

# Lafayette County Labor Basin Labor Availability Analysis – 2015

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

Caldwell • Carroll • Clay • Jackson •  
Johnson • Lafayette • Pettis • Ray • Saline Counties



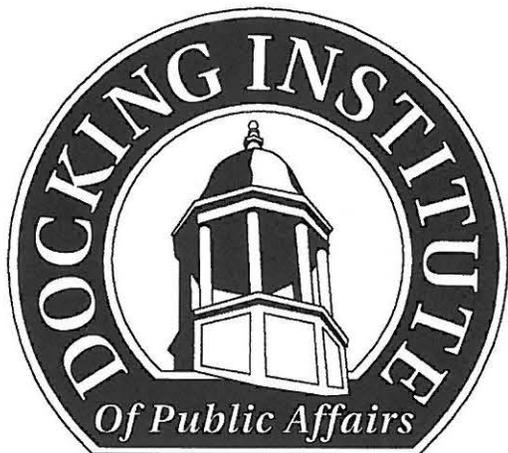
Prepared For

**Central Missouri Economic Development Alliance**

By

**The Docking Institute of Public Affairs**

**Copyright © 2015**  
All Rights Reserved



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

Gary D. Brinker, PhD  
Director

Michael S. Walker, MS  
Assistant Director

Jian Sun, PhD  
Research Scientist

Bradley Pendergast  
Survey Center Manager

Lynette Ottley  
Administrative Associate

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.

# Lafayette County Labor Basin Labor Availability Analysis – 2015

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

## **Prepared By:**

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

## **Prepared For:**

Central Missouri Economic Development Alliance

**Copyright © 2015**  
All Rights Reserved

## Table of Contents

List of Tables .....	ii
List of Figures .....	iii
List of Maps .....	iv
Executive Summary .....	1
The Lafayette County Labor Basin .....	2
<i>Components of the Report</i> .....	3
The Lafayette County Labor Basin's Available Labor Pool .....	4
Current Skills and Work Experiences .....	8
Educational Experience .....	14
Considerations for Employment .....	16
Wage Demands of Available Labor Pool .....	19
Subsets of the Available Labor Pool .....	20
<i>Subset 1: Within Necessary Commute Time</i> .....	20
• <i>Wage Demands (of those Within Necessary Commute Time)</i> .....	20
• <i>Wage Demands by Occupational Sector (for those Within Necessary Commute Time)</i> .....	21
<i>Subset 2: Underemployed Available Labor Pool Workers</i> .....	24
Comparative Analysis (2009, 2012, and 2015 Reports) .....	27
Methods .....	33
<i>Explaining the Civilian Labor Force</i> .....	33
<i>Defining the Available Labor Pool</i> .....	33
Glossary of Terms .....	35
Appendix: Hourly Wage to Annual Salary Conversion Chart .....	36

## List of Tables

Table 1: Age, Gender, and Education Levels of Available Labor Pool.....	6
Table 2: Major Occupational Categories of Available Labor .....	7
Table 3: Current Work Experience plus Previous Work or Training Experience .....	8
Table 4: Previous Work Experience of Non-Workers.....	10
Table 5: Desired Benefits and Current Benefits Offered.....	18
Table 6: Cumulative Wage Demands for Occupational Sectors .....	21
Table 7: Cumulative Wage Demands Allowing Mobility between General Labor and Service Sector.....	22
Table 8: Highest Level of Education Achieved Among Underemployed .....	25
Table 9: Key Population and Employment Indicators .....	27
Table 10: Available Labor Pool Occupational Sectors and Education Levels Comparison .....	29
Table 11: Willing to Work Outside of Field and Work Shift Comparison .....	29
Table 12: Important Benefits to Change Employment Comparison .....	30
Table 13: Underemployed Workers Occupational Sectors and Education Levels Comparison..	32

## List of Figures

Figure 1: The Available Labor Pool for the Lafayette County Labor Basin.....	4
Figure 2: Occupational Sectors of Available Labor (Employed Only).....	7
Figure 3: Current Work Experience plus Previous Work or Training Experience .....	9
Figure 4: Work Experience / Willing to Work in Field.....	11
Figure 4a: Work Experience in Distribution Center or Warehouse.....	12
Figure 4b: Work Experience in Manufacturing or Processing Plant.....	12
Figure 5: Undergraduate College Major .....	14
Figure 6: Community College Experience .....	15
Figure 6a: Community College Study Area .....	15
Figure 7: Considerations for Employment .....	16
Figure 8: Available Labor by Commute Minutes.....	17
Figure 8a: Being Closer to Work .....	17
Figure 9: Benefits Very Important to Change Employment.....	18
Figure 10: Available Labor by Hourly Wage .....	19
Figure 11: Available Labor by Hourly Wage (for those Within Necessary Commute Time).....	20
Figure 12: Employed and Unemployed Members of the Available Labor Pool .....	24
Figure 13: Underemployed Workers.....	24
Figure 14: Reasons for Underemployment.....	25
Figure 15: Occupational Sectors of Underemployed Workers .....	26
Figure 16: Seeking to Employment to Address Underemployment.....	26
Figure 17: Available Labor Pool Comparison .....	28
Figure 18: Available Labor by Commute Minutes Comparison .....	30
Figure 19: Available Labor Pool by Hourly Wage Comparison .....	31

**List of Maps**

Map 1: Lafayette County Labor Basin ..... 2  
Map 2: Percent of Total Available Labor in Basin by Zip Code ..... 5  
Map 3: Workplaces by Zip Code .....13  
Map 4: Percent Within Necessary Commute Time by Zip Code .....23

## Lafayette County Labor Basin Labor Availability Analysis

### Executive Summary

The Lafayette County Labor Basin includes Caldwell, Carroll, Clay, Jackson, Johnson, Lafayette, Pettis, Ray, 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.

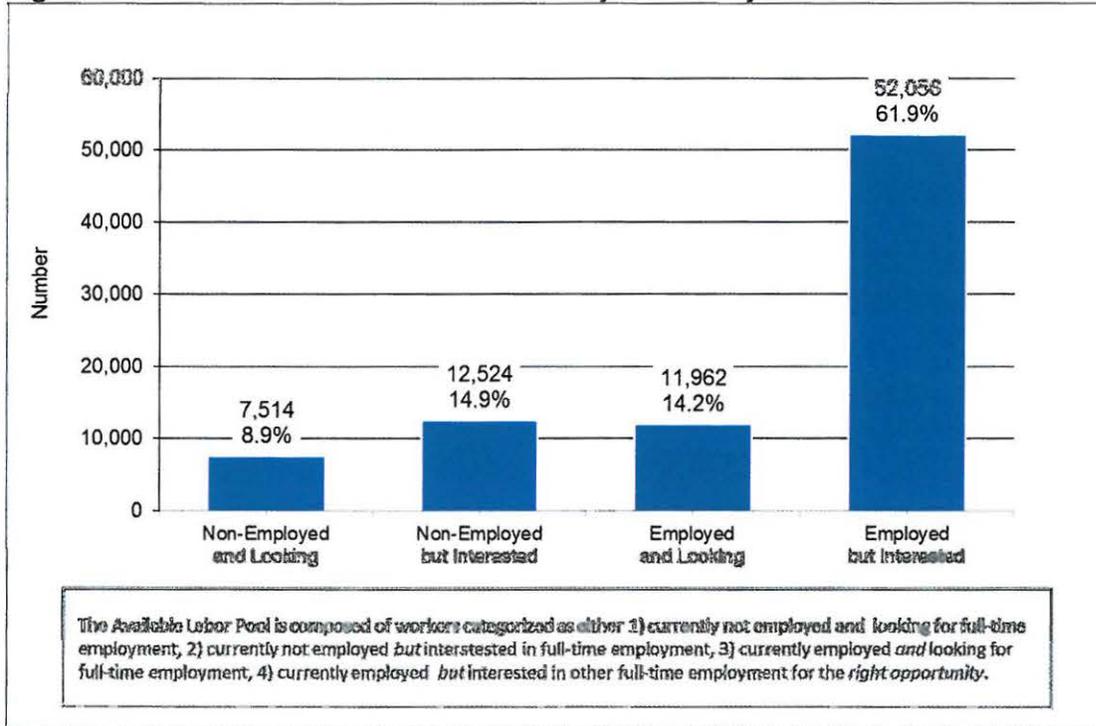
The Docking Institute’s independent analysis of this labor basin shows that:

- The population of the Lafayette County Labor Basin is 280,160. About 30% of the population (or 84,056 individuals) is considered the Available Labor Pool.
- Of the non-working members of the Available Labor Pool, an estimated 7,514 (8.9%) are currently looking for work and 12,524 (14.9%) are interested in working for the right opportunities. Of the working members of the Available Labor Pool, 11,962 (14.2%) are currently looking for work, while 52,056 (61.9%) are interested in a different job given the right opportunities.
- More than two-thirds (69.8%) of the Available Labor Pool has at least some college experience and about 95% has at least a high school diploma. The average age for members of the Pool is about 45 years old, and women make up slightly less than half (46.3%) of the Pool.
- An estimated 18.4% 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 36.4% members of the Pool work in service sector jobs, while 11.7% work in professional white-collar jobs. Almost one quarter (23.8%) are 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.”
- Almost half (49%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 88% 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, on-the-job (OJT) or paid training, good vacation benefits, and good health benefits.
- An estimated 12,159 members (14%) of the Available Labor Pool are interested in a new job at \$10 an hour, 29,073 (35%) are available at \$15 an hour, and 47,013 (56%) are available at \$20 an hour.
- Of the 64,018 members in the subset of *employed members* of the Available Labor Pool, 20,039 (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 Lafayette County Labor Basin's Available Labor Pool

It is estimated that 7,514 (8.9%) members of the Available Labor Pool) are non-employed<sup>1</sup> *and* looking for employment, while 12,524 (14.9%) are non-employed *but* interested in a job for the right opportunities. In addition, 11,962 (14.2%) members of the Pool are employed *and* currently looking for different employment, while 52,056 (61.9%) are employed *but* interested in new employment for the right opportunities.

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



<sup>1</sup> The terms "non-employed," "not employed," and "non-working" refer to officially unemployed members of the Civilian Labor Force *and* any non-employed/non-working full-time students, homemakers, retirees, and disabled individuals that indicate they are available for employment.

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 Lafayette County Labor Basin. The map shows:

- Ten percent or more of the entire labor basin's Available Labor Pool is located in Zip Codes areas within Johnson and Pettis counties. (See purple areas in the map.)
- Between 5% and 9.99% of the entire labor basin's Available Labor Pool is located in Zip Code areas within Clay, Jackson, Ray, and Saline 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 Clay, Johnson, Lafayette, and Ray counties. (See brown areas in the map.)
- Zip Code areas in Carroll, Clay, Jackson, Johnson, Lafayette, Ray, and Saline counties contain 1% to 2.99% of the basin's Available Labor Pool. (See orange areas in the map.)
- Zip Codes areas in Caldwell, Carroll, Jackson, Johnson, Lafayette, Pettis, Ray and Saline 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**

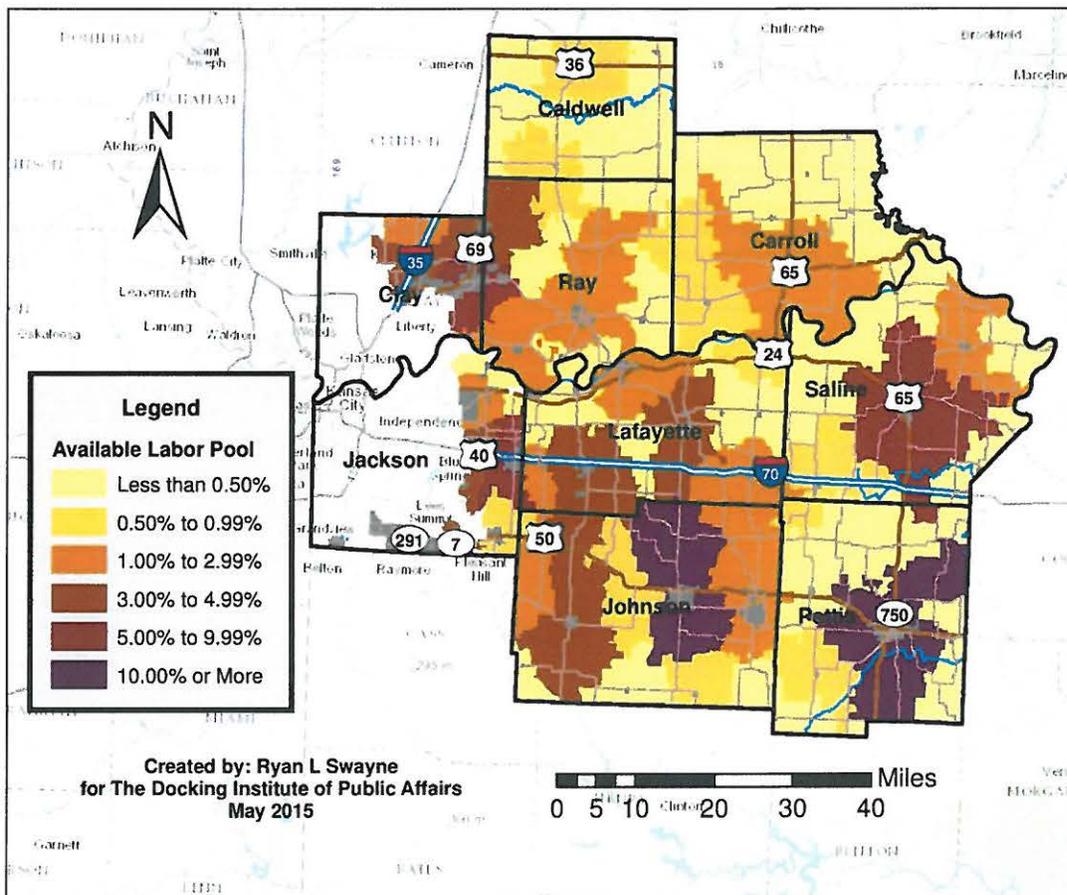


Table 1 shows the gender, age, and education levels of the 84,056-member Available Labor Pool. Slightly less than half (46.3%) of the Pool is women, and the average age is about 45 years old. Most (95.4%) have **at least** a high school diploma, more than two-thirds (69.8%) have **at least** some college education, and more than a third (35.4%) have **at least** a bachelor's degree.

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

<b>Current Year</b>	Age in 2015		
Range	18 to 75		
Average	45		
Median	47		
<b>Gender</b>	Number	Percent	
Female	38,881	46.3	
Male	45,175	53.7	
Total	84,056	100	
<b>Highest Level of Education Achieved</b>			Cumulative Percent
Doctoral Degree	861	1.0	1.0
Masters Degree	10,384	12.4	13.4
Bachelors Degree	18,535	22.1	35.4
Associates Degree	10,630	12.6	48.1
Some College (including current students)	18,282	21.7	69.8
High School Diploma	21,473	25.5	95.4
Less HS Diploma	3,890	4.6	100
Total	84,056	100	
<b>"Do you speak Spanish?"</b>	Number	Percent	
"Yes"	15,251	18.1	
<i>Speak Very Well</i>	695	4.6	} These percentages represent portions of 18.1%
<i>Speak Fairly Well</i>	1,886	12.4	
<i>Speak Only a Little</i>	12,670	83.1	
		100	

Table 2 shows the various occupational categories of the 84,056-member Available Labor Pool. General labor occupations represent 18.4% of the entire Available Labor Pool, while high-skilled, blue-collar jobs make up 9.7%. Traditional service-related occupations represent 36.4% of the Available Labor Pool, while professional occupations represent 11.7%. Non-employed members of the Pool make up less than a quarter (23.8%) of the total.

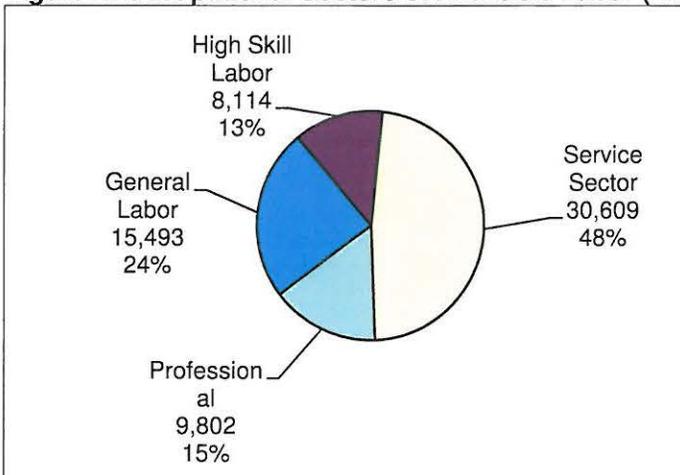
**Table 2: Major Occupational Categories of Available Labor**

	Number	Percent	Years at Job	
			Mean	Median
General Labor/Delivery	5,506	6.6	14.1	10.0
Manufacturing/Maintenance/Trucking	9,987	11.9	12.7	11.6
<b>Total General Labor</b>	<b>15,493</b>	<b>18.4</b>	<b>13.4</b>	<b>10.8</b>
Mechanic/Welder/Comp Tech	3,127	3.7	10.4	5.0
Crew Management/Protection Services	4,987	5.9	15.3	15.8
<b>Total Highly-Skilled Labor</b>	<b>8,114</b>	<b>9.7</b>	<b>12.9</b>	<b>10.4</b>
Customer Service	11,435	13.6	7.9	4.0
Clerical	4,101	4.9	6.2	5.3
Office or Dept Manager	6,445	7.7	10.9	9.0
Health Aid/Nurse	4,642	5.5	8.6	3.2
Education Aid/Teacher	3,985	4.7	7.7	6.4
<b>Total Service Sector</b>	<b>30,609</b>	<b>36.4</b>	<b>8.3</b>	<b>5.6</b>
Exec Management	4,811	5.7	14.7	9.2
Accounting/Engineering	2,561	3.0	6.7	3.7
Doctor/Professor/Attorney	1,950	2.3	13.7	12.6
Writer/Artist/Musician	480	0.6	2.1	2.1
<b>Total Professional Sector</b>	<b>9,802</b>	<b>11.7</b>	<b>9.3</b>	<b>6.9</b>
Homemaker/Student/Unemployed	11,850	14.1	n/a	n/a
Retired/Disabled	8,188	9.7	n/a	n/a
<b>Total Non-Employed</b>	<b>20,038</b>	<b>23.8</b>		
<b>Total</b>	<b>84,056</b>	<b>100</b>		

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 Lafayette 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, 2,677 members of the Pool are currently employed as general laborers, construction, cleaners, and similar positions. An additional 3,807 Pool members (employed and currently non-employed) had previous employment experience or training in one of those jobs, for a total of 6,484 individuals.

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

	Current Employment* Number +	Previous Work/Training* Number =	Current plus Previous Work or Training** Number
<b>Working with Hands</b>			
General Labor	2,677	3,807	6,484
Farm or Ranch Labor	1,324	579	1,903
Manufacturing and Assembly	3,890	4,851	8,741
Maintenance	2,058	934	2,992
Driving (Delivery, Bus, Postal)	1,505	358	1,862
Truck Driving/Heavy Equip. Op.	4,039	1,975	6,014
Skilled Labor	2,072	2,464	4,537
Crew Management	2,831	1,272	4,103
<b>Working with People</b>			
General Customer Service	11,435	12,942	24,378
Office Management	6,445	5,587	12,033
Governmental Services	2,156	2,426	4,582
Executive Management	4,811	1,813	6,624
Advanced Social Services	941	1,338	2,278
<b>Working with Numbers</b>			
Clerical	4,101	2,329	6,430
Accounting/Finance/Banking	1,243	1,890	3,132
Researcher/Analyst	0	228	228
<b>Working with Technology</b>			
IT and Other (Non-Med) Tech. Maint.	1,055	1,643	2,698
Software Dev./Comp. Prog.	918	1,336	2,255
Engineer/Designer	400	202	602
<b>Providing Health Services</b>			
Health Aid	2,540	1,882	4,421
Nurse	2,102	1,212	3,314
Advanced Medical Practitioner	0	256	256
<b>Providing Educational Services</b>			
Education Aid	1,977	537	2,514
Teacher/Trainer	2,008	1,752	3,761
Professor/Lecturer	1,009	202	1,211
<b>Creative Arts</b>			
Writer/Artist/Musician	480	913	1,393
<b>Total</b>	<b>64,018</b>	<b>54,727</b>	<b>118,745</b>

\* Retired, disabled, non-working students, homemakers are not included.  
 \*\* An individual member of the Pool is counted only once within each employment category. If jobs are duplicate, 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 11,435 working Pool members currently employed in this category and 12,942 previously employed/trained in this category, for a total of 24,377 individuals.

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

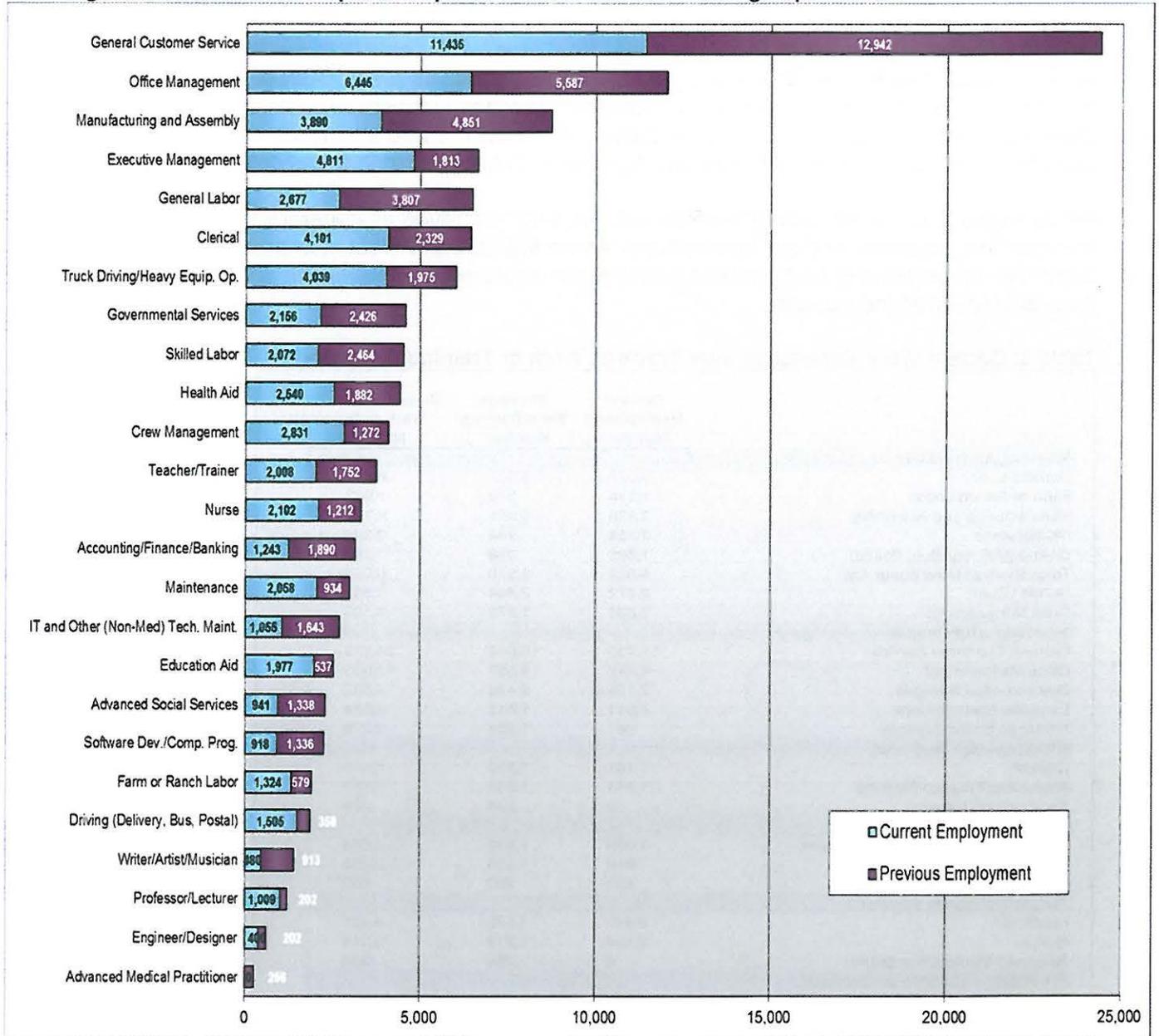


Table 2 on page 7 showed that 20,038 members of the Available Labor Pool are currently non-working. Those with previous work experience were included in the “previous work/training” column in Table 3 on page 8.

Table 4 below shows the work experience of the non-working members of the Pool. The table shows that 20.2% of the current non-workers were previously employed as general customer service workers and 12.7% worked in manufacturing and assembly.

**Table 4: Previous Work Experience of Non-Workers**

<b>Non-Employed - Previous Experience</b>		
	Number	Percent
<b><i>Working with Hands</i></b>		
General Labor	1,309	6.5
Farm or Ranch Labor	0	0.0
Manufacturing and Assembly	2,537	12.7
Maintenance	244	1.2
Driving (Delivery, Bus, Postal)	548	2.7
Truck Driving/Heavy Equip. Op.	1,453	7.3
Skilled Labor	948	4.7
Crew Management	0	0.0
<b><i>Working with People</i></b>		
General Customer Service	4,048	20.2
Office Management	2,171	10.8
Governmental Services	0	0.0
Executive Management	1,322	6.6
Advanced Social Services	591	3.0
<b><i>Working with Numbers</i></b>		
Clerical	605	3.0
Accounting/Finance/Banking	230	1.1
Researcher/Analyst	0	0.0
<b><i>Working with Technology</i></b>		
IT and Other (Non-Med) Tech. Maint.	0	0.0
Software Dev./Comp. Prog.	230	1.1
Engineer/Designer	0	0.0
<b><i>Providing Health Services</i></b>		
Health Aid	1,365	6.8
Nurse	1,127	5.6
Advanced Medical Practitioner	0	0.0
<b><i>Providing Educational Services</i></b>		
Education Aid	487	2.4
Teacher/Trainer	822	4.1
Professor/Lecturer	0	0.0
<b><i>Creative Arts</i></b>		
Writer/Artist/Musician	0	0.0
<b>Total</b>	<b>20,038</b>	<b>100</b>

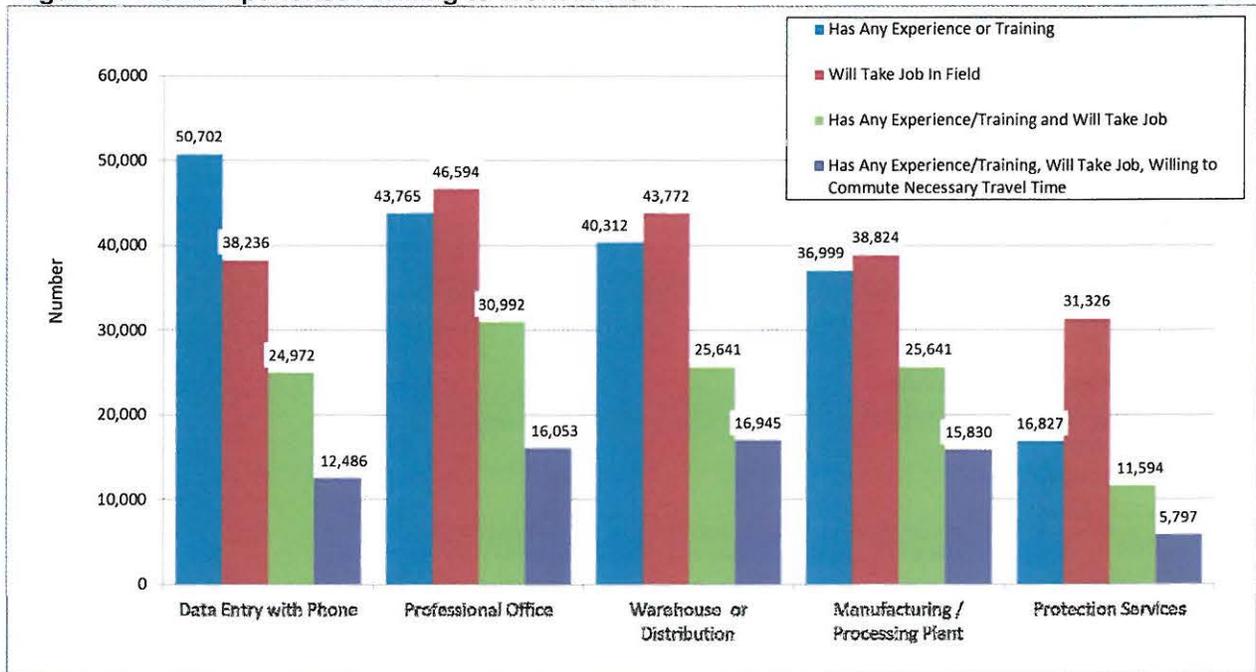
In addition to collecting data regarding the current employment status and previous work or training experience through a series of “open-ended” survey questions (the results of which are shown in the previous table and figure), respondents were asked about the five specific employment areas listed in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

The figure shows that an estimated 50,702 Pool members report having training and/or experience in data entry with telephone operation, while fewer (38,236) individuals) would consider employment in that field. An estimated 43,765 members of the Pool have training and/or experience in a professional office environment, while more (46,594 individuals) would take a job in that field.

An estimated 40,312 members of the Pool suggest that they have training or experience working in a distribution center or warehouse while 43,772 would consider a job in that field. An estimated 36,999 have experience working in a manufacturing or processing plant while 38,824 would take a job in that field. Finally, 16,827 have training or experience in protection or security services, while 31,326 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**

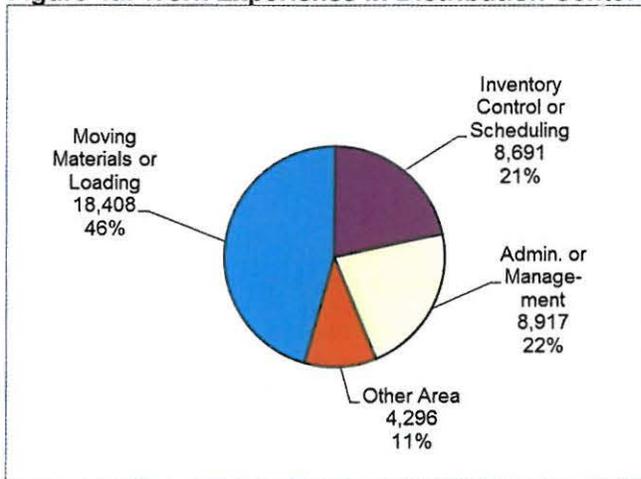


<sup>2</sup> Figure 4 differs substantially from Table 3 and Figure 3 (pages 8 and 9). For example, the “has any experience or training” column above represents an extrapolated total of **all** Pool members answering “yes” to a question asking “do you have any experience or training in...”. As such, 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.

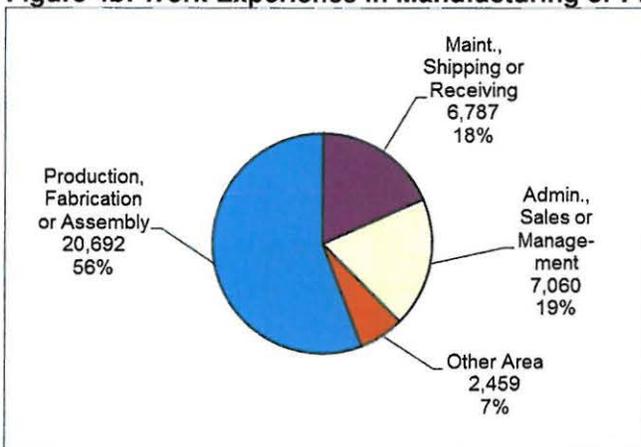
Survey respondents indicating that they had training or experience in distribution/warehousing or manufacturing/processing were asked additional questions to assess the type of work they performed at those jobs.

Figures 4a and 4b show the responses to those questions. The figures show that about half (46%) of those indicating distribution/warehousing experience moved materials or loaded trucks. Additionally, just over half (56%) of those indicating experience in manufacturing/processing had jobs in procession, fabrication or assembly.

**Figure 4a: Work Experience in Distribution Center or Warehouse**



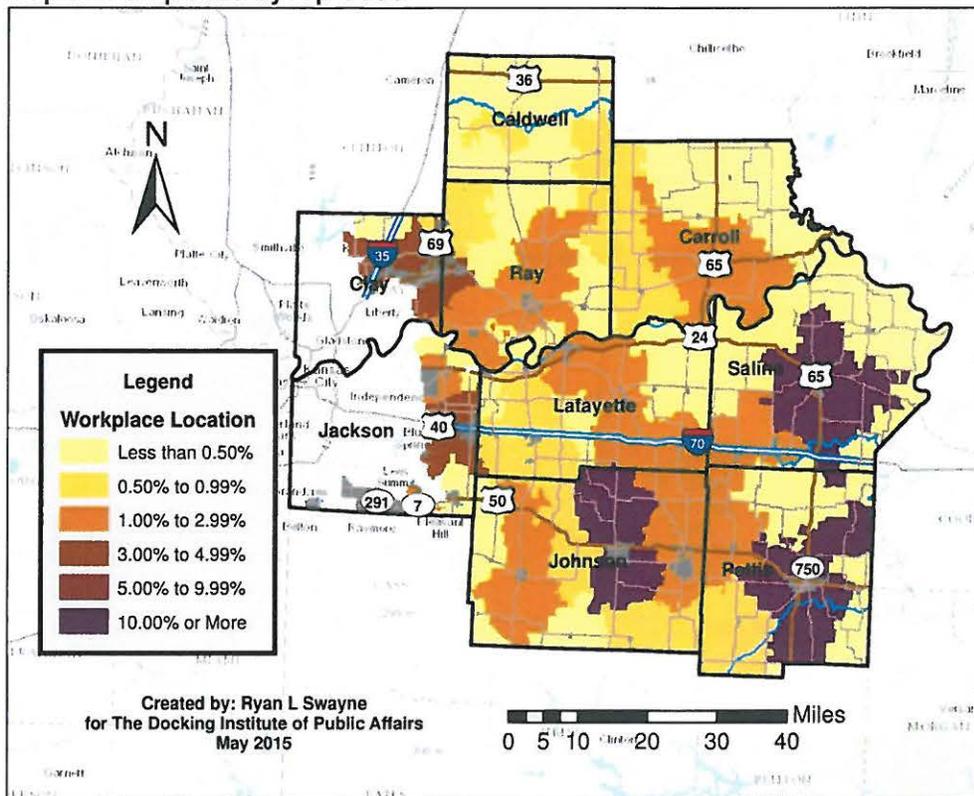
**Figure 4b: Work Experience in Manufacturing or Processing Plant**



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, Pettis, and Saline counties. (See purple areas in the map.)
- Workplaces located in Zip Code areas in Clay, Jackson, Lafayette, and Ray counties employ 3% to 4.99% of the basin’s working Pool members. (See brown areas in the map.)
- Workplaces located in Carroll, Clay, Jackson, Johnson, Lafayette, Pettis, Ray, and Saline 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 counties areas in the basin. (See peach and yellow areas in the map.)

**Map 3: Workplaces by Zip Code**



## Educational Experience

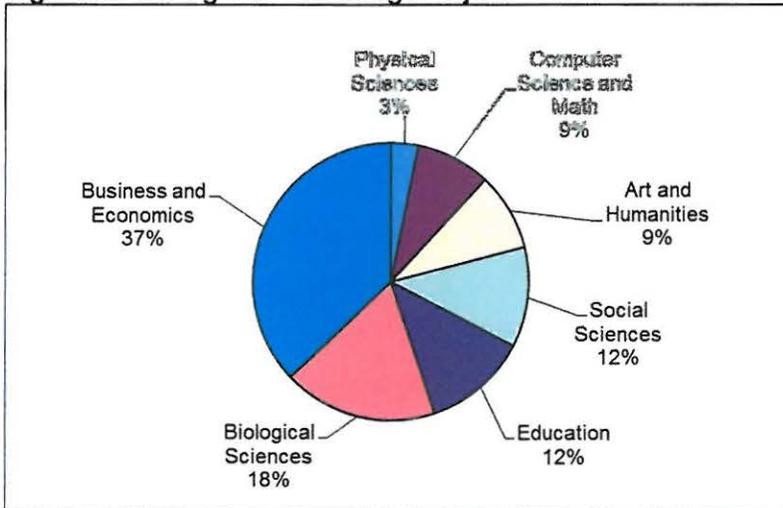
Table 1 (see page 6) shows that 69.8% of the Available Labor Pool reports attending some college (with at least 48.1% completing an associate's degree and at least 35.4% completing a bachelor's degree).

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.

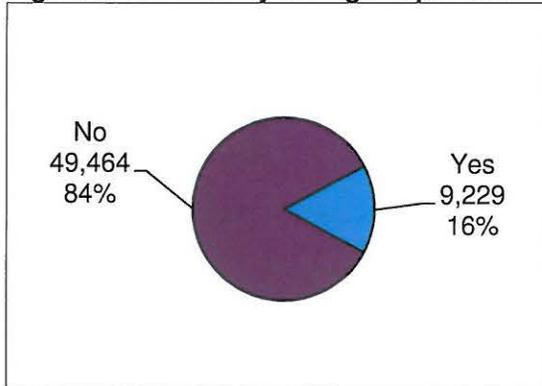
Figure 5 shows that the largest groups of Available Labor Pool members indicate a major in business and economics (37%), biological sciences (18%), education (12%), and social sciences (12%). Art and humanities, computer science and math, and physical sciences have a combined total of 21%.

**Figure 5: Undergraduate College Major**



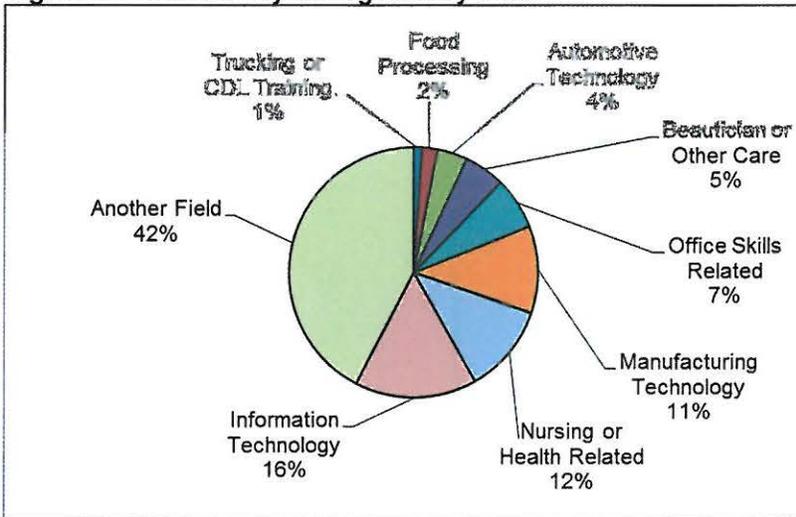
All respondents that had completed “at least some college” were asked: “Are you attending technical school now or have you received a technical degree?” Figure 6 shows that 16% of the respondents hold a technical degree or are working on one at the present time.

**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 12% report studying nursing or another health related field. Less than 12% report studying manufacturing technology, office skills, beautician skills or other personal care, automotive technology, food processing or 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 Lafayette County Labor Basin. Figure 7 shows that 67,084 (79.8%) members of the Available Labor Pool are willing to accept positions outside of their primary fields of employment.

**Figure 7: Considerations for Employment**

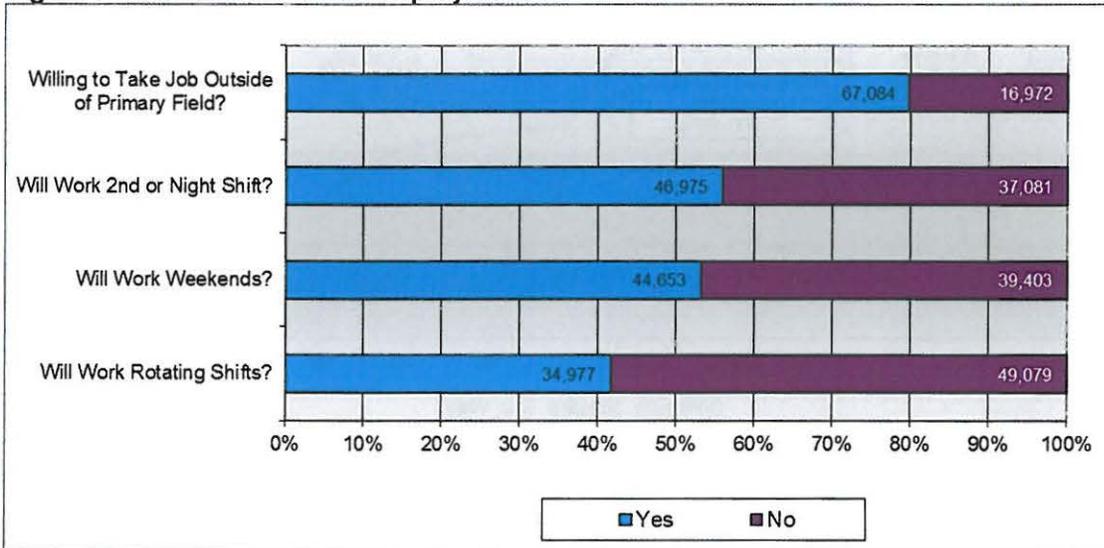
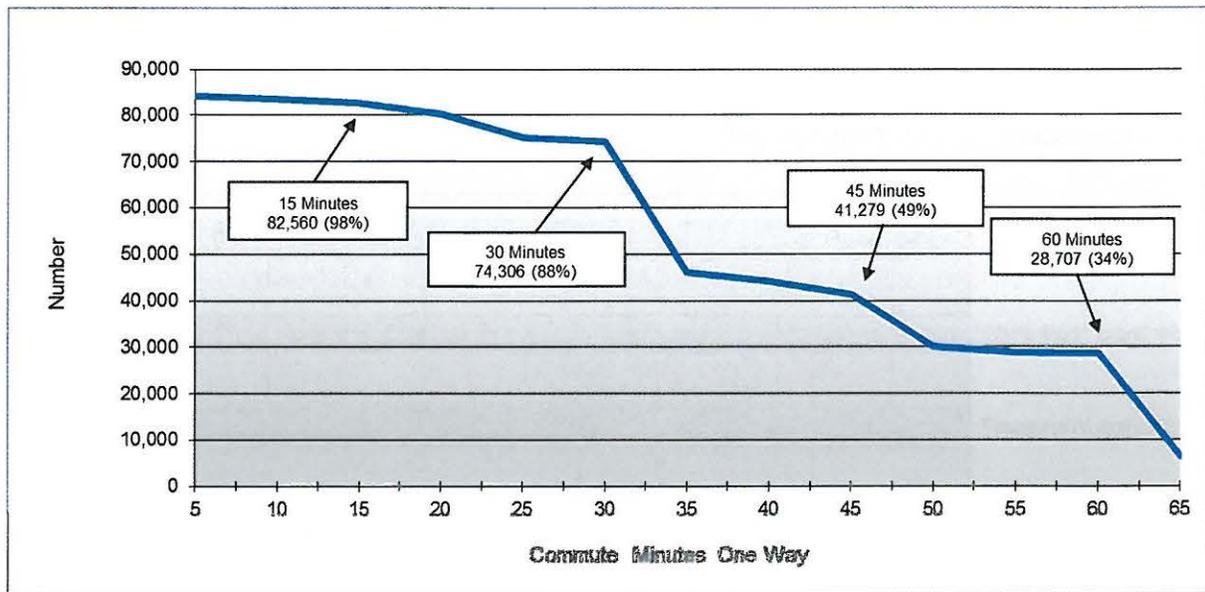


Figure 7 also shows responses to three questions regarding work shifts. Respondents were asked if they would be willing to work a second or night shift, weekends, or rotating shifts for a new job.

The figure shows that 56% of the Available Labor Pool is willing to work a second shift or night shift for a new job, and 53% is willing to work weekends for a new job. More than two-fifths (41.6%) 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 Lafayette County Labor Basin is open to commuting. About half (49%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 88% will commute up to 30 minutes for employment. Virtually all (98%) will travel up to 15 minutes for employment.

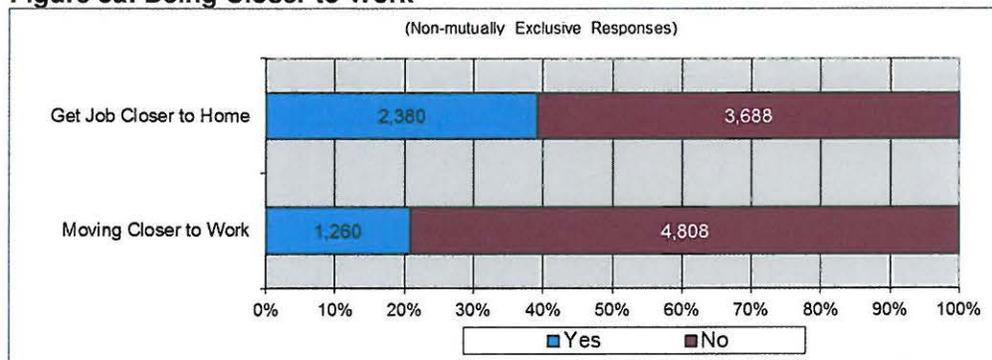
**Figure 8: Available Labor by Commute Minutes**



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 39% of this subset of the Pool would consider getting a new job closer to their places of residence, while about 21% would consider moving closer to their places of work.

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

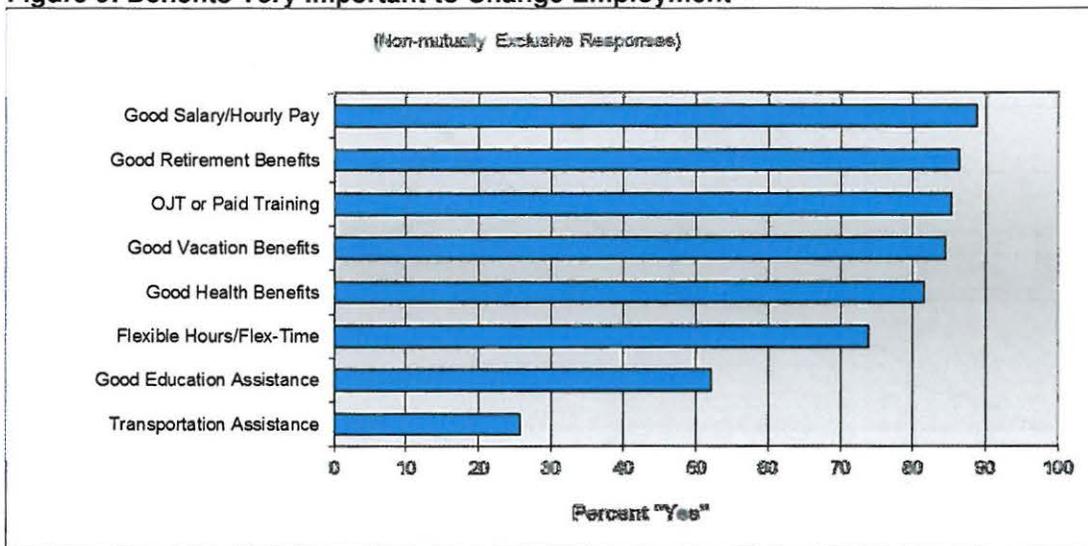


Available Labor Pool members were asked about various benefits that might be important when considering whether to take a new or different job. Respondents were asked if each benefit would be a “very important” consideration for taking a new job, with answer options included “yes” and “no.”

Figure 9 shows that the five most important benefits are, in order, good salary or hourly pay, good retirement benefits, on-the-job training (OJT), good vacation benefits, and good health benefits. 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 74%. The least desired benefits are good educational assistance and transportation assistance, considered “very important” by 52% and 26% of Available Labor Pool members, respectively.

The least desired benefits are good educational assistance and transportation assistance, considered “very important” by 52% and 26% 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. Good Retirement Benefits and Flexible Hours/Flex-Time stand out with 18.3% and 17.1% differences, respectively.

**Table 5: Desired Benefits and Current Benefits Offered**

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent
Good Salary/Hourly Pay	88.7	82.9
Good Retirement Benefits	86.3	68.0
OJT or Paid Training	85.3	71.3
Good Vacation Benefits	84.4	77.3
Good Health Benefits	81.5	77.9
Flexible Hours/Flex-Time	73.9	56.8
Good Education Assistance	52.0	49.7
Transportation Assistance	25.7	18.2

\* This column represents working ALP members only.

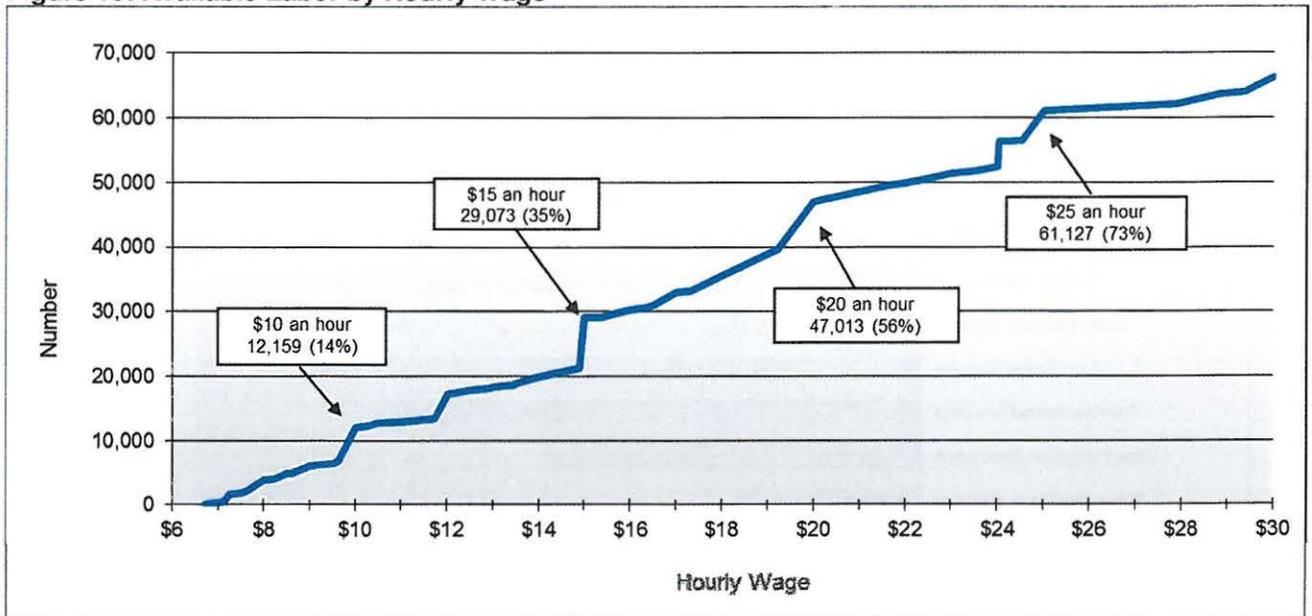
## Wage Demands of Available Labor Pool

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 61,127 people (or 73% of the available labor) are interested in a new job at \$25 an hour.<sup>3</sup>

An estimated 47,013 (56%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 29,073 (35%) are interested at \$15 an hour.

Finally, an estimated 12,159 people (14%) are interested in a new job at \$10 an hour.

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



<sup>3</sup> 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.

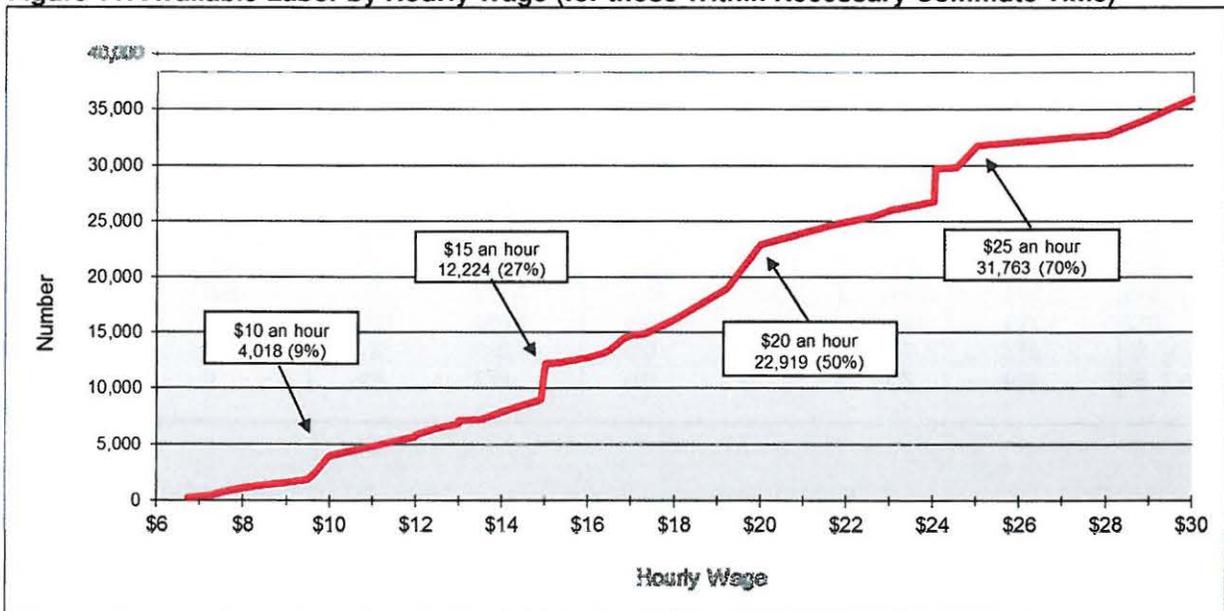
### Subset 1: Within Necessary Commute Time

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 31,763 people (or 70% of this subset) are interested in a new job at \$25 an hour. An estimated 22,919 (50%) are interested in new employment opportunity at \$20 an hour, and 12,224 (27%) are interested at \$15 an hour. Finally, an estimated 4,018 people (9%) 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, 12,224 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 7,959 members of the pool available. As such, an increase of \$1 per hour from \$14 to \$15 represents an increase of 4,265 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, 1,166 members of this subset are interested in a job at \$8 an hour. At \$9 an hour there are an estimated 1,635 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is only 469 individuals – a relatively small increase given the overall size of this subset of the Available Labor Pool.

Additional wage plateaus exist between \$13 and \$14 (805), between \$15 and \$16 (597), and between \$20 and \$21 (874).

• **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 18% of the general laborers will take a new or different job at a wage of at \$12 an hour, while 34% is available for new employment at a wage of \$15 an hour. Of the skilled laborers, 8% is available for new employment at a wage of \$12 an hour, while 20% is available at a wage of \$15 an hour.

Regarding service workers, 11% is available at a wage of \$12 an hour, while 24% is available at a wage of \$15 an hour. Of the professional workers, none are available at a wage of \$12 an hour, while only 3% is available at a wage of \$15 an hour.

**Table 6: Cumulative Wage Demands for Occupational Sectors**

	General Labor (N= 44 ) (+/- 14.7% MoE)		High Skill Labor (N= 25 ) (+/- 19.5% MoE)		Service Sector (N= 68 ) (+/- 11.9% MoE)		Professional (N= 28 ) (+/- 18.6% MoE)	
	Number	Cumulative	Number	Cumulative	Number	Cumulative	Number	Cumulative
\$30 <	9,867	100%	5,607	100%	15,208	100%	6,158	100%
\$30	8,521	86%	3,364	60%	10,702	70%	2,495	41%
\$27	8,297	84%	3,364	60%	9,575	63%	1,579	26%
\$24	7,400	75%	2,692	48%	7,998	53%	1,122	18%
\$21	6,727	68%	2,243	40%	7,548	50%	893	14%
\$18	5,158	52%	1,794	32%	5,069	33%	435	7%
\$15	3,364	34%	1,121	20%	3,717	24%	206	3%
\$12	1,794	18%	449	8%	1,690	11%	0	0%
\$9	673	7%	0	0%	1,239	8%	0	0%
\$6	224	2%	0	0%	676	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.<sup>4</sup>

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

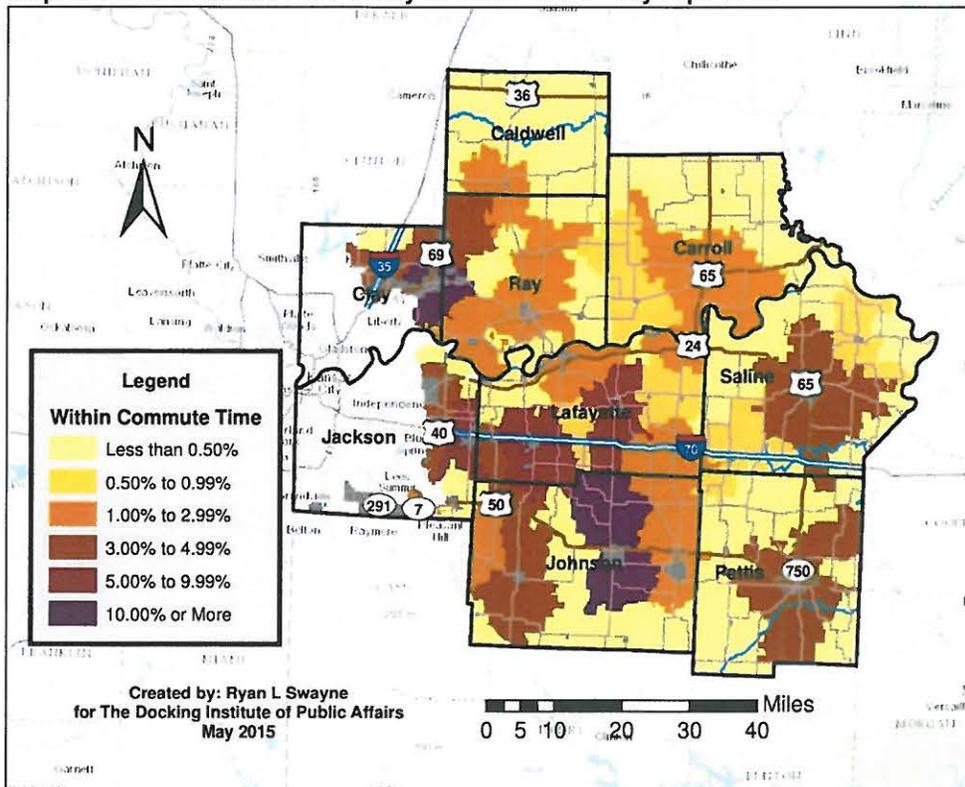
	Mobile General Labor		Mobile Service Sector	
	(N= 127 ) (+/- 8.7% MoE) <i>Number</i>	<i>Cumulative</i>	(N= 135 ) (+/- 8.4% MoE) <i>Number</i>	<i>Cumulative</i>
\$30 <	28,316	100%	30,100	100%
\$30	18,283	65%	20,066	67%
\$27	16,945	60%	19,175	64%
\$24	13,155	46%	15,607	52%
\$21	12,709	45%	15,161	50%
\$18	9,141	32%	10,925	36%
\$15	6,020	21%	7,581	25%
\$12	2,898	10%	4,013	13%
\$9	1,338	5%	1,784	6%
\$6	446	2%	669	2%

<sup>4</sup> 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 Clay, Johnson, and Ray counties. (See purple areas in the map.)
- Between 5% and 9.99% of this subset is located in Zip Code areas Jackson, Johnson, and Lafayette counties. (See red areas on the map.)
- Zip Code areas in Clay, Jackson, Johnson, Pettis, Ray, and Saline counties contain 3% to 4.99% of this subset. (See brown areas in the map.)
- Zip Code areas in Caldwell, Carroll, Johnson, Lafayette, and Ray 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 the counties of the labor basin. (See peach and yellow areas on the map.)

**Map 4: Percent within Necessary Commute Time by Zip Code**



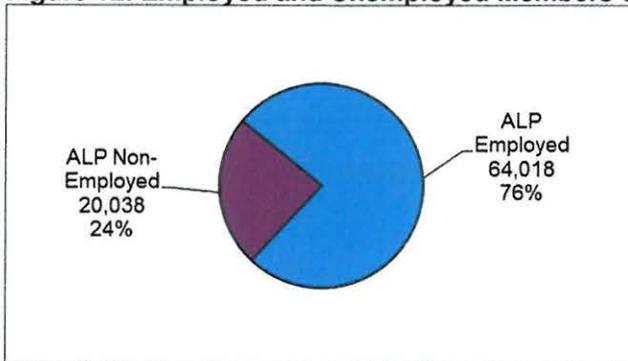
## Subset 2: Underemployed Available Labor Pool Workers

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 Lafayette County Labor Basin, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.<sup>5</sup> 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.

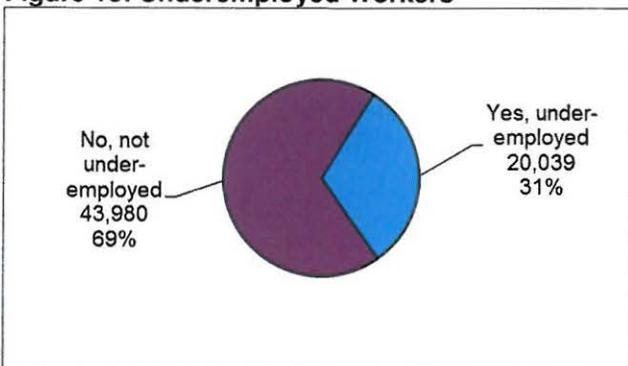
Of the 64,018 *employed members* of the Available Labor Pool (shown in Figure 12), over one fourth answered “yes” to one or more of the questions presented above (see Figure 13). These Pool members are considered “underemployed.”

Figure 13 shows that the underemployed workers represent 31% (or 20,039 individuals) of the employed members of the Pool.

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



**Figure 13: Underemployed Workers**



<sup>5</sup> “Because of circumstances, some workers have jobs that do not fully match their skills, education, or experiences. For example, a master plumber taking tickets at a movie theater would be a mismatch between skill level and job requirements. Do you consider yourself an underemployed worker because...?”

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 24% also earned more money at a past but similar job and about 22% possesses skills not used currently on the job. About 15% cannot work enough hours as desired.

**Figure 14: Reasons for Underemployment**

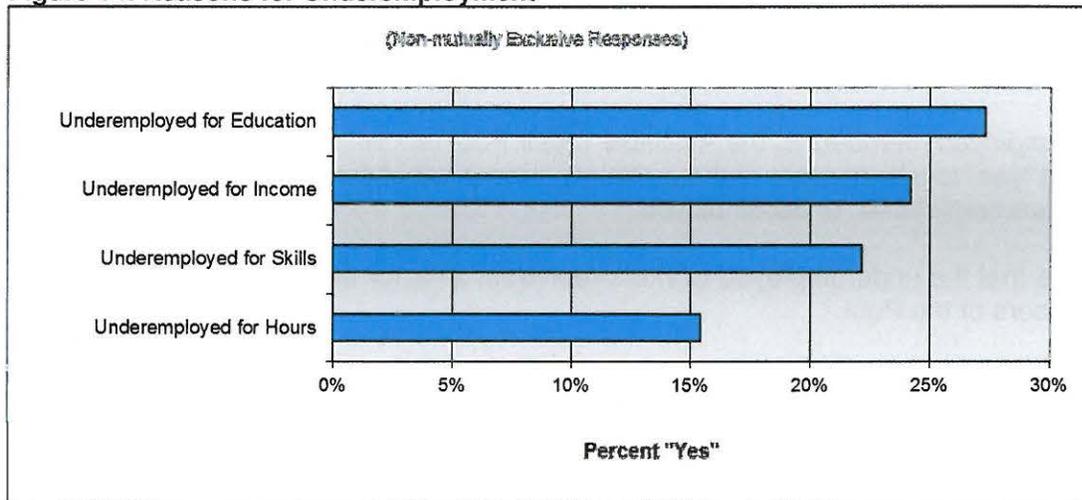


Table 8 (below) and Figure 15 (next page) show some characteristics of the underemployed members of the Available Labor Pool.

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 than those with lower education levels. For example, the table below shows that 29.6% of the underemployed workers have at least bachelor’s degrees, while the percentage for the Available Labor Pool as a whole is 35.4% - see Table 1, page 6.

**Table 8: Highest Level of Education Achieved Among Underemployed**

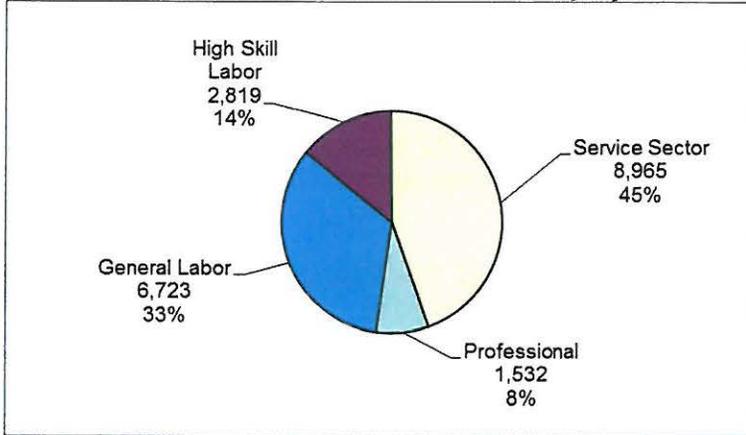
	Number	Percent	Cumulative Percent
Doctoral Degree	0	0.0	0.0
Masters Degree	2,524	12.6	12.6
Bachelors Degree	3,408	17.0	29.6
Associates Degree	2,530	12.6	42.2
Some College	5,023	25.1	67.3
High School Diploma Only	5,493	27.4	94.7
Less HS Diploma	1,059	5.3	100.0
<b>Total</b>	<b>20,039</b>	<b>100</b>	

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

Figure 15 shows that 33% of the underemployed workers are general laborers and 14% are high skill blue-collar workers. The highest percentage of underemployed workers are employed as service sector workers (45%), while 8% hold professional positions.

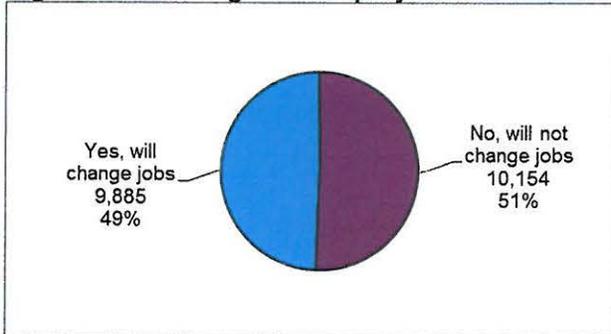
Comparing Figure 15 with Figure 2 (page 7) suggests that fewer professional workers but more general laborers consider themselves underemployed. Figure 2 shows that the subset of working Available Labor Pool members consists of 24% general laborers, 13% high skill laborers, 48% service workers, and 15% 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 about half (51% or 10,154 individuals) of the underemployed workers are seeking new employment to address underemployment.

**Figure 16: Seeking New Employment to Address Underemployment**



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

The Docking Institute of Public Affairs conducted a similar labor study in the Lafayette 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 Lafayette County Labor Basin has increased by 36,822 individuals from 2005 to 2015, while the Civilian Labor Force has increased by about 13,000 workers during that same period.

The number of employed people in the labor basin has also increased over the 10 years by 11,067. The basin lost about 1,300 jobs between 2009 and 2012 but has gained more than 12,000 between 2012 and 2015. The unemployment rate increased from 5.6% in 2005 to 9.6% in 2012, but is now about 6.5%.

The table also shows the Available Labor Pools for each year. The Pool increased by 17,867 people from 2005 to 2012 and gained 9,889 more from 2012 to 2015.

**Table 9: Key Population and Employment Indicators**

Lafayette County Labor Basin				
	2005 Report	2009 Report	2012 Report	2015 Report
Basin Population	243,338	246,666	262,592	280,160
Civilian Labor Force	124,923	125,657	129,263	137,923
Employed	117,884	118,128	116,806	128,951
Average Unemployment Rate	5.6%	6.3%	9.6%	6.5%
Available Labor Pool	56,301	58,418	74,168	84,056

Figure 17 shows larger proportions of employed members in 2015 Pool, compared to the 2012 Pool. Additionally, the 2009 Pool shows a larger proportion of non-employed Pool members looking for work than the other pools, but an unusually small proportion of non-workers 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**

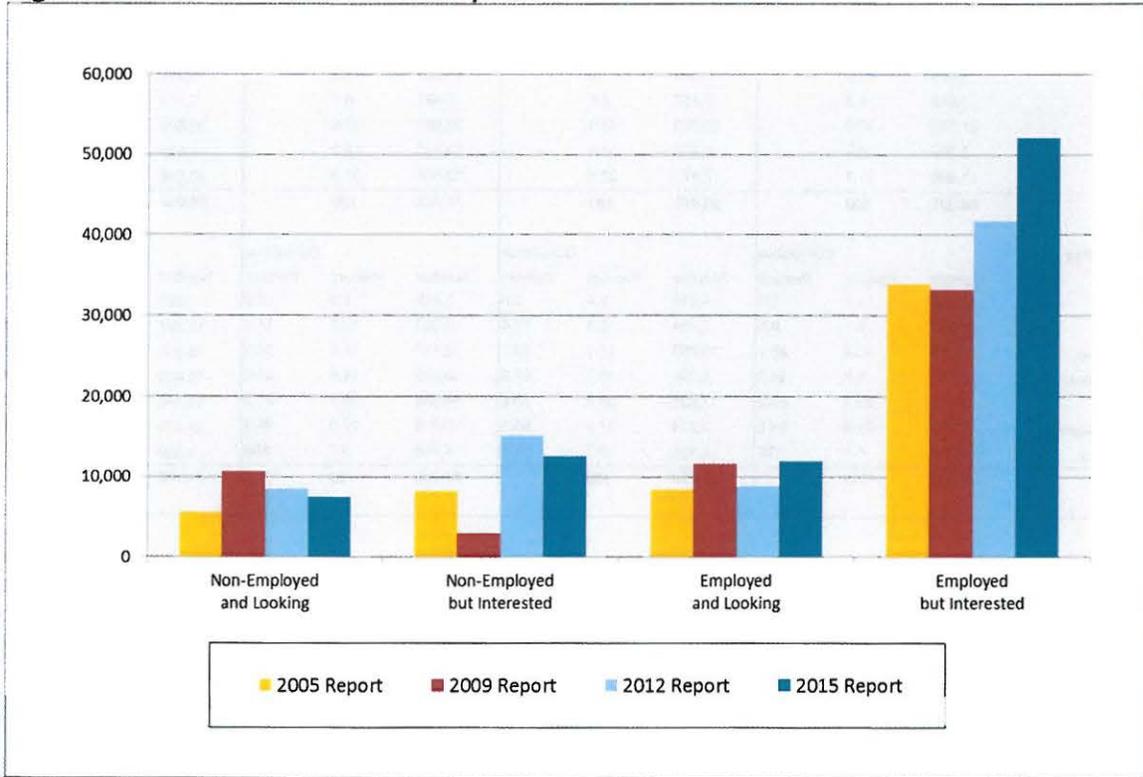


Table 10 (below) compares occupational sectors and education levels from the four studies. The 2012 study stands out with the highest percentage of non-working pool members. The 2005 Pool had the highest percentages of general laborers and service sector employees.

The education levels among the four pools vary somewhat. The 2015 Pool has the highest percentage of educated workers, with more than a third (35.4%) holding at least bachelor's degrees (see cumulative columns), and the 2012 Pool is similar to 2015.

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

Labor Sector	2005 Report		2009 Report		2012 Report		2015 Report		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
General Labor	13,085	23.2	9,904	17.0	11,352	15.3	15,493	18.4	
High Skill Labor	4,649	8.3	5,157	8.8	6,487	8.7	8,114	9.7	
Service Sector	21,349	37.9	20,368	34.9	20,669	27.9	30,609	36.4	
Professional	5,337	9.5	10,012	17.1	12,075	16.3	9,802	11.7	
Non-Working	11,880	21.1	12,977	22.2	23,584	31.8	20,038	23.8	
<b>Total</b>	<b>56,301</b>	<b>100</b>	<b>58,418</b>	<b>100</b>	<b>74,168</b>	<b>100</b>	<b>84,056</b>	<b>100</b>	
Highest Education	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	638	1.1	0.6	1,416	2.4	2.0	1,448	2.0	2.0
Masters Degree	4,571	8.1	9.6	7,764	13.3	11.4	9,085	12.2	14.2
Bachelors Degree	9,229	16.4	25.1	10,005	17.1	28.7	12,157	16.4	30.6
Associates Degree	4,879	8.7	34.2	6,226	10.7	27.9	10,823	14.6	45.2
Some College	16,282	28.9	63.2	17,635	30.2	68.6	16,388	22.1	67.3
High School Diploma	17,547	31.2	94.6	13,214	22.6	95.3	20,010	27.0	94.3
Less HS Diploma	3,154	5.6	100	2,158	3.7	100	4,256	5.7	100
<b>Total</b>	<b>56,301</b>	<b>100</b>		<b>58,418</b>	<b>100</b>		<b>74,168</b>	<b>100</b>	

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 79.0% (2009) to 89.5% (2005).

**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?	50,374	89.5	46,033	79.0	62,968	84.9	67,084	79.8
Will Work 2nd or Night Shift?	n/a	n/a	32,539	55.7	45,094	60.8	46,975	55.9
Will Work Weekends?	n/a	n/a	32,714	56	43,685	58.9	44,653	53.1
Will Work Rotating Shifts?	n/a	n/a	25,295	43.3	36,713	49.5	34,977	41.6

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**

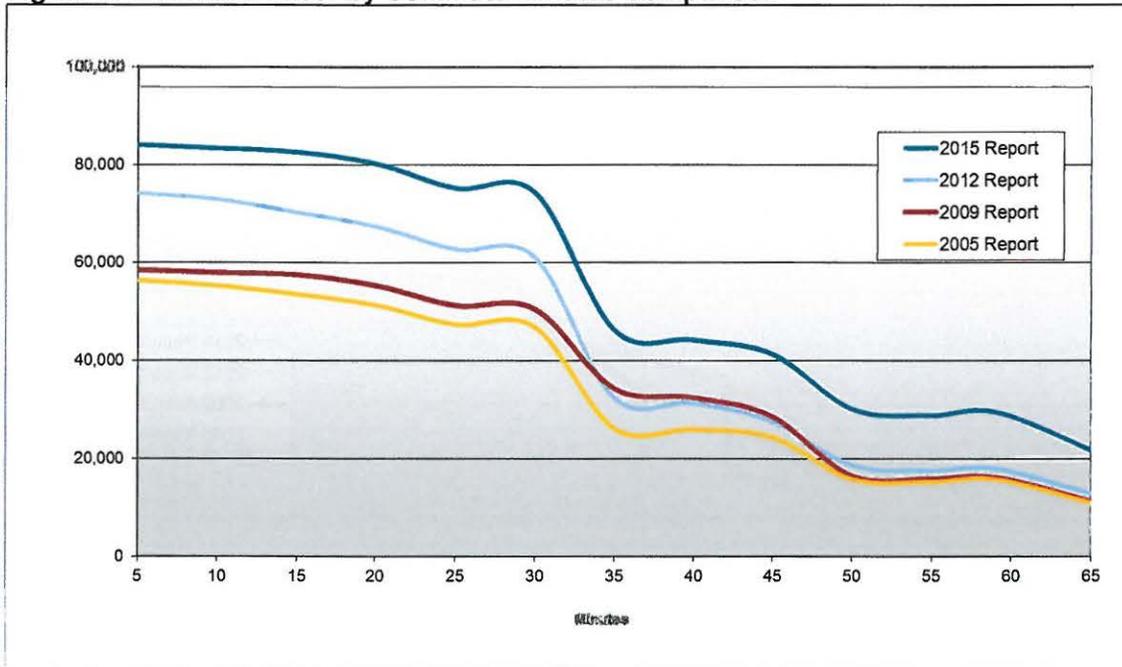


Table 12 shows desired benefits to take a new or a different job for each labor study, ranked in order by 2015 data. The table shows that “good salary/hourly pay” is the most important benefit in the 2015, whereas, good retirement benefits were most important in 2012, and good health benefits were most important in 2005 and 2009.

The items of greatest change between 2012 and 2015 is “good vacation benefits,” with 74.1% indicating this was a “very important” benefit in 2012 but 84.4% considering it “very important” in 2015. Alternatively, “transportation assistance” decreased in importance the most from 2012 to 2015 (from 33.7% to 25.7%).

**Table 12: Important Benefits to Change Employment Comparison**

<i>(Ranked by 2015 Report)</i>	2005 Report	2009 Report	2012 Report	2015 Report	<i>Change '15-'12</i>
	<i>Percent Responding "Yes"</i>				
Good Salary/Hourly Pay	85.7	81.3	82.6	88.7	6.1
Good Retirement Benefits	81.7	86.9	83.1	86.3	3.2
OJT or Paid Training	84.9	80.6	81.1	85.3	4.2
Good Vacation Benefits	77.4	80.3	74.1	84.4	10.3
Good Health Benefits	89.7	88.6	82.7	81.5	-1.2
Flexible Hours/Flex-Time	70.0	72.1	66.6	73.9	7.3
Good Education Assistance	68.7	50.3	52.2	52.0	-0.2
Transportation Assistance	n/a	31.8	33.7	25.7	-8.0

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 \$10 to \$18 an hour or so range when compared to the 2015 Pool.

**Figure 19: Available Labor Pool by Hourly Wage Comparison**

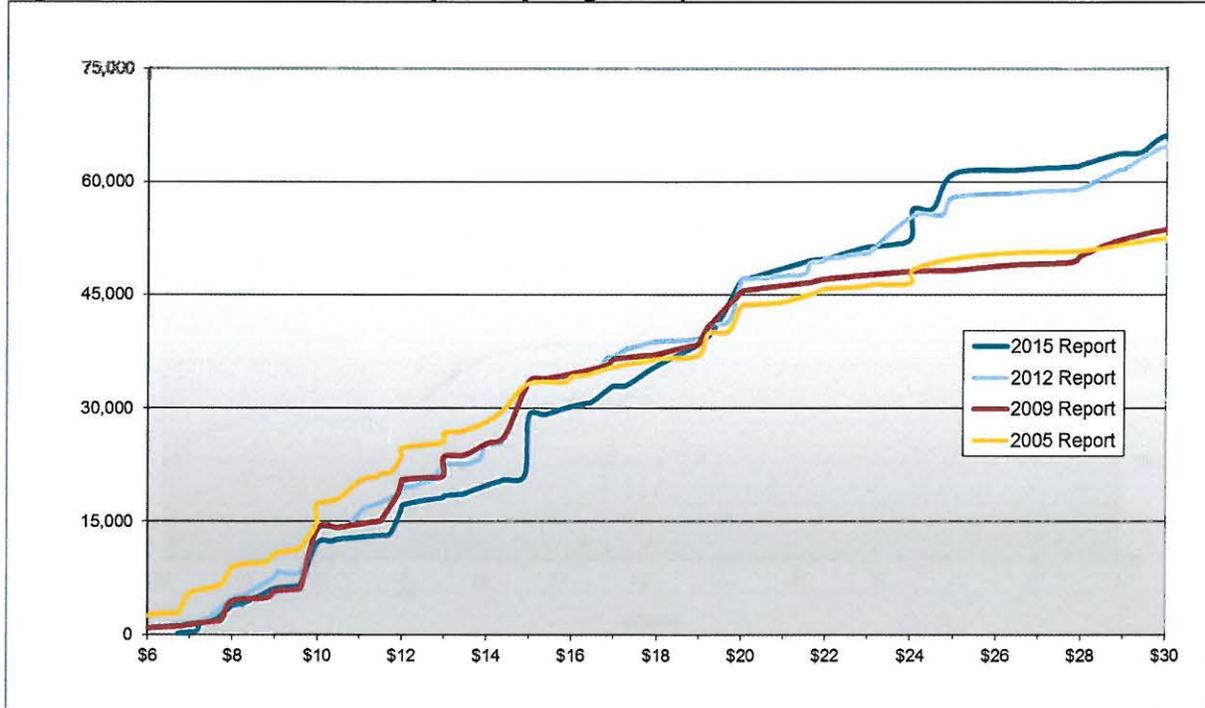


Table 13 (below) shows a comparison of the underemployed members of the Available Labor Pools for the four studies.

The percentage of underemployed workers in 2005 (54%) was the highest among the Pools, while the percentage in 2012 (28.1%) was lowest. However, the 2005 pool had the largest percentage of employed members of the Pool (79%) and 2012 had the lowest (68.2%).

The percentage of underemployed workers in general labor occupations is highest in 2015 (33.6%) and lowest in 2012 (21.1%). Alternatively, the percentage of underemployed professional workers is lowest in 2015 (7.6%) and highest is 2005 (16.5%).

Examining the cumulative percentage columns in the educational attainment (Highest Education) section of the table shows that 45.5% of the underemployed workers in 2012 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	44,421	79.0	45,441	78.0	50,583	68.2	64,018	76.2		
<b>Underemployed Wrkrs</b>	<b>24,152</b>	<b>54.0</b>	<b>15,177</b>	<b>33.0</b>	<b>14,214</b>	<b>28.1</b>	<b>20,039</b>	<b>31.3</b>		
Willing to Change Job to Address Status	20,183	90.0	12,673	83.0	12,110	85.2	9,685	49.3		
<b>Labor Sector</b>										
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
General Labor	7,002	29.0	4,127	27.2	2,993	21.1	6,723	33.6		
High Skill Labor	2,714	11.2	1,633	10.8	1,657	11.7	2,819	14.1		
Service Sector	10,443	43.2	7,231	47.6	7,524	52.9	8,965	44.7		
Professional	3,993	16.5	2,186	14.4	2,040	14.4	1,532	7.6		
<b>Total</b>	<b>24,152</b>	<b>100</b>	<b>15,177</b>	<b>100</b>	<b>14,214</b>	<b>100</b>	<b>20,039</b>	<b>100</b>		
<b>Highest Education</b>										
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	
Doctoral Degree	396	1.6	1.6	191	1.3	1.3	280	2.0	2.0	
Masters Degree	1,581	6.5	8.2	1,536	10.1	11.4	1,338	9.4	11.4	
Bachelors Degree	5,299	21.9	30.1	1,604	10.6	21.9	2,598	18.3	29.7	
Associates Degree	2,459	10.2	40.3	2,679	17.7	39.6	2,253	15.8	45.5	
Some College	7,141	29.6	69.9	3,900	25.7	65.3	4,041	28.4	73.9	
High School Diploma	6,472	26.8	96.7	4,652	30.7	95.9	2,846	20.0	94.0	
Less HS Diploma	803	3.3	100	615	4.1	100	860	6.0	100	
<b>Total</b>	<b>24,152</b>	<b>100</b>		<b>15,177</b>	<b>100</b>		<b>14,214</b>	<b>100</b>	<b>20,039</b>	<b>100</b>

## Methods

The Lafayette County Labor Basin has a total population 280,160, and a Civilian Labor Force of 137,923. The average unemployment rate was 6.5% at the time of the study. The basin contains an Available Labor Pool of 84,056 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 Lafayette 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.”<sup>6</sup> The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for employment, 2) currently not working *but* interested in employment, 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.<sup>7</sup> 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

---

<sup>6</sup> The Available Labor Pool includes potential workers excluded from the Civilian Labor Force (such as full-time students willing to take a job, homemakers who have not yet sought employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be willing and able to be gainfully employed).

<sup>7</sup> The number that is added to the Civilian Labor Force is derived by taking from the survey the total number of full-time students, homemakers, military, retirees, and long-term unemployed, who state that they are seeking or available for employment, and dividing this number by the total number of 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 Lafayette 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.<sup>8</sup> 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.<sup>9</sup> 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 Lafayette County Labor Basin encompasses nine of the 20 counties: Caldwell, Carroll, Clay, Jackson, Johnson, Lafayette, Pettis, Ray, and Saline. A total of 704 cooperating and eligible respondents lie within the basin. Of these respondents, 377 constitute 2015 Available Labor Pool for the Lafayette County Labor Basin (Margin of Error = +/- 5.05%.

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.<sup>10</sup>

---

<sup>8</sup> Cell-phone and land-line telephone numbers were assembled by randomly generating suffixes within specific area codes and prefixes. As such, unlisted numbers were included in this sample, minimizing the potential for response bias. Known business, fax, modem, and disconnected numbers were screened from the sample in efforts to reach households only (and to minimize surveyor dialing time). Up to eight attempts were made to contact each respondent during three calling periods (10 AM to Noon, 2 PM to 4 PM, and 6 PM to 9 PM). Initial refusals were re-attempted by specially trained "refusal converters," which aided in the cooperation rate.

<sup>9</sup> When a land-line number was called, surveyors requested to "speak with an adult over the age of 17 that has had the most recent birthday." When a cell-phone number was called, the respondent was asked if they were over the age of 17.

<sup>10</sup> 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

**Lafayette County Labor Basin** – The Lafayette County Labor Basin includes Caldwell, Carroll, Clay, Jackson, Johnson, Lafayette, Pettis, Ray, 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 different 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	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		
		\$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

