Johnson County Labor Basin

Labor Availability Analysis – 2015

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

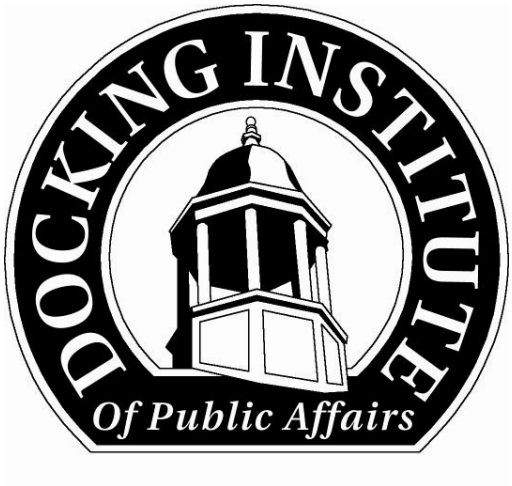
Benton ● Cass ● Henry ● Jackson ●
Johnson ● Lafayette ● Pettis ● Saline Counties

Prepared For

Central Missouri Economic Development Alliance

By

The Docking Institute of Public Affairs



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Executive Summary

The Johnson County Labor Basin includes Benton, Cass, Henry, Jackson, Johnson, Lafayette, Pettis, and Saline counties in Missouri. The purpose of this report is to assess the "Available Labor Pool" in this labor basin. The "Available Labor Pool" represents those who indicate that they are looking for employment or are interested in changing their jobs for the right employment opportunity.

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

- The population of the Johnson County Labor Basin is 338,908. About 32% of the population (or 107,376 individuals) is considered the Available Labor Pool.

- Of the non-working members of the Available Labor Pool, an estimated 10,241 (9.5%) are currently looking for work and 17,147 (16.0%) are interested in working for the right opportunities. Of the working members of the Available Labor Pool, 17,452 (16.3%) are currently looking for work, while 62,536 (58.2%) are interested in a different job given the right opportunities.

- Almost three-quarters (73.5%) of the Available Labor Pool has at least some college experience and almost 97% has at least a high school diploma. The average age for members of the Pool is about 44 years old, and women make up less than half (46.4%) of the Pool.

- An estimated 15.8% of the Available Labor Pool are currently employed as general laborers, while an additional 9.7% work in government services or technical/high skill blue-collar occupations. An estimated 34.7% members of the Pool work in service sector jobs, while 14.2% work in professional white-collar jobs. A quarter (25.5%) is not currently working.

- Almost 80% of the Available Labor Pool indicates that they are "willing to work outside of their primary field of employment for a new or different employment opportunity."

- Half (50%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 87% will commute up to 30 minutes for employment.

- The five most important desired benefits in order are good salary or hourly wage, good retirement benefits, good vacation benefits, good health benefits, and on-the-job (OJT) or paid training.

- An estimated 18,247 members (17%) of the Available Labor Pool are interested in a new job at $10 an hour, 39,734 (37%) are available at $15 an hour, and 60,680 (57%) are available at $20 an hour.

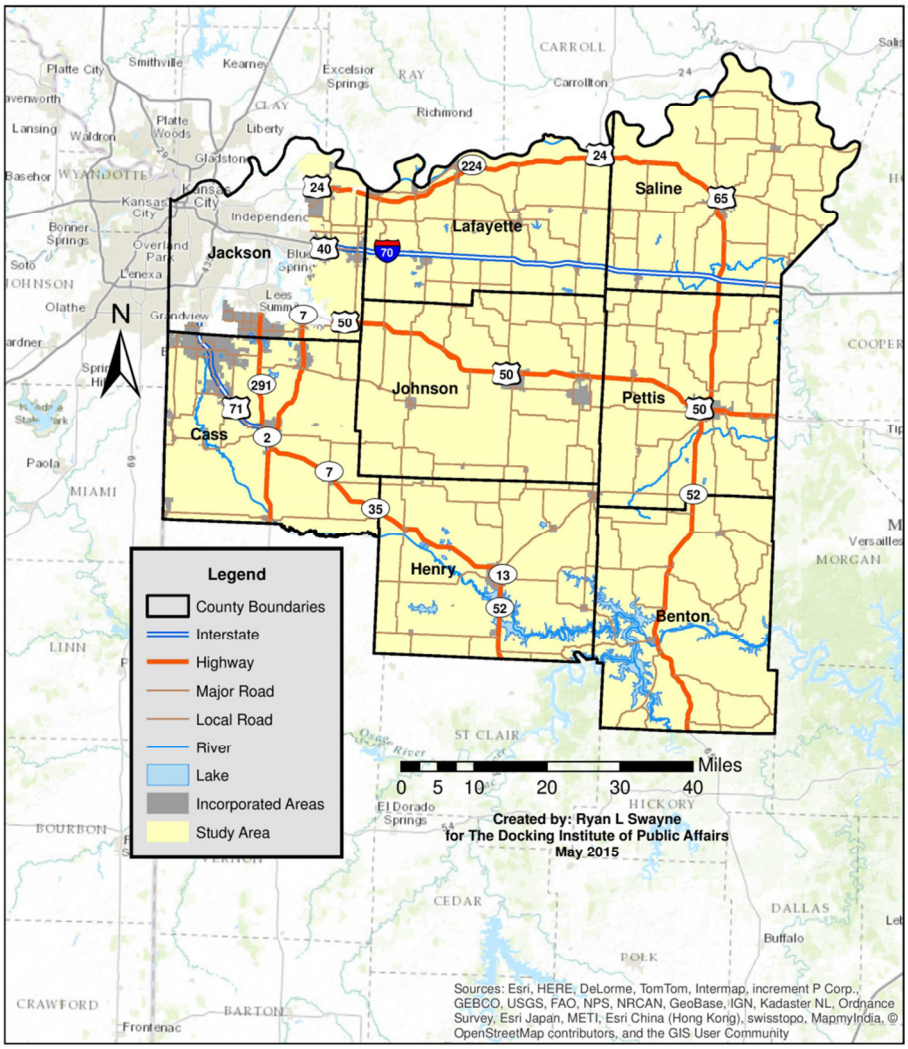
- Of the 79,988 members in the subset of *employed members* of the Available Labor Pool, 24,737 (31%) consider themselves underemployed.

- A comparison of data presented in 2012 and 2015 for the labor region suggests that there is a larger proportion of *employed* members of the 2015 pool than the 2012 pool.

The Johnson County Labor Basin

The Johnson County Labor Basin includes eight counties in central Missouri (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 (Warrensburg) for an employment opportunity. In the case of the Johnson County Labor Basin, it is reasonable that individuals may commute from (and within) one of the eight counties because these counties contain 1) communities with adequate transportation to the Warrensburg area and 2) communities that are within a 45-minute commute to the center of the labor basin.

Map 1: Johnson County Labor Basin



The Johnson County Labor Basin has a total population of approximately 338,908, and a Civilian Labor Force of 165,106. The total number of employed is 154,560 and the average unemployment rate was 6.39% at the time of this study. The Docking Institute's analysis suggests that the basin contains an Available Labor Pool of 107,376 individuals.

The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for full-time employment, 2) not working *but* interested in full-time employment, 3) currently working *and* looking for other employment, and 4) currently employed *but* interested in different employment for the right opportunities. Please see the Methods section – page 36 – for more information about the Institute's Available Labor Pool analysis methodology and the survey research methods used for this study. See the glossary – page 38 – for definitions of terms used throughout the report.

Components of the Report

The majority of this report assesses the characteristics of the Available Labor Pool in the Johnson County Labor Basin by answering the following questions:

- What proportion of the labor force – employed, unemployed, homemakers, students, retired and disabled – are interested in a new employment opportunity?
- What skills and education levels do those interested in new employment have?
- What types of jobs have these workers and potential workers had in the past?
- What types of jobs have currently non-working workers had in the past?
- What types of considerations (pay, benefits, commute time) shape their decision-making?
- What are some of the characteristics of the general laborers, high skill blue-collar workers, service and support workers and professional white-collar workers?
- What proportion of the Available Labor Pool is willing to change fields of employment?
- What work shifts are Available Labor Pool members willing to work?

Two Subsets of the Available Labor Pool

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

- Those living "within the necessary commute time." Necessary commute time is defined as a commute time stated by the respondent that is equal to or greater than the commute time necessary for the respondent to travel from his or her Zip Code of residence to the Zip Code at the center of the labor basin.
- Those that consider themselves as "underemployed."

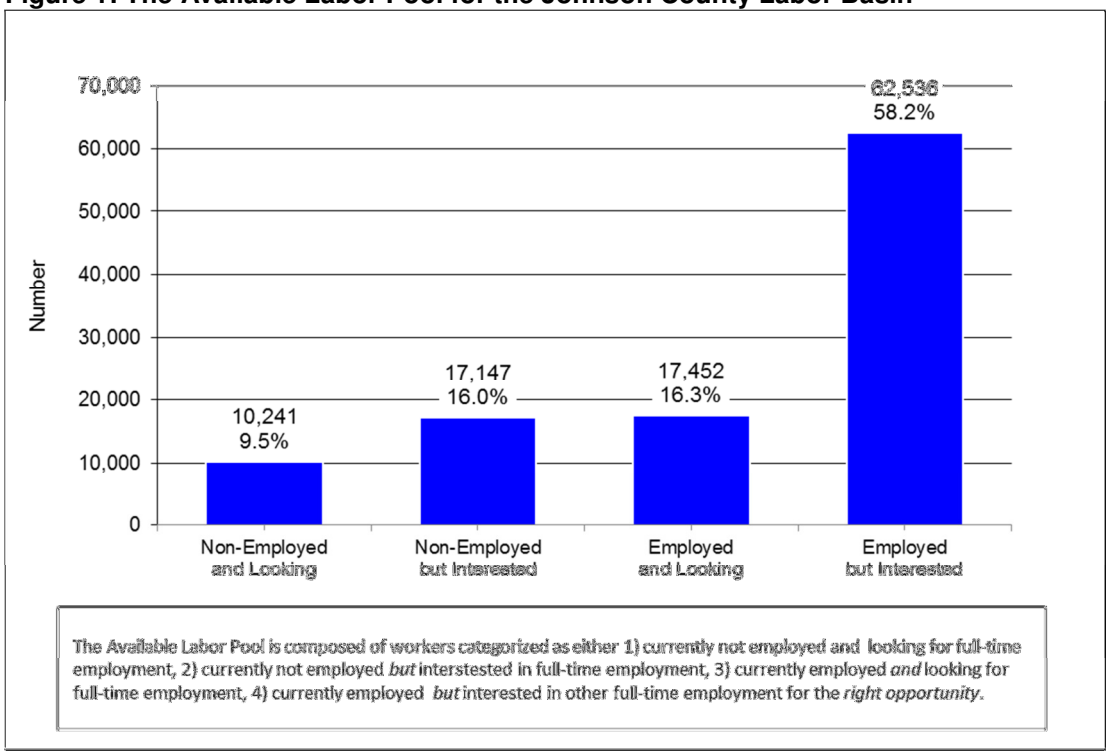
Comparative Analysis

Finally, this report provides a comparative analysis of key findings from the 2005, 2009, 2012, and 2015 labor availability reports conducted in the Johnson County area.

The Johnson County Labor Basin's Available Labor Pool

It is estimated that 10,241 (9.5%) members of the Available Labor Pool) are non-employed[1] *and* looking for employment, while 17,147 (16.0%) are non-employed *but* interested in a job for the right opportunities. In addition, 17,452 (16.3%) members of the Pool are employed *and* currently looking for different employment, while 62,536 (58.2%) are employed *but* interested in new employment for the right opportunities.

Figure 1: The Available Labor Pool for the Johnson County Labor Basin



[1] 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.

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 Johnson County Labor Basin. The map shows:

- Between 5% and 9.99% of the entire labor basin's Available Labor Pool is located in Zip Code areas within Cass, Johnson, and Pettis counties. (See red areas in the map.)
- Between 3% and 4.99% of the entire labor basin's Available Labor Pool is located in Zip Code areas within Cass, Henry, Jackson, and Saline counties. (See brown areas in the map.)
- Zip Code areas in all eight counties contain 1% to 2.99% of the basin's Available Labor Pool. (See orange areas in the map.)
- Zip Codes areas in all eight counties contain less than 1% of the Available Labor Pool. (See peach and yellow areas in the map.)

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

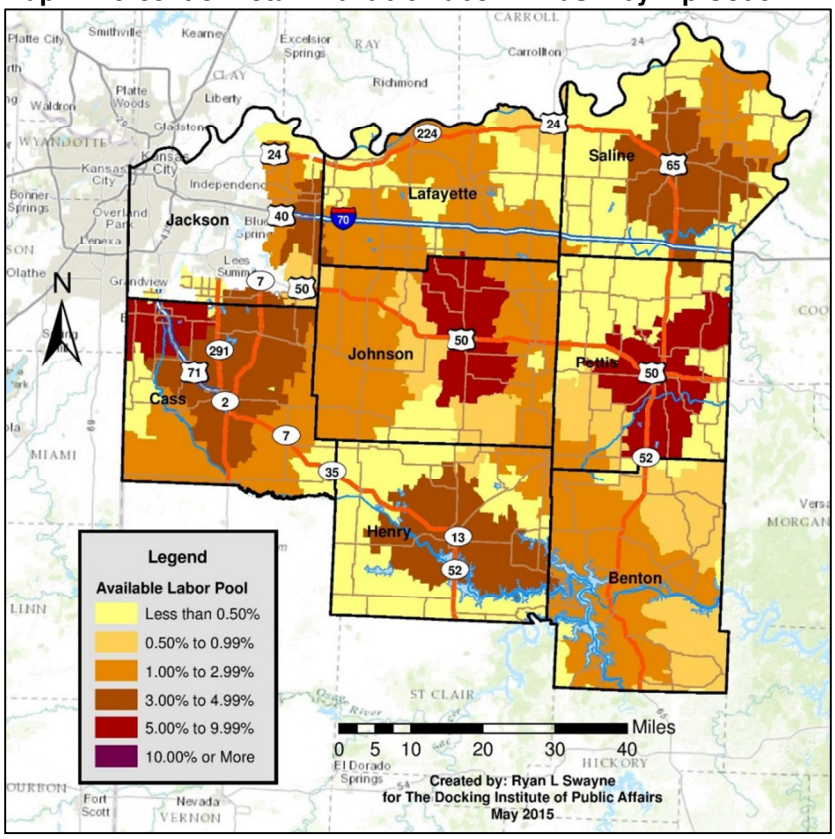


Table 1 shows the gender, age, and education levels of the 107,376-member Available Labor Pool. Less than half (46.4%) of the Pool is women, and the average age is about 44 years old. Most (96.7%) have ***at least*** a high school diploma, almost three-quarters (73.5%) have ***at least*** some college education, and more than a third (35.9%) have ***at least*** a bachelor's degree.

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

Current Year	Age in 2015		
Range	18 to 75		
Average	44		
Median	45		
Gender	Number	Percent	
Female	49,864	46.4	
Male	57,511	53.6	
Total	107,376	100	
			Cumulative
Highest Level of Education Achieved			Percent
Doctoral Degree	1,472	1.4	1.4
Masters Degree	13,501	12.6	13.9
Bachelors Degree	23,565	21.9	35.9
Associates Degree	15,441	14.4	50.3
Some College (including current students)	24,947	23.2	73.5
High School Diploma	24,915	23.2	96.7
Less HS Diploma	3,535	3.3	100
Total	107,376	100	
"Do you speak Spanish?"	Number	Percent	
"Yes"	21,264	19.8	
Speak Very Well	*1,308*	*6.2*	*These percentages represent portions of 19.8%*
Speak Fairly Well	*1,922*	*9.0*	
Speak Only a Little	*18,034*	*84.8*	
		100	

Table 2 shows the various occupational categories of the 107,376-member Available Labor Pool. General labor occupations represent 15.8% of the entire Available Labor Pool, while high-skilled, blue-collar jobs make up 9.7%. Traditional service-related occupations represent 34.7% of the Available Labor Pool, while professional occupations represent 14.2%. Non-employed members of the Pool make up a quarter (25.5%) of the total.

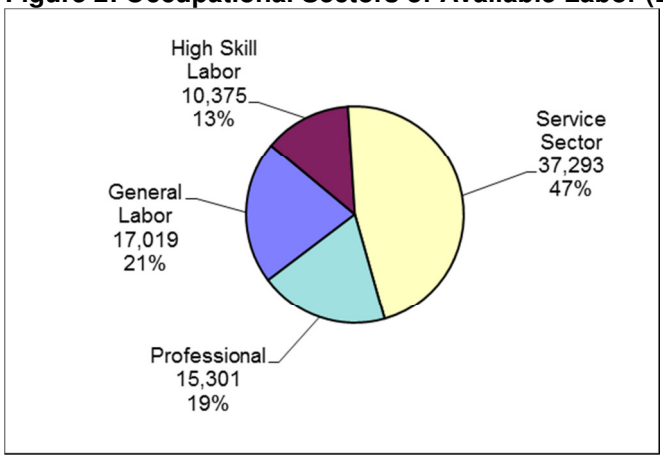
Table 2: Major Occupational Categories of Available Labor

			Years at Job	
	Number	Percent	Mean	Median
General Labor/Delivery	7,738	7.2	9.8	3.0
Manufacturing/Maintenance/Trucking	9,281	8.6	10.8	7.0
Total General Labor	*17,019*	*15.8*	*10.3*	*5.0*
Mechanic/Welder/Comp Tech	4,732	4.4	10.3	8.9
Crew Management/Protection Services	5,643	5.3	15.4	15.5
Total Highly-Skilled Labor	*10,375*	*9.7*	*12.9*	*12.2*
Customer Service	14,630	13.6	7.3	4.0
Clerical	3,355	3.1	6.0	5.0
Office or Dept Manager	8,305	7.7	11.8	10.0
Health Aid/Nurse	6,139	5.7	9.3	5.0
Education Aid/Teacher	4,863	4.5	7.6	6.0
Total Service Sector	*37,293*	*34.7*	*8.4*	*6.0*
Exec Management	5,807	5.4	14.2	12.5
Accounting/Engineering	4,909	4.6	11.1	5.0
Doctor/Professor/Attorney	3,814	3.6	14.7	12.1
Writer/Artist/Musician	771	0.7	8.9	5.2
Total Professional Sector	*15,301*	*14.2*	*12.2*	*8.7*
Homemaker/Student/Unemployed	17,946	16.7	n/a	n/a
Retired/Disabled	9,442	8.8	n/a	n/a
Total Non-Employed	*27,388*	*25.5*		
Total	107,376	100		

Total numbers or percentages in table might not match those in text due to rounding.

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)



Current Skills and Work Experiences

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

Table 3 (below) and Figure 3 (next page) show the current employment status and previous work or training experience of Available Labor Pool members. 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 that indicate previous training or experience in that particular field.

For example, 4,704 members of the Pool are currently employed as general laborers, construction, cleaners, and similar positions. An additional 5,190 Pool members (employed and currently non-employed) had previous employment experience or training in one of those jobs, for a total of 9,895 individuals. (The total does not sum correctly due to rounding error.)

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
Working with Hands			
General Labor	4,704	5,190	9,895
Farm or Ranch Labor	1,431	253	1,684
Manufacturing and Assembly	2,306	6,603	8,910
Maintenance	2,132	890	3,022
Driving (Delivery, Bus, Postal)	1,603	846	2,448
Truck Driving/Heavy Equip. Op.	4,842	1,469	6,311
Skilled Labor	2,800	3,606	6,406
Crew Management	3,130	1,452	4,582
Working with People			
General Customer Service	14,630	18,062	32,692
Office Management	8,305	8,956	17,261
Governmental Services	2,513	3,256	5,769
Executive Management	5,807	2,385	8,192
Advanced Social Services	2,007	1,704	3,710
Working with Numbers			
Clerical	3,355	2,373	5,729
Accounting/Finance/Banking	1,214	2,272	3,486
Researcher/Analyst	593	297	890
Working with Technology			
IT and Other (Non-Med) Tech. Maint.	1,932	918	2,850
Software Dev./Comp. Prog.	2,212	1,624	3,836
Engineer/Designer	890	496	1,386
Providing Health Services			
Health Aid	3,074	3,113	6,187
Nurse	3,065	987	4,051
Advanced Medical Practitioner	513	0	513
Providing Educational Services			
Education Aid	2,725	1,053	3,779
Teacher/Trainer	2,138	2,378	4,516
Professor/Lecturer	1,294	0	1,294
Creative Arts			
Writer/Artist/Musician	771	955	1,727
Total	79,988	71,136	151,124

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

** An individual member of the Pool is counted only once within each employment category. If jobs are dublicate, they were removed from the Previous Job Category.

Total numbers or percentages in table might not match those in text due to rounding.

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 14,630 working Pool members currently employed in this category and 18,062 previously employed/trained in this category, for a total of 32,692 individuals.

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

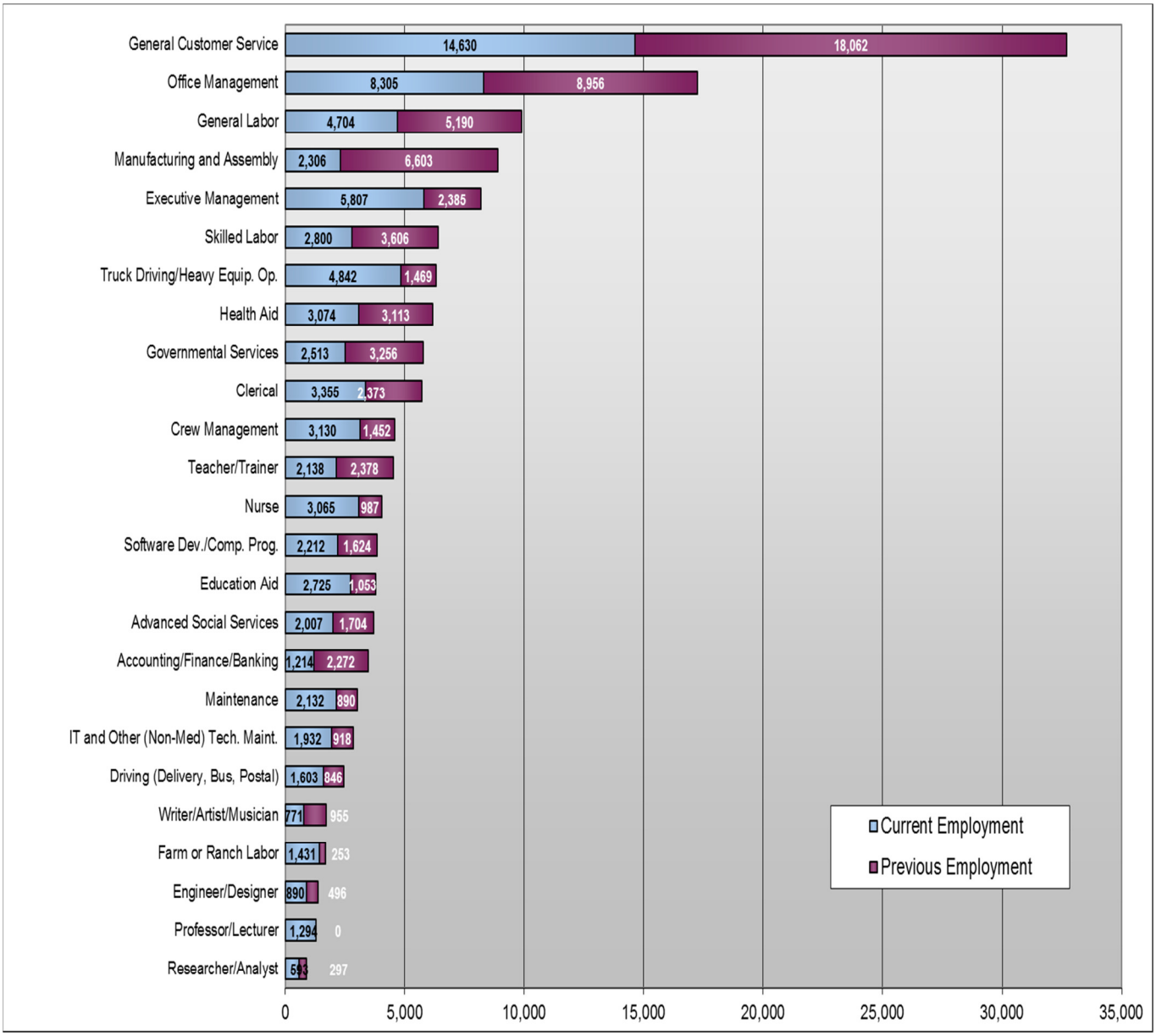


Table 2 on page 7 showed that 27,388 members of the Available Labor Pool are currently non-working. Those with previous work experience were included in the "previous work/training" column in Table 3 on page 8.

Table 4 below shows the work experience of the non-working members of the Pool. The table shows that 26.7% of the current non-workers were previously employed as general customer service workers and 11.4% were office managers.

Table 4: Previous Work Experience of Non-Workers

Non-Employed - Previous Experience	Number	Percent
Working with Hands		
General Labor	1,591	5.8
Farm or Ranch Labor	0	0.0
Manufacturing and Assembly	2,017	7.4
Maintenance	0	0.0
Driving (Delivery, Bus, Postal)	528	1.9
Truck Driving/Heavy Equip. Op.	1,520	5.6
Skilled Labor	1,981	7.2
Crew Management	0	0.0
Working with People		
General Customer Service	7,324	26.7
Office Management	3,133	11.4
Governmental Services	0	0.0
Executive Management	1,369	5.0
Advanced Social Services	1,230	4.5
Working with Numbers		
Clerical	348	1.3
Accounting/Finance/Banking	463	1.7
Researcher/Analyst	0	0.0
Working with Technology		
IT and Other (Non-Med) Tech. Maint.	0	0.0
Software Dev./Comp. Prog.	222	0.8
Engineer/Designer	0	0.0
Providing Health Services		
Health Aid	1,921	7.0
Nurse	851	3.1
Advanced Medical Practitioner	0	0.0
Providing Educational Services		
Education Aid	1,371	5.0
Teacher/Trainer	1,321	4.8
Professor/Lecturer	0	0.0
Creative Arts		
Writer/Artist/Musician	199	0.7
Total	27,388	100

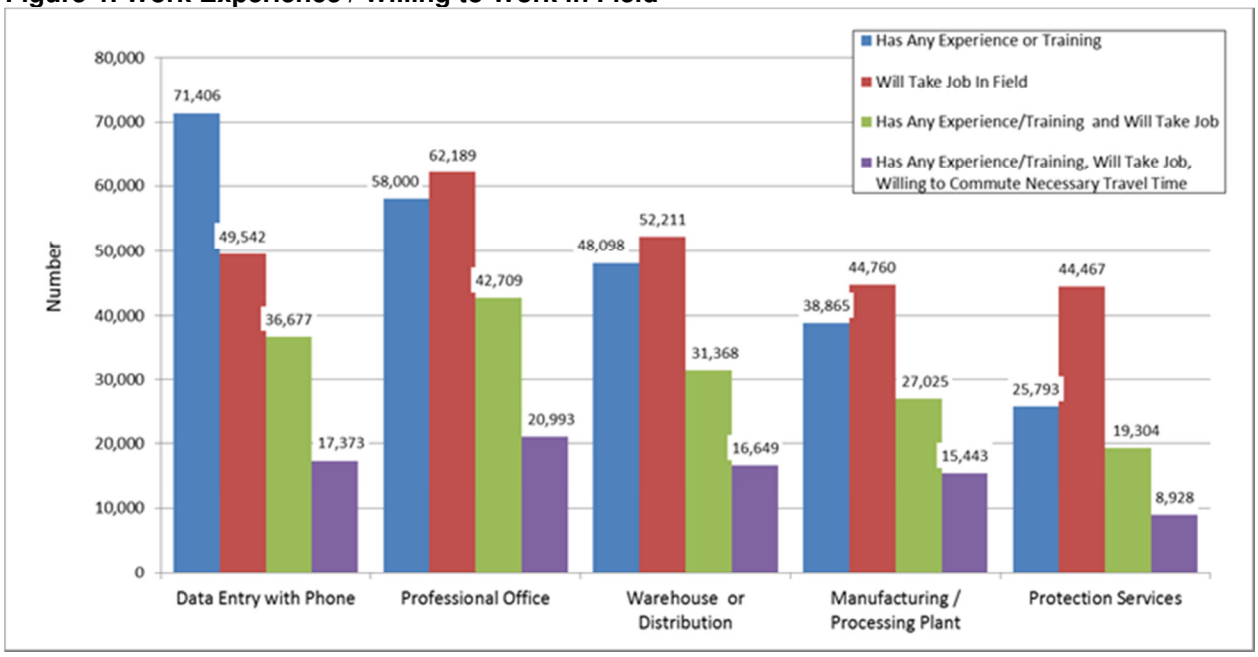
In addition to collecting data regarding the current employment status and previous work or training experience through a series of "open-ended" survey questions (the results of which are shown in the previous table and figure), respondents were asked about the five specific employment areas listed in 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.[2]

The figure shows that an estimated 71,406 Pool members report having training and/or experience in data entry with telephone operation, while fewer (49,542) individuals would consider employment in that field. An estimated 58,000 members of the Pool have training and/or experience in a professional office environment, while more (62,189 individuals) would take a job in that field.

An estimated 48,098 members of the Pool suggest that they have training or experience working in a distribution center or warehouse while 52,211 would consider a job in that field. An estimated 38,865 have experience working in a manufacturing or processing plant while 44,760 would take a job in that field. Finally, 25,793 have training or experience in protection or security services, while 44,467 would consider employment in that field.

The third column shows the estimated number that have any experience or training in a field ***and*** are willing to work in that field again. The fourth column show the estimated numbers that have any training/experience ***and*** are willing to take a job in that field ***and*** are within the necessary commute time for a new or different job. (See page 20 for a definition of "within the necessary commute time.")

Figure 4: Work Experience / Willing to Work in Field



[2] Figure 4 differs substantially from Table 3 and Figure 3 (pages 8 and 9). For example, the "has any experience or training" column above represents an extrapolated total of ***all*** Pool members answering "yes" to a question asking "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, non-working in the second) about specific jobs – one current job and/or one previous job.

Survey respondents indicating that they had training or experience in distribution/warehousing or manufacturing/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 almost half (47%) of those indicating distribution/warehousing experience moved materials or loaded trucks. Additionally, just over half (52%) of those indicating experience in manufacturing/processing had jobs in procession, fabrication or assembly.

Figure 4a: Work Experience in Distribution Center or Warehouse

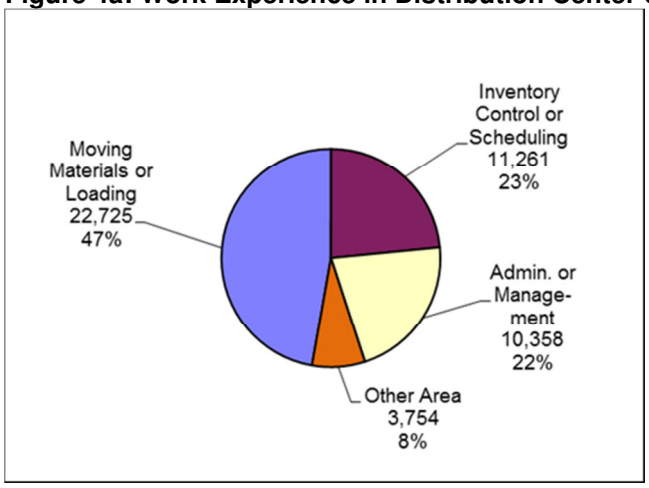
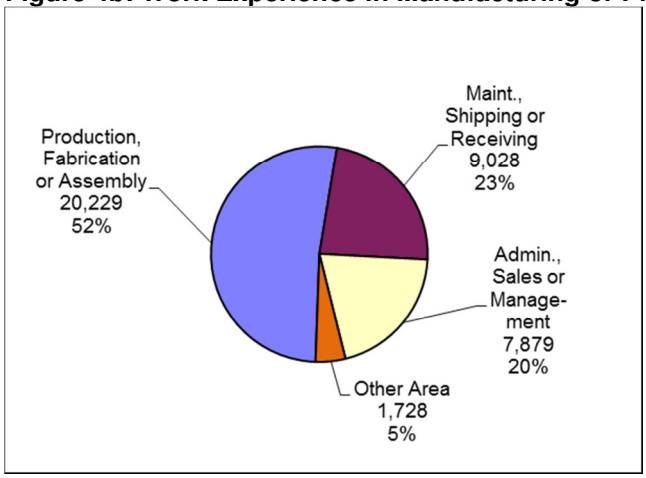


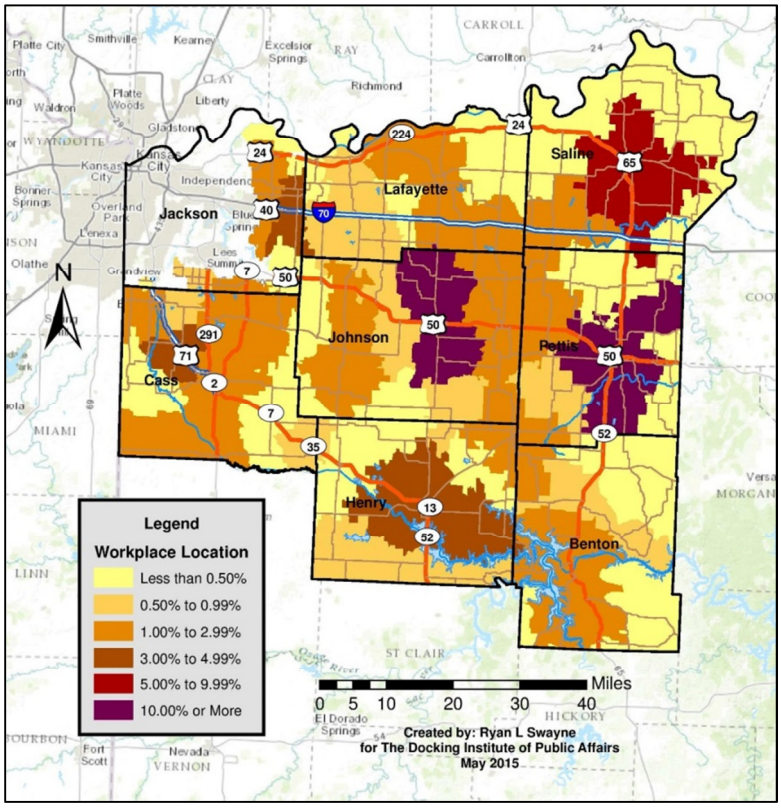
Figure 4b: Work Experience in Manufacturing or Processing Plant



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 *within the basin* by Zip Code area. The map shows:

- Ten percent or more of the working members of the Available Labor Pool work in Zip Code areas in Johnson and Pettis counties. (See purple areas in the map.)
- Workplaces located in Zip Code areas in Saline County employ 5% to 9.99% of the basin's working Pool members. (See red area in the map.)
- Workplaces located in Zip Code areas in Cass, Henry, and Jackson counties employ 3% to 4.99% of the basin's working Pool members. (See brown areas in the map.)
- Workplaces located all eight counties employ 1% to 2.99% of the basin's working Pool members. (See orange areas in the map.)
- Finally, less than 1% of the Pool work for employers are located in all eight counties areas in the basin. (See peach and yellow areas in the map.)

Map 3: Workplaces by Zip Code



Educational Experience

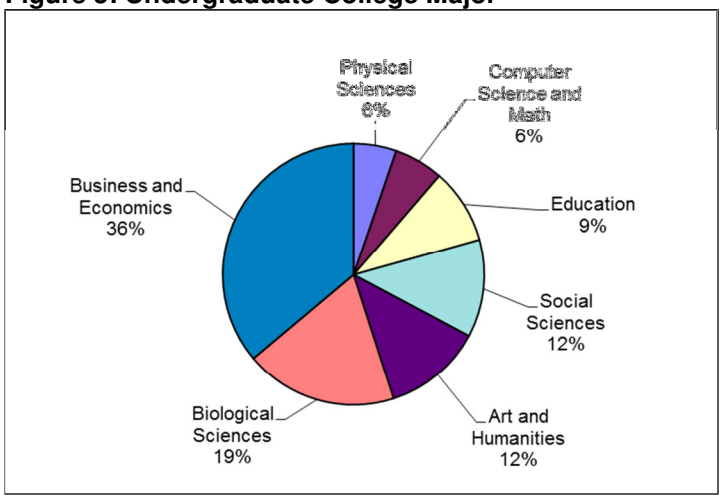
Table 1 (see page 6) shows that 73.5% of the Available Labor Pool reports attending some college (with at least 50.3% completing an associate's degree and at least 35.9% completing a bachelor's degree).

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

Social Sciences: Sociology, Psychology, Anthropology, Politics and Social Work.
Biological Sciences and Health: Biology, Agriculture, Nursing, Pre-med, Pre-vet and Human Performance.
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: Computer Programming or Technology, Networking, Web Design and Math.
Arts and Humanities: Art, Music, History, Philosophy and Languages.

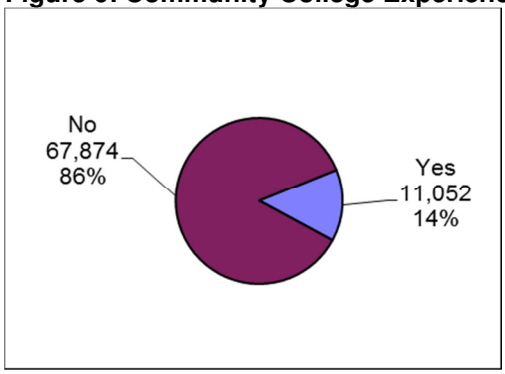
Figure 5 shows that the largest groups of Available Labor Pool members indicate a major in business and economics (36%), biological sciences (19%), arts and humanities (12%), and social sciences (12%). Education, physical sciences, and computer science and math have a combined total of 21%.

Figure 5: Undergraduate College Major



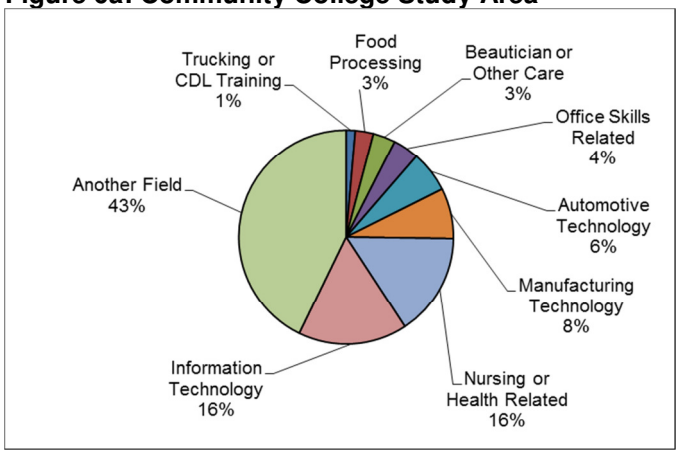
All respondents that had completed “at least some college” were asked: “Are you attending technical school now or have you received a technical degree?” Figure 6 shows that 14% of the respondents hold a technical degree or are working on one at the present time.

Figure 6: Community College Experience



Respondents answering “yes” to the above question were asked for their area of study. Answer options were grouped into one of the options shown in Figure 6a. The figure shows that almost fifth (16%) report studying information technology, while another 16% report studying nursing or another health related field. Less than 10% report studying manufacturing technology, automotive technology, office skills, beautician studies or other personal care, food processing/handling, and trucking or commercial driver’s license (CDL) training.

Figure 6a: Community College Study Area



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 job to a different type of position. 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 Johnson County Labor Basin. Figure 7 shows that 84,971 (79%) members of the Available Labor Pool are willing to accept positions outside of their primary fields of employment.

Figure 7: Considerations for Employment

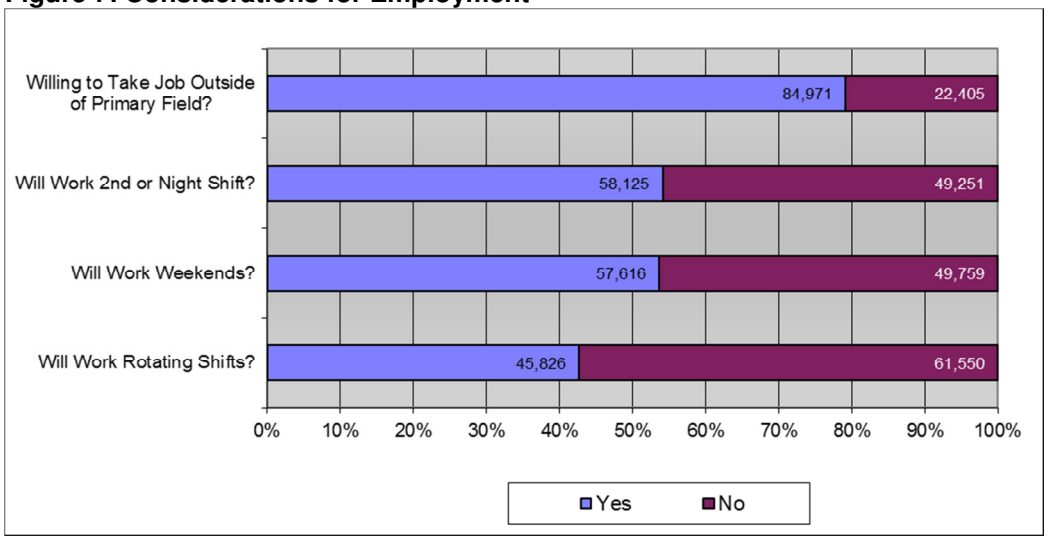
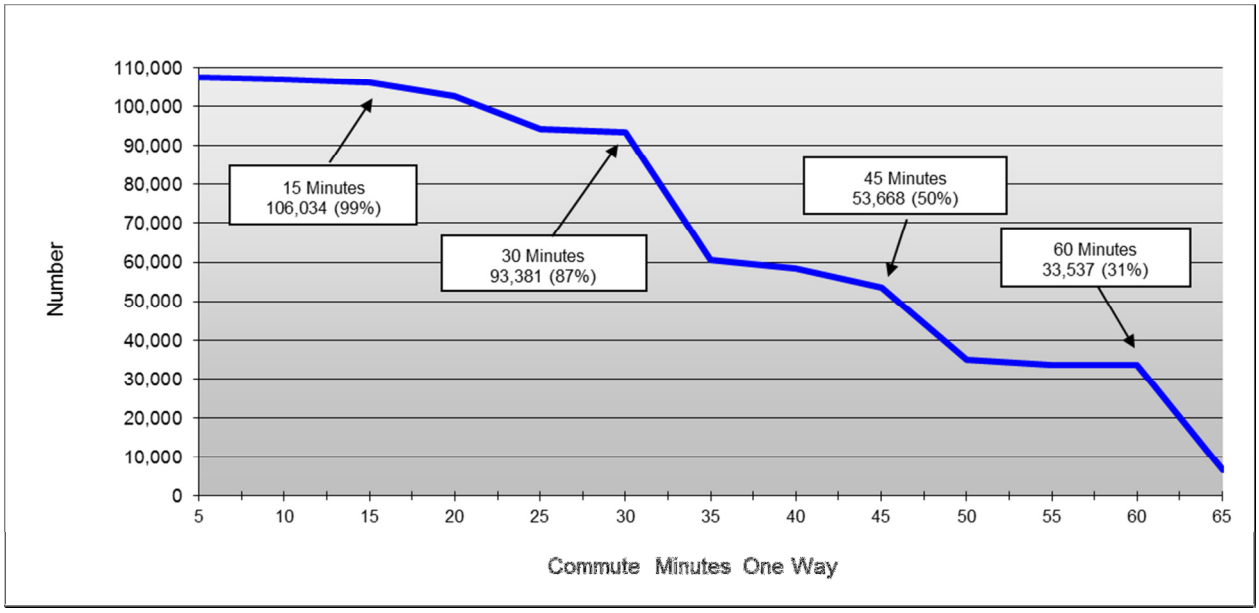


Figure 7 also shows responses to three questions regarding work shifts. Respondents were asked if they would be willing to work a second or night shift, weekends, or rotating shifts for a new job.

The figure shows that 54% of the Available Labor Pool is willing to work a second shift or night shift for a new job and almost 54% is willing to work weekends for a new job. More than two-fifths (42.7%) is 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 8 suggest that the Available Labor Pool in the Johnson County Labor Basin is open to commuting. Half (50%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 87% will commute up to 30 minutes for employment. All (99%) will travel up to 15 minutes for employment.

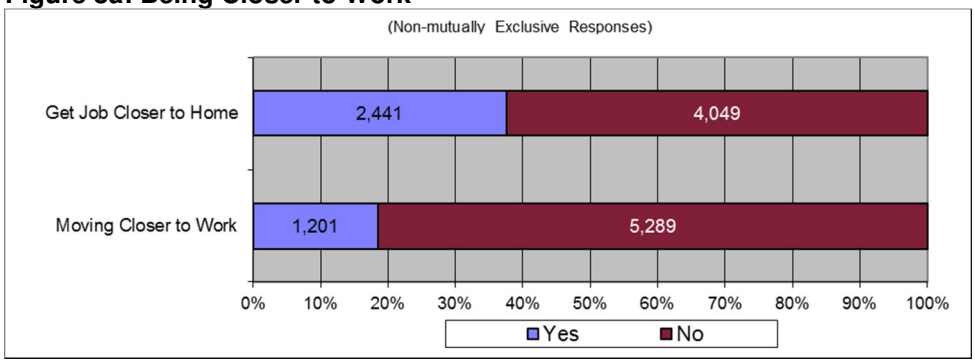
Figure 8: Available Labor by Commute Minutes



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

Figure 8a shows that about 38% of this subset of the Pool would consider getting a new job closer to their places of residence, while about 19% would consider moving closer to their places of work.

Figure 8a: Being Closer to Work

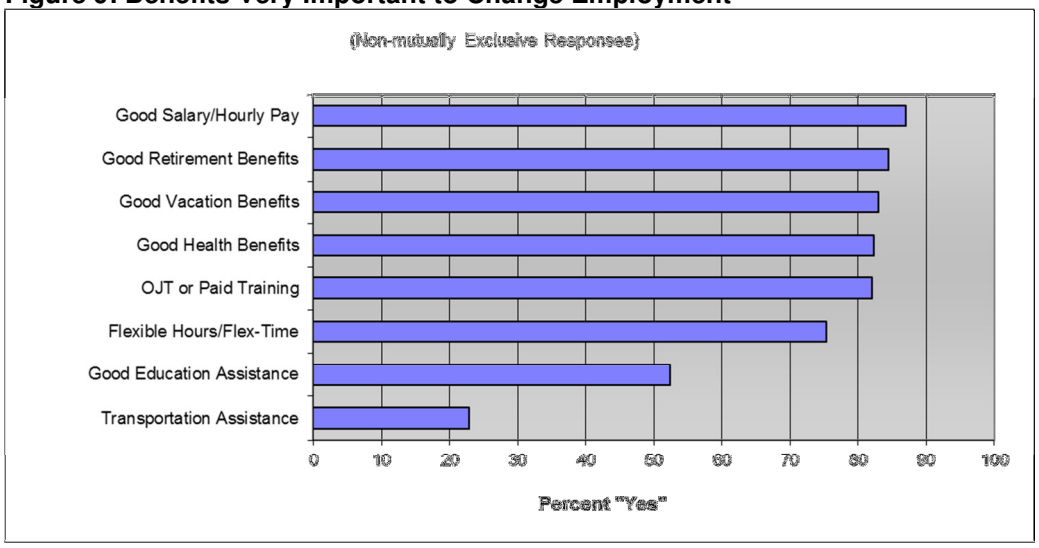


Available Labor Pool members were asked about various benefits that might be important when considering whether to take a new or different job. Respondents were asked if each benefit would be a "very important" consideration for taking a new job, with answer options included "yes" and "no."

Figure 9 shows that the five most important benefits are, in order, good salary or hourly pay, good retirement benefits, good vacation benefits, good health benefits, and on-the-job training (OJT). All of these benefits are considered "very important" by 80% or more of the Available Labor Pool each. Flexible hours or flex-time follows at about 75%.

The least desired benefits are good educational assistance and transportation assistance, considered "very important" by 53% and 23% of Available Labor Pool members, respectively.

Figure 9: Benefits Very Important to Change Employment



The left column in Table 5 shows the percentages of all Pool members that said the benefit is a *very important* consideration for taking a new or different job, 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 and Good Retirement Benefits stand out with 16.7% and 15.1% differences, respectively.

Table 5: Desired Benefits and Current Benefits Offered

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent
Good Salary/Hourly Pay	87.0	84.4
Good Retirement Benefits	84.4	69.3
Good Vacation Benefits	83.0	78.0
Good Health Benefits	82.3	78.1
OJT or Paid Training	82.0	76.1
Flexible Hours/Flex-Time	75.3	58.6
Good Education Assistance	52.4	47.9
Transportation Assistance	22.9	16.4

* This column respresents w orking ALP members only.

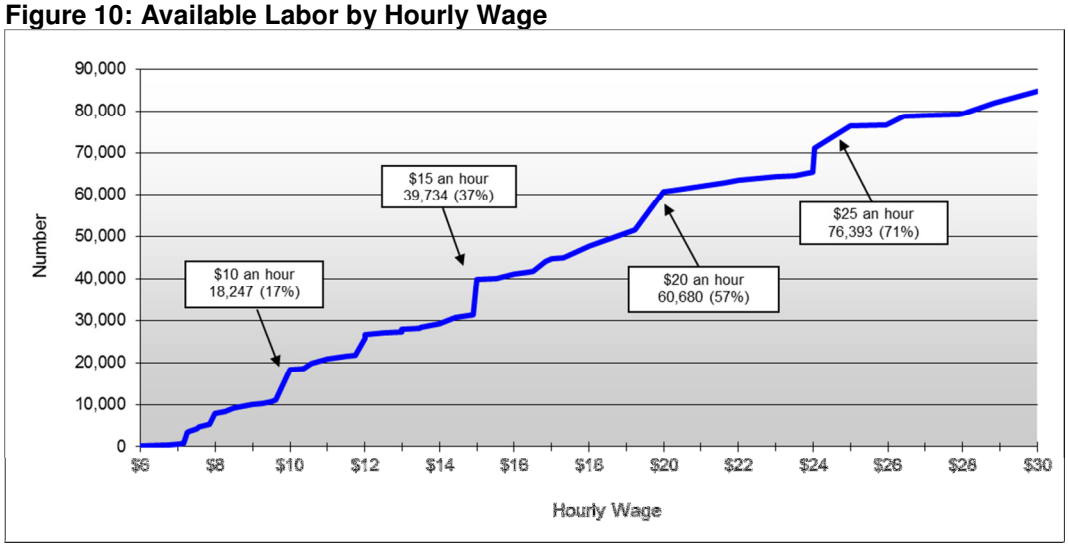
Wage Demands of Available Labor Pool

Wage demands 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 76,393 people (or 71% of the available labor) are interested in a new job at $25 an hour.[3]

An estimated 60,680 (57%) members of the Pool are interested in new employment opportunities at $20 an hour, while 39,734 (37%) are interested at $15 an hour.

Finally, an estimated 18,247 people (17%) are interested in a new job at $10 an hour.

Figure 10: Available Labor by Hourly Wage



[3] 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 reports addresses two subsets of the Available Labor Pool. Each provides a different look at the Available Labor Pool, and they are not mutually exclusive. The two subsets are: those residing Within the Necessary Commute Time and the Underemployed Available Labor Pool Workers.

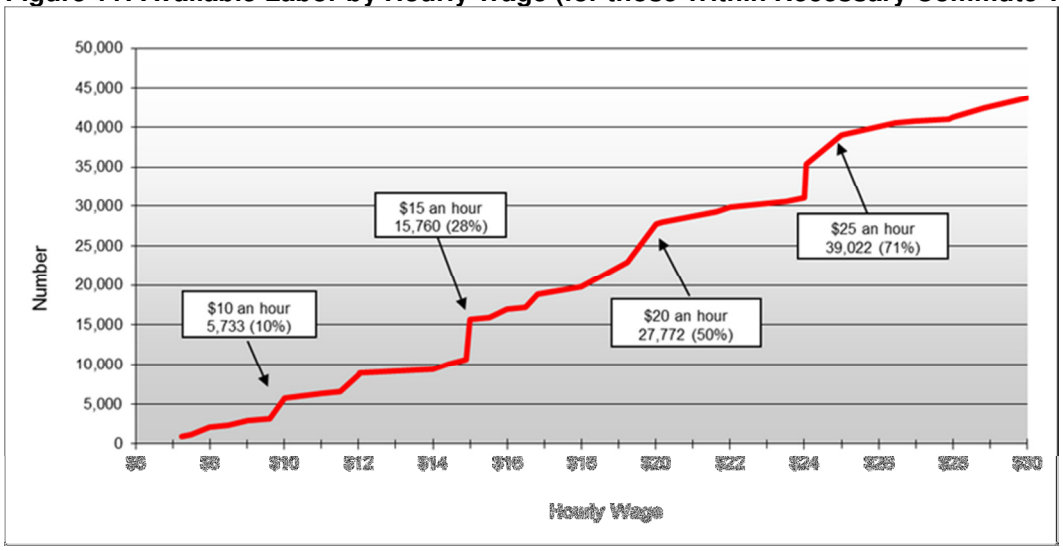
Subset 1: Within Necessary Commute Time

To present an even more refined picture regarding the number of workers who would seriously consider a new employment opportunity, the data in this section includes *only those respondents* that are determined to reside "within the necessary commute time." "**Necessary Commute Time**" is defined as a commute time stated by the respondent that is equal to or greater than the commute time necessary for the respondent to travel from his or her Zip Code of residence to the Zip Code at the center of the labor basin. For example, a respondent that is willing to travel for 30 minutes, one-way, for a new or different job opportunity and that lives an estimated 15 minutes from the center of the labor basin is considered to be "willing to travel the necessary commute time" for a new job. Data from these respondents are included in this section of the report.

- ***Wage Demands (of those Within Necessary Commute Time)***

Figure 11 shows the wage demands for the Available Labor Pool members that are "within the necessary commute time." An estimated 39,022 people (or 71% of this subset) are interested in a new job at $25 an hour. An estimated 27,772 (50%) are interested in new employment opportunity at $20 an hour, and 15,760 (28%) are interested at $15 an hour. Finally, an estimated 5,733 people (10%) are interested in a new job at $10.

Figure 11: Available Labor by Hourly Wage (for those Within Necessary Commute Time)



The previous figure suggests the obvious: that the higher the wage, the larger the pool of available labor. As noted, 15,740 members of the "within the necessary commute time" subset of the labor pool are available for a new or different job at $15 an hour. At $14 an hour there are 9,390 members of the pool available. As such, an increase of $1 per hour from $14 to $15 represents an increase of 6,350 workers and potential workers.

The graph also highlights various "wage preference plateaus" that may be of interest to current and potential employers. 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, 8,705 members of this subset are interested in a job at $12 an hour. At $13 an hour there are an estimated 9,161 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is only 456 individuals – a relatively small increase given the overall size of this subset of the Available Labor Pool.

Additional wage plateaus exist between $8 and $9 an hour (756 individuals), $13 and $14 (228), between $17 and $18 (457), and between $20 and $21 (862).

- ***Wage Demands by Occupational Sector (for those within Necessary Commute Time)***

Table 6 shows the four main occupational sectors (employed only) of those within the necessary commute time subset of the Available Labor Pool. The table shows that 17% of the general laborers will take a new or different job at a wage of at $12 an hour, while 24% is available for new employment at a wage of $15 an hour. Of the skilled laborers, 17% is available for new employment at a wage of $12 an hour, while 22% is available at a wage of $15 an hour.

Regarding service workers, 16% is available at a wage of $12 an hour, while 26% is available at a wage of $15 an hour. Of the professional workers, only 3% is available at a wage of $12 an hour, while 13% is available at a wage of $15 an hour.

Table 6: Cumulative Wage Demands for Occupational Sectors

	General Labor (N= 42) (+/- 15.1% MoE)		High Skill Labor (N= 25) (+/- 19.7% MoE)		Service Sector (N= 78) (+/- 11.1% MoE)		Professional (N= 32) (+/- 17.4% MoE)	
	Number	*Cumulative*	*Number*	*Cumulative*	*Number*	*Cumulative*	*Number*	*Cumulative*
$30 <	10,209	100%	5,980	100%	18,774	100%	7,621	100%
$30	8,264	81%	3,380	57%	14,327	76%	4,319	57%
$27	7,778	76%	2,860	48%	13,586	72%	3,049	40%
$24	6,077	60%	2,340	39%	10,622	57%	2,286	30%
$21	5,347	52%	2,340	39%	10,128	54%	2,286	30%
$18	3,646	36%	1,560	26%	7,164	38%	1,778	23%
$15	2,431	24%	1,300	22%	4,940	26%	1,016	13%
$12	1,701	17%	1,040	17%	2,964	16%	254	3%
$9	1,215	12%	0	0%	1,482	8%	0	0%
$6	486	5%	0	0%	741	4%	0	0%

Table 6 (previous page) shows data for working members of the Pool that are within the necessary commute time, with each occupational sector shown *independently* and excluding non-working pool members.

Table 7 (below) includes non-working Pool members, working service sector Pool members, and working general labor Pool members that are within the necessary commute time.

Additionally, in Table 7, general laborers and service sector workers are classified in both sectors shown *if* they are willing to change fields of employment (see Figure 7, page 16). It is assumed that non-working Pool members will take jobs (all things being equal) in either general labor or service sectors.

In other words, Table 7 allows general laborers, service sector workers, and non-workers to "transfer" between employment sectors – providing much larger numbers of workers available for general labor and service sector jobs at various wages than is shown in Table 6.

Specifically, Table 7 *includes* data from respondents that:

1 are willing to commute the necessary distance from his/her community to the center of the labor basin, *and*
2 are willing to change their primary field of employment (for example: service sector employment to general labor employment), *and*
3a are currently non-employed, *or*
3b are employed as general laborers or service sector employees.[4]

Table 7: Cumulative Wage Demands Allowing Mobility between General Labor and Service Sector

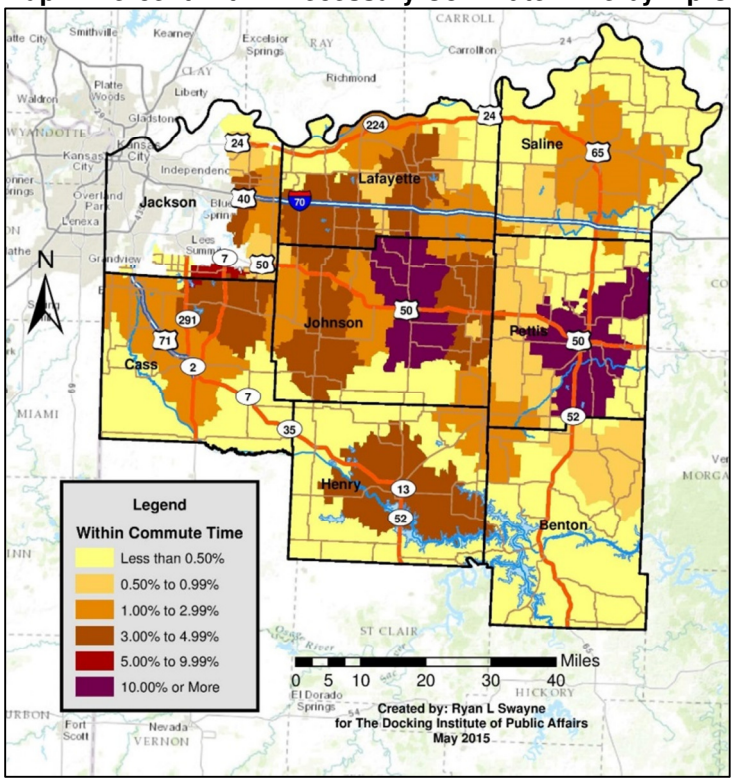
	Mobile General Labor (N= 142) (+/- 8.2% MoE)		Mobile Service Sector (N= 148) (+/- 8.0% MoE)	
	Number	*Cumulative*	*Number*	*Cumulative*
$30 <	34,375	100%	35,807	100%
$30	27,136	79%	27,362	76%
$27	25,447	74%	26,210	73%
$24	19,897	58%	20,902	58%
$21	18,932	55%	20,261	57%
$18	14,433	42%	15,688	44%
$15	9,181	27%	9,922	28%
$12	5,933	17%	6,494	18%
$9	2,906	8%	3,116	9%
$6	824	2%	824	2%

[4] High skill blue-collar workers and professional white-collar workers are excluded from Table 7 because it is assumed that, as a general rule, people in occupations such as Doctors, Lawyers, Engineers, Professors, Machinists, Electricians, etc… are unlikely to transfer into lower-skill general labor and service/support occupations. In addition, it is assumed that, because professional and high skill occupations require extensive education and/or training, lower-skilled general laborers and service sector workers are unable to transfer to higher-skill labor or professional positions - at least in the near term.

Map 4 shows how each Zip Code area compares to all other Zip Code areas in terms of the percent of the *within the necessary commute time subset* of the Available Labor Pool. The map shows:

- Ten percent or more of this subset is located in Zip Code areas within Johnson and Pettis counties. (See purple areas in the map.)
- Between 5% and 9.99% of this subset is located in Zip Code areas in Jackson County. (See red areas on the map.)
- Zip Code areas in Cass, Henry, Jackson, Johnson, and Lafayette counties contain 3% to 4.99% of this subset. (See brown areas in the map.)
- Zip Code areas in all eight counties contain 1% to 2.99% of this subset. (See orange areas on the map.)
- Finally, less than 1% of this subset is located in Zip Code areas in all eight counties of the labor basin. (See peach and yellow areas on the map.)

Map 4: Percent within Necessary Commute Time by Zip Code



Subset 2: 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 Johnson County Labor Basin, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.[5] They were then asked a series of questions assessing if they perceive themselves as underemployed because 1) their skill level is greater than their current job requires, 2) they possess higher levels of education than is 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 can work.

Of the 79,988 *employed members* of the Available Labor Pool (shown in Figure 12), over one fourth answered "yes" to one or more of the questions presented above (see Figure 13). These Pool members are considered "underemployed."

Figure 13 shows that the underemployed workers represent 31% (or 24,737 individuals) of the employed members of the Pool.

Figure 12: Employed and Unemployed Members of the Available Labor Pool

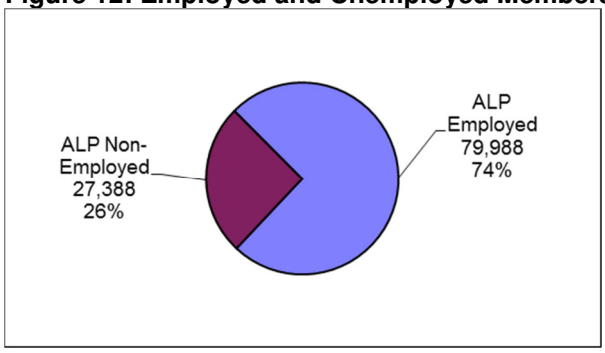
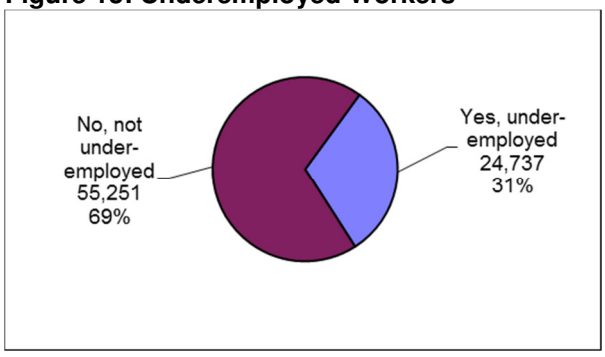


Figure 13: Underemployed Workers



[5] "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...?"

Figure 14 shows the percentages of the positive responses (i.e., “yes” answers) to the various measures of underemployment.

Almost 28% of this subset possesses education levels exceeding those needed for their current jobs. About 21% also earned more money at a past but similar job and 21% possesses skills not used currently on the job. About 16% cannot work enough hours as desired.

Figure 14: Reasons for Underemployment

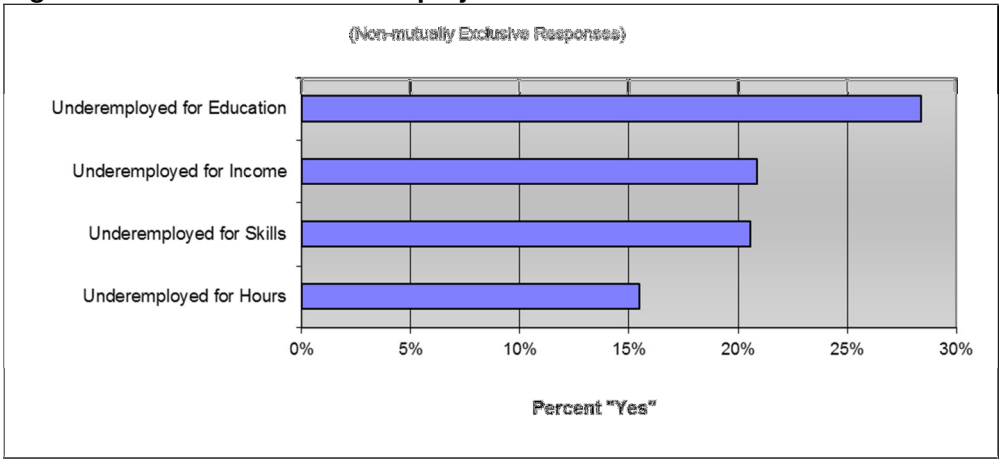


Table 8 (below) and Figure 15 (next page) show some characteristics of the underemployed members of the Available Labor Pool.

Table 8 shows that the education levels of the underemployed workers differ somewhat from the overall Available Labor Pool. Those with higher education levels are less likely to consider themselves as underemployed that those with lower education levels. For examples, the table below shows that 11.5% of the underemployed workers have at least master’s degrees, while the percentage for the Available Labor Pool as a whole is 13.9% - see Table 1, page 6.

Table 8: Highest Level of Education Achieved Among Underemployed

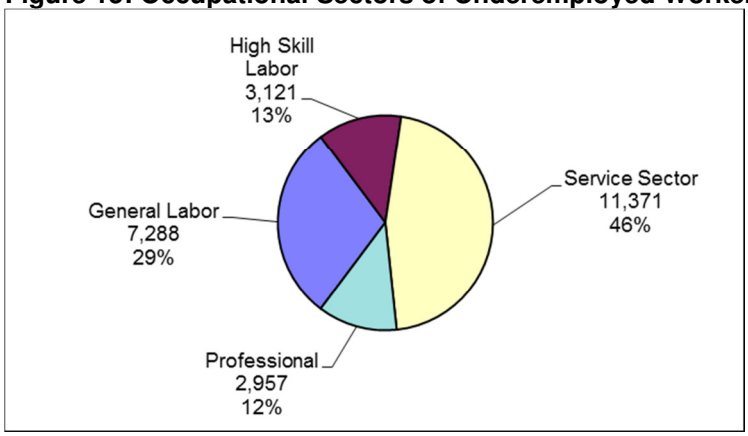
	Number	Percent	Cumulative Percent
Doctoral Degree	0	0.0	0.0
Masters Degree	2,852	11.5	11.5
Bachelors Degree	4,762	19.3	30.8
Associates Degree	4,066	16.4	47.2
Some College	5,870	23.7	70.9
High School Diploma Only	6,403	25.9	96.8
Less HS Diploma	784	3.2	100.0
Total	24,737	100	

Total numbers or percentages in table might not match those in text due to rounding.

Figure 15 shows that 29% of the underemployed workers are general laborers and 13% are high skill blue-collar workers. The highest percentage of underemployed workers are employed as service sector workers (46%), while 12% hold professional positions.

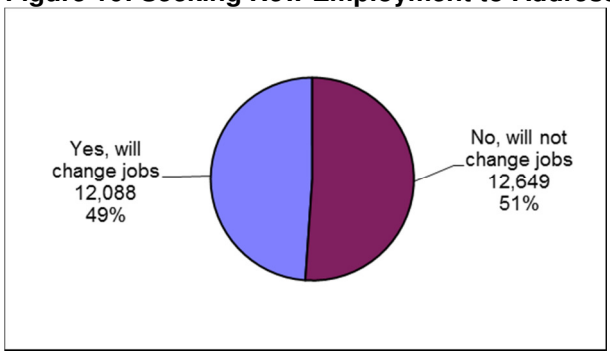
Comparing Figure 15 with Figure 2 (page 7) suggests that fewer professional workers but more general laborers consider themselves underemployed. Figure 2 shows that the subset of working Available Labor Pool members consists of 21% general laborers, 13% high skill laborers, 47% service workers, and 19% professionals.

Figure 15: Occupational Sectors of Underemployed Workers



Underemployed workers were asked if they "are available for a new or different job because they are underemployed?" Figure 16 shows that half (51% or 12,649 individuals) of the underemployed workers are seeking new employment to address underemployment.

Figure 16: Seeking New Employment to Address Underemployment



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

The Docking Institute of Public Affairs conducted a similar labor study in the Johnson Labor Basin and provided reports in 2005, 2009, and 2012. This section of the report compares some of the data collected from all four studies.

Table 9 shows population, Civilian Labor Force, employment, average unemployment rate, and Available Labor Pool data presented in the four reports.

The population of the Johnson County Labor Basin has increased by 30,968 individuals from 2005 to 2015, while the Civilian Labor Force has increased by about 7,686 workers during that same period.

The number of employed people in the labor basin has also increased over the 10 years by 6,116. The unemployment rate increased from 2005 to 2012 (5.8% to 9.6%) but is now about 6.4%.

The table also shows the Available Labor Pools for each year. The Pool increased by 9,359 people from 2005 to 2012. From 2012 to 2015 the pool increased by 13,753.

Table 9: Key Population and Employment Indicators

Johnson County Labor Basin

	2005 Report	2009 Report	2012 Report	2015 Report
Basin Population	307,940	316,320	323,624	338,908
Civilian Labor Force	157,420	160,256	156,876	165,106
Employed	148,444	150,504	141,794	154,560
Average Unemployment Rate	5.8%	6.2%	9.6%	6.4%
Available Labor Pool	84,264	85,286	93,623	107,376

Figure 17 shows larger proportions of employed members in 2015 Pool, comparted to the 2012 Pool. Additionally, the 2009 Pool shows a larger proportion of non-employed Pool members looking for work than the other four pools, but an unusually small proportion of non-working members of the Pool interested in a new job.

The figure suggests that the recent recession affected the structures of the 2009 and 2012 Pools. The structure of the 2015 Pool is similar to those of labor studies conducted recently in Kansas and Missouri.

Figure 17: Available Labor Pool Comparison

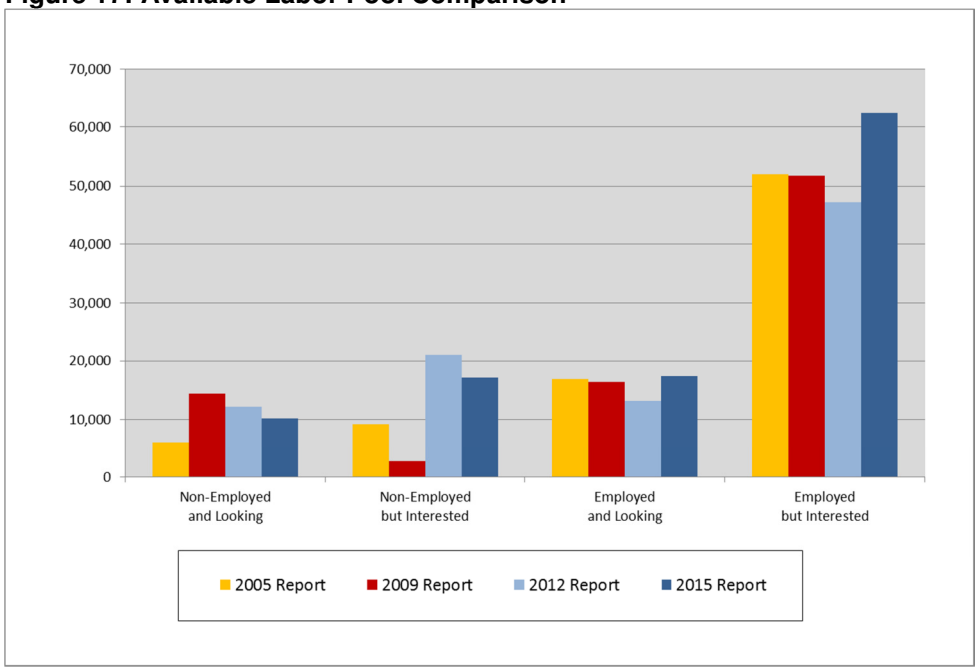


Table 10 (below) compares occupational sectors and education levels from the four studies. The 2012 study stands out with the highest percentage of non-working pool members. The 2009 Pool had the highest percentage of general laborers, while the 2015 has the highest percentage of service sector employees.

The education levels among the four pools vary somewhat. The 2015 Pool has the highest percentage of educated workers, with more than a third (35.9%) holding at least bachelor's degrees (see cumulative columns).

Table 10: Available Labor Pool Occupational Sectors and Education Levels Comparison

	2005 Report			2009 Report			2012 Report			2015 Report		
Labor Sector												
	Number	Percent		Number	Percent		Number	Percent		Number	Percent	
General Labor	18,992	22.5		17,776	20.8		14,769	15.8		17,019	15.8	
High Skill Labor	5,797	6.9		8,236	9.7		7,487	8.0		10,375	9.7	
Service Sector	24,531	29.1		28,257	33.1		25,175	26.9		37,293	34.7	
Professional	19,655	23.3		14,147	16.6		13,014	13.9		15,301	14.2	
Non-Working	15,288	18.1		16,870	19.8		33,179	35.4		27,388	25.5	
Total	***84,263***	***100***		***85,286***	***100***		***93,623***	***100***		***107,376***	***100***	
Highest Education			Cumulative			Cumulative			Cumulative			Cumulative
	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent
Doctoral Degree	548	0.7	0.6	1,909	2.2	2.0	2,090	2.2	2.2	1,472	1.4	1.4
Masters Degree	6,614	7.8	9.6	7,690	9.0	11.4	9,371	10.0	12.2	13,501	12.6	13.9
Bachelors Degree	14,591	17.3	25.1	16,710	19.6	28.7	13,902	14.8	27.1	23,565	21.9	35.9
Associates Degree	7,606	9.0	34.2	6,600	7.7	27.9	13,820	14.8	41.9	15,441	14.4	50.3
Some College	26,244	31.1	63.2	26,715	31.3	68.6	23,373	25.0	66.8	24,947	23.2	73.5
High School Diploma	24,467	29.0	94.6	22,133	26.0	95.3	26,053	27.8	94.6	24,915	23.2	96.7
Less HS Diploma	4,194	5.0	***100***	3,529	4.1	***100***	5,015	5.4	***100***	3,535	3.3	***100***
Total	***84,263***	***100***		***85,286***	***100***		***93,623***	***100***		***107,376***	***100***	

Table 11 (below) 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 79.1% (2015).

Table 11: Willing to Work Outside of Field and Work Shift Comparison

	2005 Report		2009 Report		2012 Report		2015 Report	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Willing to Take Job Outside of Primary Field?	73,315	87.0	70,958	83.2	79,298	84.7	84,971	79.1
Will Work 2nd or Night Shift?	n/a	n/a	48,357	56.7	54,301	58.0	58,125	54.1
Will Work Weekends?	n/a	n/a	45,969	53.9	52,522	56.1	57,616	53.7
Will Work Rotating Shifts?	n/a	n/a	36,161	42.4	46,156	49.3	45,826	42.7

Figure 18 shows a comparison of “minutes willing to commute” for the four studies.

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

Figure 18: Available Labor by Commute Minutes Comparison

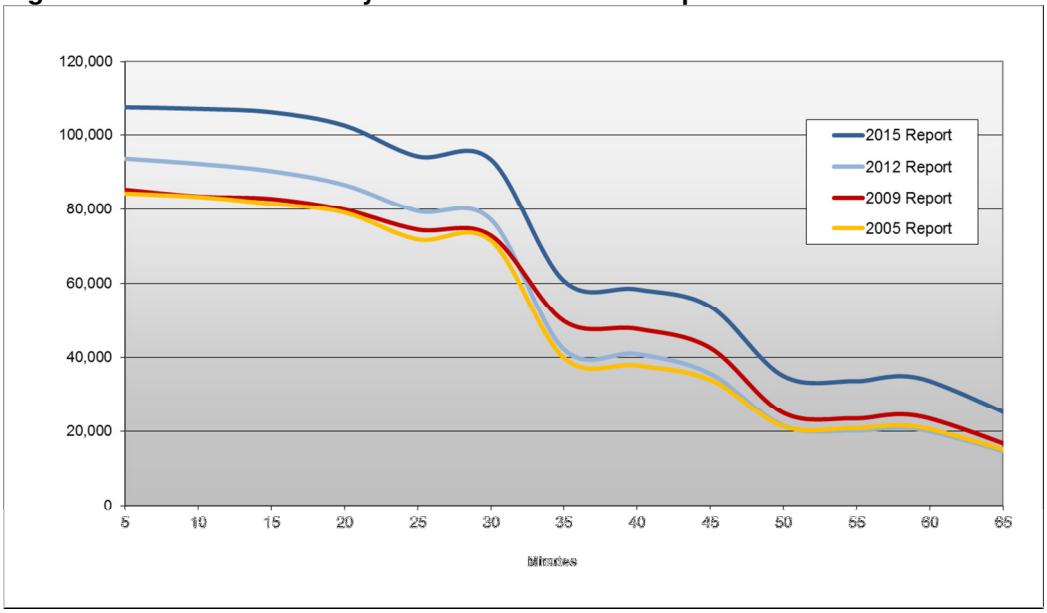


Table 12 shows desired benefits to take a new or a different job for each labor study, ranked in order by 2015 data. The table shows that “good salary/hourly pay” is the most important benefit in the 2012 and 2015 studies, whereas, good retirement benefits was “very important” for most respondents in 2009.

The items of greatest change between 2012 and 2015 is “good vacation benefits,” with 73.2% indicating this was a “very important” benefit in 2012 but 84.4% considering it “very important” in 2015. Alternatively, “good health benefits” and “transportation assistance” decreased in importance the most from 2012 to 2015.

Table 12: Important Benefits to Change Employment Comparison

	2005 Report	2009 Report	2012 Report	2015 Report	
(Ranked by 2015 Report)	*Percent Responding "Yes"*				*Change '15-'12*
Good Salary/Hourly Pay	88.5	84.3	84.2	87.0	*2.8*
Good Retirement Benefits	81.6	89.4	79.3	84.4	*5.1*
Good Vacation Benefits	78.1	79.4	73.2	83.0	*9.8*
Good Health Benefits	85.9	85.5	82.5	82.3	*-0.2*
OJT or Paid Training	88.6	88.9	79.9	82.0	*2.1*
Flexible Hours/Flex-Time	68.4	69.4	67.5	75.3	*7.8*
Good Education Assistance	66.2	53.0	49.5	52.4	*2.9*
Transportation Assistance	n/a	33.0	30.3	22.9	*-7.4*

Figure 19 shows a comparison of the desired wages of the four study groups. The desired wage line shows larger proportions of the 2005, 2009, and 2012 Pools are available for work in the $13 to $18 an hour or so range when compared to the 2015 Pool.

Figure 19: Available Labor Pool by Hourly Wage Comparison

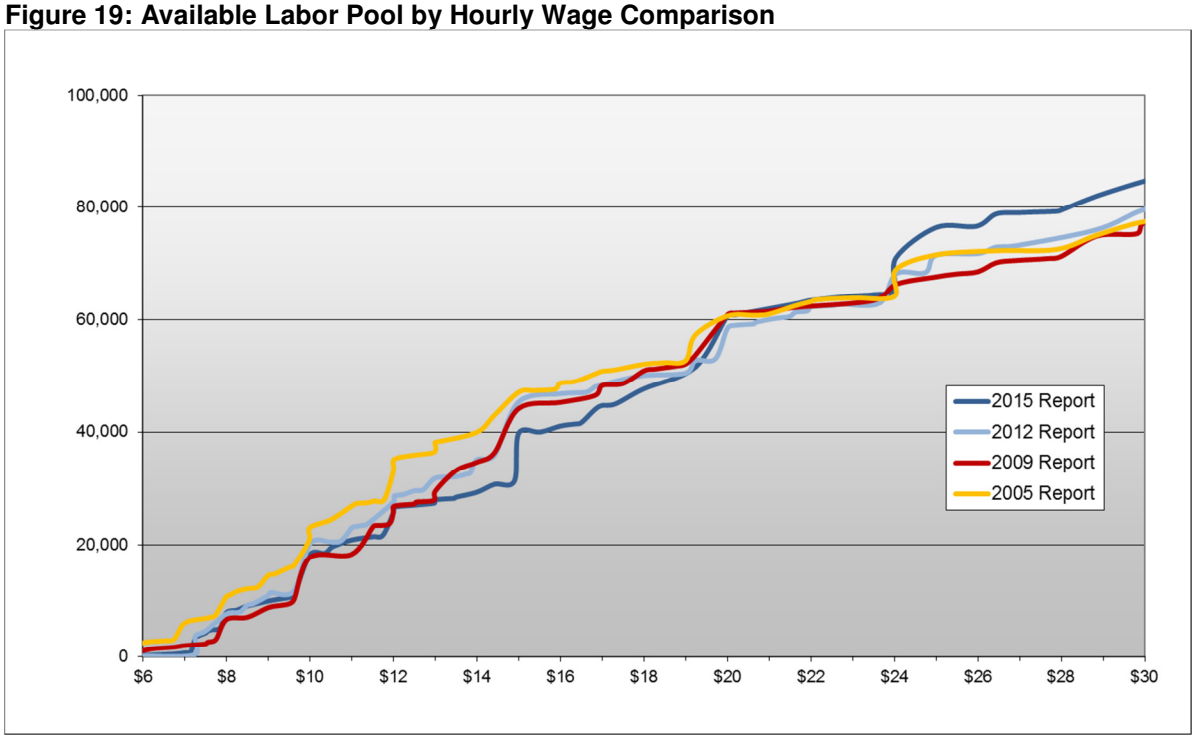


Table 13 (below) shows a comparison of the underemployed members of the Available Labor Pools for the four studies.

The percentage of underemployed workers in 2005 (56%) was the highest among the Pools, while the percentage in 2012 (26.7%) was lowest. However, the 2005 pool had the largest percentage of employed members of the Pool (82%) and 2012 had the lowest (64.6%).

The percentage of underemployed workers in general labor occupations is highest in 2015 (29.5%) and lowest in 2009 (23.1%). Alternatively, the percentage of underemployed professional workers is lowest in 2015 (12%) and about the same (15%-16%) among the other unemployed Pool.

Examining the cumulative percentage columns in the educational attainment (Highest Education) section of the table shows that 47.2% of the underemployed workers in 2015 had at least associates degrees, while these percentages are lower for the other study periods.

Table 13: Underemployed Workers Occupational Sectors and Education Levels Comparison

	2005 Report			2009 Report			2012 Report			2015 Report		
	Number	Percent		Number	Percent		Number	Percent		Number	Percent	
Employed of Pool	68,975	82.0		68,416	80.0		60,444	64.6		79,988	74.5	
Underemployed Wrkrs	***38,535***	***56.0***		***21,140***	***31.0***		***16,139***	***26.7***		***24,737***	***30.9***	
Willing to Change Job to Address Status	33,382	87.0		17,821	84.0		13,524	83.8		12,088	48.9	
Labor Sector												
	Number	Percent		Number	Percent		Number	Percent		Number	Percent	
General Labor	9,891	26.0		3,820	23.1		4,301	26.6		7,288	29.5	
High Skill Labor	4,317	11.0		1,735	10.5		1,705	10.6		3,121	12.6	
Service Sector	18,530	48.0		8,399	50.7		7,585	47.0		11,371	46.0	
Professional	5,797	15.0		2,597	15.7		2,548	15.8		2,957	12.0	
Total	***38,535***	***100***		***16,551***	***100***		***16,139***	***100***		***24,737***	***100***	
Highest Education			Cumulative			Cumulative			Cumulative			Cumulative
	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent
Doctoral Degree	460	1.2	1.2	471	2.2	2.2	451	2.8	2.8	0	0.0	0.0
Masters Degree	2,888	7.5	8.7	427	2.0	4.2	1,372	8.5	11.3	2,852	11.5	11.5
Bachelors Degree	8,927	23.2	31.9	4,263	20.2	24.4	3,137	19.4	30.7	4,762	19.3	30.8
Associates Degree	3,554	9.2	41.1	2,842	13.4	37.9	2,288	14.2	44.9	4,066	16.4	47.2
Some College	12,039	31.2	72.3	5,917	28.0	65.8	4,331	26.8	71.7	5,870	23.7	70.9
High School Diploma	9,216	23.9	96.2	6,102	28.9	94.7	3,846	23.8	95.6	6,403	25.9	96.8
Less HS Diploma	1,451	3.8	***100***	1,118	5.3	***100***	713	4.4	***100***	784	3.2	***100***
Total	***38,535***	***100***		***21,140***	***100***		***16,139***	***100***		***24,737***	***100***	

Methods

The Johnson County Labor Basin has a total population 339,908, and a Civilian Labor Force of 165,106. The average unemployment rate was about 6.4% at the time of the study. The basin contains an Available Labor Pool of 107,376 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 the labor force in the Johnson 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, the 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."[6] 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, 3) currently working *and* looking for other full-time 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.[7] Secondly, the number of potential workers is then *restricted* to those workers who indicate they are looking for work or that are interested in new employment. The advantage of this methodology is that it allows researchers to examine

[6] 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).

[7] 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 Johnson County Labor Basin.

Description of Survey Research Methods

Data for the 2015 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, Pettis, Ray, Saline, and St. Clair.[8] Surveying took place from November 2014 through February 2015, using a Computer Assisted Telephone Interviewing (CATI) system. A total of 4,401 households were successfully contacted during the data collection period, and a randomly selected adult in each was asked to participate in the study.[9] In 2,364 households the selected adult agreed to be interviewed. This represents a cooperation rate of 53.7% and a margin of error of +/-2.02%.

Survey respondents that were 65 years of age or older, retired and not 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 1,466, and are considered eligible respondents. Of these respondents, 803 or (62%) were looking for work or available for new or different employment. This subgroup is the Available Labor Pool for the West Central Missouri Region. The Margin of Error for the regional Available Labor Pool is +/- 3.46%.

The Johnson County Labor Basin encompasses eight of the 20 counties: Benton, Cass, Henry, Jackson, Johnson, Lafayette, Pettis, and Saline. A total of 788 cooperating and eligible respondents lie within the basin. Of these respondents, 445 constitute 2015 Available Labor Pool for the Johnson County Labor Basin (Margin of Error = +/- 4.65%.

Data collection for the 2005, 2009, and 2012 labor studies used the same methods.

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.[10]

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[8] 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.

[9] 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.

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

Glossary of Terms

Johnson County Labor Basin – The Johnson County Labor Basin includes Benton, Cass, Henry, Jackson, Johnson, Lafayette, Pettis, and Saline counties in central Missouri.

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 categorized as either 1) currently not working *and* looking for employment, 2) currently not working in any manner *but* interested in a new or difference job given the right opportunities, 3) employed (full- or part-time) *and* looking for other full-time 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.

Within the Necessary Commute Time – "Necessary Commute Time" is the number of minutes that a respondent is willing to travel that is equal to or greater than the estimated travel time necessary for the respondent to actually commute from his or her zip code of residence to the zip code at the center of the labor basin. For example, a respondent that is willing to travel for 30 minutes, one-way, for a new or different job and that lives an estimated 15 minutes from the center of the labor basin is considered to be "within the necessary commute time" for a new job.

Within the Necessary Commute Time Available Labor Pool – The "within the necessary commute time Available Labor Pool" is a subset of the Available Labor Pool that is composed of those members of the Available Labor Pool that are within the necessary commute time for a new or different job opportunity.

Underemployment – Individuals that 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/hour 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 (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 mechanics, welder, 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
$5.00	$10,400
$5.50	$11,440
$6.00	$12,480
$6.50	$13,520
$7.00	$14,560
$7.50	$15,600
$8.00	$16,640
$8.50	$17,680
$9.00	$18,720
$9.50	$19,760
$10.00	$20,800
$10.50	$21,840
$11.00	$22,880
$11.50	$23,920
$12.00	$24,960
$12.50	$26,000
$13.00	$27,040
$13.50	$28,080
$14.00	$29,120
$14.50	$30,160
$15.00	$31,200
$15.50	$32,240
$16.00	$33,280
$16.50	$34,320
$17.00	$35,360
$17.50	$36,400
$18.00	$37,440
$18.50	$38,480
$19.00	$39,520
$19.50	$40,560
$20.00	$41,600
$20.50	$42,640
$21.00	$43,680
$21.50	$44,720
$22.00	$45,760
$22.50	$46,800
$23.00	$47,840
$23.50	$48,880
$24.00	$49,920
$24.50	$50,960
$25.00	$52,000
$25.50	$53,040
$26.00	$54,080
$26.50	$55,120
$27.00	$56,160
$27.50	$57,200
$28.00	$58,240
$28.50	$59,280
$29.00	$60,320
$29.50	$61,360

Hourly Wage	Annual Salary
$30.00	$62,400
$30.50	$63,440
$31.00	$64,480
$31.50	$65,520
$32.00	$66,560
$32.50	$67,600
$33.00	$68,640
$33.50	$69,680
$34.00	$70,720
$34.50	$71,760
$35.00	$72,800
$35.50	$73,840
$36.00	$74,880
$36.50	$75,920
$37.00	$76,960
$37.50	$78,000
$38.00	$79,040
$38.50	$80,080
$39.00	$81,120
$39.50	$82,160
$40.00	$83,200
$40.50	$84,240
$41.00	$85,280
$41.50	$86,320
$42.00	$87,360
$42.50	$88,400
$43.00	$89,440
$43.50	$90,480
$44.00	$91,520
$44.50	$92,560
$45.00	$93,600
$45.50	$94,640
$46.00	$95,680
$46.50	$96,720
$47.00	$97,760
$47.50	$98,800
$48.00	$99,840
$48.50	$100,880
$49.00	$101,920
$49.50	$102,960
$50.00	$104,000