

West Central Missouri Region Labor Availability Analysis – 2018

Including a comparison to data from the
2005, 2009, 2012, and 2015 Labor Availability Analyses

Bates • Benton • Caldwell • Carroll • Cass • Chariton • Clay •
Cooper • Henry • Hickory • Howard • Jackson • Johnson • Lafayette •
Moniteau • Morgan • Pettis • Ray • Saline • St. Clair Counties



Prepared For

Central Missouri Economic Development Alliance





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Mission:

To facilitate effective public policy decision-making.

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University Center for Survey Research are dedicated to
serving the people of Kansas and surrounding states.

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2005, 2009, 2012, and 2015 Labor Availability Analyses

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Central Missouri Economic Development Alliance

Represented by:

Henry County
Johnson County
Lafayette County
Pettis County
Saline County

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Executive Summary

The West Central Missouri Region includes 20 counties located in west central Missouri. The purpose of this report is to assess the “Available Labor Pool” in this labor basin. The Available Labor Pool represents those who are looking for employment or are interested in new jobs for the right employment opportunities.

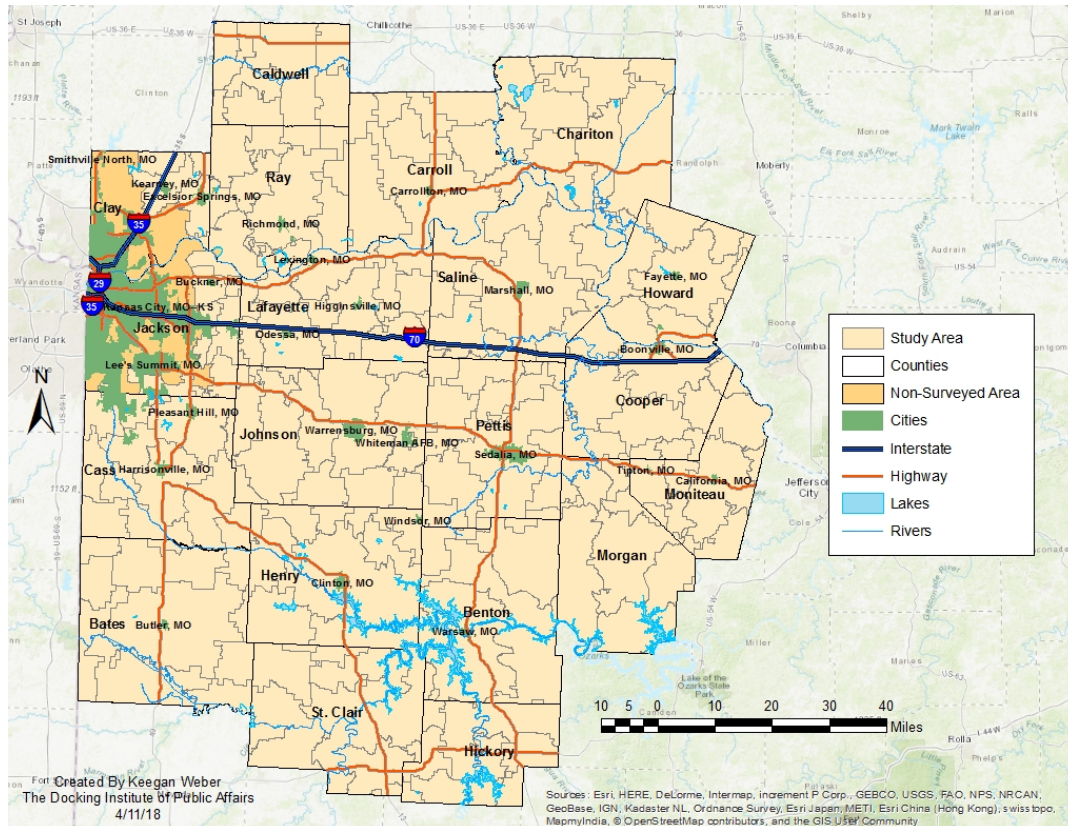
The Docking Institute’s independent analysis of the labor basin shows that:

- The population of the West Central Missouri Labor Region is 531,838. The Civilian Labor Force is 264,431. The Available Labor Pool contains 155,009 individuals.
- Of the *non-working* members of the Available Labor Pool, an estimated 12,869 (8.3%) are currently looking for work and 29,667 (19.1%) are interested in working given the right opportunities. Of the *working* members of the Available Labor Pool, 22,288 (14.4%) are currently looking for work, while 90,185 (58.2%) are interested in different jobs given the right opportunities.
- More than three-fourths (77.7%) of the Available Labor Pool have *at least* some college experience and about 97% have *at least* a high school diploma. The average age for members of the Pool is between 47 and 50 years old, and men make up more than half (52.4%) of the Pool.
- Slightly more than 18% of the Available Labor Pool is currently employed as general laborers, while an additional 8% work in government services or technical/highly skilled blue-collar occupations. More than a third (35.2%) of the Pool work in service sector jobs, while about a tenth (10.8%) work in professional, white-collar jobs. More than a quarter (27.6%) are not currently working outside the home.
- A vast majority (81%) of the Available Labor Pool are “willing to work outside of their primary field of employment for a new or different employment opportunity.”
- More than two-fifths (44%) of the members of the Available Labor Pool will commute up to 45 minutes one-way for an employment opportunity, while 85% will commute up to 30 minutes for employment.
- The six most important desired benefits, in order, are good salary or hourly wage, on-the-job training (OJT) or paid training, good health benefits, good vacation benefits, good retirement benefits, and flexible hours or flex-time.
- An estimated 16,431 members (11%) of the Available Labor Pool are interested in a new job at \$10 an hour; 60,764 (39%) are interested at \$15 an hour; and 85,720 (55%) are interested at \$20 an hour.
- Of the 112,213 members in the subset of *employed members* of the Available Labor Pool, 24,862 (22%) consider themselves underemployed.
- About 15% (23,940) Available Labor Pool members report military experience, either serving currently or having served in the past. Of those with military experience, 13,310 (56%) are currently employed. Of the employed subset of those with military experience, 2,269 (17%) consider themselves underemployed.
- Almost 4% (6,198) Available Labor Pool members are considered “discouraged” Pool members. Almost a quarter (27.3%) have previously worked in office management.

The West Central Missouri Labor Region

The West Central Missouri Labor Region includes twenty counties in west central Missouri (see Map 1 below). This report provides an overview of the entire labor region – which is made up of five labor basins: Henry, Johnson, Lafayette, Pettis, and Saline. Please see individual reports for more details about each labor basin.

Map 1: West Central Missouri Labor Region



The West Central Missouri Labor Region has a total population of approximately 531,838, and a Civilian Labor Force of 264,431. The total number of employed individuals is 252,084, and the average county unemployment rate was about 4.7% at the time of this study.

The Docking Institute's analysis suggests that the West Central Missouri Labor Region contains an Available Labor Pool of 155,009 individuals.

This report describes characteristics of the Available Labor Pool for the West Central Missouri Labor Region. This report also provides information on three subsets of the Available Labor Pool.

Please see the Methods section (page 41) for more information about the Institute's Available Labor Pool Analysis methodology and the survey research methods used for this study. The glossary (page 43) provides definitions of terms used in this report.

Components of the Report

The majority of this report assesses the characteristics of the Available Labor Pool in the West Central Missouri Labor Region by answering the following types of questions:

- What portions of the labor force – employed, unemployed, homemakers, students, retired and disabled – are interested in a new employment opportunity?
- What types of jobs have workers and potential workers had in the past?
- What skills and education levels do those interested in new employment have?
- What certificates and technical school experiences do workers and potential workers have?
- What are the job satisfaction levels of those interested in new employment?
- What types of considerations (pay, benefits, and commute time) shape their decision-making?
- What percentage is willing to change fields of employment?
- What work shifts are they willing to work?

Three Subsets of the Available Labor Pool

This report also provides information on three subsets of the Available Labor Pool:

- Those that consider themselves as underemployed. Information includes the following:
 - Age, gender, and education levels
 - Reasons for underemployment
 - Current employment sectors and categories
 - Important benefits to change jobs
- Those with military experience, either currently serving or previous experience. Information includes the following:
 - Age, gender, and education levels
 - Current employment sectors and categories
 - Desired wages for a new job
 - Important benefits to change jobs
 - Underemployment
- Those considered “discouraged Pool members.” Information includes the following:
 - Age, gender, and education levels
 - Previous employment
 - Desired wages for a new job
 - Important benefits for a new job

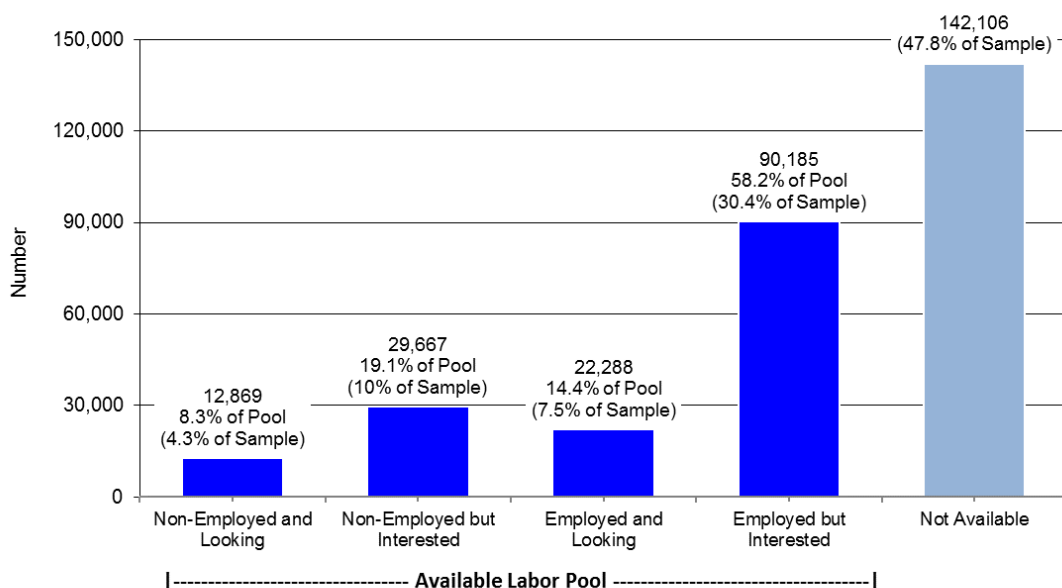
The West Central Missouri Labor Region's Available Labor Pool

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 for the right opportunities, 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 47.8% of respondents are not available for a new or different job. The remaining 52.2% are members of the Available Labor Pool¹.

It is estimated that 12,869 (8.3%) members of the Available Labor Pool are non-employed² *and* looking for employment, while 29,667 (19.1%) are non-employed *but* interested in a job for the right opportunities. In addition, 22,288 (14.4%) members of the Pool are employed *and* currently looking for different employment, while 90,185 (58.2%) are employed *but* interested in new employment for the right opportunities.

Figure 1: The Available Labor Pool for the West Central Missouri Labor Region



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*.

¹ The figure shows percentages of the Available Labor Pool, as well as the entire sample (shown in parentheses). For example, 8.3% of the Pool is non-employed and looking for work, while this percentage is 4.3% for the entire sample.

² 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 officially unemployed.

Table 1 shows the gender, age, and education levels of the 155,009-member Available Labor Pool. More than half (52.4%) of the Pool are men, and the average age is about 47 (mean average) or 50 (median average) years old.

Almost all (97.3%) have *at least* a high school diploma, more than three-quarters (77.7%) have *at least* some college experience, and more two-fifths (43.9%) have *at least* a bachelor's degree.

About a quarter (25.2%) speak Spanish, but most (78.9%) speak "only a little."

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

Age Information		Age in 2017	
Range		18 to 69	
Mean Average		47	
Median Average		50	
Gender		Number	Percent
Female		73,854	47.6
Male		81,155	52.4
Total		155,009	100
Highest Level of Education Achieved			Cumulative Percent
Doctoral Degree	3,371	2.2	2.2
Masters Degree	20,257	13.1	15.2
Bachelors Degree	44,375	28.6	43.9
Associates Degree	22,294	14.4	58.3
Some College (including current students)	30,157	19.5	77.7
High School Diploma	30,435	19.6	97.3
Less than HS Diploma	4,120	2.7	100
Total	155,009	100	
"Do you speak Spanish?"		Number	Percent
"Yes"	39,048	25.2	These percentages represent portions of 25.2%
<i>Speak Very Well</i>	1,989	5.1	
<i>Speak Fairly Well</i>	6,238	16.0	
<i>Speak Only a Little</i>	30,821	78.9	
		100	

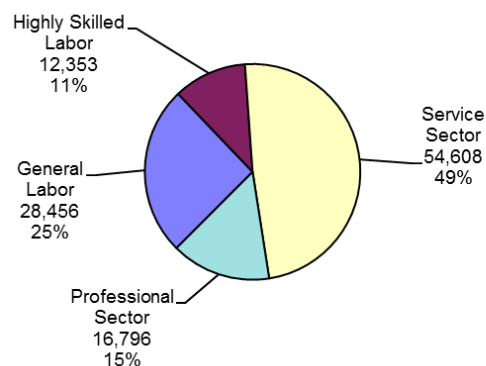
Table 2 shows the various occupational categories of the 155,009-member Available Labor Pool. General labor occupations represent 18.4% of the entire Available Labor Pool, while highly skilled, blue-collar jobs make up 8%. Traditional service-related occupations represent 35.2% of the Available Labor Pool, while professional occupations represent 10.8%. Non-employed members of the Pool make up 27.6% of the total.

Table 2: Major Occupational Categories of Available Labor

	Number	Percent	Years at Job	
			Mean	Median
General Labor/Delivery	13,739	8.9	10.7	5.0
Manufacturing/Maintenance/Trucking	14,717	9.5	12.6	10.9
Total General Labor	28,456	18.4	11.7	8.0
Mechanic/Welder/Comp Tech	7,856	5.1	14.8	16.0
Crew Management/Protection Services	4,497	2.9	10.3	9.9
Total Highly Skilled Labor	12,353	8.0	12.6	13.0
Customer Service	14,221	9.2	8.5	4.2
Clerical	8,797	5.7	8.3	3.0
Office or Dept Manager	9,678	6.2	11.6	7.4
Health Aid/Nurse	12,164	7.8	11.9	8.6
Education Aid/Teacher	9,748	6.3	11.2	8.8
Total Service Sector	54,608	35.2	10.3	6.4
Exec Management	3,810	2.5	8.2	6.0
Accounting/Engineering	9,576	6.2	10.5	9.0
Doctor/Professor/Attorney	2,527	1.6	9.2	7.9
Writer/Artist/Musician	884	0.6	7.6	2.0
Total Professional Sector	16,796	10.8	8.9	6.2
Homemaker/Student/Unemployed	21,193	13.7	n/a	n/a
Retired/Disabled	21,603	13.9	n/a	n/a
Total Non-Employed	42,796	27.6		
Total	155,009	100		

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.

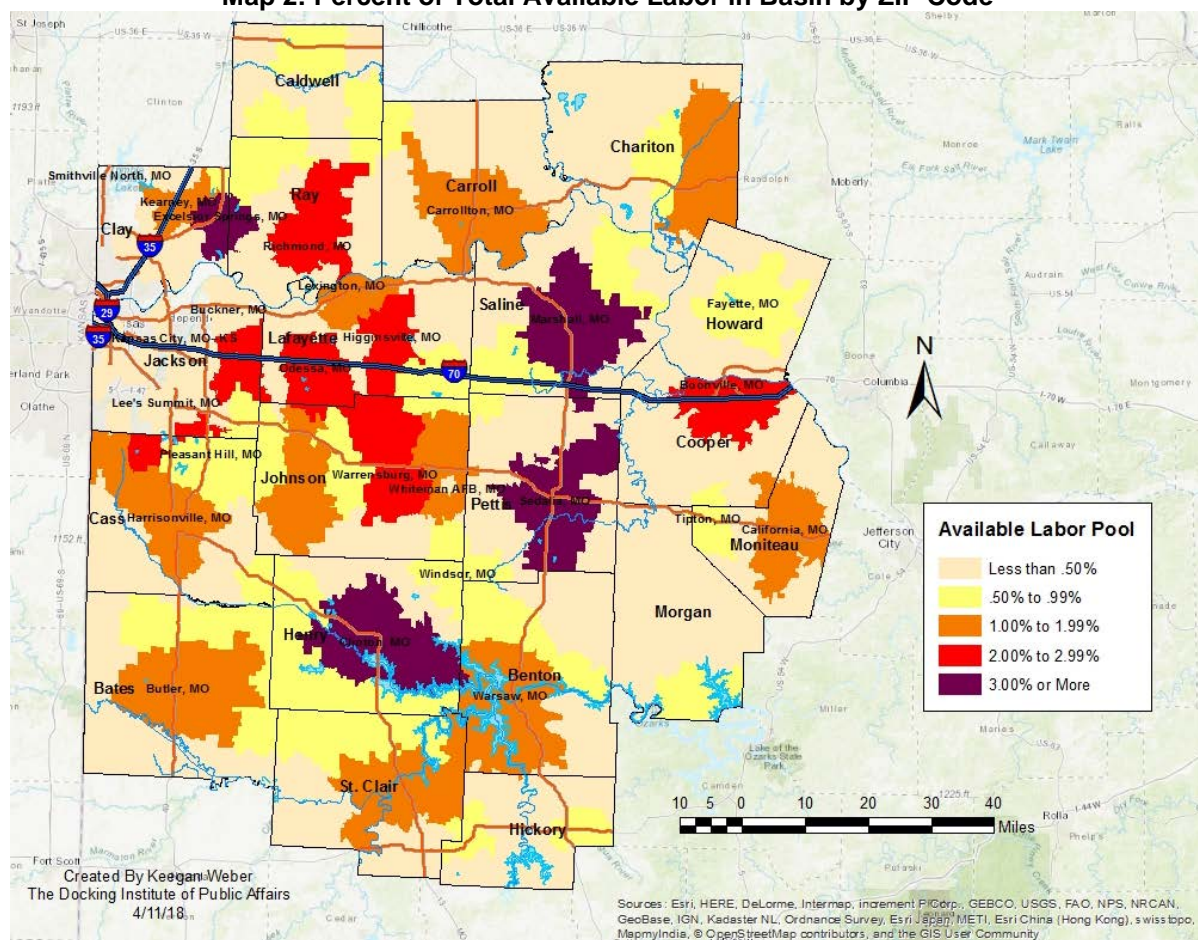
Figure 2: Occupational Sectors of Available Labor (Employed Only)



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 West Central Missouri Labor Region. The map shows:

- Three percent or more of the entire labor region's Available Labor Pool is located in ZIP code areas within Clay, Henry, Pettis, Ray, and Saline counties. (See purple areas in the map.)
- Between 2% and 2.99% of the entire labor region's Available Labor Pool is located in ZIP code areas within Cass, Cooper, Jackson, Johnson, and Lafayette counties. (See red areas in the map.)
- ZIP code areas in ten counties (Bates, Benton, Carroll, Cass, Chariton, Clay, Johnson, Moniteau, Benton, and St. Clair) contain 1% to 1.99% of the region's Available Labor Pool. (See orange areas in the map.)
- ZIP code areas in all counties contain less than 1% of the region's Available Labor Pool. (See yellow areas and cream colored areas in 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 or different employment in the West Central Missouri Labor Region, survey respondents were asked questions to assess work skills 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 indicated previous training or experience in that particular field.

For example, 8,849 members of the Pool are currently employed in such fields as general laborers, construction workers, cleaners, and similar positions. An additional 8,060 Pool members (employed and currently non-employed) had previous employment experience or training in one of those jobs for a total of 16,909 individuals.

Table 3: Current Work Experience and Previous Work or Training Experience

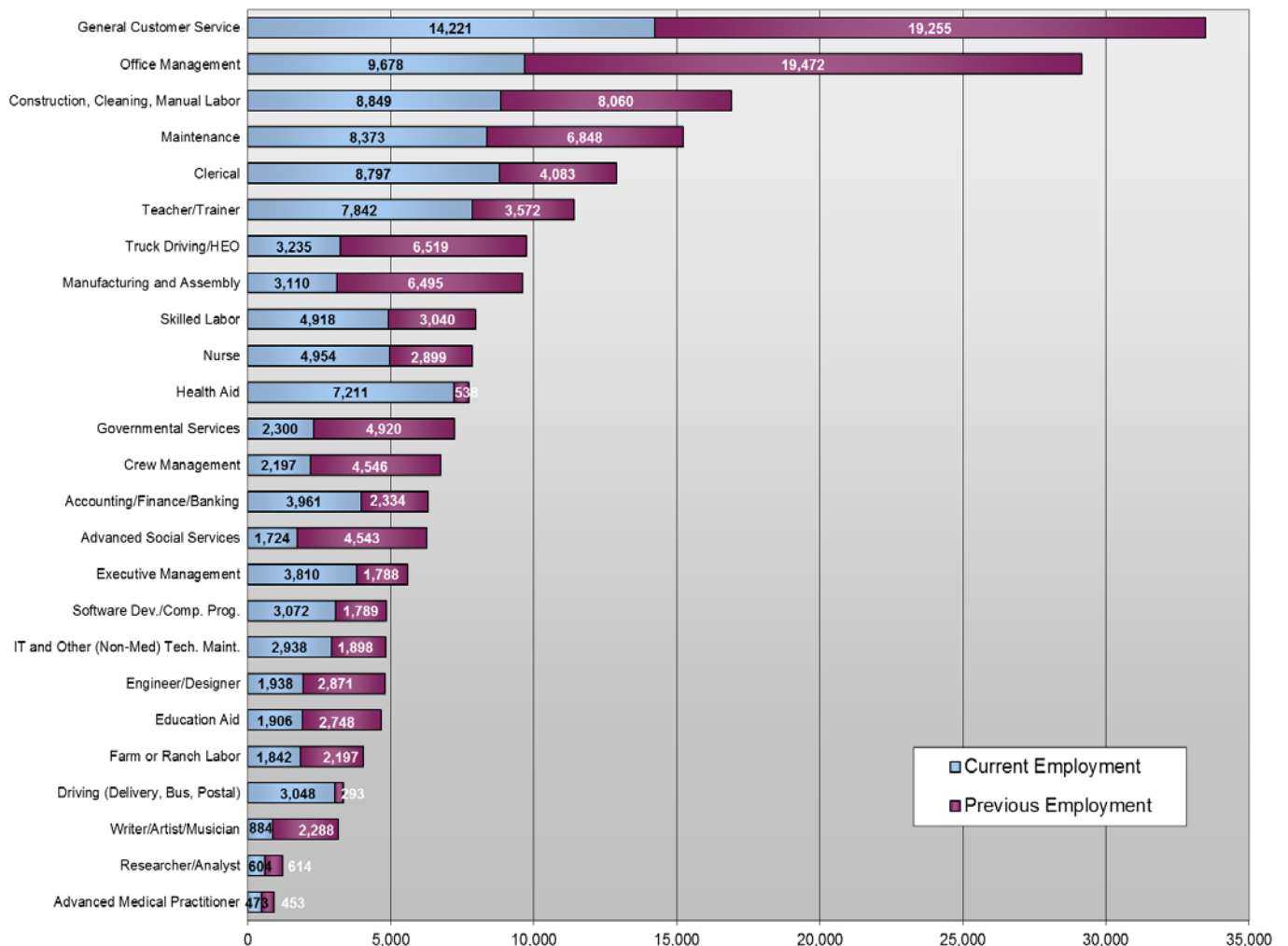
	Current Employment* Number	Previous Work/Training Number	Current plus Previous Work or Training** Number
Working with Hands			
Construction, Cleaning, Manual Labor	8,849	8,060	16,909
Farm or Ranch Labor	1,842	2,197	4,039
Manufacturing and Assembly	3,110	6,495	9,605
Maintenance	8,373	6,848	15,220
Driving (Delivery, Bus, Postal)	3,048	293	3,340
Truck Driving/HEO	3,235	6,519	9,754
Skilled Labor	4,918	3,040	7,958
Crew Management	2,197	4,546	6,743
Working with People			
General Customer Service	14,221	19,255	33,477
Office Management	9,678	19,472	29,150
Governmental Services	2,300	4,920	7,220
Executive Management	3,810	1,788	5,597
Advanced Social Services	1,724	4,543	6,267
Working with Numbers			
Clerical	8,797	4,083	12,880
Accounting/Finance/Banking	3,961	2,334	6,296
Researcher/Analyst	604	614	1,218
Working with Technology			
IT and Other (Non-Med) Tech. Maint.	2,938	1,898	4,836
Software Dev./Comp. Prog.	3,072	1,789	4,861
Engineer/Designer	1,938	2,871	4,809
Providing Health Services			
Health Aid	7,211	538	7,749
Nurse	4,954	2,899	7,853
Advanced Medical Practitioner	473	453	925
Providing Educational Services			
Education Aid	1,906	2,748	4,654
Teacher/Trainer	7,842	3,572	11,414
Professor/Lecturer	330	550	880
Creative Arts			
Writer/Artist/Musician	884	2,288	3,172
Total	112,213	114,614	226,827

* 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 14,221 working Pool members currently employed in this category and 19,255 previously employed/trained in this category for a total of 33,477 individuals³. The total number not shown in figure below.

Figure 3: Current Work Experience and Previous Work or Training Experience



³ Rounding error accounts for discrepancy between the two figures and the sum.

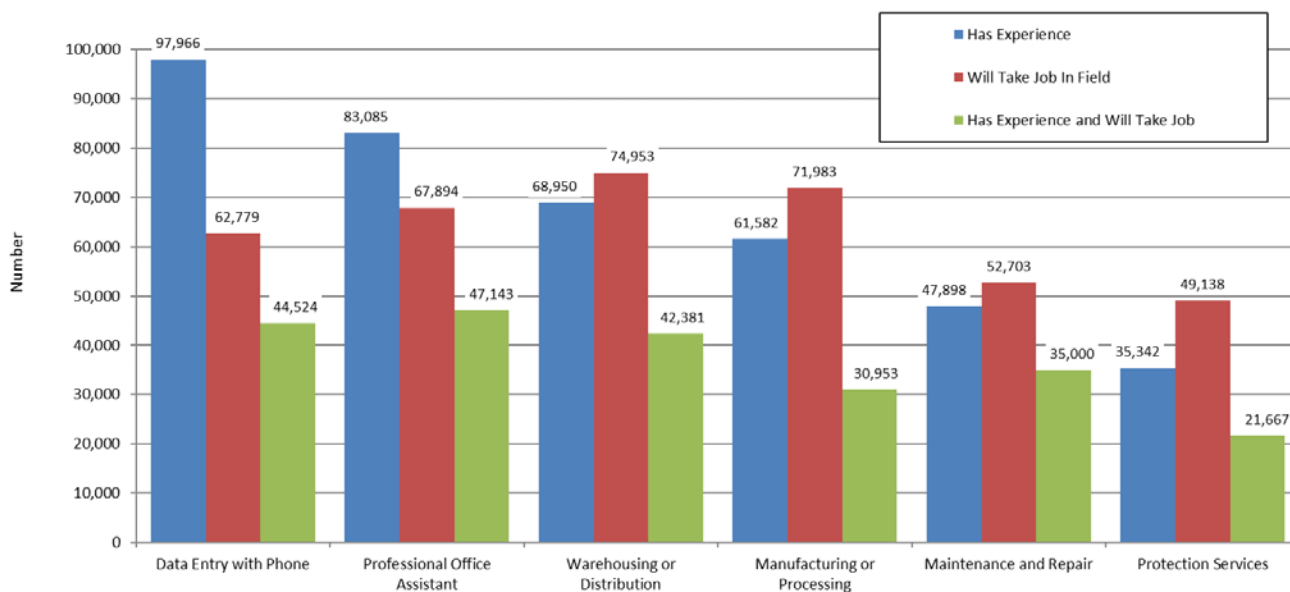
In addition to collecting data regarding the current employment status and previous work or training experience through a series of “open-ended” survey questions (the results of which are shown previously), respondents were asked about the six specific employment areas listed in Figure 4. Respondents 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).⁴

The figure shows that an estimated 97,966 Pool members reported experience or training in data entry with telephone operation (blue column), while fewer (62,779 individuals) would consider employment in that field (red column). An estimated 83,085 members of the Pool have *at least* some experience or training as a professional office assistant (blue column), while fewer members of the Pool (67,894 individuals) would take a job in that field (red column).

The figure also shows responses for training or experience working in warehousing or distribution, manufacturing or processing, maintenance and repair, and in protection services.

The third column shows the estimated number that have *at least* some experience/training in a field **and** are willing to work in that field again (green column).

Figure 4: Work Experience / Willing to Work in Field



⁴ 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 warehousing or distribution or in manufacturing or processing were asked additional questions to assess the type of work they performed at those jobs.

Figures 4a and 4b show the responses to those questions. The figures show that two-fifths (40%) of those with warehousing experience worked in jobs involving moving materials or loading trucks (see figure 4a).

More than half (56%) of those with manufacturing or processing experience worked in jobs involving production, fabrication, or assembly (see figure 4b).

Figure 4a: Work Experience in Warehousing or Distribution

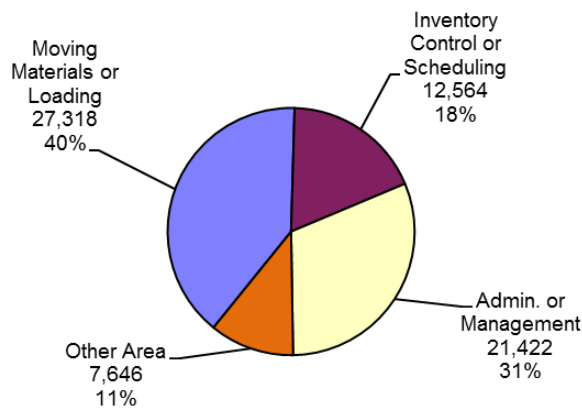
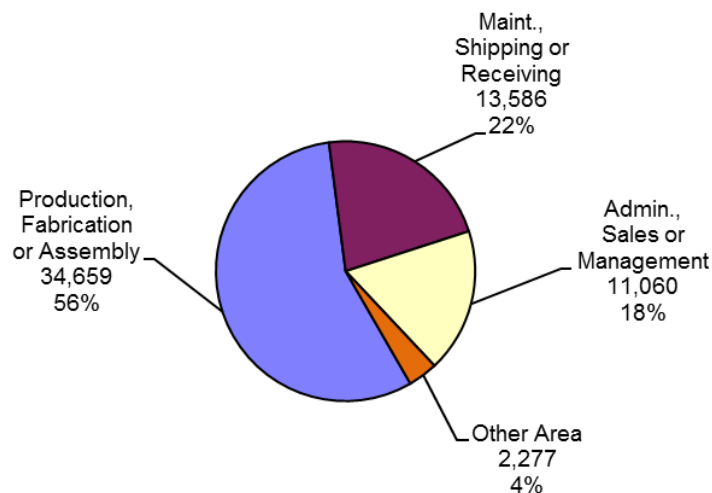
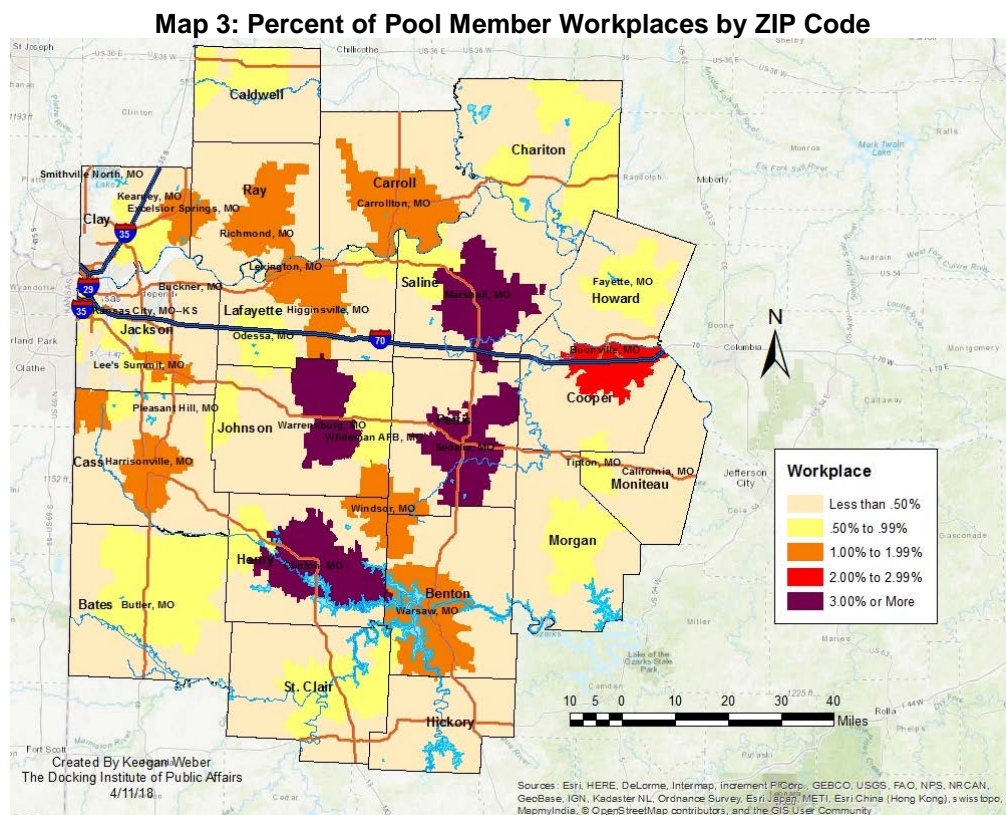


Figure 4b: Work Experience in Manufacturing or Processing



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:

- Three percent or more of the working members of the Available Labor Pool work in ZIP code areas in Henry, Johnson, Pettis, and Saline counties. (See purple areas on the map.)
- Between 2% and 2.99% of the working members of the Pool work in ZIP codes areas in Cooper County. (See red area on the map.)
- Workplaces located in ZIP code areas in 10 counties (Benton, Carroll, Cass, Clay, Henry, Jackson, Johnson, Lafayette, Saline, and Ray) employ 1% to 1.99% of the region's working Pool members, respectively. (See orange areas on the map.)
- Workplaces located in ZIP code areas in all counties employ less than 1% of the region's working Pool members. (See yellow and light cream areas on the map.)



Educational Experience and Job Satisfaction

Table 1 (see page 5) shows that 77.7% of the Available Labor Pool reported *at least* some college experience (with 58.3% holding *at least* associate's degrees and 43.9% having completed *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.

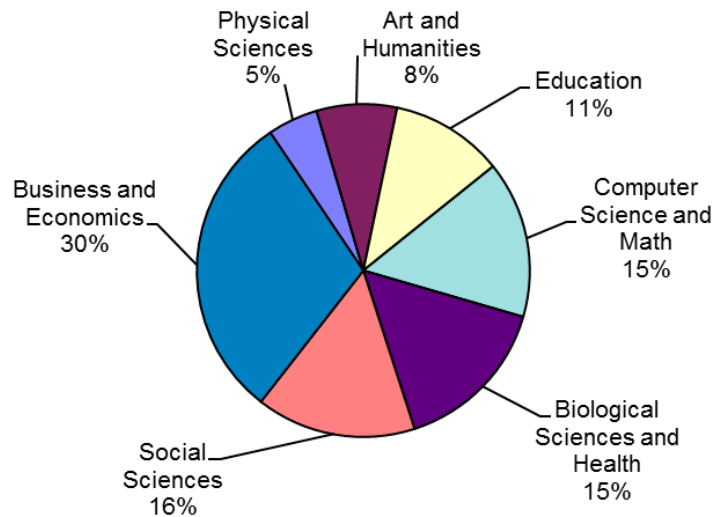
Education: Elementary and Secondary Teaching.

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

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

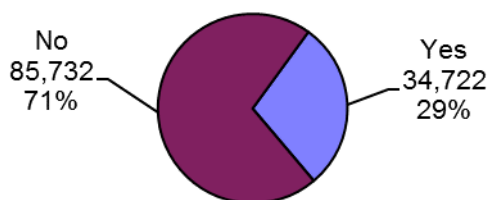
Figure 5 shows that Available Labor Pool members with at least some college experience indicate majors in business and economics (30%), social sciences (16%), biological sciences and health (15%), computer science and math (15%), education (11%), arts and humanities (8%), and physical sciences (5%).

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 29% of the respondents hold a community college or technical degree or were working on one at the time of the research.

Figure 6: Community College or Technical College Experience

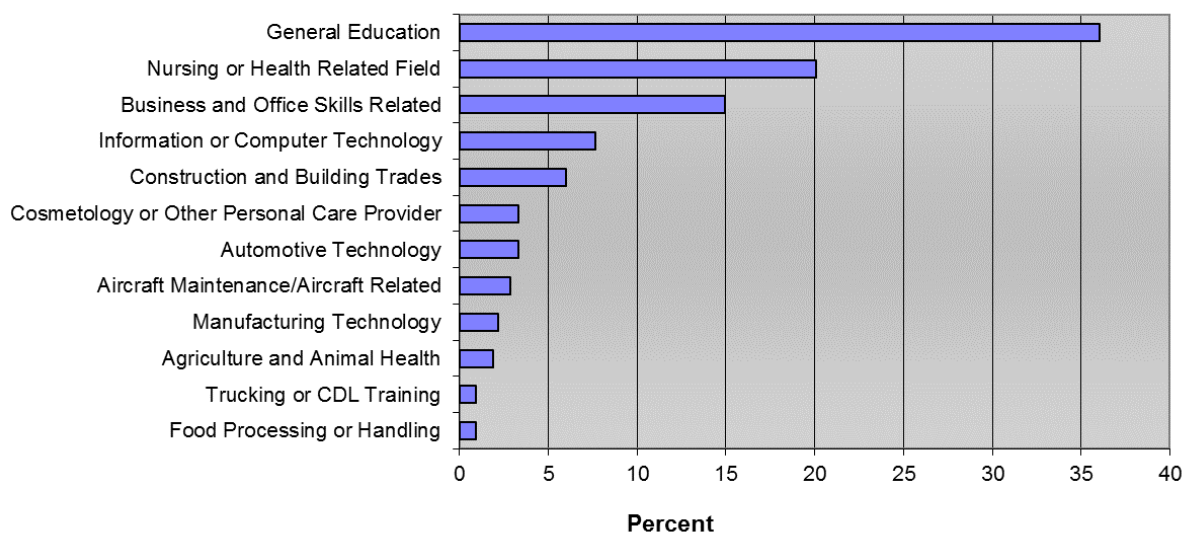


Respondents answering “yes” to the above question were asked for their area of study. Answer options are grouped into one of the categories shown in Figure 6a. The figure shows that almost 36% reported studying general education courses and about 20% reported studying nursing or a health related field.

About 15% report studying a business-related field and 8% reported studying information technology or computer technology.

Other areas of study mentioned were construction or other building trades, cosmetology or other personal care, automotive technology, aircraft maintenance or other aircraft related field, manufacturing technology, agriculture or animal health, trucking or commercial driver’s license (CDL) training, and food processing or handling.

Figure 6a: Community or Technical College Study Area



All members of the Available Labor Pool were asked if they had completed a certificate in a technical field. Figure 7 shows that 33% of the Pool members reported completing a technical certificate of some kind.

Figure 7: Completed a Technical Certificate

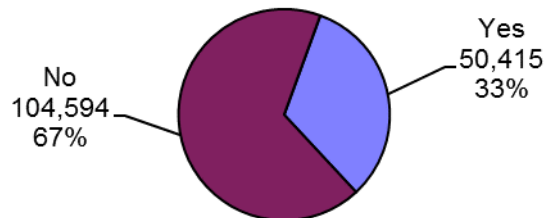


Figure 8 and Table 4 show responses to questions regarding *job satisfaction*. The figure and table report responses from *working survey respondents* only. The figure shows that about 36% of the working Pool respondents “strongly agree” with a statement suggesting that they “enjoy the things I do,” while about 58% “agree” with that statement. In all, about 93% *at least* “agree” that they enjoy their work.

In general, Pool members are generally satisfied with their work and their work environments but are looking for and/or are available for new employment. About 51%, however, *at least* disagree that they have a “fair chance at promotion” to another position.

Figure 8: Job Satisfaction among Available Labor Pool Workers

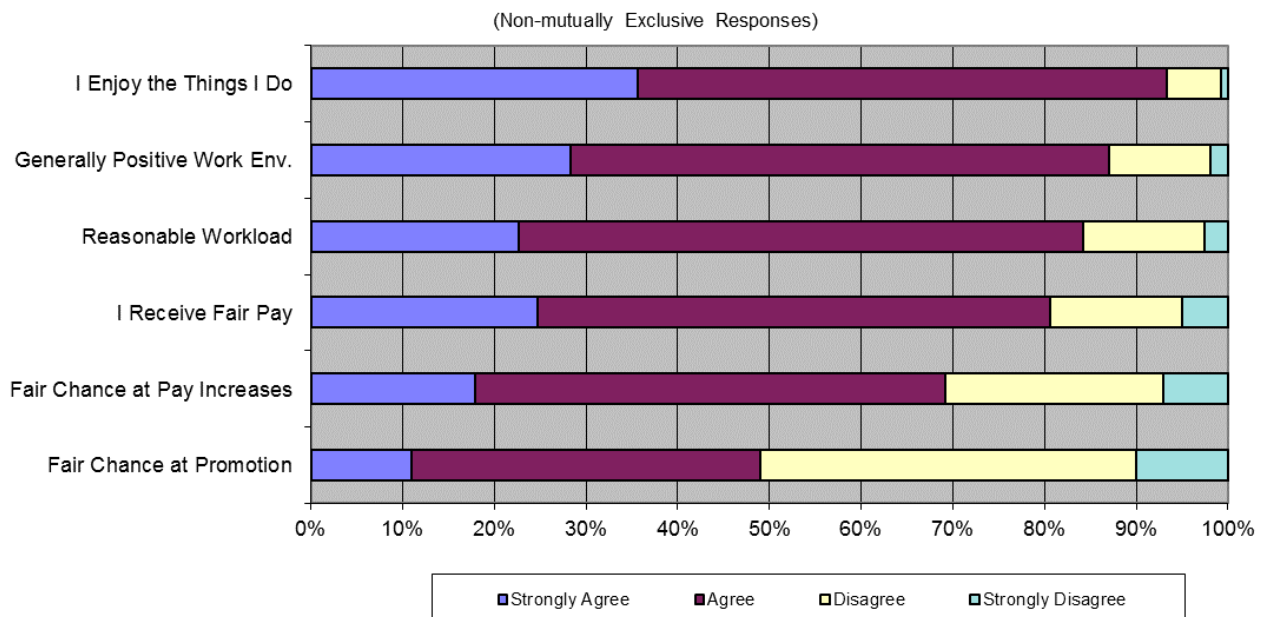


Table 4 shows combined “strongly agree” and “agree” responses of working Pool members and working non-Pool respondents. The table shows that about 93% of the working Pool members *at least* agree with the statement regarding “enjoying the things I do”; a higher percentage (98%) of the working non-Pool respondents suggest the same.

Four of the six items show disparity of more than 10%. That is, comparing the “at least agree” percentages between the working Pool members and working non-Pool members, reveals four items with 10% or more difference.

The statement with the largest percentage of disparity is with regard to having a “fair chance at promotion.” Almost 61% of the working non-Pool respondents *at least* agree with this statement, whereas about 11.8% fewer (49%) of the working Pool members feel the same way.

Similarly, 92.1% of the working non-Pool respondents *at least* agree with the statement “I receive fair pay,” while 80.6% of the working Pool members report the same. This is a difference of 11.5%.

About 10% more of the working non-Pool respondents than working Pool members *at least* agree that they have a “generally positive work environment” and a “fair chance at pay increases.”

Table 4: Job Satisfaction Among Workers: Pool and Non-Pool Members

	At Least Agree		<i>Difference</i>
	Pool Only Percent	Non-Pool Only* Percent	
I Enjoy the Things I Do	93.3	98.0	-4.7
Generally Positive Work Env.	87.0	97.9	-10.9
Reasonable Workload	84.2	91.6	-7.4
I Receive Fair Pay	80.6	92.1	-11.5
Fair Chance at Pay Increases	69.2	79.3	-10.1
Fair Chance at Promotion	49.0	60.8	-11.8

*This column represents working non-Pool respondents.

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. For example, some workers may be available for new employment but are unwilling to switch from their current job to a different type of position. A large percentage of those unwilling to change their jobs might limit the types of employers who can enter the labor basin.

This does not seem to be the case for the West Central Missouri Labor Region. Figure 9 shows that a clear majority of the Available Labor Pool (125,531 members or 81%) are willing to accept positions outside of their primary fields of employment.

Figure 9: Considerations for Employment

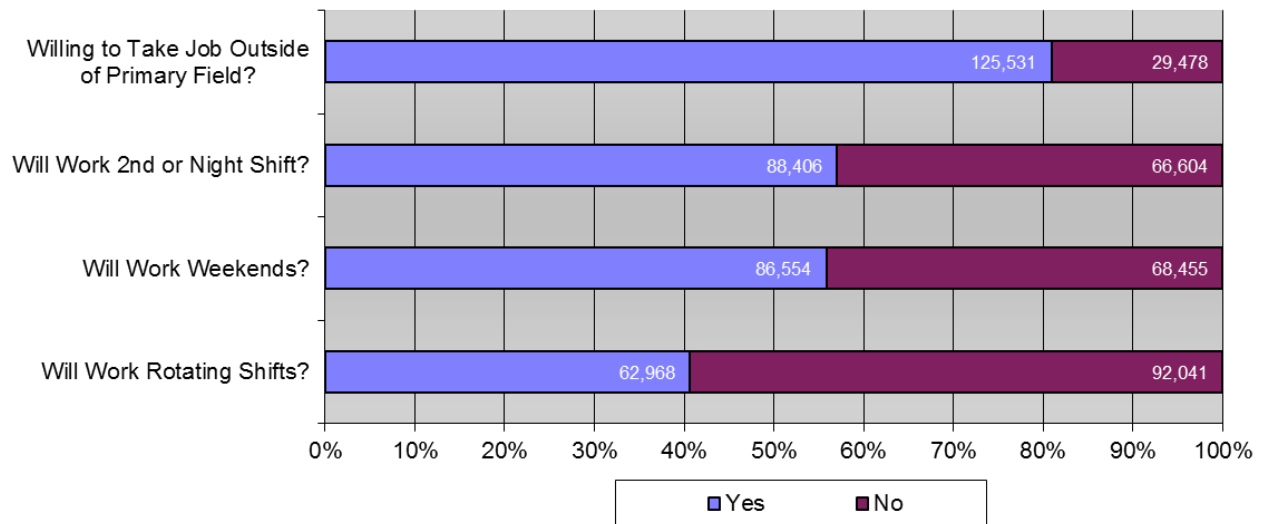
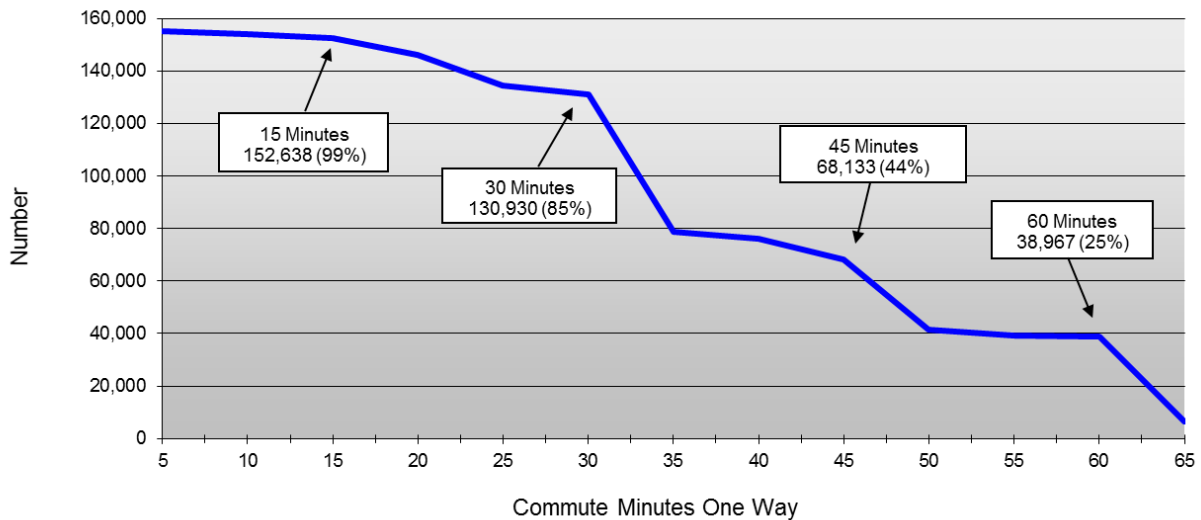


Figure 9 also shows responses to three questions regarding work shifts. Respondents were asked if they would be willing to work weekends, a second or night shift, and rotating shifts for a new job.

The figure shows that about 56% of the Available Labor Pool are willing to work weekends and 57% are willing to work a second shift or a night shift. About two-fifths (41%) are willing to work 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 10 shows the extent to which Available Labor Pool members in the West Central Missouri Labor Region are open to commuting. More than two-fifths (44%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 85% will commute up to 30 minutes, one-way, for employment. Nearly all (99%) will travel up to 15 minutes, one-way, for employment.

Figure 10: Available Labor by Commute Minutes

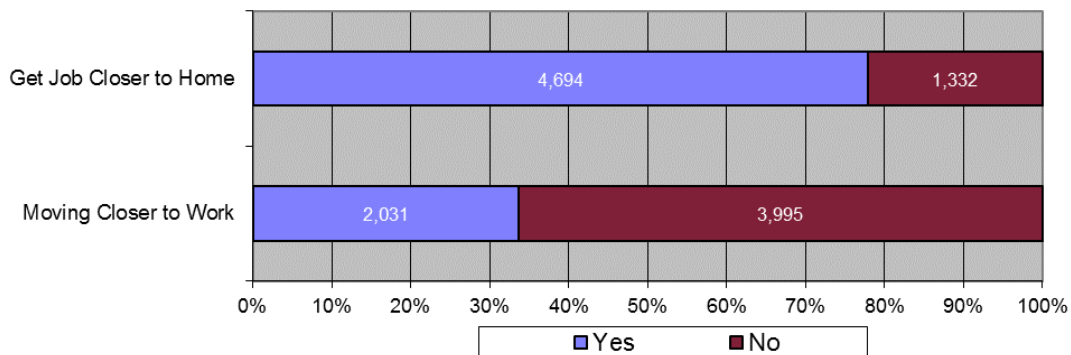


Working members of the Pool who currently *commute farther than 60 minutes*, one-way, for a job, were asked two questions: “Have you considered moving to be closer to your job?” and “Have you considered getting a job closer to your home?”

Figure 10a shows that a vast majority (78%) of this subset of the Pool would consider getting a new job closer to their place of residence, while about 34% would consider moving closer to their place of work.

Figure 10a: Being Closer to Work

(Non-mutually Exclusive Responses)

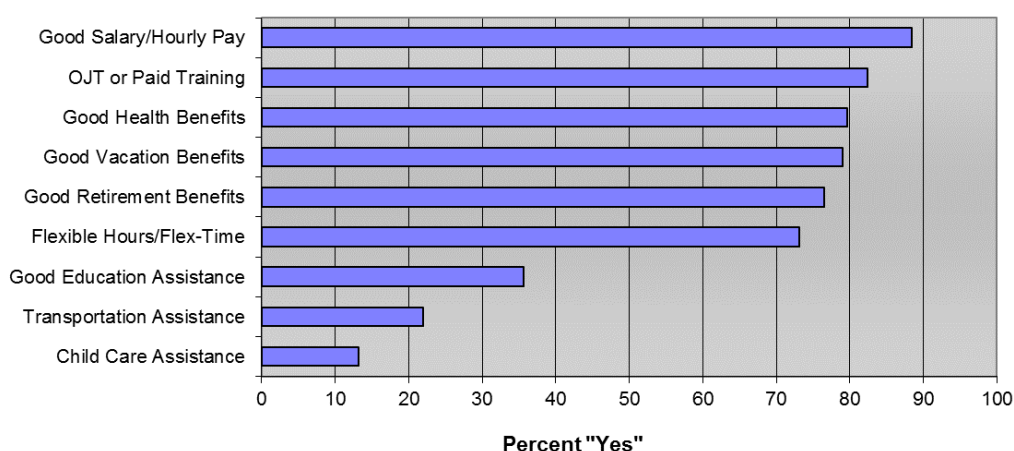


Available Labor Pool members were asked about various benefits that might be important when considering whether to take a new or different job. Respondents were asked if each benefit would be a “very important” consideration for taking a new job, with answer options including “yes” and “no.” (Responses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

Figure 11 shows that the six most important benefits are, in order: good salary or hourly pay, on-the-job training (OJT) or paid training, good health benefits, good vacation benefits, good retirement benefits, and flexible hours or flex-time. All of these benefits are considered “very important” by 70% or more of the Available Labor Pool. Good educational assistance, transportation assistance, and child care assistance are considered “very important” by 36%, 22%, and 13% of Pool members, respectively.

Figure 11: Benefits Very Important to Change Employment

(Non-mutually Exclusive Responses)



The left column in Table 5 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 12.8% difference between those Pool members considering this benefits very important (73.1%) and those working Pool members receiving this benefit (60.3%). Education assistance also stands out with 12.1% more working Pool members receiving this benefit than Pool members as a whole desiring this benefit.

Table 5: Desired Benefits and Current Benefits Offered

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent	Difference
Good Salary/Hourly Pay	88.4	85.6	2.8
OJT or Paid Training	82.4	85.0	-2.6
Good Health Benefits	79.7	81.1	-1.4
Good Vacation Benefits	79.0	78.6	0.4
Good Retirement Benefits	76.5	73.9	2.6
Flexible Hours/Flex-Time	73.1	60.3	12.8
Good Education Assistance	35.7	47.8	-12.1
Transportation Assistance	22.0	19.3	2.7
Child Care Assistance	13.2	8.6	4.6

*This column represents working Pool members that receive the benefit.

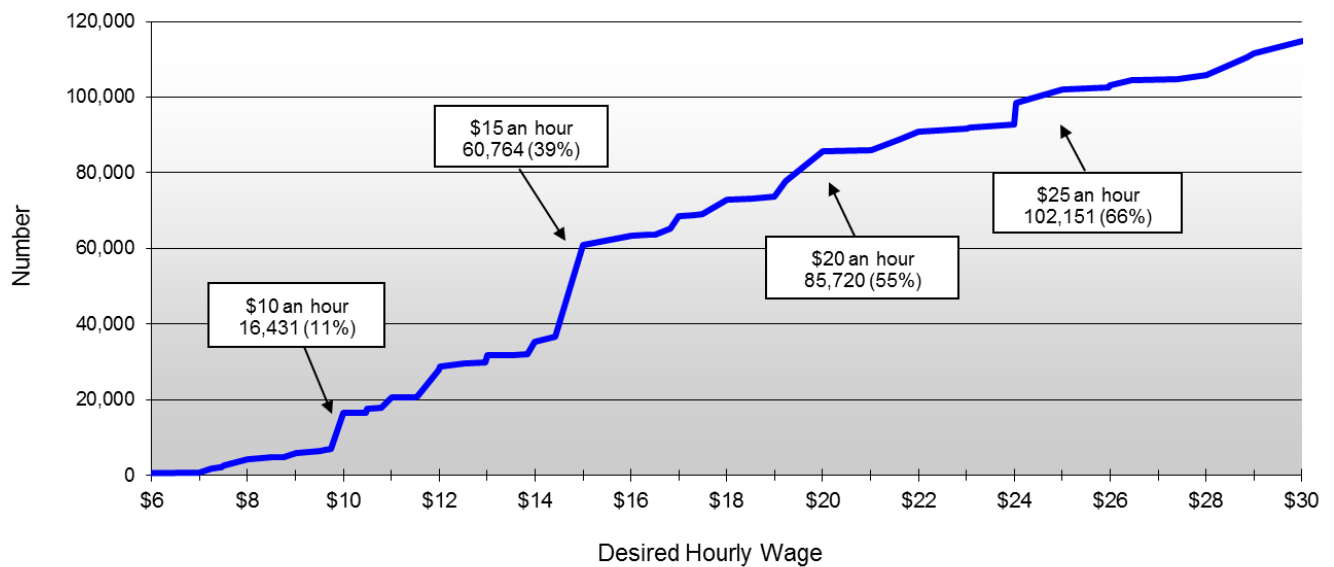
Desired Wages of Available Labor Pool

Desired wage is another important consideration for employers and economic developers. Figure 12 shows desired wages of members of the Available Labor Pool. It is estimated that 102,151 people (or 66% of the available labor) are interested in a new job at \$25 an hour⁵.

An estimated 85,720 (55%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 60,764 (39%) are interested at \$15 an hour.

Finally, an estimated 16,431 people (11%) are interested in a new job at \$10 an hour.

Figure 12: Available Labor by Desired Hourly Wage



⁵ See the Appendix for an hourly wage/annual salary conversion chart.

Subsets of the Available Labor Pool

The previous portion of the report addressed the entire Available Labor Pool. The remainder of the report addresses three subsets of the Available Labor Pool. Each provides a different look at the Available Labor Pool, and they are not mutually exclusive.

The three subsets are the following:

- 1 Underemployed Available Labor Pool Workers
- 2 Those with Military Experience
- 3 Discouraged Available Labor Pool Members

Subset 1: Underemployed Available Labor Pool Workers

Underemployment (individuals possessing skills and/or training that exceeds the responsibilities of their current jobs) is a significant issue in many communities. To assess underemployment in the West Central Missouri Labor Region, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.⁶ 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 are required on the job, 3) they previously earned a higher income at a similar job, or 4) they are limited in the number of hours that they may work.

Of the 112,213 *employed members* of the Available Labor Pool (shown in Figure 13), more than a fifth (see Figure 14) answered “yes” to one or more of the questions presented above. These Pool members are considered “underemployed.”

Figure 14 shows that the underemployed workers represent 22% (24,862 individuals) of the employed members of the Pool.

Figure 13: Employed and Non-Employed Members of the Available Labor Pool

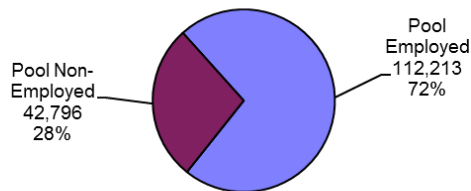
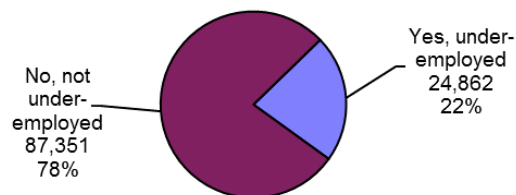


Figure 14: Underemployed Workers



⁶ “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 6 shows that the average age of this subset of the Available Labor Pool is between 43 and 46 years old. Half (50.1%) are female, about a two-fifths (42.3%) hold *at least* a bachelor's degree, and a vast majority (96.9%) have earned a high school diploma.

Table 6 shows that the education levels of the underemployed workers differs somewhat from the overall 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 11.4% of the underemployed workers hold *at least* a master's degree, while the percentage for the Available Labor Pool as a whole is 15.2% (See Table 1, page 5).

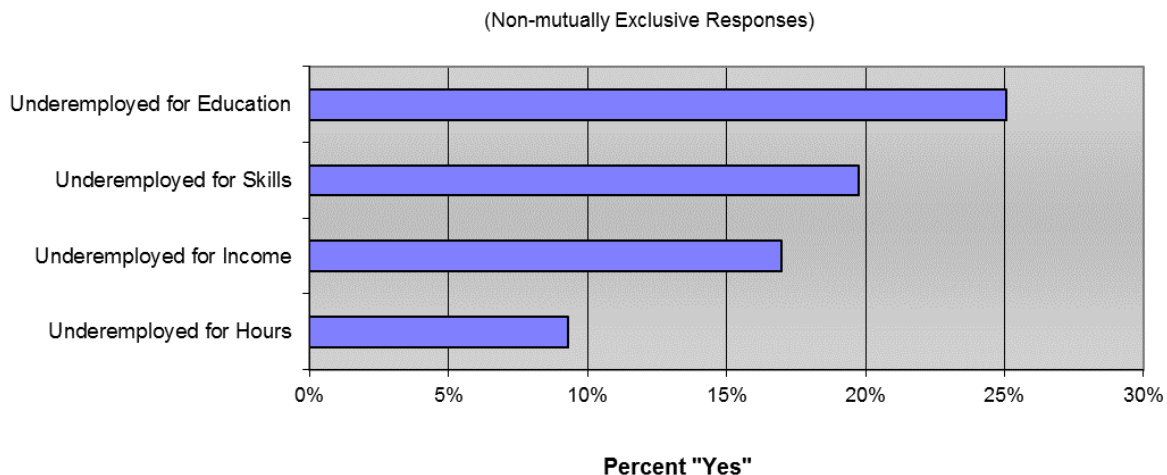
Table 6: Age, Gender, and Education Levels of Underemployed Workers

Age Information		Age in 2017	
Range		19 to 65	
Mean Average		43	
Median Average		46	
Gender	Number	Percent	
Female	12,465	50.1	
Male	12,397	49.9	
Total	24,862	100	
Highest Level of Education Achieved			<i>Cumulative Percent</i>
Doctoral Degree	366	1.5	1.5
Masters Degree	2,458	9.9	11.4
Bachelors Degree	7,700	31.0	42.3
Associates Degree	4,185	16.8	59.2
Some College (including current students)	5,040	20.3	79.4
High School Diploma	4,333	17.4	96.9
Less than HS Diploma	780	3.1	100
Total	24,862	100	

Figure 15 shows the varying percentage of positive responses (i.e., “yes” answers) to the various measures of underemployment.

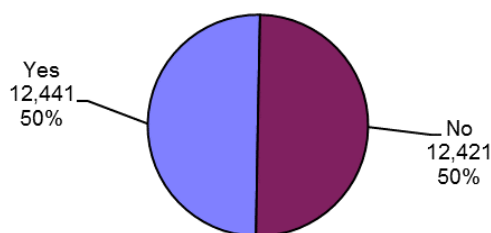
About 25% of this subset possess education levels exceeding those needed for their current jobs, while about 20% possess skills not used currently on the job. About 17% earned more money at a past but similar job, while 9% are unable to work as many hours as desired.

Figure 15: Reasons for Underemployment



Underemployed workers were asked if they “are available for a new or different job because they are underemployed?” Figure 16 shows that half of the underemployed workers are seeking new employment to address underemployment.

Figure 16: Seeking New Employment to Address Underemployment



Occupational Sectors and Categories of Underemployed Workers

Figure 17 and Table 7 show the occupational sectors and categories of underemployed workers. Figure 17 shows that 30% of the underemployed workers are general laborers and 5% are highly skilled blue-collar workers. Most underemployed workers are employed as service sector workers (54%), while 11% hold professional positions.

Comparing Figure 17 with Figure 2 (page 6) suggests that fewer professional and highly skilled laborers but more general laborers and service sector employees consider themselves underemployed. Figure 2 (page 6) shows that the subset of working Available Labor Pool members consists of 25% general laborers, 11% highly skilled laborers, 49% service workers, and 15% professional sector workers.

Figure 17: Occupational Sectors of Underemployed Workers

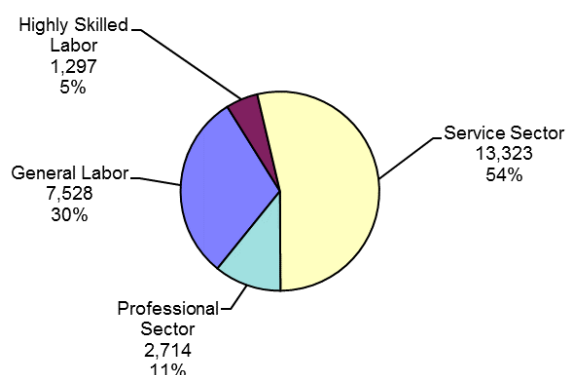


Table 7 shows the occupational categories of underemployed workers. The table shows that the four largest groups of underemployed workers are general laborers/delivery drivers and those holding similar positions (13.6%), manufacturing/maintenance/truck drivers (16.7%), customer service workers (19.2%), and health aids/nurses (12.2%).

Table 7: Occupational Categories of Underemployed Workers

	Number	Percent
General Labor/Delivery	3,374	13.6
Manufacturing/Maintenance/Trucking	4,154	16.7
Mechanic/Welder/Comp Tech	892	3.6
Crew Management/Protection Services	404	1.6
Customer Service	4,768	19.2
Clerical	1,930	7.8
Office or Dept Manager	1,648	6.6
Exec Management	830	3.3
Accounting/Engineering	1,281	5.2
Health Aid/Nurse	3,037	12.2
Education Aid/Teacher	1,941	7.8
Doctor/Professor/Attorney	225	0.9
Writer/Artist/Musician	378	1.5
Total	24,862	100

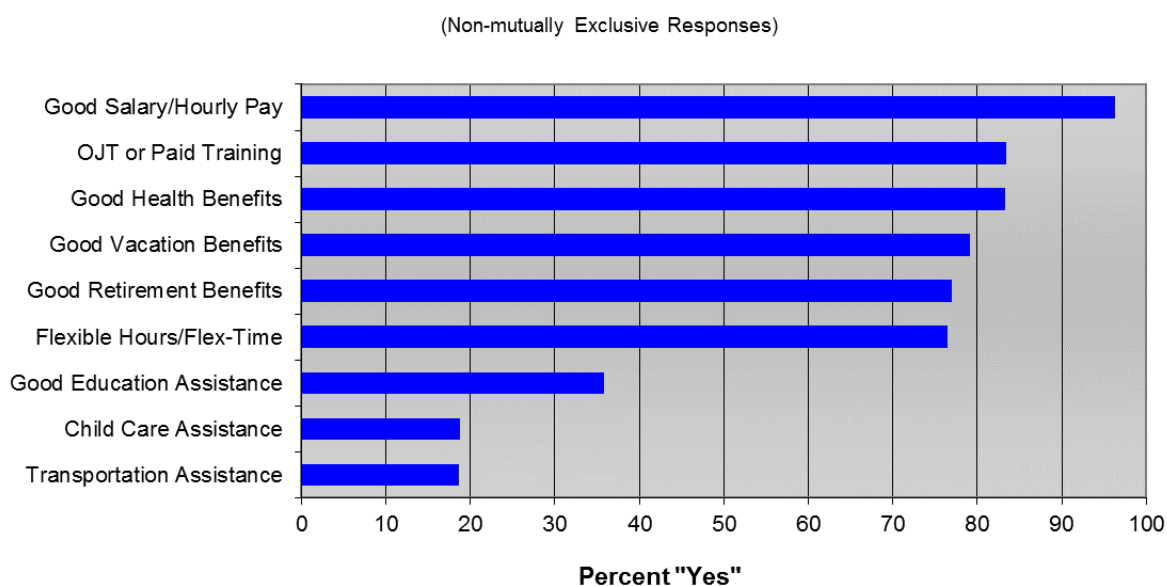
Considerations for Employment among Underemployed Workers

Figure 18 shows that the six most important benefits for this subset are, in order, good salary or hourly pay, on-the-job training (OJT) or paid training, good health benefits, good vacation, benefits, retirement benefits, and flexible hours/flex-time. All of these benefits are considered “very important” by 75% or more among the underemployed workers.

Good educational assistance follows at about 36%.

Transportation assistance and child care assistance are considered “very important” by about 18%, each.

Figure 18: Underemployed Workers – Benefits Very Important to Change Jobs



Subset 2: Those with Military Experience

This portion of the report addresses Available Labor Pool members with military experience – either serving currently or in the past.

Figure 19 shows that 23,940 (15%) members of the Available Labor Pool have military experience.

Figure 19: Military Experience

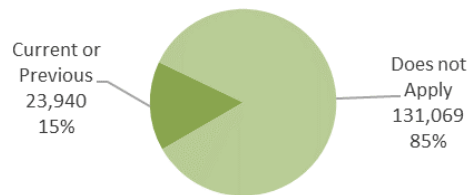


Table 8 shows that the average age of this subset of the Available Labor Pool is between 50 and 53 years old. About two-thirds (67%) are male. About two-fifths (40.9%) hold *at least* a bachelor's degree, and almost all (97.9%) have earned *at least* a high school diploma.

Table 8: Age, Gender, and Education Levels of Individuals with Military Experience

Age Information		Age in 2017	
Range		21 to 69	
Mean Average		50	
Median Average		53	
Gender		Number	Percent
Female		7,911	33.0
Male		16,029	67.0
Total		23,940	100.0
Highest Level of Education Achieved			Cumulative Percent
Doctoral Degree	516	2.2	2.2
Masters Degree	2,527	10.6	12.7
Bachelors Degree	6,740	28.2	40.9
Associates Degree	4,959	20.7	61.6
Some College (including current students)	5,334	22.3	83.9
High School Diploma	3,353	14.0	97.9
Less than HS Diploma	512	2.1	100
Total	23,940	100	

Occupational Sectors and Categories of Those with Military Experience

Figure 20 and Table 9 show the occupational sectors and occupational categories for those with military experience. Figure 20 shows that not quite a quarter (23%) are service sector workers currently. Professional workers and highly skilled laborers make up 8% and 6% respectively, and general laborers make up 19%. A large percentage (44%) of this subset is currently not working outside the home.

Figure 20: Occupational Sectors of Individuals with Military Experience

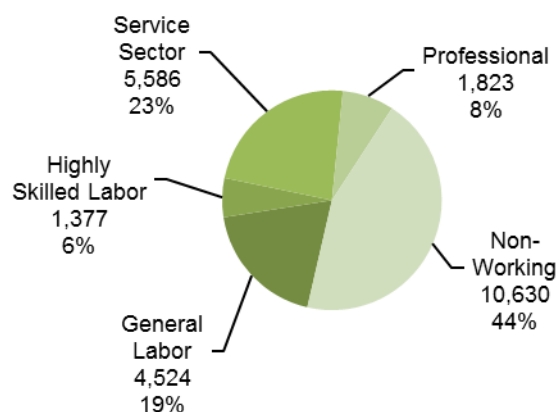


Table 9 shows the occupational categories of this subset of the Available Labor Pool. The figure shows that 15.5% currently work in manufacturing, maintenance, trucking, and other skilled positions. Slightly more than 16% are homemakers, students, or unemployed, and more than a quarter (28.3%) are retired or disabled individuals.

Table 9: Occupational Categories of Those with Military Experience

	Number	Percent
General Labor/Delivery	805	3.4
Manufacturing/Maintenance/Trucking	3,719	15.5
Mechanic/Welder/Comp Tech	562	2.3
Crew Management/Protection Services	815	3.4
Customer Service	1,578	6.6
Clerical	993	4.1
Office or Dept Manager	1,480	6.2
Exec Management	413	1.7
Accounting/Engineering	1,000	4.2
Health Aid/Nurse	1,273	5.3
Education Aid/Teacher	261	1.1
Doctor/Professor/Attorney	410	1.7
Homemaker/Students/Unemployed	3,849	16.1
Retirees/Disabled	6,781	28.3
Total	23,940	100

Considerations for Employment among Those with Military Experience

Figure 21 shows the estimated number of this subset by desired hourly wage. The figure shows that 66% are interested in a new job at \$25 an hour. About half (51%) are interested in a new job at \$20 an hour and more than a third (35%) are interested at \$15 an hour. Finally, 12% are interested in a new job at \$10 an hour.

Figure 21: Military Experience by Desired Hourly Wage

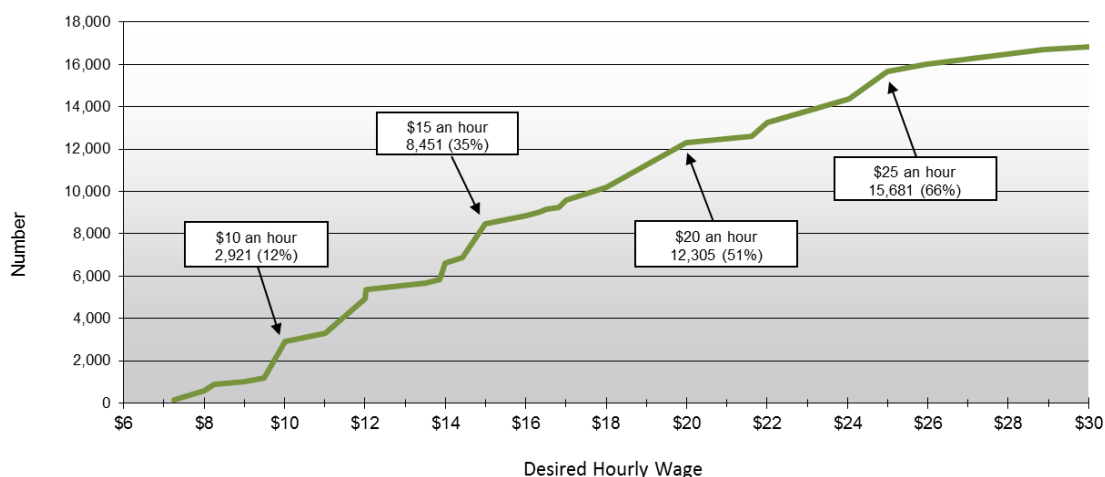
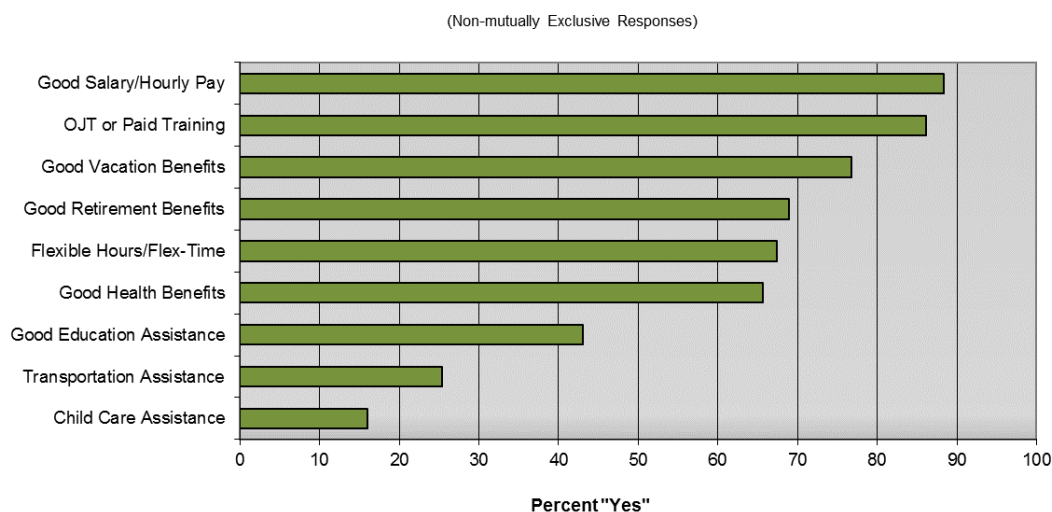


Figure 22 shows that the six most important benefits for this subset are, in order, good salary or hourly pay, on-the-job training (OJT) or paid training, good vacation benefits, good retirement benefits, flexible hours/flex-time, and good health benefits. All of these benefits are considered “very important” by about 65% or more of those with military experience. More than two-fifths (43%) considered good educational assistance “very important” benefits for a new or different job.

Transportation assistance and child care assistance is considered “very important” by about 25% and 16%, respectively.

Figure 22: Military Experience – Benefits Very Important to Change Jobs



Underemployment among Those with Military Experience

Of the *working members of this subset* (13,310), 17% consider themselves underemployed.

Figure 23: Underemployment among Those with Military Experience

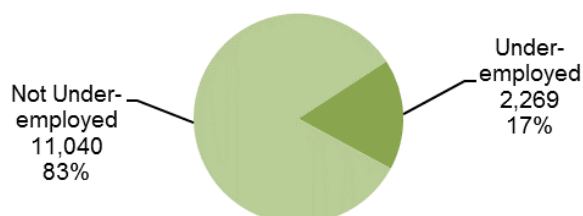
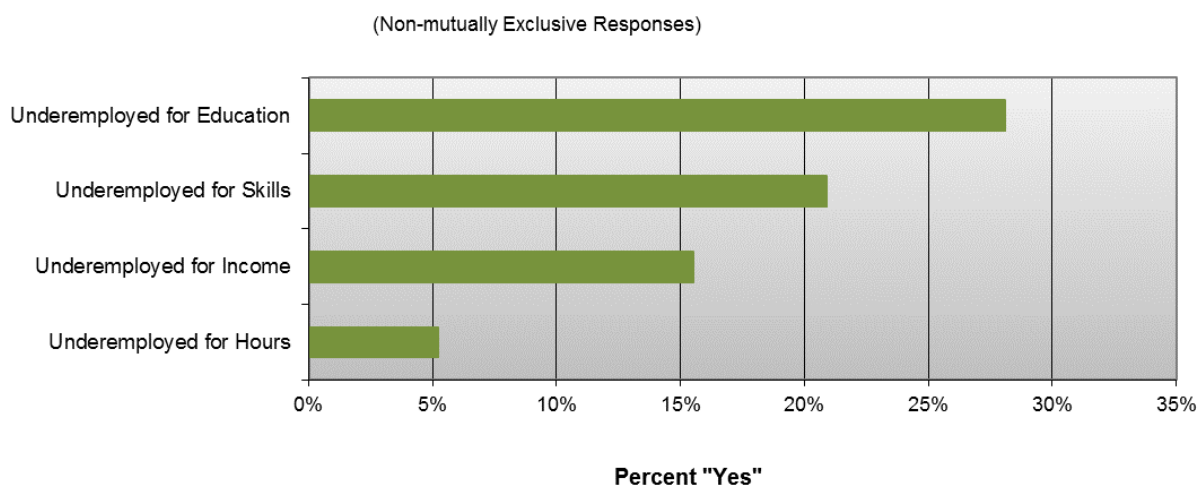


Figure 24 shows the percentages of the positive responses (i.e., “yes” answers) to the various measures of underemployment.

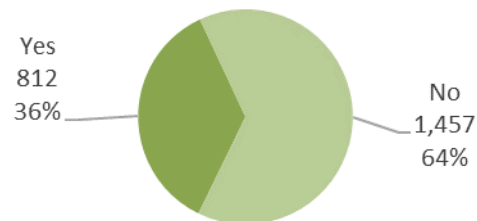
Of the *working and underemployed members of this subset*, 28% possess education levels exceeding those needed for their current jobs, 21% possess skills not used currently on the job, 16% earned more money at a past but similar job, and 5% are unable to work as many hours as desired.

Figure 24: Military Experience – Reasons for Underemployment



Underemployed workers were asked if they “are available for a new or different job because they are underemployed?” Figure 25 shows that 36% of the underemployed workers of this subset are seeking new employment to address underemployment.

Figure 25: Military Experience – New Employment to Address Underemployment



Subset 3: Discouraged Available Labor Pool Members

This portion of the report addresses unemployed Available Labor Pool members who are not currently looking for work but are interested in a new job. This subset includes nonworking Pool members who report being not-employed but are not full-time students, homemakers, retired, or disabled.

The number of members of this subset is 6,198 individuals.

Table 10 shows that the average age of this subset of the Available Labor Pool is about 43 years old. Two-thirds (66.3%) are female. More than a third (35%) hold *at least* a bachelor's degree, and almost all (94%) have earned *at least* a high school diploma.

Table 10: Age, Gender, and Education Levels of Discouraged Pool Members

Age Information		Age in 2017	
Range		19 to 66	
Mean Average		44	
Median Average		42	
Gender		Number	Percent
Female		4,106	66.3
Male		2,092	33.7
Total		6,198	100
Highest Level of Education Achieved			
		Cumulative Percent	
Doctoral Degree		0	0.0
Masters Degree		519	8.4
Bachelors Degree		1,653	26.7
Associates Degree		978	15.8
Some College (including current students)		724	11.7
High School Diploma		1,953	31.5
Less than HS Diploma		371	6.0
Total		6,198	100

Previous Occupational Groups of Discouraged Pool Members

Table 11 shows the previous occupation groups of *discouraged Pool members*.

The table shows that 27.3% of this subset previously worked in office management and 18.2% worked in customer service.

Table 11: Previous Occupational Groups of Discouraged Pool Members

	Number	Percent
General Labor	282	4.5
Maintenance	563	9.1
Truck Driving/Heavy Equipment Operator	282	4.5
General Customer Service	1,127	18.2
Office Management	1,690	27.3
Clerical	282	4.5
Software Development/Computer Programming	282	4.5
Health Aid	282	4.5
Nurse	282	4.5
Education Aid	282	4.5
Professor/Lecturer	282	4.5
Musician/Artist/Designer	563	9.1
Total	6,198	100

Considerations for Employment among Discouraged Pool Members

Figure 26 shows the estimated number of this subset by desired hourly wage. The figure shows that 70% are interested in a new job at \$15 an hour or more, and 30% are interested in a new job at \$10 an hour or more.

Figure 26: Discouraged Pool Members by Desired Hourly Wage

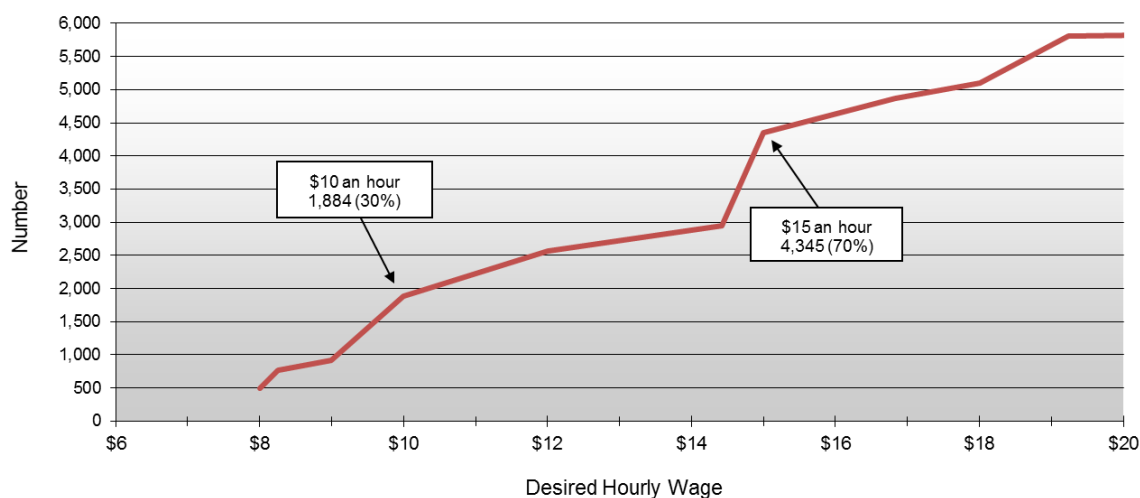
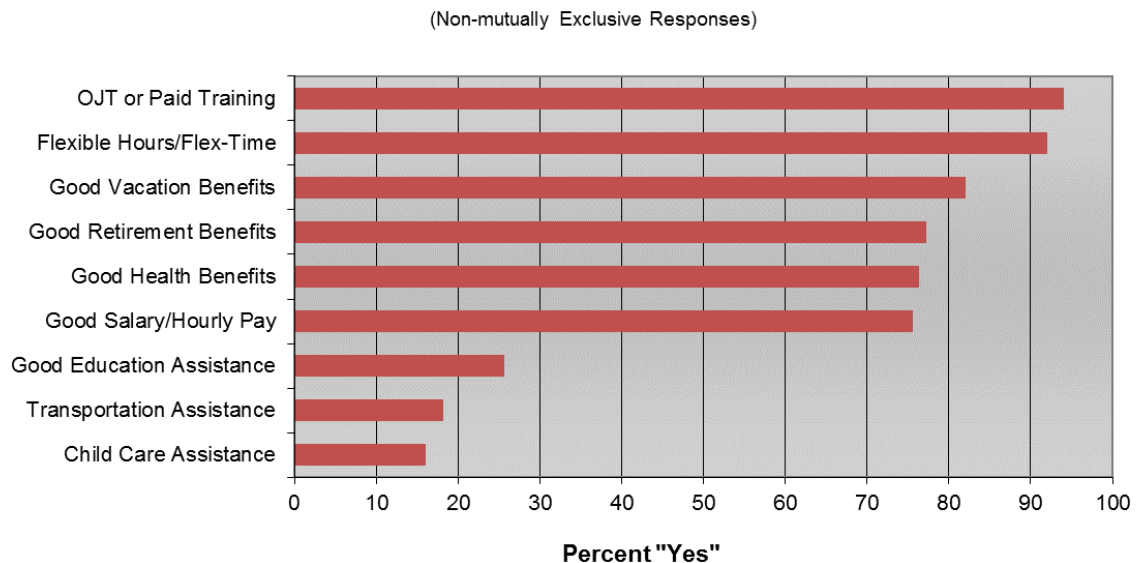


Figure 27 shows that the six most important benefits for this subset are, in order, on-the-job training (OJT) or paid training, flexible hours/flex-time, good vacation benefits, good retirement benefits, good health benefits, and good salary or hourly pay. All of these benefits are considered “very important” by about 75% or more of discouraged Pool members.

Good educational assistance, transportation assistance, and child care are considered “very important” by about 26%, 18%, and 16%, respectively.

Figure 27: Discouraged Pool Members – Benefits Very Important for New Job



Comparative Analysis (2005, 2009, 2012, 2015, and 2018 Reports)

The Docking Institute of Public Affairs has conducted similar labor studies in 2005, 2009, 2012, and 2015. This section of the report compares some of the data collected from all five studies.

Table 12 shows the population, Civilian Labor Force, number of employed, average unemployment rate, and Available Labor Pool data presented in the five reports.

Note: The West Central Labor Region occupied a smaller geographic area in 2005, as Bates, Hickory, and St. Clair counties were not included in that study.

The population of the West Central Missouri Labor Region has increased by 87,530 individuals from 2005 to 2018. As noted, however, some of the population increase can be attributed to the inclusion of Bates, Hickory, and St. Clair counties in post-2005 studies. The population of the labor region increased by 40,752 from 2009 to 2018.

The Civilian Labor Force has increased by about 37,152 workers from 2005 to 2018 and by 18,506 from 2009 to 2018.

The number of employed people in the labor basin increased from 2005 to 2009 (but again, primarily due to the inclusion of three counties) and then decreased from 2009 to 2012. The number of employed people has increased from 2012 to the present.

The unemployment rate increased from 2005 to 2012 (5.8% to 9.7%), but is now about 4.7%.

The table also shows the Available Labor Pools for each year. The Pool increased by 28,731 people from 2005 to 2018 and by 25,315 from 2009 to 2018.

Table 12: Key Population and Employment Indicators

West Central Missouri Labor Region

	2005 Report	2009 Report	2012 Report	2015 Report	2018 Report	Change '18-'05	Change '18-'09
Basin Population	444,308	491,086	511,627	528,679	531,838	87,530	40,752
Civilian Labor Force	227,279	245,925	246,603	256,020	264,431	37,152	18,506
Employed	214,532	230,619	222,708	239,273	252,084	37,552	21,465
Average Unemployment Rate	5.8%	6.5%	9.7%	6.5%	4.7%		
Available Labor Pool	126,278	129,694	149,840	163,525	155,009	28,731	25,315

The configuration of the Available Labor Pool has shifted over the past thirteen years. Figure 28 shows that there was a larger proportion of non-employed Pool members in 2012, compared to other years. The proportion of Pool members who were employed but interested in a new of different job was larger in 2015 than other years.

Figure 28: Available Labor Pool Comparison

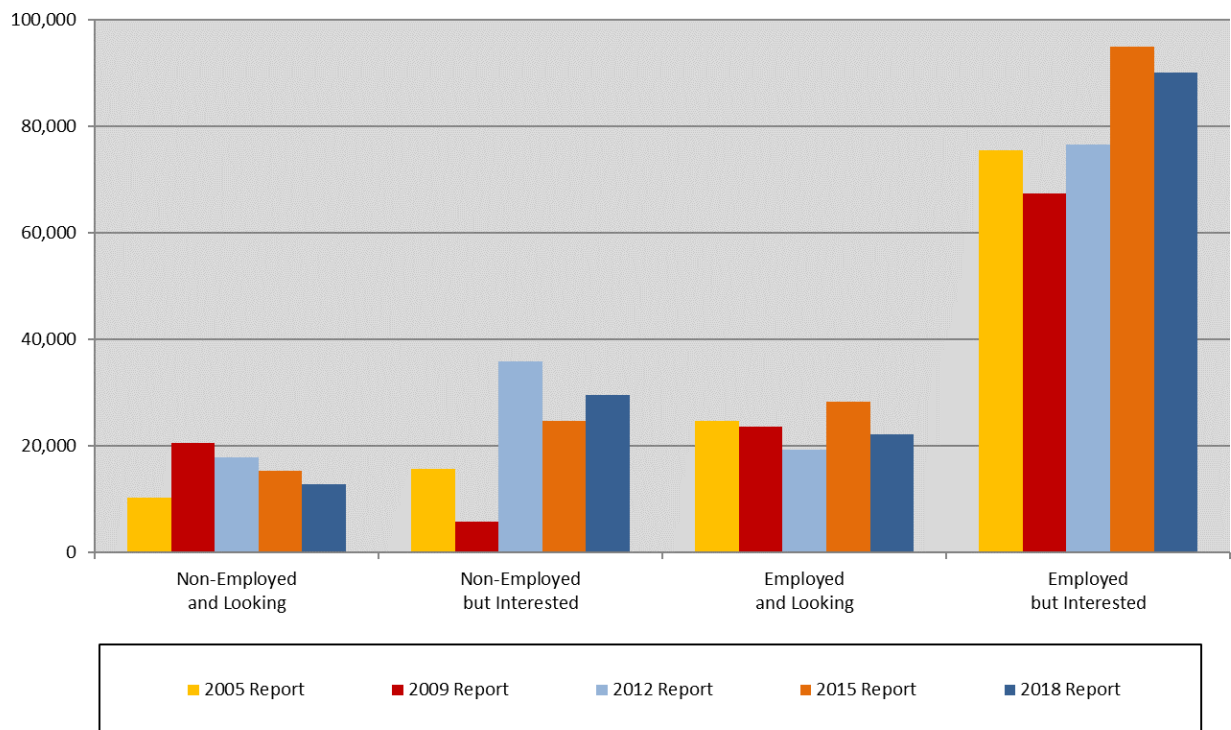


Table 13 compares occupational sectors and education levels from the five studies. The 2012 study stands out with the largest percentage of non-working pool members (35.5%). The 2005 Pool had the largest percentage of general laborers (22%) and the largest percentage of professional employees (22.9%). The 2018 study has the largest percentage of service sector workers (35.2%)

The education levels among the five pools vary somewhat. The 2018 Pool has the largest percentage of workers with advanced educations, with about two-fifths (43.9%) holding *at least* bachelor's degrees (see cumulative columns).

Table 13: Available Labor Pool Occupational Sectors and Education Levels Comparison

	2005 Report		2009 Report		2012 Report		2015 Report		2018 Report			
Labor Sector												
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
General Labor	27,758	22.0	26,214	20.2	21,744	14.5	28,042	17.1	28,456	18.4		
Highly Skilled Labor	8,899	7.0	11,355	8.8	11,253	7.5	16,525	10.1	12,353	8.0		
Service Sector	34,666	27.5	43,157	33.3	42,351	28.3	56,284	34.4	54,608	35.2		
Professional	28,980	22.9	21,445	16.5	21,288	14.2	22,501	13.8	16,796	10.8		
Non-Working	25,975	20.6	27,523	21.2	53,203	35.5	40,173	24.6	42,796	27.6		
Total	126,278	100	129,694	100	149,839	100	163,525	100	155,009	100		
Highest Education												
			Cumulative		Cumulative		Cumulative		Cumulative			
	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent
Doctoral Degree	809	0.6	0.6	2,558	2.0	2.0	2,680	1.8	1.8	2,376	1.5	1.5
Masters Degree	11,368	9.0	9.6	12,286	9.5	11.4	15,998	10.7	12.5	18,156	11.1	12.6
Bachelors Degree	19,537	15.5	25.1	22,372	17.2	28.7	23,048	15.4	27.8	33,392	20.4	33.0
Associates Degree	11,464	9.1	34.2	11,999	9.3	37.9	21,075	14.1	41.9	21,044	12.9	45.8
Some College	36,634	29.0	63.2	39,793	30.7	68.6	31,944	21.3	63.2	37,315	22.8	68.7
High School Diploma	39,687	31.4	94.6	34,645	26.7	95.3	46,159	30.8	94.0	44,281	27.1	95.7
Less HS Diploma	6,779	5.4	100	6,040	4.7	100	8,936	6.0	100	6,961	4.3	100
Total	126,278	100		129,693	100		149,840	100		163,525	100	
										155,009	100	

Table 14 shows the numbers and percentages of those “willing to take a job outside of their primary field.” The table also shows responses to questions regarding various work shifts.

The table shows that the percentage of Pool members willing to take a job outside of their primary field varies from 87% (2005) to 79.7% (2015).

Table 14: Willing to Work Outside of Field and Work Shift Comparison

	2005 Report		2009 Report		2012 Report		2015 Report		2018 Report	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Willing to Take Job Outside of Primary Field?	109,862	87.0	108,035	83.3	126,611	84.5	130,394	79.7	125,531	81.0
Will Work 2nd or Night Shift?	n/a	n/a	72,110	55.6	85,409	57.0	89,285	54.6	88,406	57.0
Will Work Weekends?	n/a	n/a	70,813	54.6	84,360	56.3	88,794	54.3	86,554	55.8
Will Work Rotating Shifts?	n/a	n/a	53,693	41.4	70,425	47.0	70,152	42.9	62,968	40.6

Figure 29 shows a comparison of “minutes willing to commute” for the four studies.

While the patterns are similar, the “drop-off” between 30 minutes and 35 minutes seems the most dramatic in the 2012 study.

Figure 29: Available Labor by Commute Minutes Comparison

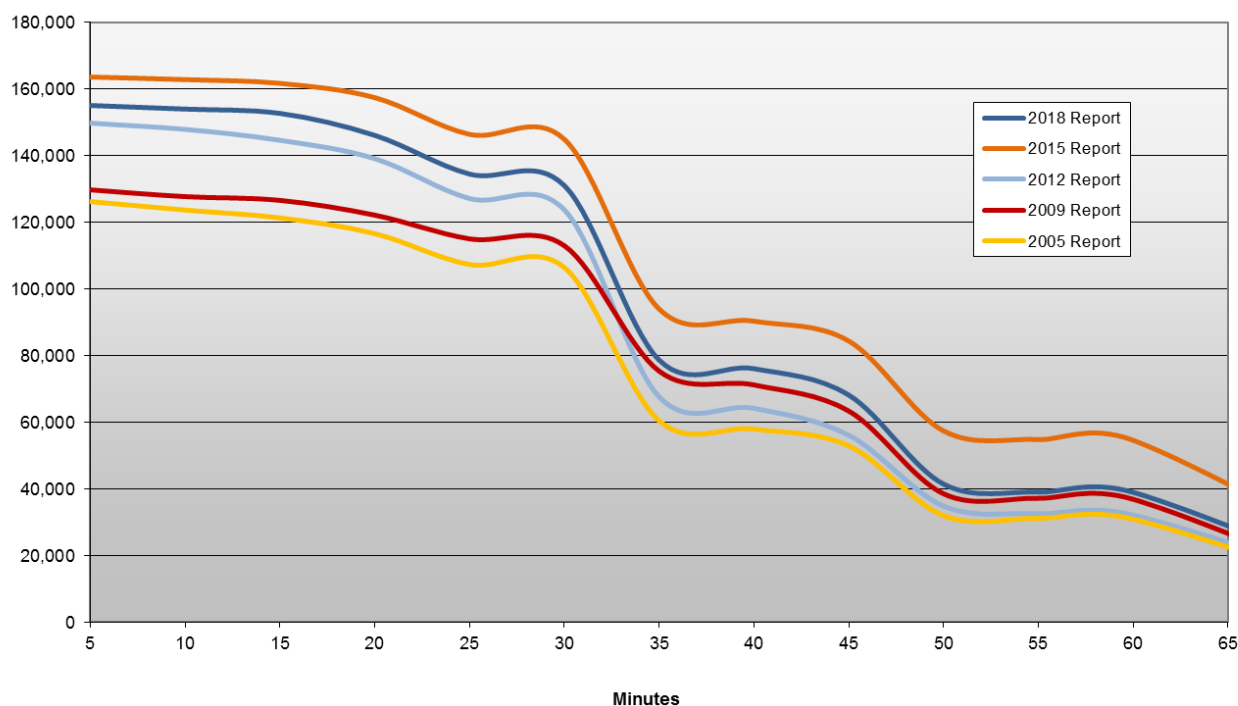


Table 15 shows desired benefits ranked in order by 2018 data. The table shows that good salary/hourly pay was the most important benefit in the 2009, 2012, 2015, and 2018 studies. On-the-job training (OJT) or paid training was the most important benefit in 2005. It should be noted, however, that many other benefits were rated very highly during all of the study years.

Table 15: Important Benefits to Change Employment Comparison

	2005 Report	2009 Report	2012 Report	2015 Report	2018 Report	
<i>Ranked by 2018 Report</i>						
	<i>Percent Responding "Yes"</i>					<i>Change '18 - '15</i>
Good Salary or Hourly Wage	81.9	88.8	83.1	88.0	88.4	0.4
OJT or Paid Training	88.0	86.7	81.0	82.4	82.4	0
Good Health Benefits	87.3	87.3	82.3	83.4	79.7	-3.7
Good Vacation Benefits	78.9	79.3	74.0	83.2	79.0	-4.2
Good Retirement Benefits	86.7	84.7	81.8	84.5	76.5	-8
Flexible Hours or Flex-Time	69.7	70.6	66.3	73.7	73.1	-0.6
Good Educational Assistance	64.8	52.2	50.2	51.9	35.7	-16.2
Transportation Assistance to Work	n/a	33	33.2	26.8	22.0	-4.8
ChildCare Assistance	n/a	n/a	n/a	n/a	13.2	n/a

Figure 30 shows a comparison of the desired wages of the five study groups. The desired wage line shows that larger proportions of the 2005, 2009, 2012, and 2015 Pools are available for work in the \$7 to \$14 an hour or so range when compared to the 2018 Pool.

Figure 30: Available Labor Pool by Hourly Wage Comparison

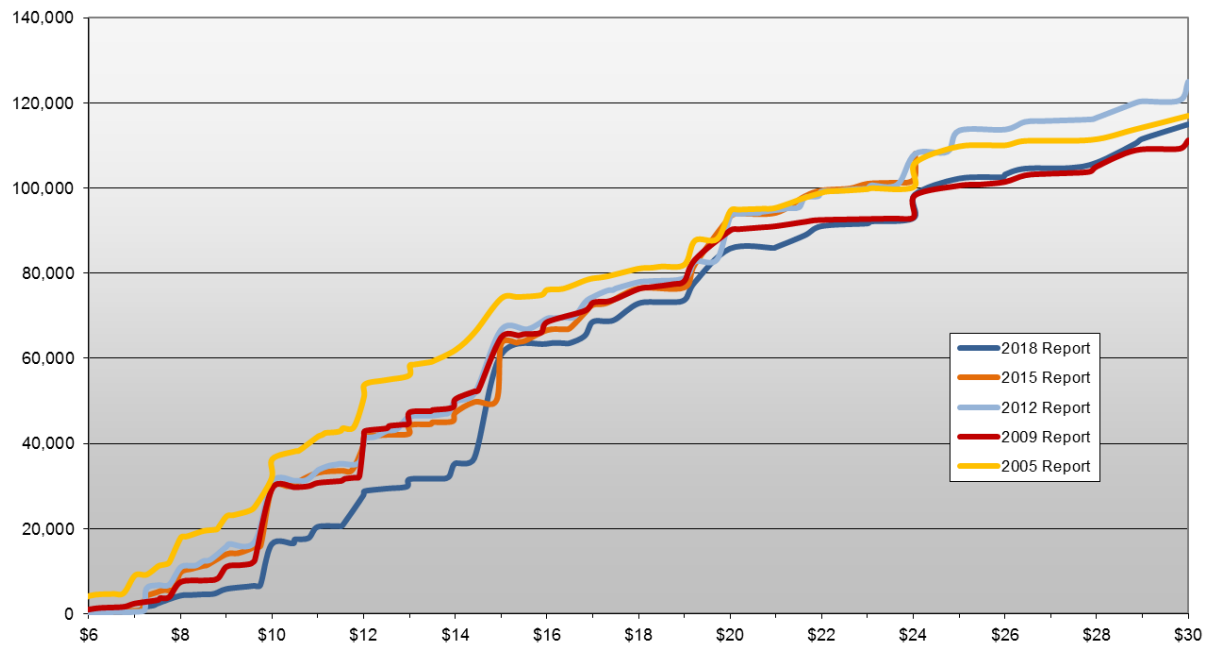


Table 16 shows a comparison of the underemployed members of the Available Labor Pools for the five studies.

The 2005 Pool had the largest percentage of employed members (79.4%) and 2012 had the smallest (64.5%). The percentage of underemployed workers was largest in 2005 (47.6%) and smallest in 2018 (22.2%).

The percentages of underemployed workers in general labor occupations is largest in 2015 and 2018 (30.5% and 30.3%, respectively) and smallest in 2012 (23.4%).

The percentage of underemployed highly skilled laborers was largest in 2009 (13%) and smallest in 2018 (5.2%).

The percentage of underemployed service sector workers was largest in 2012 and 2018 (52.8% and 53.6%, respectively) and smallest in 2005, 2009, and 2015 (46.3%, 45.2%, and 46.5%, respectively).

Finally, the percentage of underemployed professional workers was largest in 2005 (15.6%) and smallest in 2015 and 2018 (10.7% and 10.9%, respectively).

Examining the cumulative percentage columns in the educational attainment (Highest Education) section of the table shows that 12.4% of the underemployed workers in 2015 had advanced degrees (*beyond the bachelor degree level*), while 8.2% had advanced degrees in 2009.

Table 16: Underemployed Workers Occupational Sectors and Education Levels Comparison

	2005 Report		2009 Report		2012 Report		2015 Report		2018 Report						
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent					
Employed of Pool	100,303	79.4	91,189	77.6	96,637	64.5	123,352	75.4	112,213	72.4					
Underemployed Wrkrs	47,822	47.6	29,183	32.0	30,924	32.0	39,733	32.2	24,862	22.2					
Willing to Change Job to Address Status	41,755	87.3	24,602	84.3	25,760	83.3	20,335	51.2	12,441	50.0					
Labor Sector															
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent					
General Labor	12,260	25.6	7,938	27.2	7,236	23.4	12,107	30.5	7,528	30.3					
Highly Skilled Labor	5,965	12.5	3,794	13.0	3,185	10.3	4,889	12.3	1,297	5.2					
Service Sector	22,118	46.3	13,191	45.2	16,328	52.8	18,494	46.5	13,323	53.6					
Professional	7,479	15.6	4,261	14.6	4,175	13.5	4,243	10.7	2,714	10.9					
Total	47,822	100	29,184	100	30,924	100	39,733	100	24,862	100					
Highest Education															
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent			
Doctoral Degree	452	0.9	0.9	603	2.1	2.1	557	1.8	1.8	436	1.1	1.1	366	1.5	1.5
Masters Degree	3,853	8.1	9.0	1,776	6.1	8.2	2,474	8.0	9.8	4,494	11.3	12.4	2,458	9.9	11.4
Bachelors Degree	8,990	18.8	27.8	4,514	15.5	23.6	6,247	20.2	30.0	6,920	17.4	29.8	7,700	31.0	42.3
Associates Degree	4,654	9.7	37.5	3,683	12.6	36.2	4,886	15.8	45.8	5,962	15.0	44.8	4,185	16.8	59.2
Some College	14,625	30.6	68.1	9,054	31.0	67.3	7,669	24.8	70.6	9,510	23.9	68.8	5,040	20.3	79.4
High School Diploma	13,379	28.0	96.1	8,483	29.1	96.3	7,607	24.6	95.2	10,897	27.4	96.2	4,333	17.4	96.9
Less HS Diploma	1,869	3.9	100	1,069	3.7	100	1,484	4.8	100	1,514	3.8	100	780	3.1	100
Total	47,822	100		29,182	100		30,924	100		39,733	100		24,862	100	

Methods

The West Central Missouri Labor Region has a total population of 531,838 and a Civilian Labor Force of 264,431. The unemployment rate was about 4.7% at the time of the study. The basin contains an Available Labor Pool of 155,009 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 (BLS) 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 who are available for work and 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 West Central Missouri Labor Region, 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 people 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.⁷ 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.⁸ Secondly, the number of potential workers is 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

⁷ 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).

⁸ 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 respondents. This quotient is then multiplied by the total number of people in the labor basin who are 18 to 65 years old.

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 West Central Missouri Labor Region.

Description of Survey Research Methods

Data for the 2018 study were collected from a random digit telephone survey of adults living in 20 counties in west central Missouri: Bates, Benton, Caldwell, Carroll, Cass, Chariton, Clay, Cooper, Henry, Hickory, Howard, Jackson, Johnson, Lafayette, Moniteau, Morgan, Saline, Ray, Saline, and St. Clair.⁹ Surveying took place from September 2017 through January 2018, and utilized a Computer Assisted Telephone Interviewing (CATI) system. A total of 3,211 households were successfully contacted during the data collection period, and a randomly selected adult in each was asked to participate in the study.¹⁰ In 1,748 households, the selected adult agreed to be interviewed. This represents a cooperation rate of 53.8% and a margin of error of +/-2.36%.

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 1,206 and are considered eligible respondents. Of these respondents, 612 or 51% were 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 +/- 3.96%.

Data collection for the 2005, 2009, 2012, and 2015 labor studies used the same methods (although the 2005 study include three fewer counties). 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 is the property of the Docking Institute.¹¹

⁹ 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.

¹⁰ 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.

¹¹ 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

West Central Missouri Labor Region – The West Central Missouri Labor Region includes Bates, Benton, Caldwell, Carroll, Cass, Chariton, Cooper, Henry, Hickory, Howard, Johnson, Lafayette, Moniteau, Morgan, Pettis, Ray, Saline, and St. Clair Counties in Missouri, plus portions of Clay and Jackson Counties east of Kansas City.

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 at which a respondent would consider accepting 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 1) possessing skills and/or training levels that exceed the responsibilities of their current job; 2) have educations that exceed those necessary for their current job; 3) have earned a higher salary/hourly wage for a previous but similar job, and/or 4) are unable to work as many hours as desired at their current job.

Military Experience – Individuals who are currently serving or who have previously served in the armed forces.

Discouraged Pool Members – Non-working, non-students, and non-retired individuals who are NOT looking for work, but are interested in a new job.

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

- **General Labor** includes occupations such as cleaning, construction, delivery, and maintenance.
- **Highly Skilled Labor** includes occupations such as police, fire-fighting, postal worker, welder, highly skilled mechanic, computer technician, and lab technician.
- **Service Sector** includes occupations such as clerical work, waitress, retail sales clerk, bookkeeper, para-professional, certified nurse’s assistant, nurse, teaching, and small business management.
- **Professional Sector** 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

