

Boonville/Cooper County Labor Basin

Labor Availability Analysis – 2022

Including a comparison to data from the
2015 and 2020 Labor Availability Analyses

Boone ● Cooper ● Howard ● Moniteau ● Monroe ● Pettis ● Saline



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To facilitate effective public policy decision-making among governmental and nonprofit entities



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Contents

List of Maps.....	ii
List of Tables	ii
List of Figures	iii
Executive Summary.....	1
The Boonville/Cooper County Labor Basin	4
Components of the Report	5
Comparative Analysis.....	5
The Boonville/Cooper County Labor Basin’s Available Labor Pool.....	6
Current Skills and Work Experiences	10
Educational Experiences and Job Satisfaction	17
Considerations for Employment	21
Wage Expectations.....	27
Subsets of the Available Labor Pool.....	31
Comparative Analysis: 2015, 2020, and 2022 Reports	42
Methods.....	50
Glossary of Terms.....	53
Appendix: Hourly Wage to Annual Salary Conversion Chart	55

List of Maps

Map 1: Boonville/Cooper County Labor Basin.....	4
Map 2: Percent of Total Available Labor in Basin by Zip Code	7
Map 3: Percent within Necessary Commute Time by Zip Code.....	35

List of Tables

Table 1: Age, Gender, and Education Levels of Available Labor Pool.....	8
Table 2: Major Occupational Categories of Available Labor.....	9
Table 3: Current Work Experience Plus Previous Work or Training Experience.....	11
Table 4: Community College Area of Study	18
Table 5: Job Satisfaction Among Workers: Pool and Non-Pool Members.....	20
Table 6: Desired Benefits/Opportunities and Currently Offered Benefits/Opportunities	24
Table 7: Benefits/Opportunities and Occupational Categories	25
Table 8: Wage Expectations by Sector for Within Necessary Commute Time	33
Table 9: Expected Hourly Wages of Transferable Workers	34
Table 10: Highest level of Education Achieved Among Underemployed	38
Table 11: Highest Level of Education Achieved Among Potential Entrepreneurs	40
Table 12: Key Population and Employment Indicators.....	42
Table 13: Available Labor Pool Occupational Sectors and Education Levels Comparison	44
Table 14: Willing to Work Outside of Field and Work Shift Comparison.....	45
Table 15: Important Benefits to Change Employment Comparison.....	47
Table 16: Underemployed Workers Occupational Sectors and Education Levels Comparison	49

List of Figures

Figure 1: The Available Labor Pool for the Boonville/Cooper County Labor Basin	6
Figure 2: Occupational Sectors of Available Labor (Employed Only).....	10
Figure 3: Current Work Experience Plus Previous Work or Training Experience	13
Figure 4: Work Experience/Willing to Work in Field.....	14
Figure 5: Experience/Training in Distribution Center or Warehouse	15
Figure 6: Experience/Training in Manufacturing or Processing.....	15
Figure 7: Workplace Location Word Cloud	16
Figure 8: Undergraduate College Major	17
Figure 9: Community College Experience	18
Figure 10: Job Satisfaction Among Available Labor Pool Workers	19
Figure 11: Considerations for Employment	21
Figure 12: Available Labor by Commute Minutes.....	22
Figure 13: Benefits/Opportunities Very Important to Change Jobs	23
Figure 14: Available Labor by Expected Hourly Wage	27
Figure 15: Expected Hourly Wage by Minutes Willing to Commute One Way.....	28
Figure 16: Expected Hourly Wage by Current Occupational Category	29
Figure 17: Expected Hourly Wage Among Those With Experience and Willing to Work in Field	30
Figure 18: Available Labor by Hourly Wage for Within Necessary Commute Time	32
Figure 19: Employed and Unemployed Members of the Available Labor Pool.....	36
Figure 20: Underemployed Workers	36
Figure 21: Reasons for Underemployment.....	37
Figure 22: Occupational Sectors of Underemployed Workers	38

Figure 23: Seeking New Employment to Address Underemployment 38

Figure 24: Business Ownership 39

Figure 25: Seriously Thought About Starting Own Business..... 39

Figure 26: Occupational Sectors of Potential Entrepreneurs 40

Figure 27: Strength of Desire for Own Business among Potential Entrepreneurs 41

Figure 28: Available Labor Pool Comparison 43

Figure 29: Available Labor by Commute Minutes Comparison 46

Figure 30: Available Labor Pool by Hourly Wage Comparison 48

Boonville/Cooper County Labor Basin

Labor Availability Analysis

Executive Summary

The Boonville/Cooper County Labor Basin includes Boone, Cooper, Howard, Moniteau, Monroe, Pettis, and Saline Counties in Missouri. The purpose of this report is to assess the “Available Labor Pool” in this labor basin. The “Available Labor Pool” (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 the following:

The Boonville/Cooper County Labor Basin includes seven counties in central Missouri. The labor basin has a total population of approximately 316,463 and a Civilian Labor Force of 157,311. The total number of employed is 151,984 and the average unemployment rate was about 3.38% during the time of this study. The Docking Institute estimates the basin’s Available Labor Pool consists of 98,182 individuals.

Of the working members of the Available Labor Pool, 16,265 (16.6%) are employed and currently looking for different employment, while 59,726 (60.8%) are interested in a new job for the right opportunities. Of the non-working members of the Pool, 1,776 (1.8%) are looking for employment, while 20,416 (20.8%) are interested in a job for the right opportunities.

The average age in the Pool is about 49 years old, 56.7% are women, all have high school diplomas, 88.5% have some college-level educational experiences, and 64.4% have bachelor’s degree. Almost a third (32.6%) speak Spanish, but most (78.3%) of those who do, speak “only a little.”

General labor occupations are held by 14% of Pool members, while high skill labor jobs make up 8.1%. Traditional service-related occupations represent 33%, while professional occupations represent 22.7%. Non-employed members of the Pool make up 22.2% of the total.

An estimated 79,233 Pool members **have training/experience** in data entry with telephone operation, 62,444 have training/experience working in a professional office environment, 34,953 have training/experience in warehousing, 34,756 have training/experience in manufacturing or processing, and 11,389 have training/experience in security or protective services.

An estimated 45,851 Pool members **will take jobs** in data entry/telephone operation, 49,975 will take jobs in a professional office environment, 31,909 will take jobs in warehousing, 25,626 will take jobs in manufacturing or processing, and 13,353 will take jobs in security or protective services.

Of those with warehousing experience, 34% moved and loaded materials. Of those with manufacturing or processing experience, 50% worked in production, fabrication, or assembly.

When asked where they currently work, most employed Pool members mentioned Columbia followed by Jefferson City, Boonville, Sedalia, Marshall, and Glasgow.

The college academic fields of Pool members with college experience include business and economics (23%), social sciences (21%), biological sciences (18%), education (11%), physical sciences (10%), arts and humanities (10%), and computer science and math (7%).

Of members of the Pool with community college or technical school experience (15%), 30.5% report taking general education courses, 17% took business skills courses, 16.5% studied HVAC, wiring, plumbing, welding, etc., and 13.1% studied nursing or health related topics.

Regarding job satisfaction, when presented with the statement “I enjoy the things I do,” 50.3% “agree” and 31.3% “strongly agree.” When presented with the statement “I have a generally positive work environment,” 56.8% “agree” and 22.7% “strongly agree.” For the statement “I have a fair chance at a promotion, 33.1% “agree or strongly agree” (combined) and 37.5% “disagree or strongly disagree” (combined).

Most (73.5%) will take a job outside of their primary field of employment or experience. When asked about working various shifts, 36.5% will work the 2nd shift, 31.6% will work weekends, 20.5% will work the night shift, and 19.4% will work rotating shifts.

Regarding travel to work, 22.5% will commute up to 45 minutes, one way, for a job and 65.7% will commute up to 30 minutes for a job.

The five most important benefits are, in order, good salary or hourly wage, good retirement benefits, flexible hours/remote work, good health benefits, and good vacation benefits.

An estimated 11,231 (11.4%) members of the Pool expect to earn \$15 an hour at a new job, while 34,950 (32.6%) expect to earn \$20 an hour at a new job.

In general, respondents expecting higher wages are willing to commute for more minutes than those expecting lower wages.

Of the 37,597 members in the “within the necessary commute time” subset, 22,640 expect an hourly wage of \$30.

Of the 76,378 employed members in the Pool, 23,360 (31%) consider themselves underemployed.

Of the 63,357 Pool members who do not own a business, 13,885 (22%) have “seriously thought about” starting their own businesses.

A comparison of data from three labor studies conducted from 2015 to 2022 shows that there are more “employed and looking” Pool members in 2015 than in 2020 and 2022. Compared to the 2015 and 2020 studies, there are very few “non-employed but looking” pool members in 2022.

2022 has the largest percentage of professional Pool members (22.7%), while 2015 had the smallest (12.9%). 2022 has the smallest percentage of high skill labor (8.1%), while 2020 had the largest (9.4%).

The percentage of Pool members willing to take jobs outside of their primary fields of employment or experience varies from a high of 79.2% in 2015 to a low of 72.3% in 2022.

A comparison of commute minutes data shows that between 30 and 35 minutes all three available labor pools decline notably in size. The year with the largest decline in available labor between 30 minutes and 35 minutes is 2022. The year with the smallest decline between 30 and 35 minutes is 2020.

“Good salary/hourly pay” is the most important benefit/opportunity in all study periods. The item with the greatest amount of change between 2015 and 2022 is “flexible hours or remote work,” with 69.1% of the 2015 Pool finding this benefit “very important” and 82% of the 2022 Pool expressing the same.

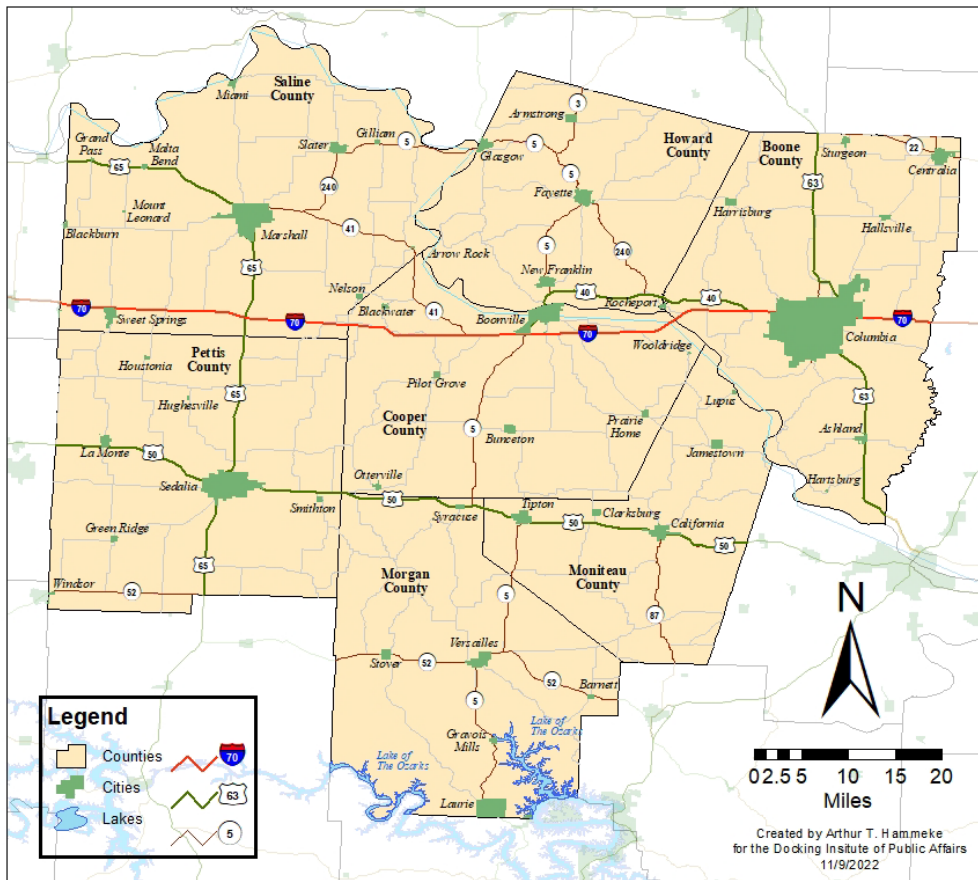
A comparison of expected wage data shows notable Pool size increases between \$15 and \$20 an hour. The year with the largest increase in Pool size between \$15 and \$20 an hour is 2022. The year with the smallest increase in Pool size between \$15 and \$20 per hour is 2015.

The year with the largest percentage of underemployed workers is 2015 (31.8%). The year with the smallest percentage of underemployed workers is 2020 (19.5%).

The Boonville/Cooper County Labor Basin

The Boonville/Cooper County Labor Basin includes nine counties in central Missouri (see Map 1 below). The labor basin has a total population of approximately 316,463, and a Civilian Labor Force of 157,311. The total number of employed is 151,984 and the average unemployment rate was about 3.38% during the time of this study. The Docking Institute's analysis suggests that the basin contains an Available Labor Pool of 98,182 individuals.

Map 1: Boonville/Cooper County Labor Basin



The Available Labor Pool (Pool) is composed of working age area residents who are classified as 1) currently not working *and* looking for a job, or 2) not working *but* interested in a job, or 3) currently working *and* looking for another job, or 4) currently employed *but* interested in different job for the right opportunities. Please see the Methods Section for more information about the Institute’s Available Labor Pool analysis methodology and the survey research methods used for this study.

Components of the Report

This report assesses the characteristics of the Available Labor Pool in the Boonville/Cooper County Labor Basin by answering the following questions:

- What proportion of the labor force – employed, unemployed, homemaker, student, retired and disabled – are interested in a new employment opportunity?
- What skills and education levels do those who would consider a new employment opportunity have?
- What types of jobs have these workers and potential workers had in the past?
- How many years of experience do workers have at their current jobs?
- What types of considerations (pay, benefits, commute time) shape their decision-making?
- How do expected pay and commute time interact?
- What are some of the characteristics of general laborers, high skill laborers, service and support workers, and professional workers?
- What percentage of the Available Labor Pool is willing to change fields of employment?
- What types of work shifts are they willing to work?
- What is their level of job satisfaction, and how do these compare to working non-Pool members?
- How many Available Labor Pool members are underemployed?
- How many might be interested in starting a business?

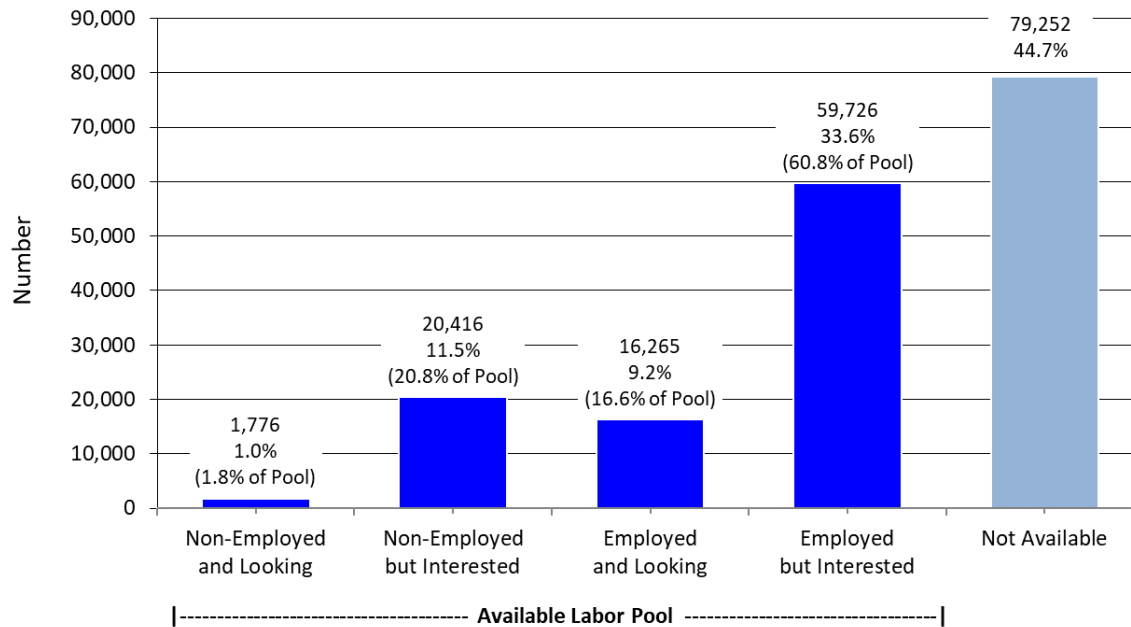
Comparative Analysis

Finally, this report provides a comparative analysis of key findings from the 2015, 2020, and 2022 labor availability reports conducted in the Boonville/Cooper County area.

The Boonville/Cooper County Labor Basin’s Available Labor Pool

It is estimated that 1,776 (1.8% members of the Available Labor Pool) are non-employed¹ and currently looking for employment, while 20,416 (20.8%) are non-employed but interested in a job for the right opportunities. In addition, 16,265 (16.6%) members of the Pool are employed and currently looking for different employment, while 59,726 (60.8%) are employed but interested in new employment for the right opportunities.

Figure 1: The Available Labor Pool for the Boonville/Cooper County Labor Basin



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

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

Map 2 shows how each Zip Code area compares to all other Zip Code areas in terms of the percent of total available labor in the Boonville/Cooper County Labor Basin. The map shows that all counties share up to 5% of the Available Labor Pool (yellow and orange areas on the map). Zip Code areas located in Pettis County share up to 10% of the Available Labor Pool (red area on the map). Zip Code areas in Boone County share 10% or more of the basin’s Available Labor Pool (darkest shading on the map).

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

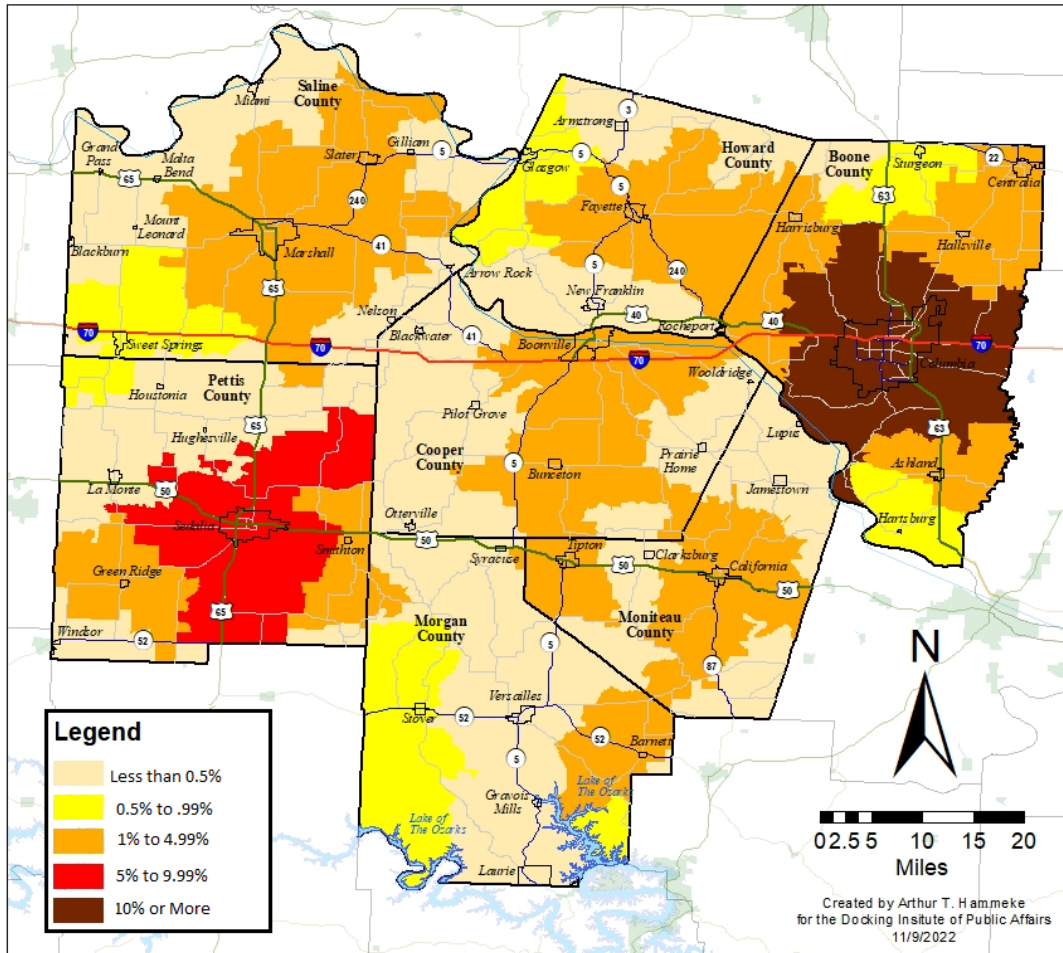


Table 1 shows the age, gender, and education levels of the 98,182-member Available Labor Pool. The average age of the Available Labor Pool is about 49 years old, more than half (56.7%) of the Pool are women, and nearly all (99.6%) have high school diplomas. A large majority (88.5%) have some college-level educational experiences, and more than half (64.4%) have bachelor’s degree. The table also shows that almost a third (32.6%) speak Spanish, but most (78.3%) of those who do, speak “only a little.”

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

Age Information	Age in 2022	
Range	20 to 77	
Mean Average	49	
Median Average	49	

Gender	Number	Percent
Male	40,960	41.7
Female	55,704	56.7
Prefer Not to Say	1,518	1.5
Total	98,182	100

Highest Level of Education	Number	Percent	Cumulative Percent
Doctoral Degree	8,594	8.8	8.8
Masters Degree	25,463	25.9	34.7
Bachelors Degree	29,217	29.8	64.4
Associates Degree	11,091	11.3	75.7
Some College	12,542	12.8	88.5
High School Diploma	11,275	11.5	100
Less HS Diploma	0	0.0	
Total	98,182	100	

"Do you speak Spanish?"	Number	Percent
"Yes"	31,989	32.6
<i>Speak Very Well</i>	2,865	9.0
<i>Speak Fairly Well</i>	4,073	12.7
<i>Speak Only a Little</i>	25,051	78.3

These percentages represent portions of 32.6%

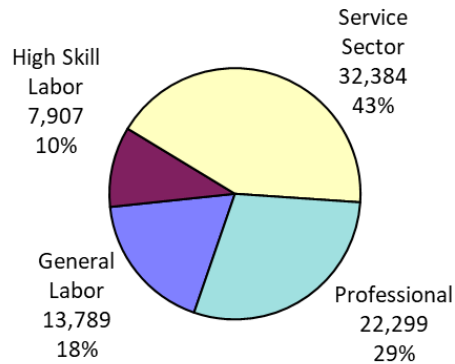
Table 2 shows the various occupational categories of the 98,182-member Available Labor Pool. General labor occupations are held by 14% of the entire Available Labor Pool, while high skill labor jobs make up 8.1%. Traditional service-related occupations represent 33% of the Available Labor Pool, while professional occupations represent 22.7%. Non-employed members of the Pool make up about one-fifth (22.2%) of the total.

Table 2: Major Occupational Categories of Available Labor

Occupational Category	Number	Percent	Years at Job	
			Mean	Median
Construction/Cleaning/Labor/Delivery	8,912	9.1	8.9	3.3
Manufacturing/Maintenance/Trucking	4,877	5.0	6.7	5.0
<i>Total General Labor</i>	<i>13,789</i>	<i>14.0</i>	<i>7.8</i>	<i>4.2</i>
Mechanic/Welder/Comp Tech	3,583	3.6	11.0	5.0
Crew Management/Protection Services	4,324	4.4	9.2	4.3
<i>Total High Skill Labor</i>	<i>7,907</i>	<i>8.1</i>	<i>10.1</i>	<i>4.7</i>
Customer Service	7,978	8.1	7.1	6.6
Clerical	6,298	6.4	7.4	3.9
Office or Dept Manager	4,606	4.7	9.2	8.0
Health Aid/Nurse	8,725	8.9	12.7	12.0
Education Aid/Teacher	4,778	4.9	9.1	5.0
<i>Total Service Sector</i>	<i>32,384</i>	<i>33.0</i>	<i>9.1</i>	<i>6.6</i>
Exec Management	5,046	5.1	10.3	7.7
Accounting/Programming/Engineering	8,708	8.9	9.5	6.6
Doctor/Professor/Attorney	6,014	6.1	16.9	16.3
Writer/Artist/Musician	2,530	2.6	11.8	5.0
<i>Total Professional Sector</i>	<i>22,299</i>	<i>22.7</i>	<i>12.1</i>	<i>7.2</i>
Homemaker/Students/Unemployed	6,197	6.3	n/a	n/a
Retirees/Disabled	15,607	15.9	n/a	n/a
<i>Total Non-Working</i>	<i>21,804</i>	<i>22.2</i>		
Total	98,182	100		

Figure 2 shows the occupational sectors of employed members *only* of the Available Labor Pool. 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 Boonville/Cooper County Labor Basin, survey respondents were asked questions to assess work skills and previous work experience.

Table 3 and Figure 3 show the current employment status and previous work/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 who have previous work/training experience in those same job categories. The table also shows the sum of working Available Labor Pool members currently employed in a job category *plus* those who indicate previous training or experience in that same field.

For example, 5,419 Pool members are currently employed as general laborers, construction workers, cleaners, and similar positions. An additional 8,571 Pool members (employed and non-employed) have previous work/training experience in those same type of jobs, for a total of 13,990 individuals.

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

	Current Employment*	Previous Work/Training	Current plus Previous Work or Training**
	Number +	Number =	Number
Working with Hands			
Construction, Cleaning, Manual Labor	5,419	8,571	13,990
Farm or Ranch Labor	1,459	574	2,032
Manufacturing and Assembly	1,459	3,047	4,506
Maintenance	2,300	4,068	6,368
Driving (Delivery, Bus, Postal)	2,034	2,602	4,635
Truck Driving/Heavy Equip. Operator	1,118	0	1,118
Skilled Labor	2,571	1,655	4,226
Crew Management	3,155	1,788	4,943
Working with People			
General Customer Service	7,978	4,442	12,420
Office Management	4,606	10,872	15,478
Governmental Services	1,170	2,460	3,630
Executive Management	5,046	3,309	8,356
Advanced Social Services	1,071	948	2,019
Working with Numbers			
Clerical	6,298	2,587	8,885
Accounting/Finance/Banking	2,400	1,147	3,548
Researcher/Analyst	3,778	574	4,352

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Table 3: Current Work Experience Plus Previous Work or Training Experience (Continued)

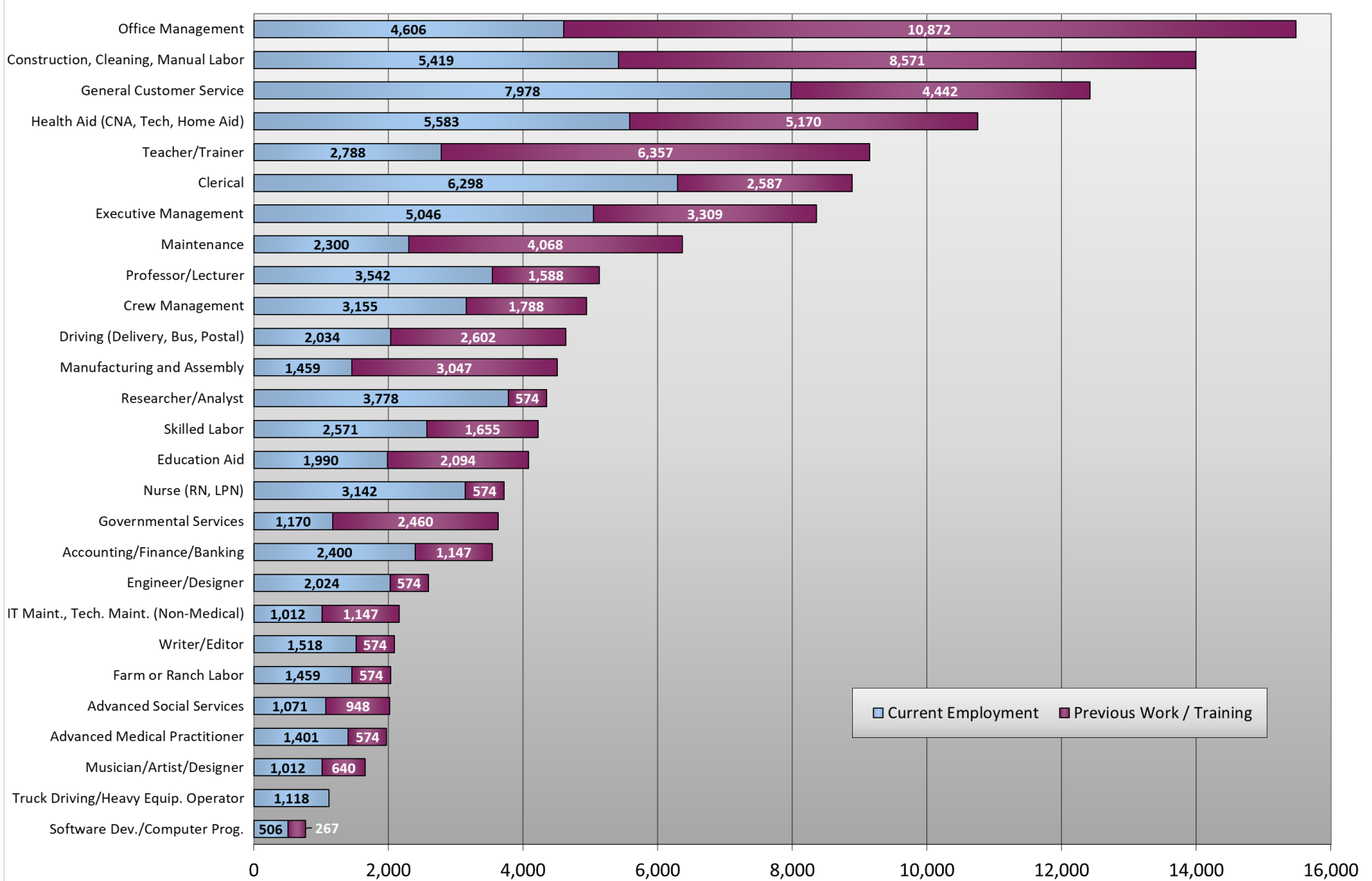
Working with Technology			
IT Maint., Tech. Maint. (Non-Medical)	1,012	1,147	2,159
Software Dev./Computer Prog.	506	267	773
Engineer/Designer	2,024	574	2,598
Providing Health Services			
Health Aid (CNA, Tech, Home Aid)	5,583	5,170	10,753
Nurse (RN, LPN)	3,142	574	3,716
Advanced Medical Practitioner	1,401	574	1,975
Providing Educational Services			
Education Aid	1,990	2,094	4,084
Teacher/Trainer	2,788	6,357	9,145
Professor/Lecturer	3,542	1,588	5,130
Creative Arts			
Musician/Artist/Designer	1,012	640	1,653
Writer/Editor	1,518	574	2,092
Total	76,378	68,203	

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

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

Figure 3 shows the same information as that presented in Table 3, but in graphic format. Most of the job areas included show more current workers than previous workers. Exceptions include Office Management; Construction, Cleaning, Manual Labor; Teacher/Trainer; Maintenance; Driving and Delivery; Manufacturing and Assembly; Education Aid; Government Services; and IT Maint., Tech. Maint. (Non-Medical).

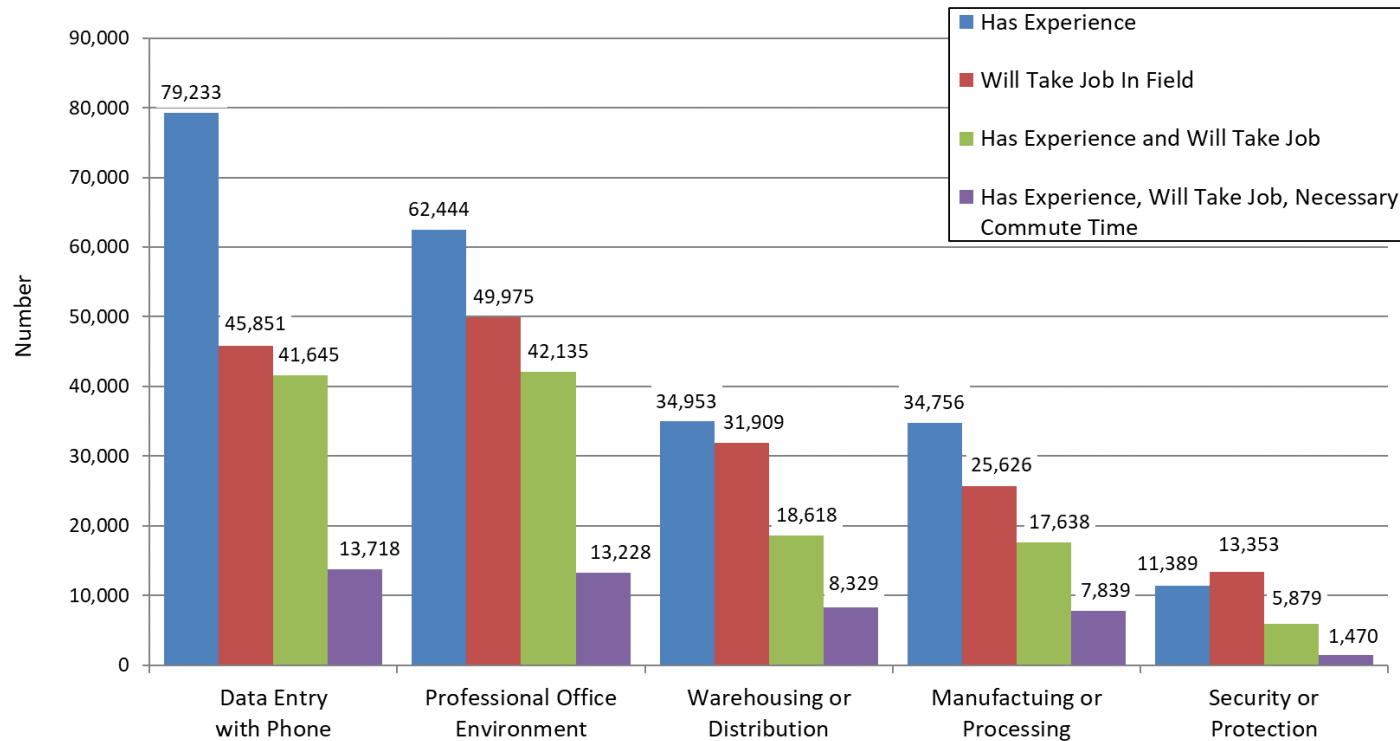
Figure 3: Current Work Experience Plus Previous Work or Training Experience



In addition to asking respondents to provide their current employment status and previous work/training experience (the results of which are shown in the previous table and figure), respondents were asked about the five specific employment fields 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. For example, the figure shows that an estimated 79,233 Pool members report having training and/or experience in data entry with telephone operation (blue column), although fewer (45,851 individuals) would consider employment in that field (red column).

The third column (green) shows the number who have experience/training in a field **and** are willing to work in that field again. The fourth column (purple) includes those who have training/experience in a field **and** are willing to take a job in that field **and** are within the necessary commute time for a new or different job (see Glossary for the definition of “necessary commute time”).

Figure 4: Work Experience/Willing to Work in Field



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 5 and 6 show the responses to those questions.

Figure 5 shows that 34% of those with distribution/warehousing experience moved materials or loaded trucks, 32% worked in inventory control or scheduling, 28% held administration or management positions, and 6% worked in some other area.

Figure 6 shows that 50% of those with manufacturing/processing experience worked in production, fabrication, or assembly. Another 23% worked in maintenance, shipping, or receiving; 20% held positions in administration, management, or sales; and 7% worked in some other area.

Figure 5: Experience/Training in Distribution Center or Warehouse

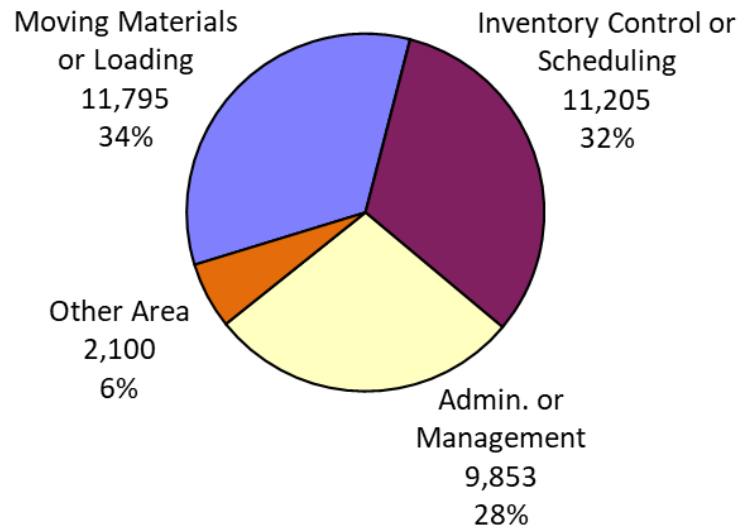
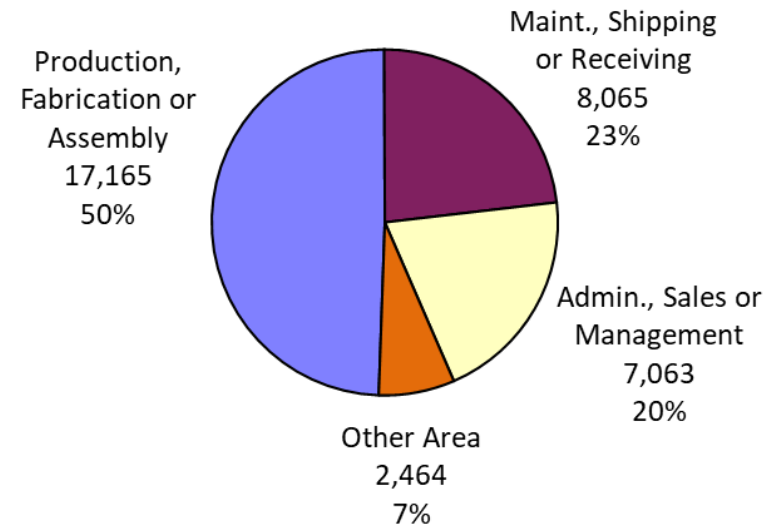


Figure 6: Experience/Training in Manufacturing or Processing



Working Available Labor Pool members were asked to provide the city or town of their workplaces. Figure 7 provides a visual representation of responses. Columbia was the most often mentioned location, followed by Jefferson City, Boonville, Sedalia, Marshall, and Glasgow.

Figure 7: Workplace Location Word Cloud



Educational Experiences and Job Satisfaction

Respondents who had completed at least “some college” 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.

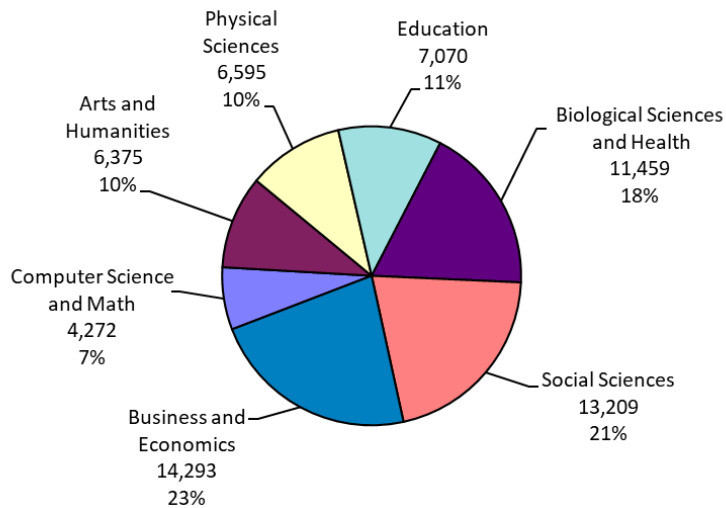
Education: Elementary and Secondary Teaching.

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

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

Figure 8 shows that the largest group of Available Labor Pool members studied business and economics (23%). Pool members also studied social sciences (21%), biological sciences and health (18%), education (11%), physical sciences (10%), arts and humanities (10%), and computer science and math (6%).

Figure 8: Undergraduate College Major



Survey respondents with at least some college education were asked if they are attending or have attended a technical or community college. Figure 9 shows that 15% of these respondents have technical or community college experience. Table 4 shows that 30.5% report taking general education courses; 17% took business skills courses; 16.5% completed maintenance and repair skills courses; 13.1% took nursing or health courses; and 11.4% took office skills courses.

Figure 9: Community College Experience

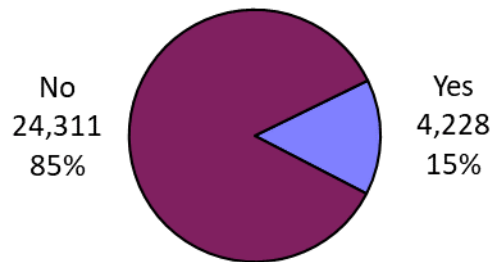


Table 4: Community College Area of Study

Area of Study	Number	Percent
General Education	1,288	30.5
Business Skills (Appraising, Accounting)	721	17.0
Maintenance and Repair Skills (HVAC, Wiring, Plumbing, Welding)	697	16.5
Nursing, CNA, EMT, Healthcare Related	554	13.1
Office Skills (Office Technology, Customer Service)	483	11.4
Cosmetology, Beautician, (non-medical) Personal Care	208	4.9
Computer Skills (IT, CAD, GIS)	193	4.6
Manufacturing or Mechanical Skills	85	2.0
Total	4,228	100

Figure 10 and Table 5 show responses to questions regarding job satisfaction. When presented with the statement “I enjoy the things I do,” for example, 50.6% “agree” and 31.3% “strongly agree.” When presented with the statement “I have a generally positive work environment,” 56.8% “agree” and 22.7% “strongly agree.”

Positive responses to “I have a reasonable workload” and “I receive fair pay” are similar, with 63.8% “agreeing or strongly agreeing” (combined) with the former, and 62.5% “agreeing or strongly agreeing” (combined) with the latter.

Slightly fewer respondents (57.5%) “agree and strongly agree” (combined) with the statement “I have a fair chance at pay increase.”

For the statement “I have a fair chance at a promotion,” 33.1% “agree or strongly agree” (combined) and 37.5% “disagree or strongly disagree” (combined).

Figure 10: Job Satisfaction Among Available Labor Pool Workers

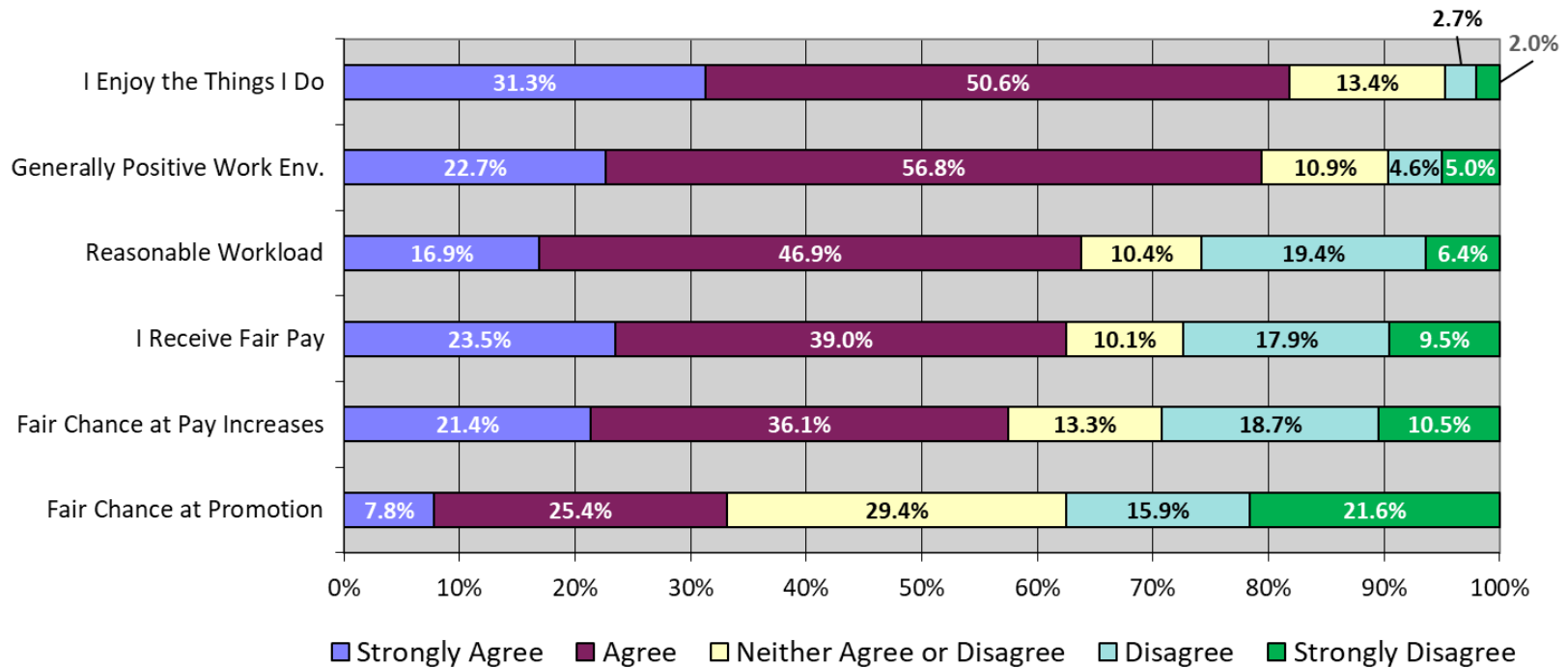


Table 5 shows combined “agree” and “strongly agree” responses of working Pool members and working non-Pool respondents. The table shows that 81.9% of the working Pool members “agree or strongly agree” (combined) with the statement regarding “enjoying the things I do,” while 90.9% of the working non-Pool respondents suggest the same.

The statement with the greatest disparity between working Pool members and working non-Pool respondents is “I receive fair pay.” About 63% of the working Pool members “agree or strongly agree” that they receive fair pay, while 75.7% (or 13.2% more) of the working non-Pool respondents feel the same way.

Table 5: Job Satisfaction Among Workers: Pool and Non-Pool Members

	Agree or Strongly Agree (combined)		<i>Difference</i>
	Desired Benefits of Working Pool	Benefits Received among Working Non-Pool	
	Percent	Percent	
I Enjoy the Things I Do	81.9	90.9	-9.0
Generally Positive Work Env.	79.4	84.5	-5.1
Reasonable Workload	63.8	66.0	-2.2
I Receive Fair Pay	62.5	75.7	-13.2
Fair Chance at Pay Increases	57.5	61.1	-3.7
Fair Chance at Promotion	33.1	30.6	2.5

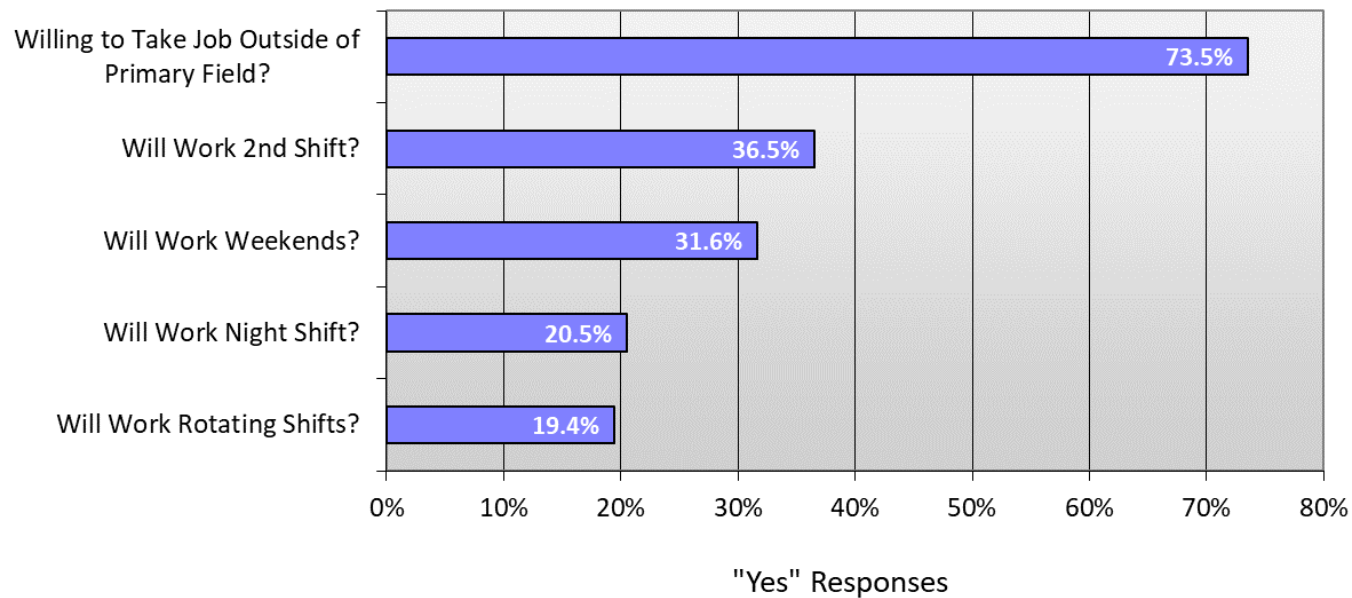
Considerations for Employment

An important consideration for many employers looking to locate or expand operations is whether workers are willing to pursue new employment opportunities outside of their primary fields. 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 Boonville/Cooper County Labor Basin, however. Figure 11 shows that 73.5% of the Available Labor Pool are willing to accept positions outside of their primary fields of employment. The figure also shows responses to four questions regarding work shifts. Respondents were asked if they would be willing to work the 2nd shift, the night shift, rotating shifts, and weekends.

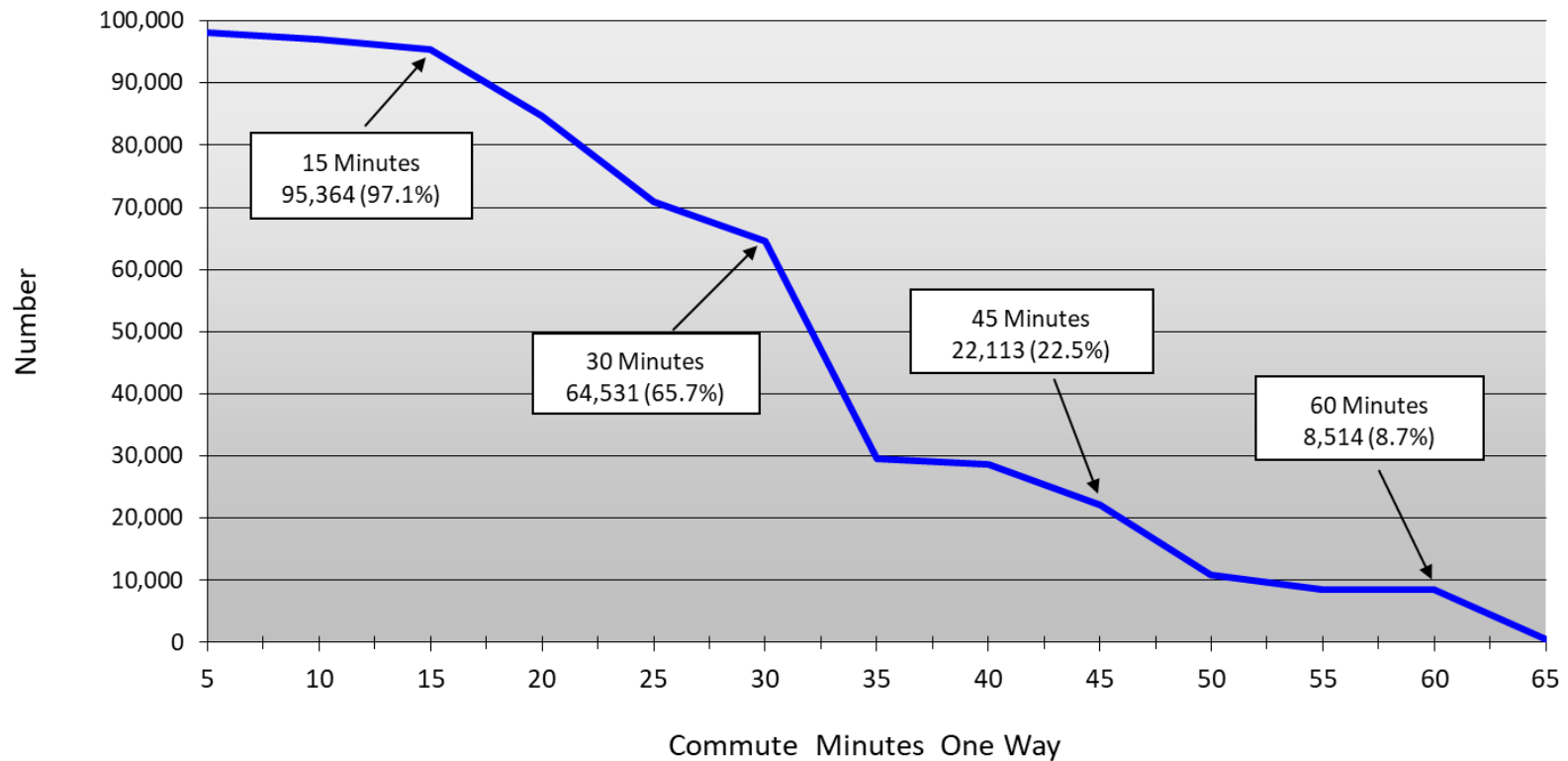
The figure shows that 36.5% of the Available Labor Pool is willing to work the 2nd shift and 31.6% will work weekends. Fewer will work the night shift (20.5%) and/or rotating shifts (19.4%).

Figure 11: Considerations for Employment



Another important consideration for many employers is whether workers are willing to commute for a new or different employment opportunity. Figure 12 shows that 22.5% of the Pool will commute up to 45 minutes, one way, for a job. Many (65.7%) will commute for 30 minutes, one way, for a job, and almost all (97.1%) will commute up to 15 minutes, one way, for a job.

Figure 12: Available Labor by Commute Minutes



Available Labor Pool members were presented with various benefits and opportunities and were asked if each would be a “very important” consideration for taking a new job. Answer options included “yes” and “no.”

Figure 13 shows that the five most important benefits/opportunities are, in order, good salary or hourly pay, good retirement benefits, flexible hours/remote work, good health benefits, and good vacation benefits. Each of these benefits/opportunities are considered “very important” by 80% or more of the Available Labor Pool.

On-the-job training (OJT)/paid training/education benefits are “very important” for almost 60% of the Pool. Allowances for items like clothing or phones are “very important” for almost 34% of the Pool, and memberships or discount programs for products or services are “very important” for about 29% of the Pool. The least desired benefit is childcare assistance which is “very important” for about 18% the of Pool.

Figure 13: Benefits/Opportunities Very Important to Change Jobs

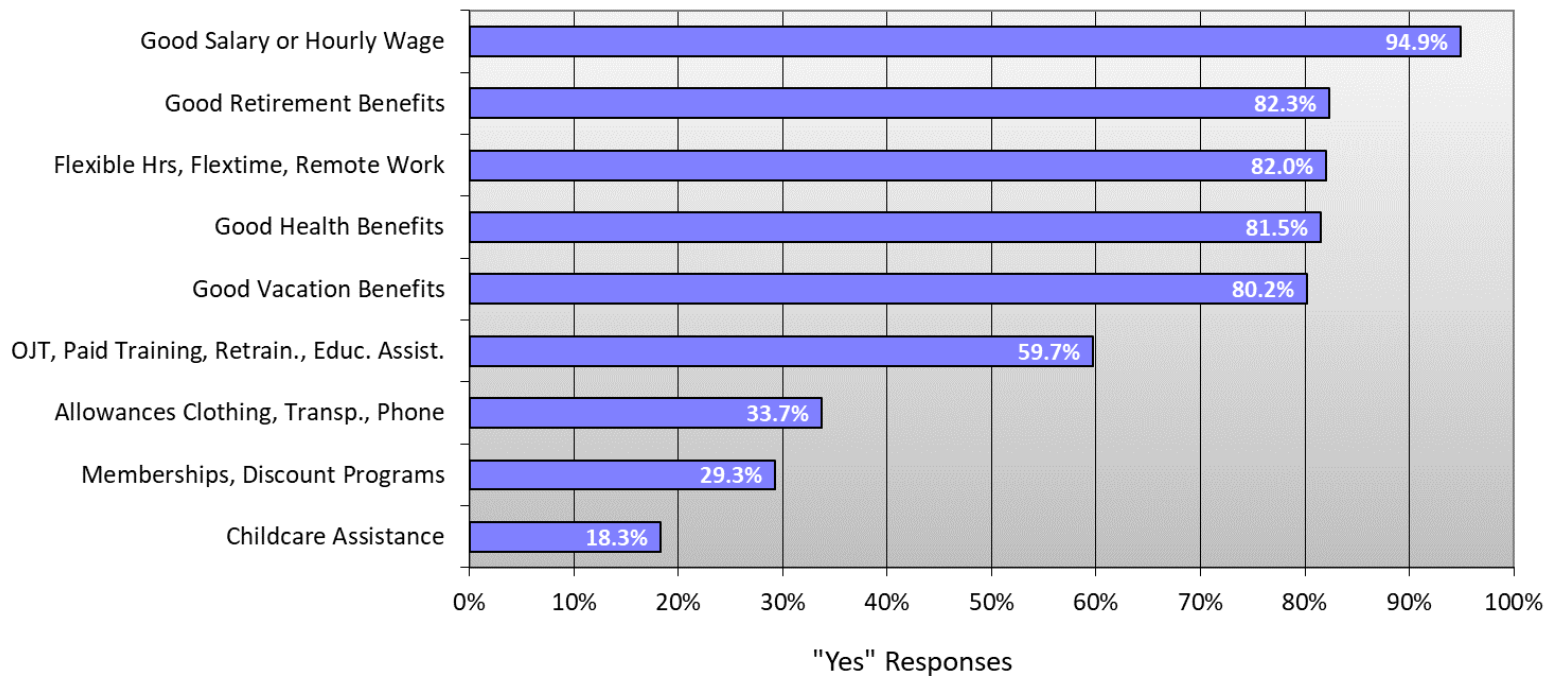


Table 6 shows information from the previous figure (left percent column) along with the percentages of working Pool members *who currently receive* the same benefits/opportunities (right percent column). The third column shows the difference between the two.

Table 6 shows that 94.9% of Pool members consider a good salary/hourly wage as “very important” for a new job, while 75% of working Pool members report that they currently receive a good salary/hourly wage. Similarly, 82.3% of the Pool consider good retirement benefits as “very important,” while 72.5% working Pool member report receiving good retirement benefits.

Larger percentages of Pool members currently receive memberships in discount clubs than consider that benefits as “very important” (42.9% and 29.3%, respectively).

Table 6: Desired Benefits/Opportunities and Currently Offered Benefits/Opportunities

	Very Important to Change Jobs Percent	Currently Received by Working Pool Members Percent	<i>Difference</i>
Good Salary or Hourly Wage	94.9	75.0	19.9
Good Retirement Benefits	82.3	72.5	9.8
Flexible Hrs, Flextime, Remote Work	82.0	58.5	23.5
Good Health Benefits	81.5	75.0	6.5
Good Vacation Benefits	80.2	73.5	6.7
OJT, Paid Training, Retrain., Educ. Assist.	59.7	67.8	-8.1
Allowances Clothing, Transp., Phone	33.7	23.9	9.8
Memberships, Discount Programs	29.3	42.9	-13.6
Childcare Assistance	18.3	3.4	14.9

Table 7 (below and next page) presents benefits/opportunities and occupational categories (shown in Table 2). Benefit columns are ordered from left to right by the “Entire Available Labor Pool” row.

Table 7: Benefits/Opportunities and Occupational Categories

(Percent "Very Important" Shown)

		Good Salary or Hourly Wage	Good Retirement Benefits	Flexible Hrs, Flextime, Remote Work	Good Health Benefits	Good Vacation Benefits
Current Employment Status	Entire Available Labor Pool	95%	82%	82%	82%	80%
	Construction, Labor, Cleaning, Delivery	90%	79%	63%	83%	68%
	Manufacturing, Maintenance, Trucking	100%	90%	70%	90%	90%
	Mechanic, Welder, Comp Tech	100%	88%	75%	71%	88%
	Crew Management, Protection Services	78%	89%	100%	89%	89%
	Customer Service	100%	94%	88%	88%	100%
	Clerical	92%	85%	77%	77%	85%
	Office or Dept Manager	100%	80%	100%	78%	100%
	Executive Management	100%	100%	100%	90%	100%
	Accounting, Programming, Engineering	100%	89%	100%	78%	78%
	Health Aid, Nurse	89%	89%	78%	82%	78%
	Education Aid, Teacher	80%	90%	70%	100%	78%
	Doctor, Professor, Attorney	100%	100%	83%	75%	83%
	Writer, Artist, Musician	100%	80%	100%	80%	80%
	Homemaker, Student, Unemployed	92%	69%	69%	77%	77%
Retired, Disabled	97%	53%	78%	75%	59%	

Table 7: Benefits/Opportunities and Occupational Categories (Continued)

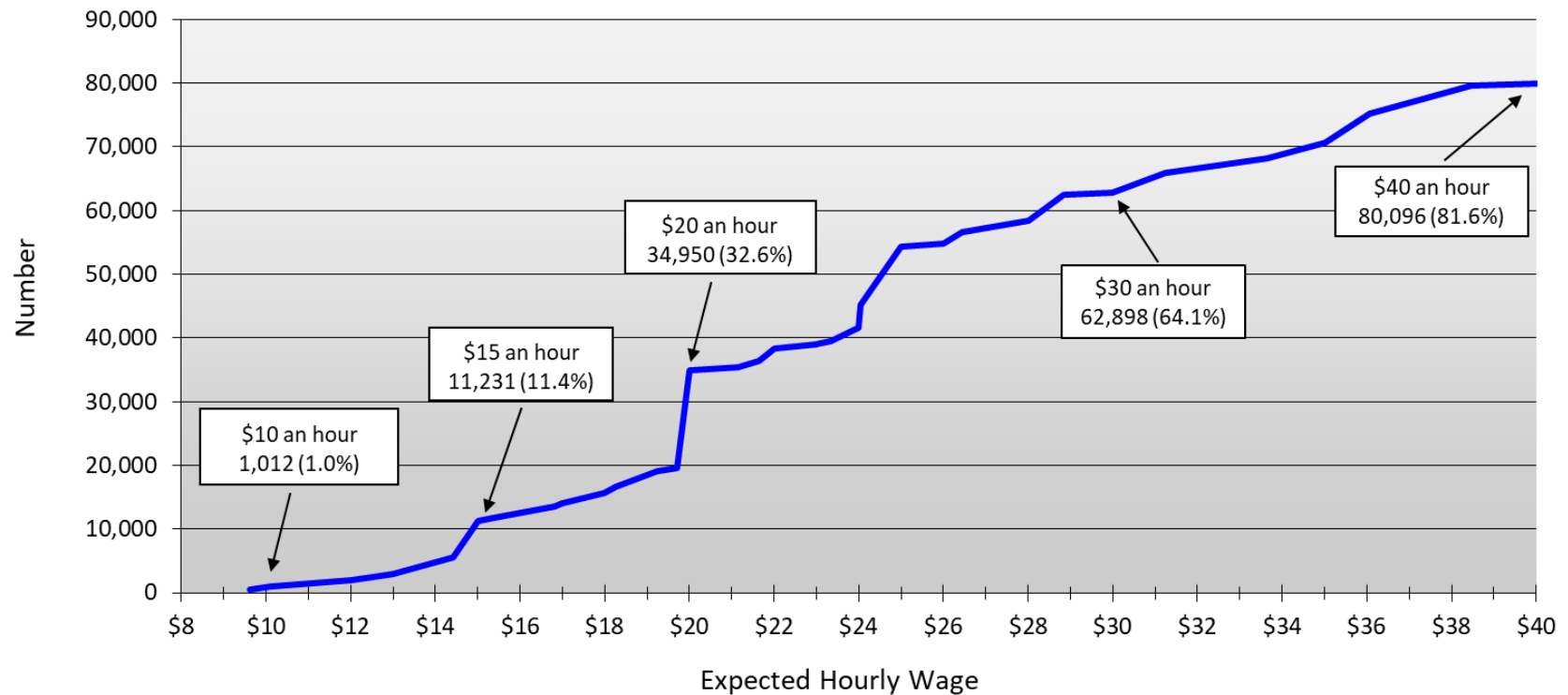
(Percent "Very Important" Shown)				
OJT, Paid Training, Retrain., Educ. Assist.	Allowances Clothing, Transp., Phone	Memberships, Discount Programs	Childcare Assistance	
60%	34%	29%	18%	Entire Available Labor Pool
78%	42%	26%	17%	Construction, Labor, Cleaning, Delivery
70%	50%	50%	30%	Manufacturing, Maintenance, Trucking
50%	29%	29%	29%	Mechanic, Welder, Comp Tech
50%	38%	22%	22%	Crew Management, Protection Services
88%	47%	44%	35%	Customer Service
62%	23%	31%	31%	Clerical
20%	22%	30%	11%	Office or Dept Manager
80%	36%	10%	0%	Executive Management
50%	22%	11%	11%	Accounting, Programming, Engineering
61%	56%	35%	22%	Health Aid, Nurse
80%	11%	10%	40%	Education Aid, Teacher
33%	17%	25%	17%	Doctor, Professor, Attorney
40%	20%	20%	20%	Writer, Artist, Musician
85%	23%	39%	8%	Homemaker, Student, Unemployed
44%	38%	38%	9%	Retired, Disabled

Current Occupational Category

Wage Expectations

The expected wage for a new or different job is another important consideration for employers and economic developers. Figure 14 shows expected wages for members of the Available Labor Pool. It is estimated that about a third (32.6%) of the Available Labor Pool is available for an hourly wage of \$20². About two-thirds (64.1%) of the Pool are available at \$30 per hour.

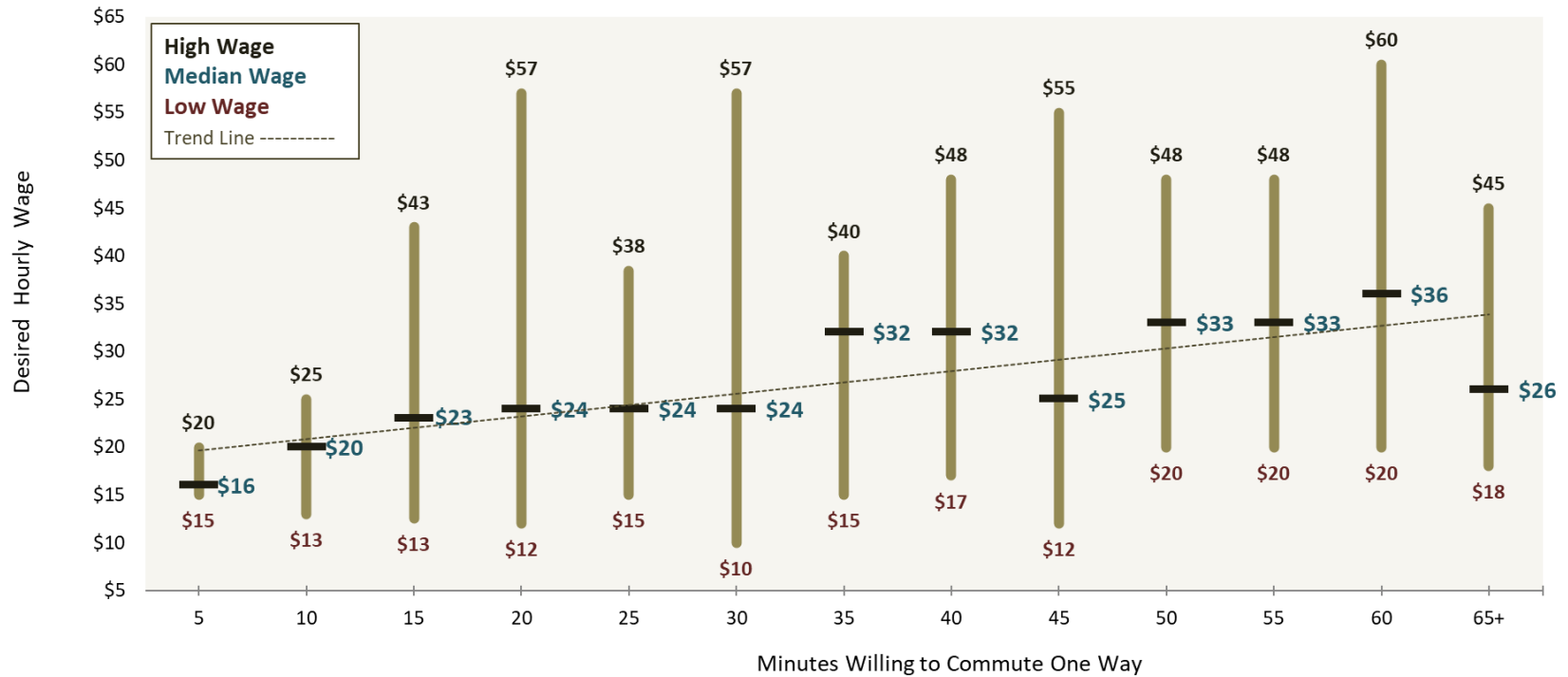
Figure 14: Available Labor by Expected Hourly Wage



² See the Appendix for an hourly wage/annual salary conversion chart.

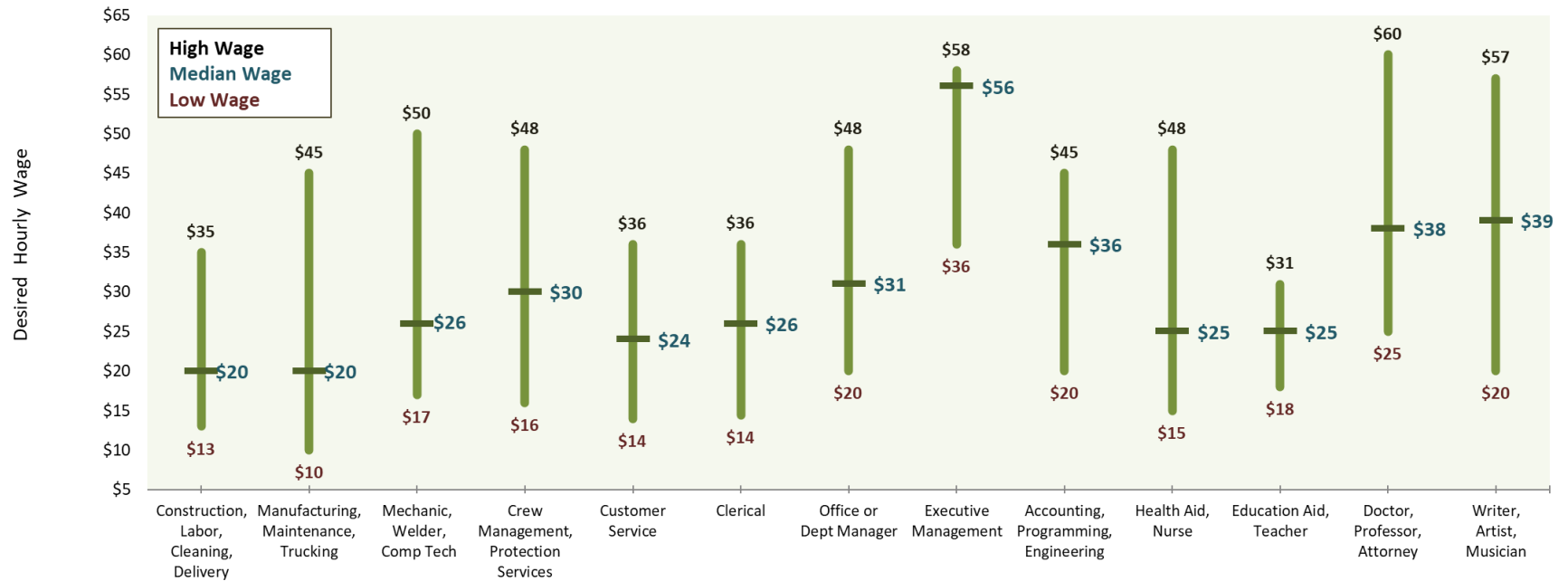
The figure below shows expected hourly wages and the number of minutes Pool members are willing to commute, one way, for a new job. The range of wages (high and low) and median wages are shown in five minute increments. In general, respondents expecting higher wages are willing to commute for more minutes than those expecting lower wages.

Figure 15: Expected Hourly Wage by Minutes Willing to Commute One Way



The figure below shows the median and range of expected hourly wages by occupational category. The lowest low expected wages tend to be associated with categories that might be considered entry-level by some people. The highest low wages tend to be associated with jobs that generally require extensive education and training.

Figure 16: Expected Hourly Wage by Current Occupational Category



The figure below shows the median and range of expected hourly wages for respondents who have experience in a field **and** who are willing to work again in that field (as shown in Figure 4).

Figure 17: Expected Hourly Wage Among Those With Experience and Willing to Work in Field



Subsets of the Available Labor Pool

The previous portion of the report addressed the entire Available Labor Pool. This section examines three subsets of the Available Labor Pool. Each provides a different look at the Available Labor Pool, and they are not mutually exclusive. The three subsets are: those residing *Within the Necessary Commute Time*, the *Underemployed Available Labor Pool Workers*, and the *Potential Entrepreneurs in the Available Labor Pool*.

Subset 1: Within Necessary Commute Time

To present an even more refined picture of the workers who would seriously consider a new employment opportunity, the data in this section includes *only those respondents* who 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 time necessary to commute from their Zip Code of residence to the Zip Code at the center of the labor basin. For example, a pool member willing to travel for 30 minutes, one-way, for a job opportunity and who lives 15 minutes from the center of the labor basin is considered to be “within the necessary commute time” for a new job.

Figure 18 shows that 2,636 Pool members within the necessary commute time are available for a job at \$15 per hour. At \$20 an hour, the available labor jumps to 12,532, and by \$30 an hour, the available labor climbs to 22,640. The figure shows that 29,071 Pool members within the necessary commute time are available at \$40 an hour.

The figure 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, 4,272 members of this subset are interested in a job at \$17.00 an hour. At \$18.00 an hour there are an estimated 4,507 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is only 235 individuals – a relatively small increase given the overall size of this subset of the Available Labor Pool.

Additional wage plateaus can be seen between \$20 and \$21 an hour (an increase of 118 individuals), between \$22 and \$23 per hour (an increase of 624 individuals), and between \$29 and \$30 per hour (an increase of 376 individuals).

Figure 18: Available Labor by Hourly Wage for Within Necessary Commute Time

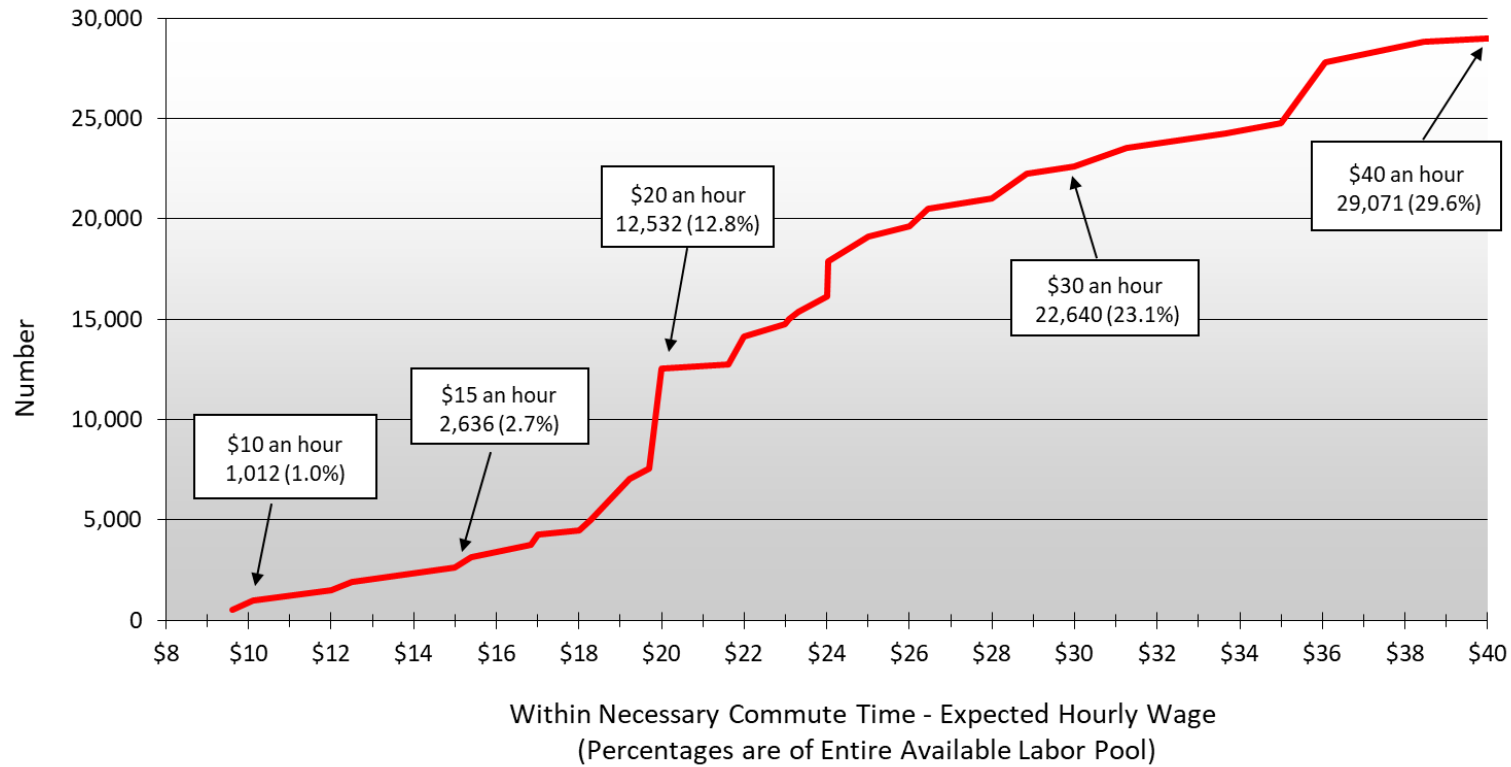


Table 8 shows expected wages the four main occupational sectors (employed only) of those included in the necessary commute time subset. The table shows that 12% of the general laborers within the necessary commute time will take a new or different job with an hourly wage of \$16 (all things being equal), while 82% will take a job with an hourly wage of \$24.³

³ It is assumed that a job seeker would, if offered, take a higher hourly wage than expected. Hence cumulative percentages are provided.

Of high skill laborers within the necessary commute time, none will take a job with an hourly wage of \$16, while 26% will take a job with an hourly wage of \$24.

Among service sector workers within the necessary commute time, 9% are available for job with an hourly wage of \$16, while 42% are available at an hourly wage of \$24. Finally, no professional workers are available for a job with an hourly wage of \$16, while 11% are available for an hourly wage of \$24.

Table 8: Wage Expectations by Sector for Within Necessary Commute Time

	Within Necessary Commute Time							
	General Labor		High Skill Labor		Service Sector		Professional	
	(N = 11) (+/- 29.0% MoE)		(N = 5) (+/- 42.2% MoE)		(N = 27) (+/- 18.7% MoE)		(N = 18) (+/- 22.8% MoE)	
	Number	Cumulative	Number	Cumulative	Number	Cumulative	Number	Cumulative
\$40 or More	5,588	100%	2,648	100%	13,410	100%	9,043	100%
Up to \$40	5,588	100%	1,177	44%	13,410	100%	5,133	57%
Up to \$36	5,588	100%	1,177	44%	13,410	100%	2,688	30%
Up to \$32	5,588	100%	1,177	44%	11,450	85%	1,955	22%
Up to \$28	5,588	100%	686	26%	9,000	67%	1,466	16%
Up to \$24	4,608	82%	686	26%	5,571	42%	978	11%
Up to \$20	1,176	21%	686	26%	3,121	23%	489	5%
Up to \$16	686	12%	0	0%	1,161	9%	0	0%
Up to \$12	686	12%	0	0%	671	5%	0	0%
Up to \$7	0	0%	0	0%	0	0%	0	0%

Table 9 shows the expected wages for general labor and service sector workers who are *willing to change fields of employment* and thus are presumably potential workers for either of these two sectors. Specifically, the table *includes* respondents who:

- 1 are willing to travel the necessary commute time from his/her community to the center of the labor basin, *and*
- 2 are willing to change their primary field of employment, *and*
- 3a are employed as general laborers or service sector employees, *or*
- 3b are currently non-employed.

Available Labor Pool members meeting these criteria are called “transferable workers.” Table 8 (previous page) shows data representing each occupational sector independently and does not include non-working pool members. Table 9, on the other hand, 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. Additionally, it is assumed that a non-working pool member will take a job (all things being equal) in either the general labor sector or the service sector.

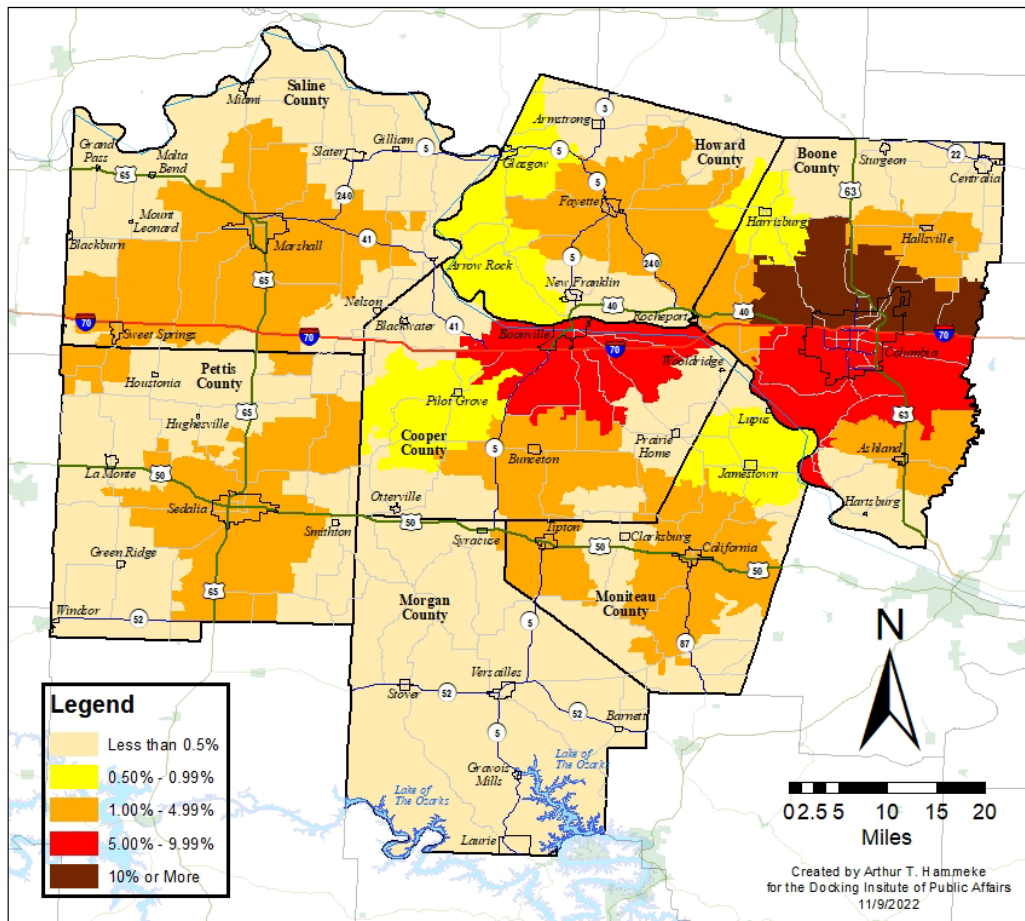
High skill and professional workers are excluded from Table 9 because it is presumed that, as a general rule, people in occupations such as machinist, electricians, medical doctors, lawyers, engineers, professors, etc... are unlikely to transfer into lower-skill general labor and service/support occupations. It is also presumed that, because professional and highly skilled occupations require extensive education and/or training, general laborers and service sector workers are unable to transfer to high skill labor or professional positions - at least in the near term.

Table 9: Expected Hourly Wages of Transferable Workers

	Within Necessary Commute Time			
	Transferrable General Labor		Transferrable Service Sector	
	(N = 43) (+/- 14.9% MoE)		(N = 48) (+/- 14.1% MoE)	
	<i>Number</i>	<i>Cumulative</i>	<i>Number</i>	<i>Cumulative</i>
\$40 or More	21,067	100%	23,507	100%
Up to \$40	19,108	91%	23,017	98%
Up to \$36	18,128	86%	21,547	92%
Up to \$32	17,638	84%	19,794	84%
Up to \$28	15,678	74%	17,344	74%
Up to \$24	11,759	56%	12,934	55%
Up to \$20	5,879	28%	7,545	32%
Up to \$16	2,450	12%	2,940	13%
Up to \$12	980	5%	980	4%
Up to \$7	0	0%	0	0%

Map 3 shows how each Zip Code area compares to all other Zip Code areas in terms of the percent. Available Labor Pool members residing within the necessary commute time in the Boonville/Cooper County Labor Basin are included in Map 3. The map shows that Boone, Cooper, Howard, Moniteau, Pettis, and Saline counties share up to 5% of this subset of the Available Labor Pool (see orange areas on the map). Zip Code areas located in Boone and Cooper counties share up to 10% of this subset of the Available Labor (see red areas on the map). Zip Code areas in Boone County share 10% or more of this subset of the Available Labor Pool (see darkest shaded areas on the map).

Map 3: Percent within Necessary Commute Time by Zip Code



Subset 2: Underemployed Available Labor Pool Workers

Underemployment — individual characteristics that exceed those required for their current job — is a significant issue in many communities. To assess underemployment in the Boonville/Cooper County Labor Basin, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.⁴ 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 could work.

Of the 76,378 *employed members* of the Available Labor Pool (shown in Figure 19), 31% answered “yes” (in Figure 20) to one or more of the questions presented above. These Pool members are considered “underemployed.” Figure 20 shows that the underemployed workers number an estimated 23,360 of the employed members of the Pool.

Figure 19: Employed and Unemployed Members of the Available Labor Pool

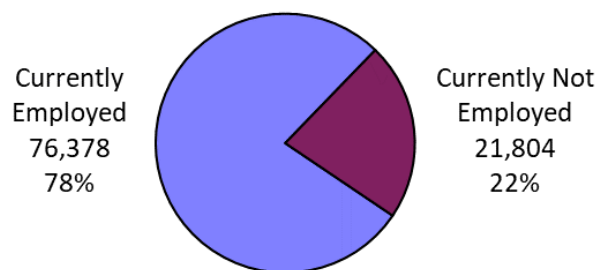
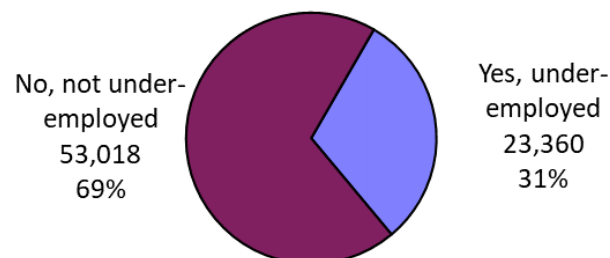


Figure 20: Underemployed Workers



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 21 shows the percentages of the positive responses (i.e., “yes” answers) to the various measures of underemployment. More than a third (34.6%) of this subset of the Available Labor Pool consider themselves underemployed because they possess education levels exceeding those needed for their current jobs, while about 30% consider themselves underemployed because they possess skills that are not being used currently on the job. When asked if they are underemployed because they earned more money at a past but similar job, 14.7% responded “yes,” while 10.2% feel they are not able to work as many hours as they would like at their job.

Figure 21: Reasons for Underemployment

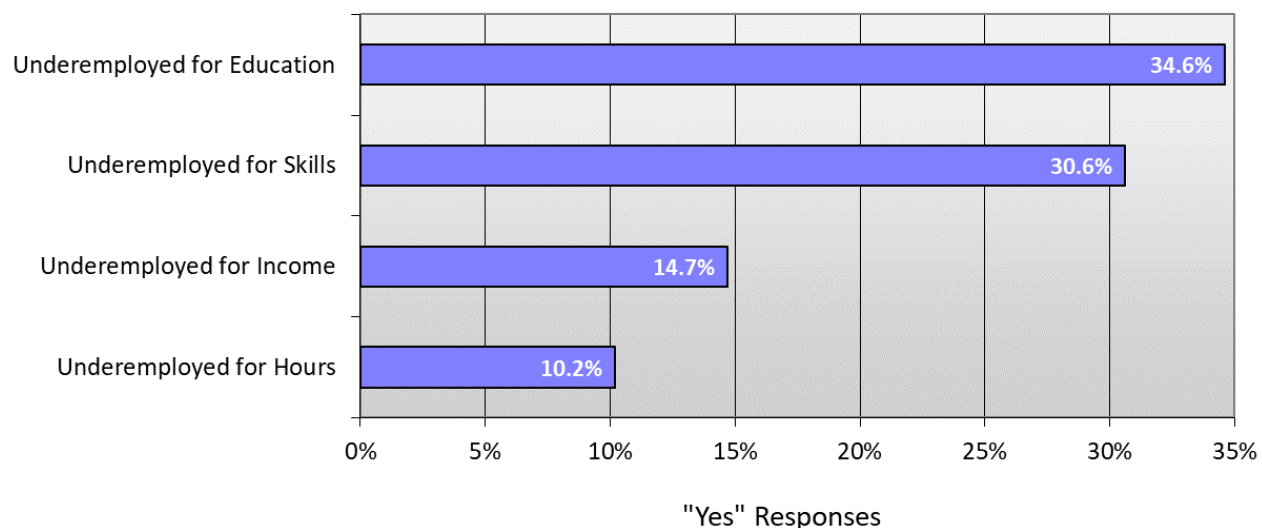


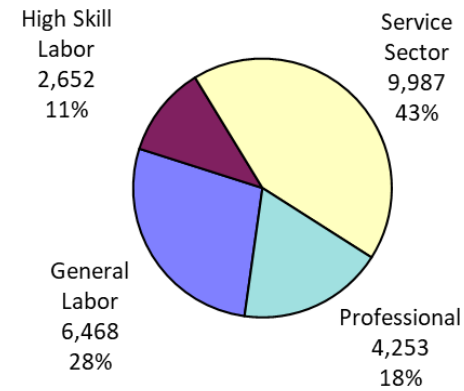
Table 10 and Figure 22 show some characteristics of the underemployed members of the Available Labor Pool. The table shows the education levels of the underemployed. Almost 87% of the underemployed workers have at least some college experiences, while all (100%) have a least a high school diploma.

Figure 22 shows that general laborers make up 28% of the underemployed workers, while high skill laborers make up 11%. Service sector workers make up the largest percentage of underemployed workers at 43%, and professionals make up 18%.

Table 10: Highest level of Education Achieved Among Underemployed

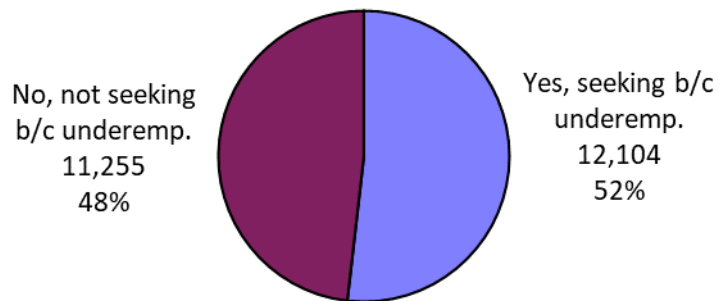
	Number	Percent	Cumulative Percent
Doctoral Degree	699	3.0	3.0
Masters Degree	5,741	24.6	27.6
Bachelors Degree	7,213	30.9	58.5
Associates Degree	3,276	14.0	72.5
Some College	3,370	14.4	86.9
High School Diploma Only	3,059	13.1	100
Less HS Diploma	0	0.0	
Total	23,360	100	

Figure 22: Occupational Sectors of Underemployed Workers



Underemployed workers were asked if they “are available or a new or different job because they are underemployed?” Figure 23 shows that 52% (or 12,104 individuals) of the underemployed workers are seeking new employment to address underemployment.

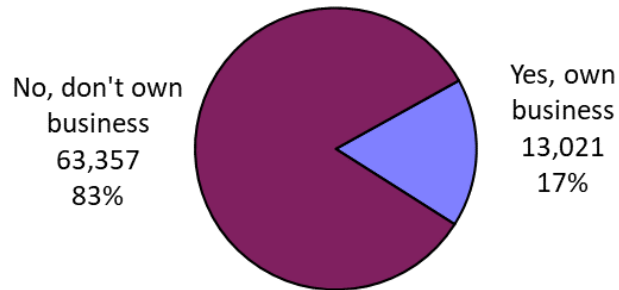
Figure 23: Seeking New Employment to Address Underemployment



Subset 3: Potential Entrepreneurs in the Available Labor Pool Workers

The desire for self-employment may be another indicator of the types of workers available in the labor basin. Figure 24 shows that of the 98,182-member Available Labor Pool, 17% report owning their own businesses.

Figure 24: Business Ownership



Non-business-owning members of the Available Labor Pool (estimated to be 63,357 or 83% of the Pool) were asked the question: “In the past few years have you seriously thought about starting your own business and making it your full-time job?” Figure 25 shows that 22% responded “yes.” These Pool members are considered “potential entrepreneurs.”

Figure 25: Seriously Thought About Starting Own Business

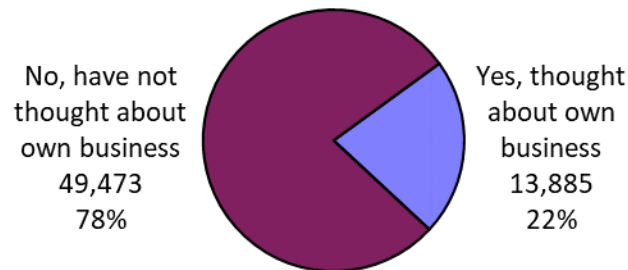


Table 11 and Figures 26 and 27 show some characteristics of the *potential entrepreneurs*. The table shows that 85.6% of the potential entrepreneurs have some college experience and 68.9% have at least Bachelor’s degrees.

Table 11: Highest Level of Education Achieved Among Potential Entrepreneurs

	Number	Percent	Cumulative Percent
Doctoral Degree	1,495	10.8	10.8
Masters Degree	2,587	18.6	29.4
Bachelors Degree	5,483	39.5	68.9
Associates Degree	1,455	10.5	79.4
Some College	860	6.2	85.6
High School Diploma Only	1,575	11.3	96.9
Less HS Diploma	429	3.1	100
Total	13,885	100	

Figure 26 shows that general laborers make up 12% of the potential entrepreneurs, while high skill laborers make up only 7%. Service sector workers make up 48%, and professionals make 20%. Non-working Pool members make up 13% of the potential entrepreneurs.

Figure 26: Occupational Sectors of Potential Entrepreneurs

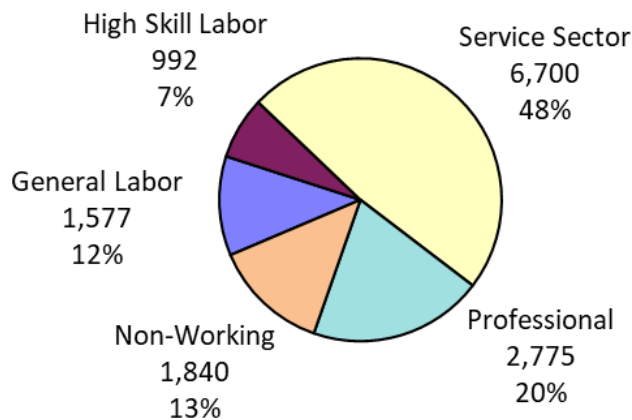


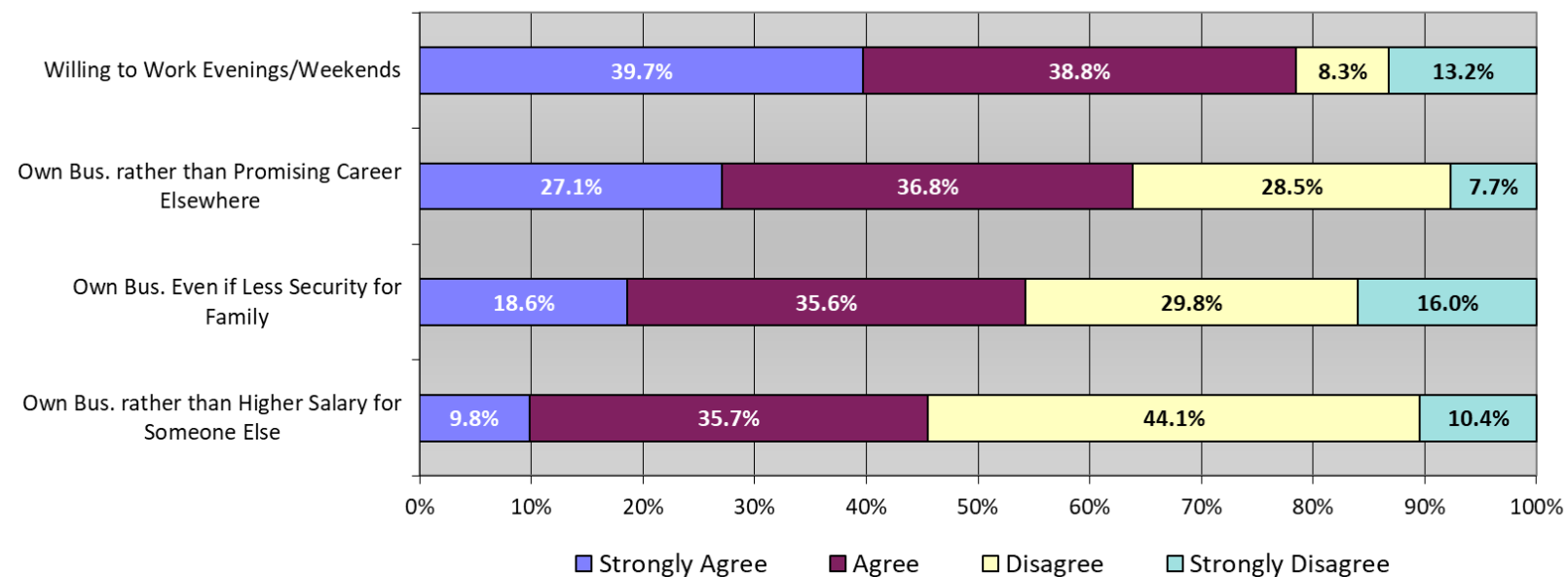
Figure 27 shows the strength of desire to own a business. About 39% of this subset of the Pool “agree” with a statement asking if they “are willing to work evenings or on weekends to make their business a success,” while 39.7% “strongly agree.”

About 37% “agree” with a statement asking if they “would rather own their own business than pursue a promising career elsewhere,” and 27.1% “strongly agree.” Almost 29% also “disagree” with this statement.

Regarding the statement “I am willing to have less security for my family in order to operate my own business,” about 54% of the potential entrepreneurs “agree” or “strongly agree” (combined), while 45.8% “disagree” or “strongly disagree” (combined).

More than half (54%) “disagree” or “strongly disagree” (combined) with the statement “I would rather own my own business than earn a higher salary working for someone else.”

Figure 27: Strength of Desire for Own Business among Potential Entrepreneurs



Comparative Analysis: 2015, 2020, and 2022 Reports

The Docking Institute of Public Affairs conducted similar labor studies in the Boonville/Cooper County Labor Basin and provided reports in 2015 and 2020. This section of the report compares some of the data collected from all three studies.

Table 12 shows population, Civilian Labor Force (CLF), employment, average unemployment rate, and Available Labor Pool data presented in the three reports.

The population of the Boonville/Cooper County Labor Basin has increased from 302,129 to 316,463 (or by 64,731 individuals) in the past 7 years since the 2015 area labor study. The Civilian Labor Force decreased from 161,119 to 157,311, and the number of employed individuals decreased from 154,718 to 151,984. The unemployment rate has fluctuated from between 2.77% and 3.97%.

The table also shows the Available Labor Pools for studies from 2015, 2020, and 2022. The size of the Pool remained stable from 2015 to 2020 but decreased by about 6,000 people between 2020 and 2022.

Table 12: Key Population and Employment Indicators

Boonville / Cooper County Labor Basin	2015 Study	2020 Study	2022 Study
Labor Basin Population	302,129	310,032	316,463
Civilian Labor Force	161,119	153,443	157,311
Employed	154,718	149,190	151,984
Average Unemployment Rate	3.97%	2.77%	3.39%
Available Labor Pool	105,778	104,343	98,182

Figure 28 shows that there are more “non-employed but interested” Pool members in 2022 than in 2015, but more members of the other three categories in 2015 than in 2022.

Figure 28: Available Labor Pool Comparison

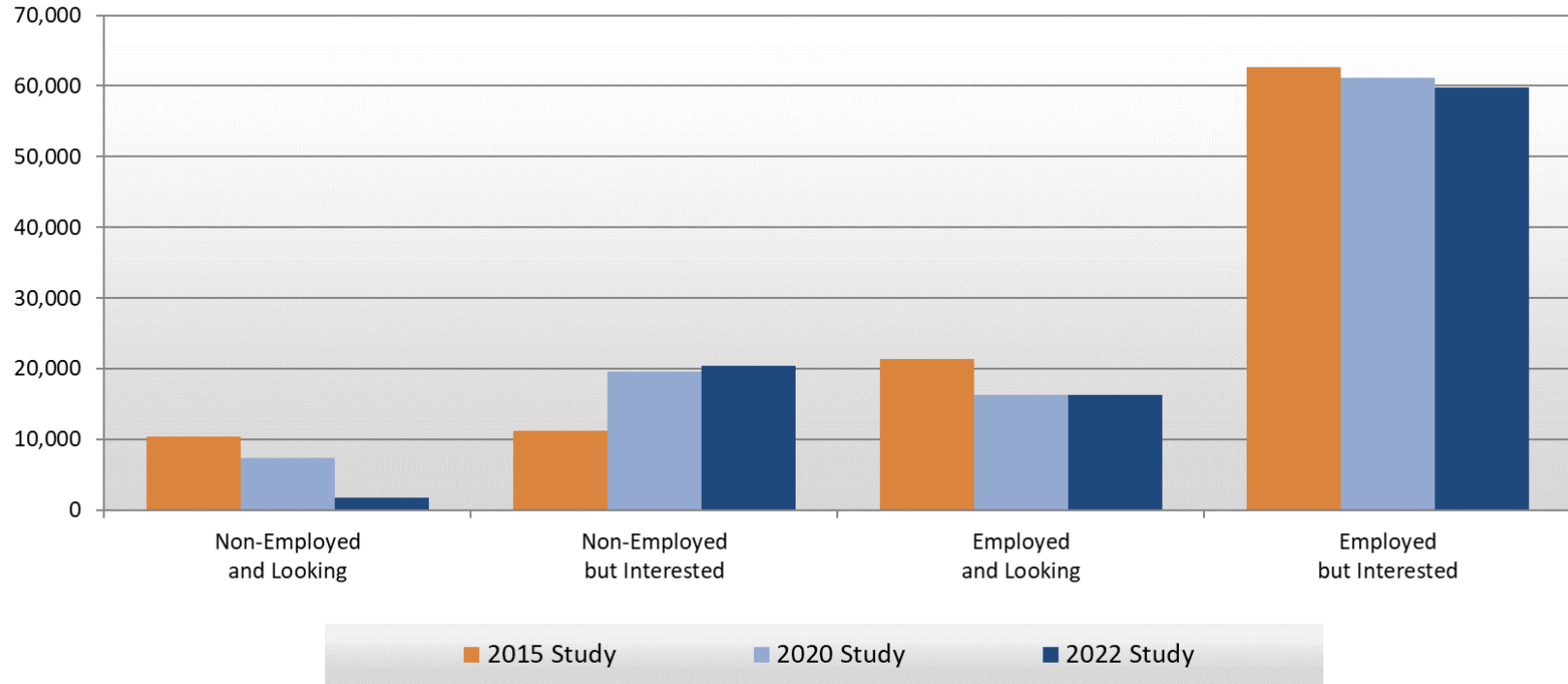


Table 13 compares occupational sectors and education levels from the three studies. The 2015 study shows the smallest percentage of non-working pool members, while 2020 shows the largest. Regarding education level, the 2022 Available Labor Pool contains the largest percentage of Pool members with any type of college experience.

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

Occupational Sector	2015 Study		2020 Study		2022 Study				
	Number	Percent	Number	Percent	Number	Percent			
General Labor	22,414	21.2	11,472	11.0	13,789	14.0			
High Skill Labor	9,841	9.3	9,856	9.4	7,907	8.1			
Service Sector	38,254	36.2	38,221	36.6	32,384	33.0			
Professional	13,653	12.9	16,981	16.3	22,299	22.7			
Non-Working*	21,616	20.4	27,812	26.7	21,804	22.2			
Total	105,778	100	104,343	100	98,182	100			
Highest Education	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	4,159	3.9	3.9	3,548	3.4	3.4	8,594	8.8	8.8
Masters Degree	11,809	11.2	15.1	11,373	10.9	14.3	25,463	25.9	34.7
Bachelors Degree	35,440	33.5	48.6	27,755	26.6	40.9	29,217	29.8	64.4
Associates Degree	12,316	11.6	60.2	10,643	10.2	51.1	11,091	11.3	75.7
Some College	17,914	16.9	77.2	22,851	21.9	73.0	12,542	12.8	88.5
High School Diploma	21,611	20.4	97.6	24,625	23.6	96.6	11,275	11.5	100
Less HS Diploma	2,527	2.4	100	3,548	3.4	100	0	0.0	0
Total	105,778	100		104,343	100		98,182	100	

*Non-working occupational status for 2022 includes survey respondents whose occupational status was not provided.

Table 14 shows responses to the question asking if the respondent was “willing to take a job outside of your primary field of employment or experience.” The table also shows responses to questions regarding various work shifts. In 2022, the 2nd shift/night shift question was split into two questions (one addressing the 2nd shift and one addressing the night shift).

The table shows that the percentage of Pool members willing to take a job outside of their primary field varies from 79.2% (2015) to 72.3% (2022). The 2015 Available Labor Pool provided larger percentages of “yes” responses to all work shift questions, compared to the other pools.

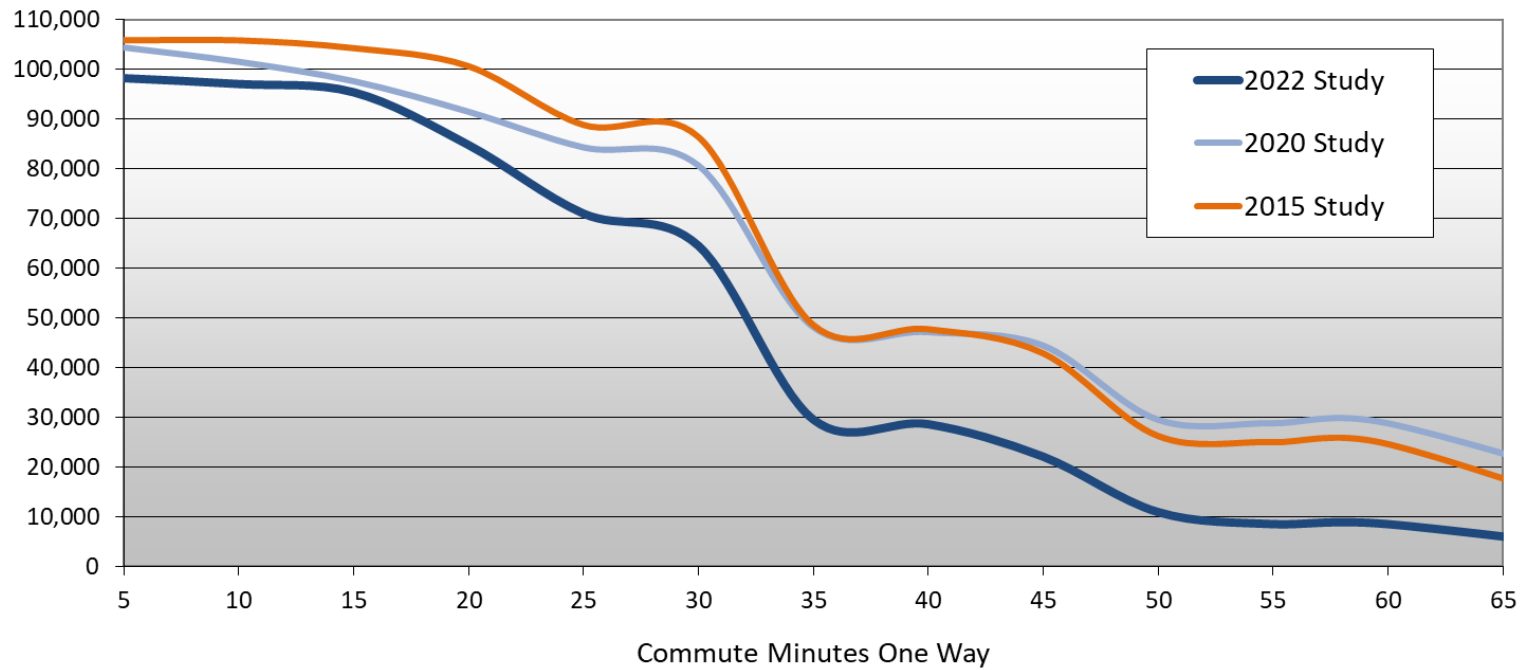
Table 14: Willing to Work Outside of Field and Work Shift Comparison

<i>(Ranked by 2022 Report)</i>	2015 Study		2020 Study		2022 Study	
	Number	Percent	Number	Percent	Number	Percent
Willing to Take Job Outside of Primary Field	83,846	79.2	79,575	76.3	82,582	72.3
Will Work 2nd Shift*	54,703	51.7	38,863	37.2	39,762	34.8
Will Work Weekends	62,973	59.5	52,590	50.4	37,014	32.4
Will Work Night Shift*	n/a	n/a	n/a	n/a	22,703	19.9
Will Work Rotating Shifts	45,322	42.8	37,847	36.3	21,905	19.2

* Prior to the 2022 study, "2nd Shift" and "Night Shift" were combined into a single question.

Figure 29 shows a comparison of “minutes willing to commute” for the three studies. A notable decline in available labor occurs between 30 and 35 minutes. The year with the largest decline in available labor between 30 and 35 minutes is 2022.⁵

Figure 29: Available Labor by Commute Minutes Comparison



⁵ Change is measured by the number of Pool members willing commute 30 minutes minus the number willing to commute at 35 divided by the number willing to commute 30 minutes. Results for each year for 30 to 35 minutes include: 2015 44%, 2020 40%, and 2022 54%.

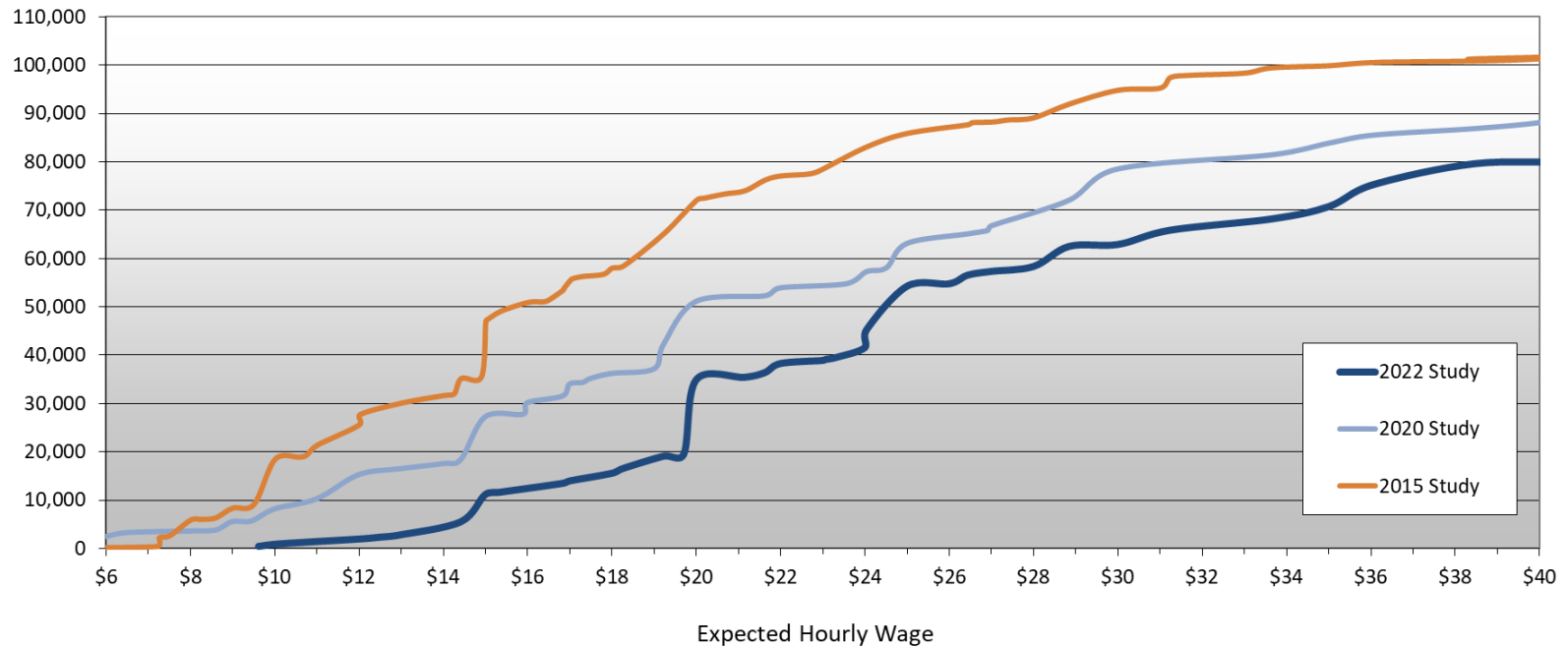
Table 15 shows the relative importance of various benefits, ranked in order of 2022 responses. The table shows that “good salary/hourly pay” is the most important benefit in all study periods. The item with the greatest amount of change between 2020 and 2022 is “flexible hours or remote work.”

Table 15: Important Benefits to Change Employment Comparison

<i>(Ranked by 2022 Report)</i>	<i>Percent Responding "Yes" Shown</i>			<i>Change</i>
	<i>2015 Study</i>	<i>2020 Study</i>	<i>2022 Study</i>	<i>2022-2020</i>
Good Salary or Hourly Wage	90.8	90.5	94.9	4.4
Good Retirement Benefits	85.4	81.4	82.3	0.9
Flexible Hrs, Flextime, Remote Work	69.1	73.7	82.0	8.3
Good Vacation Benefits	80.0	80.6	81.5	0.9
Good Health Benefits	86.0	77.6	80.2	2.6

Figure 30 shows a comparison of the expected wages of the three study groups. As with commute time, the patterns are similar but there are a few differences among labor pools. The year with the largest increase in Pool size between \$15 and \$20 an hour is 2022. The smallest increase between \$15 and \$20 an hour is 2015.⁶

Figure 30: Available Labor Pool by Hourly Wage Comparison



⁶ Change is measured by the number of Pool members expecting \$20 an hour minus the number expecting \$15 an hour, divided by the number expecting \$15. Results for each year include the following: 2015 53%, 2020 88%, and 2022 211%.

Table 16 shows a comparison of the underemployed members of the Available Labor Pools for the three studies. The Available Labor Pool with the smallest percentage of underemployed workers is 2020 (19.5%), while 2015 and 2022 report about 30% each.

The percentage of underemployed workers in general labor occupations is largest in 2015 (35%) and smallest in 2020 (21.1%). The percentage of underemployed professional workers is smallest in 2015 (5.8%) and largest is 2020 (19%).

The percentage of underemployed workers with advanced degrees (masters or doctorate) is largest in 2022 (27.6%) and smallest in 2015 (13.4%).

Table 16: Underemployed Workers Occupational Sectors and Education Levels Comparison

	2015 Study		2020 Study		2022 Study				
	Number	Percent	Number	Percent	Number	Percent			
Employed of Pool	84,161	79.1	76,531	73.3	76,378	77.8			
Underemployed Wrkrs	26,747	31.8	14,927	19.5	23,360	30.6			
Willing to Change Jobs to Address Status	15,382	57.5	7,837	52.5	12,104	51.8			
Occupational Sector	Number	Percent	Number	Percent	Number	Percent			
General Labor	9,357	35.0	3,152	21.1	6,468	27.7			
High Skill Labor	2,991	11.2	2,061	13.8	2,652	11.4			
Service Sector	12,840	48.0	6,877	46.1	9,987	42.8			
Professional	1,559	5.8	2,838	19.0	4,253	18.2			
<i>Total</i>	<i>26,747</i>	<i>100</i>	<i>14,927</i>	<i>100</i>	<i>23,360</i>	<i>100</i>			
Highest Education	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	1,106	4.1	4.1	1,617	10.8	10.8	699	3.0	3.0
Masters Degree	2,479	9.3	13.4	2,340	15.7	26.5	5,741	24.6	27.6
Bachelors Degree	7,751	29.0	42.4	2,565	17.2	43.7	7,213	30.9	58.5
Associates Degree	4,596	17.2	59.6	3,577	24.0	67.7	3,276	14.0	72.5
Some College	3,991	14.9	74.5	2,385	16.0	83.6	3,370	14.4	86.9
High School Diploma	6,197	23.2	97.7	2,025	13.6	97.2	3,059	13.1	100
Less HS Diploma	627	2.3	100	418	2.8	100	0	0.0	
<i>Total</i>	<i>26,747</i>	<i>100</i>		<i>14,927</i>	<i>100</i>		<i>23,360</i>	<i>100</i>	

Methods

The Boonville/Cooper County Labor Basin includes Boone, Cooper, Howard, Moniteau, Monroe, Pettis, and Saline Counties in Missouri. The basin has a total population of approximately 316,463, and a Civilian Labor Force of 157,311. The total number of employed is 151,984 and the average unemployment rate was about 3.38% during the time of this study. The Docking Institute estimates the basin's Available Labor Pool consists of 98,182 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 Boonville/Cooper 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 soon and retired individuals who may be available for work but have not been looking for work recently.

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

Defining the Available Labor Pool

An alternative to the Civilian Labor Force is the “Available Labor Pool.”⁷ The Available Labor Pool is composed of workers of working age (18-65) categorized as either 1) currently not working *and* looking for employment, 2) currently not working *but* interested in employment, 3) currently

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

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 Force⁸. Secondly, the number of potential workers is then *restricted* to those working-age 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 represents a substantial number of working-age workers and potential workers for employers to draw upon in the Boonville/Cooper County Labor Basin.

Description of Survey Research Methods

For the 2015 and 2020 studies, data were collected from a random digit telephone survey of area adults, using the Docking Institute's Computer Assisted Telephone Interviewing (CATI) system. Data were collected in 2022 using address-based sampling (ABS) and paper booklet questionnaires. The Institute purchased an address-based sample of households from an expert sampling vendor. Questionnaire instructions asked that an adult (18 or older) in the household participate in the survey. The self-administered questionnaire booklet was designed to be taped shut and dropped in the mail upon completing the questions, as the back cover is printed with business-reply postage and pre-addressed for return to the Docking Institute.

The initial booklet was sent to 3,644 area residents in April 2022. A second wave, for non-responding households, was sent to 2,454 households on May 9, 2022. The combined mailing yielded a response rate of 2.3%, and too few booklets to meet study objectives. A second booklet was produced, and additional ABS samples were purchased (totaling 19,084 households). On August 10, 2022, a post card announcing a forthcoming booklet was sent to half of the households (9,542). The second booklet was sent to 19,084 households by September 9, 2022. A second post card, asking households to complete/return the booklet questionnaire and providing instructions for an online survey option, was mailed to 18,705 households on September 23, 2022.

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

In total, 25,182 booklets were mailed to area households. By October 26, 2022, 1,577 booklets were returned to the Institute as completed (792), undeliverable (769), and unusable/refusals (16). Excluding the undeliverable booklets and including 25 surveys completed online (for 817 completions total), the response rate is 3.35%. The sample margin of error for 817 completions is +/- 3.43%, assuming no response bias. Thus, we estimate there is a 95% chance that results in the sample of 817 are within +/-3.43% of what we would find in the full population if we could survey everyone.

From Labor Basin to Available Labor Pool

A total of 482 residents of Boone, Cooper, Howard, Moniteau, Monroe, Pettis, and Saline counties are included in the Boonville/Cooper County Labor Basin. As the Available Labor Pool consists of working-age residents interested in a new or different job, survey respondents 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 362. Of these 362 respondents, 55% (or 200) indicated that they were looking for another job or interested in a new or different given the right opportunities. This subgroup is considered the Available Labor Pool for the Boonville/Cooper County Labor Basin. The Margin of Error for the Available Labor Pool is +/- 6.92%.

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.⁹

⁹ 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

Boonville/Cooper County Labor Basin – The Boonville/Cooper County Labor Basin includes Boone, Cooper, Howard, Moniteau, Monroe, Pettis, and Saline Counties in central Missouri.

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

Available Labor Pool – The Available Labor Pool is composed of workers and potential categorized as either 1) currently not working *and* looking for employment, 2) currently not working in any manner *but* interested in a new or 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.

Expected Wage – The hourly wage that a respondent would expect to earn at a new or different job given the right opportunities. If a respondent offers a yearly salary instead of an hourly wage, an hourly 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 indicates he or she is willing to travel that is equal to or greater than the estimated 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 who 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 “within the necessary commute time” for a new job.

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.

Potential Entrepreneurs – Potential entrepreneurs are non-business owning members of the Available Labor Pool that have “seriously considered starting their own businesses in the past few years.”

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

General Labor includes occupations such as cleaning, construction, delivery, and maintenance.

High Skill Labor includes occupations such as police, firefighting, postal worker, welder, high-skilled mechanics, welder, computer technician and lab technician.

Service Sector includes occupations such as clerical worker, waitress, retail salesclerk, bookkeeper, para-professional, certified nurse’s assistant, nurse, teacher, and small business manager.

Professional Sector includes occupations such as administrator, business executive, professional salesperson, doctor, lawyer, professor, and engineer.

Appendix: Hourly Wage to Annual Salary Conversion Chart

Hourly Wage	Annual Salary	Hourly Wage	Annual Salary	Hourly Wage	Annual Salary
\$5.00	\$10,400	\$23.00	\$47,840	\$40.50	\$84,240
\$5.50	\$11,440	\$23.50	\$48,880	\$41.00	\$85,280
\$6.00	\$12,480	\$24.00	\$49,920	\$41.50	\$86,320
\$6.50	\$13,520	\$24.50	\$50,960	\$42.00	\$87,360
\$7.00	\$14,560	\$25.00	\$52,000	\$42.50	\$88,400
\$7.50	\$15,600	\$25.50	\$53,040	\$43.00	\$89,440
\$8.00	\$16,640	\$26.00	\$54,080	\$43.50	\$90,480
\$8.50	\$17,680	\$26.50	\$55,120	\$44.00	\$91,520
\$9.00	\$18,720	\$27.00	\$56,160	\$44.50	\$92,560
\$9.50	\$19,760	\$27.50	\$57,200	\$45.00	\$93,600
\$10.00	\$20,800	\$28.00	\$58,240	\$45.50	\$94,640
\$10.50	\$21,840	\$28.50	\$59,280	\$46.00	\$95,680
\$11.00	\$22,880	\$29.00	\$60,320	\$46.50	\$96,720
\$11.50	\$23,920	\$29.50	\$61,360	\$47.00	\$97,760
\$12.00	\$24,960	\$30.00	\$62,400	\$47.50	\$98,800
\$12.50	\$26,000	\$30.50	\$63,440	\$48.00	\$99,840
\$13.00	\$27,040	\$30.50	\$63,440	\$48.50	\$100,880
\$13.50	\$28,080	\$31.00	\$64,480	\$49.00	\$101,920
\$14.00	\$29,120	\$31.50	\$65,520	\$49.50	\$102,960
\$14.50	\$30,160	\$32.00	\$66,560	\$50.00	\$104,000
\$15.00	\$31,200	\$32.50	\$67,600	\$50.50	\$105,040
\$15.50	\$32,240	\$33.00	\$68,640	\$51.00	\$106,080
\$16.00	\$33,280	\$33.50	\$69,680	\$51.50	\$107,120
\$16.50	\$34,320	\$34.00	\$70,720	\$52.00	\$108,160
\$17.00	\$35,360	\$34.50	\$71,760	\$52.50	\$109,200
\$17.50	\$36,400	\$35.00	\$72,800	\$53.00	\$110,240
\$18.00	\$37,440	\$35.50	\$73,840	\$53.50	\$111,280
\$18.50	\$38,480	\$36.00	\$74,880	\$54.00	\$112,320
\$19.00	\$39,520	\$36.50	\$75,920	\$54.50	\$113,360
\$19.50	\$40,560	\$37.00	\$76,960	\$55.00	\$114,400
\$20.00	\$41,600	\$37.50	\$78,000	\$55.50	\$115,440
\$20.50	\$42,640	\$38.00	\$79,040	\$60.00	\$124,800
\$21.00	\$43,680	\$38.50	\$80,080		
\$21.50	\$44,720	\$39.00	\$81,120		
\$22.00	\$45,760	\$39.50	\$82,160		
\$22.50	\$46,800	\$40.00	\$83,200		