

# Cloud County Labor Basin Labor Availability Analysis – 2018

Clay • Cloud • Dickinson • Jewell • Lincoln  
Mitchell • Ottawa • Republic • Saline • Washington Counties



Prepared For

**CloudCorp, Concordia, Kansas**



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To Facilitate Effective Public Policy Decision-Making.

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# Cloud County Labor Basin **Labor Availability Analysis – 2018**

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**Prepared For:**

CloudCorp, Concordia, Kansas

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## Executive Summary

The Cloud County Labor Basin includes Clay, Cloud, Jewell, Lincoln, Mitchell, Ottawa, Republic, Washington Counties, and portions of Saline and Dickinson Counties in north central Kansas. The purpose of this report is to assess the “Available Labor Pool” in this labor basin. The Available Labor Pool represents those residents who are looking for employment or are interested in new jobs for the right employment opportunities.

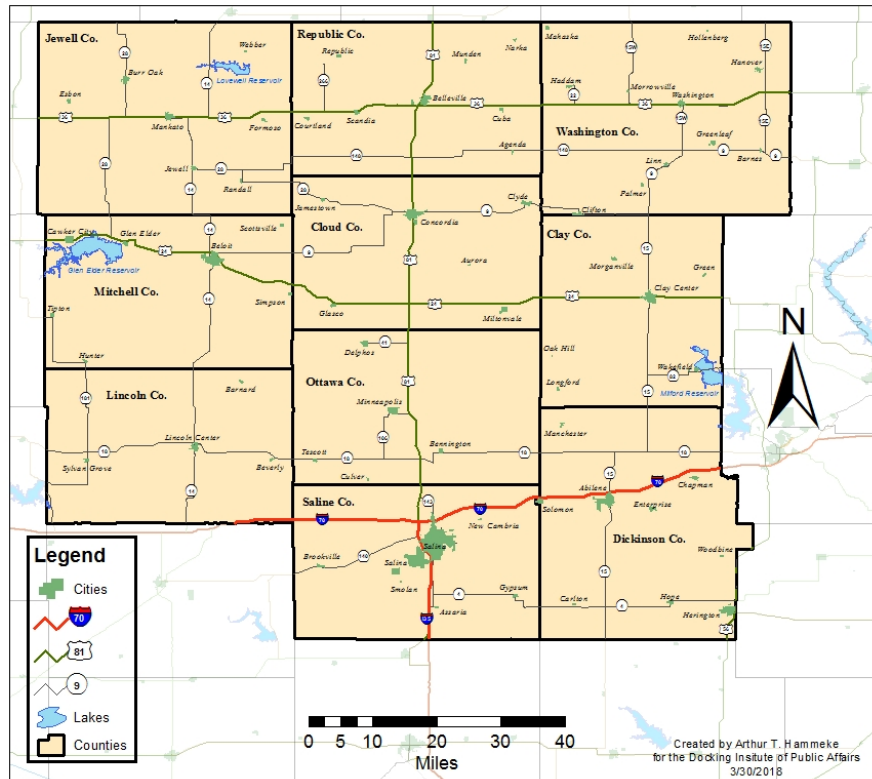
The Docking Institute’s independent analysis of this labor basin shows that:

- The population of the Cloud County Labor Basin is 111,618. The Civilian Labor Force is 61,081. The Available Labor Pool contains 37,190 individuals.
- Of the *non-working* members of the Available Labor Pool, an estimated 2,740 (7.4%) are currently looking for work and 4,085 (11%) are interested in working for the right opportunities. Of the *working* members of the Available Labor Pool, 5,817 (15.6%) are currently looking for work, while 14,547 (66%) are interested in different jobs given the right opportunities.
- More than three-quarters (77.4%) of the Available Labor Pool have at least some college experience and almost all (97.2%) have at least a high school diploma. The average age for members of the Pool is between 46 and 49 years old, and women make up half (49.5%) of the Pool.
- About 12% of the Available Labor Pool are currently employed as general laborers, while an additional 12% work in government services or technical/high skill blue-collar occupations. About 46% of the Pool work in service sector jobs, while 11% work in professional white-collar jobs. Slightly less than a fifth (18%) are not currently working.
- A vast majority (85.7%) of the Available Labor Pool are “willing to work outside of their primary field of employment for a new or different employment opportunity.”
- Almost a third (31%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 77% will commute up to 30 minutes for employment.
- The six most important desired benefits are, in order, good salary or hourly wage, on-the-job training (OJT) or paid training, good vacation benefits, good retirement benefits, good health benefits, and flexible hours or flex-time.
- An estimated 4,356 members (12%) of the Available Labor Pool are interested in a new job at \$10 an hour, 13,689 (39%) are interested at \$15 an hour, and 19,794 (53%) are interested at \$20 an hour.
- About 34% (12,617 individuals) of the Available Labor Pool have experience or training in food production or processing, while 30% (11,081) will work in that field. A total of 6,457 have experience/training and will work in that field.
- Of the 30,365 members in the subset of *employed members* of the Available Labor Pool, 8,877 (29%) consider themselves underemployed.

## The Cloud County Labor Basin

The Cloud County Labor Basin includes 10 counties in north central Kansas (see Map 1 below). The criterion used to include a county in this labor basin is whether it contains communities from which, it can be reasonably assumed, individuals may commute to the center of the labor basin (Concordia) for an employment opportunity. In the case of the Cloud County Labor Basin, it is reasonable that individuals may commute from (and within) the mapped area because these counties contain 1) communities with adequate transportation to the Concordia area and 2) communities that are within a 45-minute commute to the center of the labor basin<sup>1</sup>.

**Map 1: Cloud County Labor Basin**



The Cloud County Labor Basin has a total population of approximately 111,618, and a Civilian Labor Force of 61,081. The total number of employed is 59,739 and the average county unemployment rate was about 2.7% at the time of this study.

The Docking Institute’s independent analysis suggests that the Cloud County Labor Basin contains an Available Labor Pool of 37,190 individuals. This report describes characteristics of the Available Labor Pool for the Cloud County Labor Basin.

<sup>1</sup> The southern portion of Saline County and the eastern portion of Dickinson County are excluded from this analysis because Salina and Abilene offer many job opportunities for workers and potential workers. It is reasonable to assume, that while some workers do indeed travel from the southern and eastern portions of Saline and Dickinson Counties to the Concordia area for work, many potential workers from these counties will find employment opportunities within Salina and Abilene.

Please see the Methods section (page 23) for more information about the Institute’s Available Labor Pool Analysis methodology and the survey research methods used for this study. The glossary (page 25) provides definitions of terms used in this report.

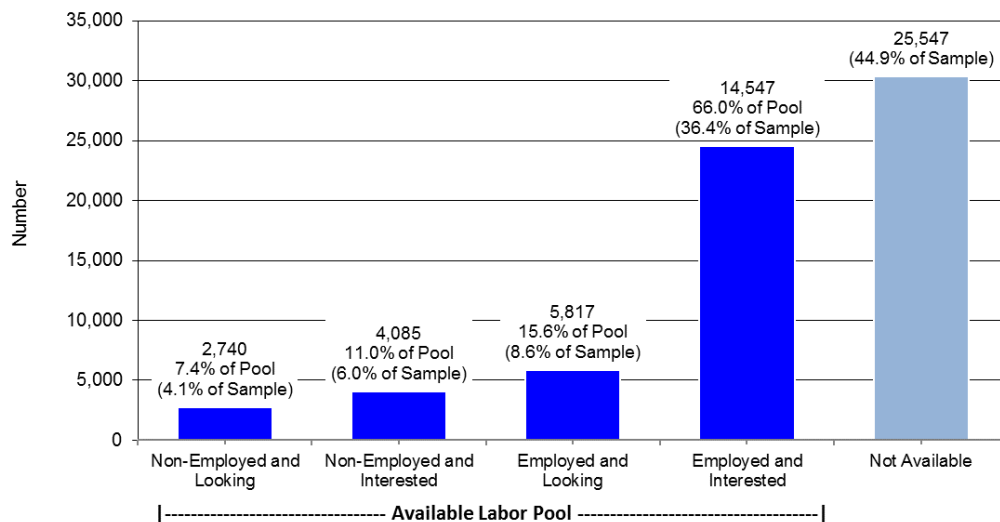
## The Cloud County Labor Basin’s Available Labor Pool

The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for employment, 2) not working *but* interested in employment, 3) currently working *and* looking for other employment, and 4) currently employed *but* interested in different employment for the right opportunities.

Figure 1 shows the extrapolated number of area adult residents that are members of the Available Labor Pool, as well as those that are not interested in a new or different job. The far right column shows that 44.9% of respondents are not available for a new or different job. The remaining 55.1% are members of the Available Labor Pool<sup>2</sup>.

It is estimated that 2,740 (7.4%) members of the Available Labor Pool are non-employed<sup>3</sup> *and* looking for employment, while 4,085 (11%) are non-employed *but* interested in a job for the right opportunities. In addition, 5,817 (15.6%) members of the Pool are employed *and* currently looking for different employment, while 14,547 (66%) are employed *but* interested in new employment for the right opportunities.

**Figure 1: The Available Labor Pool for the Cloud County Labor Basin**



The Available Labor Pool is composed of workers categorized as either 1) currently not employed and looking for full-time employment, 2) currently not employed *but* interested in full-time employment, 3) currently employed *and* looking for full-time employment, 4) currently employed *but* interested in other full-time employment for the *right opportunities*.

<sup>2</sup> The figure shows percentages of the Available Labor Pool as well as for the entire sample (shown in parentheses). For example, 4.1% of the entire sample is non-employed and looking for work, while this percentage is 7.4% for the Available Labor Pool itself.

<sup>3</sup> The terms “non-employed,” “not employed,” and “non-working” refer to officially unemployed members of the Civilian Labor Force *and* any non-employed/non-working full-time students, homemakers, retirees, and disabled individuals that indicate they are available for employment but that might not be “unemployed” officially.



Table 1 shows the gender, age, and education levels of the 37,190-member Available Labor Pool. Half (49.5%) of the Pool are women, and the average age is between 46 and 49 years old. Almost all (97.2%) have *at least* a high school diploma, more than three-quarters (77.4%) have *at least* some college experience, and two-fifths (40.4%) have *at least* a bachelor's degree. Almost a third (32.9%) speak Spanish, but most (76%) speak "only a little."

**Table 1: Age, Gender, and Education Levels of Available Labor Pool**

<b>Age Information</b>		Age in 2018		
Range		18 to 74		
Mean Average		46		
Median Average		49		
<b>Gender</b>		Number	Percent	
Female		18,409	49.5	
Male		18,781	50.5	
<b>Total</b>		37,190	100	
<b>Highest Level of Education Achieved</b>		Number	Percent	Cumulative Percent
Doctoral Degree		1,006	2.7	2.7
Masters Degree		4,560	12.3	15.0
Bachelors Degree		9,443	25.4	40.4
Associates Degree		7,688	20.7	61.0
Some College (including current students)		6,081	16.4	77.4
High School Diploma		7,386	19.9	97.2
Less HS Diploma		1,026	2.8	100
<b>Total</b>		37,190	100	
<b>"Do you speak Spanish?"</b>		Number	Percent	
"Yes"		12,235	32.9	} These percentages represent portions of 32.9%
<i>Speak Very Well</i>		1,878	15.3	
<i>Speak Fairly Well</i>		1,058	8.6	
<i>Speak Only a Little</i>		9,299	76.0	
<b>Total</b>			100	

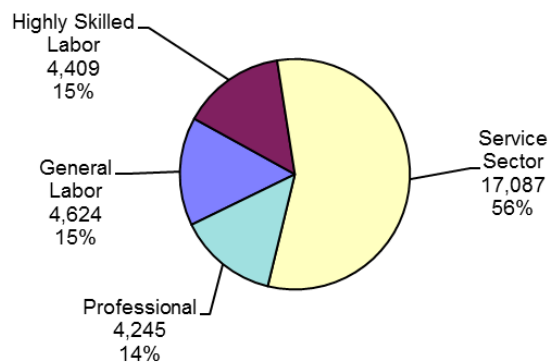
Table 2 shows the various occupational categories of the 37,190-member Available Labor Pool. General labor occupations represent 12.4% of the entire Available Labor Pool, while highly skilled blue-collar workers make up 11.9%. Traditional service-related occupations represent 45.9% of the Available Labor Pool, while professional occupations represent 11.4%. Non-employed members of the Pool make up 18.4% of the total.

**Table 2: Major Occupational Categories of Available Labor**

	Number	Percent	Years at Job	
			Mean	Median
General Labor/Delivery	4,463	12.0	5.9	5.7
Manufacturing/Maintenance/Trucking	161	0.4	5.0	5.0
<b>Total General Labor</b>	<b>4,624</b>	<b>12.4</b>	<b>5.5</b>	<b>5.4</b>
Mechanic/Welder/Comp Tech	3,245	8.7	7.6	6.0
Crew Management/Protection Services	1,164	3.1	5.5	1.0
<b>Total Highly Skilled Labor</b>	<b>4,409</b>	<b>11.9</b>	<b>6.6</b>	<b>3.5</b>
Customer Service	3,318	8.9	6.9	5.0
Clerical	3,838	10.3	8.4	5.7
Office or Dept Manager	3,389	9.1	9.7	7.0
Health Aid/Nurse	2,409	6.5	9.7	6.0
Education Aid/Teacher	4,133	11.1	15.1	10.0
<b>Total Service Sector</b>	<b>17,087</b>	<b>45.9</b>	<b>10.0</b>	<b>6.7</b>
Exec Management	810	2.2	24.0	24.0
Accounting/Engineering	1,790	4.8	12.2	9.4
Doctor/Professor/Attorney	1,561	4.2	9.5	4.0
Writer/Artist/Musician	84	0.2	10	10.0
<b>Total Professional Sector</b>	<b>4,245</b>	<b>11.4</b>	<b>13.9</b>	<b>11.9</b>
Homemaker/Student/Unemployed	3,546	9.5	n/a	n/a
Retired/Disabled	3,279	8.8	n/a	n/a
<b>Total Non-Employed</b>	<b>6,825</b>	<b>18.4</b>		
<b>Total</b>	<b>37,190</b>	<b>100</b>		

Figure 2 shows the occupational sectors of the *employed members* of the Available Labor Pool only. The *percentages* shown in Figure 2 differ from those presented in Table 2 because the table includes non-employed Available Labor Pool members.

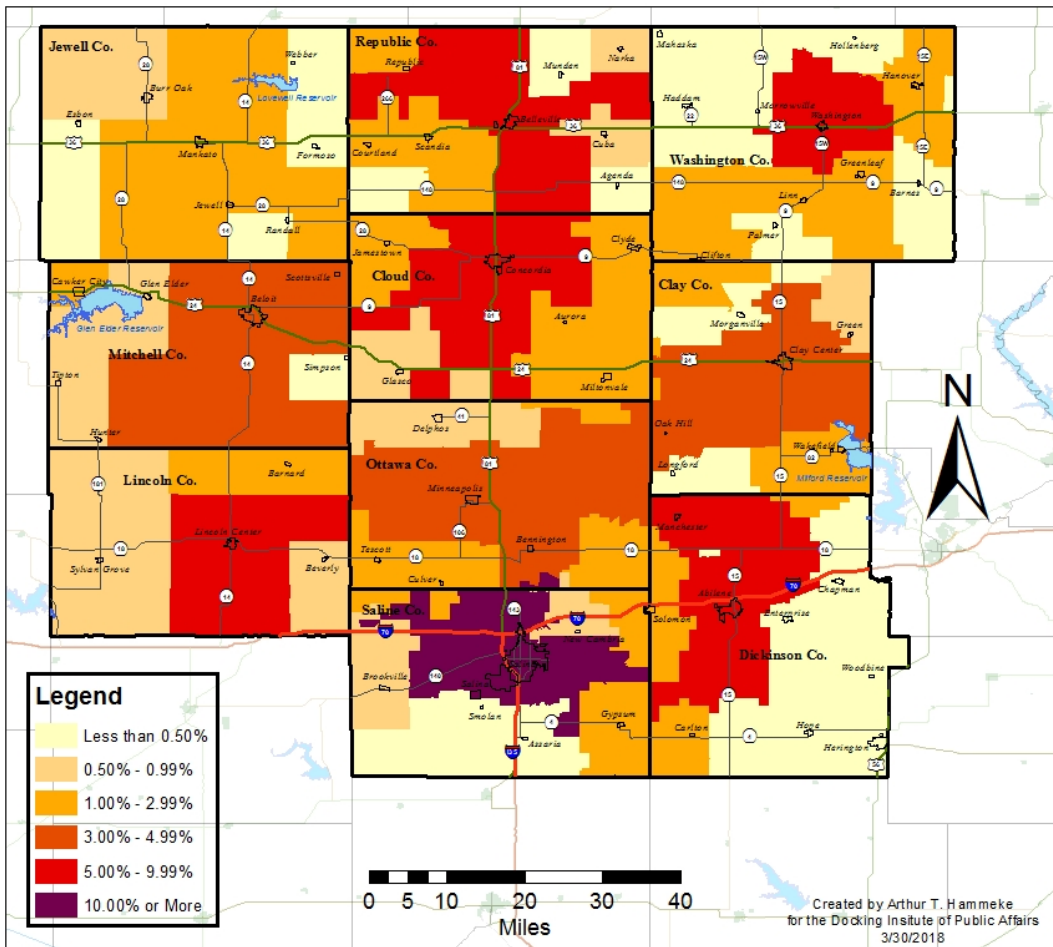
**Figure 2: Occupational Sectors of Available Labor (Employed Only)**



Map 2 shows how each ZIP code area compares to all other ZIP code areas in terms of the percent of total available labor in the Cloud County Labor Basin. The map shows:

- Ten percent or more of the entire labor basin's Available Labor Pool is located in ZIP code areas within Saline County. (See purple area in the map.)
- Between 5% and 9.99% of the entire labor basin's Available Labor Pool is located in ZIP code areas within Cloud, Dickinson, Lincoln, Republic and Washington Counties. (See red area in the map.)
- ZIP code areas in Clay, Mitchell, and Ottawa Counties contain 3% to 4.99% of the basin's Available Labor Pool. (See dark orange areas in the map.)
- ZIP code areas in every county contain 1% to 2.99% of the basin's Available Labor Pool. (See light orange areas in the map.)
- ZIP codes areas across the labor basin also contain less than 1% of the Available Labor Pool. (See light orange a light yellow areas on the map.)

**Map 2: Percent of Total Available Labor in Basin by ZIP Code**



## Current Skills and Work Experience

To gain perspective on the types of workers that are available for new and/or different employment in the Cloud County Labor Basin, survey respondents were asked questions assessing current work and previous work experience.

Table 3 shows the number of workers currently employed in various job categories, as well as the number of workers and non-workers that have previous work or training experience in those same job categories. The table also shows the sum of working Available Labor Pool members currently employed in a job category *plus* those who indicate previous training or experience in that particular field.

For example, 2,212 members of the Pool are currently employed as general laborers, construction, cleaners, and similar positions. An additional 1,182 Pool members (employed and currently non-employed) had previous employment experience or training in one of those jobs, for a total of 3,394 individuals.

**Table 3: Current Work Experience plus Previous Work or Training Experience**

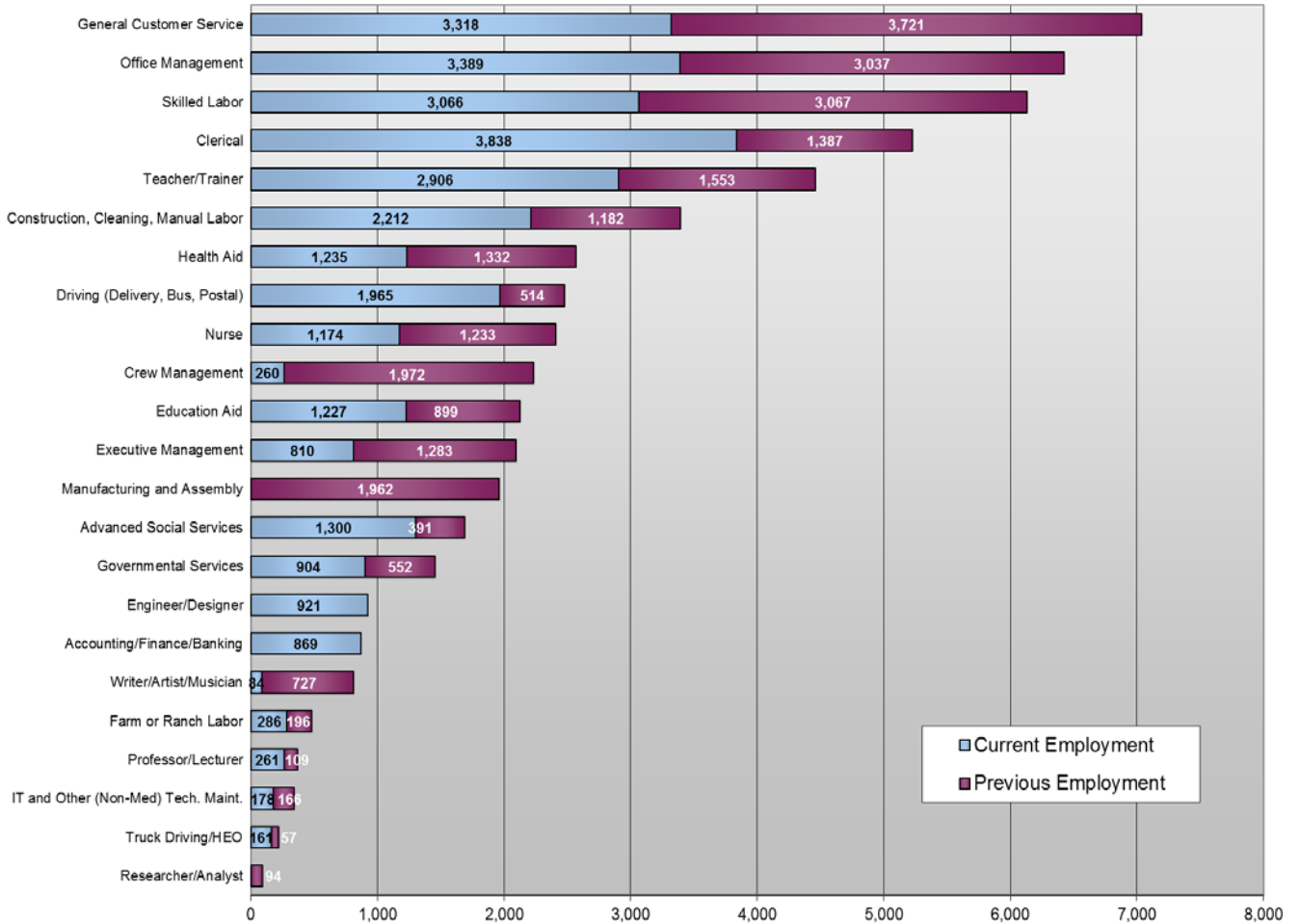
	Current Employment* Number +	Previous Work/Training Number =	Current plus Previous Work or Training** Number
<b>Working with Hands</b>			
Construction, Cleaning, Manual Labor	2,212	1,182	3,394
Farm or Ranch Labor	286	196	482
Manufacturing and Assembly	0	1,962	1,962
Maintenance	0	0	0
Driving (Delivery, Bus, Postal)	1,965	514	2,479
Truck Driving/HEO	161	57	219
Skilled Labor	3,066	3,067	6,134
Crew Management	260	1,972	2,232
<b>Working with People</b>			
General Customer Service	3,318	3,721	7,040
Office Management	3,389	3,037	6,426
Governmental Services	904	552	1,456
Executive Management	810	1,283	2,093
Advanced Social Services	1,300	391	1,691
<b>Working with Numbers</b>			
Clerical	3,838	1,387	5,225
Accounting/Finance/Banking	869	0	869
Researcher/Analyst	0	94	94
<b>Working with Technology</b>			
IT and Other (Non-Med) Tech. Maint.	178	166	345
Software Dev./Comp. Prog.	0	0	0
Engineer/Designer	921	0	921
<b>Providing Health Services</b>			
Health Aid	1,235	1,332	2,567
Nurse	1,174	1,233	2,407
Advanced Medical Practitioner	0	0	0
<b>Providing Educational Services</b>			
Education Aid	1,227	899	2,126
Teacher/Trainer	2,906	1,553	4,459
Professor/Lecturer	261	109	370
<b>Creative Arts</b>			
Writer/Artist/Musician	84	727	811
<b>Total</b>	<b>30,365</b>	<b>25,436</b>	<b>55,800</b>

\* Retired, disabled, non-working students, homemakers are not included.

\*\* An individual member of the Pool is counted only once within each employment category. If an individual's previous job is the same as the current job, he or she is not counted in the Previous Job Category.

Figure 3 shows the same information as that presented in Table 3, but in graphic format. Many Available Labor Pool members report current work experience or previous work/training as front desk clerks, retail sales positions, receptionists, and other jobs classified as “general customer service” workers. There are 3,318 working Pool members currently employed in this category and 3,721 previously employed/trained in this category, for a total of 7,040 individuals (total not shown in Figure 3).

**Figure 3: Current Work Experience plus Previous Work or Training Experience**



In addition to collecting data regarding the current employment status and previous work or training experience through a series of “open-ended” survey questions (the results of which are shown previously), respondents were asked about the six specific employment areas listed in Figure 4. Respondents were first asked if they had any training or work experience in a specific field and then if they would take a job in that field (regardless of their prior training or experience).<sup>4</sup>

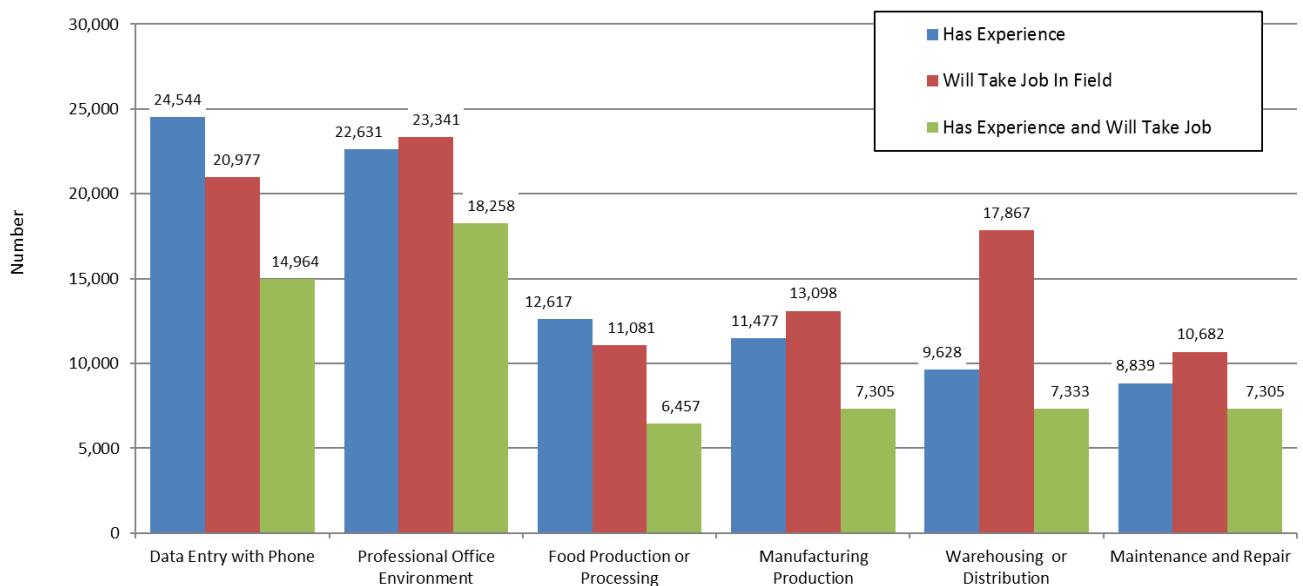
The figure shows that an estimated 24,544 Pool members report any experience or training in data entry with telephone operation (blue column), while fewer (20,977 individuals) would consider employment in that field (red column).

An estimated 22,631 members of the Pool have any experience or training as a professional office assistant (blue column), while more members of the Pool (23,341 individuals) would take a job in that field (red column).

The figure also shows the extrapolated numbers for working in food production or processing, working in a manufacturing production, working in warehousing or distribution, and working in maintenance and repair.

The third (green) column shows those with experience/training AND willing to work in the field.

**Figure 4: Experience/Training in Field & Willingness to Work in Field**



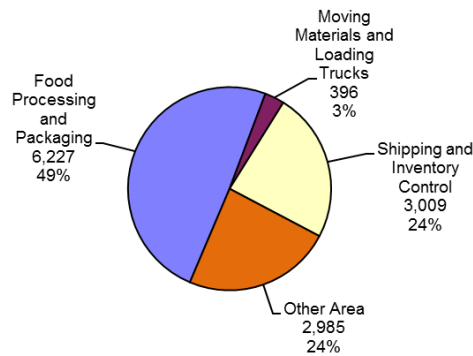
<sup>4</sup> Figure 4 differs substantially from Table 3 and Figure 3 (previous pages). For example, the “has experience” column above represents an extrapolated total of *all* Pool members answering “yes” to the question “do you have any experience or training in...” As such, Figure 4 provides a “50,000-foot view” of the skill sets of Pool members. Table 3 and Figure 3, on the other hand, provide extrapolated responses from Pool members (working in the first column, working and non-working in the second) about specific jobs – one current job and/or one previous job.

Survey respondents with training or experience in food production or processing, manufacturing production, and warehousing or distribution were asked additional questions to assess the type of work they performed at those jobs.

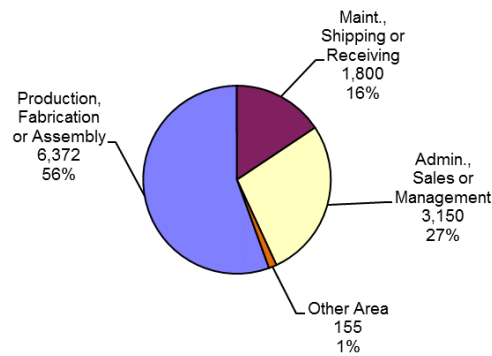
Figures 4a, 4b, and 4c show the responses to those questions.

The figures show that almost half (49%) of those with food production or processing experience worked in jobs involving food processing or packaging (see figure 4a), more than half (56%) of those with manufacturing experience worked in jobs involving production, fabrication, or assembly (see figure 4b), and about two-fifths (41%) of those with warehousing or distribution experience moved materials or loaded trucks (see figure 4c).

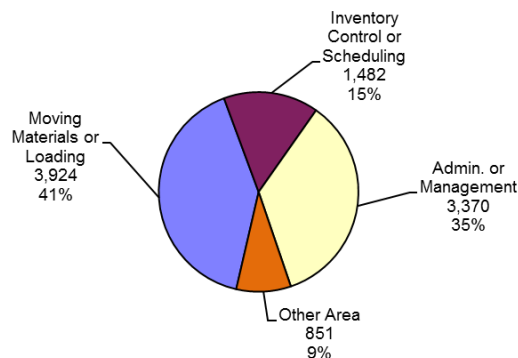
**Figure 4a: Work Experience in Food Production or Processing**



**Figure 4b: Work Experience in Manufacturing Production**



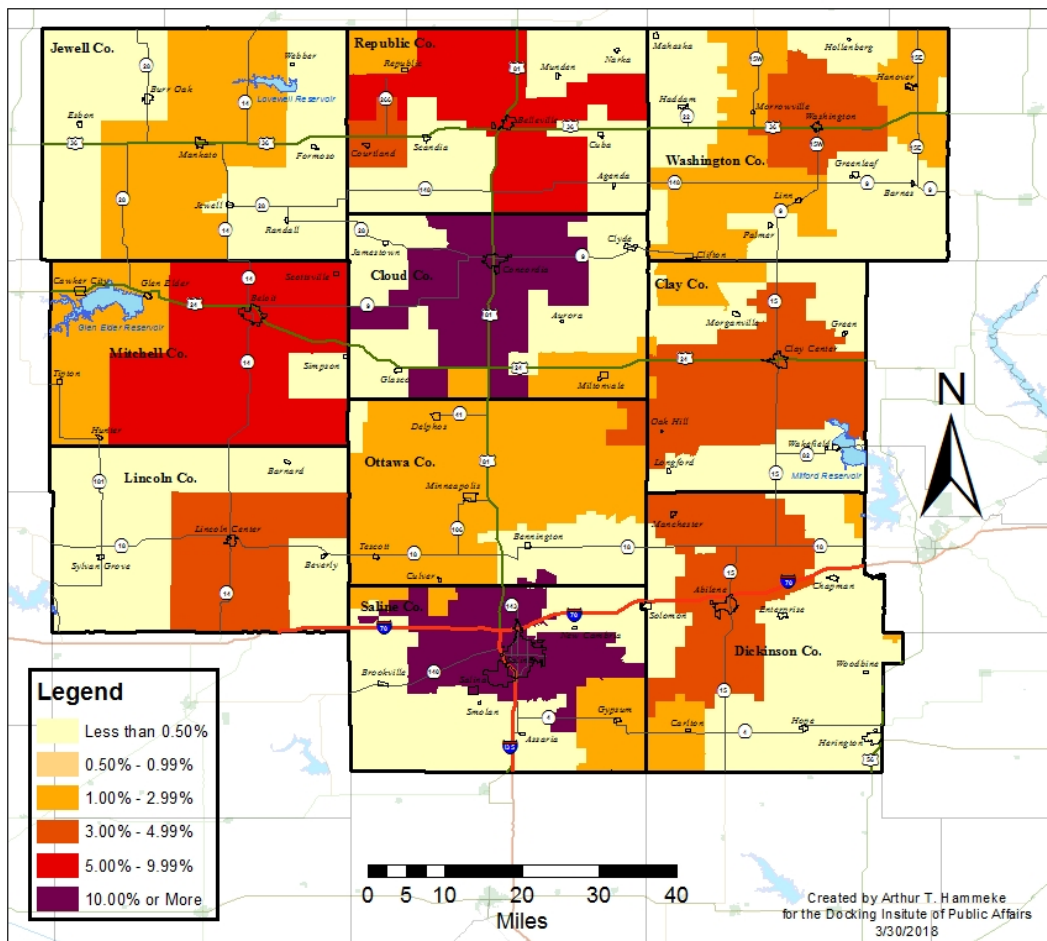
**Figure 4c: Work Experience in Warehousing or Distribution**



Working Available Labor Pool members were asked for the ZIP code of their workplaces. Map 3 shows the locations of workplaces employing Available Labor Pool members by ZIP code area. The map shows the following:

- Ten percent or more of the working members of the Available Labor Pool work in ZIP code areas in Cloud and Saline Counties. (See purple areas in the map.)
- Between 5% and 9.99% of the working members of the Pool work in ZIP codes areas in Mitchell and Republic Counties. (See red area in the map.)
- Workplaces located in ZIP code areas in Clay, Dickinson, Lincoln, and Washington Counties employ 3% to 4.99% of the basin’s working Pool members. (See dark orange areas in the map.)
- Workplaces located in ZIP code areas in most counties employ 1% to 2.99% of the basin’s working Pool members. (See light orange areas in the map.)
- Finally, less than 1% of the Pool work for employers located in ZIP code areas in the rest of the labor basin. (See light orange and light yellow areas on the map.)

**Map 3: Percent of Pool Member Workplaces by ZIP Code**





## Educational Experience

Table 1 (see page 4) shows that 77.4% of the Available Labor Pool report at least some college experience (with 61% holding at least an associate's degree and 40.4% holding at least a bachelor's degree).

Respondents that have at least some college experience or are currently enrolled in a community college, college, or university were asked to provide their major area of study. Answers are grouped into the following categories:

**Social Sciences:** Sociology, Psychology, Anthropology, Politics, and Social Work.

**Biological Sciences and Health:** Biology, Agriculture, Nursing, Pre-med, and Pre-vet.

**Physical Sciences and Engineering:** Physics, Geology, Chemistry, and Engineering.

**Business and Economics:** Management, Accounting, Finance, Marketing, and Economics.

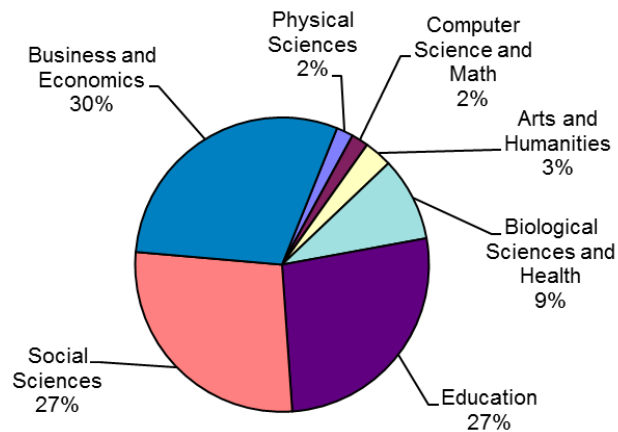
**Education:** Elementary and Secondary Teaching.

**Computer Science and Math:** Programming or Technology, Networking, Web Design, and Math.

**Arts and Humanities:** Art, Music, History, Philosophy, and Languages.

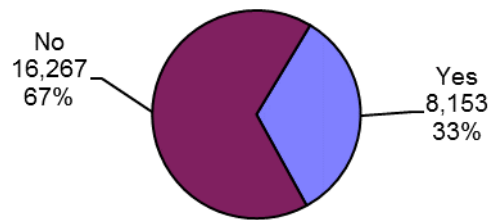
Figure 5 shows that Available Labor Pool members with at least some college experience indicate majors in business and economics (30%), social sciences (27%), education (27%), biological sciences and health (9%), arts and humanities (3%), computer science and math (2%), and physical sciences (2%).

**Figure 5: Undergraduate College Major**



All respondents that have completed at least some college were also asked: “Are you attending a community college or technical school now, or have you received a community college or technical degree?” Figure 6 shows that 33% of the respondents hold a community college or technical degree or are working on one at the present time.

**Figure 6: Community College or Technical College Experience**

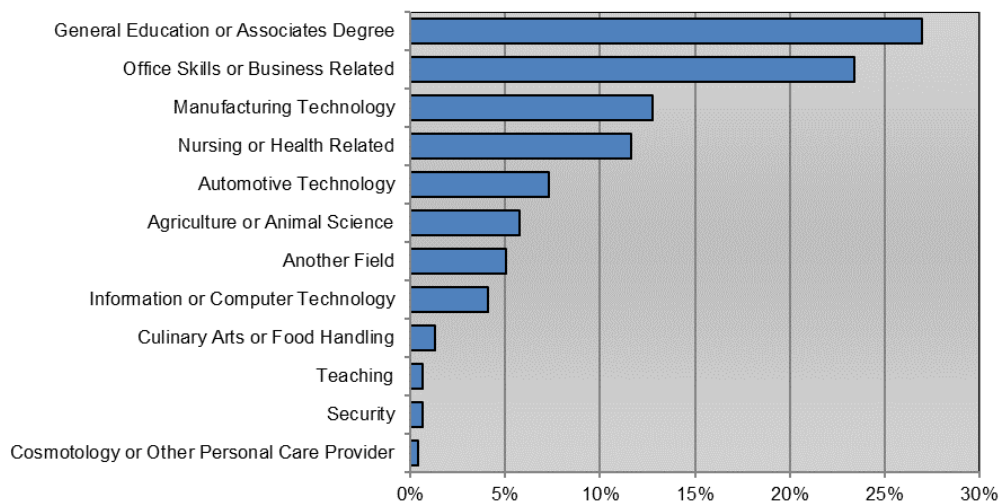


Respondents answering “yes” to the above question were asked for their area of study. Answer options are grouped into one of the options shown in Figure 6a. The figure shows that about 27% report studying general education or working towards an associate’s degree, and about 23% report studying office skills or business related courses.

About 13% and 12% report studying manufacturing technology and nursing or a health related field, respectively.

Between 5% and 7% report studying automotive technology, agriculture or animal science, and some other field. Areas mentioned in “some other field” include construction management, commercial advertising, marketing, mortuary science, travel and tourism, and geographic information systems.

**Figure 6a: Community or Technical College Area of Study**



## Considerations for Employment

An important consideration for many employers looking to locate or expand operations is whether workers are willing to pursue new employment opportunities. Some workers may be available for new employment but are unwilling to switch from their current field to a different type of position, for example. A large percentage of those unwilling to change their jobs might limit the types of employers that can enter the labor basin.

This does not seem to be the case for the Cloud County Labor Basin. Figure 7 shows that a clear majority of the Available Labor Pool (31,864 members or 85.7%) are willing to accept positions outside of their primary fields of employment.

**Figure 7: Considerations for Employment**

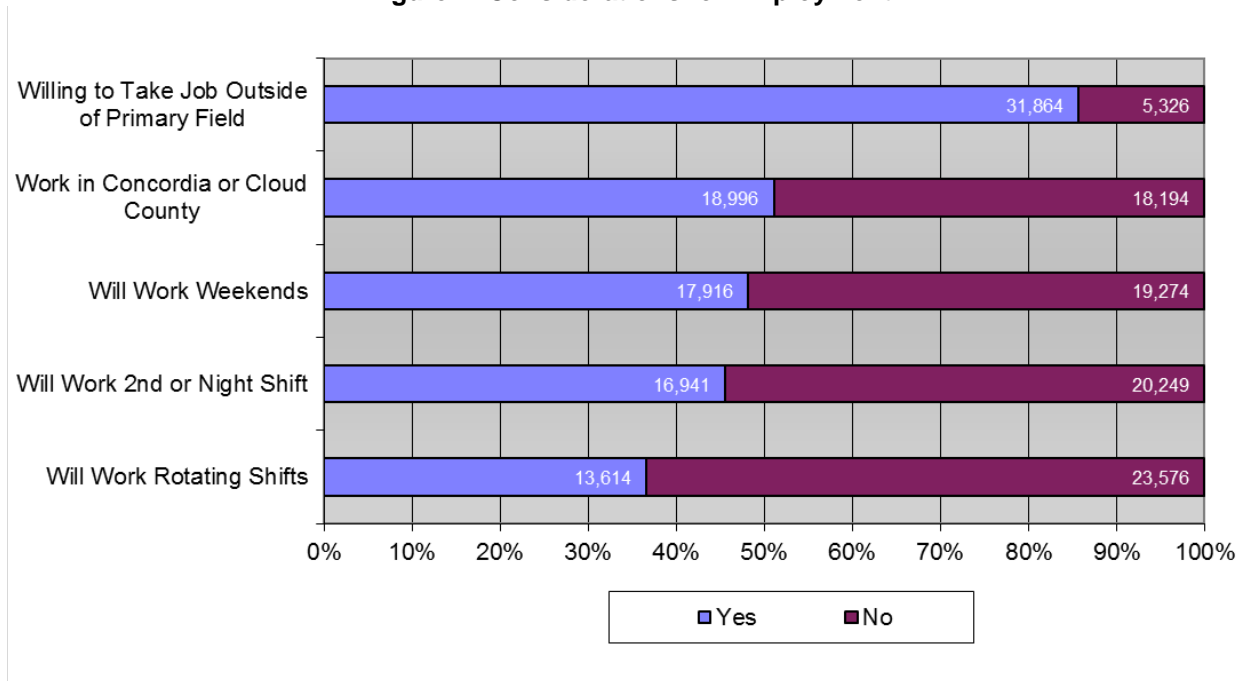
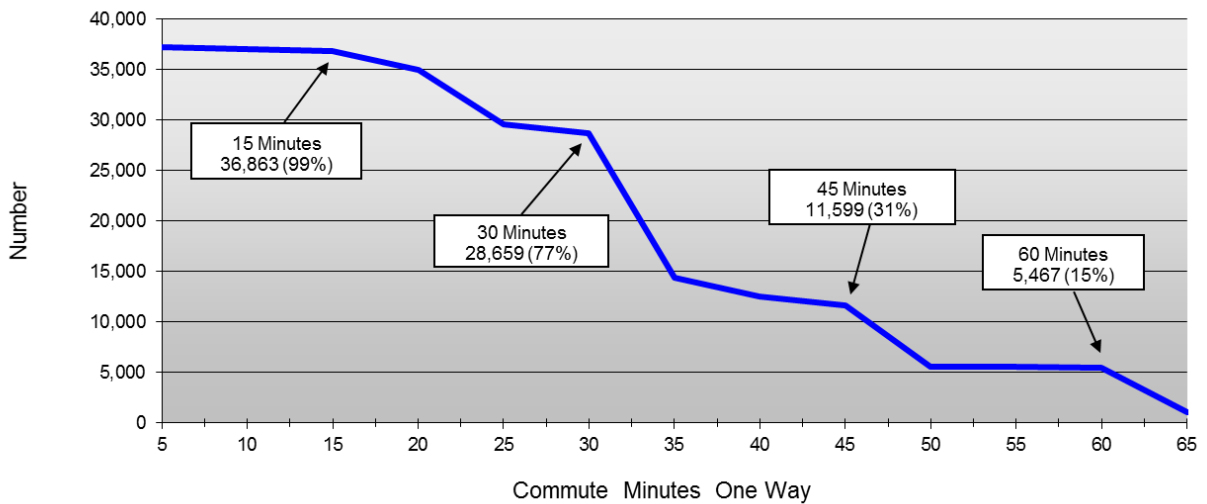


Figure 7 also shows responses to three questions regarding work shifts, as well as working in Concordia or Cloud County.

The figure shows that more than half (51%) of the Available Labor Pool are willing to work in Concordia or Cloud County, 48% are willing to work weekends, 46% are willing to work a second shift or night shift, and about 37% are willing to rotating shifts for a new or different job.

Another important consideration for many employers is whether workers are willing to commute for a new or different employment opportunity. Figure 8 shows that the Available Labor Pool in the Cloud County Labor Basin is open to commuting. Not quite a third (31%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 77% will commute up to 30 minutes, one-way, for employment. Essentially all (99%) will travel up to 15 minutes, one-way, for employment.

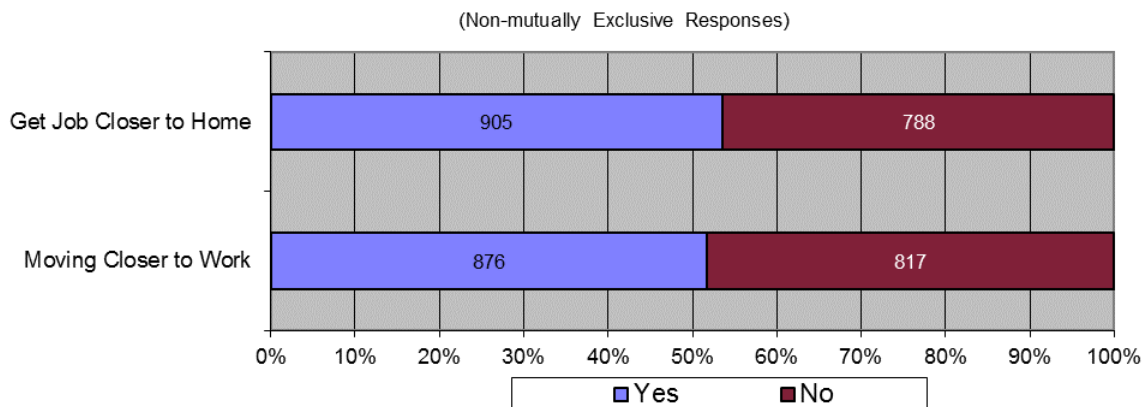
**Figure 8: Available Labor by Commute Minutes**



Working members of the Pool who indicated a willingness to commute farther than 60 minutes, one-way, for a job, were asked two questions: “Have you considered moving to be closer to your job?” and “Have you considered getting a job closer to your home?”

Figure 8a shows that about half (53%) of this subset of the Pool would consider getting a new job closer to their places of residence, while about 52% would consider moving closer to their places of work.

**Figure 8a: Being Closer to Work**

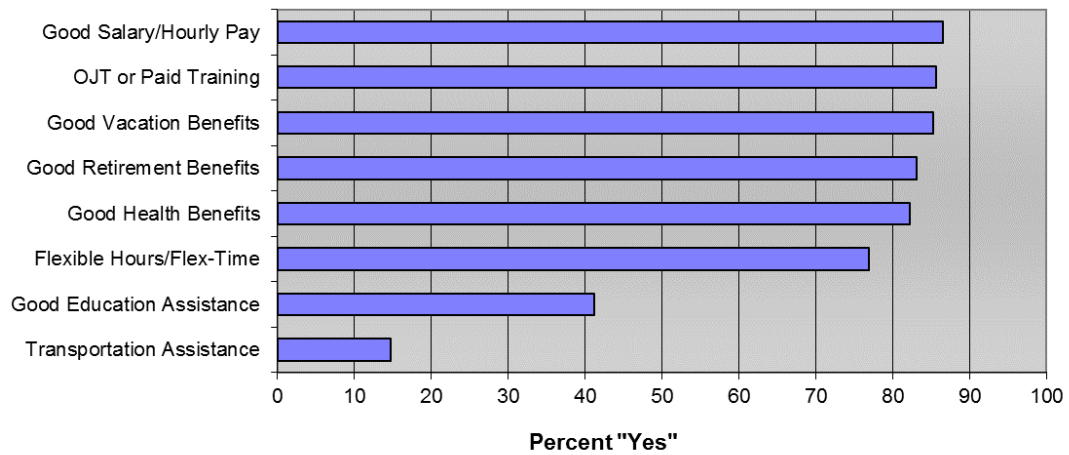


Available Labor Pool members were asked about various benefits that might be important when considering whether to take a new or different job. Respondents were asked if each benefit would be a “very important” consideration for taking a new job, with answer options including “yes” and “no.” (Responses are non-mutually exclusive.)

Figure 9 shows that the six most important benefits are, in order: good salary or hourly pay, on-the-job training (OJT) or paid training, good vacation benefits, good retirement benefits, good health benefits, and flexible hours or flex-time. All of these benefits are considered “very important” by 75% or more of the Available Labor Pool. Good educational assistance and transportation assistance are considered “very important” by 41% and 15% of Pool members, respectively.

**Figure 9: Benefits Very Important to Change Employment**

(Non-mutually Exclusive Responses)



The left column in Table 4 shows the percentages of all Pool members, while the right column shows the percentages of *working members* of the Available Labor Pool that are offered the benefit from their current employers. Flexible hours/flex-time stands out with a 21.6% difference between those Pool members considering this benefits very important (76.9%) and those working Pool members offered this benefit (55.3%). Good vacation benefits also stands out as a benefit desired by (85.3%) a larger percentage of Pool members than offered (73.8%) to working Pool members.

Good education assistance stands out as a benefit less desirable than currently offered by employers, suggesting that employers already offer this benefit in sufficient quantities and/or that the labor pool is already highly educated.

**Table 4: Desired Benefits and Current Benefits Offered**

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent	<i>Difference</i>
Good Salary/Hourly Pay	86.6	87.6	-1.0
OJT or Paid Training	85.6	86.1	-0.5
Good Vacation Benefits	85.3	73.8	11.5
Good Retirement Benefits	83.1	78.1	5.0
Good Health Benefits	82.2	86.8	-4.6
Flexible Hours/Flex-Time	76.9	55.3	21.6
Good Education Assistance	41.2	52.0	-10.8
Transportation Assistance	14.7	15.6	-0.9

\*Working Pool members who are offered benefit by employers.

## Desired Wages of Available Labor Pool

Desired wages are another important consideration for employers and economic developers. Figure 10 shows desired wages for members of the Available Labor Pool. It is estimated that 26,063 people (or 70% of the available labor) are interested in a new job at \$25 an hour<sup>5</sup>.

An estimated 19,794 (53%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 13,689 (37%) are interested at \$15 an hour.

Finally, an estimated 4,356 people (12%) are interested in a new job at \$10 an hour.

**Figure 10: Available Labor by Desired Hourly Wage**

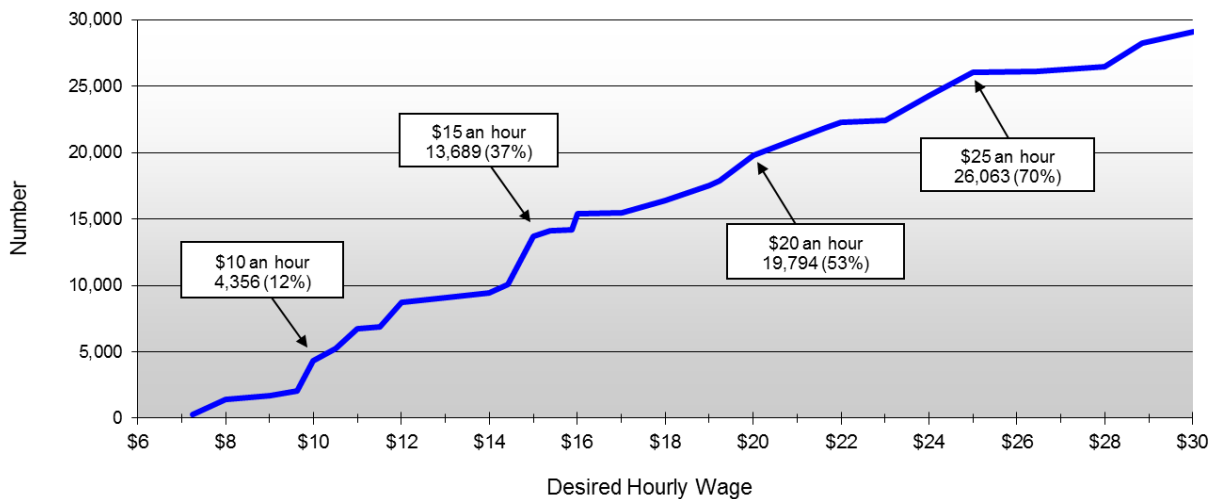


Figure 10 suggests the obvious: that the higher the wage, the larger the pool of available labor. As noted, 4,356 members of the Available Labor Pool are available for a new or different job at \$10 an hour. At \$9 an hour there are 1,717 members of the pool available. As such, an increase of \$1 per hour from \$9 to \$10 represents an increase of 2,639 workers and potential workers.

The graph also highlights various “wage preference plateaus” that may be of interest to current and potential employers to avoid. A wage preference plateau is a situation in which an increase in wage results in an insignificant or small increase in available labor. For example, 8,704 members of Pool are interested in a job at \$12 an hour. At \$13 an hour there are an estimated 9,108 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is only 404 individuals – a relatively small increase given the overall size of this subset of the Available Labor Pool.

Additional wage plateaus exist between \$13 and \$14 an hour (an increase of 354 individuals), and \$16 and \$17 an hour (an increase of 119 individuals).

<sup>5</sup> See Appendix for an hourly wage/annual salary conversion chart.

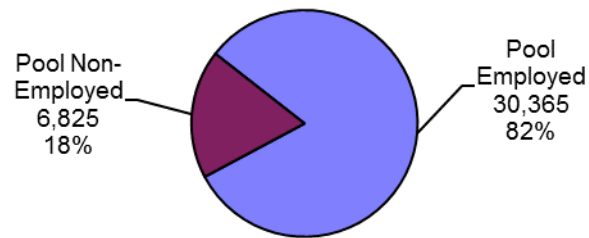
## Subset: Underemployed Available Labor Pool Workers

Underemployment (individuals possessing skills and/or training levels that exceed the responsibilities of their current job) is a significant issue in many communities. To assess underemployment in the Cloud County Labor Basin, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.<sup>6</sup> They were then asked a series of questions assessing if they perceive themselves as underemployed because 1) their skill levels are greater than their current job requires, 2) they possess higher levels of education than those required on the job, 3) they earned a higher income at a similar job previously, or 4) they are limited in the number of hours that they may work.

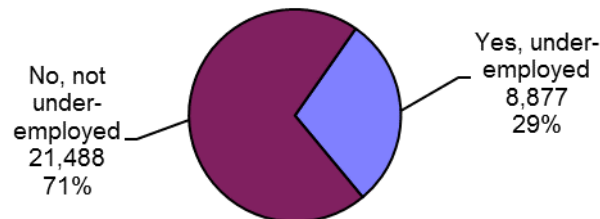
Of the 30,365 *employed members* of the Available Labor Pool (shown in Figure 11), more than a quarter (see Figure 12) answered “yes” to one or more of the questions presented above. These Pool members are considered “underemployed.”

Figure 12 shows that the underemployed workers represent 29% (or 8,877 individuals) of the employed members of the Pool.

**Figure 11: Employed and Non-Employed Members of the Available Labor Pool**



**Figure 12: Underemployed Workers**



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<sup>6</sup> “Because of circumstances, some workers have jobs that do not fully match their skills, education, or experiences. For example, a master plumber taking tickets at a movie theater would be a mismatch between skill level and job requirements. Do you consider yourself an underemployed worker because...?”



Table 5 shows that the average age of the underemployed subset of the Available Labor Pool is between 45 and 49 years old. Almost two-thirds (65.9%) are female. Not quite a third (30.5%) hold at least a bachelor's degree and all (100%) have completed high school.

**Table 5: Age, Gender, and Education Levels of Underemployed Workers**

<b>Age Information</b>	Age in 2018		
Range	19 to 67		
Mean Average	45		
Median Average	49		
<b>Gender</b>	Number	Percent	
Female	5,853	65.9	
Male	3,023	34.1	
<b>Total</b>	<b>8,877</b>	<b>100</b>	
<b>Highest Level of Education Achieved</b>			Cumulative Percent
Doctoral Degree	77	0.9	0.9
Masters Degree	922	10.4	11.3
Bachelors Degree	1,705	19.2	30.5
Associates Degree	1,738	19.6	50.0
Some College (including current student)	2,044	23.0	73.1
High School Diploma	2,390	26.9	100
Less HS Diploma	0	0.0	
<b>Total</b>	<b>8,877</b>	<b>100</b>	

Table 5 shows that the education levels of the underemployed workers differ somewhat from the entire Available Labor Pool. Those with higher education levels are less likely to consider themselves as underemployed than those with lower education levels. For example, the table below shows that 11.3% of the underemployed workers hold at least a master's degree, while the percentage for the Available Labor Pool as a whole is 15% (See Table 1, page 4).

In addition, 30.5% of underemployed workers have completed at least a bachelor's degree, while this figure is 40.4% for the entire Pool (See Table 1, page 4).

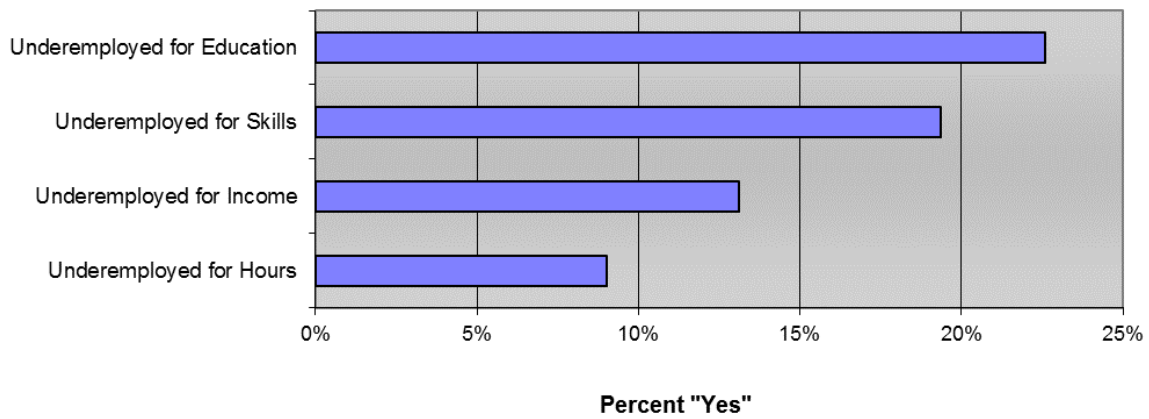
Figure 13 shows the percentages of the positive responses (i.e., “yes” answers) to the various measures of underemployment.

About 23% of this subset possess education levels exceeding those needed for their current jobs, while about 19% possess skills not used currently on the job.

About 13% earned more money at a past but similar job, while 9% are unable to work as many hours as desired.

**Figure 13: Reasons for Underemployment**

(Non-mutually Exclusive Responses)



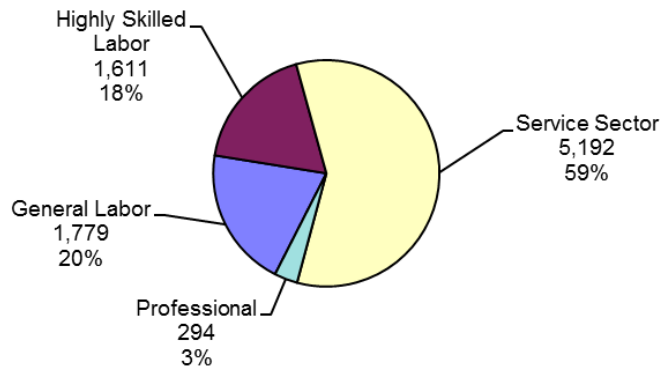
Underemployed workers were asked if they “are available for a new or different job because they are underemployed?” Figure 14 shows that half (52% or 4,637 individuals) of the underemployed workers are seeking new employment to address underemployment.

**Figure 14: Seeking New Employment to Address Underemployment**



Figure 15 shows the occupation sectors of underemployed workers. The figure shows that 20% of the underemployed workers are general laborers, and 18% are highly skilled blue-collar workers. Most underemployed workers are employed as service sector workers (59%), while 3% hold professional positions.

**Figure 15: Occupational Sectors of Underemployed Workers**



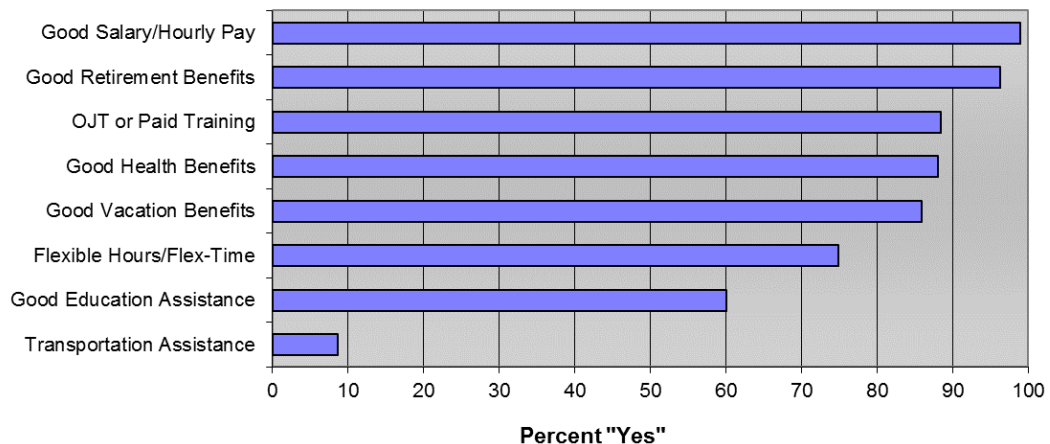
Comparing Figure 15 with Figure 2 (page 5) suggests that fewer professional and highly skilled laborers but more general laborers and service sector employees consider themselves underemployed. Figure 2 (page 5) shows that the subset of working Available Labor Pool members consists of 15% general laborers, 15% highly skilled laborers, 56% service workers, and 14% professionals.

Figure 16 shows that the six most important benefits for this subset are, in order, good salary or hourly pay, good retirement benefits, on-the-job training (OJT) or paid training, good health benefits, good vacation benefits, and flexible hours/flex-time. All of these benefits are considered “very important” by 70% or more of underemployed workers.

Good educational assistance follows at about 60%. Transportation assistance is considered “very important” by about 9%.

**Figure 16: Underemployed Workers – Benefits Very Important to Change Jobs**

(Non-mutually Exclusive Responses)



## Methods

The Cloud County Labor Basin has a total population of approximately 111,618, and a Civilian Labor Force of 61,081. The total number of employed is 59,739 and the average county unemployment rate was about 2.7% at the time of this study.

The Docking Institute's analysis suggests that the Cloud County Labor Basin contains an Available Labor Pool of 37,190 individuals.

### ***Explaining the Civilian Labor Force***

Traditional methods of assessing the dynamics of the labor force have concentrated on what the Bureau of Labor Statistics calls the Civilian Labor Force. The Civilian Labor Force represents "the civilian non-institutional population, 16 years of age and over classified as employed or unemployed." The BLS defines "non-institutional civilians" as those individuals who are not inmates in institutions and who are not on active duty in the Armed Forces; and "unemployed civilians" as civilians available for work and who had "made specific efforts to find employment" in the previous four weeks.

While a review of Civilian Labor Force statistics represents the starting point for understanding labor force dynamics in the Cloud County Labor Basin, there are some limitations associated with these statistics. These limitations occur because the Civilian Labor Force *excludes* individuals who may be willing and able to be gainfully employed but have not made specific efforts to find employment in the last four weeks. These individuals may include full-time students, homemakers, unemployed who are no longer seeking employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be available for work but have not been looking for work recently.

In addition, most new employers draw their workforce from those who are presently employed, not those who are unemployed. As such, Bureau of Labor Statistics data (such as the Civilian Labor Force) do not specifically address the possibility of workers moving from one industry to another in search of other employment opportunities.

### ***Defining the Available Labor Pool***

An alternative to the Civilian Labor Force is the "Available Labor Pool."<sup>7</sup> The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for employment, 2) currently not working *but* interested in employment given the right opportunities, 3) currently working *and* looking for other employment, and 4) currently working and not looking, *but* interested in different employment for the right opportunities.

There are two key differences between the Civilian Labor Force and the Available Labor Pool. First, the Available Labor Pool methodology expands the pool of potential workers by including workers excluded from the Civilian Labor Force.<sup>8</sup> Secondly, the number of potential workers is

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<sup>7</sup> The Available Labor Pool includes potential workers excluded from the Civilian Labor Force (such as full-time students willing to take a job, homemakers who have not yet sought employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be willing and able to be gainfully employed).

<sup>8</sup> The number that is added to the Civilian Labor Force is derived by taking from the survey the total number of full-time students, homemakers, military, retirees, and long-term unemployed, who state that they are seeking or available for employment, and dividing this number by the total number of

then *restricted* to those individuals who indicate that they are looking for work or are interested in new employment. The advantage of this methodology is that it allows researchers to examine those members of the labor pool who have a propensity to consider a job opportunity given their employment expectations. Even with these restrictions, it should be noted that, in practice, not all members of the Available Labor Pool would apply for a new job opportunity. However, the Available Labor Pool figure for a labor basin reveals to current employers and potential employers better information about the quantity and quality of the labor pool than do Civilian Labor Force data and unemployment statistics. The Available Labor Pool represents a substantial number of workers and potential workers for employers to draw upon in the Cloud County Labor Basin.

### **Description of Survey Research Methods**

Data for this study were collected from a random digit telephone survey of adults living in 10 counties in north central Kansas: Clay, Cloud, Jewell, Lincoln, Mitchell, Ottawa, Republic, Washington, and portions of Saline and Dickinson.<sup>9</sup> Surveying took place from February 22 through March 2, 2018, using a Computer Assisted Telephone Interviewing (CATI) system. A total of 602 households were successfully contacted during the data collection period, and a randomly selected adult in each was asked to participate in the study.<sup>10</sup> In 359 households the selected adult agreed to be interviewed. This represents a cooperation rate of 59.6% and a margin of error of +/-5.17%.

Survey respondents that were 65 years of age or older, retired and not looking for work nor interested in a new or different job were not asked the entire battery of survey questions and are not included in the analysis of this report. The remaining respondents (all other working and non-working respondents) total to 304 and are considered eligible respondents. Of these respondents, 198 (or 65%) are looking for work or are interested in new or different employment. This subgroup is the Available Labor Pool for the study region. The Margin of Error for the region-wide Available Labor Pool is +/- 6.97%.

The study sponsors and Institute personnel agreed upon the survey items used, with the former identifying the study objectives and the latter developing items and methodologies that were valid, reliable and unbiased. Question wording and design of the survey instrument are the property of the Docking Institute.<sup>11</sup>

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respondents. This quotient is then multiplied by the total number of people in the labor basin who are 18 to 65 years old.

<sup>9</sup> Cell-phone and land-line telephone numbers were assembled by randomly generating suffixes within specific area codes and prefixes. As such, unlisted numbers were included in this sample, minimizing the potential for response bias. Known business, fax, modem, and disconnected numbers were screened from the sample in efforts to reach households only (and to minimize surveyor dialing time). Up to eight attempts were made to contact each respondent during three calling periods (10 AM to Noon, 2 PM to 4 PM, and 6 PM to 9 PM). Initial refusals were re-attempted by specially trained "refusal converters," which aided in the cooperation rate.

<sup>10</sup> When a land-line number was called, surveyors requested to "speak with an adult over the age of 17 that has had the most recent birthday." When a cell-phone number was called, the respondent was asked if they were over the age of 17.

<sup>11</sup> A detailed summary of the method of analysis used in this report can be found in Joseph A. Aistrup, Michael S. Walker & Brett A. Zollinger, "The Kansas Labor Force Survey: The Available Labor Pool and Underemployment." *Kansas Department of Human Resources*, 2002.

## Glossary of Terms

**Cloud County Labor Basin** – The Cloud County Labor Basin includes Clay, Cloud, Jewell, Lincoln, Mitchell, Ottawa, Republic, Washington Counties, as well as the northern portion of Saline and the western portion of Dickinson County in north central Kansas.

**Civilian Labor Force** – The Civilian Labor Force represents “the civilian non-institutional population, 16 years of age and over classified as employed or unemployed.” The Bureau of Labor Statistics defines “non-institutional civilians” as those individuals who are not inmates in institutions and who are not on active duty in the Armed Forces; and “unemployed civilians” as civilians available for work and who had “made specific efforts to find employment” in the previous four weeks.

**Available Labor Pool** – The Available Labor Pool is composed of workers and potential workers categorized as either 1) currently not working *and* looking for employment, 2) currently not working in any manner *but* interested in a new or different job given the right opportunities, 3) employed (full- or part-time) *and* looking for other employment, and 4) currently employed and not looking, *but* interested in different employment given the right opportunities.

**Desired Wage** – The desired wage is the hourly wage that a respondent would consider accepting to take a new or different job given the right opportunities. If a respondent offers a yearly salary instead of an hourly wage, a wage is computed by dividing the salary by 2,080.

**Minutes Willing to Travel** – “Minutes Willing to Travel” indicates the minutes that a respondent is willing to travel, one-way, for a new or different job opportunity given the right opportunities.

**Underemployment** – Individuals who perceive themselves as possessing skills and/or training levels that exceed the responsibilities of their current job, have educations that exceed those necessary for their current job, have earned a higher salary/hourly wage for a previous but similar job, or are unable to work as many hours as desired at their current job.

**Job Sectors** – “Job sectors” include the following (with examples shown):

- **General Labor** includes occupations such as cleaning, construction, delivery, and maintenance.
- **High-Skill Blue Collar** includes occupations such as police, fire-fighting, postal worker, welder, high-skilled mechanic, computer technician, and lab technician.
- **Service Sector** includes occupations such as clerical worker, waitress, retail sales clerk, bookkeeper, para-professional, certified nurse’s assistant, nurse, teacher and small business manager.
- **Professional White Collar** includes occupations such as administrator, business executive, professional salesperson, doctor, lawyer, professor, and engineer.

## Appendix: Hourly Wage to Annual Salary Conversion Chart

Hourly Wage	Annual Salary	Hourly Wage	Annual Salary
\$5.00	\$10,400	\$30.50	\$63,440
\$5.50	\$11,440	\$31.00	\$64,480
\$6.00	\$12,480	\$30.50	\$63,440
\$6.50	\$13,520	\$31.00	\$64,480
\$7.00	\$14,560	\$31.50	\$65,520
\$7.50	\$15,600	\$32.00	\$66,560
\$8.00	\$16,640	\$32.50	\$67,600
\$8.50	\$17,680	\$33.00	\$68,640
\$9.00	\$18,720	\$33.50	\$69,680
\$9.50	\$19,760	\$34.00	\$70,720
\$10.00	\$20,800	\$34.50	\$71,760
\$10.50	\$21,840	\$35.00	\$72,800
\$11.00	\$22,880	\$35.50	\$73,840
\$11.50	\$23,920	\$36.00	\$74,880
\$12.00	\$24,960	\$36.50	\$75,920
\$12.50	\$26,000	\$37.00	\$76,960
\$13.00	\$27,040	\$37.50	\$78,000
\$13.50	\$28,080	\$38.00	\$79,040
\$14.00	\$29,120	\$38.50	\$80,080
\$14.50	\$30,160	\$39.00	\$81,120
\$15.00	\$31,200	\$39.50	\$82,160
\$15.50	\$32,240	\$40.00	\$83,200
\$16.00	\$33,280	\$40.50	\$84,240
\$16.50	\$34,320	\$41.00	\$85,280
\$17.00	\$35,360	\$41.50	\$86,320
\$17.50	\$36,400	\$42.00	\$87,360
\$18.00	\$37,440	\$42.50	\$88,400
\$18.50	\$38,480	\$43.00	\$89,440
\$19.00	\$39,520	\$43.50	\$90,480
\$19.50	\$40,560	\$44.00	\$91,520
\$20.00	\$41,600	\$44.50	\$92,560
\$20.50	\$42,640	\$45.00	\$93,600
\$21.00	\$43,680	\$45.50	\$94,640
\$21.50	\$44,720	\$46.00	\$95,680
\$22.00	\$45,760	\$46.50	\$96,720
\$22.50	\$46,800	\$47.00	\$97,760
\$23.00	\$47,840	\$47.50	\$98,800
\$23.50	\$48,880	\$48.00	\$99,840
\$24.00	\$49,920	\$48.50	\$100,880
\$24.50	\$50,960	\$49.00	\$101,920
\$25.00	\$52,000	\$49.50	\$102,960
\$25.50	\$53,040	\$50.50	\$104,000
\$26.00	\$54,080	\$51.00	\$105,040
\$26.50	\$55,120	\$51.50	\$106,080
\$27.00	\$56,160	\$52.00	\$107,120
\$27.50	\$57,200	\$52.50	\$108,160
\$28.00	\$58,240	\$53.00	\$109,200
\$28.50	\$59,280	\$53.50	\$110,240
\$29.00	\$60,320	\$54.00	\$111,280
\$29.50	\$61,360	\$54.50	\$112,320
\$30.00	\$62,400	\$55.00	\$113,360

End of Report

