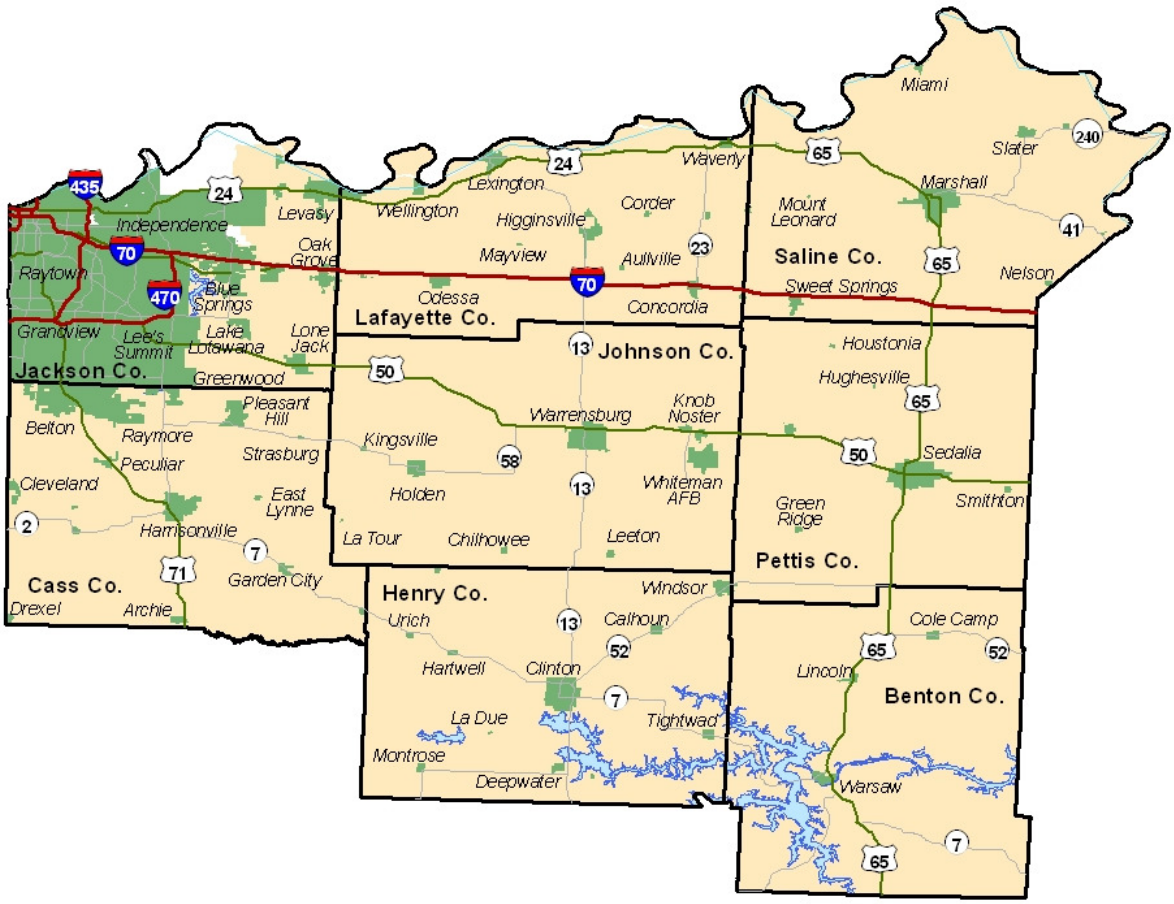
Johnson County Labor Basin

Labor Availability Analysis – 2009

Including a comparison to data from the
2005 Labor Availability Analysis

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

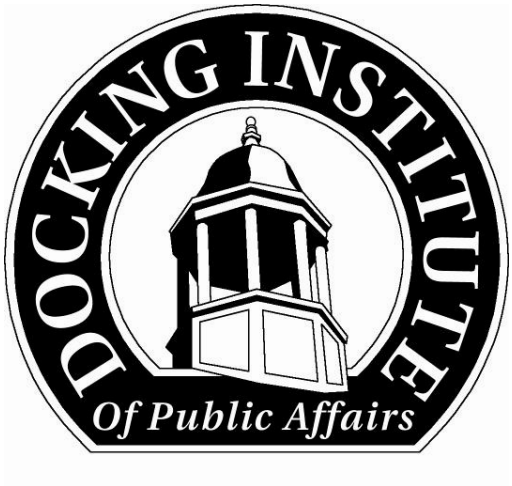


Prepared For

Central Missouri Economic Development Alliance

By

The Docking Institute of Public Affairs



Fort Hays State University
600 Park Street
Hays, Kansas 67601-4099
Telephone: (785) 628-4197
FAX: (785) 628-4188
www.fhsu.edu/docking

Gary D. Brinker, PhD
Director

Michael S. Walker, MS
Assistant Director

Jian Sun, PhD
Research Scientist

Leslie Paige, MS, EdS
Grants Facilitator

Joyce Wolfe, MS
Survey Center Manager

Lynette Pfeifer
Administrative Assistant

Mission:

To Facilitate Effective Public Policy Decision-Making.

The staff of the Docking Institute of Public Affairs and its University Center for Survey Research are dedicated to serving the people of Kansas and surrounding states.

Johnson County Labor Basin
Labor Availability Analysis - 2009

Including a comparison to data from the
2005 Labor Availability Analysis

Prepared By:

Michael S. Walker, M.S.
Assistant Director,
Docking Institute of Public Affairs

Prepared For:

Central Missouri Economic Development Alliance

Table of Contents

List of Tables

List of Figures

List of Maps

Johnson County Labor Basin
Labor Availability Analysis

Executive Summary

The Johnson County Labor Basin includes Benton, Cass, Henry, Johnson, Lafayette, Pettis, and Saline Counties, and a portion of Jackson County 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 would consider changing their jobs for the right employment opportunity.

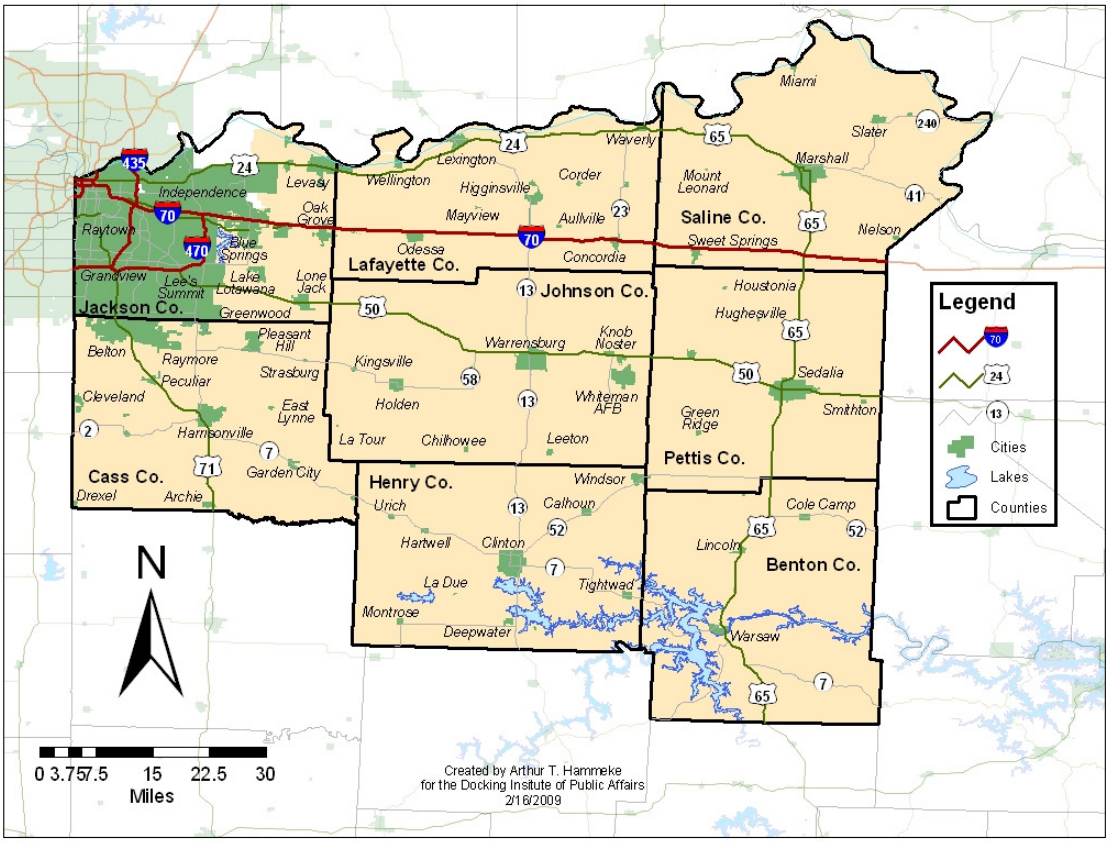
The Docking Institute's independent analysis of this labor basin shows that:

- The population of the Johnson County Labor Basin is estimated to be 316,320. About 27% of the population (or 85,286 individuals) are considered to be part of the Available Labor Pool (ALP).
- Of the ALP, an estimated 14,438 (16.9%) non-working and 16,453 (19.3%) working individuals are *looking* for new employment, while 2,686 (3.1%) non-working and 51,709 (60.6%) working individuals would *consider* new and/or different employment for the right opportunities.
- Almost 70% of the ALP has at least some college experience and almost 96% has at least a high school diploma. The average age for members of the ALP is about 45 years old, and women make up almost half (47.6%) of the ALP.
- An estimated 17,776 members of the ALP are currently employed as general laborers, while an additional 8,235 work in government services or technical/high skill blue-collar occupations. An estimated 28,257 members of the ALP work in service sector jobs, while 14,147 work in professional white-collar jobs.
- About 83% of the ALP indicates that they are "willing to work outside of their primary field of employment for a new or different employment opportunity."
- About 50% of the members of the ALP will commute up to 45 minutes, one way, for an employment opportunity. Slightly more than 85% will commute up to 30 minutes for employment.
- The most important desired benefits in order are good salary or hourly wage, on-the-job or paid training, good retirement benefits, good health benefits, and good vacation benefits.
- An estimated 45,227 members (53%) of the ALP are interested in a new job at $16 an hour, 25,759 (30.2%) are available at $12 an hour, and 6,675 (7.8%) are available at $8 an hour.
- Of the 68,416 members in the subset of *employed members* of the ALP, 21,140 (31%) consider themselves underemployed.
- A comparison of 2008 and 2005 data for the labor region suggest that there is a larger percentage of non-employed ALP members looking for full-time employment in 2008 than in 2005. Good health benefits is a less desired benefit in 2008 (84.3%) than in 2005 (88.5%).

The Johnson County Labor Basin

The Johnson County Labor Basin includes seven counties in west central Missouri and portion of one more near Kansas City (see Map 1 below). The labor basin includes Benton, Cass, Henry, Johnson, Lafayette, Pettis, and Saline Counties, and part of Jackson County.

Map 1: Johnson County Labor Basin



The Johnson County Labor Basin has a total population of approximately 316,320, and a Civilian Labor Force (CLF) of 160,256. There is an unemployment rate of 6.17%.

The Docking Institute's analysis suggests that the basin contains an Available Labor Pool (ALP) of 85,286 individuals. The ALP is composed of workers categorized as either 1) currently not working *but* looking for full-time employment, 2) currently employed (full- or part-time) *and* looking for other full-time employment, 3) currently not working in any manner *but* willing to consider full-time employment for the *right opportunity*, and 4) currently employed and not looking, *but* willing to consider different full-time employment for the *right opportunity*. Please see the Methodology section – page 27 – for more information about the Institute's ALP analysis methodology and the survey research methods used for this report.

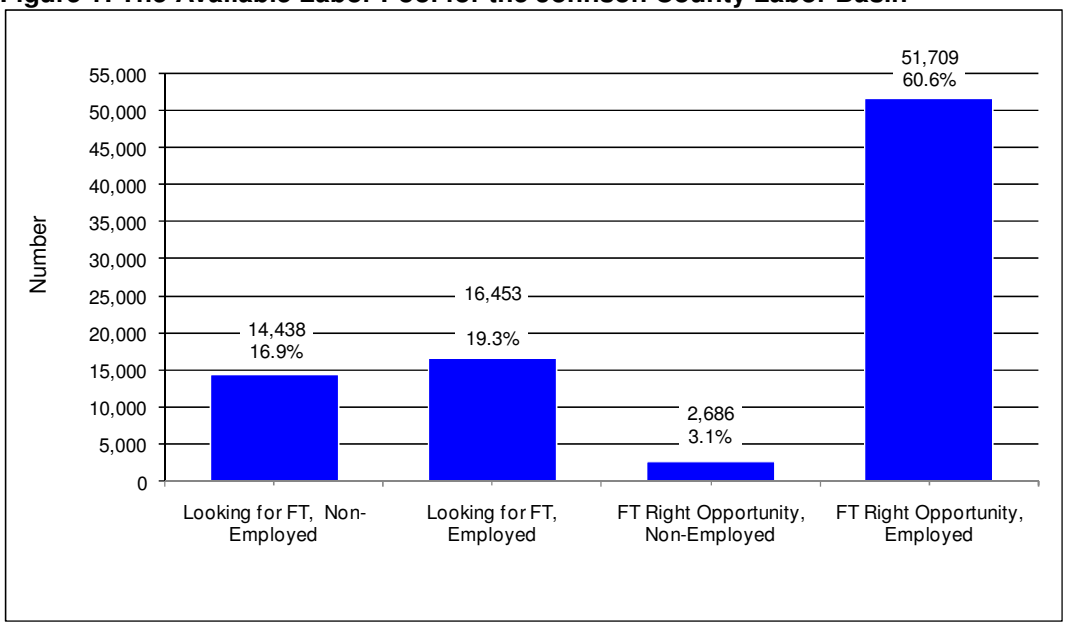
The Johnson County Labor Basin's Available Labor Pool

This section of the 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, homemaker, student, retired, and disabled – would seriously consider applying for a new full-time employment opportunity?
- What skills do those who would consider a new employment opportunity have?
- What type of jobs have these workers and potential workers had in the past?
- What types of considerations (pay, benefits, commute time) shape their decision-making?
- What are the wage demands of those ALP members that are "willing to commute the necessary distance to the center of the labor basin?"
- What proportion of those workers among the Available Labor Pool is considered "underemployed?"
- What are some of the characteristics of those underemployed workers?
- How do the results of this study compare to one conducted in 2005?

It is estimated that 14,438 (16.9% of the ALP) non-employed[1] and 16,453 (19.3%) employed individuals are *currently looking* for new or different full-time employment, and 2,686 (3.1%) non-employed individuals and 51,709 (60.6%) employed individuals *would consider* new or different full-time employment for the right opportunities.

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



[1] The terms "non-employed" and "non-working" refer to officially unemployed members of the Civilian Labor Force *as well as* any non-employed/non-working full-time students, homemakers, retirees, and disabled individuals.

Map 2 shows how each zip code in the basin compares to all other zip codes in terms of the percent of total available labor in the Johnson County Labor Basin. Each zip code is grouped into one of five categories specified in the legend. The zip codes containing the most available labor in the Johnson County Labor Basin are located in Pettis, Jackson, Johnson, Lafayette, and Cass Counties. Up to 4.99% of the available labor is also located in zip code areas in Benton, Henry, and Saline Counties.

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

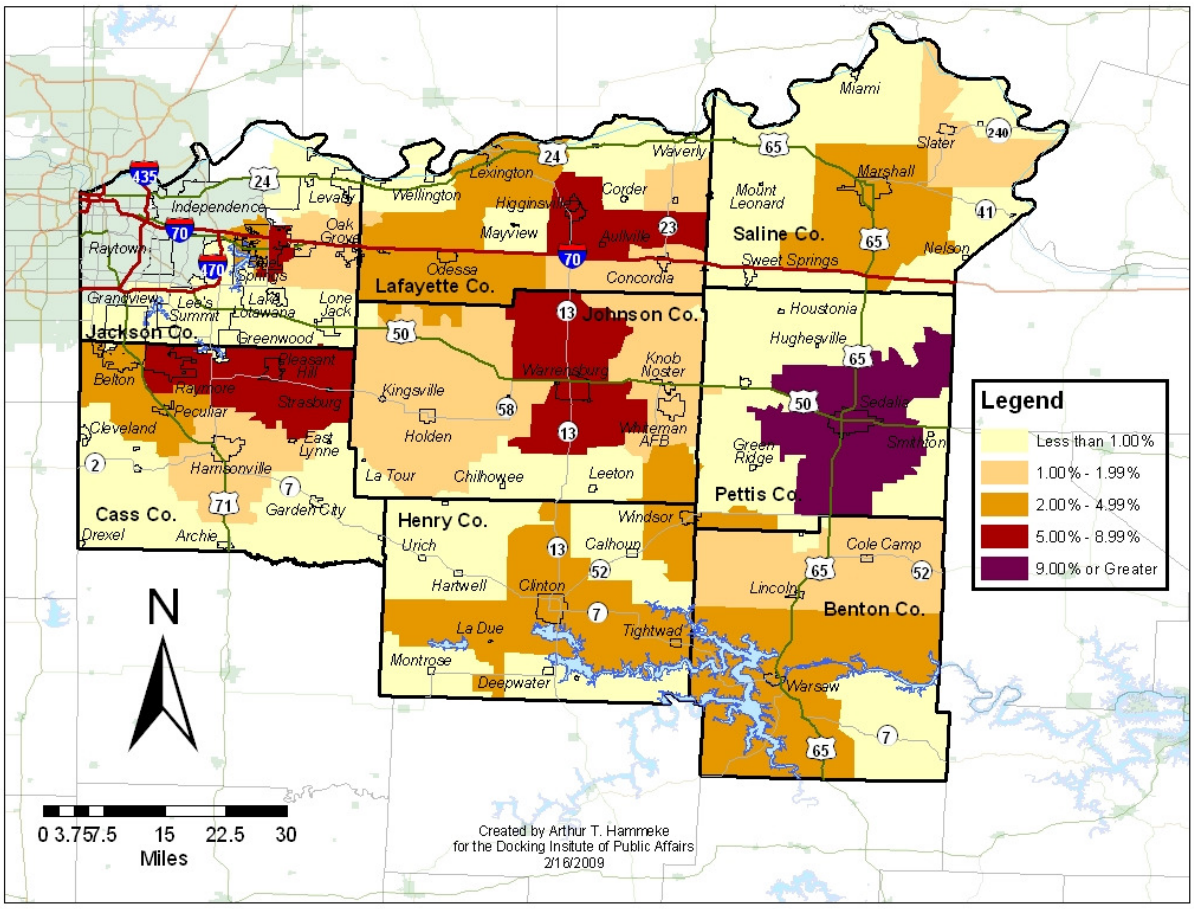


Table 1 shows the gender, age, and education levels of the 85,286-member ALP. Almost 48% percent are women, and the average age is about 45 years old. Most (95.9%) have at least a high school diploma, more than two-thirds (69.9%) have at least some college education, and almost a third (30.8%) have at least a bachelor's degree.

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

Age	Age in 2008		
Range	18 to 72		
Average	45		
Median	46		
Gender	Number	Percent	
Female	40,596	47.6	
Male	44,690	52.4	
Total	85,286	100	
			Cumulative
Highest Level of Education Achieved	Number	Percent	Percent
Doctoral Degree	1,909	2.2	2.2
Masters Degree	7,690	9.0	11.3
Bachelors Degree	16,710	19.6	30.8
Associates Degree	6,600	7.7	38.6
Some College (including current students)	26,715	31.3	69.9
High School Diploma	22,133	26.0	95.9
Less HS Diploma	3,529	4.1	100
Total	85,286	100	
"Do you speak Spanish?"	Number	Percent	
"Yes"	24,392	28.6	
Speak Very Well	*1,049*	*4.3*	*These percentages represent portions of 28.6%*
Speak Fairly Well	*3,610*	*14.8*	
Speak Only a Little	*19,733*	*80.9*	
		100	

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

Table 2 shows the various occupational categories of the 85,286-member ALP. General labor occupations represent 20.8% of the entire ALP, while high-skilled blue-collar jobs make up 9.7%. Traditional service-related occupations represent 33.1% of the ALP, while professional occupations represent 16.6% of the ALP.

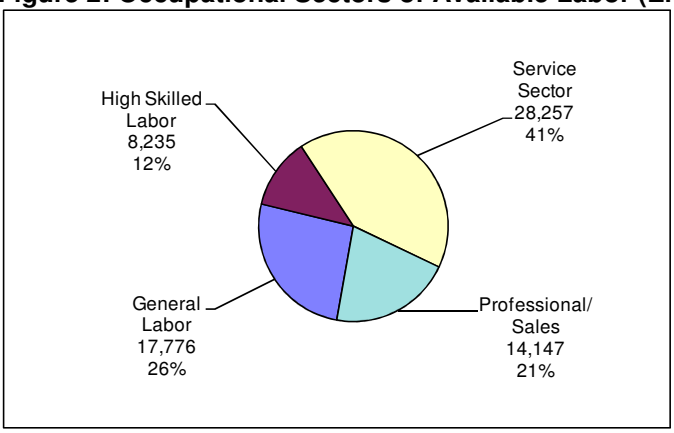
Table 2: Major Occupational Categories of Available Labor

			Years at Occupation	
	Number	Percent	Mean	Median
General Labor/Cleaning/Farm Labor/Delivery	7,814	9.2	11.2	6.0
Maintenance/Factory Work	6,491	7.6	14.3	13.5
Trucking/HEO/Other BC	3,471	4.1	11.1	5.0
Total General Labor	*17,776*	*20.8*	*12.2*	*8.2*
Gov't Service/Protective Service	2,538	3.0	5.3	5.8
Technician/Mechanic/Welder	5,697	6.7	17.6	15.1
Total Highly-Skilled Labor	*8,235*	*9.7*	*11.4*	*10.5*
Customer Service/Receptionist/Food Service	7,529	8.8	6.9	5.0
Clerical/Secretarial	2,872	3.4	8.8	3.0
Social Service/Para-Professional/Nursing	9,638	11.3	8.9	7.0
Office Manager/Small Business Owner/Other WC	8,218	9.6	10.7	9.7
Total Service Sector	*28,257*	*33.1*	*8.8*	*6.2*
Gov't & Business Professional/Sales	6,495	7.6	12.7	8.3
Educator/Counselor/Doctor/Attorney	7,652	9.0	12.3	10.1
Total Professional	*14,147*	*16.6*	*12.5*	*9.2*
Homemakers/Unemployed	13,019	15.3	n/a	n/a
Students	1,579	1.9	n/a	n/a
Retired/Disabled	2,273	2.7	n/a	n/a
Total Non-Employed	*16,870*	*19.8*		
Total	85,286	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 ALP only. The *percentages* shown in Figure 2 differ from those presented in Table 2 because the table includes non-working ALP members. Appendix I provides a detailed list of occupations.

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 and Figure 3 (next page) show the current employment status and previous work or training experience of ALP members. Table 3 shows the number of workers currently employed in various job categories, as well as the number of workers that have previous work or training experience. The table also shows the sum of working ALP members currently employed in a job category *plus* those that indicate previous training or experience in that particular field.

It is estimated, for example, that 4,490 members of the ALP in the Johnson County Labor Basin are currently employed as general labor, construction, cleaners, and similar positions. An additional 10,580 ALP members in the basin indicate previous employment experience or training in one of those jobs, for a total of 15,070 individuals.

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

	Current Employment* Number	+	Previous Work/Training* Number	=	Current plus Previous Work or Training** Number
General Labor/Construction/Cleaning	4,490		10,580		15,070
Farm Labor/Ranch Hand/Landscaping	464		2,123		2,587
Delivery/Driver/Courier	440		6,146		6,586
Maintenance/Wiring/Plumbing	3,058		4,463		7,521
Factory Worker/Grain Elevator Op/Meat Packer	4,335		7,858		12,192
Truck Driver/Heavy Equipment Operator	3,905		1,817		5,723
Police/Fire/Postal/Military Enlisted	1,514		12,215		13,729
Lab or Medical Technician/Comp Technician	1,268		2,388		3,657
Skilled Mechanic/Welder/Carpenter/Electrician	2,858		2,481		5,339
General Customer Service/Retail/Reception/Food Service	8,231		11,726		19,957
Clerical/Secretary/Book-Keeper/Bank Teller	2,605		14,897		17,502
Para-legal/Para-pro/CNA/Day Care	3,810		6,981		10,790
Nurse/LPN/RN/Semi-skilled Social Service	6,916		2,979		9,895
Office Manager/Small Business Owner	7,591		5,937		13,527
Teacher/Instructor/Writer/Researcher	5,766		8,629		14,395
Sales/Marketing/Accounting	3,878		7,668		11,546
Govt, Non-Profit, or Bus Exec/Farm Owner/Military Officer	782		464		1,245
Counselor/Social Worker/Physician's Assistant	782		1,377		2,159
Professor/Doctor/Engineer/Attorney	4,643		3,117		7,760
Total	67,335		113,846		

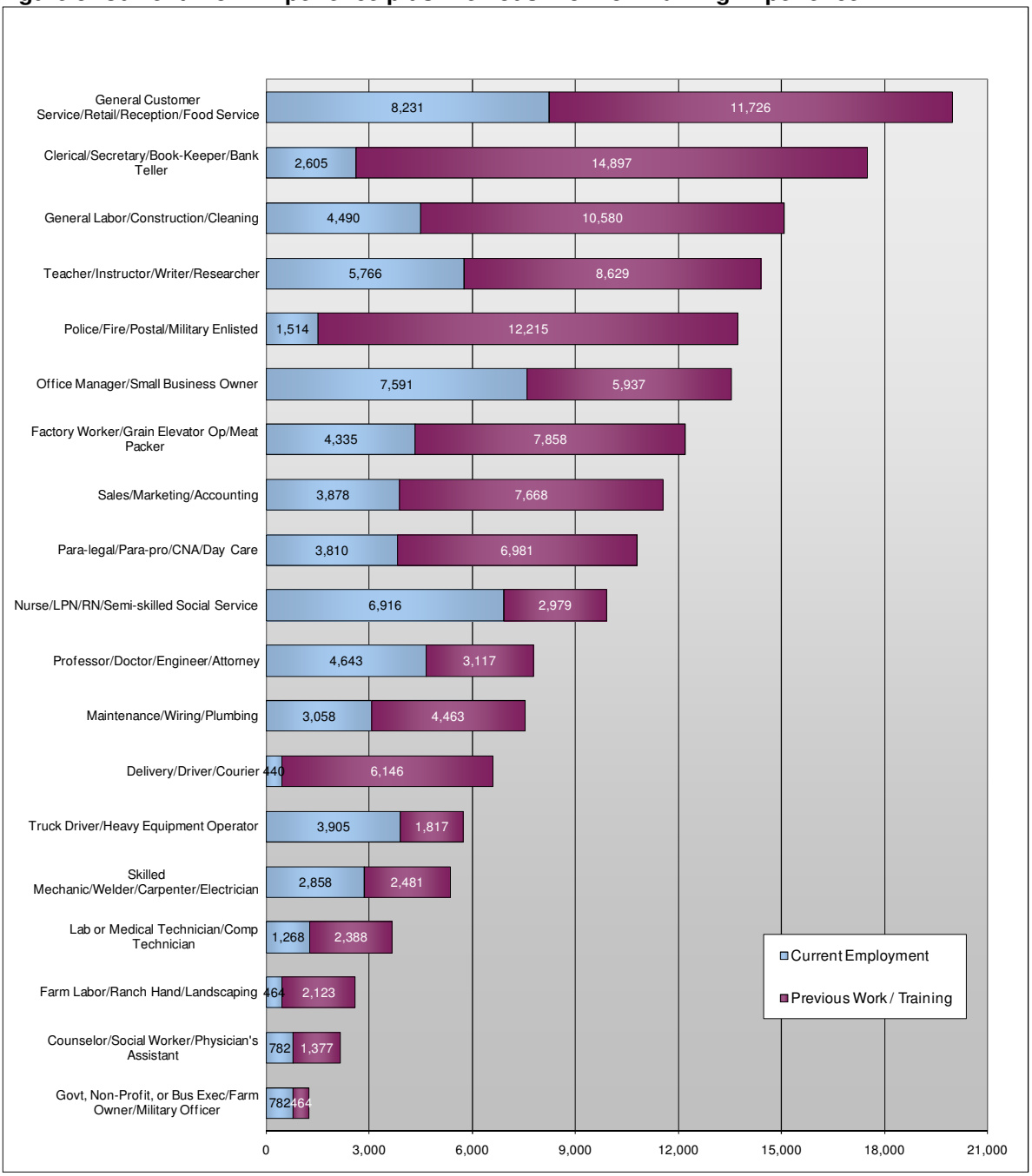
* Retired, disabled, non-working students, homemakers are not included.

** An individual member of the ALP is counted only once within each employment 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 ALP members report current work experience or previous work/training as general customer service workers, retail sales clerks, receptionists, food service workers and similar positions that often require face-to-face interaction with the public. There are 8,231 working ALP members currently employed in this category and 11,726 previously employed/trained in this category, for a total of 19,957 individuals.

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



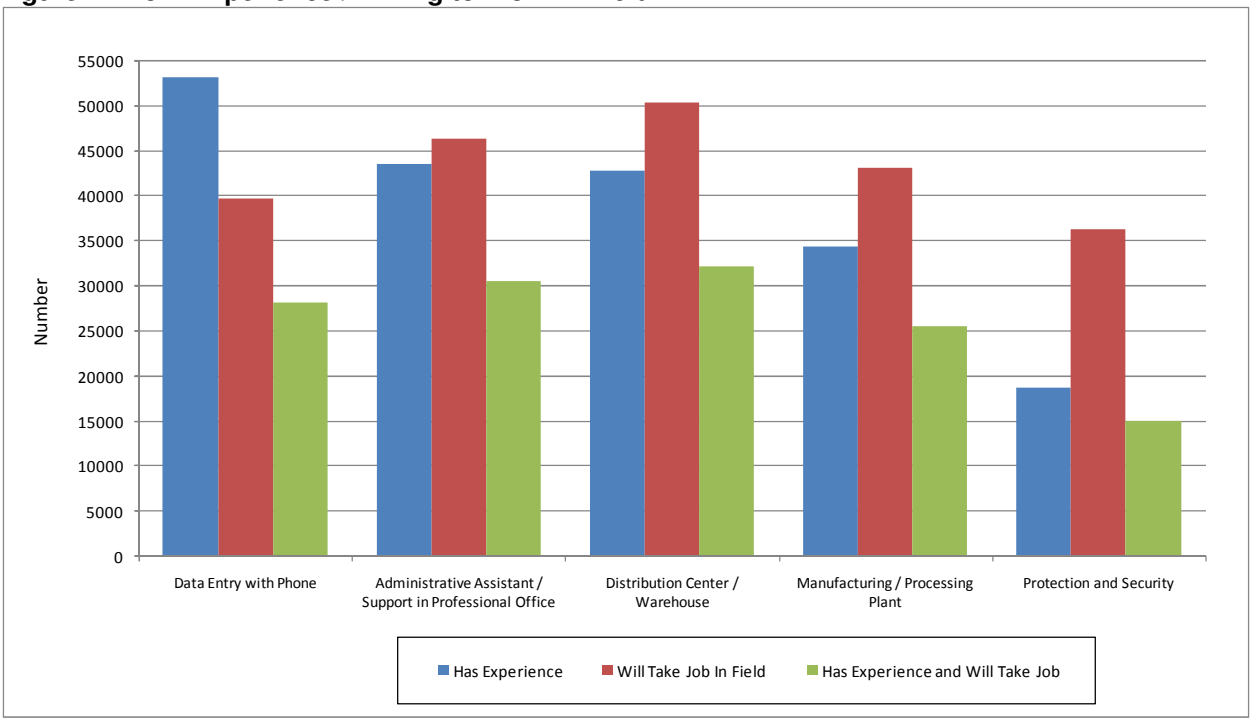
In addition to collecting data regarding the current employment status and previous work or training experience through a series of "open-ended" survey questions (the results of which are shown in the previous table and figure), respondents were asked about the four specific employment areas listed in Figure 4. Respondents were first asked if they had 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.

The figure indicates that an estimated 53,200 ALP members report having training and/or experience in data entry with telephone operation, while fewer (about 39,700 individuals) would consider employment in that field. An estimated 43,500 members of the ALP have training and/or experience in professional office environments as office workers or administrative assistants, while more (46,500 individuals) indicate that they would take a job in that field.

An estimated 43,000 members of the ALP suggest that they have training or experience working in a distribution center or warehouse while 50,500 would consider a job in that field. An estimated 34,500 have experience working in a manufacturing plant or processing center while about 43,200 would take a job in that field.

The third column shows the estimated number that have experience or training in a field ***and*** are willing to work in that field again.

Figure 4: Work Experience / Willing to Work in Field



Survey respondents who indicated that they had worked in manufacturing and processing and those that indicated that they had worked in distribution/warehousing were asked additional questions to assess the type of work they performed at those jobs. Figures 5 and 6 show the responses to those questions.

Figure 5: Work Experience in Manufacturing or Processing Plant

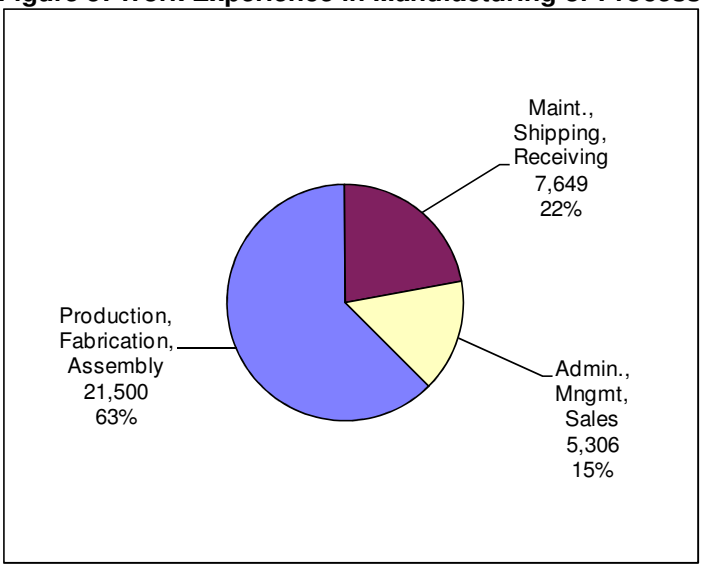
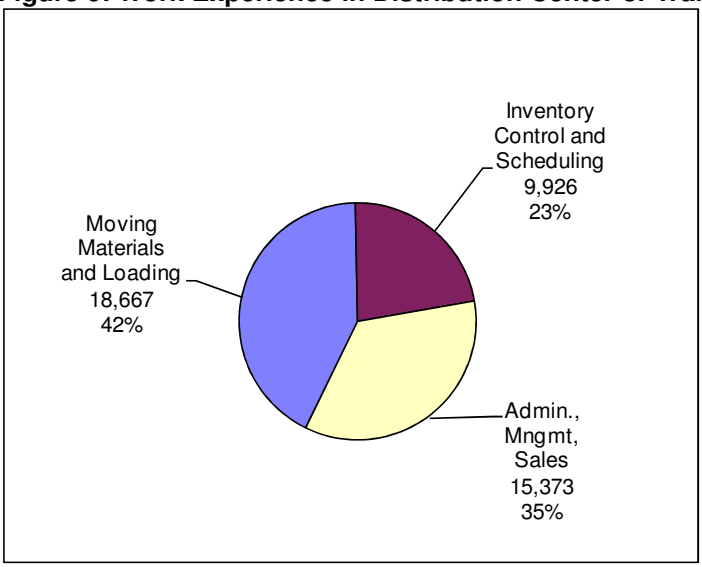


Figure 6: Work Experience in Distribution Center or Warehouse



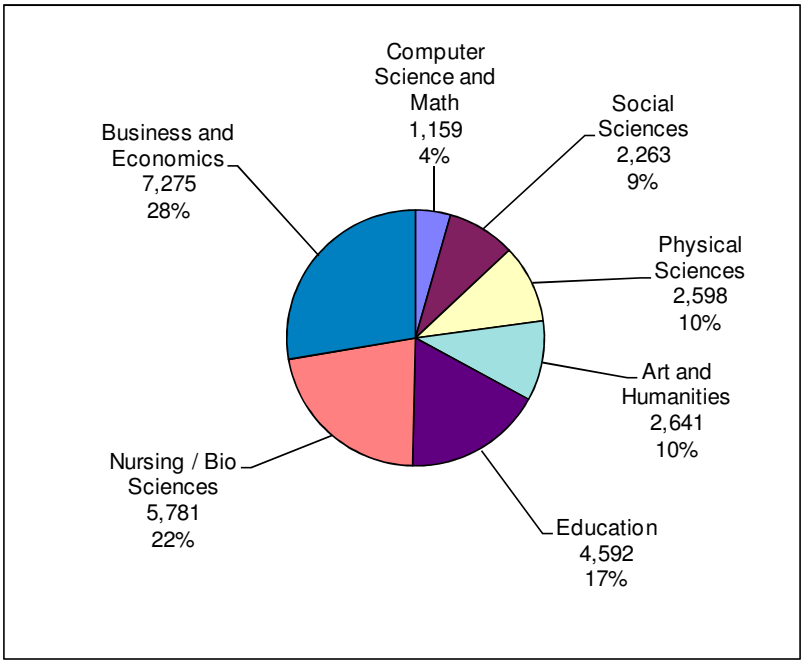
Educational Experience

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. Answer options included:

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.

The figure below shows that the largest groups of ALP members indicate a major in Business and Economics (28%), Biological Sciences or Nursing (22%), and Education (17%). Arts and Humanities, Physical Sciences, Social Sciences, and Computer Science and Math follow with 10% or less each.

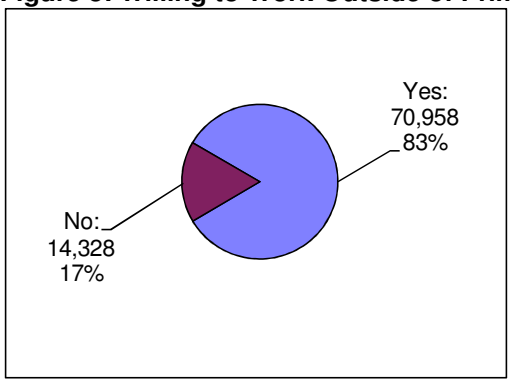
Figure 7: Undergraduate College Major



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 in the Johnson County Labor Basin. Figure 8 indicates that 70,958 (83%) members of the Available Labor Pool are willing to accept positions outside of their primary fields of employment.

Figure 8: Willing to Work Outside of Primary Field



Figures 9, 10, and 11 show responses to three questions regarding work shifts. Respondents were asked if they would be willing to work a second or night shift for the right opportunities, whether they are willing to work rotating shifts, and if they would be willing to work on weekends for the right opportunities.

Figure 9 shows the responses to the first question, with 57% suggesting that they are willing to work a second or night shift for a new or different job. Figure 10 (next page) shows that 42% indicate that they are willing to work rotating shifts for a new or different job, and Figure 11 (next page) shows that 54% suggest that they are willing to work weekend shifts for a new or different job.

Figure 9: Willingness to Work Second Shift

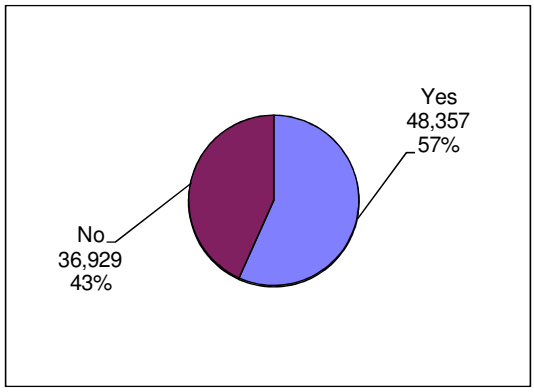


Figure 10: Willingness to Work Rotating Shift

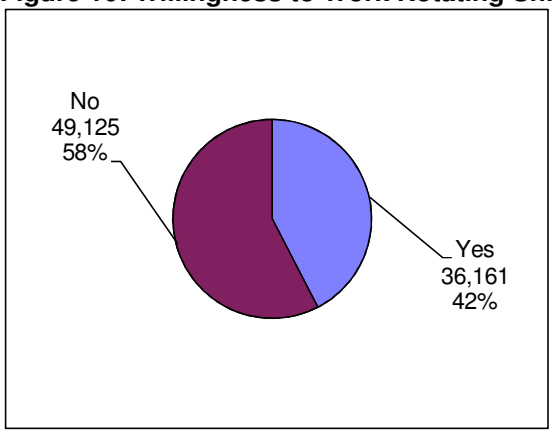
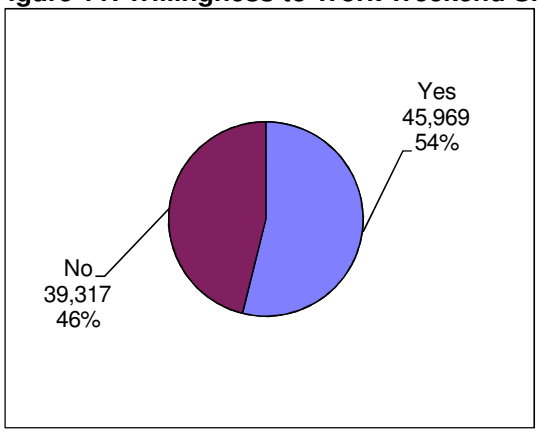


Figure 11: Willingness to Work Weekend Shift



Another important consideration for many employers is whether workers are willing to commute for a new or different employment opportunity. Figure 12 and Table 4 suggest that the Available Labor Pool in the labor basin is open to commuting. Almost half (49.8%) of the members of the Available Labor Pool will commute up to 45 minutes, one way, for an employment opportunity, while 85.4% will commute up to 30 minutes for employment. Almost all (97.1%) will travel up to 15 minutes for employment.

Figure 12: Available Labor by Commute Minutes

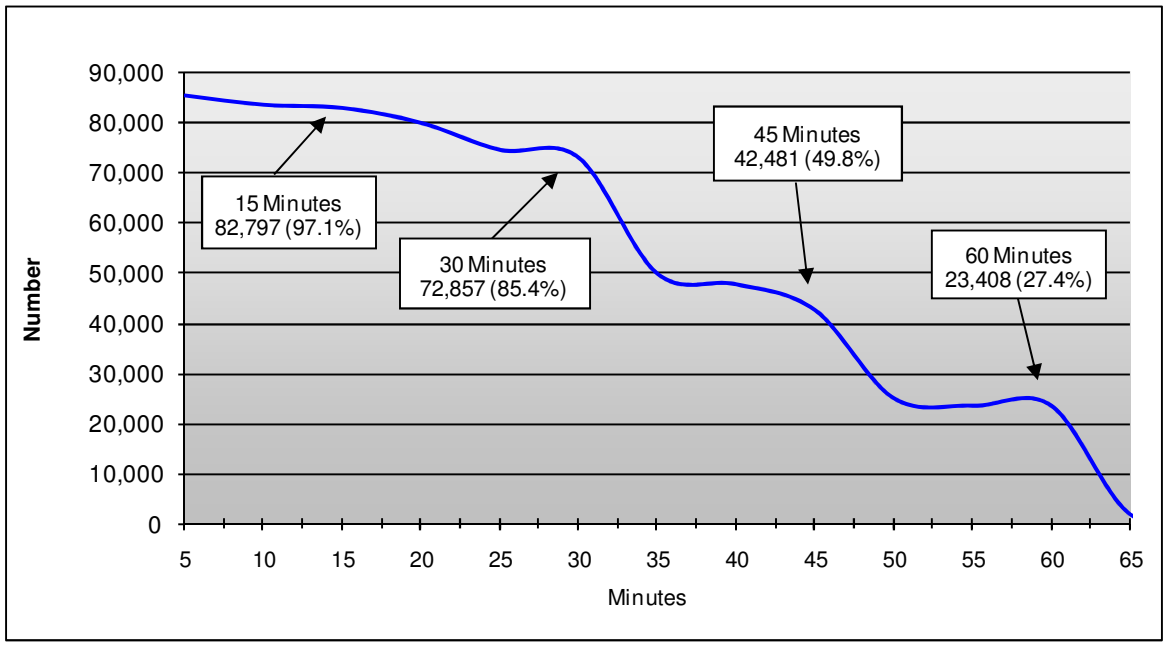


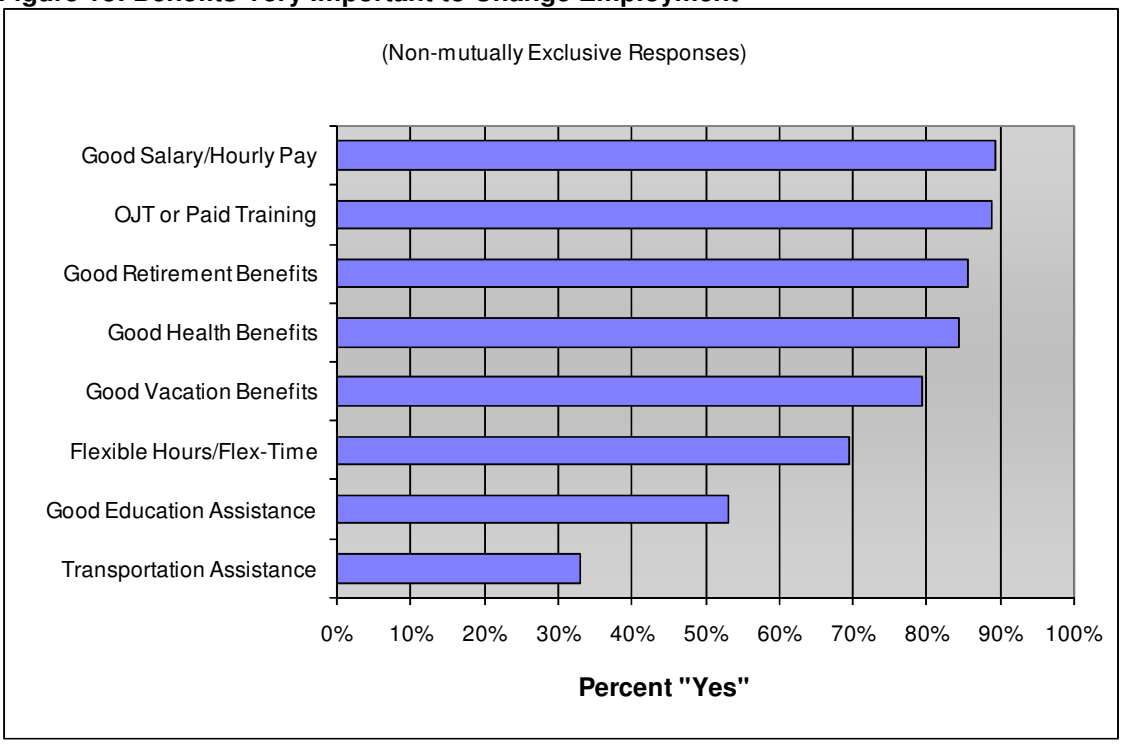
Table 4: Available Labor by Commute Minutes

	Number	Cumulative Percent
More than 60 Minutes	1,764	2.1
Up to 60 Minutes	23,408	27.4
Up to 55 Minutes	23,408	27.4
Up to 50 Minutes	24,907	29.2
Up to 45 Minutes	42,481	49.8
Up to 40 Minutes	47,635	55.9
Up to 35 Minutes	49,727	58.3
Up to 30 Minutes	72,857	85.4
Up to 25 Minutes	74,457	87.3
Up to 20 Minutes	79,835	93.6
Up to 15 Minutes	82,797	97.1
Up to 10 Minutes	83,451	97.8
Up to 5 Minutes	85,286	100

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

Figure 13 shows various benefits affecting the decisions of current workers to take a different job and potential workers to take a new job. The four most important benefits are, in order, good salary or hourly pay, on-the-job or paid training, good retirement benefits, and good health benefits. Each one of these benefits is considered "very important" by more than 80% of the Available Labor Pool each. Good vacation benefits follows closely with 79%. Flexible hours or flextime follows with 69%. The least two desired benefits are good educational assistance and transportation assistance, considered "very important" by 53% and 33% ALP members, respectively.

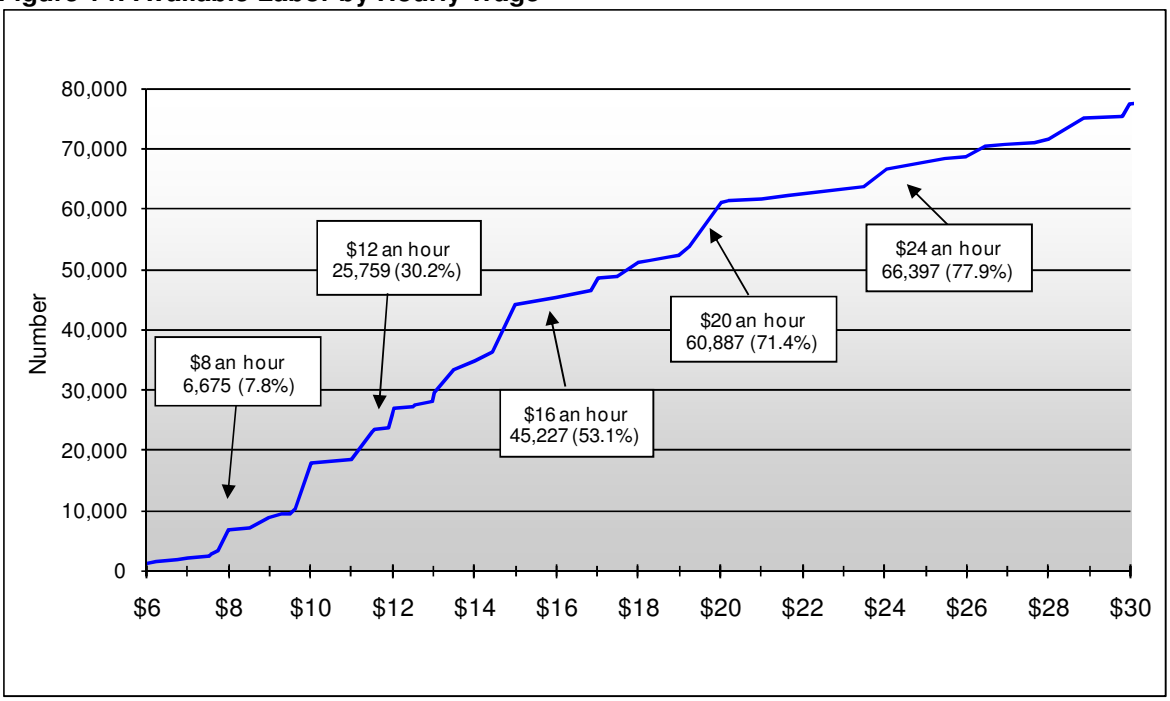
Figure 13: Benefits Very Important to Change Employment



Wage Demands of Available Labor Pool

Wage demands are another important consideration for employers and economic developers. Figure 14 shows desired wages for members of the Available Labor Pool. It is estimated that 66,397 people (or 77.9% of the available labor) are interested in a new job at $24 an hour[2]. An estimated 60,887 (or 71.4%) members of the labor pool are interested in new employment opportunity at $20 an hour, while 45,227 (53.1%) are interested at $16 an hour. Finally, an estimated 25,759 people (30.2%) are interested in a new job at $12 an hour and 6,675 (7.8%) at $8 an hour.

Figure 14: Available Labor by Hourly Wage



The figure above suggests the obvious: that the higher the wage, the larger the pool of available labor. For example, 6,675 members of the Available Labor Pool are available for a new or different job at $8.00 an hour. At $10.00 an hour, the size of the available labor increases to 17,754 members. This represents an increase of 11,079 individuals.

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, 17,754 members of available labor are interested in a job at $10.00 an hour. At $11.00 an hour there are an estimated 18,320 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is estimated to be only 566 individuals.

[2] See Appendix II for an hourly wage/annual salary conversion chart.

Willing to Commute the Necessary Travel 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 be "willing to commute the necessary travel time" for a new or different job opportunity. "Necessary travel time" is defined as a travel time stated by the respondent that is equal to or greater than the travel time necessary for the respondent to 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 opportunity and that lives an estimated 15 minutes from Warrensburg is considered "willing to commute the necessary travel time" for a new job. Data from these respondents are included in this section of the report. The phrase "willing to commute necessary travel time" is shortened to "willing to commute."

Figure 15 shows the wage demands for the Available Labor Pool members that are "willing to commute." It is estimated that 30,301 people are interested in a new job at $24 an hour, while an estimated 29,111 are interested in new employment opportunity at $20 an hour. An estimated 20,372 are interested at $16 an hour, 11,897 at $12 an hour and 3,072 at $8 an hour.

Figure 15: Available Labor by Hourly Wage (for those Willing to Commute)

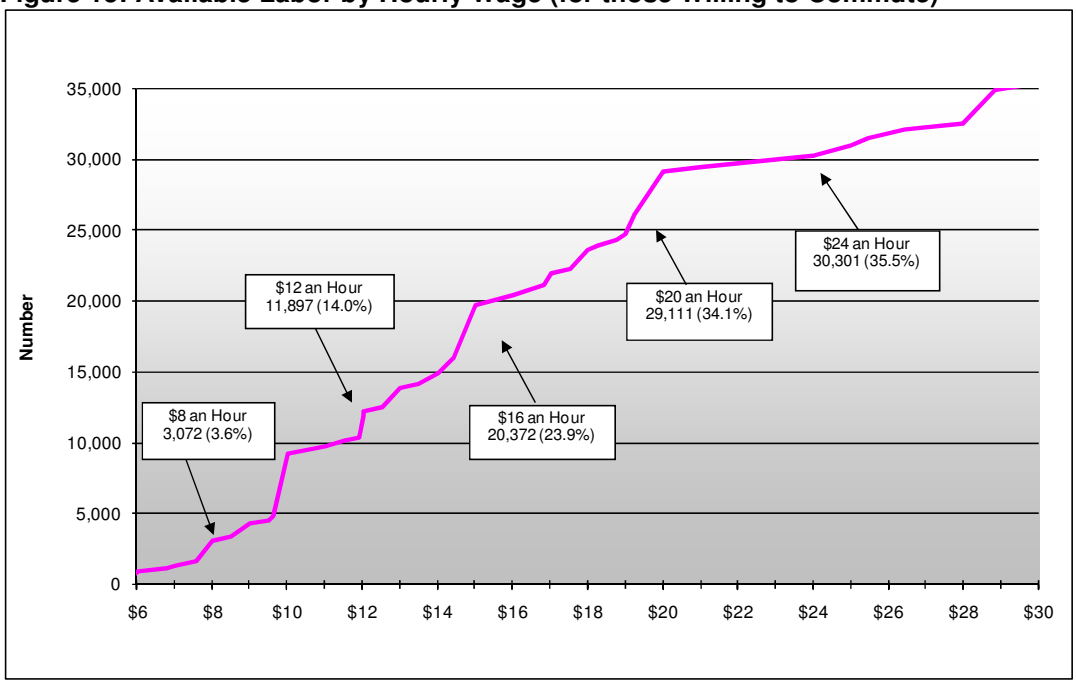


Table 5 (next page) shows the four main occupational sectors (employed only) of the ALP. The table shows data representing each occupational sector *independently* and does *not* include non-working ALP members. The table shows that 5% of the general laborers are available for a new or different job at a wage of up to $9 an hour, while 27% are available for new employment at a wage of up to $15 an hour. Of the skilled laborers, 29% are available for a job at $15 an hour but none are available for a job at or below $12 an hour.

Eight percent of the service workers are available at a wage of up to $9 an hour, while 35% are available at a wage of up to $15 an hour. Conversely, only 9% of the professional workers are available at a wage of up to $15 an hour, none are available at a wage of $9 an hour or less.

Table 5: Cumulative Wage Demands for Occupational Sectors

	General Labor		High Skilled Labor		Service Sector		Professional/Sales	
	(N= 29) (+/- 18.3% MoE)		(N= 13) (+/- 27.1% MoE)		(N= 51.5) (+/- 13.7% MoE)		(N= 23.8) (+/- 20.1% MoE)	
	Number	*Cumulative*	*Number*	*Cumulative*	*Number*	*Cumulative*	*Number*	*Cumulative*
$30 or More	12,114	100%	5,509	100%	21,623	100%	9,978	100%
Up to $30	9,141	75%	3,411	62%	18,083	84%	4,602	46%
Up to $27	9,141	75%	2,974	54%	15,594	72%	3,632	36%
Up to $24	8,155	67%	2,664	48%	14,010	65%	3,099	31%
Up to $21	7,783	64%	2,664	48%	14,010	65%	3,099	31%
Up to $18	5,421	45%	2,131	39%	11,253	52%	1,293	13%
Up to $15	3,316	27%	1,598	29%	7,489	35%	921	9%
Up to $12	2,130	18%	1,066	19%	4,576	21%	550	6%
Up to $9	636	5%	0	0%	1,832	8%	0	0%
Up to $6	0	0%	0	0%	620	3%	0	0%

Table 6 shows wage demand data for general labor and service sector workers that are willing to change fields of employment and thus, are presumably potential workers for either of these two sectors. Additionally, it is assumed that a non-working ALP member will take a job (all things being equal) in either the general labor sector or the service sector. Specifically, Table 6 *includes* data from respondents[3] 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.

Table 6: Cumulative Wage Demands Allowing Mobility between General Labor and Service Sector

	Mobile General Labor		Mobile Service Sector	
	(N= 92.3) (+/- 10.2% MoE)		(N= 99.4) (+/- 9.8% MoE)	
	Number	*Cumulative*	*Number*	*Cumulative*
$30 or More	30,991	100%	33,376	100%
Up to $30	26,054	84%	28,597	86%
Up to $27	24,917	80%	26,608	80%
Up to $24	23,392	75%	24,554	74%
Up to $21	23,095	75%	24,257	73%
Up to $18	18,564	60%	19,286	58%
Up to $15	13,730	44%	13,730	41%
Up to $12	8,896	29%	8,896	27%
Up to $9	3,173	10%	3,421	10%
Up to $6	921	3%	921	3%

[3] Unlike Table 5, Table 6 allows a general laborer or service sector worker to be classified in both sectors *if* he or she indicates a willingness to change fields of employment (see Figure 8). High-skilled blue-collar workers and professional white-collar workers are excluded from Table 6 because it is presumed that, as a general rule, people in occupations such as Doctors, Lawyers, Engineers, Professors, Machinists, Electricians, etc… are unlikely to transfer into lower-skilled general labor and service/support occupations. It is also presumed that, because professional and highly skilled occupations require extensive education and/or training, lower-skilled general laborers and service sector workers are unable to transfer to higher-skilled labor or professional positions - at least in the near term.

Underemployment Among 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 ALP* were presented with a scenario describing underemployment[4]. They were then asked a series of questions assessing if they perceived 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 were limited in the number of hours that they could work.

Of the 68,416 *employed members* of the ALP (shown in Figure 16), less than a third answered "yes" to one or more of the questions presented above and are considered underemployed. Figure 17 shows that the underemployed workers represent 31% (or 21,140 individuals) of the employed members of the ALP.

Figure 16: Employed Members of the Available Labor Pool

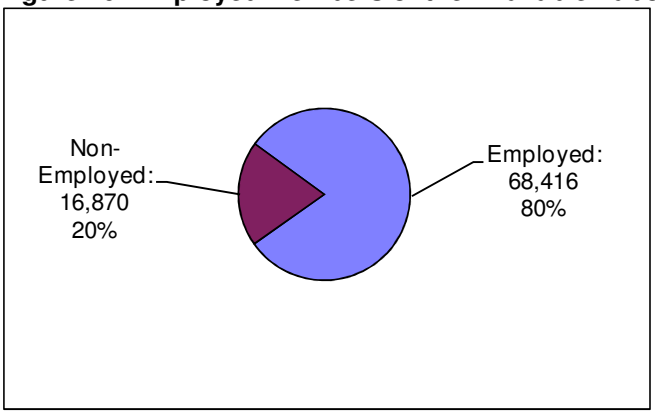
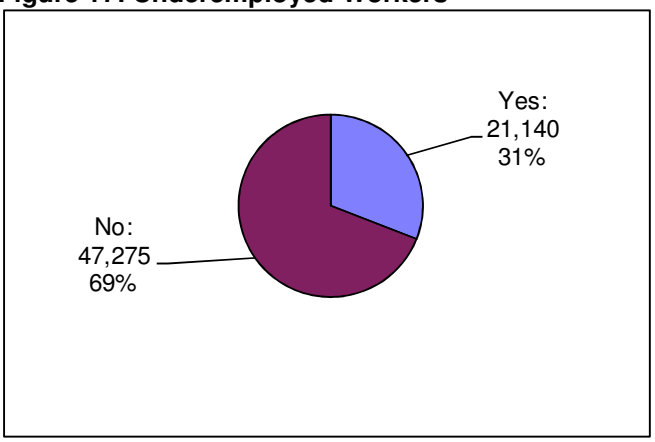


Figure 17: Underemployed Workers



[4] "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 18 shows the percentages of the positive responses (i.e., "yes" answers) to the various measures of underemployment. Almost 30% of this subset of the ALP considers themselves as underemployed because they assess their skill levels as greater than their current jobs require. About 28% consider their education levels as exceeding those needed for their current positions. Twenty-four percent had a previous but similar jobs that provided more income, while about 13% suggest they are not able to work enough hours.

Figure 18: Reasons for Underemployment

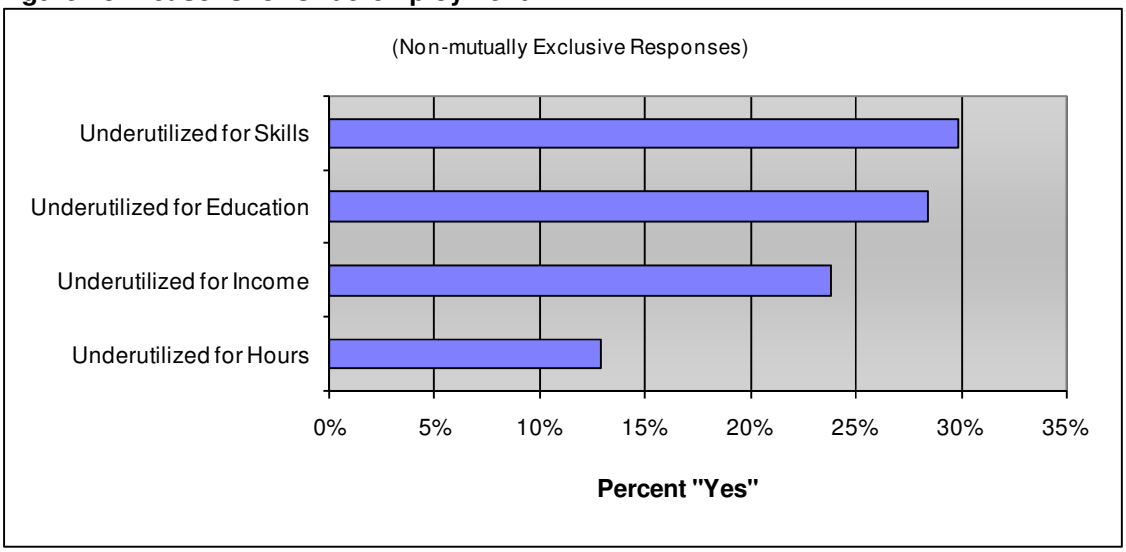


Table 7 and Figure 19 (next page) show some characteristics of the underemployed members of the Available Labor Pool. Table 7 indicates that the education level of the underemployed workers compares to the overall ALP with about 66% having at least some college education and 38% having completed associates degrees. (Table 1 shows that almost 70% of the entire ALP has some college experience and about 38.6% have completed an associate's degree).

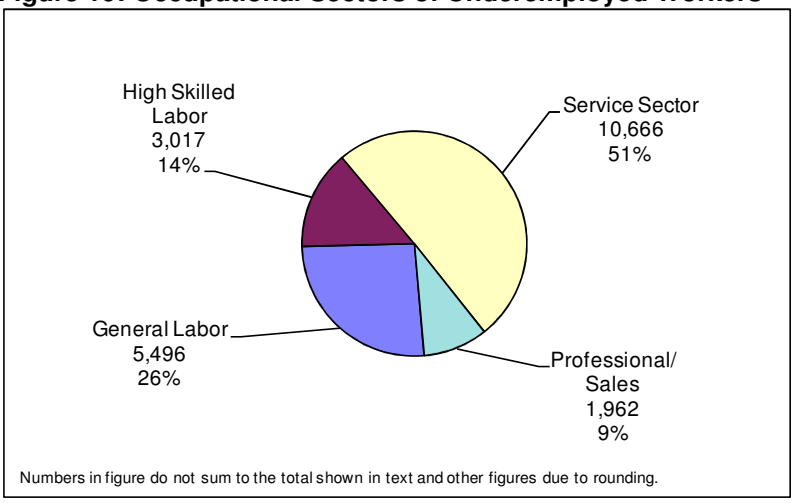
Table 7: Highest Level of Education Achieved Among Underemployed

	Number	Percent	Cumulative Percent
Doctoral Degree	471	2.2	2.2
Masters Degree	427	2.0	4.2
Bachelors Degree	4,263	20.2	24.4
Associates Degree	2,842	13.4	37.9
Some College	5,917	28.0	65.8
High School Diploma Only	6,102	28.9	94.7
Less HS Diploma	1,118	5.3	
Total	21,140	100	

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

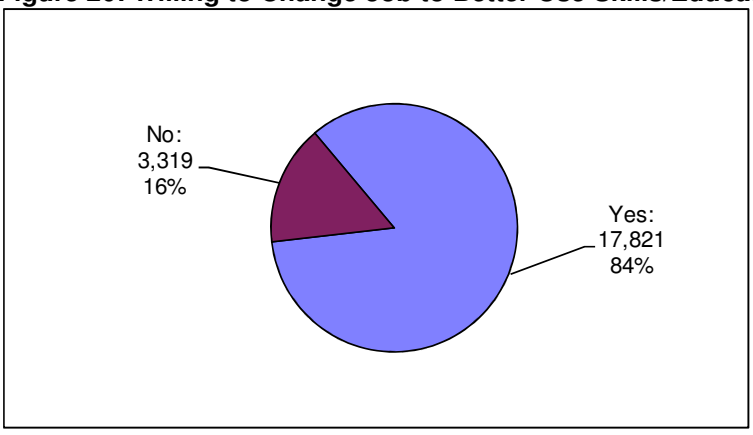
Figure 19 shows that 26% of the underemployed workers are employed as general laborers and 14% are employed as skilled blue-collar workers. The largest percentage of underemployed workers is employed as service sector and support workers (51%), while few (9%) hold professional positions.

Figure 19: Occupational Sectors of Underemployed Workers



Respondents indicating that they were underemployed were also asked a follow-up question addressing the willingness to change jobs in order for them to better utilize their skills and/or education. Figure 20 suggests that many – 84% (or 17,821 individuals) – of the underemployed workers are willing to change jobs to address underemployment.

Figure 20: Willing to Change Job to Better Use Skills/Education



Comparative Analysis (2005 and 2008 Data)

The Docking Institute of Public Affairs conducted a similar labor study in the Johnson County Labor Basin in 2005. This section of the report will compare some of the data collected during 2005 to data collected in 2008.

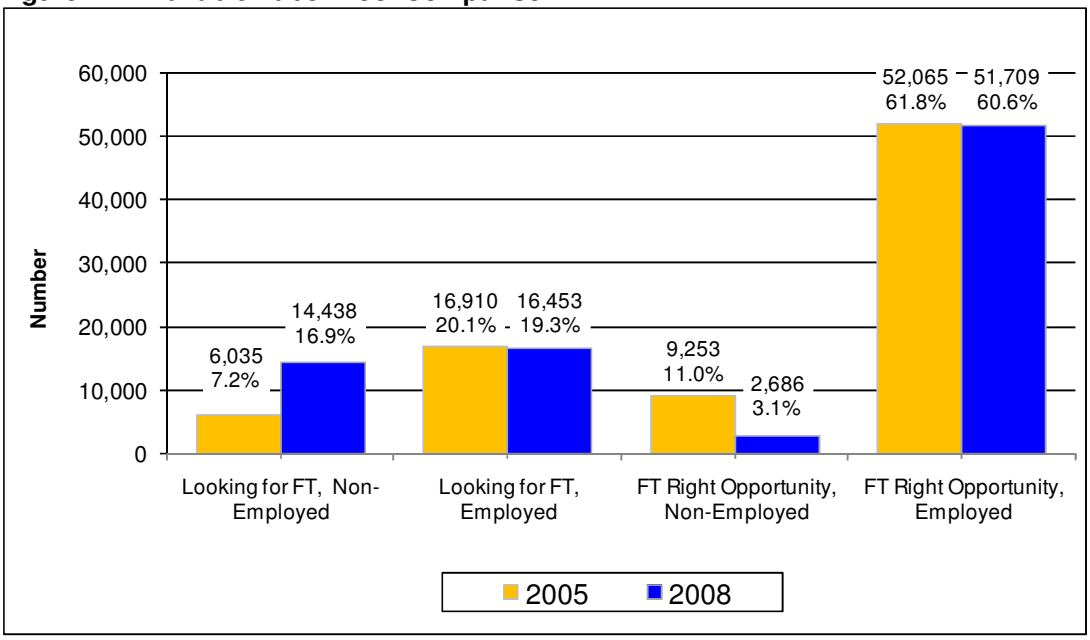
Table 8 shows population, civilian labor force, employment, and the ALP data presented in the 2005 and 2008 reports. Total population within the Johnson County Labor Basin has increased from 307,940 to 316,320, the Civilian Labor Force increased from 157,420 to 160,266, and the number of employed individuals has increased from 148,444 to 150,504. The unemployment rate increased from 5.8% to 6.2%.

Table 8: Population, CLF, Employed, ALP, and Unemployment Rate Comparisons

	2005 Study	2008 Study
Labor Basin Population	307,940	316,320
Civilian Labor Force	157,420	160,256
Employed	148,444	150,504
Available Labor Pool	84,264	85,286
Unemployment Rate	5.8%	6.2%

Figure 21, below, shows the ALP for the Johnson County Labor Basin in 2005 and 2008. The percentage of ALP members indicating that they are *non-employed* and *actively looking for other full-time employment* increased from 2005 to 2008 from 7.2% to 16.9%. The percentage that is *non-employed* and *available given the right opportunities* decreased from 11.0% to 3.1%. The percentages of ALP members in the other two categories are about the same.

Figure 21: Available Labor Pool Comparison



An occupation and education level comparison is shown in Table 9. The greatest changes in the occupations of the ALP are among service sector workers and professional workers. There are about four percent more service sector workers in 2008 ALP than in the 2005 ALP, while there are 6.7% fewer professional workers in the 2008 ALP than in the 2005 ALP.

The overall education level of the Available Labor Pool stayed relatively stable from 2005 to 2008 when comparing cumulative percent figures, although 30.8% hold bachelor's degrees (**at least**) in 2008 compared to 25.8% in 2005.

Table 9: ALP Occupation and Education Levels Comparison

	2005 Study			2008 Study		
Employment Sector	Number	Percent	Percent of Wrkg ALP	Number	Percent	Percent of Wrkg ALP
General Labor	18,992	22.5	27.5	17,776	20.8	26.0
Skilled Labor	5,797	6.9	8.4	8,235	9.7	12.0
Service	24,531	29.1	35.6	28,257	33.1	41.3
Professional	19,655	23.3	28.5	14,147	16.6	20.7
Non-Working	15,288	18.1	*N/A*	16,870	19.8	*N/A*
Education Level	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	548	0.7	0.7	1,909	2.2	2.2
Masters Degree	6,614	7.8	8.5	7,690	9.0	11.3
Bachelors Degree	14,591	17.3	25.8	16,710	19.6	30.8
Associates Degree	7,606	9.0	34.8	6,600	7.7	38.6
Some College	26,244	31.1	65.9	26,715	31.3	69.9
High School Diploma	24,467	29.0	94.9	22,133	26.0	95.9
Less HS Diploma	4,195	5.0	100	3,529	4.1	100

Data from the 2005 and 2008 studies shows that the percentage of the ALP indicating they are willing to take a job outside their primary field decreased by 3.8% (see Table 10).

Table 10: Willing to Take Job Outside of Primary Field

	2005 Study		2008 Study	
	Number	Percent	Number	Percent
Yes	73,310	87.0	70,958	83.2
No	10,954	13.0	14,328	16.8
Total	84,264	100	85,286	100

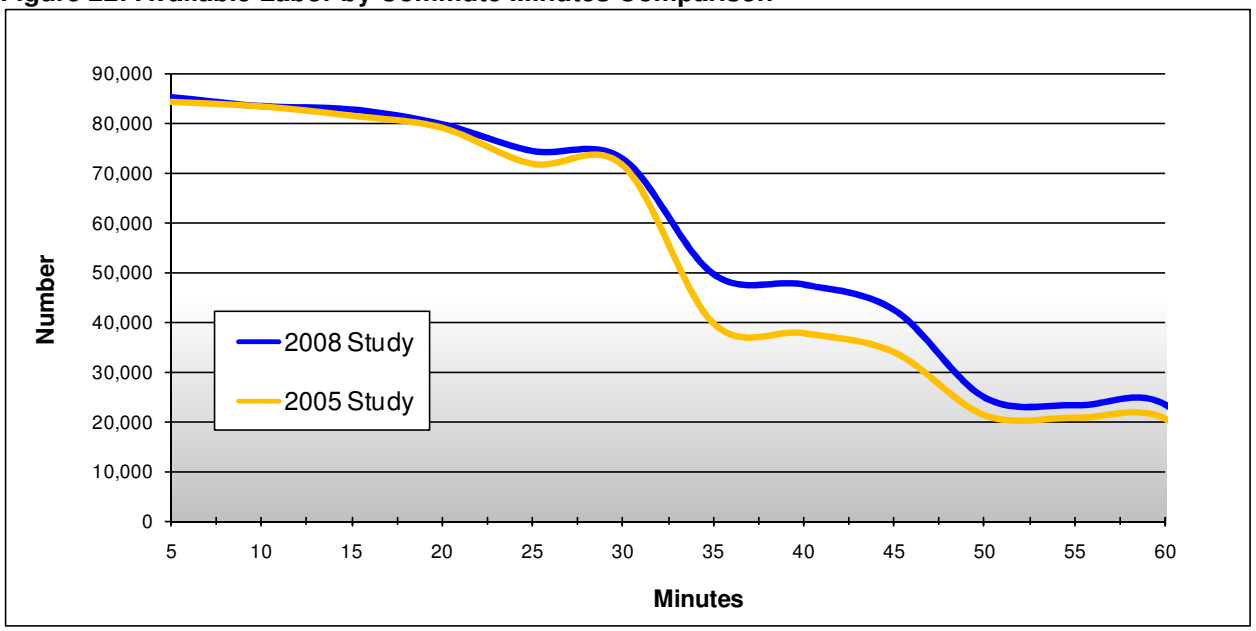
Table 11 shows a comparison of "willingness to commute" for the two studies. The cumulative percentages for the various commute minute categories are similar for the two studies up to the "up to 35 minutes" category. The cumulative percentages of the categories ranging from "up to 35 minutes" to "up to 60 minutes" suggests that members of the 2008 ALP are willing to travel for longer periods of time for a new or different job than are members of the 2005 ALP.

Table 11: Available Labor by Commute Minutes

	2005 Study		2008 Study	
	Cumulative		Cumulative	
	Number	Percent	Number	Percent
More than 60 Minutes	2,779	3.3	1,764	2.1
Up to 60 Minutes	20,515	24.3	23,408	27.4
Up to 55 Minutes	20,788	24.7	23,408	27.4
Up to 50 Minutes	21,265	25.2	24,907	29.2
Up to 45 Minutes	33,909	40.2	42,481	49.8
Up to 40 Minutes	37,767	44.8	47,635	55.9
Up to 35 Minutes	39,755	47.2	49,727	58.3
Up to 30 Minutes	71,468	84.8	72,857	85.4
Up to 25 Minutes	71,810	85.2	74,457	87.3
Up to 20 Minutes	79,045	93.8	79,835	93.6
Up to 15 Minutes	81,468	96.7	82,797	97.1
Up to 10 Minutes	83,338	98.9	83,451	97.8
Up to 5 Minutes	84,264	100	85,286	100

Figure 22 shows the same information as that in Table 11, but in graphic form. The figure shows that the data from the two study groups begins to diverge at about 33 minutes.

Figure 22: Available Labor by Commute Minutes Comparison



Regarding desired benefits to take a new or a different job, Table 12 shows that on-the-job or paid training is a very important benefit in both studies, but that the percentages of respondents considering health benefits as an important reason to take a new job was higher for the 2005 ALP than they are for the 2008 ALP.

Table 12: Importance of Benefits to Change Employment Comparison

	2005 Study	2008 Study
	Percent Responding "Yes"	
OJT or Paid Training	88.7	88.9
Good Retirement Benefits	85.9	85.5
Good Health Benefits	88.5	84.3
Good Vacation Benefits	78.1	79.4
Flexible Hours/Flex-Time	68.4	69.5
Good Education Assistance	66.2	53.0

Figure 23 shows a comparison of the wage demands of the two study groups. The wage demand line shows that a smaller proportion of the 2008 ALP members are available for work for hourly wages up to $18 per hour when compared to the 2005 ALP, however, the number of ALP members at $16 an hour (for example) is still more than half of the 2008 ALP (53.1%).

Figure 23: Comparison of Wage Demands of the Willing-to-Commute

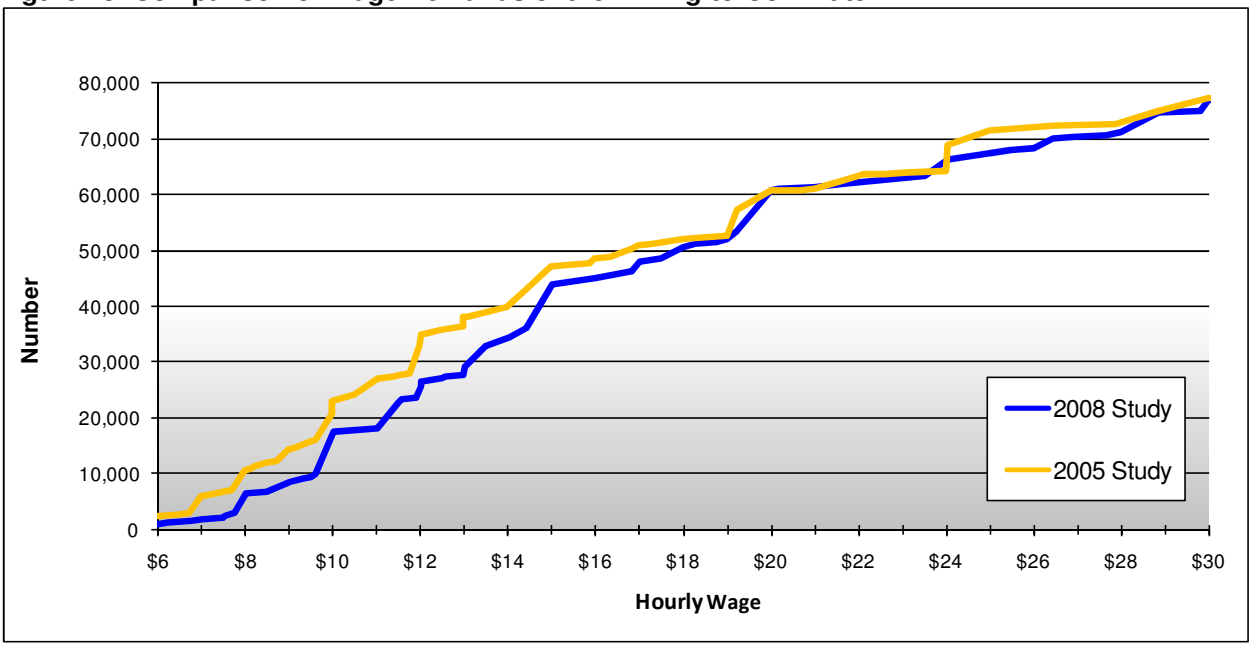


Table 11 shows a comparison of the underemployed members of the ALPs for 2005[5] and 2008. The levels of underemployment for the two study periods are similar. The table suggests that more high-skilled blue collar workers and fewer professional white-collar workers might consider themselves underemployed in 2008 than in 2005.

Table 11: Underemployed Workers and Education Level Comparison

	2005 Study		2008 Study	
	Percent		Percent	
Underemployed	30.8		30.9	
Will Change Jobs to address Underemployment	81.6		84.3	
Employment Sector				
	Percent		Percent	
General Labor	27.8		26.0	
Skilled Labor	10.5		14.3	
Service	49.0		50.5	
Professional	12.7		9.3	
Education Level		Cumulative		Cumulative
	Percent	Percent	Percent	Percent
Doctoral Degree	1.2	1.2	2.2	2.2
Masters Degree	5.5	6.7	2.0	4.2
Bachelors Degree	21.2	27.9	20.2	24.4
Associates Degree	11.2	39.1	13.4	37.9
Some College	30.2	69.3	28.0	65.8
High School Diploma	25.9	95.2	28.9	94.7
Less HS Diploma	4.8	100	5.3	100

[5] The percentages shown for 2005 in this report will differ from those shown in the report published in 2005. This is because the 2005 underemployment section included employed ALP members seeking part-time employment. The 2008 survey asked only those employed ALP members seeking full-time employment the underemployment questions. This is consistent with usual Docking Institute labor study practices and the data from 2005 was reanalyzed and recalculated.

Methodology

The Johnson County Labor Basin has a total population of approximately 316,320, and a Civilian Labor Force (CLF) of 160,256. The Docking Institute's analysis suggests that the basin contains an Available Labor Pool (ALP) of 85,286 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 (CLF). The CLF 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 CLF 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 CLF *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, Census-based and BLS data (such as the CLF) 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 CLF is the "Available Labor Pool[6]." The Available Labor Pool is composed of workers categorized as either 1) currently not working *but* looking for employment, 2) currently employed (full- or part-time) *and* looking for other full-time employment, 3) currently not working in any manner *but* willing to consider different employment for the *right opportunity*, and 4) currently employed and not looking, *but* willing to consider different employment for the *right opportunity*.

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 CLF[7]. Secondly, the number of potential workers is then *restricted* to

[6] The Available Labor Pool includes potential workers excluded from the CLF (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 are within a reasonable commute distance to the center of the labor basin, 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 workers who indicate they are looking for work or that are available for new employment. The advantage of this methodology is that it allows researchers to examine those members of the labor pool who have a propensity to consider a job opportunity given their employment expectations. Even with these restrictions, it should be noted that, in practice, not all members of the Available Labor Pool would apply for a new job opportunity. However, the Available Labor Pool figure for a labor basin reveals to current employers and potential employers better information about the quantity and quality of the labor pool than do Civilian Labor Force data and unemployment statistics. The Available Labor Pool for the Johnson County Labor Basin includes 85,286 individuals. This represents a substantial number of workers and potential workers for employers to draw upon in the Johnson County Labor Basin.

Survey Research Methods

Data for the **2008 study** were collected from a random digit telephone survey[8] of adults living in twenty 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. Surveying took place from October 14 to December 15, 2008, using a Computer Assisted Telephone Interviewing (CATI) system. A total of 4,247 households were successfully contacted during the data collection period, and a randomly selected adult[9] in each was asked to participate in the study. In 2,361 households the selected adult agreed to be interviewed. This represents a cooperation rate of 59% and a margin of error of +/-2.1%.

Survey respondents that were 65 years of age or older and retired or over 65 and not working 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 1,177 and are considered eligible respondents.

The Johnson County Labor Basin encompasses eight of the twenty counties in which surveying took place, and a portion of another county. These counties are Benton, Cass, Henry, Johnson, Lafayette, Pettis, Saline, and the eastern portion of Jackson. A total of 516 cooperating and eligible respondents were found to lie within the basin (MoE +/- 3.60%). Of these respondents, 254 indicated that they were available for new or different employment and/or were looking for a new or different job. This subgroup is considered the Available Labor Pool for the Johnson County Labor Basin. The margin of error for the ALP is +/- 6.15%.

Data for the **2005 study** were collected from a random digit telephone survey of adults living in 17 counties (Bates, St. Clair, Hickory, and Camden were not included in 2005). Surveying took place from June 20, 2005 to August 4, 2005, using the same CATI system. A total of 3,061 households were successfully contacted during the data collection period, and a randomly

---

[8] The 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] Surveyors requested to "speak with an adult over the age of 17 that has had the most recent birthday."

selected adult in 1,864 household agreed to be interviewed. The cooperation rate for the 2005 study was 61%, with a margin of error of +/-2.27%.

As in 2008, survey respondents that were 65 years of age or older and retired or over 65 and not working 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 1,149, and were considered eligible respondents.

A total of 782 cooperating and eligible respondents were found to lie within the Johnson County Labor Basin in 2005 (MoE +/-3.50%). Of these respondents, 381 indicated that they were available for new or different employment and/or were looking for a new or different job. This represents the 2005 Johnson County Labor Basin ALP (MoE +/- 5.02%).

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. 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.

Appendix I: Current Employment Status of ALP

	Current Employment Status of ALP	
	Number	Percent
General Labor/Construction/Cleaning	4,490	5.3
Farm Labor/Ranch Hand/Landscaping	464	0.5
Delivery/Driver/Courier	440	0.5
Maintenance/Wiring/Plumbing	3,058	3.6
Factory Worker/Grain Elevator Op/Meat Packer	4,335	5.1
Truck Driver/Heavy Equipment Operator	3,905	4.6
Police/Fire/Postal/Military Enlisted	1,514	1.8
Lab or Medical Technician/Comp Technician	1,268	1.5
Skilled Mechanic/Welder/Carpenter/Electrician	2,858	3.4
Other Blue Collar	0	0.0
General Customer Service/Retail/Reception/Food Service	8,231	9.7
Clerical/Secretary/Book-Keeper/Bank Teller	2,605	3.1
Para-legal/Para-pro/CNA/Day Care	3,810	4.5
Nurse/LPN/RN/Semi-skilled Social Service	6,916	8.1
Office Manager/Small Business Owner	7,591	8.9
Teacher/Instructor/Writer/Researcher	5,766	6.8
Sales/Marketing/Accounting	3,878	4.5
Govt, Non-Profit, or Bus Exec/Farm Owner/Military Officer	782	0.9
Counselor/Social Worker/Physician's Assistant	782	0.9
Professor/Doctor/Engineer/Attorney	4,643	5.4
Other White Collar	0	0.0
Homemaker	3,846	4.5
Full-Time Student	2,295	2.7
Unemployed	9,025	10.6
Retired	2,345	2.7
Disabled	440	0.5
Total	85,286	100

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

Appendix II: 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