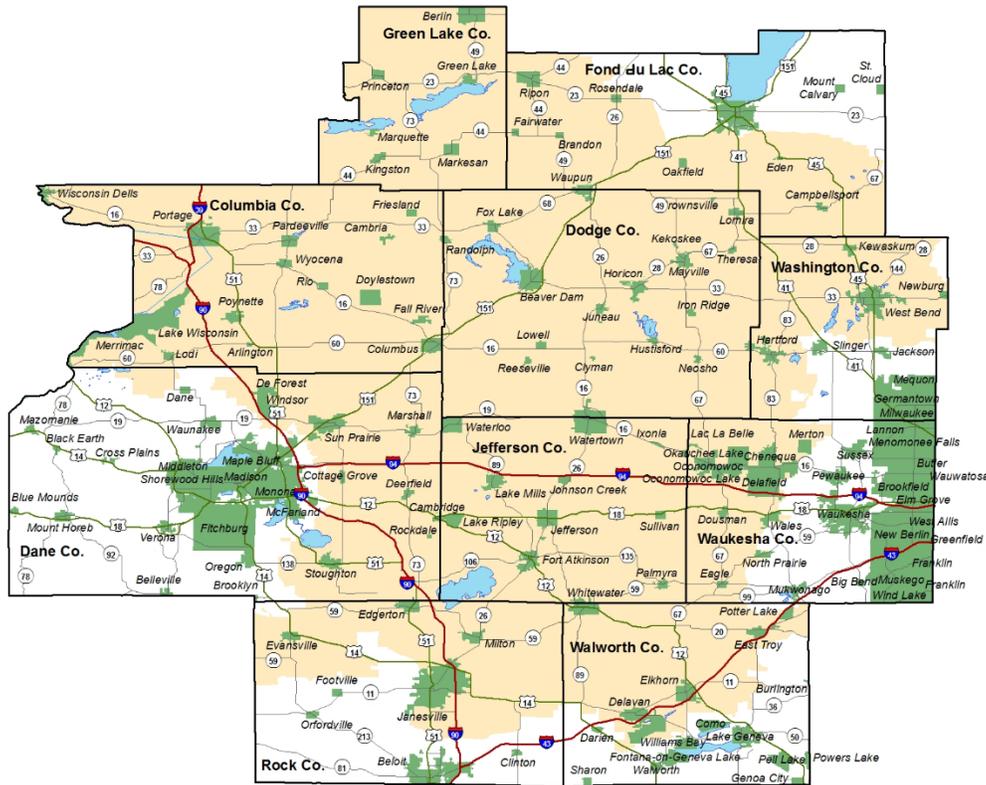


Central Wisconsin Labor Region Labor Availability Analysis – 2018 With Emphasis on Manufacturing Employment

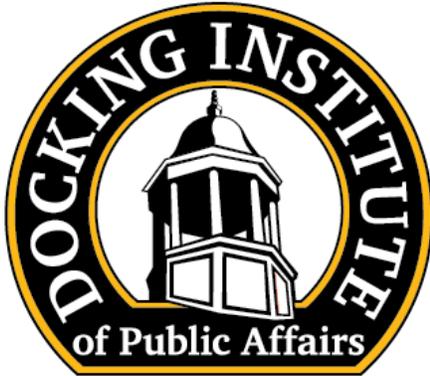
Columbia • Dane • Dodge • Fond du Lac • Green Lake •
Jefferson • Rock • Walworth • Washington • Waukesha Counties



Prepared For

**The Economic Development Administration (EDA)
for the completion of an Economic Adjustment Strategy (EDS)**





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Mission:

To Facilitate Effective Public Policy Decision-Making.

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

Central Wisconsin Labor Region
Labor Availability Analysis – 2018
With Emphasis on Manufacturing Employment

Prepared By:

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Prepared For:

The Economic Development Administration (EDA)
for the completion of an Economic Adjustment Strategy (EDS)

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Executive Summary

The Central Wisconsin Labor Region includes all or portions of Columbia, Dane, Dodge, Fond du Lac, Green Lake, Jefferson, Rock, Walworth, Washington, and Waukesha Counties in Wisconsin. The purpose of this report is to assess the “Available Labor Pool” in this labor basin, with an emphasis on those interested in manufacturing employment. The “Available Labor Pool” represents those who are looking for employment or are interested in new jobs for the right employment opportunities.

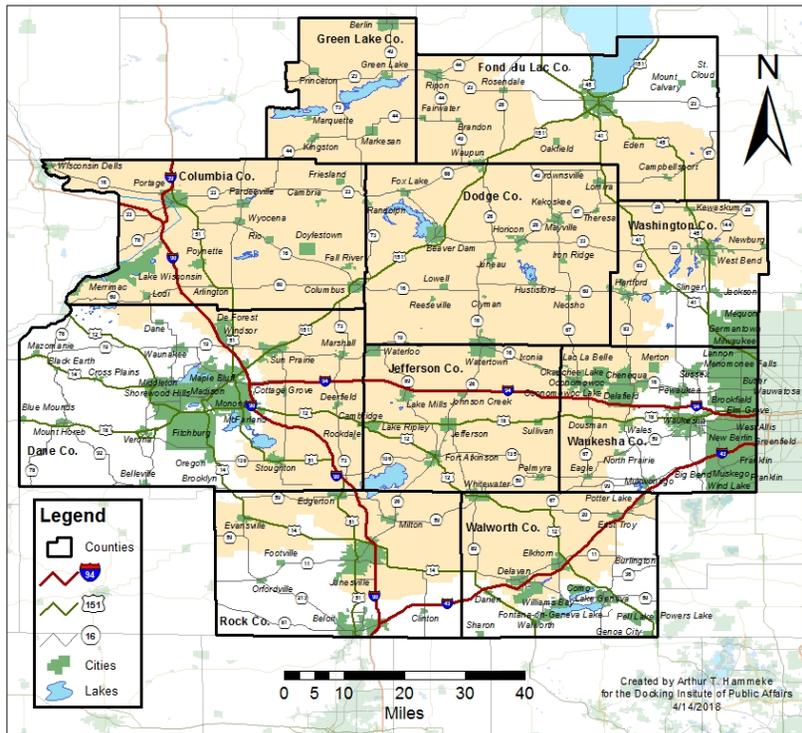
The Docking Institute’s independent analysis of this labor basin shows that:

- The population of the Central Wisconsin Labor Region is 779,636. The Civilian Labor Force is 450,208. The Available Labor Pool contains 259,704 individuals.
- Of the *non-working* members of the Available Labor Pool, an estimated 14,969 (5.8%) are currently looking for work and 46,427 (17.9%) are interested in working for the right opportunities. Of the *working* members of the Available Labor Pool, 36,092 (13.9%) are currently looking for work, while 162,153 (62.5%) are interested in different jobs given the right opportunities.
- More than three-quarters (80.7%) of the Available Labor Pool have at least some college experience and almost 99% have at least a high school diploma. The average age for members of the Pool is about 48 years old, and women make up half (45.2%) of the Pool.
- Almost 20% of the Available Labor Pool are currently employed as general laborers, while an additional 6.9% work in government services or technical/highly skill blue-collar occupations. About 30% of the Pool work in service sector jobs, while 19.4% work in professional white-collar jobs. About a quarter (23.7%) are not currently working.
- More than three-quarters (76.9%) of the Available Labor Pool are “willing to work outside of their primary field of employment for a new or different employment opportunity.”
- Not quite half (45%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 87% will commute up to 30 minutes for employment.
- The six most important desired benefits, in order, are good salary or hourly wage, good retirement benefits, good health benefits, good vacation benefits, on-the-job training (OJT) or paid training, and flexible hours or flex-time.
- An estimated 7,012 members (3%) of the Available Labor Pool are interested in a new job at \$10 an hour, 29,347 (11%) are interested at \$15 an hour, and 71,419 (28%) are interested at \$20 an hour.
- About 44% of the Available Labor Pool report having training or experience, and 47% report being interested in employment in manufacturing. Of those with manufacturing experience, 51% report working in production.
- The average age for those interested in manufacturing employment is about 50 years old, and 32.5% are women. Practically all (99.9%) have a high school diploma.
- Half (50%) of those interested in manufacturing employment will work in Dodge County, and 57% will work in Jefferson County.

The Central Wisconsin Labor Region

The Central Wisconsin Labor Region includes all or portions of 10 counties in Central Wisconsin (see Map 1 below). The criterion used to include a county in this labor basin is whether it contains communities from which, it can be reasonably assumed, individuals may commute to the center of the region for an employment opportunity. In the case of the Central Wisconsin Labor Region, it is reasonable that individuals may commute from (and within) the highlighted area because these counties contain 1) communities with adequate transportation to the center area and 2) communities that are within a 45-minute commute to the center of the labor basin¹.

Map 1: Central Wisconsin Labor Region



The Central Wisconsin Labor Region has a total population of approximately 779,636, and a Civilian Labor Force of 450,208. The total number of employed is 433,483 and the average county unemployment rate was about 3.71% at the time of this study.

The Docking Institute's analysis suggests that the Central Wisconsin Labor Region contains an Available Labor Pool of 259,704 individuals.

This report describes characteristics of the Available Labor Pool for the Central Wisconsin Labor Region, with emphasis on those with an interested in manufacturing employment.

¹ Portion of Dane, Fond Du Lac, Rock Walworth, Washington, and Waukesha are excluded from the labor region because Madison, Janesville, Beloit, the southern portion of Walworth County, Milwaukee, and Fond Du Lac offer many job opportunities for workers and potential workers. It is reasonable to assume, that while some workers do indeed travel from these areas to Dodge and Jefferson Counties for work, many potential workers from those counties will find employment opportunities closer to home.

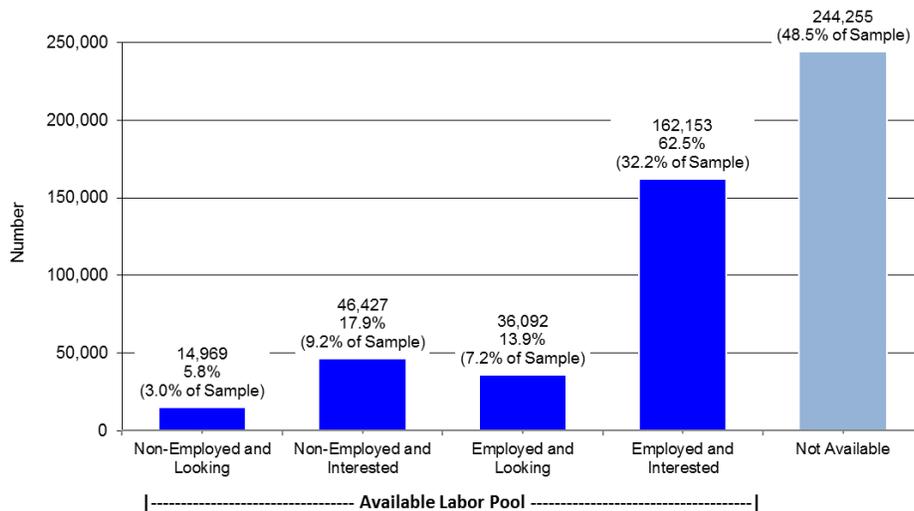
The Central Wisconsin Labor Region’s Available Labor Pool

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

Figure 1 shows the extrapolated number of area adult residents that are members of the Available Labor Pool, as well as those that are not interested in a new or different job. The far right column shows that 48.5% of respondents are not available for a new or different job. The remaining 51.5% are members of the Available Labor Pool².

It is estimated that 14,969 (5.8%) members of the Available Labor Pool are non-employed³ *and* looking for employment, while 46,427 (17.9%) are non-employed *but* interested in a job for the right opportunities. In addition, 36,092 (13.9%) members of the Pool are employed *and* currently looking for different employment, while 162,153 (62.5%) are employed *but* interested in new employment for the right opportunities.

Figure 1: The Available Labor Pool for the Central Wisconsin Labor Region



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*.

² The figure shows percentages of the Available Labor Pool as well as percentages of the sample as a whole (shown in parentheses). For example, 5.8% of the Available Labor Pool is non-employed and looking for work, while this percentage is 3.0% for the entire sample of respondents.

³ 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 but that might not be officially unemployed.

Table 1 shows the gender, age, and education levels of the 259,704-member Available Labor Pool. More than two-fifths (45.2%) of the Pool are women, and the average age is about 48 years old. Most (98.6%) have *at least* a high school diploma, more than three-quarters (80.7%) have *at least* some college experience, and almost half (47%) have *at least* a bachelor's degree. More than a quarter (30.8%) speak Spanish, but most (77%) speak "only a little."

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

Age Information		Age in 2017	
Range		18 to 67	
Mean Average		48	
Median Average		49	
Gender		Number	Percent
Female		117,437	45.2
Male		142,267	54.8
Total		259,704	100
Highest Level of Education Achieved			Cumulative Percent
Doctoral Degree	6,035	2.3	2.3
Masters Degree	35,705	13.7	16.1
Bachelors Degree	80,385	31.0	47.0
Associates Degree	47,337	18.2	65.3
Some College (including current students)	40,071	15.4	80.7
High School Diploma	46,603	17.9	98.6
Less HS Diploma	3,569	1.4	100
Total	259,704	100	
"Do you speak Spanish?"		Number	Percent
"Yes"	79,912	30.8	} These percentages represent portions of 30.8%
<i>Speak Very Well</i>	8,012	10.0	
<i>Speak Fairly Well</i>	10,404	13.0	
<i>Speak Only a Little</i>	61,496	77.0	
		100	

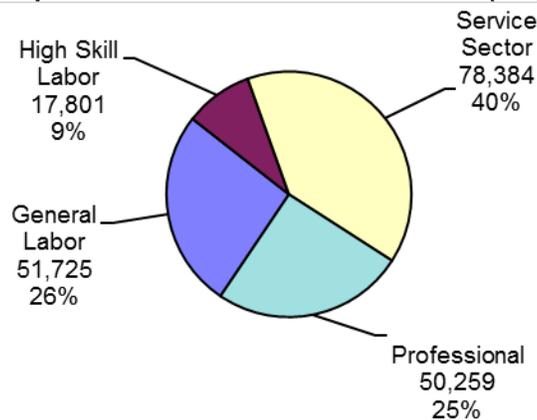
Table 2 shows the various occupational categories of the 259,704-member Available Labor Pool. General labor occupations represent 19.9% of the entire Available Labor Pool, while highly skilled, blue-collar jobs make up 6.9%. Traditional service-related occupations represent 30.2% of the Available Labor Pool, while professional occupations represent 19.4%. Non-employed members of the Pool make up 23.7% of the total.

Table 2: Major Occupational Categories of Available Labor

	Number	Percent	Years at Job	
			Mean	Median
General Labor/Delivery	23,575	9.1	12.8	10.0
Manufacturing/Maintenance/Trucking	28,150	10.8	12.5	10.0
Total General Labor	51,725	19.9	12.7	10.0
Mechanic/Welder/Comp Tech	9,298	3.6	13.4	10.0
Crew Management/Protection Services	8,503	3.3	12.6	11.6
Total Highly Skilled Labor	17,801	6.9	13.0	10.8
Customer Service	22,021	8.5	9.6	7.0
Clerical	8,106	3.1	7.8	5.7
Office or Dept Manager	14,748	5.7	13.7	10.0
Health Aid/Nurse	15,523	6.0	8.9	5.0
Education Aid/Teacher	17,987	6.9	12.5	12.3
Total Service Sector	78,384	30.2	10.5	8.0
Exec Management	15,342	5.9	11.6	10.0
Accounting/Engineering	20,500	7.9	13.5	10.0
Doctor/Professor/Attorney	9,053	3.5	15.8	15.8
Writer/Artist/Musician	5,364	2.1	11	7.8
Total Professional Sector	50,259	19.4	13.0	10.9
Homemaker/Student/Unemployed	25,207	9.7	n/a	n/a
Retired/Disabled	36,328	14.0	n/a	n/a
Total Non-Employed	61,535	23.7		
Total	259,704	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.

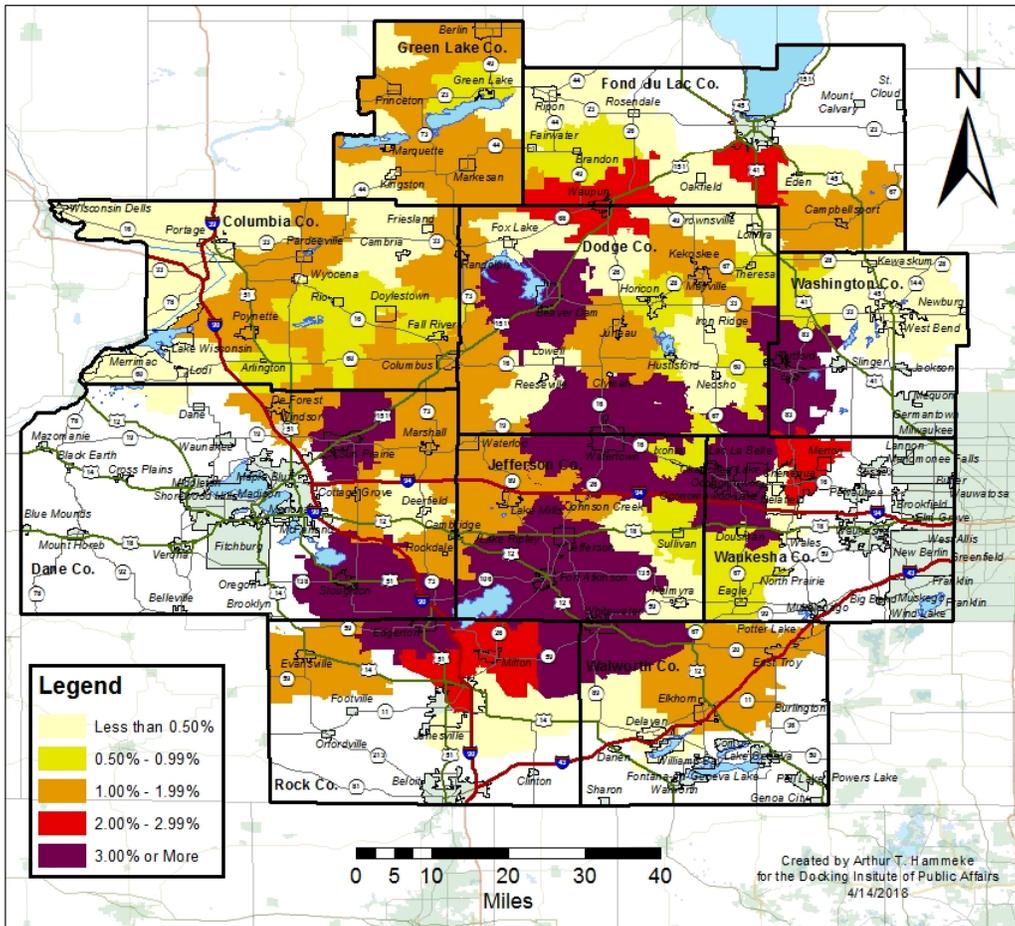
Figure 2: Occupational Sectors of Available Labor (Employed Only)



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 Central Wisconsin Labor Region. The map shows:

- Three percent or more of the entire labor basin's Available Labor Pool is located in ZIP code areas within Dane, Dodge, Jefferson, Rock, Walworth, Waukesha, and Washington Counties. (See purple area in the map.)
- Between 2% and 2.99% of the entire labor basin's Available Labor Pool is located in ZIP code areas within Dodge, Fond du Lac, Rock, and Waukesha Counties. (See red area in the map.)
- ZIP code areas in all counties except for Waukesha and Washington Counties contain 1% to 1.99% of the basin's Available Labor Pool. (See dark orange areas in the map.)

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



Current Skills and Work Experience

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

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 who indicate previous training or experience in that particular field.

For example, 16,026 members of the Pool are currently employed as general laborers, construction, cleaners, and similar positions. An additional 96,006 Pool members (employed and currently non-employed) had previous employment experience or training in one of those jobs, for a total of 112,032 individuals.

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

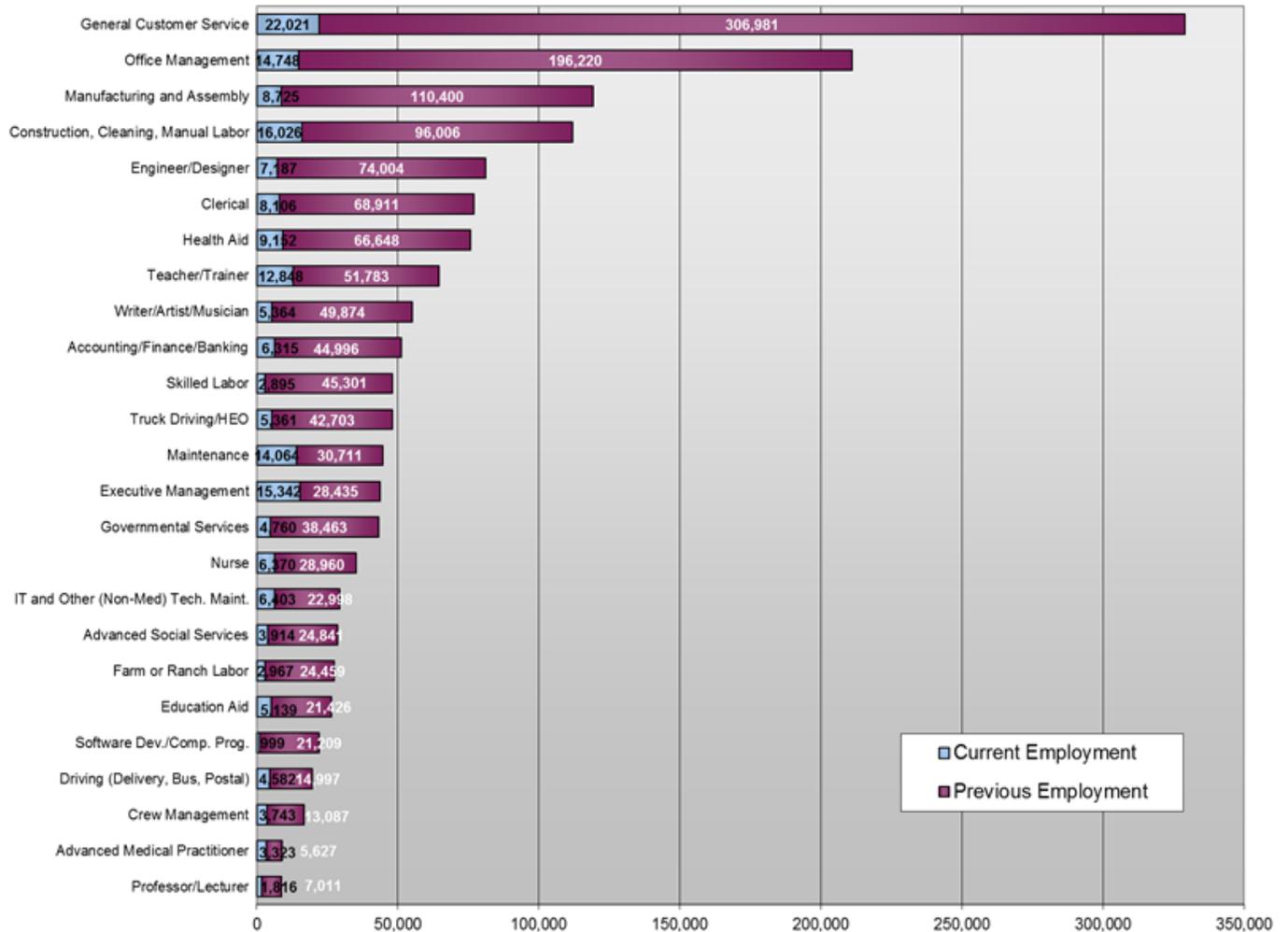
	Current Employment* Number	+ Previous Work/Training Number	= Current plus Previous Work or Training** Number
Working with Hands			
Construction, Cleaning, Manual Labor	16,026	96,006	112,032
Farm or Ranch Labor	2,967	24,459	27,427
Manufacturing and Assembly	8,725	110,400	119,124
Maintenance	14,064	30,711	44,775
Driving (Delivery, Bus, Postal)	4,582	14,997	19,579
Truck Driving/HEO	5,361	42,703	48,065
Skilled Labor	2,895	45,301	48,196
Crew Management	3,743	13,087	16,830
Working with People			
General Customer Service	22,021	306,981	329,002
Office Management	14,748	196,220	210,967
Governmental Services	4,760	38,463	43,223
Executive Management	15,342	28,435	43,777
Advanced Social Services	3,914	24,841	28,755
Working with Numbers			
Clerical	8,106	68,911	77,017
Accounting/Finance/Banking	6,315	44,996	51,312
Researcher/Analyst	5,998	0	5,998
Working with Technology			
IT and Other (Non-Med) Tech. Maint.	6,403	22,998	29,401
Software Dev./Comp. Prog.	999	21,209	22,209
Engineer/Designer	7,187	74,004	81,191
Providing Health Services			
Health Aid	9,152	66,648	75,800
Nurse	6,370	28,960	35,330
Advanced Medical Practitioner	3,323	5,627	8,950
Providing Educational Services			
Education Aid	5,139	21,426	26,565
Teacher/Trainer	12,848	51,783	64,631
Professor/Lecturer	1,816	7,011	8,827
Creative Arts			
Writer/Artist/Musician	5,364	49,874	55,238
Total	198,169	1,436,052	1,634,221

* 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. 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 22,021 working Pool members currently employed in this category and 306,981 previously employed/trained in this category, for a total of 329,002 individuals (total individuals not show on Figure 3).

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



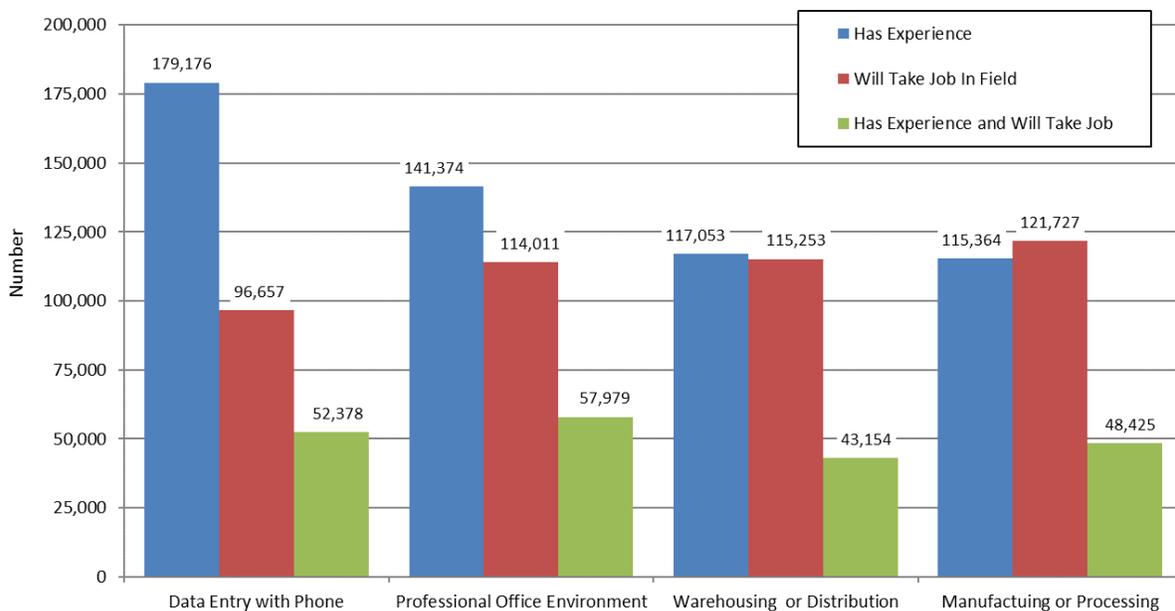
In addition to collecting data regarding the current employment status and previous work or training experience through a series of “open-ended” survey questions (the results of which are shown previously), respondents were asked about the six specific employment areas listed in Figure 4. Respondents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

The figure shows that an estimated 179,176 Pool members report any experience or training in data entry with telephone operation (blue column), while fewer (96,657 individuals) would consider employment in that field (red column). An estimated 141,374 members of the Pool have any experience or training as a professional office assistant (blue column), while fewer members of the Pool (114,011 individuals) would take a job in that field (red column).

The figure also shows responses for training or experience working in warehousing or distribution and manufacturing or processing.

The third column shows the estimated number that have any experience/training in a field **and** are willing to work in that field again (green column).

Figure 4: Work Experience / Willing to Work in Field



⁴ Figure 4 differs substantially from Table 3 and Figure 3 (previous pages). For example, the “has experience” column above represents an extrapolated total of **all** Pool members answering “yes” to the question “do you have any experience or training in...” As such, Figure 4 provides a “50,000-foot view” of the skill sets of Pool members. Table 3 and Figure 3, on the other hand, provide extrapolated responses from Pool members (working in the first column, working and non-working in the second) about specific jobs – one current job and/or one previous job.

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

Figures 4a, 4b, 4c show the responses to those questions. The figures show that about a third (35%) of those with warehousing experience worked in jobs involving moving materials or loading (see figure 4a). Half (51%) of those with manufacturing or processing experience worked in jobs involving production work directly (see figure 4b). Figure 4c shows that 41% of those with manufacturing experience worked in metallic manufacturing.

Figure 4a: Work Experience in Warehousing or Distribution

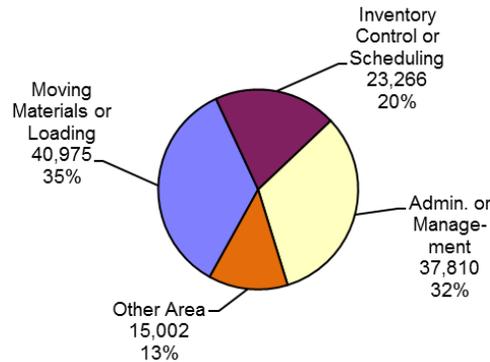


Figure 4b: Work Experience in Manufacturing or Processing

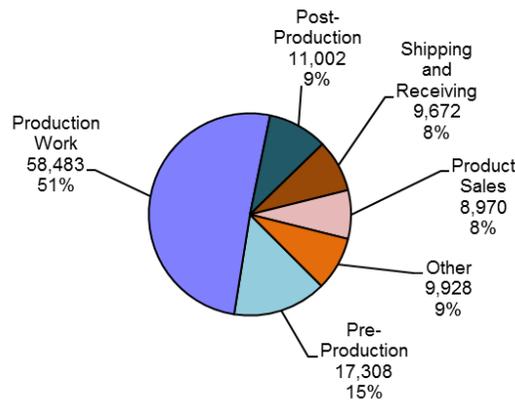
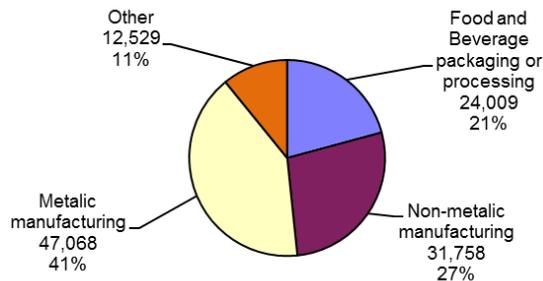


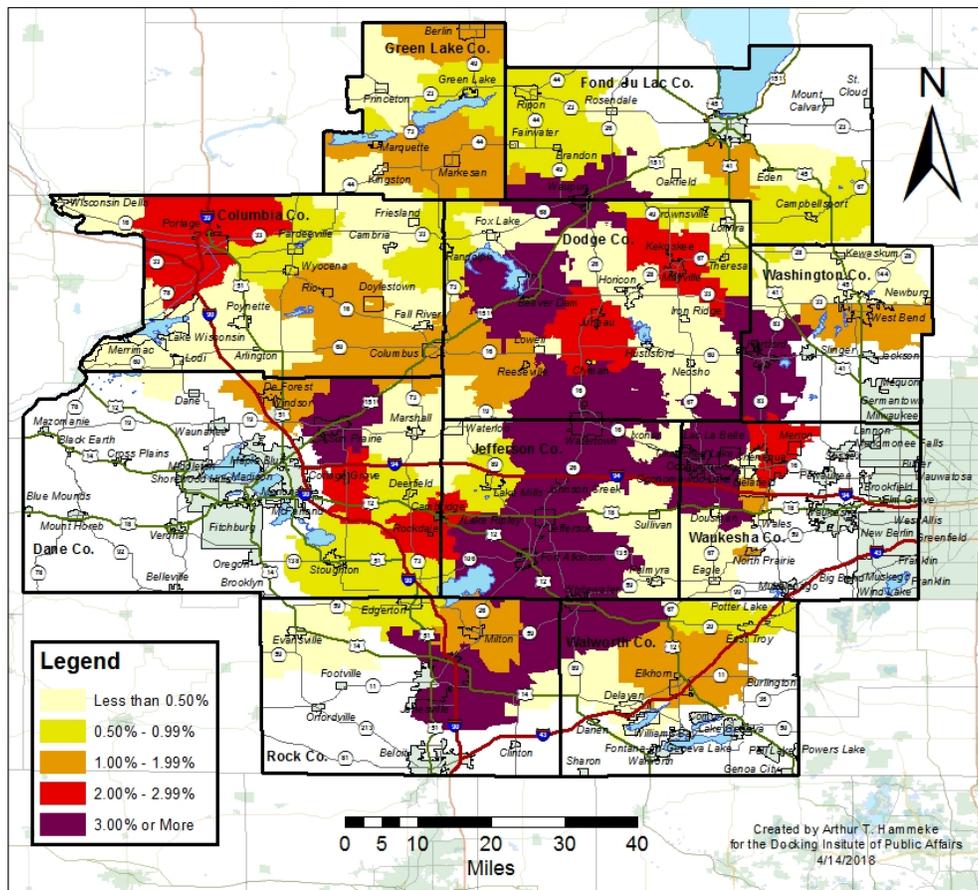
Figure 4c: Manufacturing Industry Experience



Working Available Labor Pool members were asked for the ZIP code of their workplaces. Map 3 shows the locations of workplaces employing Available Labor Pool members by ZIP code area. The map shows the following:

- Three percent or more of the working members of the Available Labor Pool work in ZIP code areas in Dane, Dodge, Fond du Lac, Jefferson, Rock, Walworth, Waukesha, and Washington Counties. (See purple areas in the map.)
- Between 2% and 2.99% of the working members of the Pool work in ZIP codes areas in Columbia, Dodge, Dane, and Waukesha Counties. (See red area in the map.)
- Workplaces located in ZIP code areas in all 10 counties employ between 1% and 1.99% of the working Available Labor Pool. (See dark orange areas in the map.)

Map 3: Percent of Pool Member Workplaces by ZIP Code



Educational Experience and Job Satisfaction

Table 1 (see page 4) shows that 80.7% of the Available Labor Pool report some college experience (with 65.3% holding associate's degrees at least and 47% having completed a bachelor's degree at least).

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

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

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

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

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

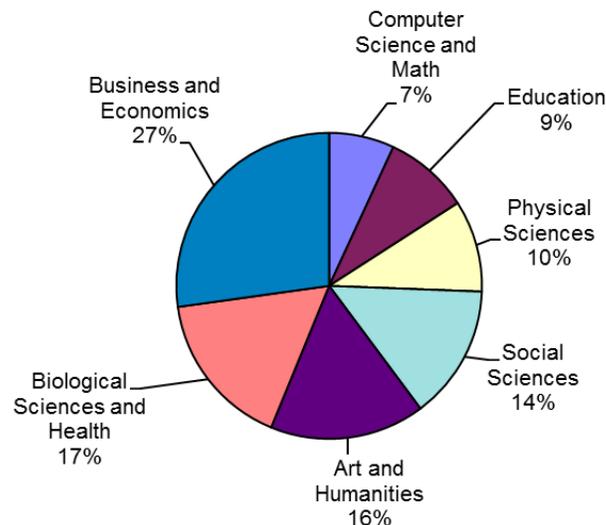
Education: Elementary and Secondary Teaching.

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

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

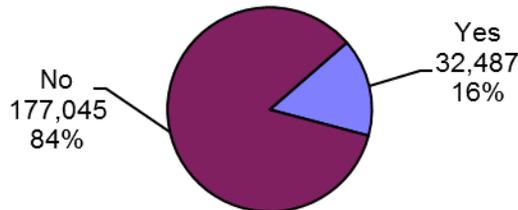
Figure 5 shows that Available Labor Pool members with at least some college experience indicate majors in business and economics (27%), biological sciences and health (17%), arts and humanities (16%), social sciences (14%), physical sciences (10%), education (9%), and computer science and math (7%).

Figure 5: Undergraduate College Major



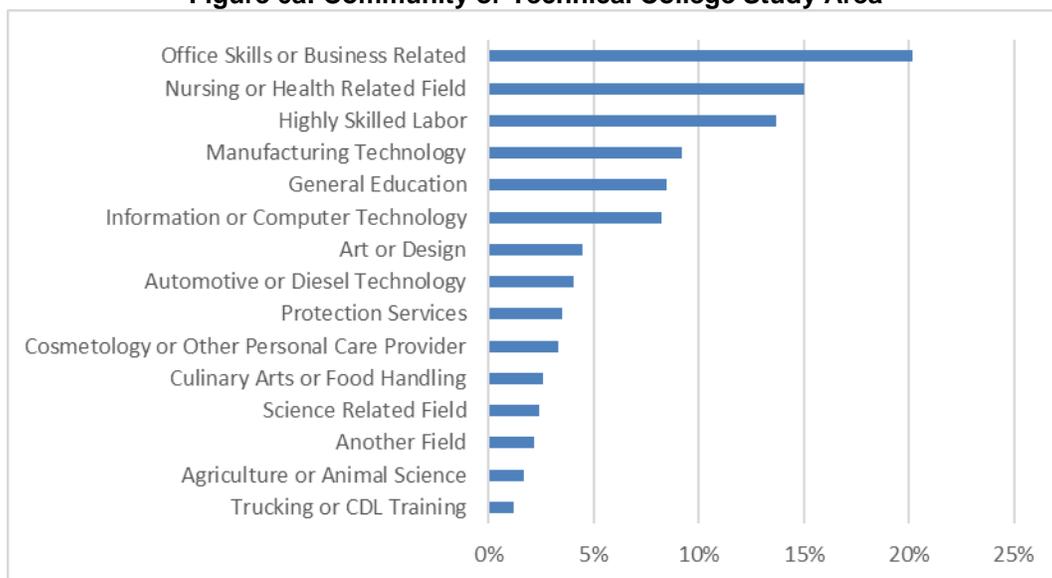
All respondents that have completed at least some college were also asked: “Are you attending a community college or technical school now, or have you received a community college or technical degree?” Figure 6 shows that 16% of the respondents hold a community college or technical degree or are working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

Figure 6: Community College or Technical College Experience



Respondents answering “yes” to the above question were asked for their area of study. Answer options are grouped into one of the options shown in Figure 6a. The figure shows that about 20% report studying office skills or a business-related field, 15% report studying nursing or a health related field, about 14% report studying for a high skills trade, about 8% report studying general education courses, and about 8% report studying information technology or computer technology.

Figure 6a: Community or Technical College Study Area



Considerations for Employment

An important consideration for many employers looking to locate or expand operations is whether workers are willing to pursue new employment opportunities. Some workers may be available for new employment but are unwilling to switch from their current job to a different type of position, for example. 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 Central Wisconsin Labor Region. Figure 7 shows that a clear majority of the Available Labor Pool (199,822 members or 76.9%) are willing to accept positions outside of their primary fields of employment.

Figure 7: Considerations for Employment

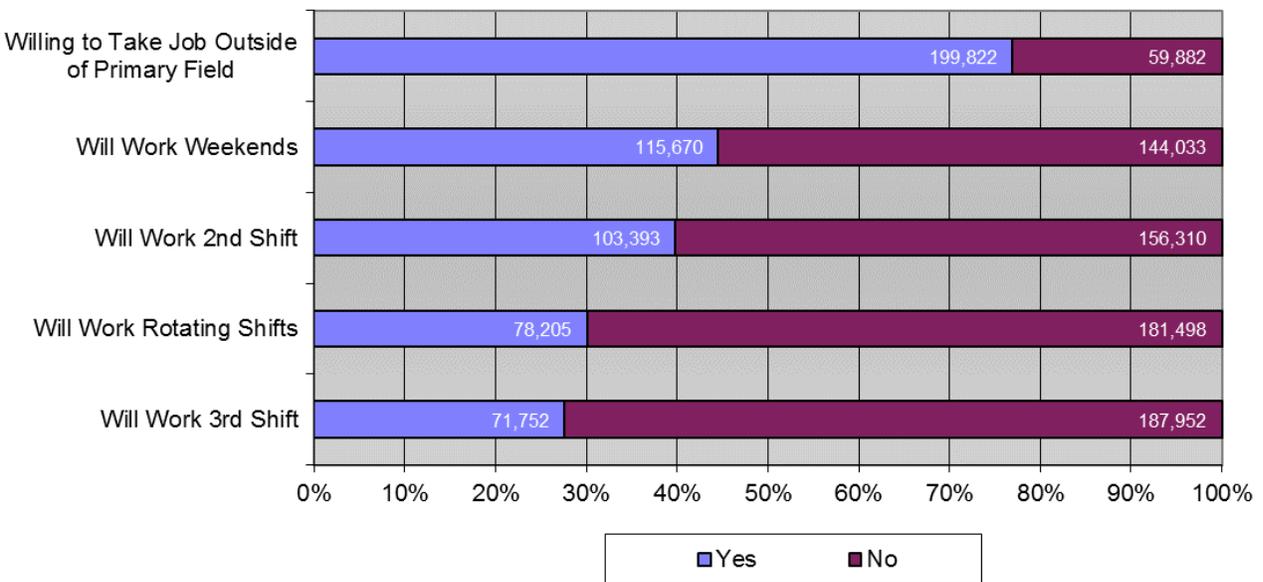
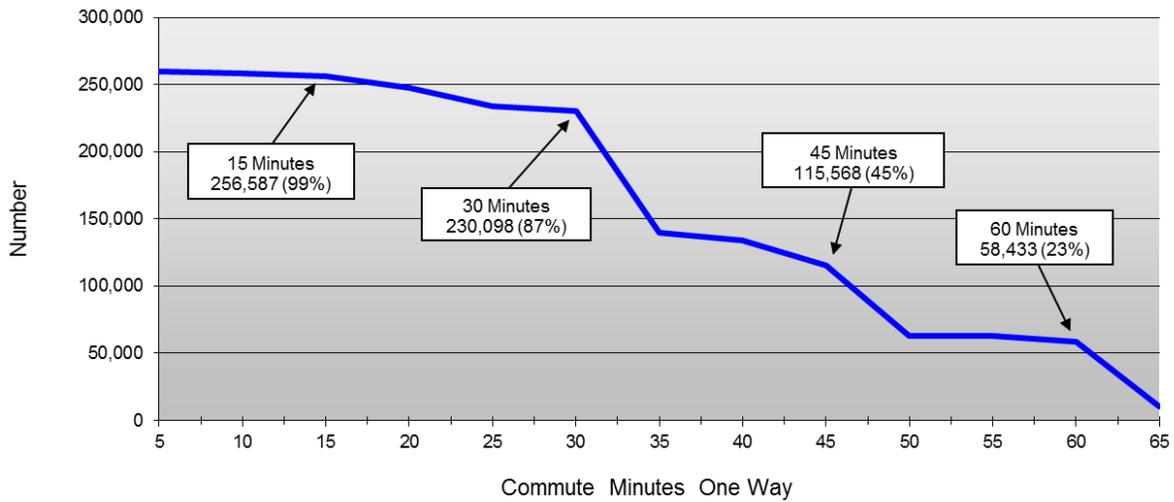


Figure 7 also shows responses to four questions regarding work shifts. Respondents were asked if they would be willing to work weekends, a 2nd shift, a 3rd shift, and/or rotating shifts for a new job.

The figure shows that almost 45% of the Available Labor Pool are willing to weekends, 40% of the Pool are willing to work the work second shift, 30% are willing to work rotating shifts, and about 28% are willing to working the third shift for a new or different job.

Another important consideration for many employers is whether workers are willing to commute for a new or different employment opportunity. Figure 8 shows that the Available Labor Pool in the Central Wisconsin Labor Region is open to commuting. Not quite half (45%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 87% will commute up to 30 minutes, one-way, for employment. Nearly all (99%) will travel up to 15 minutes, one-way, for employment.

Figure 8: Available Labor by Commute Minutes

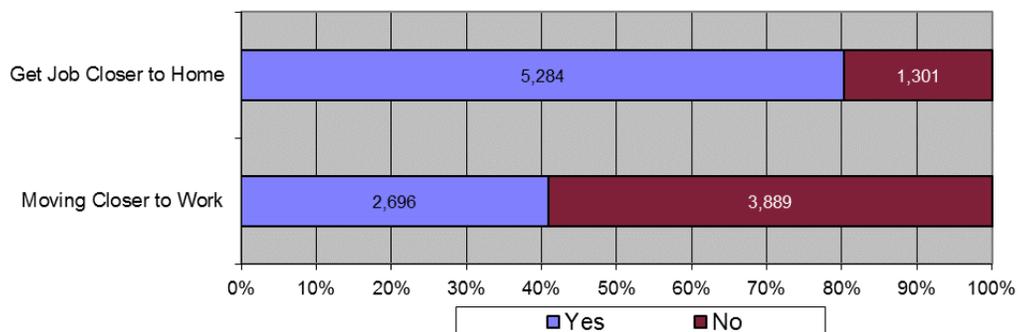


Working members of the Pool indicating a willingness to commute farther than 60 minutes, one-way, for a job, were asked two questions: “Have you considered moving to be closer to your job?” and “Have you considered getting a job closer to your home?”

Figure 8a shows that a vast majority (80%) of this subset of the Pool would consider getting a new job closer to their places of residence, while about 41% would consider moving closer to their places of work.

Figure 8a: Being Closer to Work

(Non-mutually Exclusive Responses)

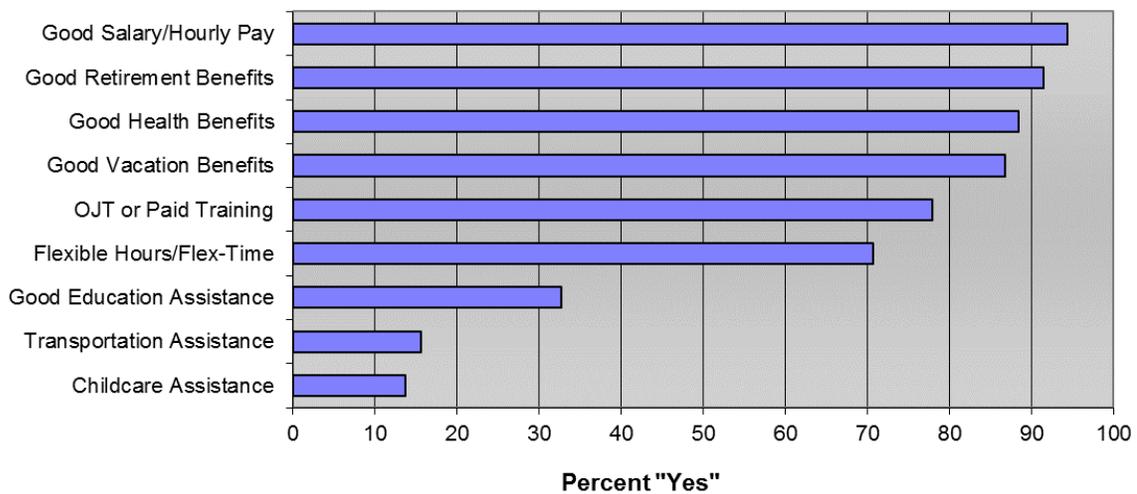


Available Labor Pool members were asked about various benefits that might be important when considering whether to take a new or different job. Respondents were asked if each benefit would be a “very important” consideration for taking a new job, with answer options including “yes” and “no.” (Responses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

Figure 9 shows that the six most important benefits are, in order: good salary or hourly pay, good retirement benefits, good health benefits, good vacation benefits, on-the-job training (OJT) or paid training, and flexible hours or flex-time. All of these benefits are considered “very important” by 70% or more of the Available Labor Pool. Good educational assistance, transportation assistance, and child care assistance are considered “very important” by 33%, 16%, and 14% of Pool members, respectively.

Figure 9: Benefits Very Important to Change Employment

(Non-mutually Exclusive Responses)



The left column in Table 4 shows the percentages of all Pool members, while the right column shows the percentages of *working members* of the Available Labor Pool that are offered the benefit from their current employers. Good salary/hour pay stands out with an 11.6% difference between those Pool members considering this benefits very important (84.4%) and those working Pool members receiving this benefit (82.8%).

Good education assistance stands out (with a difference of 26.9%) as a benefit less desirable than currently offered by employers, suggesting that employers already offer this benefit in sufficient quantities and/or that the labor pool is already highly educated.

Table 4: Desired Benefits and Current Benefits Offered

	Benefit Important to Change Jobs Percent	Benefit Currently Offered* Percent	<i>Difference</i>
Good Salary/Hourly Pay	94.4	82.8	11.6
Good Retirement Benefits	91.5	90.4	1.1
Good Health Benefits	88.4	92.9	-4.5
Good Vacation Benefits	86.8	90.2	-3.4
OJT or Paid Training	77.9	80.8	-2.9
Flexible Hours/Flex-Time	70.7	60.8	9.9
Good Education Assistance	32.7	59.6	-26.9
Transportation Assistance	15.6	21.4	-5.8
Childcare Assistance	13.8	11.0	2.8

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

Desired Wages of Available Labor Pool

Desired wages are another important consideration for employers and economic developers. Figure 10 shows desired wages for members of the Available Labor Pool. It is estimated that 118,944 people (or 46% of the available labor) are interested in a new job at \$25 an hour⁵.

An estimated 71,419 (28%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 29,347 (11%) are interested at \$15 an hour. Finally, an estimated 7,012 people (3%) are interested in a new job at \$10 an hour.

Figure 10: Available Labor by Desired Hourly Wage

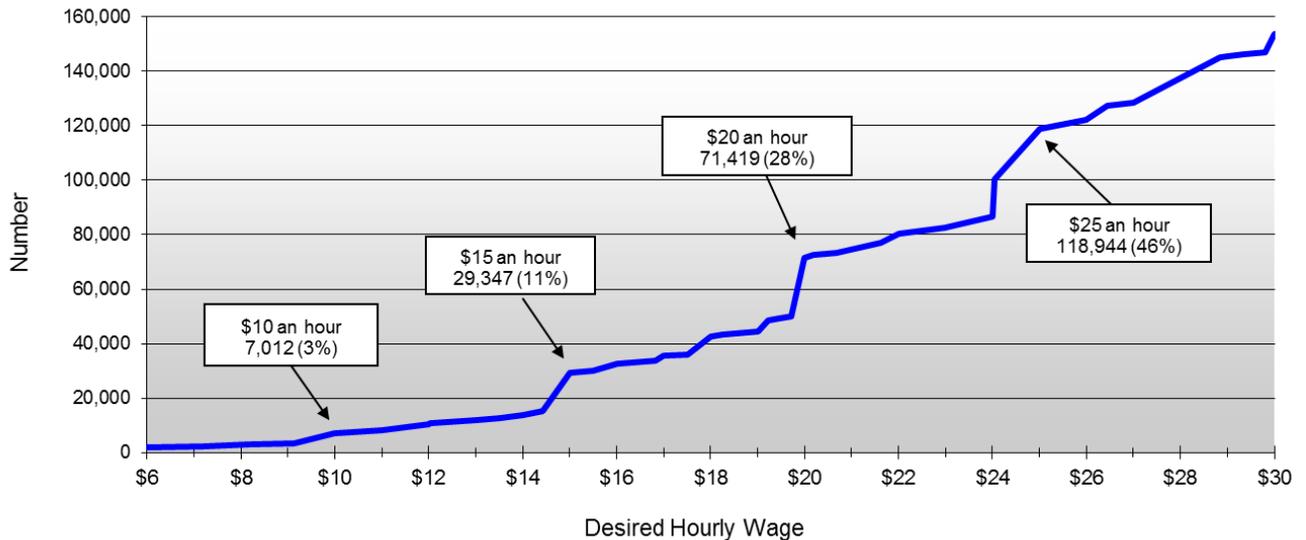


Figure 10 suggests the obvious: that the higher the wage, the larger the pool of available labor. As noted, 29,347 members of the Available Labor Pool are available for a new or different job at \$15 an hour. At \$14 an hour there are 13,764 members of the pool available. As such, an increase of \$1 per hour from \$14 to \$15 represents an increase of 15,582 workers and potential workers.

The graph also highlights various “wage preference plateaus” that may be of interest to current and potential employers to avoid. 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, 10,388 members of Pool are interested in a job at \$12 an hour. At \$13 an hour there are an estimated 11,946 individuals available. So, while there is certainly an increase in the number of available workers at this higher wage rate, the increase is only 1,558 individuals – a relatively small increase given the overall size of this subset of the Available Labor Pool.

Additional wage plateaus exist between \$16 and \$17 an hour (an increase of 2,857 individuals), and \$18 and \$19 an hour (an increase of 1,818 individuals), among other areas seen on the graph.

⁵ See Appendix for an hourly wage/annual salary conversion chart.

Manufacturing Emphasis

The previous portion of the report addressed the entire Available Labor Pool. The remainder of the report addresses those members of the Available Labor Pool interested in manufacturing employment.

As shown on Figure 4 (page 9), 121,727 members of the Available Labor Pool are willing to take a job in manufacturing. Table 5 shows the gender, age, and education levels of the subset of 121,727-members of the Pool willing to work in manufacturing.

Slightly more than two-thirds (67.5%) of this subset are men, and the average age is between 49 and 51 years old. Practically all (99.4%) have *at least* a high school diploma, about three-quarters (76%) have *at least* some college experience, and a third (36.7%) have *at least* a bachelor's degree. Essentially a quarter (26.6) speak Spanish, but most (76.9%) speak "only a little."

Table 5: Age, Gender, and Education Levels of Those Interested in Manufacturing

Age Information	Age in 2017		
Range	18 to 66		
Mean Average	49		
Median Average	51		
Gender	Number	Percent	
Female	39,587	32.5	
Male	82,140	67.5	
Total	121,727	0	
Highest Level of Education Achieved			Cumulative Percent
Doctoral Degree	1,243	1.0	1.0
Masters Degree	10,298	8.5	9.5
Bachelors Degree	33,166	27.2	36.7
Associates Degree	27,121	22.3	59.0
Some College (including current students)	21,127	17.4	76.4
High School Diploma	28,087	23.1	99.4
Less HS Diploma	685	0.6	100
Total	121,727	0	
"Do you speak Spanish?"	Number	Percent	
"Yes"	32,350	26.6	} These percentages represent portions of 26.6%
<i>Speak Very Well</i>	3,341	10.3	
<i>Speak Fairly Well</i>	4,119	12.7	
<i>Speak Only a Little</i>	24,889	76.9	
		100	

Considerations for Manufacturing Employment

Figure 11 shows consideration for employment for the 121,727 members of the Available Labor Pool are willing to take a job in manufacturing.

The figure shows that a clear majority (86%) of the Available Labor Pool members interested in manufacturing employment are willing to accept positions outside of their primary fields of employment.

The figure also shows that about 57% of this subset are willing to work weekends for a new manufacturing job, 54% will work a second shift, 38% will work rotating shifts, and 36% will work a third shift.

Figure 11: Considerations for Employment

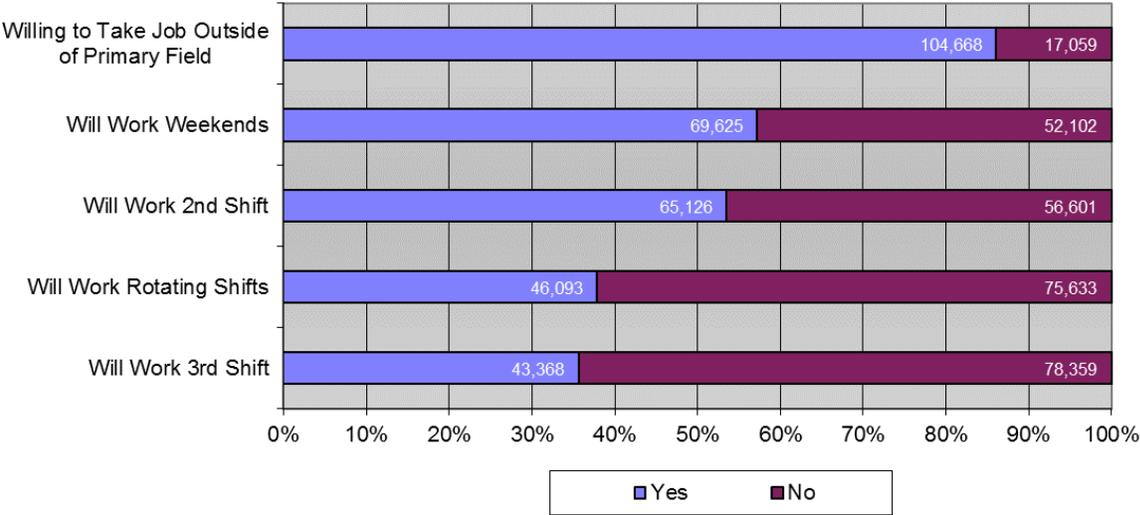


Figure 12 shows that Available Labor Pool members willing to work in manufacturing in the Wisconsin labor region are generally open to commuting. More than a third (38%) of the members of the Available Labor Pool will commute up to 45 minutes, one-way, for an employment opportunity, while 82% will commute up to 30 minutes, one-way, for employment. A vast majority (97%) will travel up to 15 minutes, one-way, for employment.

Figure 12: Available Labor by Commute Minutes

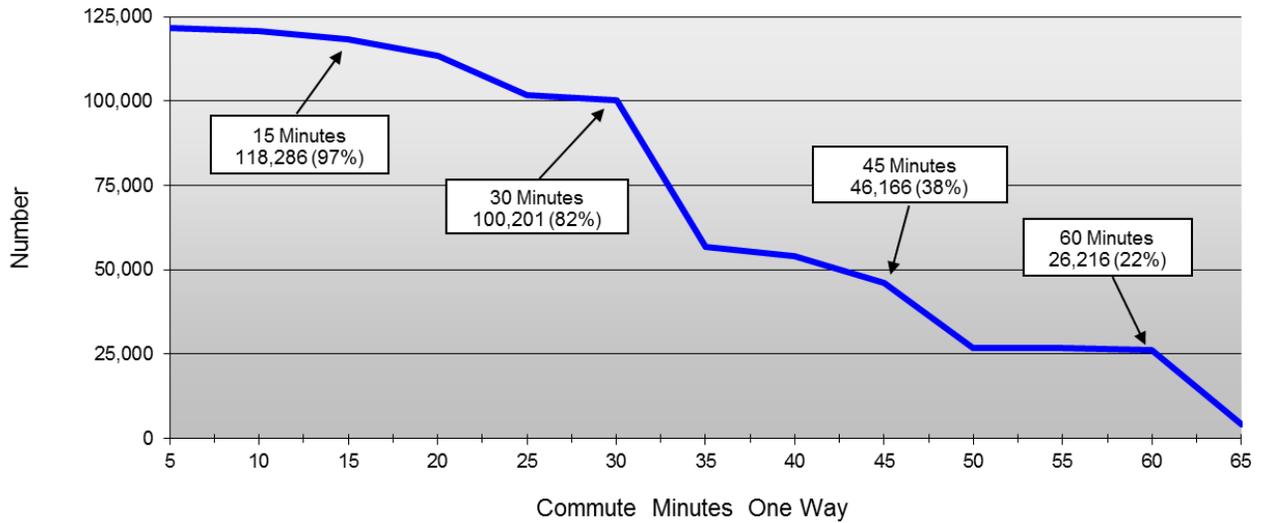


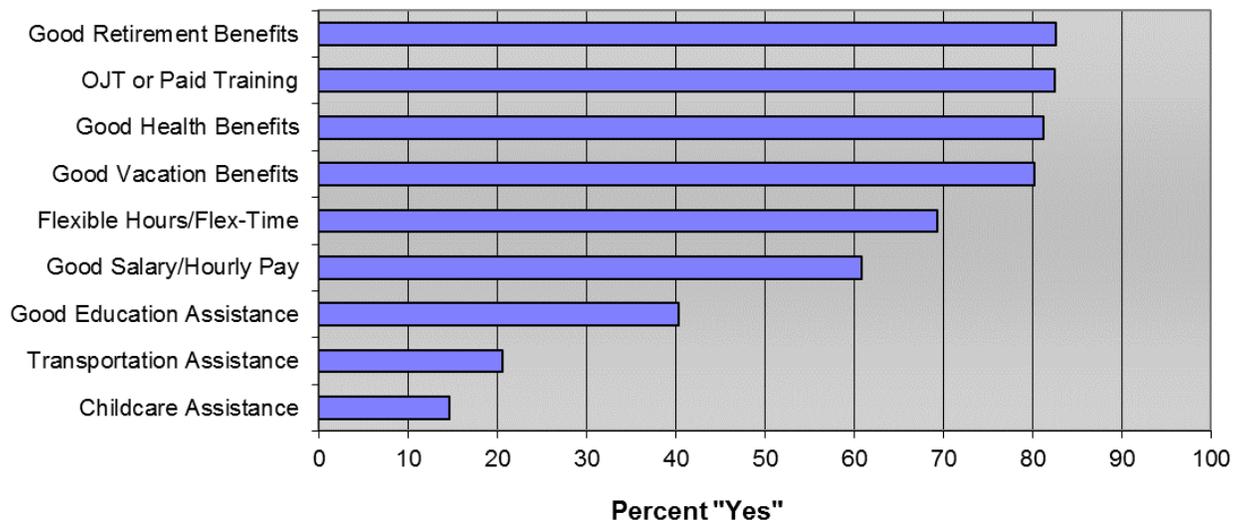
Figure 13 shows that the four most important benefits are, in order: good retirement benefits, on-the-job (OJT) or paid training, good health benefits, and good vacation benefits. All four of these benefits are considered “very important” by 80% or more of the Available Labor Pool members willing to work in manufacturing.

Flexible hours or flex-time is considered “very important” by 69% or more of the Available Labor Pool members willing to work in manufacturing.

Good salary/hourly pay, good educational assistance, transportation assistance, and childcare assistance are considered “very important” by about 60%, 40%, 21%, and 15% of this subset of the Available Labor Pool, respectively.

Figure 13: Benefits Very Important to Change Employment

(Non-mutually Exclusive Responses)



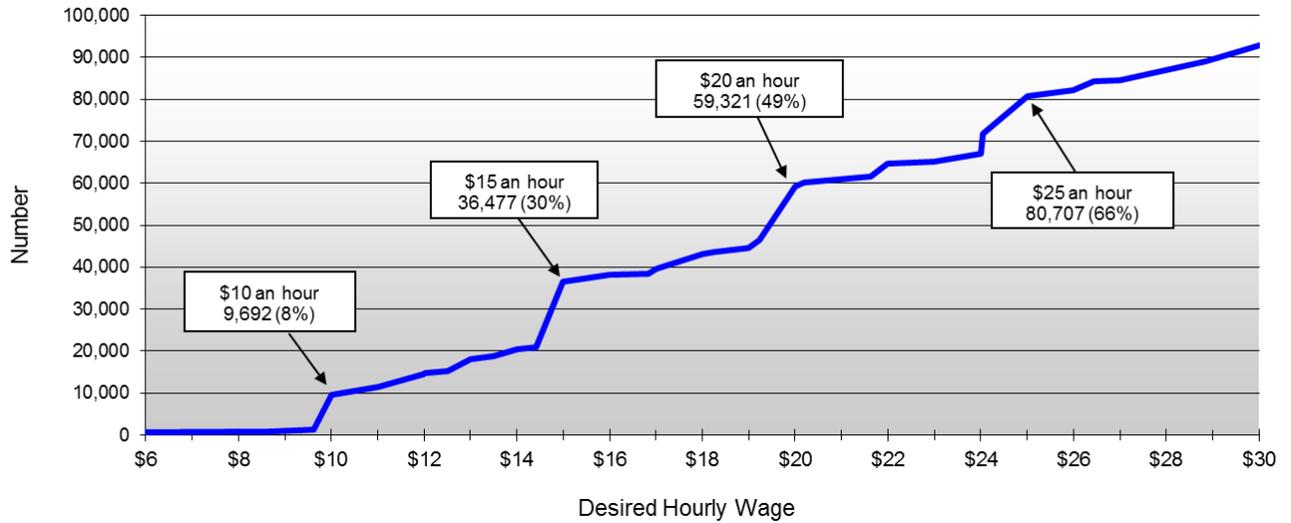
Desired Wages among Those Interested in Manufacturing Employment

Desired wages 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 80,707 members of the Available Labor Pool interested in manufacturing employment (or 66%) are interested in a new job at \$25 an hour.

An estimated 59,321 (49%) members of the Pool are interested in new employment opportunities at \$20 an hour, while 36,477 (30%) are interested at \$15 an hour. Finally, an estimated 9,692 people (8%) are interested in a new job at \$10 an hour.

Figure 14: Available Labor by Desired Hourly Wage



Willing to Work in Manufacturing in Dodge and Jefferson Counties

Survey respondents were asked if they would take a manufacturing job in Dodge County and if they would take a manufacturing job in Jefferson County.

Figure 15 shows that half (50%) of Available Labor Pool members interested in working in manufacturing report that they are willing to work in Dodge County. Figure 16 shows that more than half (57%) are willing to work in Jefferson County.

Figure 15: Will Work in Dodge County

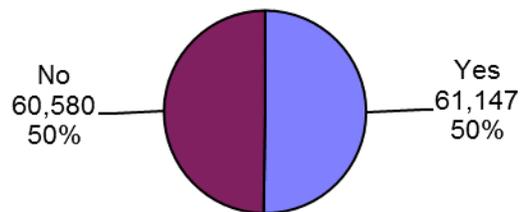
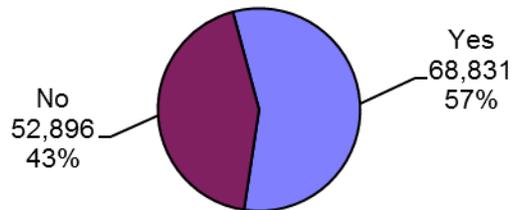


Figure 16: Will Work in Jefferson County



Considerations for Employment among Those Willing to Work in Manufacturing in Dodge and Jefferson Counties

Figure 17 shows the number of minutes members of this subset are willing to commute, one way, to Jefferson and Dodge Counties for a job in manufacturing.

The pattern between the two groups (willing to work in Jefferson County and willing to work in Dodge County) are very similar. The number is larger for those willing to work in Jefferson County, and this is reflected in the figure below.

Figure 17: Commute Minutes for Those Willing to Work in Manufacturing in Dodge and Jefferson Counties

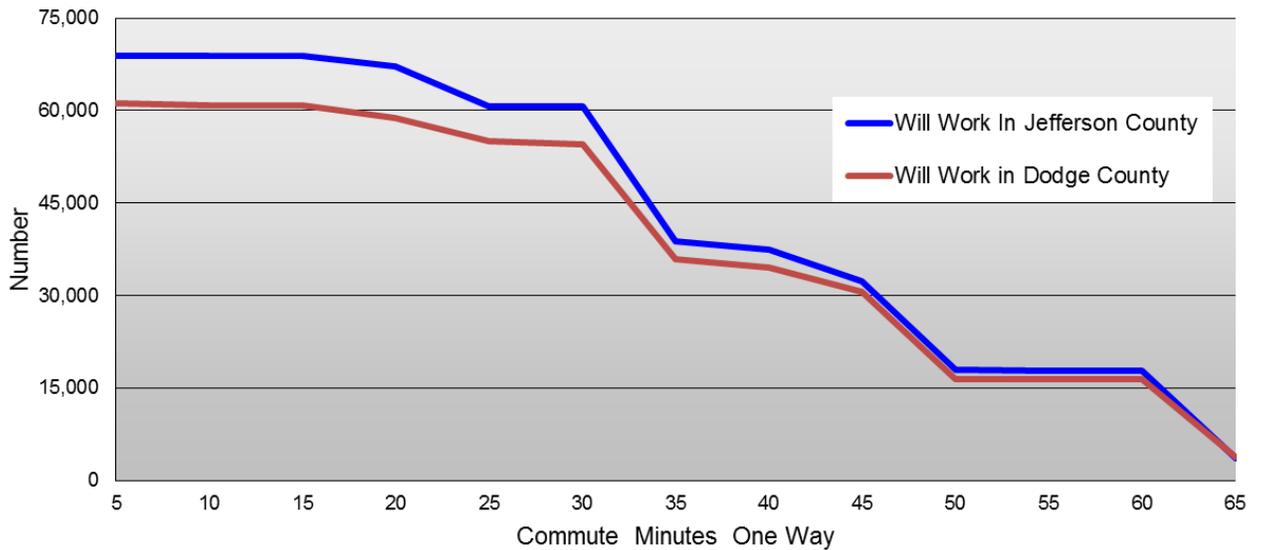
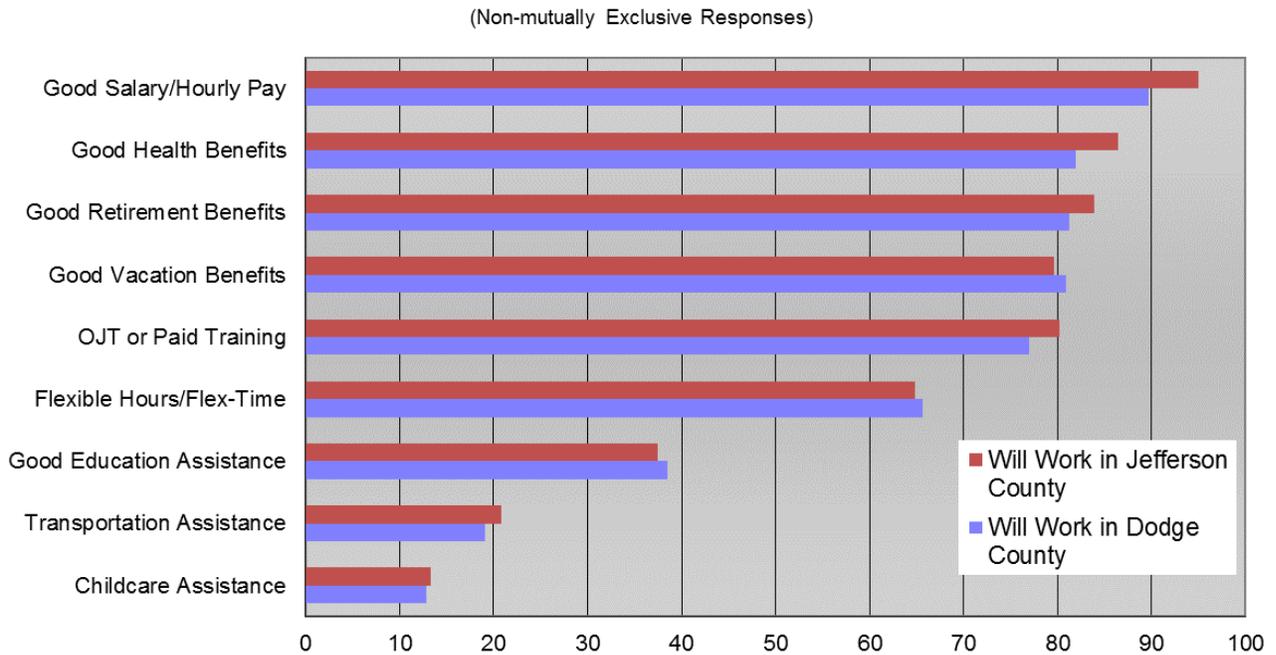


Figure 18 shows desired benefits for those willing to take a job in manufacturing and also work in Dodge and Jefferson Counties. The table shows that good salary/hourly pay rank highest among both groups, at 95% for those willing to work in Jefferson County, and 89.7% for those willing to work in Dodge County.

The least desired benefits are transportation assistance and childcare assistance for both groups.

Figure 18: Desired Benefits for Those Willing to Work in Manufacturing and Willing to Work in Dodge and Jefferson Counties



Desired Wages among Willing to Work in Manufacturing in Dodge and Jefferson Counties

Desired wages are shown in Figures 19 and 20 for three work shifts. The work shifts are the Day Shift, the Second Shift, and the Third Shift.

More available labor is willing to work the day shift in both groups across all wage levels.

Figure 19: Desired Hourly Wage for Those Willing to Work in Manufacturing in Jefferson County by Work Shift

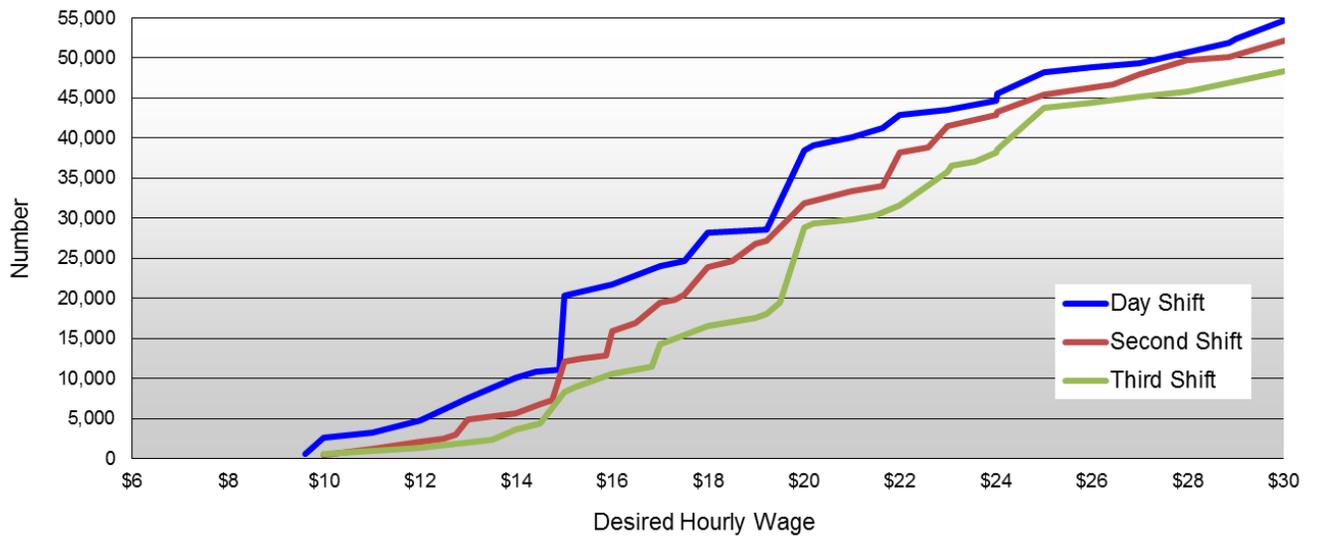


Figure 20: Desired Hourly Wage for Those Willing to Work in Manufacturing in Dodge County by Work Shift

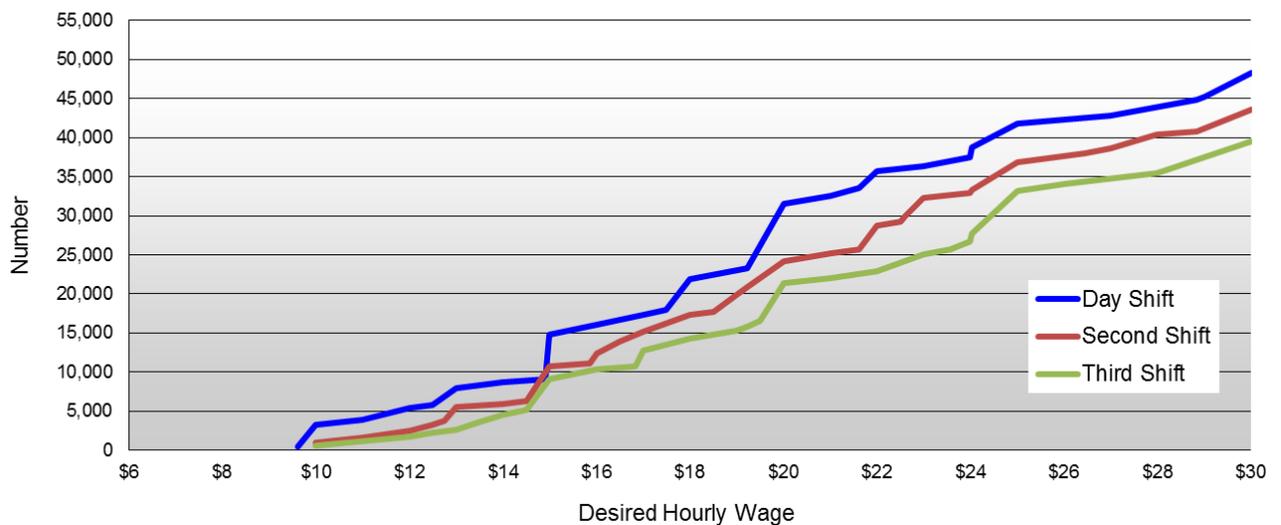


Table 6 shows the mean and median average desired hourly wage for those willing to work in manufacturing and in Dodge or Jefferson Counties for various shifts.

The table shows that the average wages are lowest for those willing to work the day shift, followed by the second shift and the third shift. Wage demands are a bit higher in Dodge County than in Jefferson County for each shift.

Table 6: Mean and Median Average Wage for Those Willing to Working in Manufacturing in Dodge and Jefferson Counties

	Will Work in Dodge County		Will Work in Jefferson County	
	Average Hourly Wage		Average Hourly Wage	
	Mean	Median	Mean	Median
Day Shift	\$25.33	\$20.00	\$24.88	\$20.00
Second Shift	\$27.87	\$23.00	\$26.61	\$22.00
Third Shift	\$30.13	\$25.00	\$28.84	\$23.00

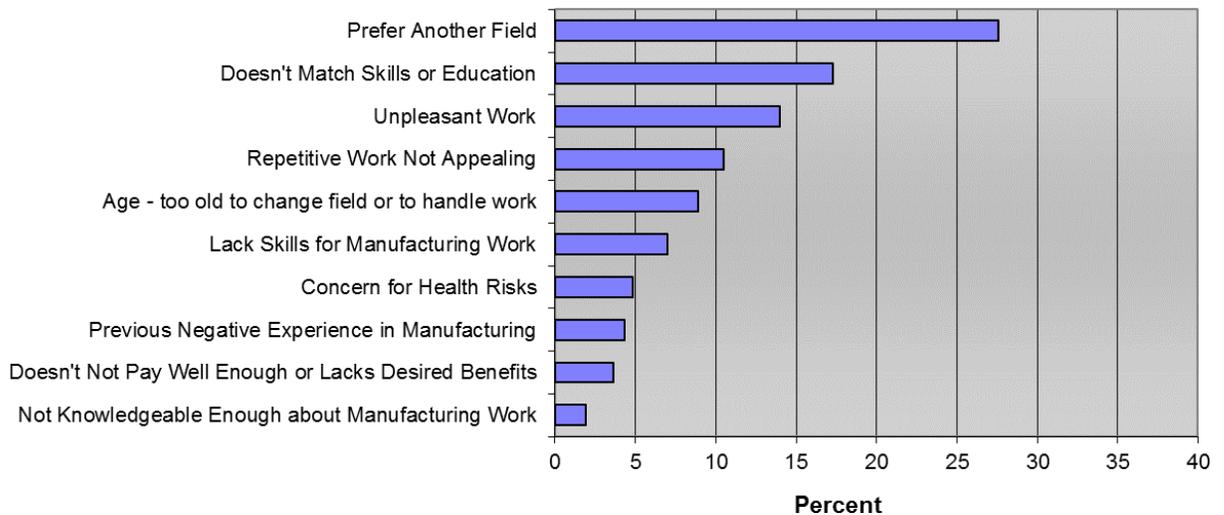
Available Labor Pool Member Not Interested in Manufacturing Employment or Not Interested in Working In Dodge or Jefferson Counties

This section of the report addresses those members of the Available Labor Pool not interested in manufacturing Employment, as well as those not willing to work in Jefferson or Dodge Counties.

Figure 21 provides the reasons given for not wanting to work in manufacturing. About 28% percent of those providing reasons (362 respondents), reported that they prefer to work in another field. About 17% reported that their educations or skill levels discourage them from taking a job in manufacturing. An additional 14% reported that they feel the work is unpleasant, hot, or too physical demanding. About 11% reported that the work is too repetitive. About 7% reported that they felt that they lacked the skills or training necessary to accept a manufacturing job.

About 7% reported that they felt that they lacked the skills or training necessary to accept a manufacturing job.

Figure 21: Reasons for Not Wanting to Work in Manufacturing

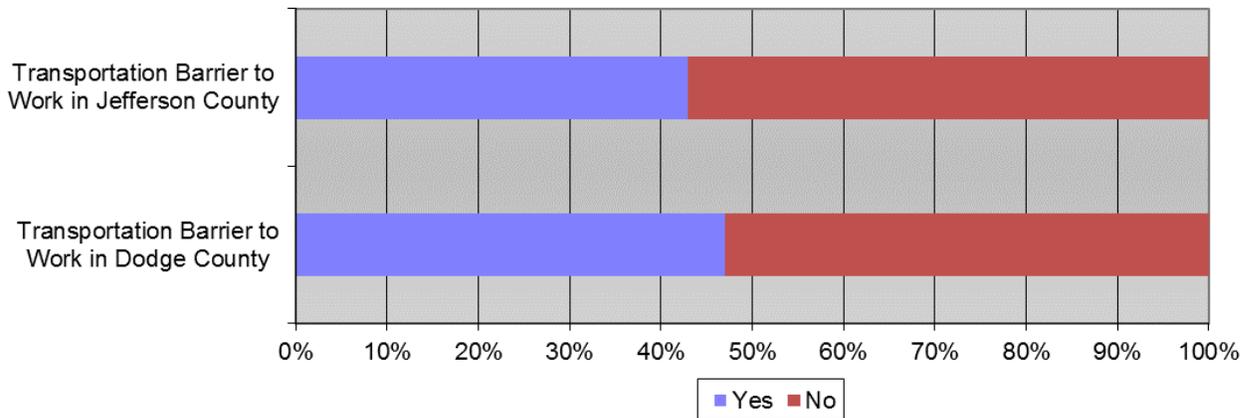


Finally, Available Labor Pool members who reported being interested in working in manufacturing but not being interested in working in Dodge or Jefferson County, were asked if transportation presented a barrier for doing so.

Figure 22 provide the results of these two questions. The percentages shown for Jefferson County represent Available Labor Pool members NOT living in Jefferson County and interested in a manufacturing job but not in Jefferson County. The percentages shown for Dodge County represent Available Labor Pool members NOT living in Dodge County and interested in a manufacturing job but not in Dodge County.

The figure shows that 43% report transportation being a barrier for working in Jefferson County, and 47% report transportation being a barrier for working in Dodge County.

Figure 22: Transportation Barrier for Working in Jefferson County or Dodge County



Methods

The Central Wisconsin Labor Region has a total population of approximately 779,636, and a Civilian Labor Force of 450,208. The total number of employed is 433,483 and the average county unemployment rate was about 3.71% at the time of this study. The Docking Institute's analysis suggests that the Central Wisconsin Labor Region contains an Available Labor Pool of 259,704 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 labor force dynamics in the Central Wisconsin Labor Region, 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, unemployed who are no longer seeking employment, military personnel who may be leaving military employment in the near future, and retired individuals who may be available for work but have not been looking for work recently.

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

Defining the Available Labor Pool

An alternative to the Civilian Labor Force is the "Available Labor Pool."⁶ The Available Labor Pool is composed of workers categorized as either 1) currently not working *and* looking for employment, 2) currently not working *but* interested in employment given the right opportunities, 3) currently working *and* looking for other employment, and 4) currently working and not looking, *but* interested in different employment for the right opportunities.

There are two key differences between the Civilian Labor Force and the Available Labor Pool. First, the Available Labor Pool methodology expands the pool of potential workers by including workers excluded from the Civilian Labor Force.⁷ Secondly, the number of potential workers is

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

⁷ The number that is added to the Civilian Labor Force is derived by taking from the survey the total number of full-time students, homemakers, military, retirees, and long-term unemployed, who state that they are seeking or available for employment, and dividing this number by the total number of respondents. This quotient is then multiplied by the total number of people in the labor basin who are 18 to 65 years old.

then *restricted* to those individuals who indicate that they are looking for work or are interested in 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 Central Wisconsin Labor Region.

Description of Survey Research Methods

Data for the study were collected from a random digit telephone survey of adults living in 10 counties in central Wisconsin: Columbia, Dane, Dodge, Fond du Lac, Green Lake, Jefferson, Rock, Walworth, Washington, and Waukesha. Portion of some counties were excluded because they contain large population centers, potentially capturing numerous potential workers.

Surveying took place from October 2017 to February 2018, using a Computer Assisted Telephone Interviewing (CATI) system.⁸ In 2,099 households a randomly selected adult agreed to be interviewed.

Survey respondents that were 65 years of age or older, retired and not looking for work nor interested in a new or different job were not asked the entire battery of survey questions and are not included in the analysis of this report. The remaining respondents (all other working and non-working respondents) total to 1,530 and are considered eligible respondents. Of these respondents, 788 or (51.5%) are looking for work or are interested in new or different employment. This subgroup is the Available Labor Pool for the study region. The Margin of Error for the region-wide Available Labor Pool is +/- 3.49%.

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

⁸ 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.

⁹ A detailed summary of the method of analysis used in this report can be found in Joseph A. Aistrup, Michael S. Walker & Brett A. Zollinger, “The Kansas Labor Force Survey: The Available Labor Pool and Underemployment.” *Kansas Department of Human Resources*, 2002.

Glossary of Terms

Central Wisconsin Labor Region – The Central Wisconsin Labor Region includes all of portions of Columbia, Dane, Dodge, Fond du Lac, Green Lake, Jefferson, Rock, Walworth, Washington, and Waukesha counties in central Wisconsin.

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 workers 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 employment, and 4) currently employed and not looking, *but* interested in different employment given the right opportunities.

Non-Employed – A respondent who indicated he or she is not employed. Non-working respondents include full-time students, homemakers, retired, officially unemployed, or disabled.

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 Commute – The number of minutes a respondent is willing to commute, one way, for a new or different job opportunity.

Willing to Work in Manufacturing – Respondents indicating they are interested in a job in a manufacturing field.

Willing to Work in Dodge County – Respondents reporting that they are willing to working in a manufacturing job in Dodge County.

Willing to Work in Jefferson County – Respondents reporting that they are willing to working in a manufacturing job in Jefferson County.

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

End of Report

