0%	100.0%
Food Preparation and Serving Related	34.9%	50.4%
Personal Care and Services	10.9%	57.5%
Office and Administrative Support	45.5%	57.5%
Construction and Extraction	13.5%	65.4%
Installation, Maintenance and Repair	20.3%	94.0%
Production	28.5%	80.9%
Transportation and Material Moving	33.7%	78.5%

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

Source: Northeast Nebraska Survey of Hiring and Training Needs

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, lack of training) and that a significant share of potential employees have factors in their background (a poor credit history or the inability to pass a background check) which can make hiring difficult, even when workers have appropriate skills for a job. In contrast to potential employees, employers also note that applicants with a "poor work history" make hiring difficult. Some workers may not be aware that "job hopping" or other evidence of an inability to get along at work is harming their employment potential. Finally, there is evidence for some occupations that the desire for higher wages is a significant source of the skills gap in the Fremont area. The strongest evidence of such a wage-based skills-gap is found among health care support and transportation and material moving occupations.

## 4. Detailed Evaluation of Select Occupations

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 occupations. Occupations were selected that have been identified by the Nebraska Department of Labor as a high wage occupation in the region, or where evidence of skills gap was identified in Chapters 2 and 3. Analysis should reveal the nature of the skills gap, if any, found in different occupations. A detailed analysis is provided for the following occupations:

Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032) Welders, Cutters, Solderers and Brazers (SOC CODES 51-4121) Registered Nurses (SOC CODE 29-1141) Maintenance and Repair Workers, General (SOC CODE 49-9071) Computer-Controlled Machine Tool Operators, Metal and Plastic (SOC CODE 51-4011)

## A. Heavy and Tractor-Trailer Truck Drivers (SOC CODE 53-3032)

Heavy and tractor-trailer truck drivers transport goods from one place to another, often through long haul routes. This is considered a H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage earning opportunities. Heavy truck drivers also are a primary occupation within the transportation and material moving occupation group. There was a significant annual deficit between the number of job openings and annual and potential entrants into the transportation and material moving occupation in the Norfolk area. There also was evidence of a wage-based skills gap. The mean hourly wage in the Fremont area is \$20.46. Finding workers is challenging in this occupation. As seen in Table 4.1, 88.8 percent of businesses report that it is difficult to hire workers in this occupation. That is twenty percent higher than for occupations overall.

Table 4.1 also shows the reasons for difficulty in hiring according to Fremont area employers who hire heavy and tractor-trailer truck drivers. Hiring truckers is especially challenging due to applicants who lack work experience, have a poor work history and are more likely to fail a background check. Only 11.5 percent of employers are willing to hire truck drivers without experience and 33.0 percent require at least one year of driving experience. The wage demands of applicants also make hiring more difficult. As might be expected, there is also a challenge due to applicants who lack required licenses and certificates. Finally, three-quarters (74.9%) of Fremont businesses indicate that there are not enough applicants for jobs in this occupation.

Data on annual openings and entrants for the heavy and tractor-trailer truck driver occupation also suggest challenges with the number of applications. As seen in Table 4.1, there are an estimated 14 new openings in this occupation in the Fremont area due to growth in employment and the replacement of workers. At the same time, 18 students graduate from the Bus and Truck Driver certificate program in area community colleges each year, with 6 expected to enter the occupation in the Fremont area. Further, the *Northeast Nebraska Labor Availability Survey* did not identify any former truck drivers in the Fremont area who report an interest in re-entering the workforce. There is a need to attract more workers to seek truck driving training and certificates. There is also a need to develop incentives for employers to hire less experienced truck drivers, when feasible, given widespread concern about the experience level of drivers in the region. Finally, heavy and tractor-trailer truck drivers need to avoid actions which can cause them to develop a poor worker history or lose the ability to pass a background check.

	Heavy and	
	Tractor-Trailer	
	Truck Drivers	
Occupation	(SOC 53-3032)	All Occupations
Percent Indicating It is Difficult to Hire	88.8%	68.8%
Reasons for Difficulty in Hiring		
Lack of Experience	60.1%	43.8%
Poor Work History	47.2%	41.7%
Lack of Occupation-Specific Skills	26.2%	48.1%
Failed Background Check	26.3%	18.6%
Wage Demands Too High	47.8%	33.1%
Lack of Required Licenses/Certificates	73.8%	20.3%
Language Barriers	7.6%	3.5%
Not Enough Applicants	74.9%	73.4%
Availability for Shifts Required	0.0%	28.1%
Lack of Required Education	5.5%	16.2%
Overqualified	7.6%	4.2%
Citizenship/Work Authorization	7.6%	2.9%
Other	0.0%	4.4%
Average Annual Openings	14	
Certificate Graduates – Bus and Truck Driver		
Community College	18	
Allocated to Fremont Area	6	
Seeking to Re-Enter the Workforce – In Occupation		
Northeast Nebraska	0	
Allocated to Fremont Area	0	
Minimum Experience Requirement		
No experience required	11.5%	50.6%
Experience required but less than 1 year	55.6%	23.8%
1 year or more experience required	33.0%	25.6%

 Table 4.1

 Key Findings for the Heavy and Tractor-Trailer Truck Drivers Occupation

Sources: Northeast Nebraska Survey of Hiring and Training Needs, Northeast Nebraska Labor Availability Survey, IPEDS, United States Department of Education and Labor Market Information, Nebraska Department of Labor

## B. Welders, Cutters, Solderers and Brazers (SOC CODE 51-4121)

Analysis of employment patterns and the key occupations identified by respondents to the *Northeast Nebraska Survey of Hiring and Training Needs* indicates that welders, cutters, solderers and brazers (SOC CODES 51-4121) is among the most common skilled production occupations in the Fremont area. It is also considered an H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage earnings opportunities. Welders, cutters, solderers and brazers use hand welding, flame cutting, hand soldering or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metals products. The mean hourly wage for the occupation in the Fremont area in 2017 is \$18.03. Survey results indicate that it is challenging to find workers in this occupation. As seen in Table 4.2, 100.0% of businesses report that it is difficult to hire workers.

Table 4.2 also shows the reasons for difficulty according to Fremont area businesses who hire welders, cutters, solderers and brazers. Sixty-nine percent of Fremont area businesses indicate that there are not enough applicants for jobs in this occupation. Hiring welders, cutters and the like is especially challenging due to applicants who lack work experience and occupation-specific skills. All employers indicate that applicants must have relevant work experience, although less than a year of experience is sufficient. There is also an elevated concern about applicants with a poor work history or an inability to pass a background check.

Survey results on the difficulty of hiring are not supported by data on annual openings and entrants for the welders, cutters, solderers and brazers. As seen in Table 4.2, there are an estimated 4 new openings in this occupation each year in the Fremont area due to growth in employment and the replacement of workers. Twenty-three students graduate from the Welding Technology degree program at area community colleges each year, and 7 would be expected to enter the occupation in the Fremont area. The expected annual number of entrants therefore exceeds openings. Consistent with that, the survey of Northeast Nebraska households indicates that there were 52 former welders, cutters, solderers and brazers who report an interest in re-entering the workforce.

These findings suggest a need to create a more experienced workforce in the welding, cutting, solderer and brazers occupation. Employers may need to be proactive in hiring newly trained workers and may require public help, for example through wage subsidies. In order to address issues with work history, employers also should consider supporting reliable production workers who seek training and degrees in welding occupations. Further, workers should avoid behaviors which lead to a poor work history or an inability to pass a background check.

	Welders, Cutters,	
	Solderers and Brazers	
Occupation	(SOC 51-4121)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	68.8%
Reasons for Difficulty in Hiring		
Lack of Experience	65.4%	43.8%
Poor Work History	65.4%	41.7%
Lack of Occupation-Specific Skills	69.2%	48.1%
Failed Background Check	30.8%	18.6%
Wage Demands Too High	0.0%	33.1%
Lack of Required Licenses/Certificates	0.0%	20.3%
Language Barriers	0.0%	3.5%
Not Enough Applicants	69.2%	73.4%
Availability for Shifts Required	34.6%	28.1%
Lack of Required Education	0.0%	16.2%
Overqualified	0.0%	4.2%
Citizenship/Work Authorization	0.0%	2.9%
Other	0.0%	4.4%
Average Annual Openings	4	
Graduates – Welding Technology		
Community College	23	
Allocated to Fremont Area	7	
Seeking to Re-Enter the Workforce – In Occupation		
Northeast Nebraska	146	
Allocated to Fremont Area	52	
Minimum Experience Requirement		
No experience required	0.0%	50.6%
Experience required but less than 1 year	100.0%	23.8%
1 year or more experience required	0.0%	25.6%

 Table 4.2

 Key Findings for the Welders, Cutters, Solderers and Brazers Occupation

Sources: Northeast Nebraska Survey of Hiring and Training Needs, Northeast Nebraska Labor Availability Survey, IPEDS, United States Department of Education and Labor Market Information, Nebraska Department of Labor

## C. Maintenance and Repair Workers, General (SOC CODE 49-9071)

Maintenance and Repair Workers, General have at least two skills in the installation, maintenance or repair of machines and mechanical equipment. Maintenance and repair workers also are one of the primary occupations within the installation, maintenance and repair occupation group. The mean hourly wage for the occupation in the Fremont area in 2017 is \$18.63. As seen in Table 4.3, 100.0 percent of businesses report that it is difficult to hire workers in this occupation.

Table 4.3 also shows the reasons for difficulty in hiring according to Fremont area businesses who hire workers in this occupation. Hiring general maintenance and repair workers is primarily challenging due to applicants who lack occupation-specific skills. All employers reported a willingness to hire workers without work experience.

Data on annual openings and entrants for general maintenance and repair workers suggest an imbalance between opening and applicants in this skilled occupation. As seen in Table 4.3, there are 6 projected openings in this occupation each year in the Fremont area. At the same time, 5 students graduate from an Industrial Mechanics and Maintenance Technology Associate's Degree programs at area community colleges each year, but none are expected to enter the occupation in Fremont. Further, our survey of Northeast Nebraska households indicates that there are no former general maintenance and repair workers who report an interest in re-entering the workforce. These findings suggest a need to encourage more individuals to seek training in industrial mechanics and maintenance technology each year.

Table 4.3
Key Findings for the Maintenance and Repair Workers, General Occupation

	Maintenance and	
	Repair Workers,	
	General	
Occupation	(SOC 49-9071)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	68.8%
Reasons for Difficulty in Hiring		
Lack of Experience	20.2%	43.8%
Poor Work History	20.2%	41.7%
Lack of Occupation-Specific Skills	60.4%	48.1%
Failed Background Check	16.0%	18.6%
Wage Demands Too High	16.0%	33.1%
Lack of Required Licenses/Certificates	0.0%	20.3%
Language Barriers	0.0%	3.5%
Not Enough Applicants	59.8%	73.4%
Availability for Shifts Required	0.0%	28.1%
Lack of Required Education	0.0%	16.2%
Overqualified	0.0%	4.2%
Citizenship/Work Authorization	0.0%	2.9%
Other	0.0%	4.4%
Average Annual Openings	6	
Graduates – – Industrial Mechanics and Maintenance Technology		
Community College	5	
Allocated to Fremont Area	0	
Seeking to Re-Enter the Workforce – In Occupation		
Northeast Nebraska	0	
Allocate to Fremont Area	0	
Minimum Experience Requirement		
No experience required	100%	50.6%
Experience required but less than 1 year	0%	23.8%
1 year or more experience required	0%	25.6%

Sources: Northeast Nebraska Survey of Hiring and Training Needs, Northeast Nebraska Labor Availability Survey, IPEDS, United States Department of Education and Labor Market Information, Nebraska Department of Labor

## D. Registered Nurses (29-1141)

Registered nurses assess patient health problems and needs, develop and implement nursing care plans, maintain medical records, administer nursing care to ill, injured, convalescent or disabled patients, advise patients on health maintenance and disease prevention, and provide case management. Registered nursing is a considered an H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage opportunities. Registered nurses also are a primary occupation within the health care practitioners and technical workers occupation group. The mean hourly wage in the Fremont area in 2017 is \$27.73. Finding workers is challenging in this occupation. As seen in Table 4.4, 100.0 percent of Fremont area businesses report that it is difficult to hire registered nurses.

Table 4.4 also shows the reasons for difficulty in hiring according to Fremont area employers who hire registered nurses. Availability is the primary challenge. Seventy five percent of employers indicate that it is difficult to hire because there not enough applicants for registered nurse positions while 50.0 percent indicate challenges with finding applicants who can work the required shifts. Registered nurses seem to understand these market conditions. An elevated 50.0 percent of businesses report that applicants have wage demands which are too high. Fifty percent also report that applicants lack occupation-specific skills and required licenses and certificates. However, there are relatively few other issues with the quality of workers, with only 25.0 percent of employers reporting that is difficult to hire because applicants have a poor work history or cannot pass a background check.

Data on annual openings and entrants for the registered nurse occupation suggest that the challenges are not entirely due to a lack of graduates. As seen in Table 4.4, there are an estimated 8 new job openings each year for registered nurses in the Fremont area due to growth in employment and the replacement of workers. There are 37 graduates with an Associate's Degree in registered nursing from area community colleges, and 12 would be expected to enter the occupation in the Fremont area. There also are baccalaureate graduates from nursing at Midland University. Together these annual graduates should be sufficient to meet the need for new job openings in the Fremont area, especially since there are an estimated 38 Fremont area residents with experience as a registered nurse who would consider rejoining the labor force if an appropriate opportunity was available. The challenge may be with local employers competing for graduates with job opportunities in larger cities in Nebraska and the wider region. Employers in the Fremont area may consider how to increase the wages, improve working condition and enhance the overall appeal of working as a registered nurse. In addition, more students should be encouraged to pursue degrees in nursing either at the community college or college level.

Table 4.4Key Findings for the Registered Nurses Occupation

	Registered Nurses	
Occupation	(SOC 29-1141)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	68.8%
Reasons for Difficulty in Hiring		
Lack of Experience	25.0%	43.8%
Poor Work History	25.0%	41.7%
Lack of Occupation-Specific Skills	50.0%	48.1%
Failed Background Check	25.0%	18.6%
Wage Demands Too High	50.0%	33.1%
Lack of Required Licenses/Certificates	50.0%	20.3%
Language Barriers	0.0%	3.5%
Not Enough Applicants	75.0%	73.4%
Availability for Shifts Required	50.0%	28.1%
Lack of Required Education	25.0%	16.2%
Overqualified	25.0%	4.2%
Citizenship/Work Authorization	0.0%	2.9%
Other	0.0%	4.4%
Average Annual Openings	8	
Certificate Graduates – Registered Nursing		
Community College	37	
Allocated to Fremont Area	12	
Seeking to Re-Enter the Workforce – In Occupation		
Northeast Nebraska	107	
Allocate to Fremont Area	38	
Minimum Experience Requirement		
No experience required	25.0%	50.6%
Experience required but less than 1 year	50.0%	23.8%
1 year or more experience required	25.0%	25.6%

Sources: Northeast Nebraska Survey of Hiring and Training Needs, Northeast Nebraska Labor Availability Survey, IPEDS, United States Department of Education and Labor Market Information, Nebraska Department of Labor

## E. Computer-Controlled Machine Tool Operators, Metal and Plastic (SOC 51-4011)

Analysis of the *Northeast Nebraska Survey of Hiring and Training Needs* indicates that computercontrolled machine tool operators (SOC CODES 51-4081) is a common skilled production occupation in the Fremont area. It is also considered an H3 occupation by the Nebraska Department of Labor, meaning it offers higher wage opportunities. Computer-controlled machine tool operators utilize machine tools or robots to perform one or more machine functions on metal or plastic work pieces. The mean hourly wage for the occupation in the Fremont area in 2017 is \$20.32. As seen in Table 4.5, 100.0 percent of businesses in the Fremont area report that it is difficult to hire workers in this occupation.

Table 4.5 also shows the reasons for difficulty in hiring. One hundred percent of Fremont area businesses indicate that there are not enough applicants for jobs in this occupation. Hiring is especially challenging due to the experience and occupation-specific skills of applicants. Three-quarters of employers indicate applicants lack both. Fifty percent of employers require applicants to have at least one year of work experience.

Despite the reported difficulty with hiring, data indicate that the annual number of openings and entrants are similar for computer-controlled machine tool operators. As seen in Table 4.5, there is 1 new opening in this occupation each year in the Fremont area. There are 7 graduates each year from a Machine Tool Technology Associate's Degree program at an area community college, but only 1 would be expected to enter the occupation locally. The survey of Northeast Nebraska households did not identify any former computer-controlled machine tool operators who report an interest in re-entering the workforce.

These findings suggest a need to increase experience among computer-controlled machine tool operators. Businesses should be incentivized to hire workers new to this occupation. The state of Nebraska or local agencies could potentially participate through temporary wage subsidies for manufacturers which hire newly graduated operators.

Table 4.5

Key Findings for the Computer-Controlled Machine T	1	nd Plastic Occupation
	Computer-	
	Controlled	
	Machine Tool	
	Operators, Metal	
Occurrentiere	and Plastic	
Occupation	(SOC 51-4011)	All Occupations
Percent Indicating It is Difficult to Hire	100.0%	68.8%
Reasons for Difficulty in Hiring	-	
Lack of Experience	75.0%	43.8%
Poor Work History	25.0%	41.7%
Lack of Occupation-Specific Skills	75.0%	48.1%
Failed Background Check	25.0%	18.6%
Wage Demands Too High	0.0%	33.1%
Lack of Required Licenses/Certificates	0.0%	20.3%
Language Barriers	0.0%	3.5%
Not Enough Applicants	100.0%	73.4%
Availability for Shifts Required	25.0%	28.1%
Lack of Required Education	25.0%	16.2%
Overqualified	0.0%	4.2%
Citizenship/Work Authorization	0.0%	2.9%
Other	0.0%	4.4%
Average Annual Openings	1	
Graduates – Machine Tool Technology		
Community College	7	
Allocated to Fremont Area	2	
Seeking to Re-Enter the Workforce – In Occupation		
Northeast Nebraska	0	
Allocated to Fremont Area	0	
Minimum Experience Requirement	1	
No experience required	25.0%	50.6%
Experience required but less than 1 year	25.0%	23.8%
1 year or more experience required	50.0%	25.6%

Key Findings for the Computer-Controlled Machine Tool Operators, Metal and Plastic Occupation

Sources: Northeast Nebraska Survey of Hiring and Training Needs, Northeast Nebraska Labor Availability Survey, IPEDS, United States Department of Education and Labor Market Information, Nebraska Department of Labor