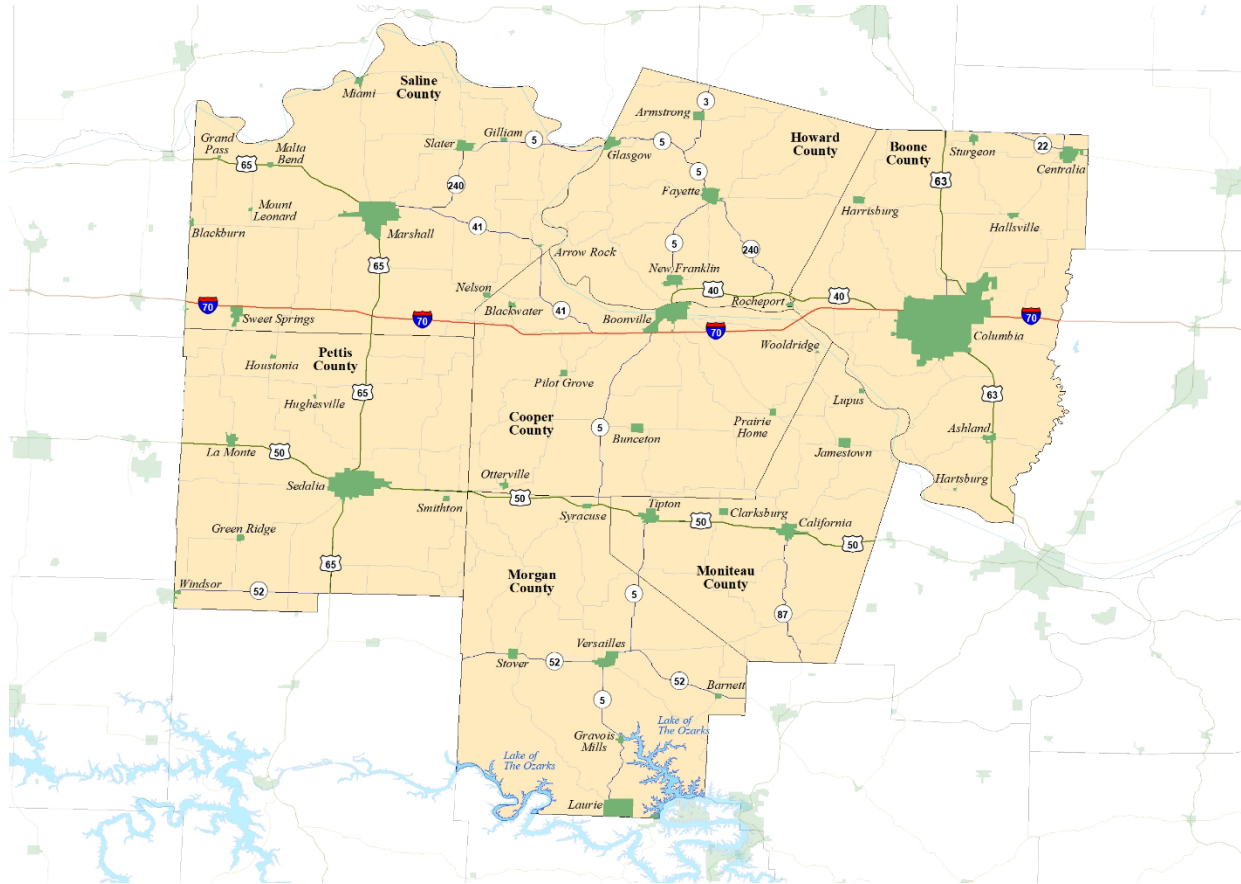


Boonville/Cooper County Labor Basin Labor Availability Analysis – 2020

Including a comparison to data from the
2015 Labor Availability Analysis

Boone • Cooper • Howard
Moniteau • Morgan • Pettis • Saline



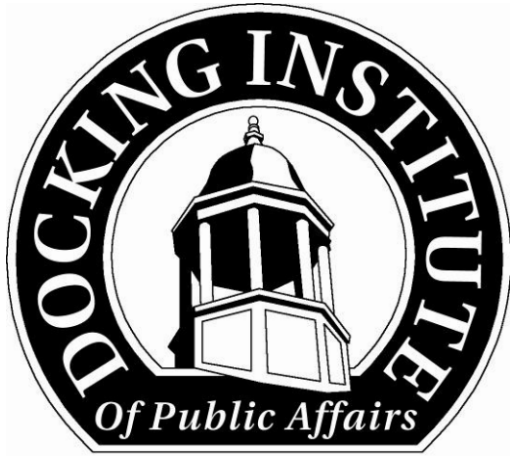
Prepared For

**Boonslick Community Development Corporation
Boonville Missouri**

By

The Docking Institute of Public Affairs

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Mission:

To Facilitate Effective Public Policy Decision-Making.

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Boonville/Cooper County Labor Basin Labor Availability Analysis - 2020

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2015 Labor Availability Analysis

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Boonville/Cooper County Labor Basin Labor Availability Analysis

Executive Summary

The Boonville/Cooper County Labor Basin includes Boone, Cooper, Howard, Moniteau, Morgan, Pettis, and Saline counties in Missouri. The purpose of this report is to assess the “Available Labor Pool” in this labor basin. The “Available Labor Pool” represents those who indicate that they are looking for employment or would consider changing their jobs for the right employment opportunity.

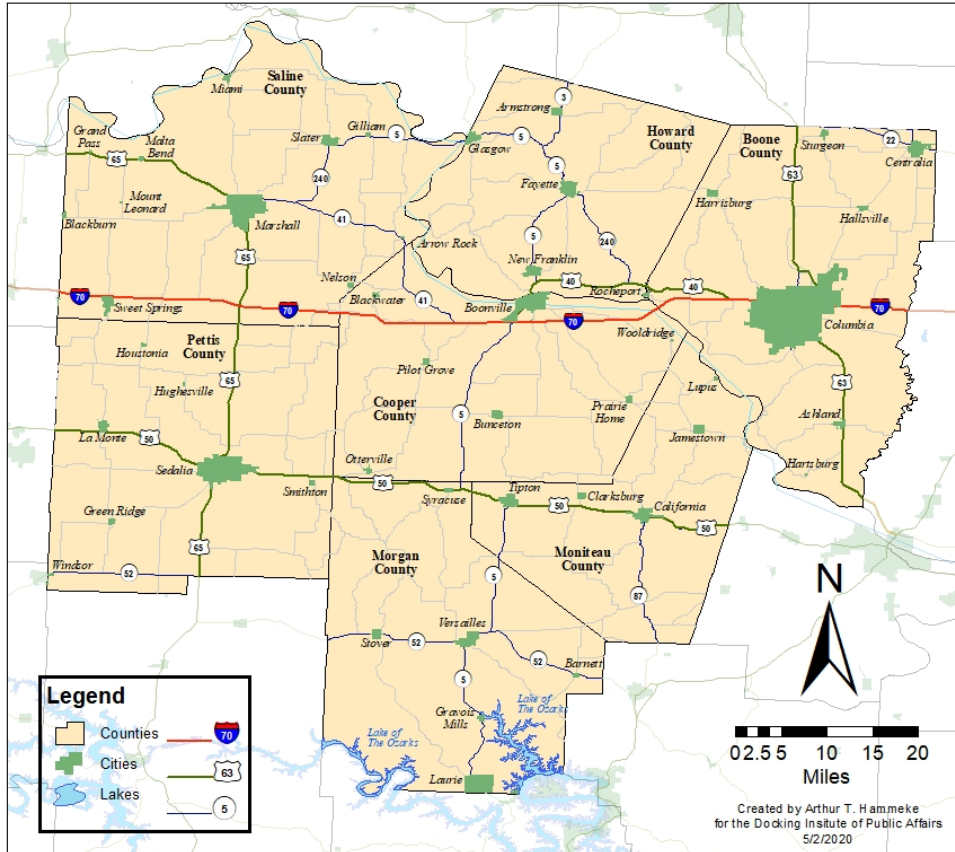
The Docking Institute’s independent analysis of this labor basin shows that:

- The population of the Boonville/Cooper County Labor Basin is 310,032. About 33% of the population (or 104,343 individuals) is considered to be part of the Available Labor Pool.
- Of the non-working members of the Available Labor Pool, an estimated 7,314 (7.0%) are currently looking for work and 19,581 (18.8%) are interested in working for the right opportunities. Of the working members of the Available Labor Pool, 16,255 (15.6%) are currently looking for work, while 61,194 (58.6%) are interested in a different job given the right opportunities.
- About three-quarters (73%) of the Available Labor Pool has at least some college experience and 97% has at least a high school diploma. The average age for members of the Pool is about 45 years old, and women make up half (50.8%) of the Pool.
- An estimated 11,472 members of the Available Labor Pool are currently employed as general laborers, while an additional 9,856 work in government services or technical/high skill blue-collar occupations. An estimated 38,221 members of the Pool work in service sector jobs, while 16,981 work in professional white-collar jobs. More than a quarter (27,812) are not currently working.
- About 76% 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.”
- About two-fifths (42.5%) of the members of the Available Labor Pool will commute up to 45 minutes, one way, for an employment opportunity, while 77.3% will commute up to 30 minutes for employment.
- The four most important benefits are, in order, good salary or hourly pay, good retirement benefits, good vacation benefits, and on-the-job (OTJ) or paid training.
- An estimated 8,139 members (8%) of the Available Labor Pool are interested in a new job at \$10 an hour, 27,234 (26%) are available at \$15 an hour, and 51,128 (49%) are available at \$20 an hour.
- Of the 76,531 members in the subset of *employed members* of the Available Labor Pool, 14,927 (20%) consider themselves underemployed.
- A comparison of data from 2015 and 2020 shows that there was a larger percentage of *employed* pool members in 2015 than in 2020. There is a smaller percentage of general laborers in the 2020 pool than in the 2015 pool, as well as a larger percentage of professional workers in 2020 than in 2015.

The Boonville/Cooper County Labor Basin

The Boonville/Cooper County Labor Basin includes seven counties in central Missouri (see Map 1 below).

Map 1: Boonville/Cooper County Labor Basin



The Boonville/Cooper County Labor Basin has a total population of approximately 310,032, and a Civilian Labor Force of 153,443. The total number of employed is 149,190 and the average unemployment rate was 2.77% at the time of this study.

The Docking Institute's analysis suggests that the basin contains an Available Labor Pool of 104,343 individuals. The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for full-time employment, 2) not working *but* interested in full-time employment, 3) currently working (full- or part-time) *and* looking for other full-time employment, and 4) currently employed *but* interested in different full-time employment for the right opportunities. Please see the Methods section – page 30 – 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

The majority of 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?
- What types of considerations (pay, benefits, commute time) shape their decision-making?
- What proportion of the Available Labor Pool is willing to change fields of employment?
- What work shifts are Available Labor Pool members willing to work?
- What is the level of job satisfaction among the Available Labor Pool members?
- How many Available Labor Pool members are underemployed?

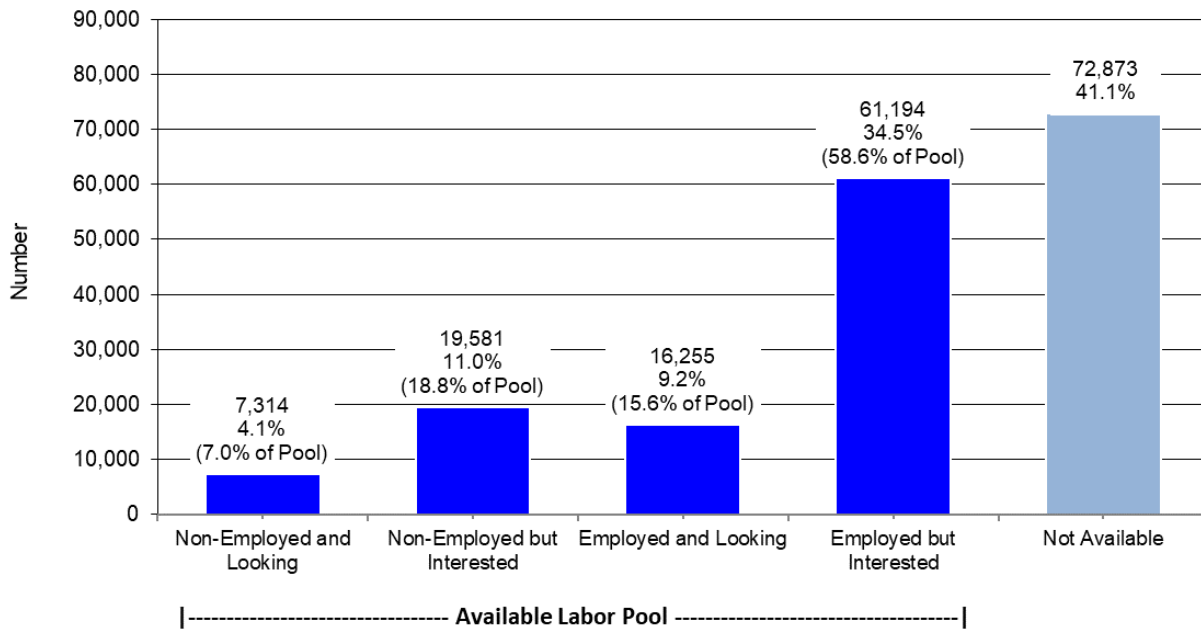
Comparative Analysis

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

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

It is estimated that 7,314 (7.0% members of the Available Labor Pool) are non-employed¹ and looking for employment, while 19,581 (18.8%) are non-employed but interested in a job for the right opportunities. In addition, 16,255 (15.6%) members of the Pool are employed and currently looking for different employment, while 61,194 (58.6%) 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:

- Ten percent or more of the entire labor basin's Available Labor Pool is located in Zip Codes areas within Boone and Pettis counties. (See the purple areas on the map.)
- Between 5% and 9.99% of the entire labor basin's Available Labor Pool is located in Zip Code areas within Cooper and Boone counties. (See the red areas on the map.)
- Zip Code areas primarily in Boone, Moniteau, Morgan, and Saline counties contain 1% to 4.99% of the basin's Available Labor Pool. (See the orange areas on the map.)
- Zip Code areas in every county contain up to .99% of the Pool. (See the yellow and cream areas on the map.)

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

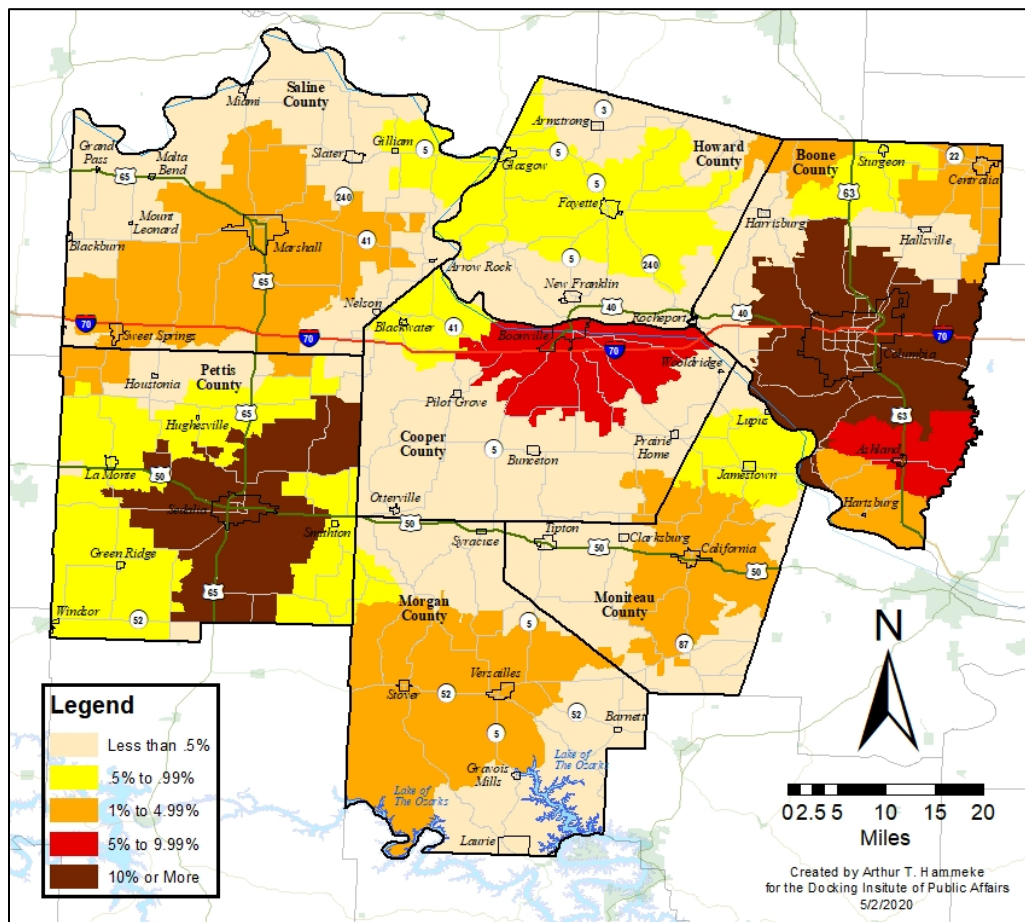


Table 1 shows the gender, age and education levels of the 104,343-member Available Labor Pool. Half (50.8%) of the Pool is women, and the average age is about 45 years old. Most (96.6%) have at least a high school diploma, 73% have **at least** some college education, 40.9% have **at least** a bachelor's degree.

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

Age Information		Age in 2020		
Range		19 to 69		
Mean Average		44		
Median Average		46		
Gender		Number	Percent	
Female		52,977	50.8	
Male		51,366	49.2	
Total		104,343	100	
Highest Level of Education Achieved		Number	Percent	Cumulative Percent
Doctoral Degree		3,548	3.4	3.4
Masters Degree		11,373	10.9	14.3
Bachelors Degree		27,755	26.6	40.9
Associates Degree		10,643	10.2	51.1
Some College (including current students)		22,851	21.9	73.0
High School Diploma		24,625	23.6	96.6
Less HS Diploma		3,548	3.4	100
Total		104,343	100	
"Do you speak Spanish?"		Number	Percent	
"Yes"		23,780	22.8	} These percentages represent portions of 22.8%
<i>Speak Very Well</i>		2,462	10.4	
<i>Speak Fairly Well</i>		3,976	16.7	
<i>Speak Only a Little</i>		17,341	72.9	
			100	

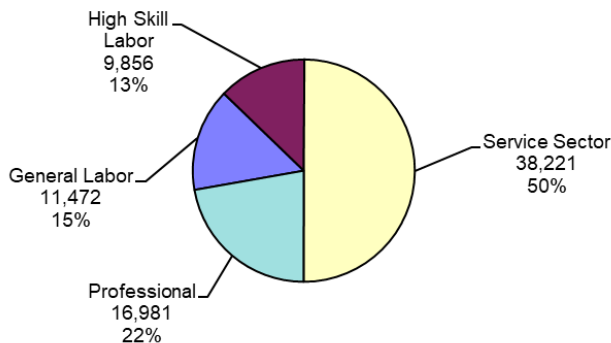
Table 2 shows the various occupational categories of the 104,343-member Available Labor Pool. General labor occupations represent 11.0% of the entire Available Labor Pool, while high skill blue-collar jobs make up 9.4%. Traditional service-related occupations represent 36.6% of the Available Labor Pool, while professional occupations represent 16.3% of the Available Labor Pool. Non-employed members of the Pool make up more than a quarter (26.7%) of the total.

Table 2: Major Occupational Categories of Available Labor

	Number	Percent	Years at Job	
			Mean	Median
General Labor/Delivery	5,483	5.3	12.5	10.0
Manufacturing/Maintenance/Trucking	5,989	5.7	12.0	7.0
Total General Labor	11,472	11.0	12.3	8.5
Mechanic/Welder/Comp Tech	4,754	4.6	14.5	9.2
Crew Management/Protection Services	5,102	4.9	10.3	10.0
Total High Skill Labor	9,856	9.4	12.4	9.6
Customer Service	13,787	13.2	8.4	3.4
Clerical	857	0.8	13.3	16.2
Office or Dept Manager	11,705	11.2	7.5	4.9
Health Aid/Nurse	5,079	4.9	7.3	4.0
Education Aid/Teacher	6,793	6.5	13.7	12.1
Total Service Sector	38,221	36.6	10.0	8.1
Exec Management	4,296	4.1	5.9	5.0
Accounting/Engineering	5,921	5.7	6.5	5.8
Doctor/Professor/Attorney	5,306	5.1	17.6	18.4
Writer/Artist/Musician	1,459	1.4	10	10.0
Total Professional Sector	16,981	16.3	10.0	9.8
Homemaker/Student/Unemployed	9,766	9.4	n/a	n/a
Retired/Disabled	18,047	17.3	n/a	n/a
Total Non-Employed	27,812	26.7		
Total	104,343	100		

Figure 2 shows the occupational sectors of the *employed members* of the Available Labor Pool only. The *percentages* shown in Figure 2 differ from those presented in Table 2 because the table includes non-employed Available Labor Pool members, while the figure does not.

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 assessing work skills and previous work experience.

Table 3 and Figure 3 (next page) show the current employment status and previous work or training experience of 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, 3,733 members of the Pool are currently employed as general labor, construction, cleaners, and similar positions. An additional 2,917 Pool members (employed and non-employed) had previous employment experience or training in one of those jobs, for a total of 6,650 individuals.

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

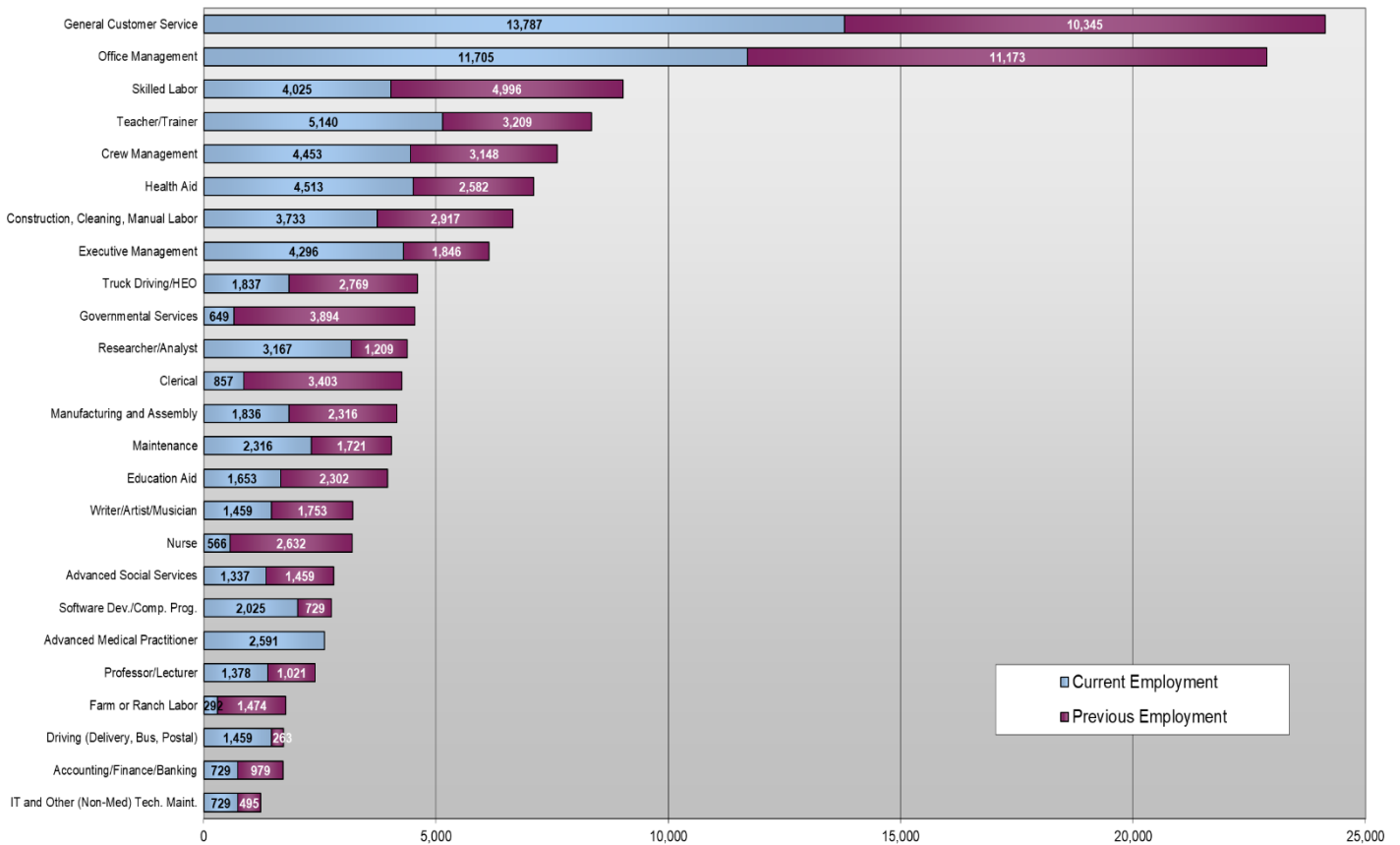
	Current Employment* Number +	Previous Work/Training Number =	Current plus Previous Work or Training** Number
Working with Hands			
Construction, Cleaning, Manual Labor	3,733	2,917	6,650
Farm or Ranch Labor	292	1,474	1,765
Manufacturing and Assembly	1,836	2,316	4,152
Maintenance	2,316	1,721	4,038
Driving (Delivery, Bus, Postal)	1,459	263	1,721
Truck Driving/HEO	1,837	2,769	4,606
Skilled Labor	4,025	4,996	9,021
Crew Management	4,453	3,148	7,601
Working with People			
General Customer Service	13,787	10,345	24,132
Office Management	11,705	11,173	22,877
Governmental Services	649	3,894	4,543
Executive Management	4,296	1,846	6,141
Advanced Social Services	1,337	1,459	2,795
Working with Numbers			
Clerical	857	3,403	4,260
Accounting/Finance/Banking	729	979	1,708
Researcher/Analyst	3,167	1,209	4,376
Working with Technology			
IT and Other (Non-Med) Tech. Maint.	729	495	1,224
Software Dev./Comp. Prog.	2,025	729	2,754
Engineer/Designer	0	924	924
Providing Health Services			
Health Aid	4,513	2,582	7,095
Nurse	566	2,632	3,198
Advanced Medical Practitioner	2,591	0	2,591
Providing Educational Services			
Education Aid	1,653	2,302	3,955
Teacher/Trainer	5,140	3,209	8,349
Professor/Lecturer	1,378	1,021	2,399
Creative Arts			
Writer/Artist/Musician	1,459	1,753	3,212
Total	76,531	69,559	146,090

* 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 and reordered. 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 13,787 working Pool members currently employed in this category and 10,345 previously employed/trained in this category, for a total of 24,132 individuals (total not shown in figure).

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



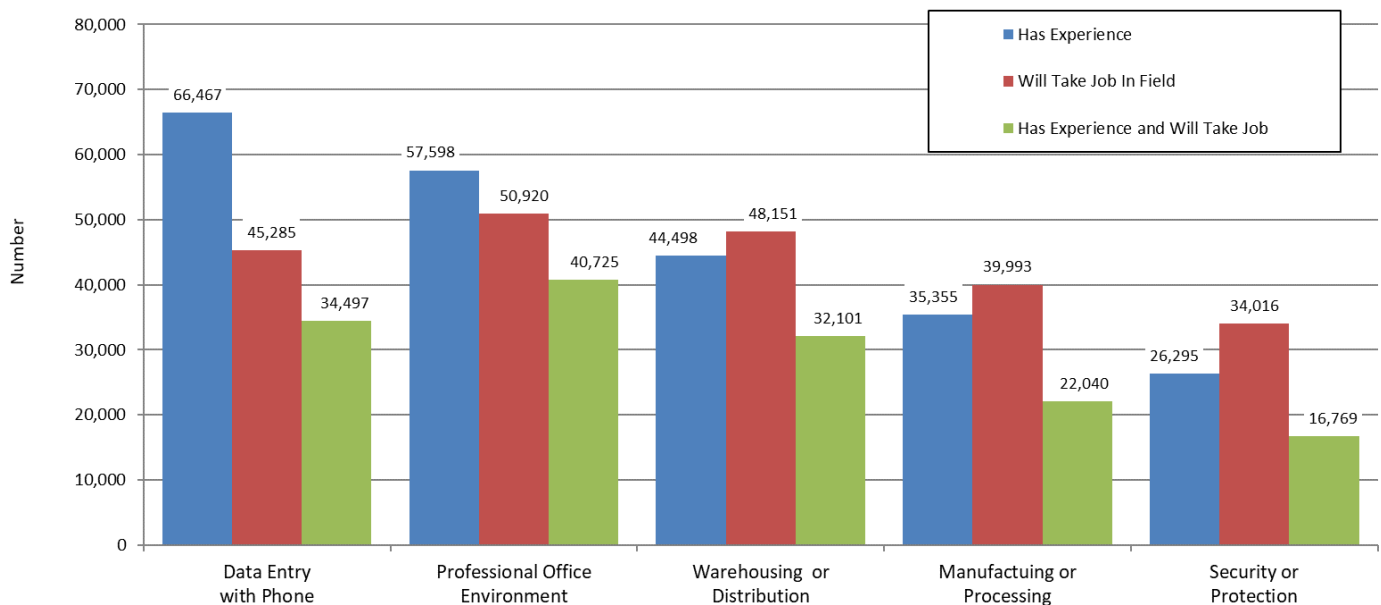
In addition to collecting data regarding the current employment status and previous work or training experience through a series of “open-ended” survey questions (the results of which are shown in the previous table and figure), respondents were asked about the five specific employment areas listed in Figure 4. Respondents were first asked if they had training or work experience in a specific field and then if they would take a job in that field regardless of their prior training or experience.

The figure shows that an estimated 66,467 Pool members report receiving training and/or having experience in data entry with telephone operation, while fewer (45,285 individuals) would consider employment in that field. An estimated 57,598 members of the Pool have training and/or experience in a professional office environment, while fewer (50,920 individuals) would take a job in that field.

An estimated 44,498 members of the Pool have training or experience working in a distribution center or warehouse, while 48,151 would consider a job in that field. An estimated 35,355 have experience working in a manufacturing plant or processing center, while 39,993 would take a job in that field. Finally, 26,295 have training or experience in protection or security services, while 34,016 would consider employment in that field.

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

Figure 4: Work Experience / Willing to Work in Field



Survey respondents indicating training or experience in distribution/warehousing or in 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. The figures show that not quite a third (31%) of those indicating distribution/warehousing experience moved materials or loaded trucks. Additionally, about two-fifths (42%) of those indicating training or experience in manufacturing/processing worked in or trained in procession, fabrication or assembly.

Figure 5: Work Experience in Distribution Center or Warehouse

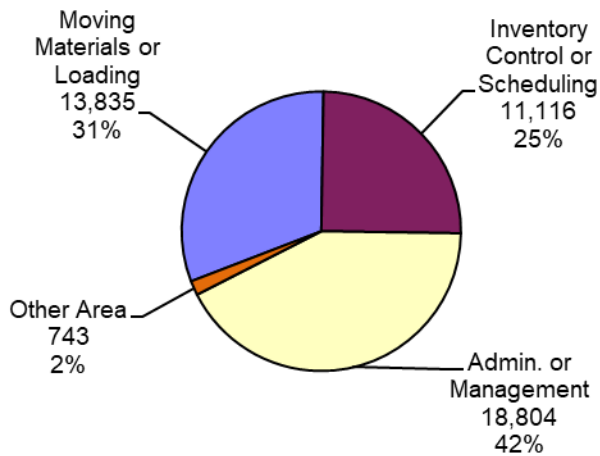
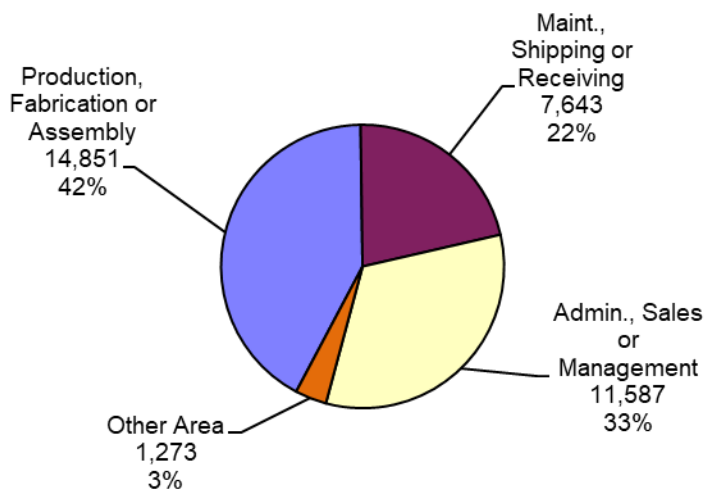


Figure 6: Work Experience in Manufacturing or Processing



Educational Experience and Job Satisfaction

Respondents that had completed at least some college or are currently enrolled in a community college, college, or university were asked to provide their major area of study. Answer options included:

Social Sciences: Sociology, Psychology, Anthropology, Politics and Social Work.

Biological Sciences and Health: Biology, Agriculture, Nursing, Pre-med, Pre-vet and Human Performance.

Physical Sciences and Engineering: Physics, Geology, Chemistry and Engineering.

Business and Economics: Management, Accounting, Finance, Marketing and Economics.

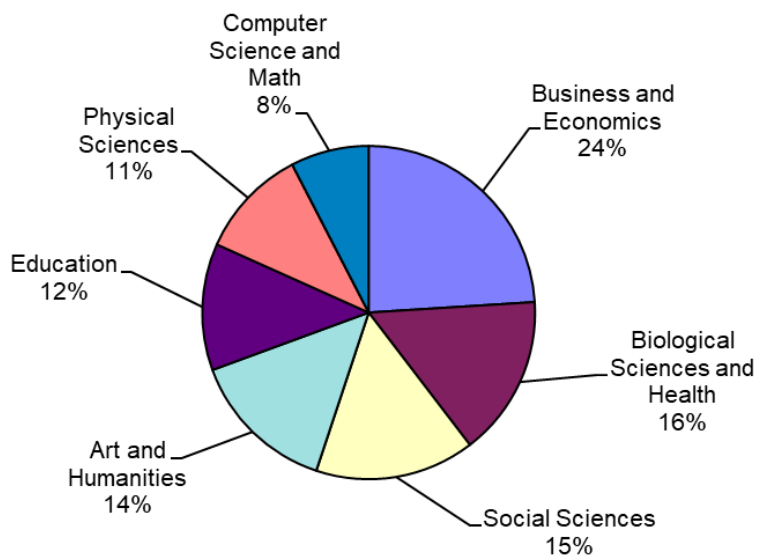
Education: Elementary and Secondary Teaching.

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

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

Figure 7 shows that the largest group of Available Labor Pool members indicate a major in business and economics (24%). Also shown are Biological sciences (16%), social sciences (15%), arts and humanities (14%), education (12%), physical sciences (11%), and computer science and math (8%).

Figure 7: Undergraduate College Major (n=42,676)



Survey respondents with at least some college education were asked if they are attending or have attended a technical or community college. Figure 8 shows that 12% of these respondents have technical or community college experience.

Figure 8: Community College Experience

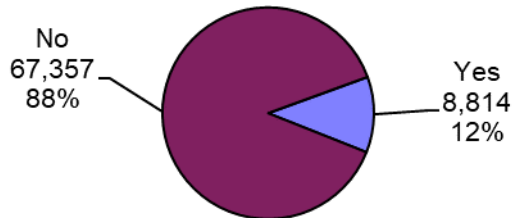


Figure 9 shows the area of study for community college students. A fifth (20%) report studying nursing/health related subjects, while 13% report studying information or computer technology. Another 9% report studying automotive technology, 7% report studying in manufacturing technology, and 6% report studying cosmetology. Less than 5% are studying (or have studied) truck driving and office skills.

Figure 9: Community College Area of Study (n=8,814)

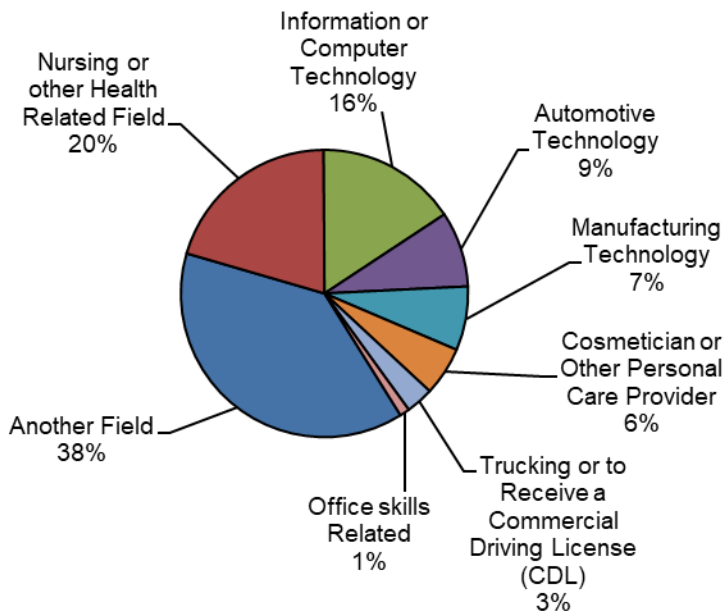


Figure 10 and Table 4 show responses to questions regarding job satisfaction. The figure and table report responses from *working survey respondents* only. The figure shows, for example, about 27% of the working Available Labor Pool respondents “strongly agree” with a statement suggesting that they “enjoy the things I do,” while 69% “agree” with that statement.

In general, the figure shows that Available Labor Pool members are generally satisfied with their work and their work environments but are simply looking for and/or are available for new employment. Only about 56%, however, feel that they have a “fair chance at promotion” to another position.

Figure 10: Job Satisfaction Among Available Labor Pool Workers

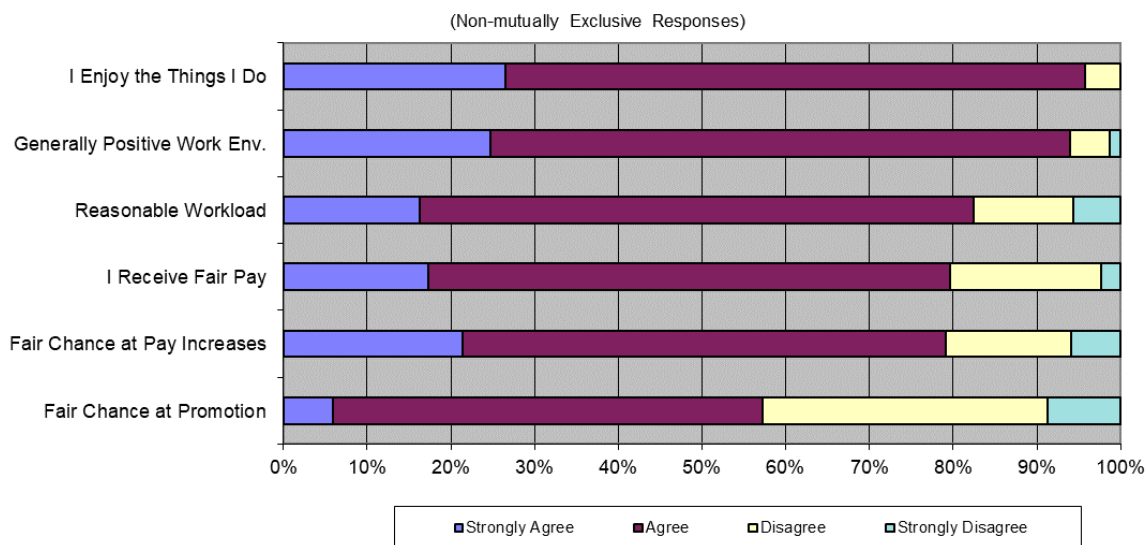


Table 4 shows combined “strongly agree” and “agree” responses of working Pool members and working non-Pool respondents. The table shows, for example, 95.8% of the working Pool members *at least* “agree” with the statement “I enjoy the things I do,” while about the same (97.4%) of the *working* non-Pool respondents suggest the same.

The statement with the largest percentage of disparity between working Pool members and working non-Pool respondents is with regards to having “I receive fair pay.” Almost 80% of the working Pool respondents *at least* “agree” that they receive fair pay, while 7.7% more (87.4%) of the working non-Pool members feel the same way.

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

	Strongly and Agree		Difference
	Pool Only Percent	Non-Pool Only* Percent	
I Enjoy the Things I Do	95.8	97.4	-1.6
Generally Positive Work Env.	94.0	98.3	-4.4
Reasonable Workload	82.5	87.4	-4.9
I Receive Fair Pay	79.7	87.4	-7.7
Fair Chance at Pay Increases	79.1	81.7	-2.6
Fair Chance at Promotion	57.3	54.5	2.8

*This column represents working non-Pool respondents.

Considerations for Employment

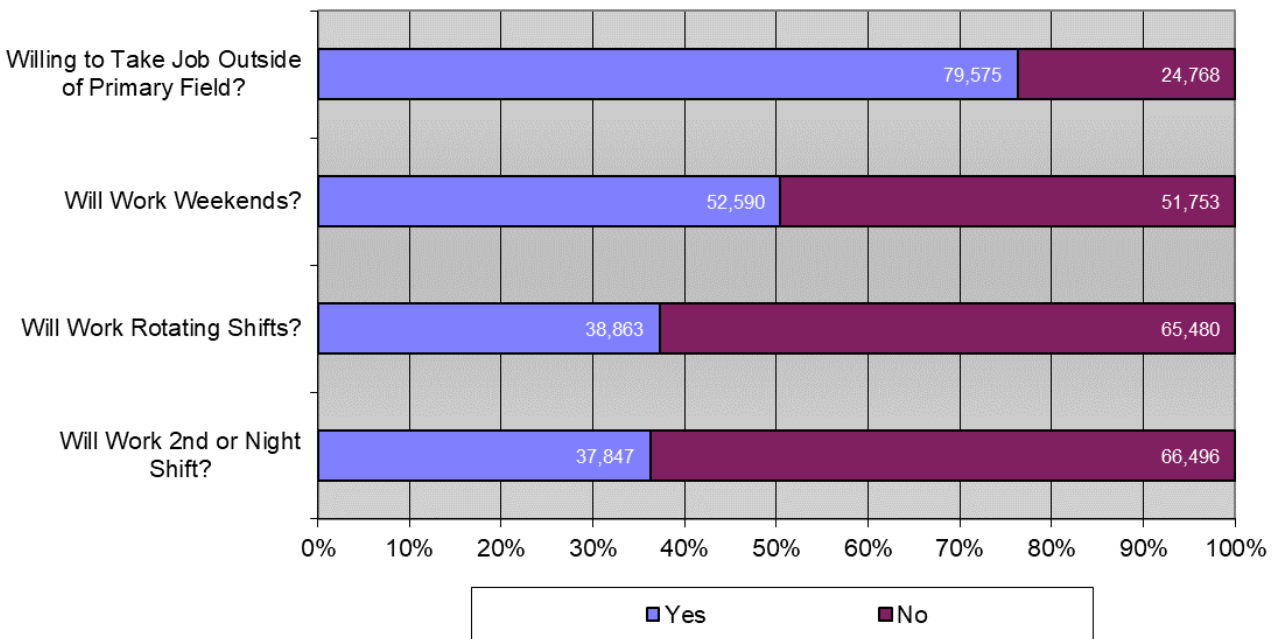
An important consideration for many employers looking to locate or expand operations is whether workers are willing to pursue new employment opportunities. Some workers may be available for new employment but are unwilling to switch from their current job to a different type of position. A large percentage 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. Figure 11 shows that 79,575 (76.3%) members of the Available Labor Pool are willing to accept positions outside of their primary fields of employment.

Figure 11 also shows responses to three questions regarding work shifts. Respondents were asked if they would be willing to work weekends, rotating shifts, and a second or night shifts.

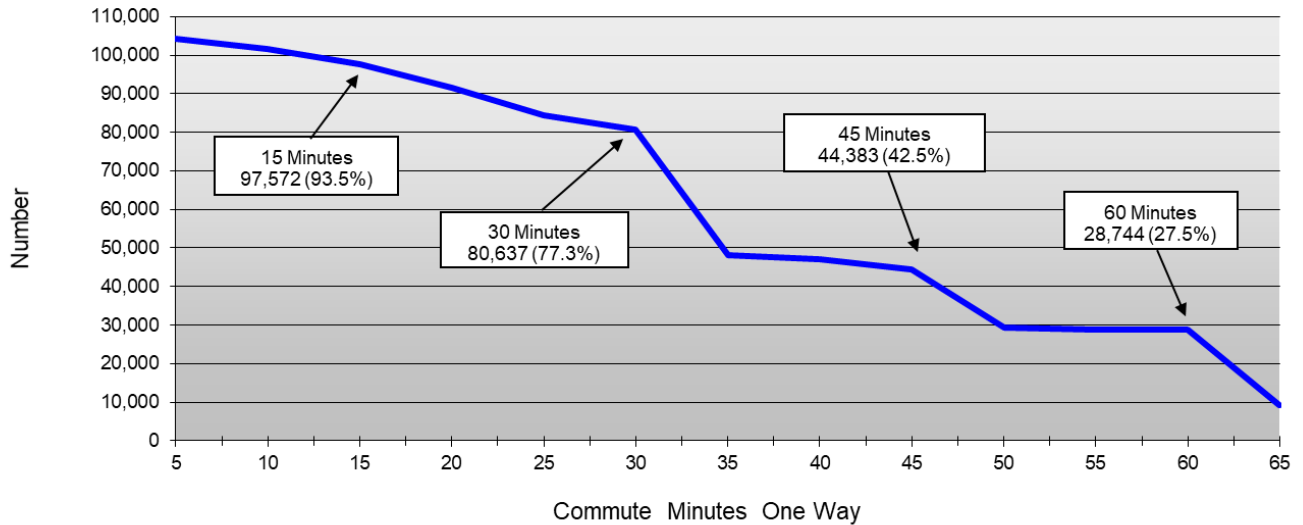
The figure shows that about 50% of the Available Labor Pool will work weekends, about 37% will work rotating shifts, and 36% will work a second shift for a new or different job.

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 suggest that the Available Labor Pool in the Boonville/Cooper County Labor Basin is open to commuting. More than two-fifths (42.5%) of the members of the Available Labor Pool will commute up to 45 minutes, one way, for an employment opportunity, while 77.3% will commute up to 30 minutes for employment. Almost all (93.5%) will travel up to 15 minutes for employment.

Figure 12: Available Labor by Commute Minutes



Available Labor Pool members were asked about various benefits that might be important for 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. Answer options included “yes” and “no.”

Figure 13 (next page) shows that the four most important benefits are, in order, good salary or hourly pay, good retirement benefits, good vacation benefits, and on-the-job (OTJ) or paid training. All of these benefits are considered “very important” by about 80% or more of the Available Labor Pool each.

Good health benefits and flexible hours/flex-time follow closely with 77% and 74%, respectively. The least desired benefits are good educational assistance and transportation assistance, considered “very important” by 43% and 20% of Available Labor Pool members, respectively.

Figure 13: Benefits Very Important to Change Employment

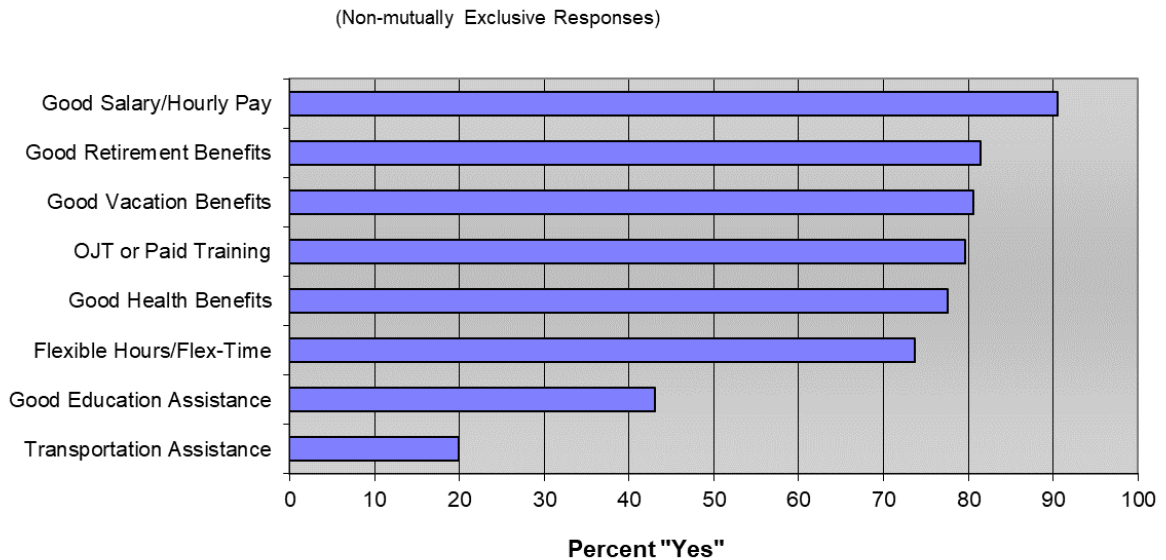


Table 5 lists the same benefits and percentages as shown in Figure 13. In addition, the center column shows the percentages of *working* Pool members who are currently offered those benefits. The “difference” column compares the two groups of respondents. For example, 90.5% Available Labor Pool members rated good salary/hourly pay as a “very important” benefit for a new or different job, while 84.1% of *working* pool members report receiving good salary/hour pay. This represent a difference of 6.4%.

Table 5: Desired Benefits and Current Benefits Offered

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent	Difference
Good Salary/Hourly Pay	90.5	84.1	6.4
Good Retirement Benefits	81.4	76.5	4.9
Good Vacation Benefits	80.6	78.9	1.7
OJT or Paid Training	79.6	78.8	0.8
Good Health Benefits	77.6	82.7	-5.1
Flexible Hours/Flex-Time	73.7	67.7	6.0
Good Education Assistance	43.1	49.8	-6.7
Transportation Assistance	19.9	20.0	-0.1

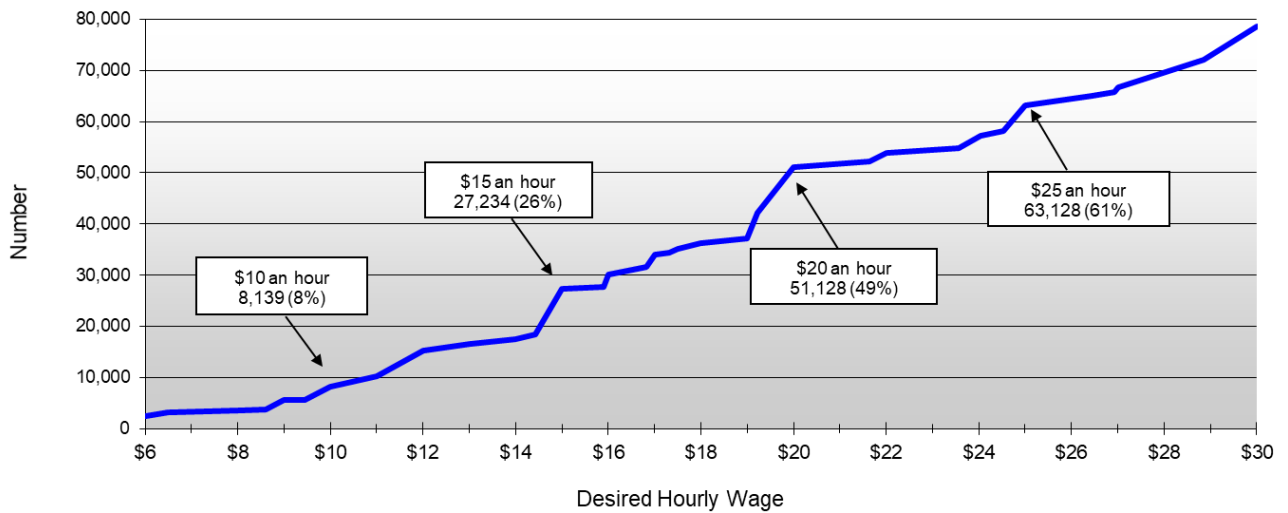
*This column represent working Pool members who receive the benefit.

Wage Demands of Available Labor Pool

Wage demands are another important consideration for employers and economic developers. Figure 14 shows desired wages for members of the Available Labor Pool. It is estimated that 63,128 people (or 61% of the available labor) are interested in a new job at \$25 an hour².

An estimated 51,128 (49%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 27,234 (26%) are interested at \$15 an hour. An estimated 8,139 people (8%) are interested in a new job at \$10 an hour.

Figure 14: Available Labor by Hourly Wage



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

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 Boonville/Cooper County Labor Basin, *employed members of the Available Labor Pool* were presented with a scenario describing underemployment.³ 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 76,531 *employed members* of the Available Labor Pool (shown in Figure 15), a fifth answered “yes” to one or more of the questions presented above. These Pool members are considered “underemployed.” Figure 16 shows that the underemployed workers represent 20% (or 14,927 individuals) of the employed members of the Pool.

Figure 15: Employed and Unemployed Members of the Available Labor Pool

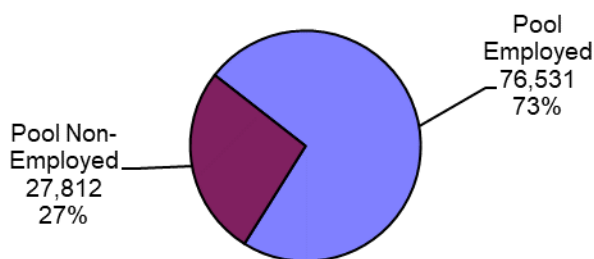
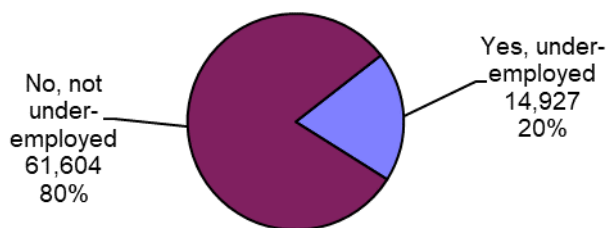


Figure 16: Underemployed Workers



³ “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 17 shows the percentages of the positive responses (i.e., “yes” answers) to the various measures of underemployment. Almost 20% of this subset of the Available Labor Pool consider themselves underemployed because they earned more money at a past but similar job, while slightly fewer possess education levels exceeding those needed for their current jobs. About 16% also possess skills that are not being used currently on the job, while 9% feel they are not offered enough work hours.

Figure 17: Reasons for Underemployment (n=14,927)

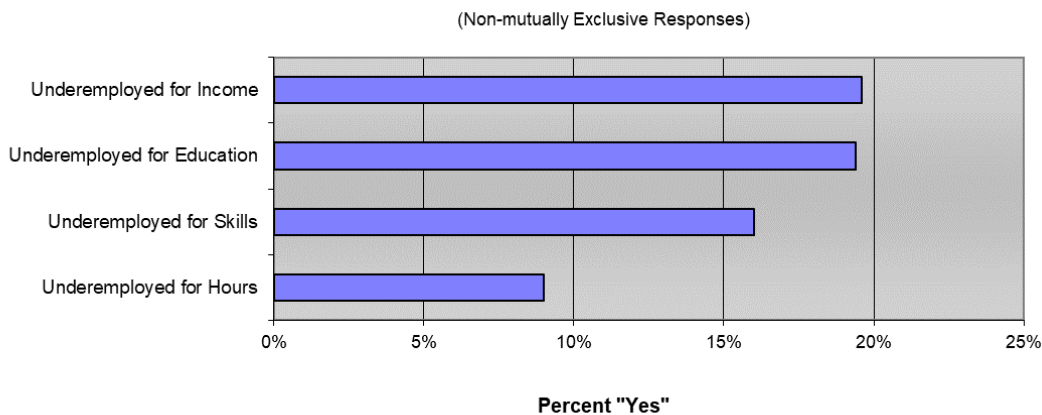


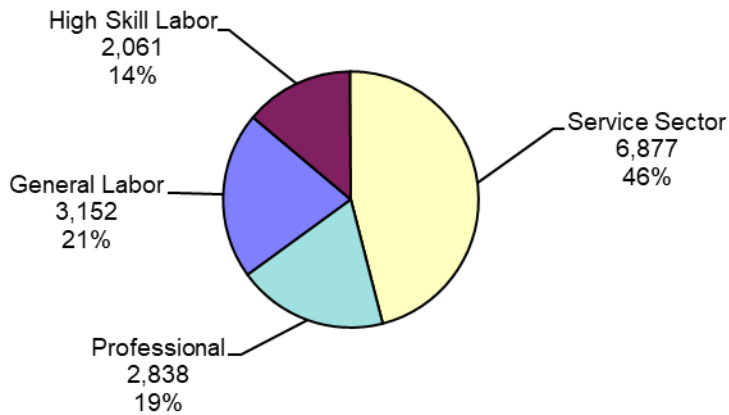
Table 6 and Figures 18 and 19 (next page) show some characteristics of the underemployed members of the Available Labor Pool. Table 6 shows that the education levels of the underemployed. The table shows that 83.6% of the underemployed workers have *at least* some college experience, while 97.2% have a *least* a high school diploma.

Table 6: Highest Level of Education Achieved Among Underemployed

	Number	Percent	Cumulative Percent
Doctoral Degree	1,617	10.8	10.8
Masters Degree	2,340	15.7	26.5
Bachelors Degree	2,565	17.2	43.7
Associates Degree	3,577	24.0	67.7
Some College	2,385	16.0	83.6
High School Diploma Only	2,025	13.6	97.2
Less HS Diploma	418	2.8	100.0
Total	14,927	100	

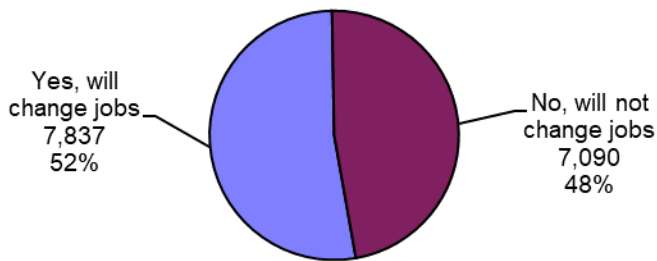
Figure 18 shows that 21% of the underemployed workers are general laborers and 14% are high skill blue-collar workers. The highest percentage of underemployed workers are employed as service sector and support workers (46%), while 19% hold professional positions.

Figure 18: Occupational Sectors of Underemployed Workers



Underemployed workers were asked if they “are available or a new or different job because they are underemployed?” Figure 19 shows that 52% (or 7,837 individuals) of the underemployed workers are seeking new employment to address underemployment.

Figure 19: Seeking New Employment to Address Underemployment



Comparative Analysis (2015 and 2020 Reports)

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

Table 7 shows population, Civilian Labor Force (CLF), employment, average unemployment rate, and Available Labor Pool data presented in both reports.

The population of the Boonville/Cooper County Labor Basin has increased from 302,129 to 310,032 (or by 7,903 individuals) in the past five years. The Civilian Labor Force, on-the-other-hand, decreased from 161,119 to 153,443, and the number of employed individuals decreased from 154,718 to 149,190. The unemployment rate also decreased from 3.97% to 2.77% in five years.

The table also shows the Available Labor Pools for both years. The size of the Pool decreased from 105,778 in 2015 to 104,343 in 2020.

Table 7: Key Population and Employment Indicators

Boonville/Cooper County Missouri	2015 Study	2020 Study
Labor Basin Population	302,129	310,032
Civilian Labor Force	161,119	153,443
Employed	154,718	149,190
Average Unemployment Rate	3.97%	2.77%
Available Labor Pool	105,778	104,343

Figure 20 shows that there is a larger proportion of *non-employed* Available Labor Pool members *interested* in a new or different job in 2020 than in 2015. On-the-other-hand, the 2015 pool had higher proportions of *non-employed and looking*, *employed and looking*, and *employed but interested* pool members.

Figure 20: Available Labor Pool Comparison

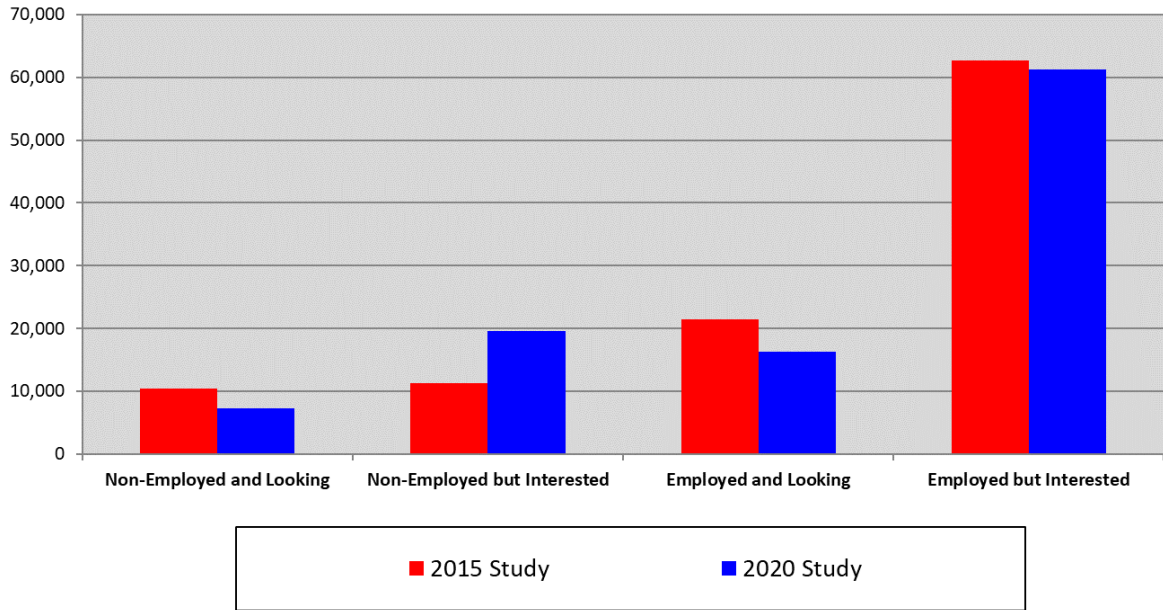


Table 8 compares occupational sectors and education levels from the two studies. There was a larger percentage of employed pool members in 2015 than in 2020. There is a smaller percentage of general laborers in the 2020 pool than in the 2015 pool, as well as a larger percentage of professional workers in 2020 than in 2015.

The education levels among the two pools are somewhat similar, although the 2015 pool had a larger percentage of pool members with bachelor's degrees, while the 2020 pool had larger percentages of members with some college experience and high school diplomas.

Table 8: Available Labor Pool Occupational Sectors and Education Levels Comparison

Occupational Sector	2015 Study		2020 Study	
	Number	Percent	Number	Percent
General Labor	22,414	21.2	11,472	11.0
High Skill Labor	9,841	9.3	9,856	9.4
Service Sector	38,254	36.2	38,221	36.6
Professional	13,653	12.9	16,981	16.3
Non-Working	21,616	20.4	27,812	26.7
Total	105,778	100	104,343	100

Highest Education	2015 Study			2020 Study		
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	4,159	3.9	3.9	3,548	3.4	3.4
Masters Degree	11,809	11.2	15.1	11,373	10.9	14.3
Bachelors Degree	35,440	33.5	48.6	27,755	26.6	40.9
Associates Degree	12,316	11.6	60.2	10,643	10.2	51.1
Some College	17,914	16.9	77.2	22,851	21.9	73.0
High School Diploma	21,611	20.4	97.6	24,625	23.6	96.6
Less HS Diploma	2,526	2.4	100	3,548	3.4	100
Total	105,778	100		104,343	100	

Table 9 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 higher percentages of 2015 pool members than 2020 pool members answered “yes” to all four questions.

Table 9: Willing to Work Outside of Field and Work Shift Comparison

	2015 Study		2020 Study	
	Number	Percent	Number	Percent
<i>(Ranked by 2020 Report)</i>				
Willing to Take Job Outside of Primary Field?	83,846	79.3	79,575	76.3
Will Work Weekends?	62,973	59.5	52,590	50.4
Will Work 2nd or Night Shift?	54,703	51.7	38,863	37.2
Will Work Rotating Shifts?	45,322	42.8	37,847	36.3

Figure 21 shows a comparison of “minutes willing to commute” for the two studies.

The patterns are similar. The “drop-off” between 30 minutes and 35 minutes for the 2015 is slightly steeper than the 2020 study.

Figure 21: Available Labor by Commute Minutes Comparison

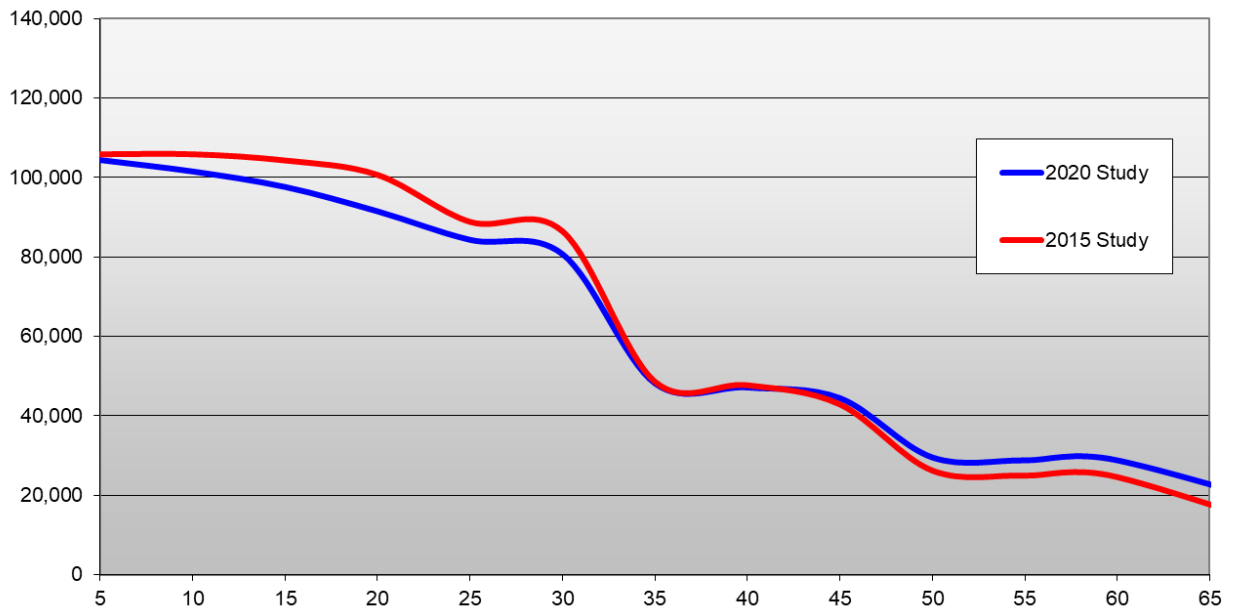


Table 10 shows desired benefits to take a new or a different job for each labor study, ordered by the 2020 study. The table shows that good salary/hourly pay is the most important benefit and transportation assistance is the least important benefit in both studies.

The items of greatest change between 2015 and 2020 is “good educational assistance,” with 51.9% indicating this was a very important benefit in 2015, but 43.1% considering this a very important benefit in 2020. A higher percentage of 2020 pool members consider flexible hours/flex-time as very important in 2020 than in 2015.

Table 10: Important Benefits to Change Employment Comparison

<i>(Ranked by 2020 Report)</i>	2015 Study 2020 Study		<i>Change '20-'15</i>
	Percent Responding "Yes"		
Good Salary or Hourly Wage	90.8	90.5	-0.3
Good Retirement Benefits	85.4	81.4	-4.0
Good Health Benefits	86.0	80.6	-5.4
OJT or Paid Training	86.6	79.6	-7.0
Good Vacation Benefits	80.0	77.6	-2.4
Flexible Hours or Flex-Time	69.1	73.7	4.6
Good Educational Assistance	51.9	43.1	-8.8
Transportation Assistance to Work	27.5	19.9	-7.6

Figure 22 provides a comparison of the desired wages of the two pools. Since the two pools are roughly the same size, and given that the chart shows data up to \$30 per hour, the smaller number of 2020 pool members shown in the figure suggests that more pool member in 2020 than in 2015 desire wages above \$30 per hour.

Figure 22: Available Labor Pool by Hourly Wage Comparison

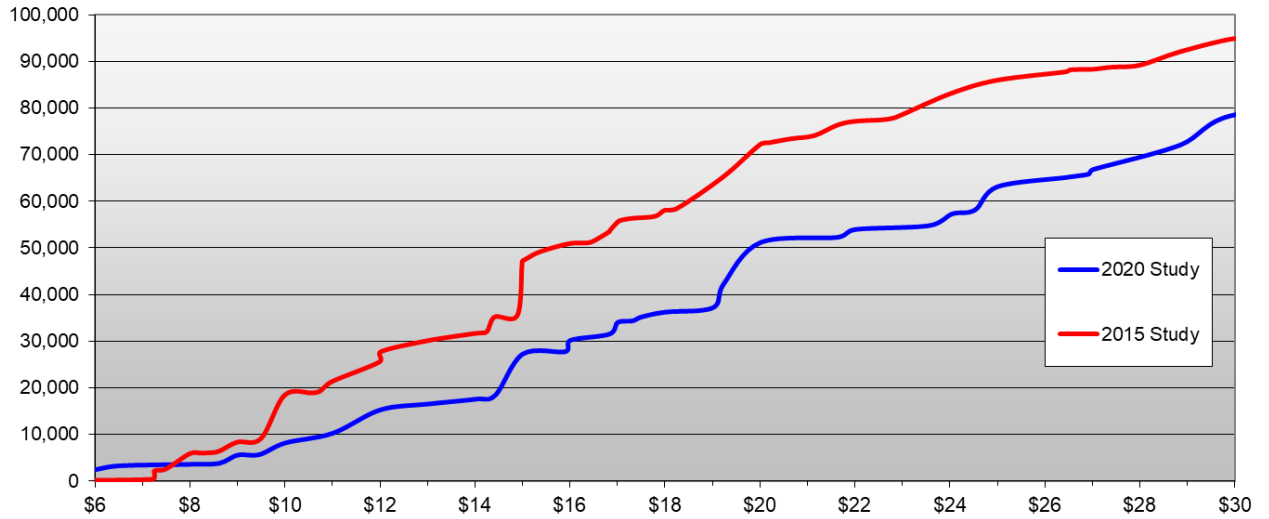


Table 11 shows a comparison of the underemployed members of the Available Labor Pools for the seven studies.

The 2015 pool had a larger percentage of underemployed workers (31.8%) compared to the 2020 pool (19.5%).

The percentage of underemployed workers in general labor occupations was larger in 2015 (35%) than in 2020 (21.1%). Alternatively, the 2020 pool has a larger percentage of underemployed professional workers (19%) than the 2015 pool (5.8%).

The cumulative percentage columns in the educational attainment (Highest Education) section of the table shows that 67.7% of the underemployed workers in 2020 had *at least* associates degrees, while this percentage was 59.6% in 2015. Similarly, there are larger percentages of pool members with *at least* some college experience, and *at least* master's degrees in 2020 than in 2015.

Table 11: Underemployed Workers Occupational Sectors and Education Levels Comparison

	2015 Study		2020 Study			
	Number	Percent	Number	Percent		
Employed of Pool	84,161	79.6	76,531	73.3		
Underemployed Wrkrs	26,747	31.8	14,927	19.5		
Willing to Change Jobs to Address Status	11,365	42.5	7,837	52.5		
Occupational Sector						
	Number	Percent	Number	Percent		
General Labor	9,357	35.0	3,152	21.1		
High Skill Labor	2,991	11.2	2,061	13.8		
Service Sector	12,840	48.0	6,877	46.1		
Professional	1,559	5.8	2,838	19.0		
Total	26,747	100	14,927	100		
Highest Education						
	Number	Percent	Cumulative Percent	Number	Percent	Cumulative Percent
Doctoral Degree	1,106	4.1	4.1	1,617	10.8	10.8
Masters Degree	2,479	9.3	13.4	2,340	15.7	26.5
Bachelors Degree	7,751	29.0	42.4	2,565	17.2	43.7
Associates Degree	4,596	17.2	59.6	3,577	24.0	67.7
Some College	3,991	14.9	74.5	2,385	16.0	83.6
High School Diploma	6,197	23.2	97.7	2,025	13.6	97.2
Less HS Diploma	627	2.3	100	418	2.8	100
Total	26,747	100		14,927	100	

Methods

The Boonville/Cooper County Labor Basin has a total population of approximately 310,032, and a Civilian Labor Force of 153,443. The total number of employed is 149,190 and the average unemployment rate was 2.77% at the time of this study.

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 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.”⁴ 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 Force⁵. Secondly, the number of potential workers is

⁴ 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).

⁵ 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.

then *restricted* to those workers who indicate they are looking for work or that are available for new employment. The advantage of this methodology is that it allows researchers to examine those members of the labor pool who have a propensity to consider a job opportunity given their employment expectations. Even with these restrictions, it should be noted that, in practice, not all members of the Available Labor Pool would apply for a new job opportunity. However, the Available Labor Pool figure for a labor basin reveals to current employers and potential employers better information about the quantity and quality of the labor pool than do Civilian Labor Force data and unemployment statistics. The Available Labor Pool represents a substantial number of workers and potential workers for employers to draw upon in the Boonville/Cooper County Labor Basin.

Description of Survey Research Methods

Data for the **2020 study** were collected from a random digit telephone survey of adults living in seven counties in central Missouri: Boone, Cooper, Howard, Moniteau, Morgan, Pettis, and Saline.⁶ Surveying took place from February 11 through March 3, 2020, using a Computer Assisted Telephone Interviewing (CATI) system. Surveying ended sooner than expected due to the COVID-19 outbreak and the need to close the survey center. A total of 1,011 households were successfully contacted during the data collection period, and a randomly selected adult in each was asked to participate in the study.⁷ In 466 households the selected adult agreed to be interviewed. This represents a cooperation rate of 46.1% and a margin of error of +/-4.54%.

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 370, and are considered eligible respondents. Of the 370 cooperating and eligible respondents, 79.4% (or 218) indicated that they were available for new or different full-time employment and/or were looking for a new or different full-time job. 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 +/- 6.64%. Data collection for previous 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.⁸

⁶ 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.

⁷ 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.

⁸ 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, Morgan, 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.

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.

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