

BOONE COUNTY LABOR ANALYSIS

October 2019



In Partnership
With:





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EXECUTIVE SUMMARY AND RECOMMENDATIONS

The following labor analysis examines existing workforce trends in Boone County and the surrounding labor shed, made up of Boone, Clinton, Hamilton, Hendricks, Marion, Montgomery, and Tippecanoe counties. The below key findings and recommendations highlight conclusions drawn from the analysis and resulting recommendations that can be used to grow and enhance the workforce and job diversity in Boone County.

Demographics

Boone County has seen significant population growth in recent years, which is projected to continue over the next twenty years. The county is projected to grow by 30.41% between 2020 and 2040.

The largest growth is projected to occur with residents 65 years and older. However, significant growth may also occur for residents 0 to 4 years and 5 to 19 years, indicating the county may see growth in families with older children.

Boone County has a median household income of \$75,591, significantly higher than the Indiana median of \$52,182. However, much of this wealth is concentrated in Zionsville, Ulen, and Whitestown, which have median household incomes of \$127,152, \$111,875, and \$74,876 respectively. All other cities and towns within Boone County have medians less than the state.

Jobs

Boone County added 10,270 jobs between 2008 and 2018, a massive job growth rate of 45.2%. The new jobs added represent 10.8% of the jobs added in the Boone County Labor Shed and 6.0% of the jobs added in Indiana since 2008.

Transportation and Warehousing is the largest industry sector in Boone County with 5,596 jobs. Large detailed industries in the county include Warehousing and Storage, Education and Hospitals (Local Government), and Electronic Shopping and Mail-Order Houses.

Relatedly, Transportation and Material Moving Occupations is the largest occupation sector in the county with 5,835 jobs, 2,528 of which are Laborers and Freight, Stock, and Material Movers, Hand. Other large detailed occupations include Customer Service Representatives and Heavy and Tractor-Trailer Truck Drivers.

Skills

Based on job postings data, the top skills that Boone County employers are looking for include Warehousing, Restaurant Operation, Merchandising, Nursing, and Selling Techniques. Combined with data from an employer survey, key skills needs in Boone County are related to automated machinery and facility management.

Skills related to Healthcare and Social Assistance, including Nursing, Basic Life Support, CPR, and family therapy may also be needed. Lastly, soft skills related to Management, Customer Service, Sales, and Communications are also needed.

Wages

Boone County's average hourly wage is \$19.98, less than the Boone County Labor Shed, the Indianapolis metropolitan region, Indiana, and the United States, even when adjusted for a lower cost of living. The gap between Boone County and the other geographies is reduced slightly when looking at the median wage rather than the average wage, but actually becomes more significant when adjusting for cost of living. Overall, Boone County jobs pay a lower wage compared to the region, state, and nation.

Boone County has seen median wage growth of 14.4% since 2008; however, this lags behind many of the counties in the labor shed with the exception of Hendricks and Montgomery counties.

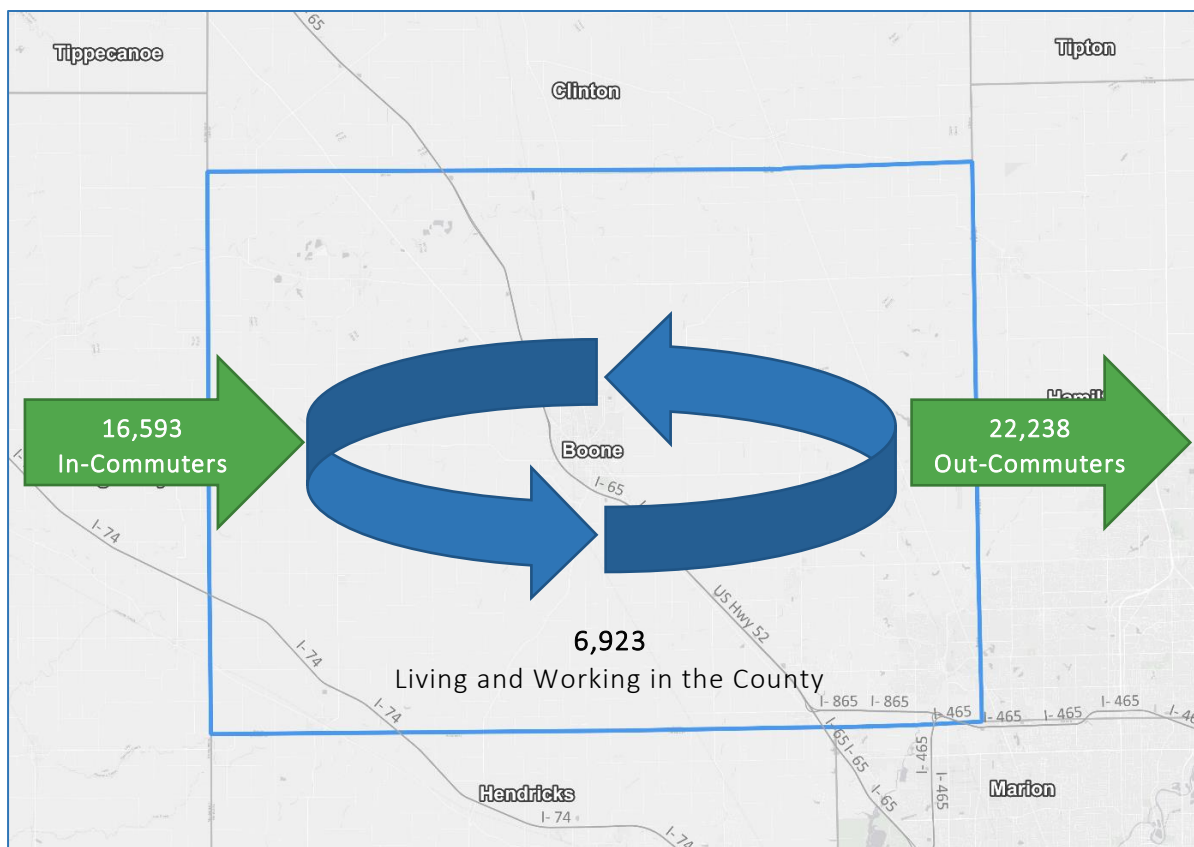
The top-paying occupations with at least 100 employees in the county include Lawyers; General and Operations Managers; Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products; Software Developers, Applications; and Registered Nurses, all of which have median hourly earnings over \$34.

Notably, the highest employing industry sector, Transportation and Warehousing has median hourly earnings of only \$14.79.

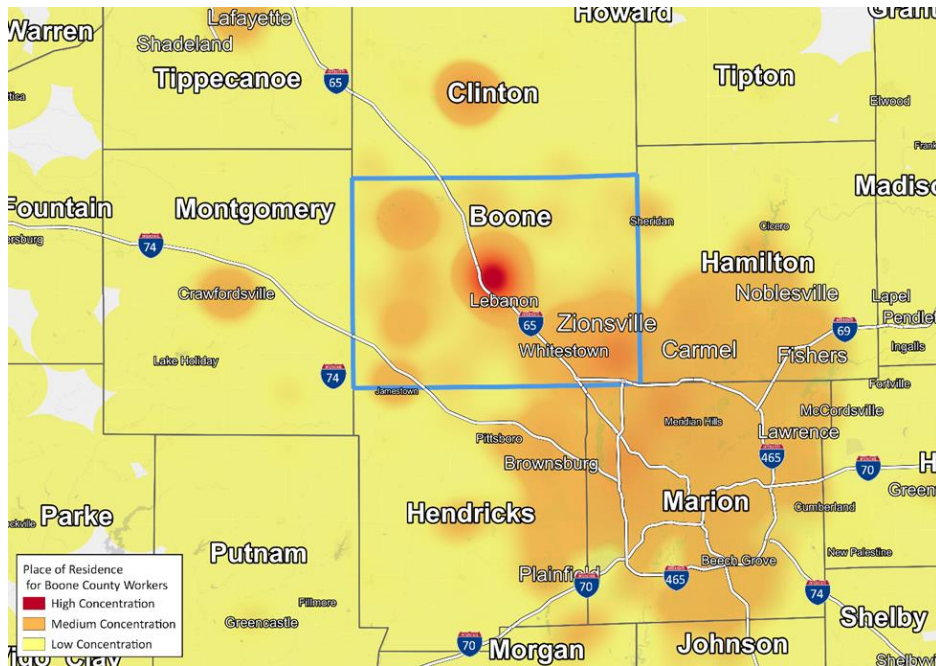
Commuting

Boone County has a large number of out and in-commuters with only 6,923 people who live and work in the county. This can be seen in Map 1 below.

Map 1: Commuters to and from Boone County

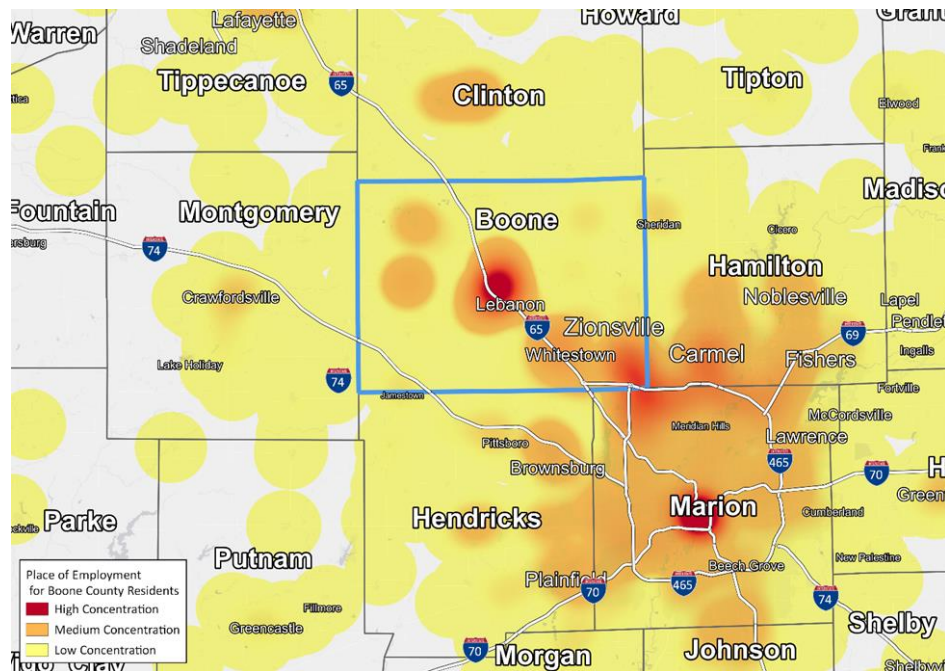


Map 2: Where Boone County Workers Live



Map 2 shows where those who work in Boone County live. As shown, many of the workers live in Boone County; however, a significant number of people also live in Marion County.

Map 3: Where Boone County Residents Work



Map 3 shows the concentration of where residents within Boone County work. While some residents work in Boone County, there are a lot of people who commute to Marion County, particularly at the intersection of Boone County and Marion County near I-65 and I-465.



Recommendations

The following recommendations, based on the labor analysis, highlight opportunities for Boone County to diversify the job types within the county, potentially attract new residents, and fill in potential skills gaps in the existing workforce.

Attract Diverse, High-Wage Jobs

Many of the jobs in Boone County are low-wage, technical jobs related to transportation and warehousing. While these jobs are a key economic driver for the county, additional focus should be placed on attracting more diverse positions. In particular, high-wage jobs in which existing residents are employed but commute outside of Boone County for work. Potential sectors to target could be Health Care and Social Assistance and Finance and Insurance. Diversifying the types of jobs in Boone County can not only provide additional options for residents in the county, it can also help protect Boone County from economic shocks by limiting the economy's reliance on one sector. One tool for accomplishing this is connecting incentives to wages. Additionally, Boone County's location in the Indianapolis metro region is a great marketing tool for attracting businesses.

Attract Workers to Live in Boone County

Many of the people that work in Boone County do not actually live in the county. As many of the positions available in the county are low to middle-wage positions related to transportation and distribution, there may be a need to identify potential income, transportation, and/or housing challenges. Ensuring that there is adequate housing and amenities for workers in the income range supported by Boone County's jobs may help attract more workers to the county. This could expand the supply of workers available for these positions, eliminate transportation issues, and grow the population in the county.

Fill in Skills Gaps

Boone County's large presence of transportation and distribution firms requires skills related to machinery and equipment operation and repair. Many of these skills may require certificates or two-year degrees but may also only need on-the-job training. Internships and apprenticeship programs may be able to fill in these gaps, and partnerships with local high schools may help build career pathways for residents into these positions. Developing skills related to health care may also be a potential avenue for not only filling existing needs in the workforce but also attracting new types of businesses to Boone County.

DEMOGRAPHIC ANALYSIS

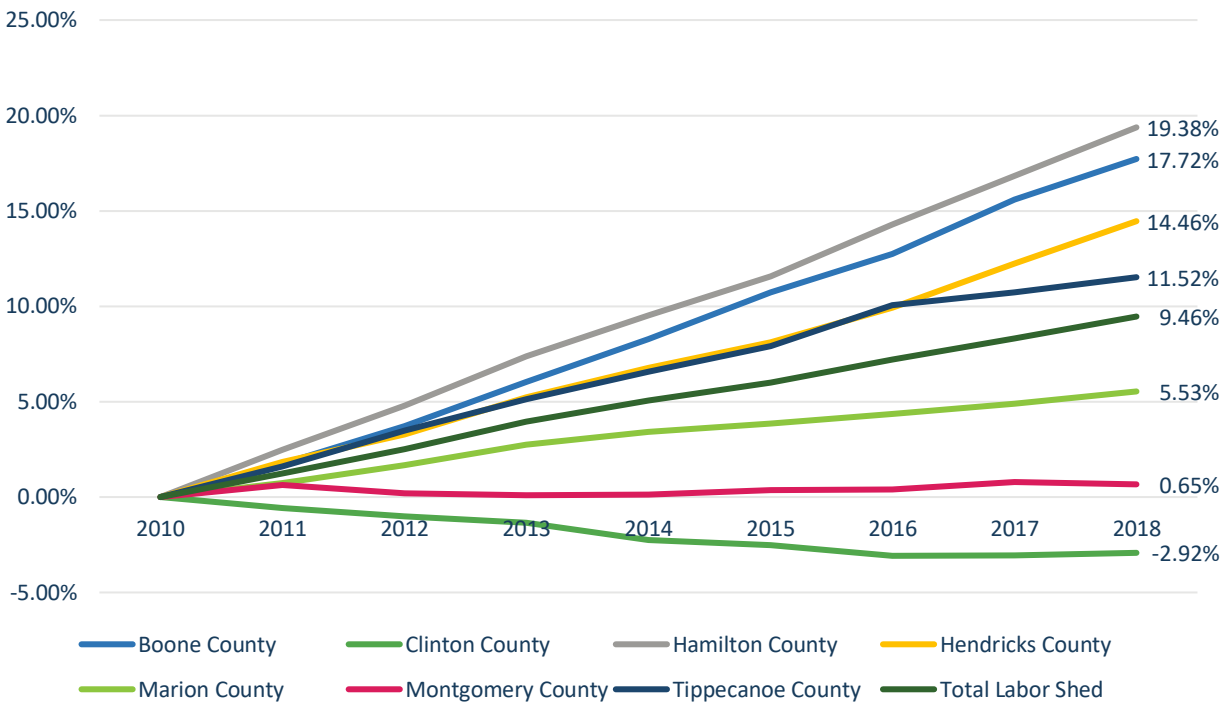
As of 2018, Boone County's estimated population was 66,999 residents. The County's population has increased in recent years, with a total population growth of 17.72% between 2010 and 2018. The only neighboring County that has grown at a faster rate than Boone is Hamilton County, whose growth was 1.66% more than Boone County during that time. The surrounding region includes Boone, Clinton, Hamilton, Hendricks, Marion, Montgomery, and Tippecanoe counties. In general, this region is experiencing population growth at a faster rate than Indiana. Montgomery County and Clinton County are the only two counties in this region that have not grown at higher rates than the State, which grew by 3.10% between 2010 and 2018. Boone County makes up 3.27% of the Indianapolis Metropolitan Region and 1.00% of Indiana's population.¹

Table 1: Total Population and Growth

Region	2010	2018	Percentage Growth
Boone County	56,914	66,999	17.72%
Clinton County	33,221	32,250	-2.92%
Hamilton County	276,509	330,086	19.38%
Hendricks County	145,912	167,009	14.46%
Marion County	904,602	954,670	5.53%
Montgomery County	38,097	38,346	0.65%
Tippecanoe County	173,102	193,048	11.52%
Total Labor Shed	1,628,357	1,782,408	9.46%
Indianapolis Metro Region	1,892,647	2,048,703	8.25%
Indiana	6,490,436	6,691,878	3.10%

¹ Total Population is from U.S. Census Bureau, Population Division, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018.

Figure 1: Total Percentage Population Growth 2010-2018



Boone County is projected to continue to grow by 30.41% between 2020 and 2040. The County's projected rate of growth is significantly higher than the State of Indiana's projected growth of 6.43% by 2040. Current projections estimate that Boone County will account for 3.83% of growth in the Indianapolis Metro Region, and 1.28% in the State of Indiana. These projections consider current population, birth, death, and migration rates. In contrast, all other counties but two in this region are expected to grow by 2040. Given previous trends, Hamilton, Hendricks and Boone Counties are expected to see the most growth within the Indianapolis Metro Region.²

Table 2: Projected Population Growth

Region	2020	2040	Percentage Growth
Boone County	70,556	92,011	30.41%
Clinton County	32,128	30,501	-5.06%
Hamilton County	343,179	479,841	39.82%
Hendricks County	170,323	222,337	30.54%
Marion County	963,732	1,033,719	7.26%
Montgomery County	38,342	37,671	-1.75%
Tippecanoe County	195,555	225,741	15.44%
Total Labor Shed	1,813,815	2,121,821	16.98%
Indianapolis Metro Region	2,077,479	2,396,950	15.38%
Indiana	6,738,573	7,171,702	6.43%

² Population Projections are from STATS Indiana, using data from the Indiana Business Research Center, IU Kelley School of Business.

Table 3 shows the distribution of projected population growth by component of change. Within the Labor Shed, 28.61% of the projected growth is anticipated to come from net migration into the area. In Boone County, 60.92% is projected to come from net migration. Three of the seven counties within the Labor Shed are predicted to lose population due to out migration: Clinton, Marion, and Montgomery.

Table 3: Components of Projected Population Growth

Region	Total Projected Growth	Births	Deaths	Natural Increase	Net Migration
Boone County	21,455	22,542	14,158	8,384	13,071
Clinton County	-1,627	9,085	7,732	1,353	-2,980
Hamilton County	136,662	121,097	60,680	60,417	76,245
Hendricks County	52,014	48,404	34,151	14,253	37,761
Marion County	69,987	306,195	189,151	117,044	-47,057
Montgomery County	-671	9,435	9,032	403	-1,074
Tippecanoe County	30,186	51,021	32,976	18,045	12,141
Total Labor Shed	308,006	567,779	347,880	219,899	88,107
Indianapolis Metro Region	319,471	630,751	424,510	206,241	113,230
Indiana	433,129	1,810,255	1,483,326	326,929	106,200

Boone County's 2017 median age of 38.4 is significantly higher than both the national median age of 37.8 and Indiana's median age of 37.5. This is largely due to a relatively small share of adults aged 20-39, and a large share of adults aged 35-54 in Boone County. However, the County's median age is similar to that of the Indianapolis Metro Region. In the region, Tippecanoe County has a significantly lower median age of 28.1, which is likely due to the presence of Purdue University's campus.³

The age distribution of Boone County mostly resembles that of the defined Labor Shed. Some key differences are seen in the 25-34 and 45-54 age ranges. The County has approximately 4% fewer individuals in the 25-34 age range, and about 2.5% higher concentration of individuals in the 45-54 age range.

Specifically, the County is projected to see a 69.26% percent increase of adults 65 years and older between 2020 and 2040. This expected increase is significantly higher than for other age groups in the County and is directly related to the current large share of adults aged 35-54. During that same time, the Labor Shed is expected to see a 54.90% percent growth of adults in the 65 years and older age group as well. The smallest growth expected in Boone County is for individuals aged between 20-24 years with only 0.28% projected growth. A positive trend for the

³ Population by Age and Median Age is from U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2013-2017.

County is the large growth expected of individuals ages 0-4 years and 5-19 years by 13.84% and 34.68% respectively.

Figure 2: Population by Age Group

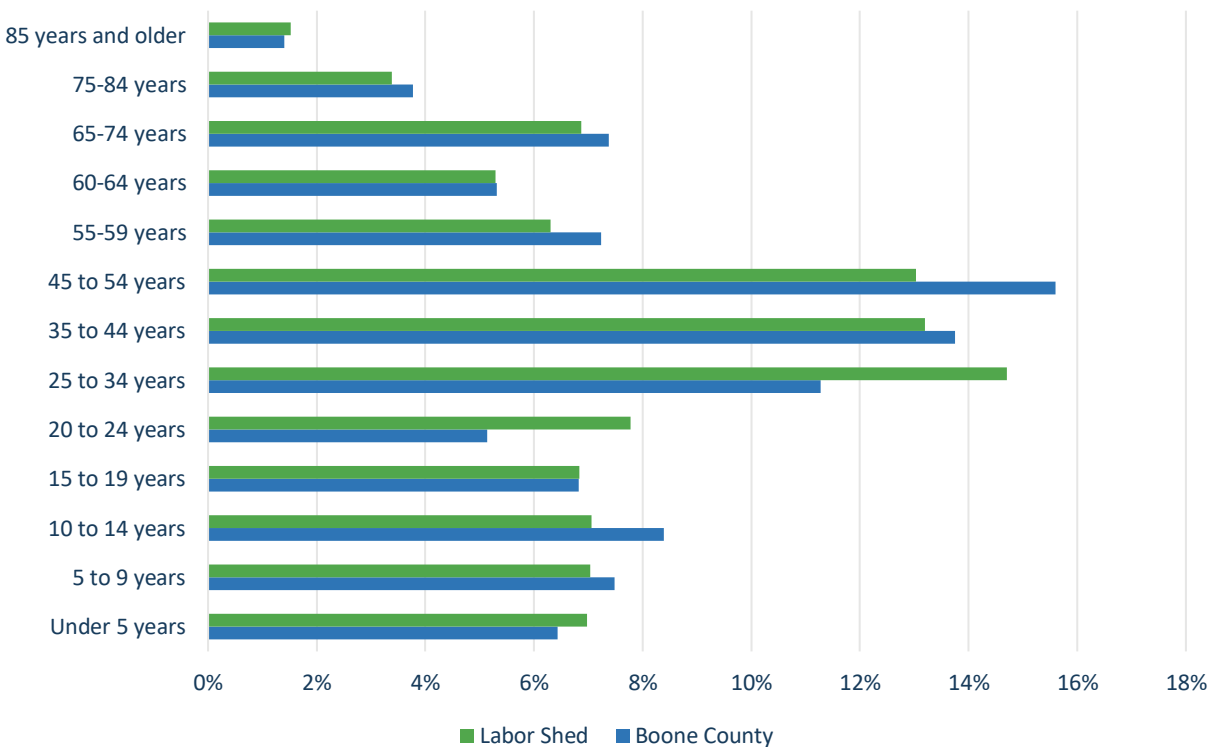


Table 4: Projected Population Growth by Age

Age Group	Boone County			Labor Shed		
	2020	2040	Percentage Growth	2020	2040	Percentage Growth
0 to 4 years	4,805	5,470	13.84%	124,919	142,721	14.25%
5 to 19 years	15,325	20,639	34.68%	373,902	432,167	15.58%
20 to 24 years	3,618	3,628	0.28%	131,502	140,808	7.08%
25 to 44 years	18,852	20,761	10.13%	507,153	549,694	8.39%
45 to 64 years	18,109	24,846	37.20%	433,521	480,299	10.79%
65 years and older	9,847	16,667	69.26%	242,818	376,132	54.90%

With 93.69% of the population identifying as White alone, Boone County is relatively homogenous. This is higher than the national average of 73.00%. The next largest demographic group identifies as Asian (2.60%). Other significant percentage of residents are Two or more races (1.64%) and Black or African American (1.61%).

The Labor Shed more closely resembles the national average, with 74.11% of the population identifying as White alone. The next largest demographic group identifies as Black or African

American (16.75%), with the remaining significant percentage of residents identifying as Asian (3.82%), Two or more races (2.59%), and Some other race (2.48%).⁴

Figure 3: Population by Race

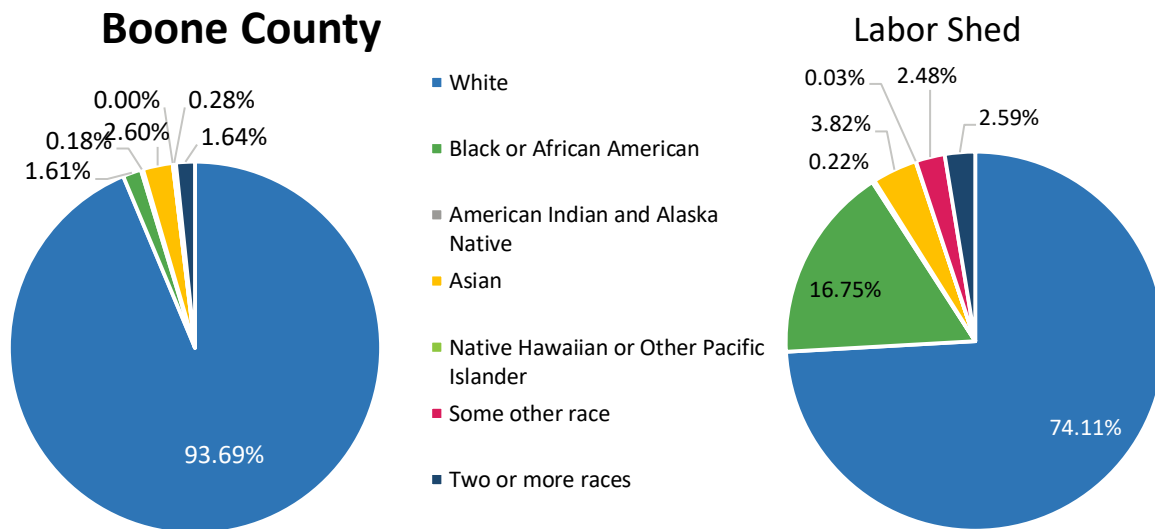


Table 5: Population by Ethnicity

County	Total	Hispanic or Latino	Percent Hispanic or Latino
Boone County	63,013	1,729	2.74%
Clinton County	32,455	4,932	15.20%
Hamilton County	309,687	11,840	3.82%
Hendricks County	158,170	5,737	3.63%
Marion County	939,964	94,609	10.07%
Montgomery County	38,288	1,807	4.72%
Tippecanoe County	186,081	15,135	8.13%
Labor Shed	1,727,658	135,789	7.86%

Median household incomes in the region range from a low of \$44,869 in Marion County to \$90,582 in Hamilton County. Boone County's average median household income of \$75,591 is comparable to the surrounding region. However, the median household income in the County is much higher compared to a median household income of \$54,181 in Indiana overall. Household income distribution in Boone County shows the share of households in particular income categories across the County. The highest concentration of households is the share with median

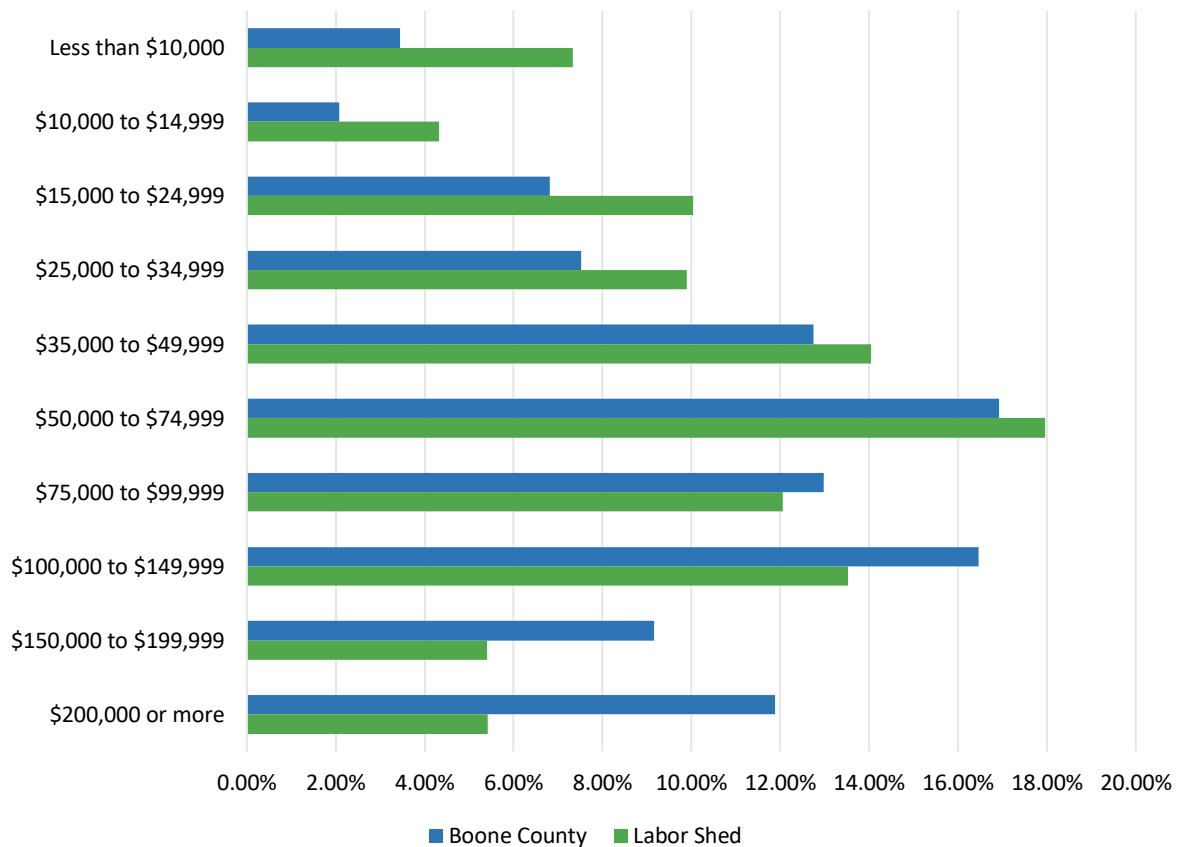
⁴ Population by Race/Ethnicity is from U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2013-2017.

incomes within the \$50,000 to \$74,999 range (16.93%). The next highest range (16.43%) is within the \$100,000 to \$149,999 range. A higher than average amount of the population earns \$200,000 or more (11.88%).⁵

Table 6: Median Household Income

County	Median Household Income
Boone County	\$75,591
Clinton County	\$51,659
Hamilton County	\$90,582
Hendricks County	\$74,245
Marion County	\$44,869
Montgomery County	\$53,075
Tippecanoe County	\$50,486
Indiana	\$52,182
United States	\$57,652

Figure 4: Household Income Distribution



⁵ Household Income is from U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2013-2017.

Table 7 shows the median household income for individual cities and towns within Boone County. As shown, there is a significant income gap within the County. Zionsville has the highest median household income at \$127,152 while Lebanon has the lowest at \$47,234. In addition to Zionsville, Ulen's median household income of \$111,875 is above the median income for the County of \$75,591. All of the other cities and town have a lower median income than the County. Additionally, Advance, Jamestown, Thorntown, and Lebanon all have lower median household incomes than the state at \$52,182.

Table 7: Median Household Income for Cities and Towns in Boone County

County	Median Household Income
Advance	\$52,083
Jamestown	\$50,833
Lebanon	\$47,234
Thorntown	\$50,114
Ulen	\$111,875
Whitestown	\$74,876
Zionsville	\$127,152

The poverty rate ranges drastically within the region from a low of 5.0% in Hamilton County to a high of 20.9% in Tippecanoe County, once again likely due to the presence of Purdue University students. The share of Boone County residents experiencing poverty is substantially lower than the United States average of 14.6%. Hendricks and Hamilton Counties are the only two surrounding counties experiencing poverty at a lower rate (5.1% and 5.0% respectively) than Boone County's 6.1%.⁶

Table 8: Poverty Rate

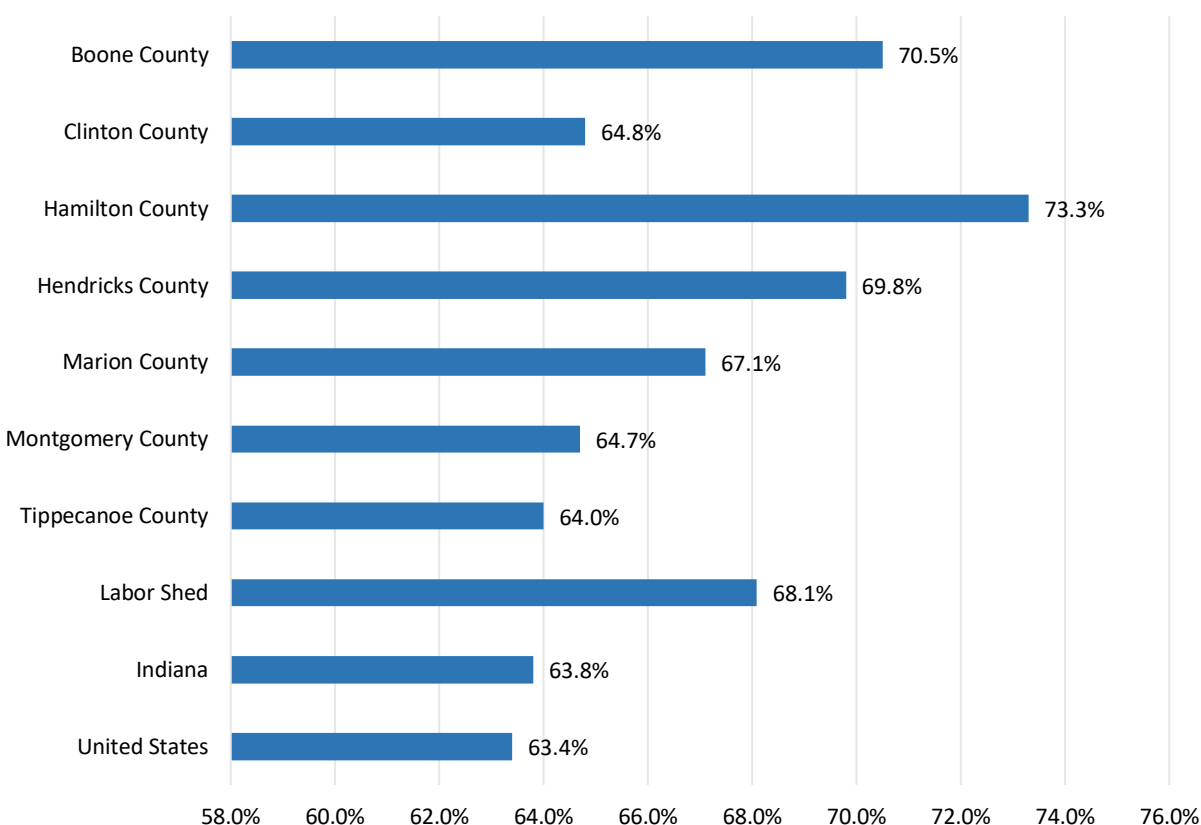
	Poverty Rate
Boone County	6.1%
Clinton	13.3%
Hamilton	5.0%
Hendricks	5.1%
Marion	19.8%
Montgomery	10.2%
Tippecanoe	20.9%
Indiana	14.6%
United States	14.6%

⁶ Poverty rate is from U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2013-2017.

LABOR INFORMATION

The labor force participation rate in Boone County, as defined by the percentage of the population 16 years and over in the labor force, is 70.5%. This is higher than that for the entire Labor Shed, Indiana, and the United States. For counties within the Labor Shed, only Hamilton county has a higher labor force participation rate.⁷

Figure 5: Labor Force Participation Rate



Employment in Boone County grew by 10,270 jobs between 2008 and 2018. Boone County's growth of 45.2% since 2008 stands out when compared to 10.0% growth in the Labor Shed, 5.4% growth in Indiana, and 7.3% growth in the United States. This significant growth trend is expected to continue with an additional 7,096 jobs expected by 2028. The growth in Boone County has increased the share of Labor Shed jobs within the County from 2.4% in 2008 to 3.2% in 2018 and to a projected 3.6% in 2028. Boone County's 10,270 new jobs represent 10.8% of the jobs added in the Labor Shed and 6.0% of the jobs added in Indiana since 2008.⁸

⁷ Labor Force Participation Rate is from U.S. Census Bureau, American Community Survey, 5 Year Estimates, 2013-2017.

⁸ Total employment is from Economic Modeling Specialists International, 2019.2.

Figure 6: Total Percentage Employment Growth

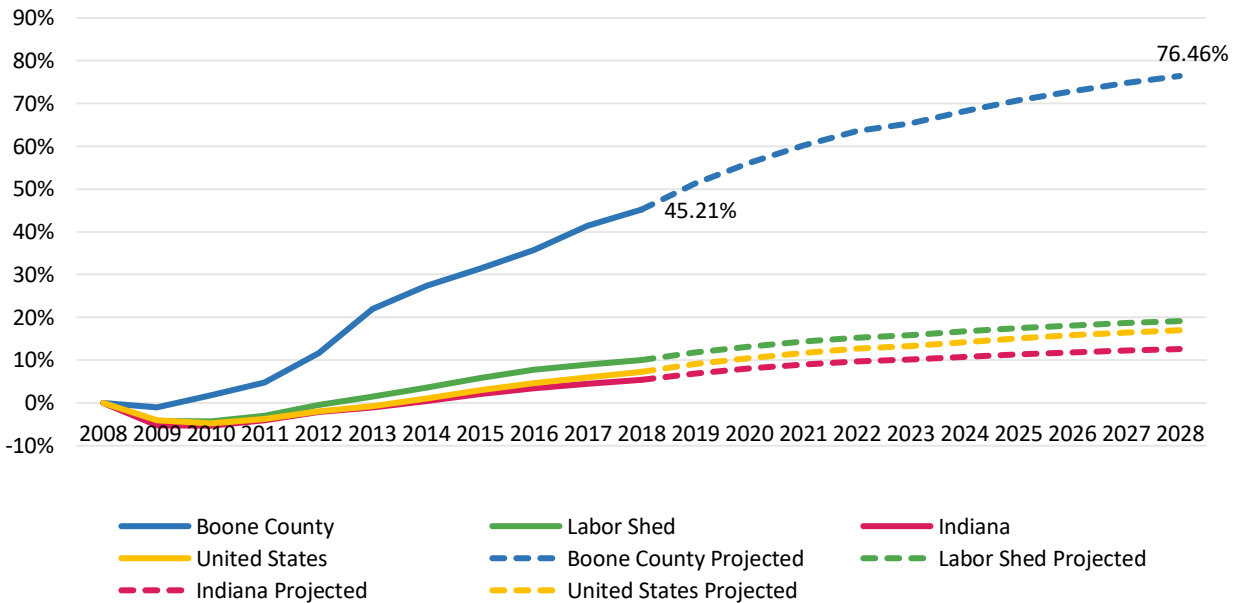
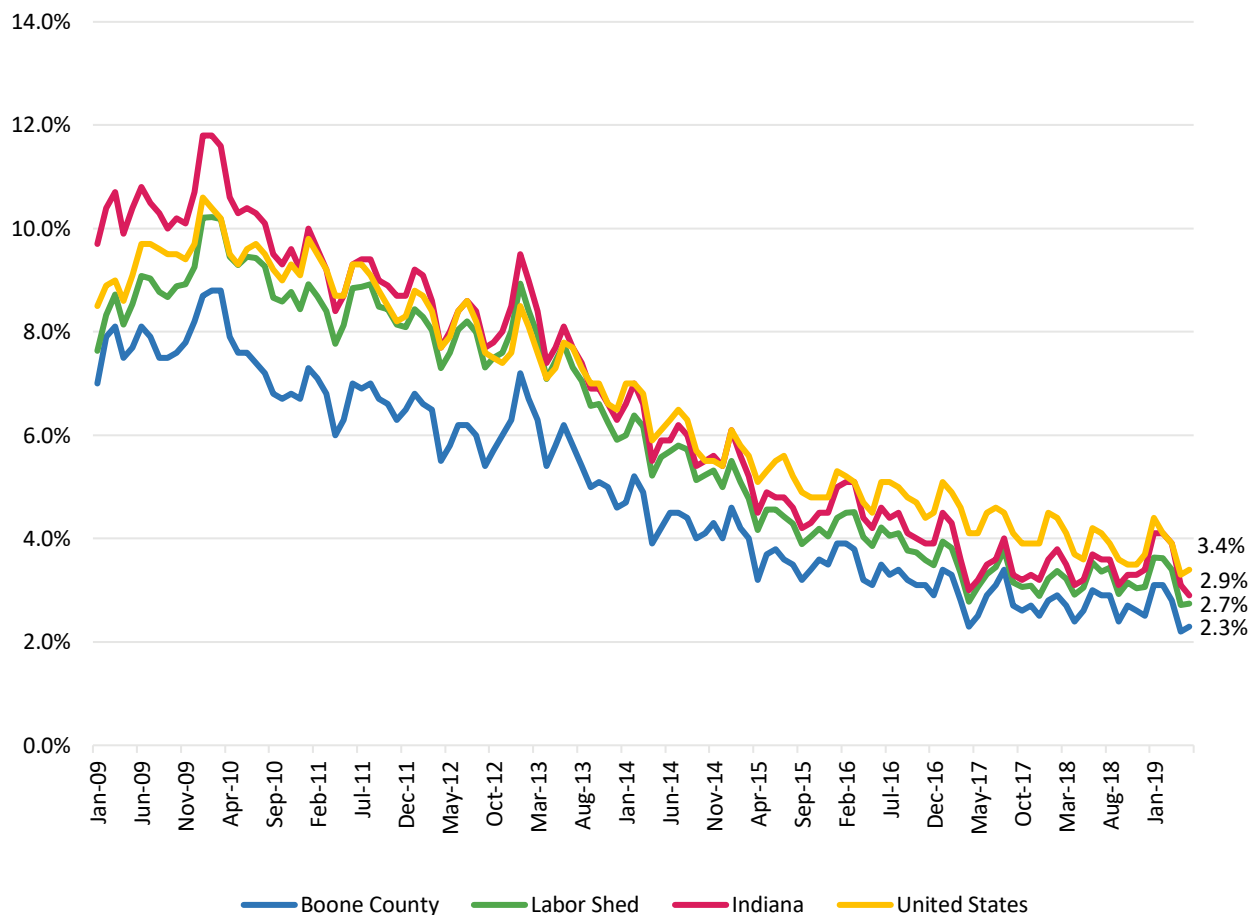


Table 9: Total Historical and Projected Employment

Year	Boone County	Labor Shed	Boone County's Share of Jobs in Labor Shed
2008	22,714	945,377	2.4%
2009	22,480	905,658	2.5%
2010	23,132	904,695	2.6%
2011	23,807	917,636	2.6%
2012	25,353	941,586	2.7%
2013	27,692	959,360	2.9%
2014	28,916	979,423	3.0%
2015	29,860	1,001,065	3.0%
2016	30,819	1,019,284	3.0%
2017	32,129	1,030,234	3.1%
2018	32,983	1,040,217	3.2%
2019	34,361	1,056,705	3.3%
2020	35,467	1,069,978	3.3%
2021	36,385	1,080,994	3.4%
2022	37,151	1,090,126	3.4%
2023	37,567	1,095,253	3.4%
2024	38,216	1,103,258	3.5%
2025	38,784	1,110,276	3.5%
2026	39,279	1,116,408	3.5%
2027	39,709	1,121,738	3.5%
2028	40,080	1,126,348	3.6%

Boone County's most recent unemployment rate is 2.3% as of May 2019, significantly lower than its most recent peak of 8.8% in March 2010. The rate in Boone County is lower than that of the County's Labor Shed, Indiana, and the United States. The rate for the Labor Shed is 2.7%, only slightly lower than that of the entire state at 2.9%. The United States unemployment rate is currently 3.4%.⁹

Figure 7: Unemployment Rate

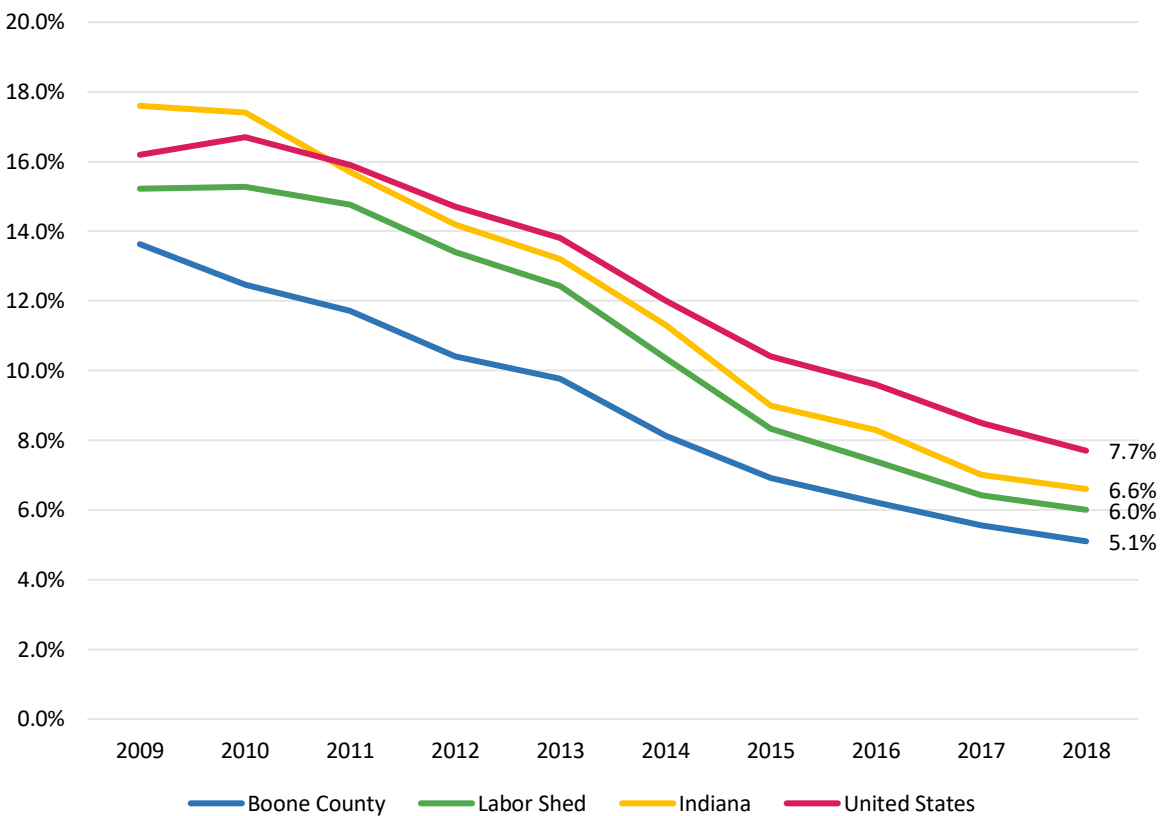


⁹ Boone County, Labor Shed, and Indiana Unemployment Rates are from the U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics Program. United States Unemployment Rate is from the U.S. Bureau of Labor Statistics, Current Population Survey.

While the traditional unemployment rate (U3) measures only those unemployed that are actively seeking work, the underemployment rate (U6) also includes persons marginally attached to the labor force (i.e. not currently working nor looking for work but who want and are available for a job) as well as workers employed part-time who want and are available for full-time work.

Figure 8 shows the underemployment rate for Boone County, the Labor Shed, Indiana and the United States. The rate has decreased significantly since 2009 for all areas with Boone County having the lowest rate at 5.1% and the United States having the highest at 7.7%.¹⁰

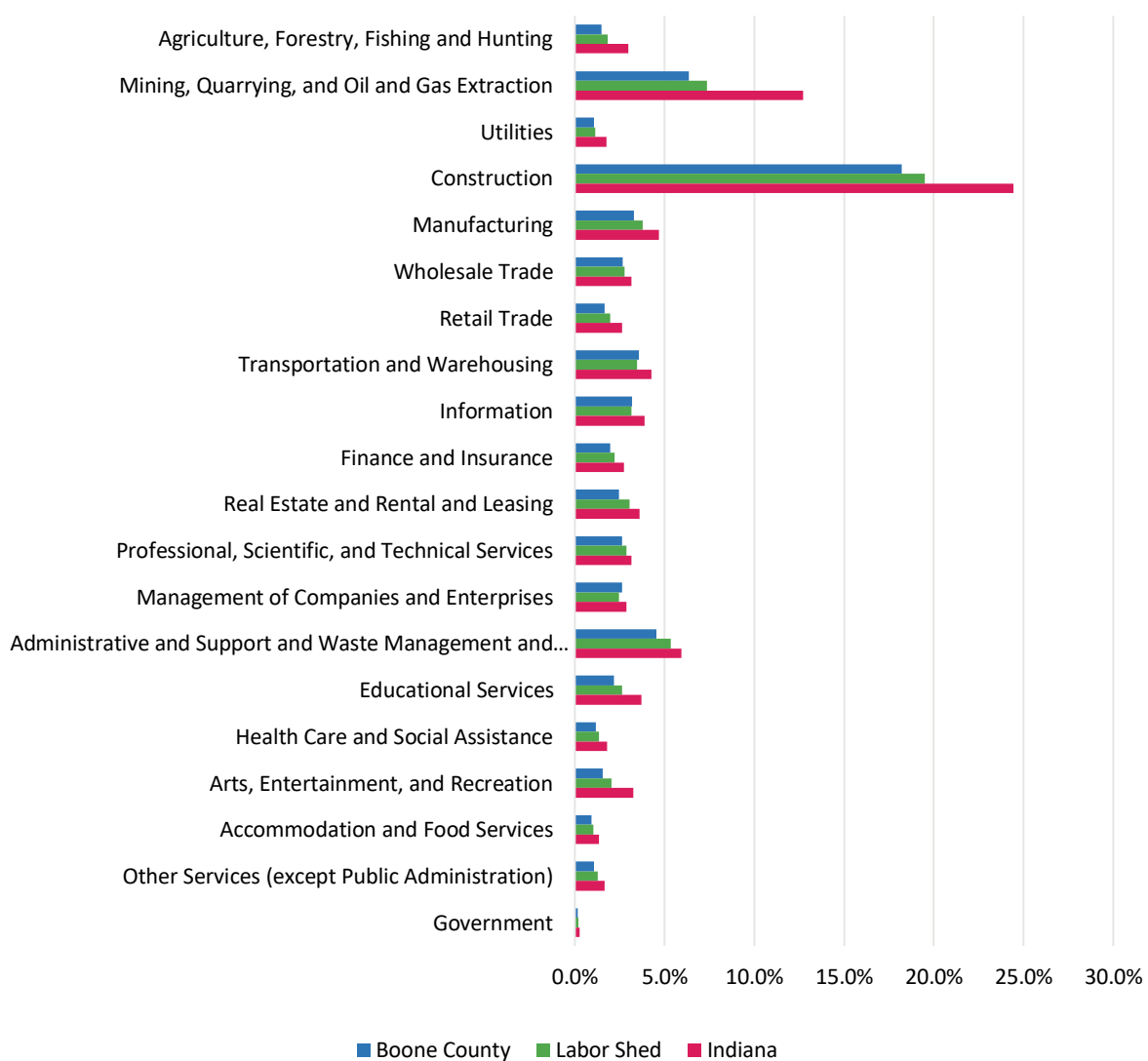
Figure 8: Underemployment Rate (U6)



¹⁰ Underemployment is from the U.S. Bureau of Labor Statistics, Current Population Survey. Estimates for Boone County and the Labor Shed are based on a ratio of Indiana's underemployment rate (U6) to its underemployment rate (U6) times the County's/Labor Shed's unemployment rate (U3).

Unemployment rates differ across industry sectors and occupation types, Figure 9 shows the unemployment rate by industry sector for Boone County, the Labor Shed, and Indiana. Construction and Mining, Quarrying, and Oil and Gas Extraction are the industries with the highest unemployment rates across all geographies. The higher unemployment rate in Construction and Mining, Quarrying, and Oil and Gas Extraction can be related to the nature of a seasonal industry whose sales or profits fluctuate in patterns through the course of the year and the relation to when the data was pulled. The rates for all industry sectors are lower in Boone County than in Indiana. However, the Boone County unemployment rates are slightly higher than those of the Labor Shed for Transportation and Warehousing; Information; and Management of Companies and Enterprises.¹¹

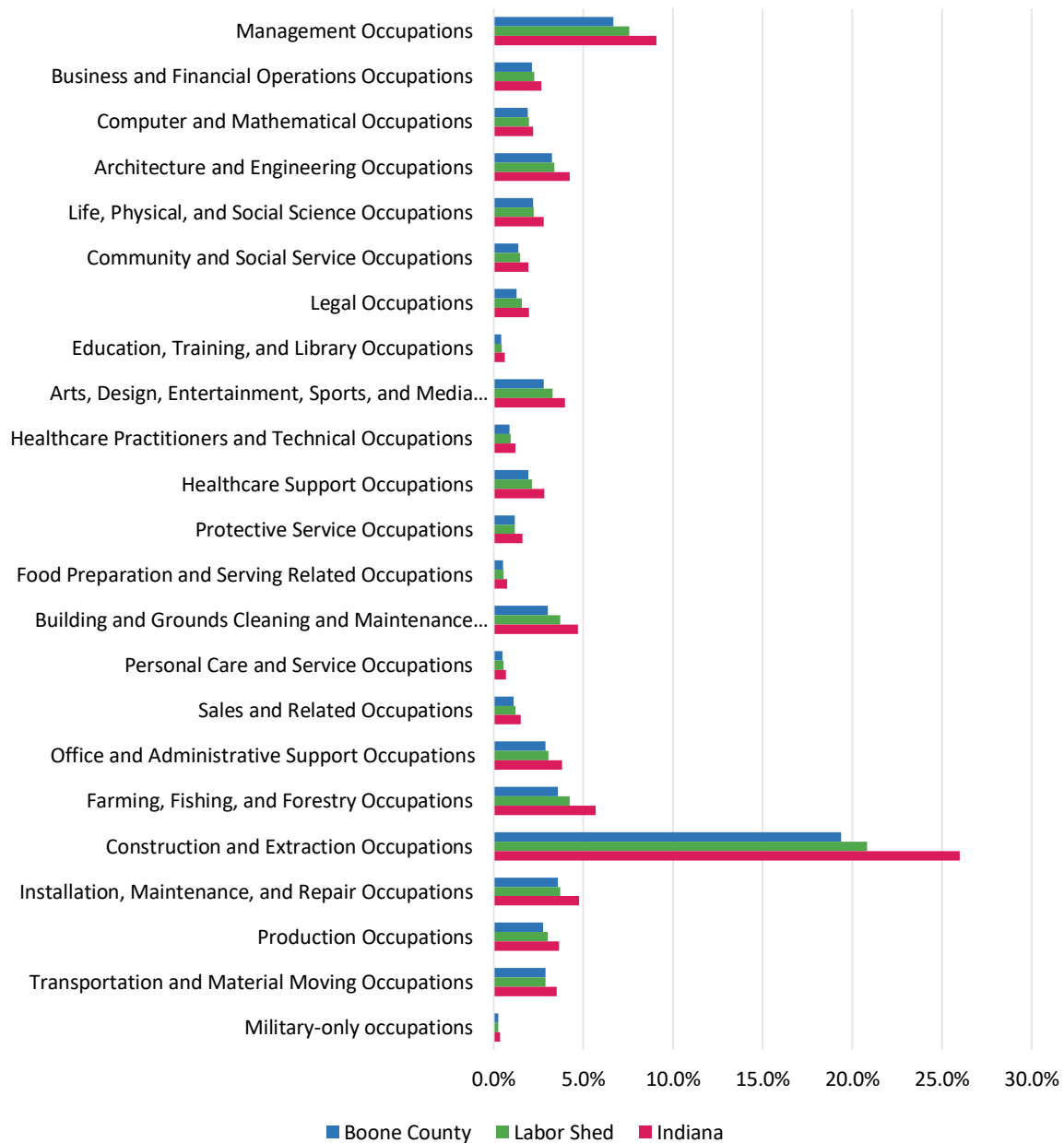
Figure 9: Unemployment Rate by Industry Sector



¹¹ Unemployment by Industry Sector is from Economic Modeling Specialists International 2019.2. Rates do not include unemployed persons without a known industry.

Figure 10 shows unemployment by major occupation group. Once again, Construction and Extraction Occupations have the highest unemployment rate across all areas with Management Occupations second. Boone County has the lowest unemployment rate across all sectors with the exception of Transportation and Material Moving Occupations where the Labor Shed's rate is slightly lower. This trend is likely due to the significant presence of this type of worker in Boone County as will be discussed in the following section.¹²

Figure 10: Unemployment by Major Occupation Group



¹² Unemployment by Major Occupational Group is from Economic Modeling Specialists International 2019.2. Rates do not include unemployed persons without a known occupation.

EMPLOYMENT BY INDUSTRY

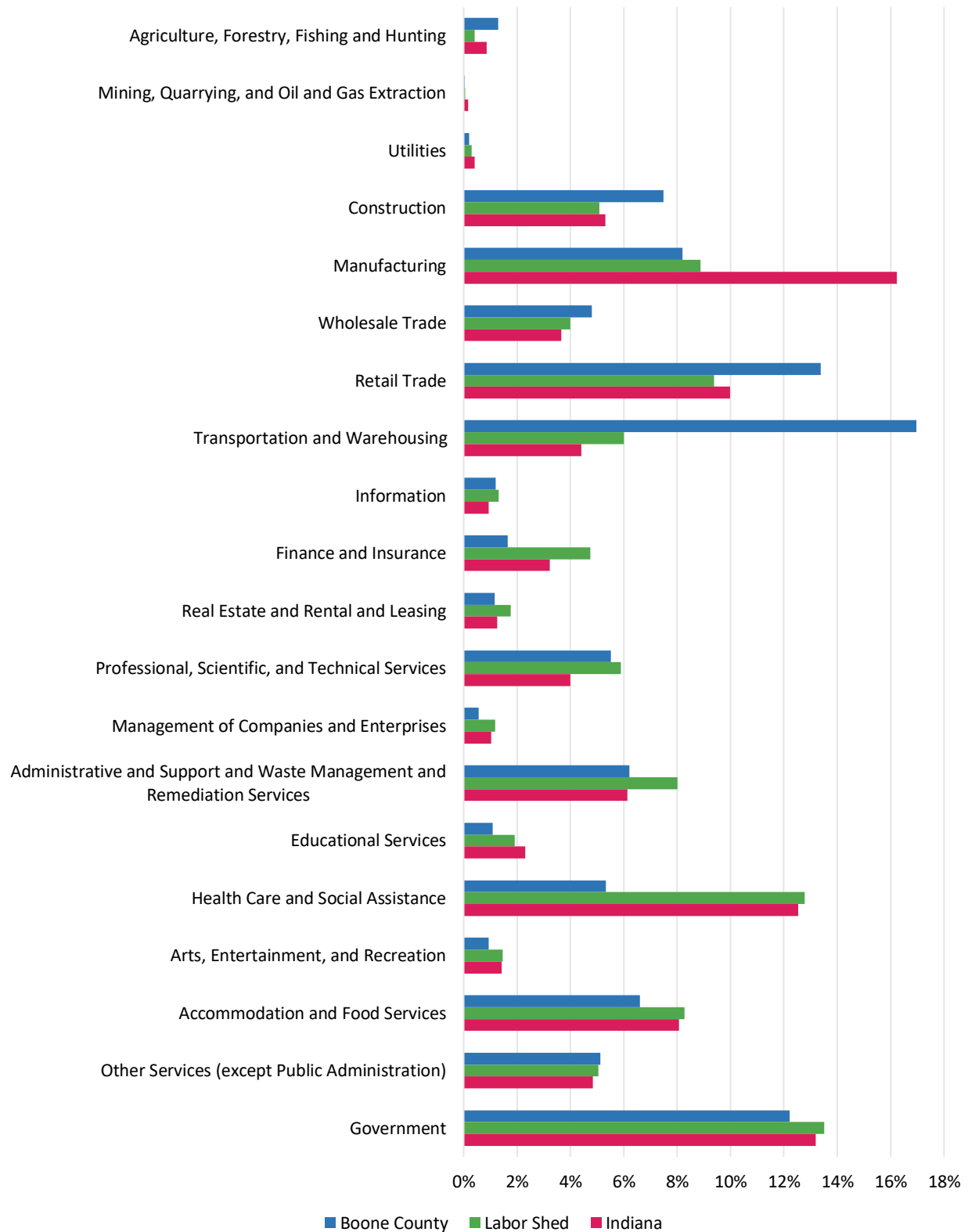
The largest industry sector in Boone County is Transportation and Warehousing with 5,596 jobs or 16.9% of all employment in the County. Retail Trade and Government are the only other sectors with over 4,000 employees. Within the Labor Shed, Government represents the largest sector with 140,473 jobs, likely due to the inclusion of Marion County and the presence of large state government offices. Health Care and Social Assistance also has over 100,000 jobs within the Labor Shed. This trend is in contrast to the State, where Manufacturing is the largest industry sector and the only one that represents over 500,000 jobs. Government and Healthcare and Social Assistance are the only other sectors with over 400,000 jobs.¹³

Table 10: Employment by Industry Sector

NAICS	Description	Boone County	Labor Shed	Indiana
11	Agriculture, Forestry, Fishing and Hunting	429	4,363	28,830
21	Mining, Quarrying, and Oil and Gas Extraction	14	506	5,920
22	Utilities	67	3,092	14,083
23	Construction	2,470	52,981	177,861
31	Manufacturing	2,707	92,299	544,339
42	Wholesale Trade	1,585	41,528	122,741
44	Retail Trade	4,412	97,539	334,927
48	Transportation and Warehousing	5,596	62,423	147,567
51	Information	397	13,674	31,469
52	Finance and Insurance	543	49,375	107,945
53	Real Estate and Rental and Leasing	386	18,418	42,003
54	Professional, Scientific, and Technical Services	1,818	61,239	134,185
55	Management of Companies and Enterprises	187	12,321	34,351
56	Administrative and Support and Waste Management and Remediation Services	2,048	83,325	205,435
61	Educational Services	359	19,915	77,439
62	Health Care and Social Assistance	1,758	132,904	420,239
71	Arts, Entertainment, and Recreation	309	15,195	47,633
72	Accommodation and Food Services	2,179	86,080	270,193
81	Other Services (except Public Administration)	1,690	52,562	162,237
90	Government	4,030	140,473	442,489
99	Unclassified Industry	0	6	101
	Total	32,983	1,040,217	3,351,986

¹³ Employment by Industry is from Economic Modeling Specialists International 2019.2.

Figure 11: Percent of Total Jobs by Industry Sector



Between 2013 and 2018, several industry sectors in Boone County lost jobs, including Agriculture, Forestry, Fishing and Hunting; Mining, Quarrying, and Oil and Gas Extraction; Retail Trade; Administrative and Support and Waste Management and Remediation Services; and Educational Services. With the exception of Educational Services, all of these industries are expected to continue to lose jobs over the next five years.

Three industry sectors saw tremendous growth since 2013: Transportation and Warehousing; Information; and Management of Companies and Enterprises with all three doubling or more in size over five years. Projections show growth in these industries will continue over the next five years.

Table 11: Boone County Historical and Projected Employment Growth by Industry Sector

Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
Agriculture, Forestry, Fishing and Hunting	459	429	426	-6.50%	-0.82%
Mining, Quarrying, and Oil and Gas Extraction	16	14	12	-8.66%	-13.59%
Utilities	45	67	80	48.41%	18.23%
Construction	1,989	2,470	2,793	24.19%	13.11%
Manufacturing	1,985	2,707	3,230	36.34%	19.34%
Wholesale Trade	1,369	1,585	1,835	15.77%	15.79%
Retail Trade	4,985	4,412	3,706	-11.50%	-16.01%
Transportation and Warehousing	1,888	5,596	7,919	196.41%	41.52%
Information	132	397	507	201.41%	27.61%
Finance and Insurance	515	543	599	5.42%	10.44%
Real Estate and Rental and Leasing	350	386	423	10.23%	9.78%
Professional, Scientific, and Technical Services	1,106	1,818	2,384	64.39%	31.11%
Management of Companies and Enterprises	91	187	258	105.64%	38.14%
Administrative and Support and Waste Management and Remediation Services	3,631	2,048	1,943	-43.60%	-5.11%
Educational Services	406	359	407	-11.53%	13.14%
Health Care and Social Assistance	1,701	1,758	1,898	3.34%	8.02%
Arts, Entertainment, and Recreation	293	309	308	5.52%	-0.26%
Accommodation and Food Services	1,729	2,179	2,477	26.02%	13.64%
Other Services (except Public Administration)	1,492	1,690	1,875	13.24%	10.98%
Government	3,510	4,030	4,486	14.83%	11.31%
Total	27,692	32,983	37,567	19.11%	13.90%

In contrast to Boone County, within the Labor Shed, the Information sector has lost jobs over the last five years. Other declining sectors include Agriculture, Forestry, Fishing and Hunting; and Utilities. Growing sectors include Mining, Quarrying, and Oil and Gas Extraction; Transportation and Warehousing; and Professional, Scientific and Technical Services. However, none of these industry sectors show the rapid growth found in many sectors in Boone County, likely due to the wider geography, total size of employment, and less industry concentration.

Table 12: Labor Shed Historical and Projected Employment Growth by Industry Sector

Description	2013 Jobs	2018 Jobs	2023 Jobs	2013-2018 Change	2018-2023 Change
Agriculture, Forestry, Fishing and Hunting	4,629	4,363	4,338	-5.75%	-0.58%
Mining, Quarrying, and Oil and Gas Extraction	411	506	508	22.96%	0.41%
Utilities	3,356	3,092	3,069	-7.88%	-0.75%
Construction	46,146	52,981	55,913	14.81%	5.54%
Manufacturing	88,538	92,299	91,042	4.25%	-1.36%
Wholesale Trade	39,956	41,528	41,885	3.93%	0.86%
Retail Trade	93,687	97,539	98,504	4.11%	0.99%
Transportation and Warehousing	51,318	62,423	68,541	21.64%	9.80%
Information	16,349	13,674	13,418	-16.36%	-1.87%
Finance and Insurance	44,876	49,375	51,061	10.03%	3.41%
Real Estate and Rental and Leasing	16,651	18,418	19,314	10.61%	4.86%
Professional, Scientific, and Technical Services	51,209	61,239	67,675	19.59%	10.51%
Management of Companies and Enterprises	11,015	12,321	12,268	11.86%	-0.43%
Administrative and Support and Waste Management and Remediation Services	76,395	83,325	89,132	9.07%	6.97%
Educational Services	18,377	19,915	22,396	8.37%	12.46%
Health Care and Social Assistance	118,590	132,904	150,232	12.07%	13.04%
Arts, Entertainment, and Recreation	13,448	15,195	16,100	12.99%	5.96%
Accommodation and Food Services	78,525	86,080	90,459	9.62%	5.09%
Other Services (except Public Administration)	48,710	52,562	55,056	7.91%	4.74%
Government	137,170	140,473	144,340	2.41%	2.75%
Total	959,360	1,040,217	1,095,253	8.43%	5.29%

Industry groups include a more detailed description of industry types. Within Boone County, the largest industry type is Warehousing and Storage with 4,463 jobs. Education and Hospitals (Local Government) and Electronic Shopping and Mail-Order Houses are the next largest groups. Warehousing and Storage employment has more than tripled since 2013 and is projected to grow another 44.66% by 2023. However, the Electronic Shopping and Mail-Order Houses industry group has lost 29.19% of its jobs since 2013 and is expected to lose another 45.73% by 2023. Employment Services is the only other large industry group that has lost jobs over the last three years.

Table 13: Boone County Largest Industry Groups

NAICS	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013 - 2018 Change	2018 - 2023 Change
4931	Warehousing and Storage	1,450	4,463	6,456	207.74%	44.66%
9036	Education and Hospitals (Local Government)	2,018	2,372	2,621	17.55%	10.53%
4541	Electronic Shopping and Mail-Order Houses	3,039	2,152	1,168	-29.19%	-45.73%
7225	Restaurants and Other Eating Places	1,574	2,001	2,275	27.11%	13.71%
9039	Local Government, Excluding Education and Hospitals	1,158	1,280	1,462	10.53%	14.22%
5613	Employment Services	2,721	1,090	893	-59.96%	-18.05%
5416	Management, Scientific, and Technical Consulting Services	271	721	1,065	165.79%	47.78%
2382	Building Equipment Contractors	467	714	904	52.83%	26.54%
4523	General Merchandise Stores, including Warehouse Clubs and Supercenters	248	620	851	150.61%	37.16%
5617	Services to Buildings and Dwellings	562	587	593	4.45%	1.10%

Table 14 shows the industry groups in Boone County with at least 50 employees that have seen the highest percentage growth from 2013 to 2018. Couriers and Express Delivery Services and Navigational, Measuring, Electromedical, and Control Instruments Manufacturing have both seen massive growth, mostly due to having fewer than ten employees in 2013. These industries are expected to continue to grow over the next five years.

Table 14: Boone County High Growth Industry Groups (minimum 50 employees)

NAICS	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013 -2018 Change	2018 - 2023 Change
4921	Couriers and Express Delivery Services	4	320	438	8,291.97%	36.73%
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	4	72	113	1,671.33%	56.15%
5121	Motion Picture and Video Industries	17	122	162	626.70%	32.89%
3119	Other Food Manufacturing	21	113	154	446.51%	35.65%
2373	Highway, Street, and Bridge Construction	39	190	273	387.37%	43.61%
4853	Taxi and Limousine Service	12	57	62	366.55%	9.23%
3331	Agriculture, Construction, and Mining Machinery Manufacturing	26	91	127	248.55%	39.06%
3279	Other Nonmetallic Mineral Product Manufacturing	37	127	159	243.53%	25.16%
3116	Animal Slaughtering and Processing	157	519	731	230.91%	40.71%
4842	Specialized Freight Trucking	111	347	486	212.79%	39.92%

Within the Labor Shed, Restaurants and Other Eating Places; Education and Hospitals (Local Government); and General Medical and Surgical Hospitals are the largest industry groups. All have seen moderate growth over the last five years. Of the largest industry groups in the Labor Shed, Warehousing and Storage has seen the most growth at 79.29%. This industry groups is expected to continue to grow, at a more modest rate of 23.56% by 2023.

Table 15: Labor Shed Largest Industry Groups

NAICS	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013 - 2018 Change	2018 - 2023 Change
7225	Restaurants and Other Eating Places	61,928	69,033	73,030	11.47%	5.79%
9036	Education and Hospitals (Local Government)	42,031	44,763	47,016	6.50%	5.03%
6221	General Medical and Surgical Hospitals	38,626	40,796	44,063	5.62%	8.01%
5613	Employment Services	38,447	40,647	42,969	5.72%	5.71%
9026	Education and Hospitals (State Government)	36,041	35,458	35,804	-1.62%	0.98%
9039	Local Government, Excluding Education and Hospitals	23,581	24,298	25,193	3.04%	3.68%
6211	Offices of Physicians	18,359	22,200	26,210	20.93%	18.06%
4931	Warehousing and Storage	11,009	19,738	24,390	79.29%	23.56%
5241	Insurance Carriers	16,270	17,279	16,934	6.20%	-2.00%
5415	Computer Systems Design and Related Services	12,650	16,611	19,355	31.32%	16.52%

Other Information Services; Facilities Support Services; and Railroad Rolling Stock Manufacturing have all seen over 200% growth since 2013 in the Labor Shed. Other high growth industries include Support Activities for Mining and Support Activities for Rail Transportation. All of the high growth industry groups are expected to continue to grow through 2023, but at more moderate rates. Other Telecommunications is expected to see the most significant slow down in growth, adding only 17 additional jobs by 2023 compared to the 173 added between 2013 and 2018.

Table 16: Labor Shed High Growth Industry Groups (minimum 50 employees)

NAICS	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013 - 2018 Change	2018 - 2023 Change
5191	Other Information Services	321	1,338	1,552	316.65%	16.01%
5612	Facilities Support Services	287	1,164	1,573	306.16%	35.10%
3365	Railroad Rolling Stock Manufacturing	18	56	83	208.93%	48.09%
2131	Support Activities for Mining	20	56	82	174.52%	47.71%
4882	Support Activities for Rail Transportation	119	301	403	153.57%	33.77%
4911	Postal Service	52	131	191	150.96%	45.64%
4869	Other Pipeline Transportation	28	63	88	122.62%	40.26%
3116	Animal Slaughtering and Processing	286	629	831	120.31%	32.11%
5179	Other Telecommunications	144	317	334	119.94%	5.22%
3111	Animal Food Manufacturing	177	385	499	117.84%	29.87%

EMPLOYMENT BY OCCUPATION

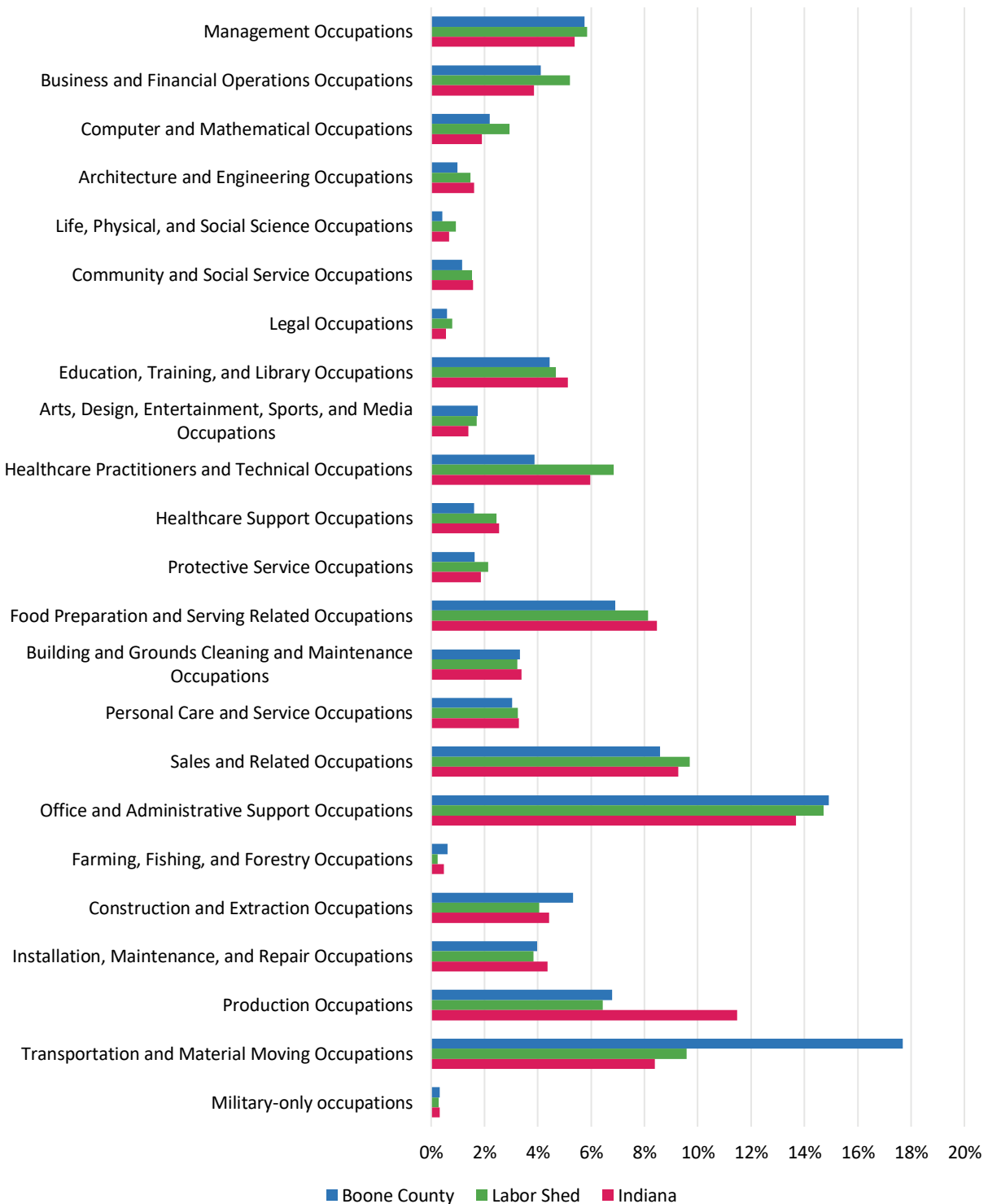
Table 17 below shows the total number of employees in Boone County, the Labor Shed, and the State by major occupational group. Transportation and Material Moving Occupations is the largest employment group in Boone County. However, in both the Labor Shed and Indiana, the Office and Administrative Support Occupations is the largest group. This trend can be more clearly seen in Figure 12 which shows the percent of total jobs in each occupational group for each geography. Notably, Transportation and Material Moving Occupations make up 17.69% of the jobs in Boone County, but only 9.58% in the Labor Shed, and 8.40% in Indiana.¹⁴

Table 17: Employment by Major Occupational Group

SOC	Description	Boone County	Labor Shed	Indiana
11	Management Occupations	1,896	60,769	180,163
13	Business and Financial Operations Occupations	1,355	54,175	129,397
15	Computer and Mathematical Occupations	725	30,669	64,122
17	Architecture and Engineering Occupations	326	15,271	54,217
19	Life, Physical, and Social Science Occupations	140	9,683	22,288
21	Community and Social Service Occupations	383	15,935	52,568
23	Legal Occupations	199	8,269	18,644
25	Education, Training, and Library Occupations	1,465	48,723	172,134
27	Arts, Design, Entertainment, Sports, and Media Occupations	575	17,738	47,032
29	Healthcare Practitioners and Technical Occupations	1,278	71,119	200,114
31	Healthcare Support Occupations	530	25,457	85,210
33	Protective Service Occupations	537	22,251	62,313
35	Food Preparation and Serving Related Occupations	2,275	84,662	283,542
37	Building and Grounds Cleaning and Maintenance Occupations	1,100	33,681	113,660
39	Personal Care and Service Occupations	1,002	33,894	110,339
41	Sales and Related Occupations	2,833	100,947	310,386
43	Office and Administrative Support Occupations	4,918	153,050	458,432
45	Farming, Fishing, and Forestry Occupations	204	2,456	15,735
47	Construction and Extraction Occupations	1,753	42,058	148,458
49	Installation, Maintenance, and Repair Occupations	1,310	40,015	146,544
51	Production Occupations	2,241	66,885	384,645
53	Transportation and Material Moving Occupations	5,835	99,635	281,466
55	Military-only occupations	104	2,876	10,576
	Total	32,983	1,040,217	3,351,986

¹⁴ Employment by Occupation is from Economic Modeling Specialist International, 2019.2.

Figure 12: Percent of Total Jobs by Major Occupational Group



Within Boone County, Transportation and Material Moving Occupations have seen the highest percentage growth over the last five years at 71.16% and are projected to grow another 25.78% over the next five years. Healthcare Support Occupations have slightly decreased in the last five years but are projected to increase by 13.64% by 2023.

Table 18: Boone County Historical and Projected Employment Growth by Major Occupational Group

SOC	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
11	Management Occupations	1,587	1,896	2,136	19.48%	12.67%
13	Business and Financial Operations Occupations	1,083	1,355	1,581	25.20%	16.68%
15	Computer and Mathematical Occupations	642	725	848	12.94%	16.86%
17	Architecture and Engineering Occupations	247	326	399	31.84%	22.56%
19	Life, Physical, and Social Science Occupations	106	140	174	31.63%	23.81%
21	Community and Social Service Occupations	298	383	450	28.66%	17.56%
23	Legal Occupations	189	199	224	5.29%	12.72%
25	Education, Training, and Library Occupations	1,397	1,465	1,614	4.86%	10.14%
27	Arts, Design, Entertainment, Sports, and Media Occupations	474	575	627	21.37%	9.18%
29	Healthcare Practitioners and Technical Occupations	1,169	1,278	1,386	9.33%	8.40%
31	Healthcare Support Occupations	560	530	563	-5.36%	6.15%
33	Protective Service Occupations	509	537	610	5.38%	13.64%
35	Food Preparation and Serving Related Occupations	1,929	2,275	2,543	17.96%	11.77%
37	Building and Grounds Cleaning and Maintenance Occupations	1,075	1,100	1,172	2.30%	6.49%
39	Personal Care and Service Occupations	827	1,002	1,135	21.15%	13.24%
41	Sales and Related Occupations	2,619	2,833	3,107	8.17%	9.68%
43	Office and Administrative Support Occupations	4,645	4,918	5,303	5.86%	7.84%
45	Farming, Fishing, and Forestry Occupations	178	204	217	14.26%	6.43%
47	Construction and Extraction Occupations	1,526	1,753	1,948	14.83%	11.13%
49	Installation, Maintenance, and Repair Occupations	995	1,310	1,553	31.72%	18.58%
51	Production Occupations	2,125	2,241	2,531	5.47%	12.93%
53	Transportation and Material Moving Occupations	3,409	5,835	7,339	71.16%	25.78%
55	Military-only occupations	102	104	108	1.55%	4.21%
	Total	27,692	32,983	37,567	19.11%	13.90%

Table 19 shows the detailed occupations with the highest number of jobs in Boone County. As expected, four of the top occupations are within the Transportation and Material Movers Occupations group, including Laborers and Freight, Stock, and Material Movers, Hand; Heavy and Tractor-Trailer Truck Drivers; Industrial Truck and Tractor Operators; and Packers and Packagers, Hand. These occupations have all grown significantly in the last five years and are expected to continue that growth until 2023. Other top occupations include Customer Service Representatives, which is the only large occupation that has decreased in employment since 2013 and is expected to shrink by another 5.38% by 2023.

Table 19: Boone County Largest Detailed Occupations

SOC	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1,440	2,528	3,172	75.55%	25.45%
43-4051	Customer Service Representatives	826	809	765	-2.09%	-5.38%
53-3032	Heavy and Tractor-Trailer Truck Drivers	354	704	931	98.78%	32.22%
43-5081	Stock Clerks and Order Fillers	449	682	820	51.79%	20.20%
53-7051	Industrial Truck and Tractor Operators	257	674	915	161.83%	35.88%
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	543	654	749	20.42%	14.45%
53-7064	Packers and Packagers, Hand	471	626	741	32.90%	18.42%
41-2031	Retail Salespersons	574	623	700	8.64%	12.42%
41-2011	Cashiers	554	616	666	11.16%	8.05%
43-5071	Shipping, Receiving, and Traffic Clerks	473	599	650	26.68%	8.47%

Table 20 shows the detailed occupations that have seen the most growth since 2013 and have at least 50 employees. Again, several of these industries are within the Transportation and Material Movers Occupations group, including Industrial Truck and Tractor Operators; Taxi Drivers and Chauffeurs; Heavy and Tractor-Trailer Truck Drivers; Light Truck or Delivery Services Drivers; and Laborers and Freight, Stock, and Material Movers, Hand. All of these industries are anticipated to continue to grow over the next five years as well.

Table 20: Boone County High Growth Detailed Occupations (minimum 50 employees)

SOC	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	79	298	398	278.37%	33.59%
53-7051	Industrial Truck and Tractor Operators	257	674	915	161.83%	35.88%
53-3041	Taxi Drivers and Chauffeurs	24	59	66	151.48%	10.83%
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	38	88	108	133.58%	22.46%
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	144	310	409	115.75%	32.08%
53-3032	Heavy and Tractor-Trailer Truck Drivers	354	704	931	98.78%	32.22%
11-3071	Transportation, Storage, and Distribution Managers	38	72	95	90.55%	31.92%
53-3033	Light Truck or Delivery Services Drivers	140	264	334	88.77%	26.85%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1,440	2,528	3,172	75.55%	25.45%
47-2152	Plumbers, Pipefitters, and Steamfitters	126	220	277	73.98%	26.22%

As in Boone County, Laborers and Freight, Stock, and Materials Movers, Hand is the largest detailed occupation in the Labor Shed. High employment occupations within the Labor Shed, but not Boone County include Registered Nurses; Office Clerks, General; General and Operations Managers; and Waiters and Waitresses.

Table 21: Labor Shed Largest Detailed Occupations

SOC	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	27,537	36,326	38,971	31.92%	7.28%
41-2031	Retail Salespersons	27,071	26,767	27,246	-1.12%	1.79%
29-1141	Registered Nurses	22,669	25,201	27,655	11.17%	9.74%
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	21,460	24,226	25,778	12.89%	6.41%
43-9061	Office Clerks, General	22,310	23,089	23,630	3.49%	2.34%
43-4051	Customer Service Representatives	18,392	21,914	22,773	19.15%	3.92%
41-2011	Cashiers	18,168	18,401	18,094	1.28%	-1.67%
11-1021	General and Operations Managers	15,841	18,280	19,280	15.40%	5.47%
53-3032	Heavy and Tractor-Trailer Truck Drivers	15,001	17,456	18,550	16.36%	6.27%
35-3031	Waiters and Waitresses	14,949	16,342	17,486	9.32%	7.00%

The high-growth detailed occupations within the Labor Shed differ significantly from those in Boone County. The only common occupation between both is Meat, Poultry, and Fish Cutters and Trimmers. Marriage and Family Therapists had the highest percentage growth with Rail Car Repairers and Agricultural Workers, All Other also having 70% or higher growth since 2013.

Table 22: Labor Shed High Growth Detailed Occupations (minimum 50 employees)

SOC	Description	2013 Jobs	2018 Jobs	2023 Jobs	2013- 2018 Change	2018- 2023 Change
21-1013	Marriage and Family Therapists	172	309	371	79.60%	20.04%
49-3043	Rail Car Repairers	116	203	232	74.99%	13.97%
45-2099	Agricultural Workers, All Other	120	205	214	70.37%	4.24%
15-1199	Computer Occupations, All Other	1,117	1,860	2,008	66.42%	7.99%
37-2021	Pest Control Workers	265	433	512	63.36%	18.11%
51-3022	Meat, Poultry, and Fish Cutters and Trimmers	312	502	591	61.12%	17.69%
27-1026	Merchandise Displayers and Window Trimmers	427	683	700	59.82%	2.55%
29-1171	Nurse Practitioners	942	1,504	1,829	59.71%	21.57%
51-3023	Slaughterers and Meat Packers	57	91	113	57.73%	25.15%
13-2061	Financial Examiners	171	268	284	56.75%	5.99%

SKILLS ANALYSIS

Knowledge, Skills, and Abilities of Existing Workforce

The following skills analysis uses data from O*NET Online that looks at the knowledge, skills, and abilities (KSAs) needed for various occupations. KSAs are the attributes required to perform a job and are generally demonstrated through qualifying service, education, or training.

Knowledge focuses on the understanding of concepts and is more theoretical than practical.

Skills are the capabilities developed through training and are the practical application of theoretical knowledge.

Abilities are often confused with skills, yet there is a subtle but important difference. Abilities are the innate traits or talents that a person brings to a task.

For example, Reading Comprehension is considered a skill and means to understand written sentences and paragraphs in work related documents. This skill represents a developed capacity that facilitates learning or the more rapid acquisition of knowledge. Written comprehension represents the ability to read and understand information and ideas presented in writing. This is an Ability that influences the acquisition and application of knowledge in problem solving.

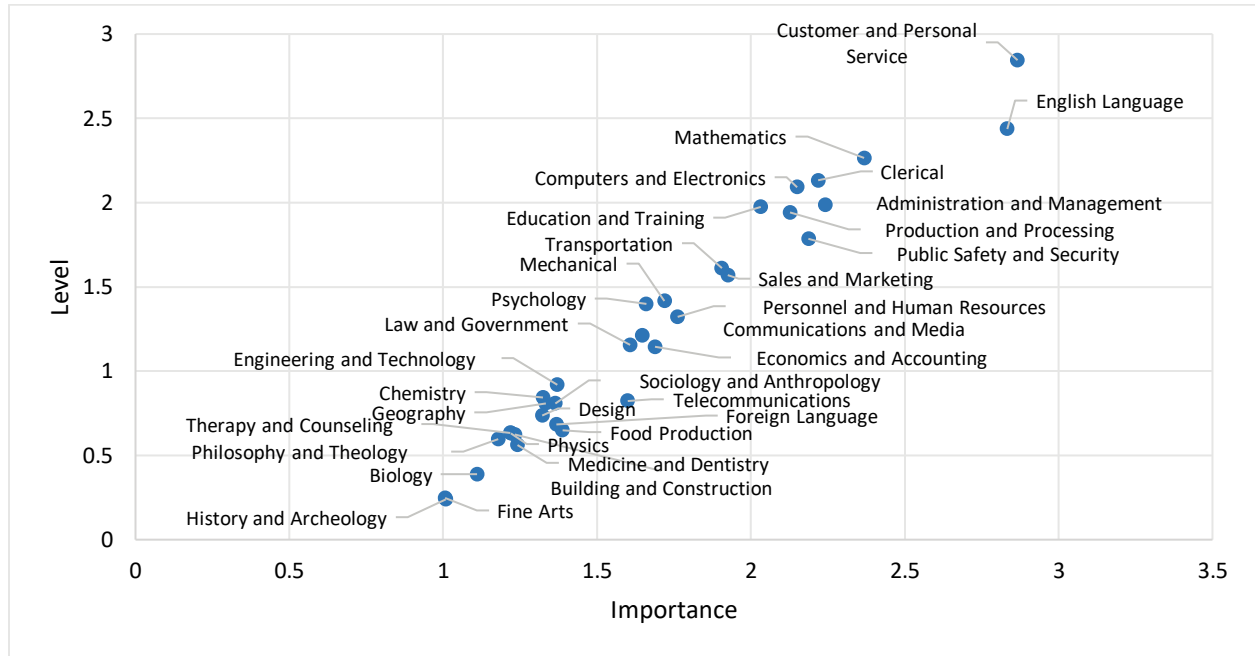
These KSAs are rated on the level needed for a given occupation as well as the importance of that KSA for an occupation. For example, the skill of Reading Comprehension has an importance of 3.88 and a level of 4.25 for Registered Nurses. Comparatively, Reading Comprehension has an importance of 2.75 and a level of 2.38 for Waiters and Waitresses. This means that Reading Comprehension is more important for Registered Nurses than for Waiters and Waitresses, and Registered Nurses need to have a higher level of Reading Comprehension. While they measure slightly different indicators of a KSA, importance and level tend to be correlated for a given occupation.¹⁵

The below analysis compares the importance and level indicators for KSAs for the top twenty most common occupations in Boone County. The index is weighted based on the overall prevalence of the occupations in order to get an approximation of the most common KSAs in Boone County for the existing workforce.

Figure 13 below shows the index of importance and level for the most common occupations in Boone County. As the chart shows, the existing workforce has knowledge in Customer and Personal Service, English Language, Mathematics, Clerical, Computers and Electronics, and Administration and Management. Knowledge not required for the most common occupations in Boone County include History and Archaeology, Fine Arts, Biology, Medicine and Dentistry, and Philosophy and Theology.

¹⁵ O*NET Online 24.0 Database

Figure 13: Knowledge for Most Common Occupations in Boone County



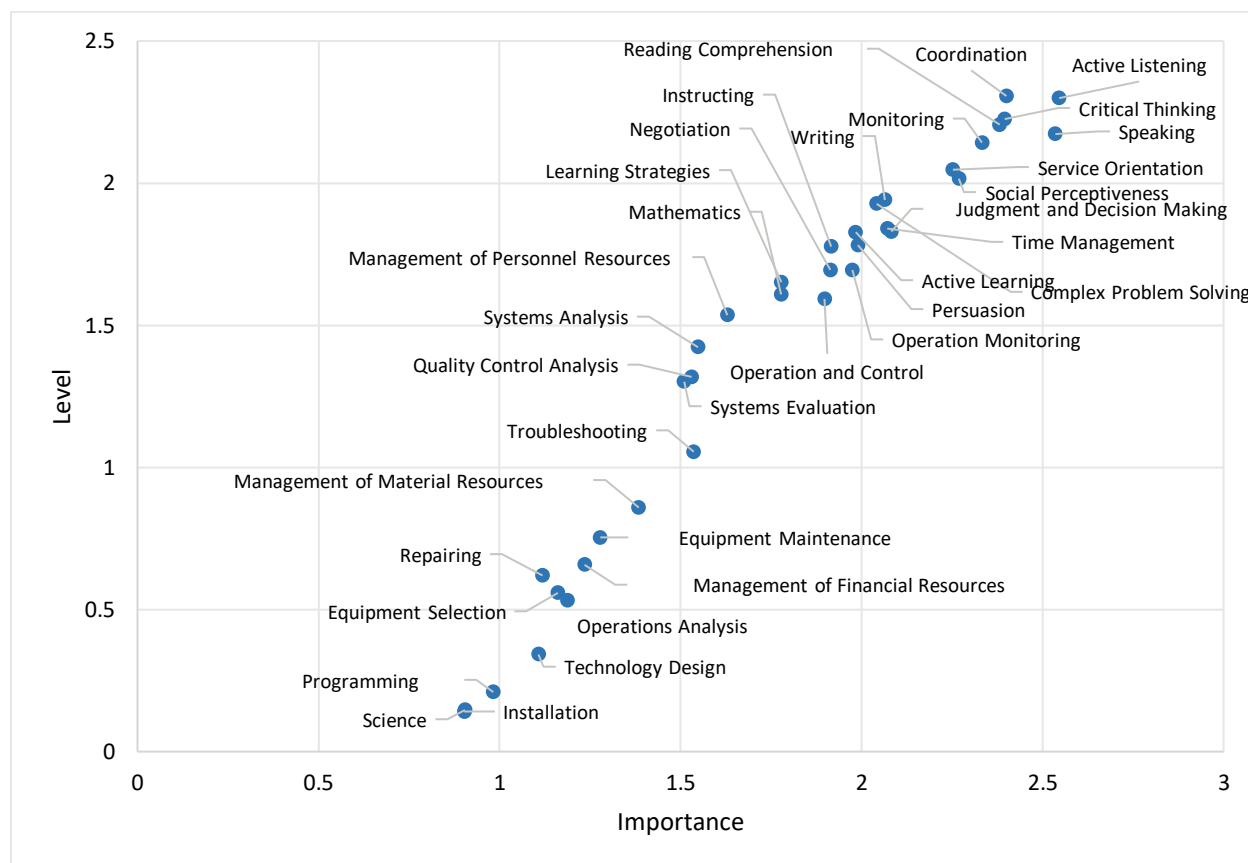
The most common occupations in Boone County require abilities related to Oral Comprehension, Oral Expression, Near Vision, Written Comprehension, and Problem Sensitivity as shown in Figure 14. The abilities of Dynamic Flexibility, Explosive Strength, Sound Localization, Night Vision, and Glare Sensitivity are less important for the most common occupations.

Figure 14: Abilities for Most Common Occupations in Boone County



The most important skills for the common occupations in Boone County are Active Listening, Coordination, Reading Comprehension, Critical Thinking, and Speaking. The least important skills include Science, Programming, Installation, Technology Design, and Equipment Selection.

Figure 15: Skills for Most Common Occupations in Boone County



The above analysis is meant to give an approximation of the knowledge, skills, and abilities needed for the most common occupations in Boone County and thus those KSAs that are likely present in the existing workforce in the County. Based on this analysis, the current workforce has knowledge in computers and mathematics and customer service and administrative work, but lacks knowledge of history, fine arts, medicine, and biology. The current workforce has abilities related to oral and written communication and expression but may lack some of the physical abilities including dynamic flexibility and strength. Lastly, the current workforce has skills related to active listening, critical thinking, and reading and writing comprehension, but may lack skills related to programming, science, and technology.

Job Posting Analysis

In order to assess potential gaps in the County's current workforce, the following analysis looks at job postings for Boone County over the period of July 2018 to July 2019). Over that time period, there were a total of 57,989 job postings for positions in Boone County. Of those postings, 17,046 represented unique positions.¹⁶

Table 23 shows the most common occupations sought for in job postings over that time period. The top occupations include Heavy and Tractor-Trailer Truck Drivers, Registered Nurses, and Stock Clerks and Order Fillers. A total of 11,380 postings or 19.6% of the total postings were for

¹⁶ Job Postings data is from Economic Modeling Specialist International 2019.2.

Heavy and Tractor-Trailer Truck Drivers. However, only 3,787 of those postings were unique. Additionally, the table provides data on the median posting duration. This data indicates that Combining Food Preparation and Serving Workers, Including Fast Food; First-Line Supervisors of Food Preparation and Serving Workers; and First-Line Supervisors of Retail Sales Workers have the longest median posting duration.

Table 23: Top Occupations Posted

Occupation (SOC)	Total Postings (Jul 2018 - Jul 2019)	Unique Postings (Jul 2018 - Jul 2019)	Median Posting Duration
Heavy and Tractor-Trailer Truck Drivers	11,380	3,787	27 days
Registered Nurses	2,247	652	32 days
Stock Clerks and Order Fillers	2,078	478	37 days
First-Line Supervisors of Retail Sales Workers	1,320	414	49 days
Light Truck or Delivery Services Drivers	1,508	409	33 days
Retail Salespersons	1,000	340	36 days
First-Line Supervisors of Food Preparation and Serving Workers	762	312	52 days
Customer Service Representatives	1,044	294	33 days
Laborers and Freight, Stock, and Material Movers, Hand	1,693	294	26 days
Combined Food Preparation and Serving Workers, Including Fast Food	837	257	52 days
Industrial Truck and Tractor Operators	1,067	240	32 days
Maintenance and Repair Workers, General	975	237	42 days
First-Line Supervisors of Production and Operating Workers	1,121	223	29 days
Security Guards	1,251	209	47 days
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	1,251	197	39 days
General and Operations Managers	695	191	36 days
Cashiers	719	189	43 days
Bus and Truck Mechanics and Diesel Engine Specialists	546	178	39 days
Childcare Workers	249	161	23 days
First-Line Supervisors of Office and Administrative Support Workers	547	154	28 days

In addition, the most common occupations posted, Table 24 includes the top hard skills that employers in Boone County are posting for. This table also includes the number of online employee profiles (such as LinkedIn) that have that skill. For example, the most common hard skill mentioned in jobs postings is Warehousing with 1,512 or 9% of job postings referencing that skill. However, 933 profiles or 5% of the profiles listed online for people in Boone County mention having Warehousing skills. This analysis could help identify some existing skills gaps in Boone County. However, it is important to note that people with some occupations and employment types are more likely to have online profiles than other occupations, which could lead to some gaps. For example, people in professional services, such as law and business are more likely to be on LinkedIn than those in the trades, such as electricians and plumbers. However, this can give an idea of the types of skills that employers are looking for within Boone County.

Table 24: Top Hard Skills Posted

Skill	Frequency in Postings	Postings with Skill	Frequency in Profiles	Profiles with Skill
Warehousing	9%	1,512	5%	933
Restaurant Operation	6%	997	2%	321
Merchandising	5%	905	3%	482
Nursing	5%	828	2%	414
Selling Techniques	3%	576	3%	552
Packaging And Labeling	3%	525	1%	218
Forklift Truck	3%	525	0%	79
Food Services	3%	433	1%	121
Customer Satisfaction	2%	409	4%	617
Accounting	2%	395	5%	921
Cash Register	2%	351	1%	115
Basic Life Support	2%	330	1%	212
Purchasing	2%	316	4%	621
Truckload Shipping	2%	309	0%	30
Continuous Improvement Process	2%	297	3%	439
Warehouse Management Systems	2%	286	0%	67
Customer Experience	2%	263	1%	88
Inventory Control	2%	256	3%	452
Palletizing	1%	249	1%	122
Cardiopulmonary Resuscitation (CPR)	1%	245	3%	471

Table 25 shows the top common skills referenced in job postings, which include skills that are more easily transferrable between different types of occupations. This table also shows the frequency of each common skill in online profiles. Management is the top common skill referenced in job postings and 48% of online profiles reference this skill. Other skills posted for include Customer Service, Sales, Communications and Operations.

Table 25: Top Common Skills Posted

Skill	Frequency in Postings	Postings with Skill	Frequency in Profiles	Profiles with Skill
Management	18%	3,130	48%	8,252
Customer Service	14%	2,402	19%	3,303
Sales	14%	2,305	23%	3,968
Communications	13%	2,188	8%	1,388
Operations	10%	1,654	12%	2,061
Valid Driver's License	8%	1,424	0%	76
Leadership	7%	1,187	21%	3,596
Problem Solving	5%	889	6%	1,009
Interpersonal Skills	5%	790	1%	161
Innovation	4%	707	1%	227
Written Communication	4%	703	1%	116
Microsoft Office	4%	678	25%	4,334
Computer Literacy	4%	663	2%	400
Good Driving Record	4%	615	0%	0
Microsoft Excel	3%	573	18%	3,141
Unloading	3%	468	1%	103
Hospitality	3%	451	1%	208
Detail Oriented	3%	432	0%	28
Teaching	2%	403	6%	1,020
Presentations	2%	402	2%	387

Skills Needs from Survey

Table 26: Top Skills Needed for New and Existing Employers

Skill	Frequency in Survey
Operation and Control	39
Detail Oriented	12
Teamwork	12
Administration and Management	11
Computer Skills	11
Mathematics and Accounting	11
Customer Service	9
Ability to Follow Instruction	8
Dynamic Strength	7
Mechanical Experience	7

As part of the Labor Analysis, the Boone County Economic Development Corporation surveyed new and existing employers that are currently hiring. A total of twenty employers provided information on their current hiring needs, including occupations, skills, and wages. The following analysis examines the top knowledge, skills, and abilities that employers indicated they are looking for in prospective employees.

Table 26 shows the top cited skills across all employers responding to the survey. Specifically, Operation and Control skills were listed as a top priority in candidates.

This category includes operating, maintaining, and fixing machinery and operations-related materials. The next skillset that was cited frequently in the responses is Detail Oriented. Employers are looking for candidates that offer attention to detail and are able to work in environments that are dynamic while maintaining a high quality of work. Skillsets were not unique to one occupation and were listed across the varying occupations, including Engineering, Warehouse Associate, Maintenance, Office Team Leader, and Director.

Skills Gaps

Based on the survey data and job postings, there are a few key skills needs within Boone County. In particular, some desired skills related to occupations in the Transportation and Warehousing sector include:

- Automated equipment operators, particularly forklifts and packaging machinery
- Facility management, including quality management systems, warehouse management systems, and continuous improvement processes.

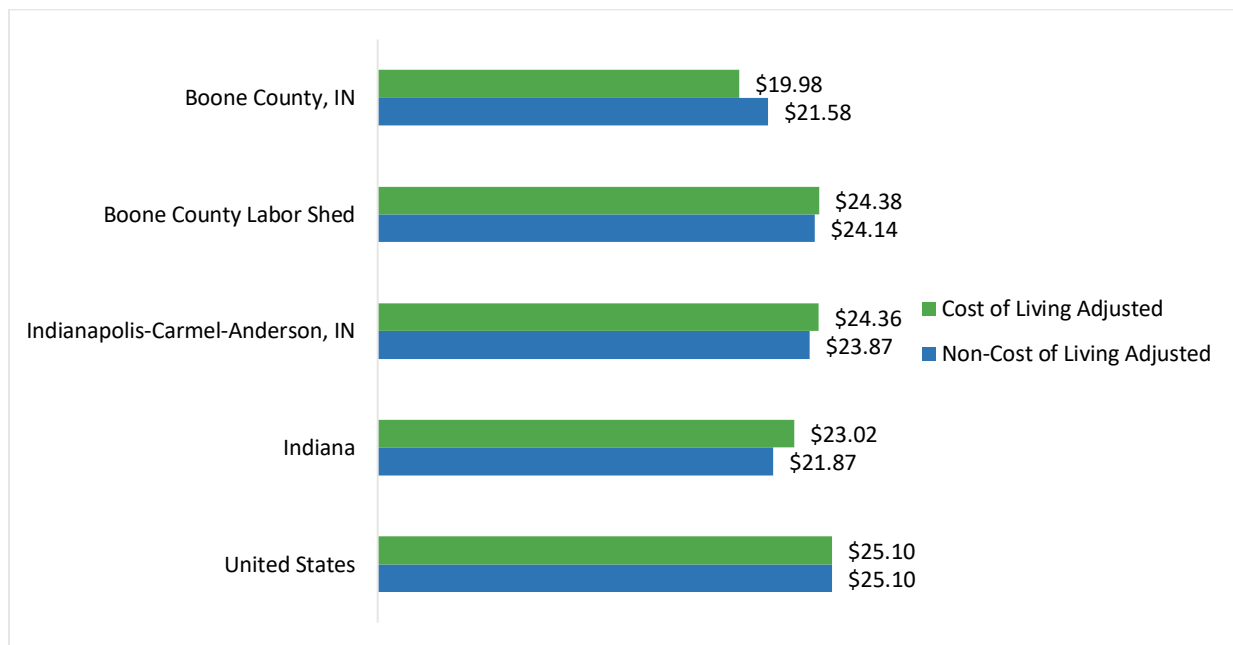
Other skills gaps are related to Healthcare and Social Assistance. Registered Nurses is one of the most common positions posted, and some of the top skills requested in jobs postings including Nursing, Basic Life Support, and Cardiopulmonary Resuscitation (CPR).

WAGE ANALYSIS

Average and Median Wages

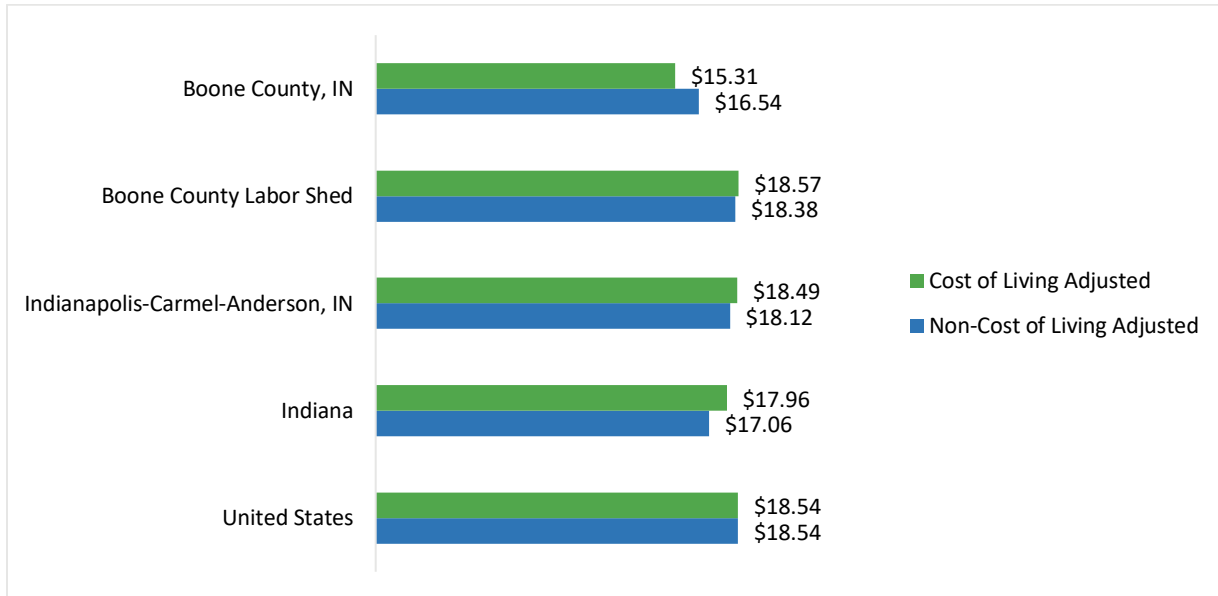
The average hourly wage for Boone County is lower when compared to the wider labor shed, the Indianapolis metropolitan area, the state, and United States as a whole. The United States has the highest average hourly wage of \$25.10, followed by the Indianapolis metropolitan area and the Boone County labor shed. Boone County has the lowest average hourly wage among all of these geographies, falling a full \$3.52 below the national average hourly wage. More noteworthy, once cost of living is factored in, the average hourly wage for Boone County is a full \$4.40 lower than the labor shed and \$4.38 below the Indianapolis metropolitan area.

Figure 16: Average Hourly Wage, 2018 Boone County vs. Comparison Regions



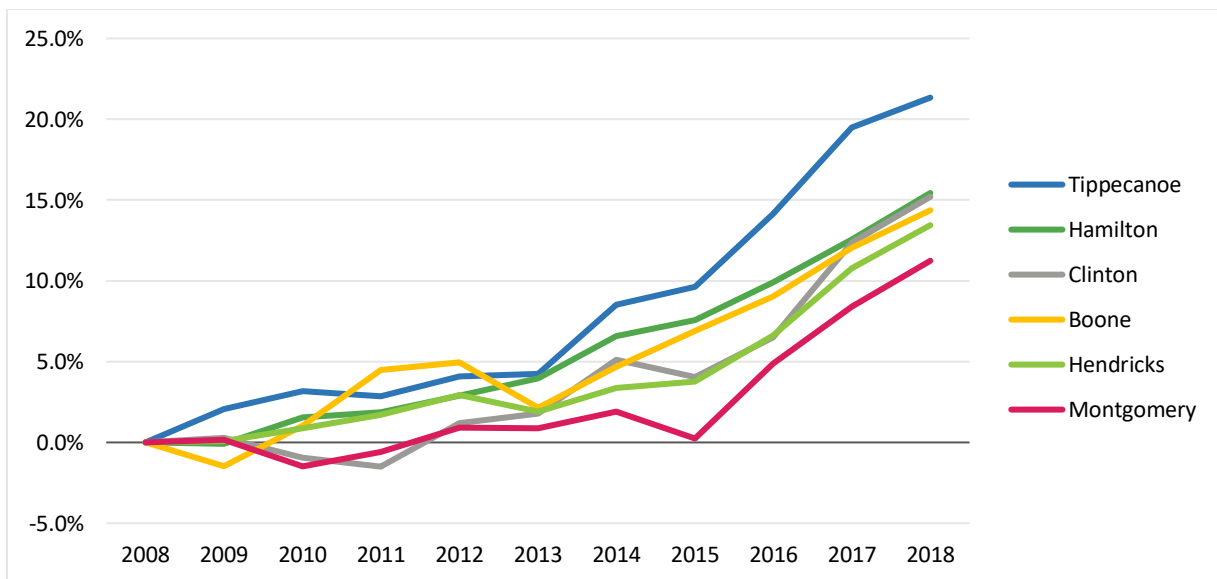
The Boone County median hourly wage of \$16.54 is the lowest when compared to the labor shed, the Indianapolis metropolitan area, Indiana, and the United States. The gap between Boone County and other geographies is smaller than the gap identified between average hourly wages. Boone County's median hourly wage is \$1.84 less than the labor shed, and \$1.58 lower than the Indianapolis metropolitan area. The gap is more significant once cost of living is factored in, making Boone County's median hourly wage \$15.31. At this rate, the median hourly wage is \$3.26 lower than the labor shed and \$3.18 less than the Indianapolis metropolitan area.

Figure 17: Median Hourly Wage, 2018, Boone County vs. Comparison Regions



Among the surrounding counties that make up the labor shed; Tippecanoe County has seen the most substantial growth in median wage since 2008 with an increase of 21.3%. Median wages in the remaining counties have grown between approximately 10-15% each. Boone County's median wages contracted between 2008-2009, but the County has seen a net growth of 14.4% since then. Following a brief decline in 2013, the County's median wage has grown steadily in accordance with the overall labor shed's trend. In terms of comparative growth, median wages in Boone County have grown at a faster rate than two of the five other counties in the labor shed, following Clinton, Hamilton, and Tippecanoe counties.

Figure 18: Total Percentage Median Wage Growth



Boone County's median wage has increased by \$2.08 between 2008-2018, a net increase of 14.4%. Other counties with higher 2018 median wages have seen faster growth. This includes Hamilton County, where the 2018 median wage of \$18.65 represents a 15.4% increase since 2008, and Tippecanoe County with a 21.3% increase since 2008 to 2018 median wage of \$16.96. The high growth noted in Tippecanoe is partially attributable to a lower 2008 median wage of \$13.98. Despite slightly more modest growth, Boone County's 2018 median wage ranks third within these counties.

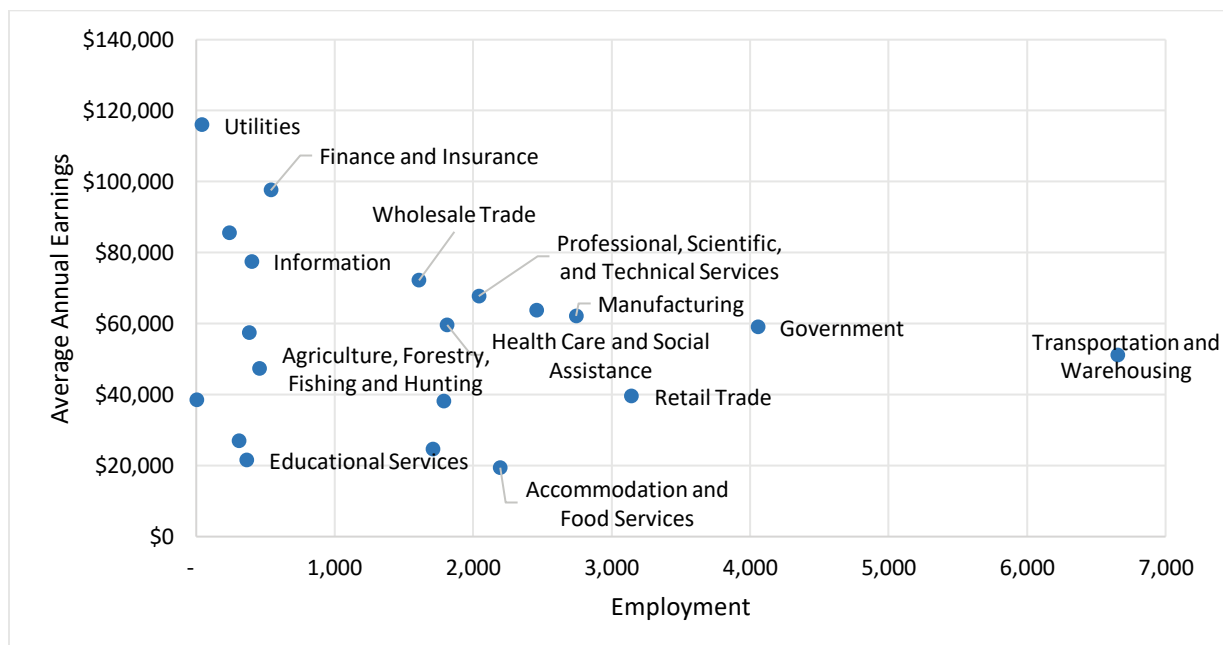
Table 27: Median Wage Growth in Boone County Labor Shed

	2008	2018	% Change
Boone	\$ 14.46	\$ 16.54	14.4%
Clinton	\$ 14.04	\$ 16.18	15.2%
Hamilton	\$ 16.15	\$ 18.65	15.4%
Hendricks	\$ 13.37	\$ 15.16	13.4%
Montgomery	\$ 14.28	\$ 15.89	11.2%
Tippecanoe	\$ 13.98	\$ 16.96	21.3%

Wages by Industry and Occupation

The industry with the most employees in Boone County is Transportation and Warehousing, followed by Government; Retail Trade; and Manufacturing. Average annual earnings in each of these industries falls within the \$40,000-\$60,000 range. Most industries with more than 2,000 employees in Boone County fall within a similar range. Some of the industries with the highest average annual earnings have the lowest employment numbers, namely Utilities; Finance and Insurance; Wholesale Trade; Professional, Scientific, and Technical Services; and Information.

Figure 19: Average Annual Earnings and Employment by 2-Digit Industry, Boone County



Collectively, the ten top-paying industries in Boone County with 10 or more employees employed 445 individuals in 2018. The three top-paying industries in Boone County include Portfolio Management; Computer and Computer Peripheral Equipment and Software Merchant Wholesalers; and Securities Brokerage and each employed 33 individuals in 2018. Portfolio Management, the top-paying industry, earns an average of \$149,587 more per year than the tenth top-paying industry, which is Industrial Machinery and Equipment Merchant Wholesalers. These industries represent potential high earnings for Boone County workers, although they represent fewer total jobs compared to the largest industries in the County by employment size.

Table 28: Top-Paying Industries in Boone County with 10+ Employees

Description	Avg. Earnings Per Job	2018 Jobs
Portfolio Management	\$274,866.78	33
Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$201,532.51	33
Securities Brokerage	\$195,964.13	33
Analytical Laboratory Instrument Manufacturing	\$175,117.65	69
General Medical and Surgical Hospitals	\$145,313.55	139
Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$141,122.60	17
Investment Advice	\$139,823.64	18
Direct Health and Medical Insurance Carriers	\$134,509.83	42
Sheet Metal Work Manufacturing	\$127,926.94	10
Industrial Machinery and Equipment Merchant Wholesalers	\$125,279.72	51

The ten top-paying industries in Boone County with 100 or more employees collectively employed 1,582 workers in Boone County. These industries have smaller average earnings per job than the ten-top paying industries with ten or more employees. General Medical and Surgical Hospitals, the top-paying industry with 100 or more employees, is also the fifth top-paying industry with 10 or more employees. This is the only industry to appear in both categories. Additionally, the General Medical and Surgical Hospitals earns approximately \$63,644 more average earnings per job than the tenth top-paying industry with 100 employees or more.

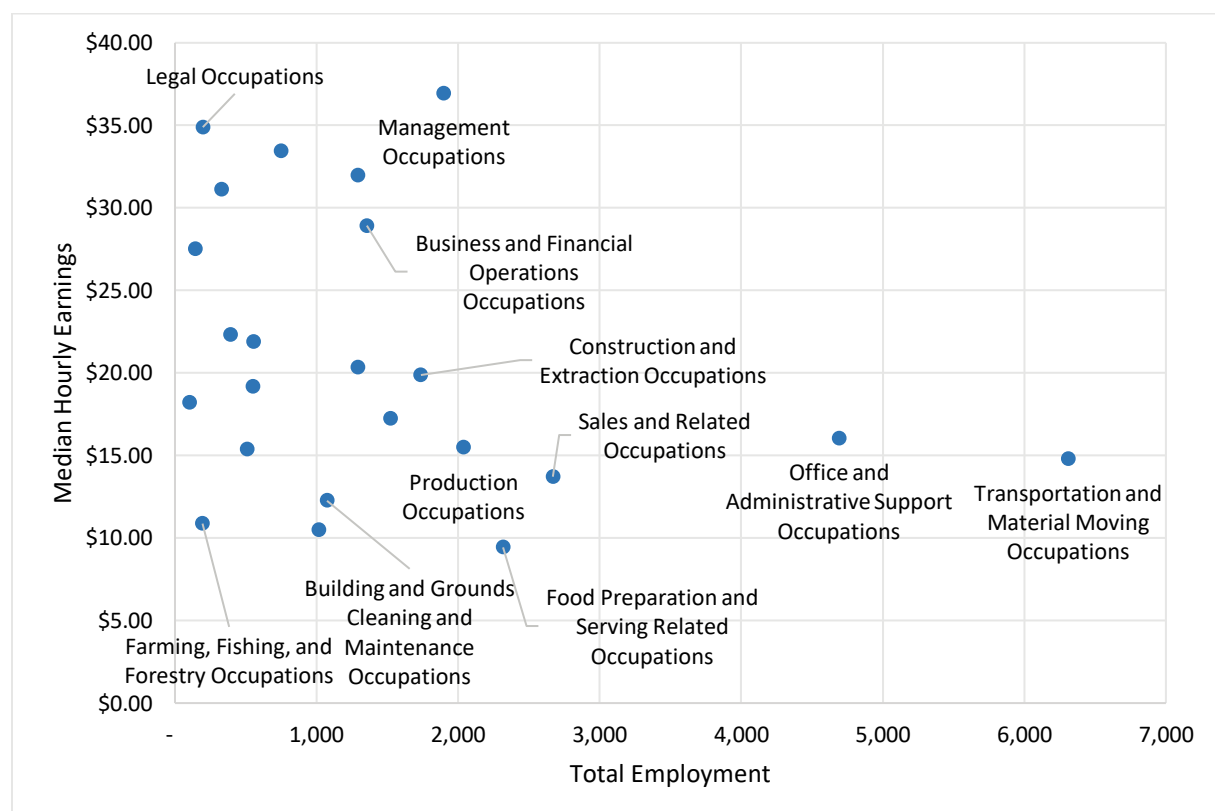
Table 29: Top-Paying Industries in Boone County with 100+ Employees

Description	Avg. Earnings Per Job	2018 Jobs
General Medical and Surgical Hospitals	\$145,313.55	139
Offices of Physicians (except Mental Health Specialists)	\$117,214.61	102
Telecommunications Resellers	\$108,336.61	158
Computer Systems Design Services	\$105,065.83	154
Offices of Lawyers	\$99,043.54	183
Other Building Equipment Contractors	\$96,159.41	127
Custom Computer Programming Services	\$93,488.55	206
Other Concrete Product Manufacturing	\$86,034.22	105

Description	Avg. Earnings Per Job	2018 Jobs
Corporate, Subsidiary, and Regional Managing Offices	\$85,185.85	239
Rolled Steel Shape Manufacturing	\$81,668.83	169

Transportation and Material Moving Occupations were the largest in Boone County, and had a median hourly wage of approximately \$15.00. This was followed by Office and Administrative Support Occupations with only a slightly higher median hourly wage. Of the occupations with at least 1,000 workers, Management Occupations had the highest median hourly wage of just over \$35.00, followed by Business and Financial Occupations. This distribution differs from the industries in Boone County as the highest median hourly earnings are also represented with a substantial number of workers in Boone County. This implies a more diverse distribution between median hourly earnings by occupation as opposed to by industry.

Figure 20: Median Hourly Earnings & Employment by 2-Digit Occupation, Boone County



The ten top-paying occupations in Boone County with 10 or more workers accounted for 415 jobs in 2018. Among these, the highest paying occupation was Physicians and Surgeons, All Other, which represented 62 jobs. The occupation with the most jobs was Computer and Information Systems Manager, which employed 65. The occupation with the highest median hourly earnings, Physicians and Surgeons, All Other earned \$60.24 more than the tenth top-paying occupation in Boone County, Personal Financial Advisors.

Table 30: Top-Paying Occupations in Boone County with 10+ Workers

Occupation Name	Median Hourly Earnings	2018 Jobs
Physicians and Surgeons, All Other	\$112.98	62
Family and General Practitioners	\$97.20	11
Dentists, General	\$70.08	45
Chief Executives	\$64.05	48
Pharmacists	\$61.47	50
Commercial Pilots	\$60.28	13
Computer and Information Systems Managers	\$56.20	65
Nurse Practitioners	\$55.87	18
Sales Managers	\$54.70	61
Personal Financial Advisors	\$52.74	42

The ten top-paying occupations with 100 or more workers in Boone County had a total of 2,193 workers in 2018. The largest occupation was General Operations Managers with 589 workers, followed by Registered Nurses with 403 workers. The top-paying occupation, Lawyers, had a median hourly earning \$15.23 higher than the tenth top-paying occupation, which was Police and Sheriff's Patrol Officers. None of the top-paying occupations in Boone County with 100 or more workers overlapped with the top-paying occupations with only ten or more workers.

Table 31: Top-Paying Occupations in Boone County with 100+ Workers

Occupation Name	Median Hourly Earnings	2018 Jobs
Lawyers	\$44.31	133
General and Operations Managers	\$42.90	589
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$41.59	106
Software Developers, Applications	\$37.27	130
Registered Nurses	\$34.95	403
Management Analysts	\$34.40	222
Computer Systems Analysts	\$34.17	123
Accountants and Auditors	\$32.34	214
Construction Managers	\$31.51	120
Police and Sheriff's Patrol Officers	\$29.09	153

Employer Wage Gaps

In addition to information on required skills, the employer survey also asked for information regarding wages. The table below shows the number of respondents that indicated they were hiring or would be hiring in the future for each occupation. Additionally, the table provides the average wage respondents are paying for that occupation, where multiple respondents indicated they were hiring for a position, the low and high wages.

The occupation with the highest wage rate was Sales Managers, with one respondent paying an average rate of \$80 an hour. Occupations that are being hired by the most employers include Transportation, Storage, and Distribution Managers; Maintenance Workers, Machinery; and Assemblers, Fabricators, All Others, including Team Assemblers.

Table 32: Wages Paid by Occupation from Survey

SOC	Occupation	Number of Respondents	Low Wage	High Wage	Average Wage
11-2021	Marketing Managers	1	N/A	N/A	\$73.00
11-2022	Sales Managers	1	N/A	N/A	\$80.00
11-3021	Computer and Information Systems Managers	1	N/A	N/A	\$53.00
11-3031	Financial Managers	1	N/A	N/A	\$37.00
11-3051	Industrial Production Managers	2	\$17.00	\$32.75	\$24.88
11-3071	Transportation, Storage, and Distribution Managers	5	\$26.44	\$72.12	\$45.92
11-9021	Construction Managers	1	N/A	N/A	\$40.00
15-1132	Software Developers, Applications	1	N/A	N/A	\$48.08
15-1133	Software Developers, Systems Software	1	N/A	N/A	\$28.85
15-1199	Computer Occupations, All Other	3	\$26.44	\$30.00	\$27.63
17-2112	Industrial Engineers	1	N/A	N/A	\$35.00
17-2141	Mechanical Engineers	1	N/A	N/A	\$26.44
17-3025	Environmental Engineering Technicians	1	N/A	N/A	\$18.00
17-3029	Engineering Technicians, Except Drafters, All Other	1	N/A	N/A	\$19.00
19-3031	Clinical, Counseling, and School Psychologists	1	N/A	N/A	\$40.14
21-1013	Marriage and Family Therapists	1	N/A	N/A	\$22.12
21-1023	Mental Health and Substance Abuse Social Workers	1	N/A	N/A	\$21.88
21-1093	Social and Human Service Assistants	1	N/A	N/A	\$14.42
31-9092	Medical Assistants	1	N/A	N/A	\$16.97
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2	\$16.00	\$38.46	\$27.23
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2	\$21.63	\$26.92	\$24.28

SOC	Occupation	Number of Respondents	Low Wage	High Wage	Average Wage
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1	N/A	N/A	\$17.13
43-4051	Customer Service Representatives	2	\$16.00	\$17.00	\$16.50
43-5071	Shipping, Receiving, and Traffic Clerks	3	\$15.00	\$20.00	\$17.00
43-5081	Stock Clerks and Order Fillers	3	\$17.50	\$25.00	\$21.13
43-9061	Office Clerks, General	1	N/A	N/A	\$21.27
47-2031	Carpenters	1	N/A	N/A	\$20.00
47-2051	Cement Masons and Concrete Finishers	1	N/A	N/A	\$25.00
47-2111	Electricians	1	N/A	N/A	\$33.65
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	1	N/A	N/A	\$18.50
49-9043	Maintenance Workers, Machinery	5	\$19.00	\$32.00	\$25.80
51-1011	First-Line Supervisors of Production and Operating Workers	1	N/A	N/A	\$11.78
51-2021	Coil Winders, Tapers, and Finishers	1	N/A	N/A	\$10.38
51-2098	Assemblers and Fabricators, All Other, Including Team Assemblers	5	\$9.00	\$14.50	\$12.18
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	1	N/A	N/A	\$18.50
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	1	N/A	N/A	\$19.59
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	1	N/A	N/A	\$28.74
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	1	N/A	N/A	\$22.38
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	1	N/A	N/A	\$18.75
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	4	\$15.00	\$18.50	\$16.68
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	1	N/A	N/A	\$16.29
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	1	N/A	N/A	\$18.00
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1	N/A	N/A	\$18.00
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	1	N/A	N/A	\$18.00
51-9111	Packaging and Filling Machine Operators and Tenders	2	\$14.00	\$17.00	\$15.50
51-9196	Paper Goods Machine Setters, Operators, and Tenders	2	\$22.00	\$23.00	\$22.50


SOC	Occupation	Number of Respondents	Low Wage	High Wage	Average Wage
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	2	\$28.85	\$36.06	\$32.45
53-3032	Heavy and Tractor-Trailer Truck Drivers	2	\$22.00	\$31.25	\$26.63
53-7051	Industrial Truck and Tractor Operators	4	\$16.68	\$18.00	\$17.42
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4	\$14.00	\$16.50	\$15.25
53-7064	Packers and Packagers, Hand	2	\$12.50	\$16.68	\$14.59

Table 33 shows the average wage paid by survey respondents compared to the average wages in Boone County, the Labor Shed, and the United States. Wages in the comparison regions that are higher than the average wage from the survey respondents are highlighted in maroon. In particular, occupations that have a lower wage than the comparison regions include Computer and Information Systems Managers; Financial Managers; Industrial Production Managers; and Software Developers, Systems Software. Significantly, many of the occupations with high wage gaps are not manager level and not in the most common occupations within the county or labor shed, indicating there may be less competition for these positions than other occupations that are in higher demand.

Table 33: Survey Wages Compared to Market Wages

SOC	Occupation	Survey Avg Wage	Boone County Avg Wage	Labor Shed Avg Wage	US Avg Wage
11-3021	Computer and Information Systems Managers	\$53.00	\$60.34	\$63.67	\$73.04
11-3031	Financial Managers	\$37.00	\$60.83	\$65.90	\$70.10
11-3051	Industrial Production Managers	\$24.88	\$47.89	\$50.38	\$53.88
15-1133	Software Developers, Systems Software	\$28.85	\$39.66	\$41.73	\$54.73
15-1199	Computer Occupations, All Other	\$27.63	\$36.23	\$39.20	\$44.53
17-2141	Mechanical Engineers	\$26.44	\$39.64	\$43.92	\$44.67
17-3025	Environmental Engineering Technicians	\$18.00	\$18.43	\$20.46	\$26.34
17-3029	Engineering Technicians, Except Drafters, All Other	\$19.00	\$19.32	\$21.52	\$31.60
19-3031	Clinical, Counseling, and School Psychologists	\$40.14	\$45.56	\$40.77	\$43.93
21-1013	Marriage and Family Therapists	\$22.12	\$26.36	\$24.20	\$27.11
21-1023	Mental Health and Substance Abuse Social Workers	\$21.88	\$26.19	\$24.01	\$24.00
21-1093	Social and Human Service Assistants	\$14.42	\$17.48	\$17.17	\$17.29
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$27.23	\$35.22	\$37.26	\$33.32
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$24.28	\$27.92	\$28.54	\$28.53

SOC	Occupation	Survey Avg Wage	Boone County Avg Wage	Labor Shed Avg Wage	US Avg Wage
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$17.13	\$19.22	\$20.19	\$20.51
43-4051	Customer Service Representatives	\$16.50	\$18.30	\$18.20	\$17.56
47-2031	Carpenters	\$20.00	\$20.35	\$22.70	\$23.31
51-1011	First-Line Supervisors of Production and Operating Workers	\$11.78	\$29.05	\$30.12	\$30.77
51-2021	Coil Winders, Tapers, and Finishers	\$10.38	\$16.41	\$18.41	\$17.60
51-2098	Assemblers and Fabricators, All Other, Including Team Assemblers	\$12.18	\$13.84	\$17.07	\$16.50
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$18.50	\$18.85	\$20.88	\$20.17
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$16.68	\$17.96	\$25.02	\$18.05
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$18.00	\$19.57	\$18.46	\$18.93
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	\$18.50	\$19.64	\$20.13	\$17.50
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$18.00	\$18.23	\$17.79	\$21.22
51-9111	Packaging and Filling Machine Operators and Tenders	\$15.50	\$16.75	\$15.14	\$15.74
11-3071	Transportation, Storage, and Distribution Managers	\$45.92	\$45.66	\$46.33	\$49.10
17-2112	Industrial Engineers	\$35.00	\$32.62	\$36.30	\$44.08
11-9021	Construction Managers	\$40.00	\$33.98	\$38.16	\$41.15
15-1132	Software Developers, Applications	\$48.08	\$40.95	\$43.11	\$51.89
53-7051	Industrial Truck and Tractor Operators	\$17.42	\$17.27	\$16.41	\$17.55
11-2021	Marketing Managers	\$73.00	\$50.17	\$54.20	\$69.07
11-2022	Sales Managers	\$80.00	\$58.48	\$64.22	\$66.16
31-9092	Medical Assistants	\$16.97	\$16.74	\$16.62	\$16.62
43-5071	Shipping, Receiving, and Traffic Clerks	\$17.00	\$15.72	\$15.48	\$16.85
43-5081	Stock Clerks and Order Fillers	\$21.13	\$13.37	\$13.37	\$13.72
43-9061	Office Clerks, General	\$21.27	\$16.05	\$16.88	\$16.96
47-2051	Cement Masons and Concrete Finishers	\$25.00	\$20.32	\$21.28	\$22.64
47-2111	Electricians	\$33.65	\$24.12	\$27.37	\$28.19
49-9043	Maintenance Workers, Machinery	\$25.80	\$22.54	\$19.75	\$23.42
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	\$19.59	\$15.82	\$14.55	\$17.61
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	\$28.74	\$20.33	\$25.70	\$19.60



SOC	Occupation	Survey Avg Wage	Boone County Avg Wage	Labor Shed Avg Wage	US Avg Wage
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$22.38	\$14.52	\$18.18	\$17.41
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$18.75	\$14.81	\$16.12	\$16.32
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	\$16.29	\$13.89	\$14.47	\$14.95
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$18.00	\$17.10	\$16.05	\$17.17
51-9196	Paper Goods Machine Setters, Operators, and Tenders	\$22.50	\$14.97	\$16.58	\$19.38
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$32.45	\$26.41	\$26.69	\$27.93
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$26.63	\$22.79	\$23.22	\$22.56
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$15.25	\$14.32	\$14.56	\$14.91
53-7064	Packers and Packagers, Hand	\$14.59	\$13.03	\$12.55	\$12.76

COMMUTER ANALYSIS

Boone County's daily working population is 23,516, inclusive of the 16,593 workers that enter the County and the 6,923 residents that remain in the County for work. Additionally, a total of 22,238 residents commute out of Boone County to work in the surrounding region. The total amount of workers entering the county for work accounts for roughly 70% of the county's workforce. Approximately 76% of Boone County residents are employed outside of the County, which is a total of 22,238 residents.

Map 4: Commuters to and from Boone County

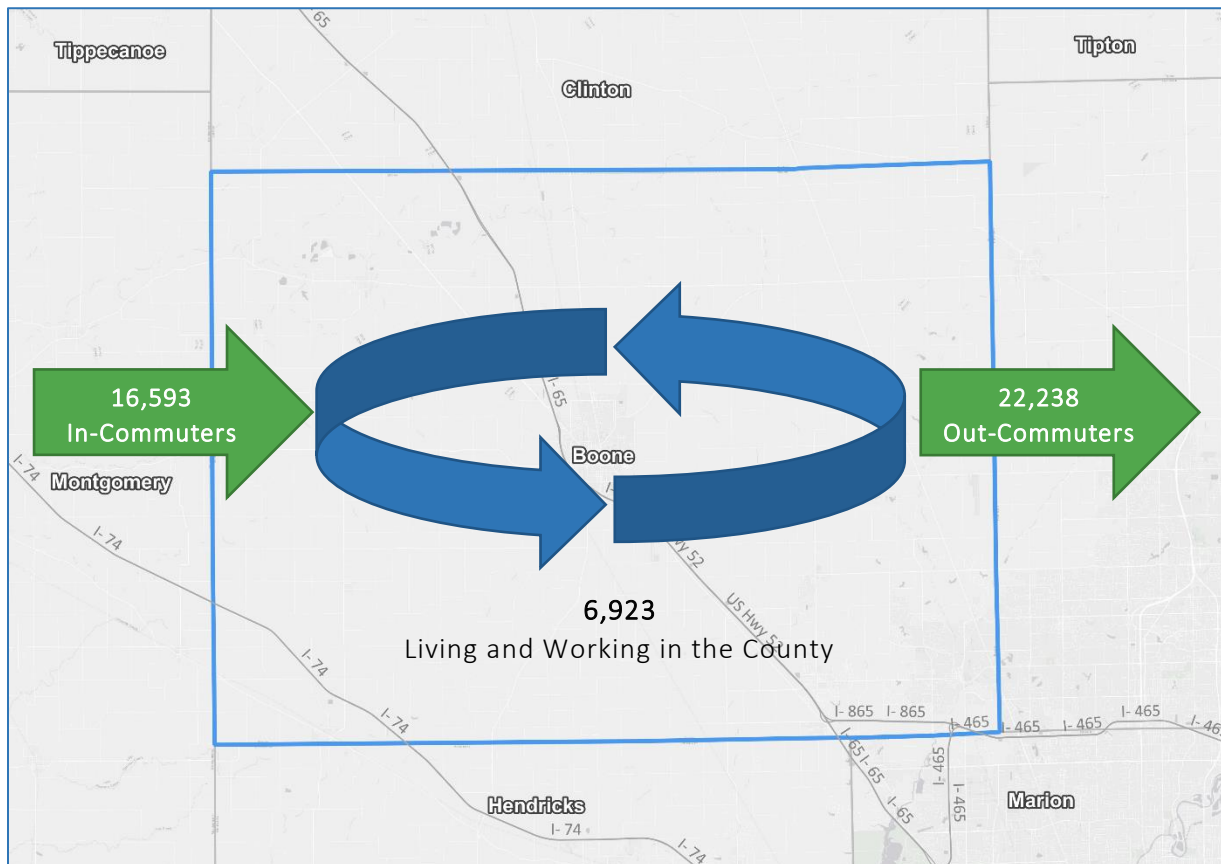


Table 34: Boone County Workers

	Total	Share of Total
Employed in Boone County but Living Outside	16,593	70.6%
Employed and Living in Boone County	6,923	29.4%
Total Employed in Boone County	23,516	100.0%

Table 35: Boone County Residents

	Total	Share of Total
Living in Boone County but Employed Outside	22,238	76.3%
Living and Employed in Boone County	6,923	23.7%
Total Living in Boone County	29,161	100.0%

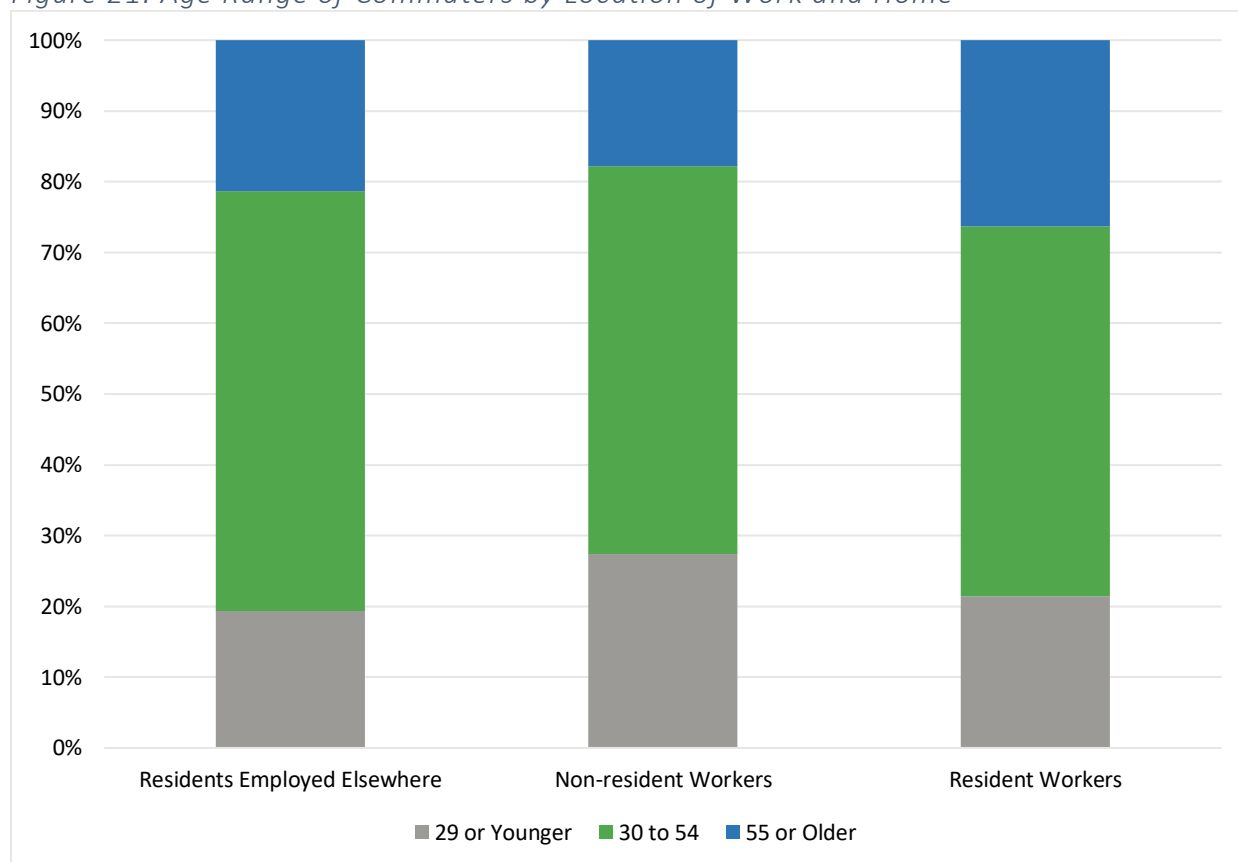
Table 36: Boone County Community-Specific Commuters

	In-Commuters	Living and Working	Out-Commuters
Jamestown	256	7	470
Lebanon	6,512	2,286	6,031
Whitestown	7,411	76	1,851
Zionsville	6,016	1,329	12,138

Characteristics of Commuters

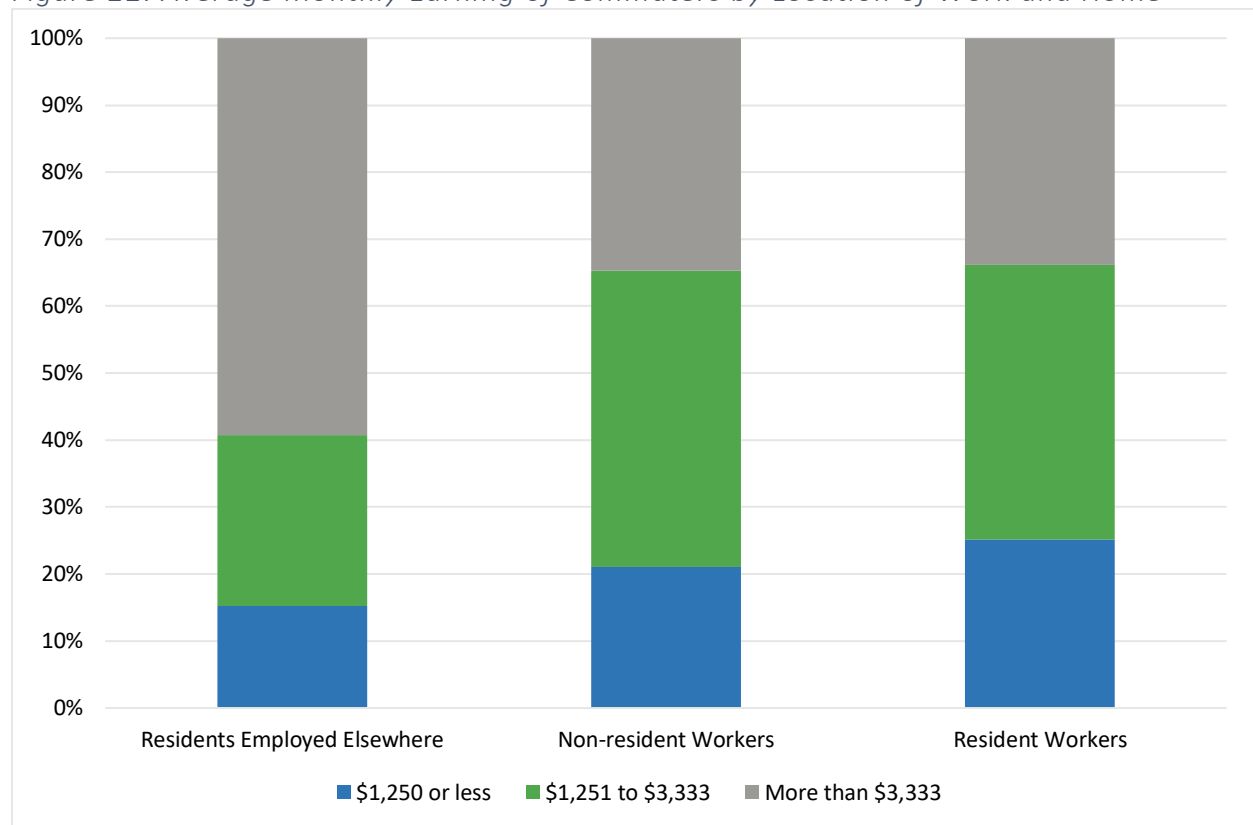
The follow analysis breaks workers into one of three groups: Residents Employed Elsewhere; Non-resident Workers; and Resident Workers. Workers between the ages of 30-54 make up the largest share of all three groups analyzed. Of these, residents who leave the County for work had the highest share of workers in this age range, a total of 13,193 or 59%. Workers who live outside of Boone County have the largest share of workers 29 or younger when compared across all three groups. Of the 6,923 employed and living in Boone County, 26% are over the age of 55, a total of 1,822 workers. Among these three groups, this was the highest proportion of workers in this age range.

Figure 21: Age Range of Commuters by Location of Work and Home



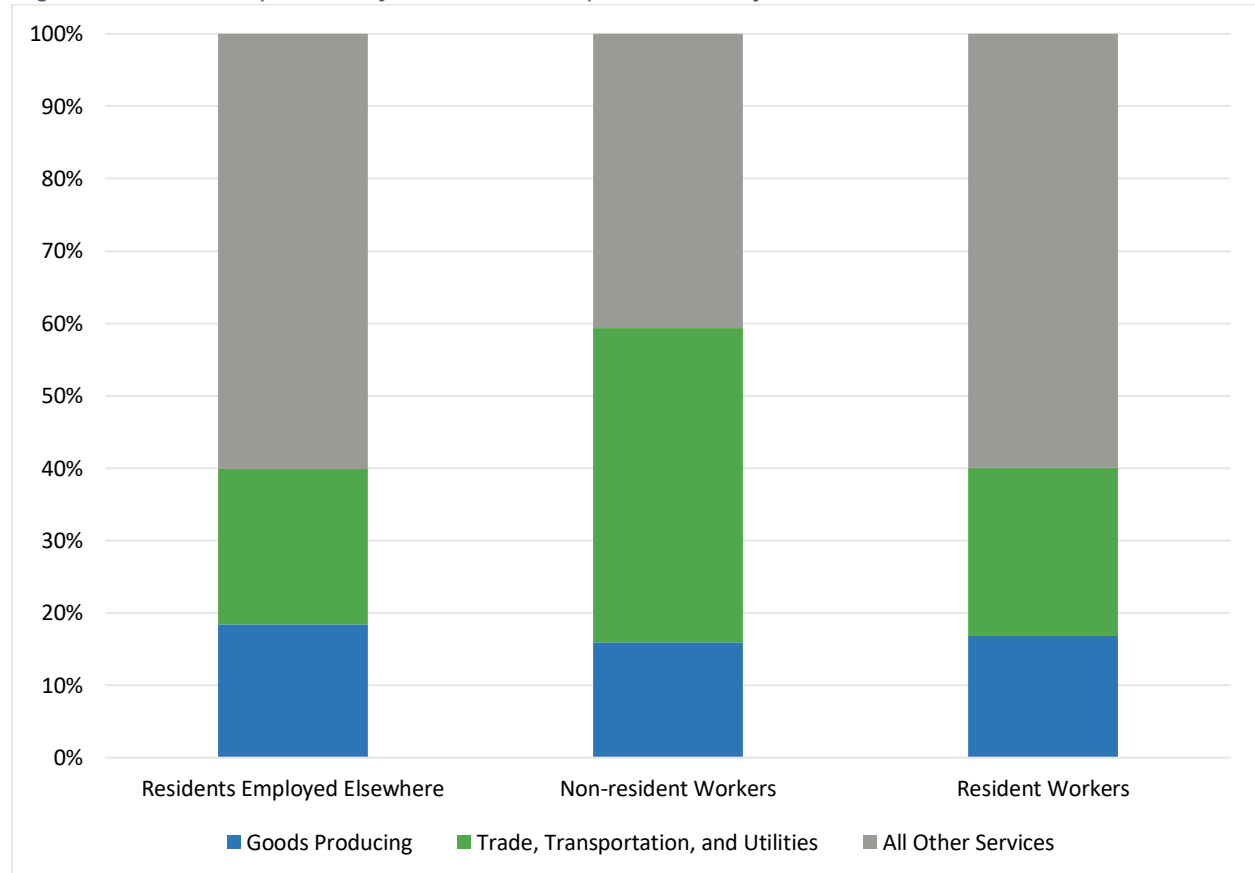
Boone County residents that leave the County to work elsewhere have a significantly higher share of total workers who earn on average more than \$3,333, a total of 59% of all workers in this category. The high salary for specialized industries, tech and business industries, and higher median wages in the nearby Indianapolis metropolitan area may account for this trend. Of the two groups employed in Boone County, the share of workers across the average monthly wage categories is more evenly distributed, with those earning between \$1,251-\$3,333 accounting for slightly higher shares.

Figure 22: Average Monthly Earning of Commuters by Location of Work and Home



The industry class of workers across the three groups analyzed differed the most substantially for residents who work outside of Boone County, 60% of which work in All Other Services. Workers who live outside of Boone County are more commonly working in the Trade, Transportation, and Utilities industry class with 43.5% of workers in this group compared to 21.5% of residents who leave the County and 23.3% of resident workers. Approximately 60% of resident workers in Boone County hold jobs that are classified as All Other Services. The share of Trade, Transportation, and Utilities; and Goods Producing jobs account for a smaller share of total jobs within this group.

Figure 23: Industry Class of Commuters by Location of Work and Home



Boone County Residents Working Elsewhere

Of the 29,161 Boone County working residents, a total of 22,238 work outside of the County. Of these workers, 59.3% are between the ages of 30-54 and 59.2% earn more than \$3,333 on average per month. Most of the Boone County residents who commute outside of the County, 60.1%, work in All Other Services industry.

Table 36: Age Range of Boone County Residents that Work Outside of the County

Age Range	Workers	Share of Workers
Workers Aged 29 or younger	4,293	19.3%
Workers Aged 30 to 54	13,193	59.3%
Workers Aged 55 or older	4,752	21.4%

Table 37: Monthly Earnings for Boone County Residents that Work Outside of the County

Workers Earning per Month	Workers	Share of Workers
\$1,250 or less	3,382	15.2%
\$1,251 to \$3,333	5,681	25.5%
More than \$3,333	13,175	59.2%

Table 38: Worker Industry Class for Boone County Residents that Work Outside of the County

Industry Class	Workers	Share of Workers
Goods Producing	4,094	18.4%
Trade, Transportation, and Utilities	4,778	21.5%
All Other Services	13,366	60.1%

Boone County Residents By Employment Sector

Table 39 below shows the breakdown of Boone County residents by employment sector. As shown, most residents in Boone County work in Manufacturing, Retail Trade, or Health Care and Social Assistance.

Table 39: Boone County Residents by Employment Sector

	Workers	Share of Workers
Agriculture, Forestry, Fishing and Hunting	103	0.3%
Mining, Quarrying, and Oil and Gas Extraction	16	0.0%
Utilities	106	0.3%
Construction	1,582	4.9%
Manufacturing	3,673	11.3%
Wholesale Trade	1,653	5.1%
Retail Trade	3,311	10.2%
Transportation and Warehousing	1,655	5.1%
Information	625	1.9%
Finance and Insurance	1,620	5.0%
Real Estate and Rental and Leasing	512	1.6%
Professional, Scientific, and Technical Services	2,300	7.1%
Management of Companies and Enterprises	569	1.8%
Administration & Support, Waste Management and Remediation	2,069	6.4%
Educational Services	2,930	9.0%
Health Care and Social Assistance	4,593	14.2%
Arts, Entertainment, and Recreation	474	1.5%
Accommodation and Food Services	2,391	7.4%
Other Services (excluding Public Administration)	973	3.0%
Public Administration	1,275	3.9%

Boone County Workers Who Live Outside the County

A total of 16,593 workers enter Boone County from the surrounding region. Among them, over half are between the ages of 30-54. Nearly half earn between \$1,251 and \$3,333. Just over 15% are in the Goods Producing industry class with the remaining workers split nearly equally between Trade, Transportation, and Utilities (43.5%); and All Other Services (40.6%).

Table 40 Age Range of Non-Resident Boone County Workers

Inflow Job Characteristics (Primary Jobs)	Workers	Share of Workers
Workers Aged 29 or younger	4,552	27.4%
Workers Aged 30 to 54	9,085	54.8%
Workers Aged 55 or older	2,956	17.8%

Table 41 Monthly Earning for Non-Resident Boone County Workers

Workers Earning per Month	Workers	Share of Workers
\$1,250 or less	3,498	21.1%
\$1,251 to \$3,333	7,331	44.2%
More than \$3,333	5,764	34.7%

Table 42 Worker Industry Class for Non-Resident Boone County Workers

Industry Class	Workers	Share of Workers
Goods Producing	2,640	15.9%
Trade, Transportation, and Utilities	7,213	43.5%
All Other Services	6,740	40.6%

Boone County Workers Living in Boone County

A total of 6,923 workers live and work in Boone County. Most of those workers, 52.3%, are between the ages of 30 and 54. Additionally, 41.0% make between \$1,251 and \$3,333 in monthly earnings. Lastly, those who live and work in the County predominately work in the All Other Services industry class.

Table 43: Age Range of Boone County Resident Workers

Interior Flow Job Characteristics (Primary Jobs)	Workers	Share of Workers
Workers Aged 29 or younger	1,482	21.4%
Workers Aged 30 to 54	3,619	52.3%
Workers Aged 55 or older	1,822	26.3%

Table 44: Monthly Earnings for Boone County Resident Workers

Workers Earning per Month	Workers	Share of Workers
\$1,250 or less	1,743	25.2%
\$1,251 to \$3,333	2,840	41.0%
More than \$3,333	2,340	33.8%

Table 45: Worker Industry Class for Boone County Resident Workers

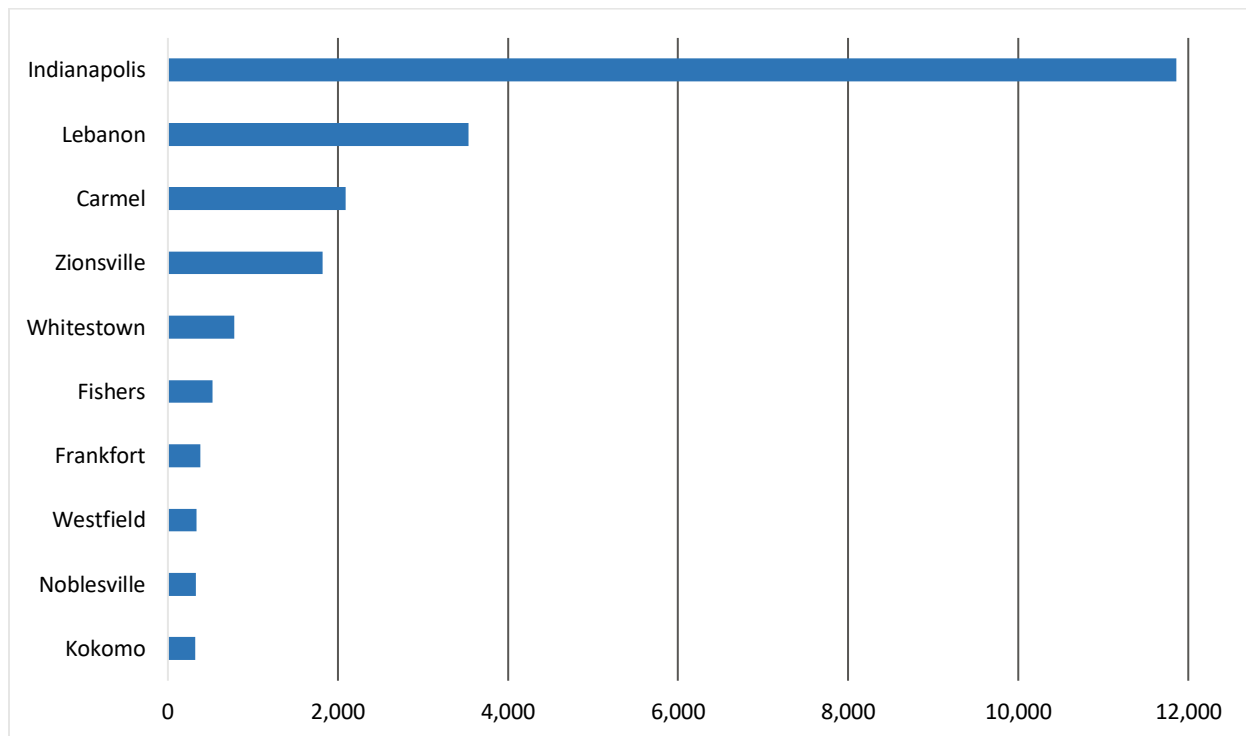
Industry Class	Workers	Share of Workers
Goods Producing	1,163	16.8%
Trade, Transportation, and Utilities	1,612	23.3%
All Other Services	4,148	59.9%

Where Boone County Residents Work

Residents in Boone County most commonly travel to Marion County, which employs 42.2% of all Boone County working residents. As shown earlier, 23.7% of Boone County residents also work in Boone County. After Marion and Boone counties, the next most popular employment locations are Hamilton and Hendricks counties. Each account for a smaller share of residents with 11.9% and 4.3% of the population working in each county respectively.

The figure below shows the top 10 places where Boone County residents work. Nearly 12,000 Boone County residents commute to Indianapolis, representing 40.7% of the total. Other top destinations include Lebanon, Carmel, Zionsville, and Whitestown.

Figure 24: Top 10 Work Destinations for Boone County Residents



Where Boone County Workers Live

Of the 23,516 people who work in Boone County, most live in either Boone County (29.4%) or Marion County (24.7%). Hamilton and Hendricks counties are the only other counties with more 5% of Boone County workers living there.

The figure below shows the top 10 home locations for those working in Boone County. The most common home location for Boone County workers is Indianapolis with over 5,000 people commuting from Indianapolis to Boone County for work. The Boone County cities of Lebanon and Zionsville are the next top home locations. Carmel in Hamilton County and Frankfort in Clinton County round out the top five home locations.

Figure 25: Top 10 Home Locations for Boone County Workers

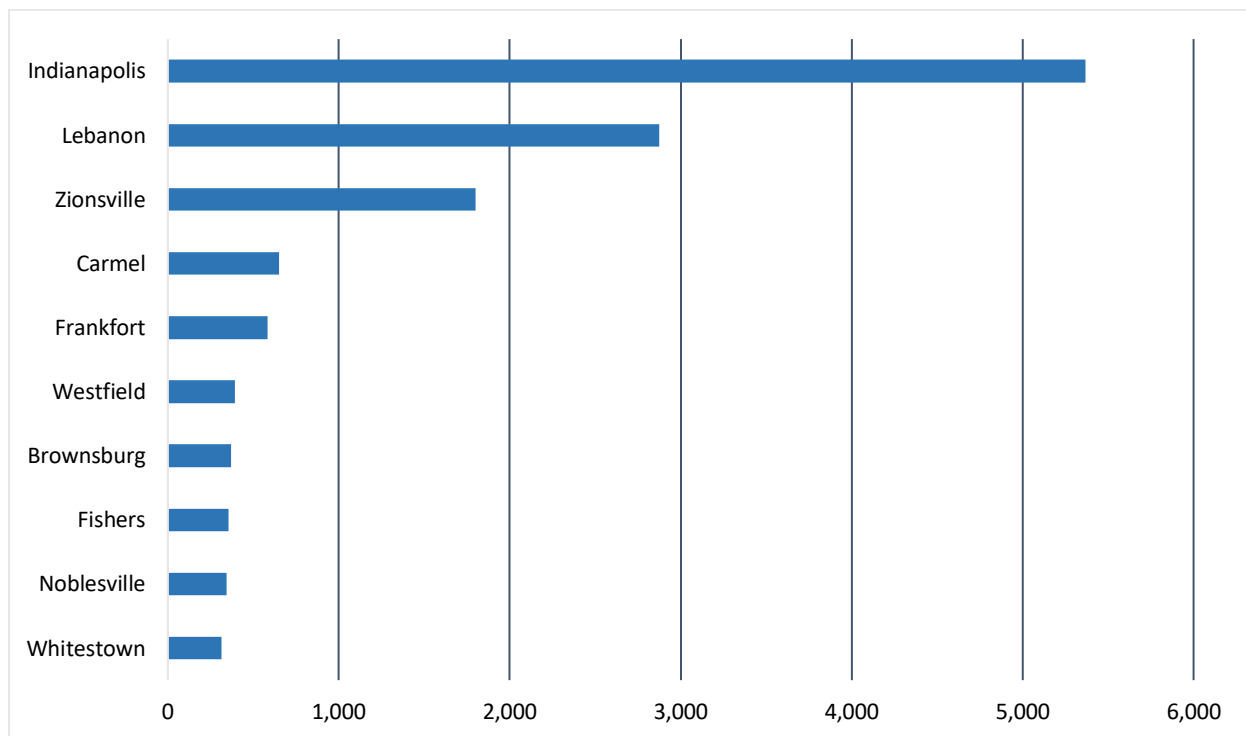


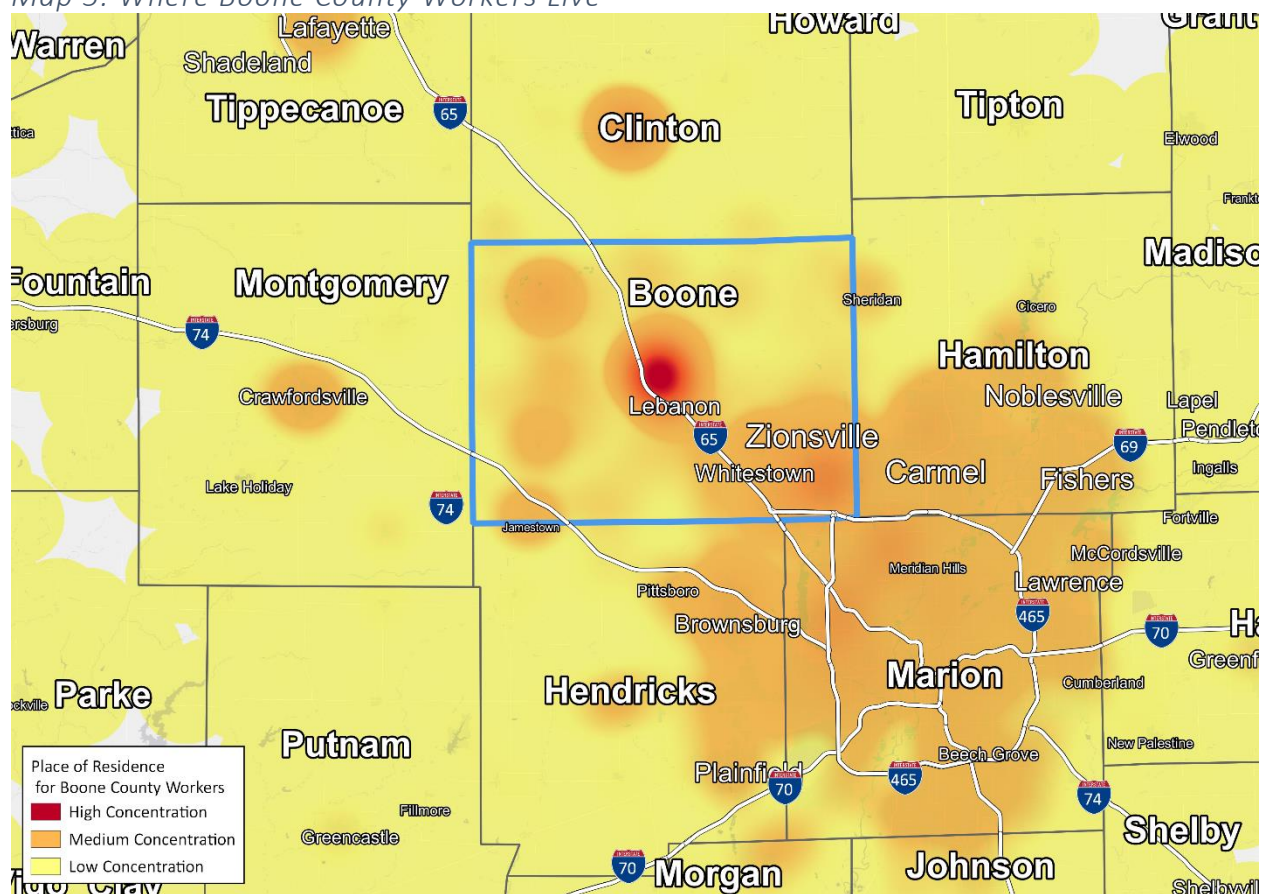
Table 46: Labor Shed Residents Employed by Sector

NAICS Industry Sector	Marion	Hamilton	Hendricks	Tippecanoe	Boone	Montgomery	Clinton	All Counties
Agriculture, Forestry, Fishing and Hunting	628	551	183	362	131	145	155	2,155
Mining, Quarrying, and Oil and Gas Extraction	156	111	69	78	18	39	8	479
Utilities	1,804	877	653	155	157	53	25	3,724
Construction	15,321	5,712	3,517	2,463	1,428	606	515	29,562
Manufacturing	38,322	14,577	8,201	12,599	3,680	4,179	3,853	85,411
Wholesale Trade	18,769	7,924	3,885	2,014	1,612	564	506	35,274
Retail Trade	45,152	14,321	7,881	6,849	3,058	1,656	1,283	80,200
Transportation and Warehousing	25,575	4,286	5,521	1,920	1,563	1,083	682	40,630
Information	8,129	3,554	1,266	836	573	178	169	14,705
Finance and Insurance	19,713	10,048	3,129	1,832	1,466	342	272	36,802
Real Estate and Rental and Leasing	6,482	2,343	898	899	396	112	109	11,239
Professional, Scientific, and Technical Services	22,796	12,051	3,983	2,367	1,850	359	290	43,696
Management of Companies and Enterprises	5,933	2,743	934	368	407	80	53	10,518
Administration & Support, Waste Management and Remediation	39,621	9,346	5,149	4,602	1,875	961	708	62,262
Educational Services	28,118	12,592	6,071	13,641	2,606	1,435	1,025	65,488
Health Care and Social Assistance	61,291	20,447	10,610	8,787	4,024	1,420	1,263	107,842
Arts, Entertainment, and Recreation	4,982	1,876	809	460	347	94	77	8,645
Accommodation and Food Services	37,425	10,305	5,598	6,184	1,901	1,101	860	63,374
Other Services (excluding Public Administration)	12,840	4,249	2,017	1,714	798	306	281	22,205
Public Administration	17,626	4,984	3,285	2,015	1,271	652	519	30,352

Commuter Heat Maps

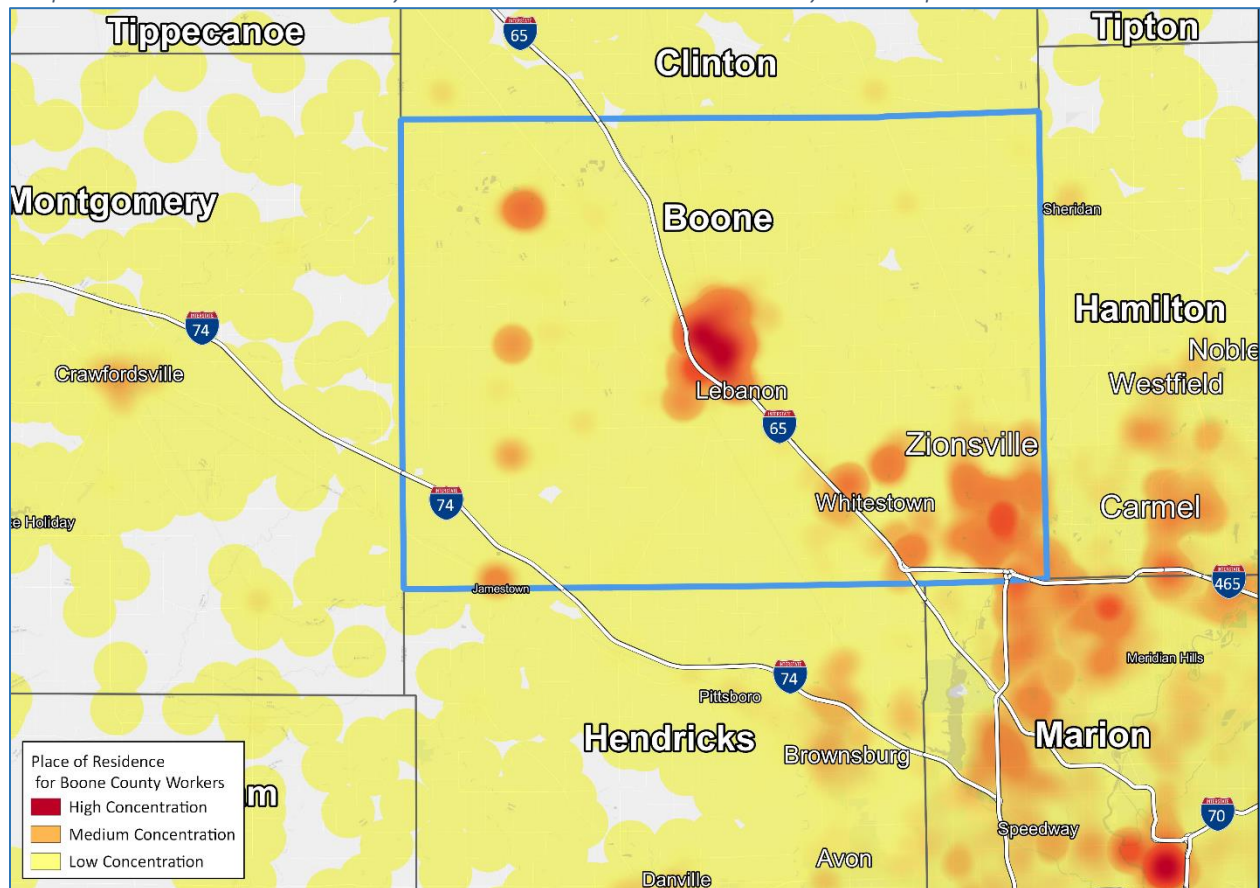
Map 5 shows the locations where Boone County workers live, including both residents and non-residents. The data is measured at the census block level where at least one or more Boone County worker resides with darker orange and red represent a higher concentration of people. While some commuters are evident in Clinton and Tippecanoe counties, most non-resident workers come from Hamilton, Marion, and Hendricks counties. While workers are distributed across the region and beyond, there is a much higher density to the southeast of Boone County. Of those working in Boone County, 72.9% travel less than 24 miles from home to place of work. Approximately 12.8% travel more than 50 miles, largely to the southeast.

Map 5: Where Boone County Workers Live



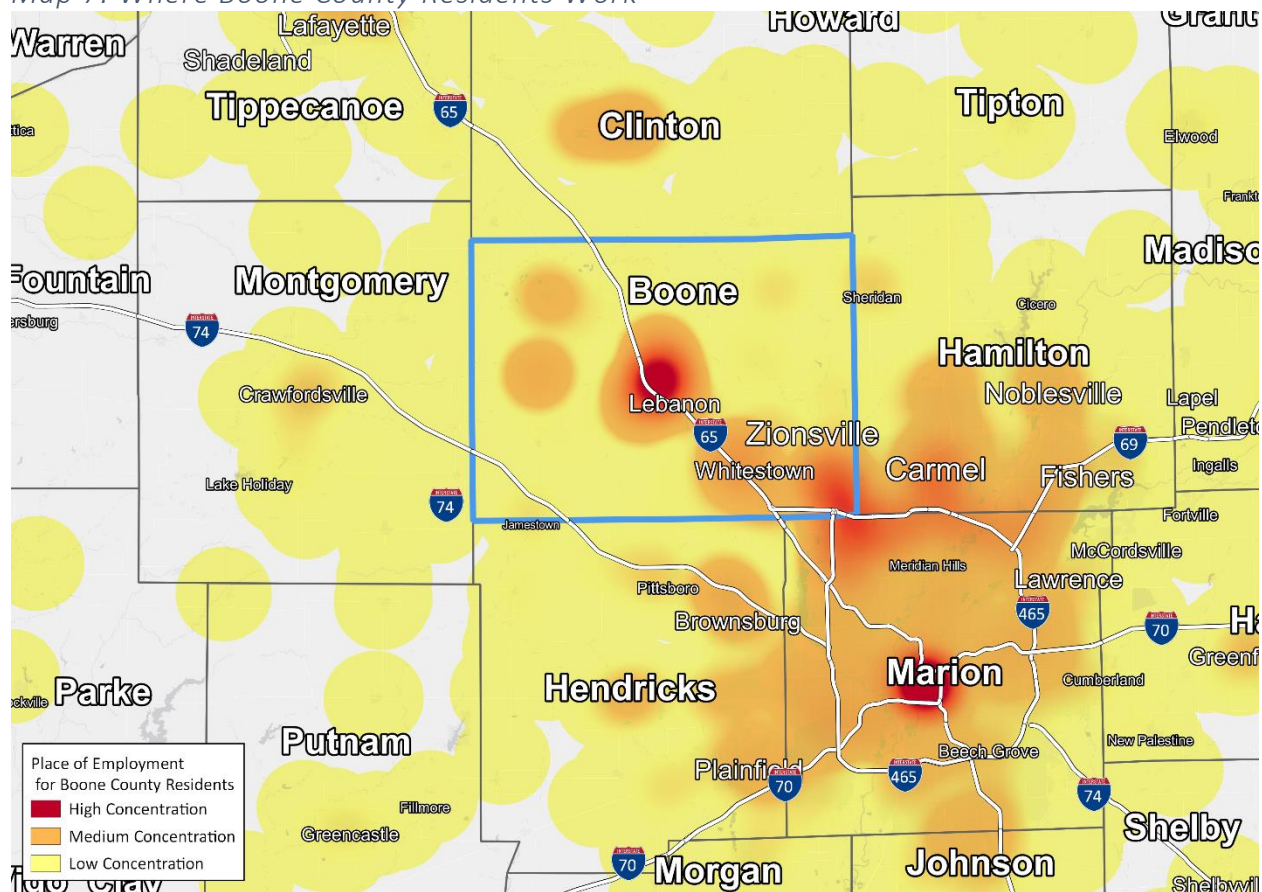
Map 6 displays the same information about where Boone County workers live with a closer look at Boone County and major municipalities. This map shows the relative concentration of primary residences of people that work in Boone County. Like Map 5, this data is measured at the census block level but includes a smaller radius of 1-square mile to identify higher concentrations at a more granular level. The largest concentration of workers within Boone County are in Lebanon, followed by Zionsville and Whitestown. Outside of Boone County, there is a large concentration of people employed in Boone County that live in Indianapolis, Carmel, and Crawfordsville. The highest concentration of people employed in Boone County that live outside of the County are residents of Marion County.

Map 6: Where Boone County Workers Live – Boone County Closeup



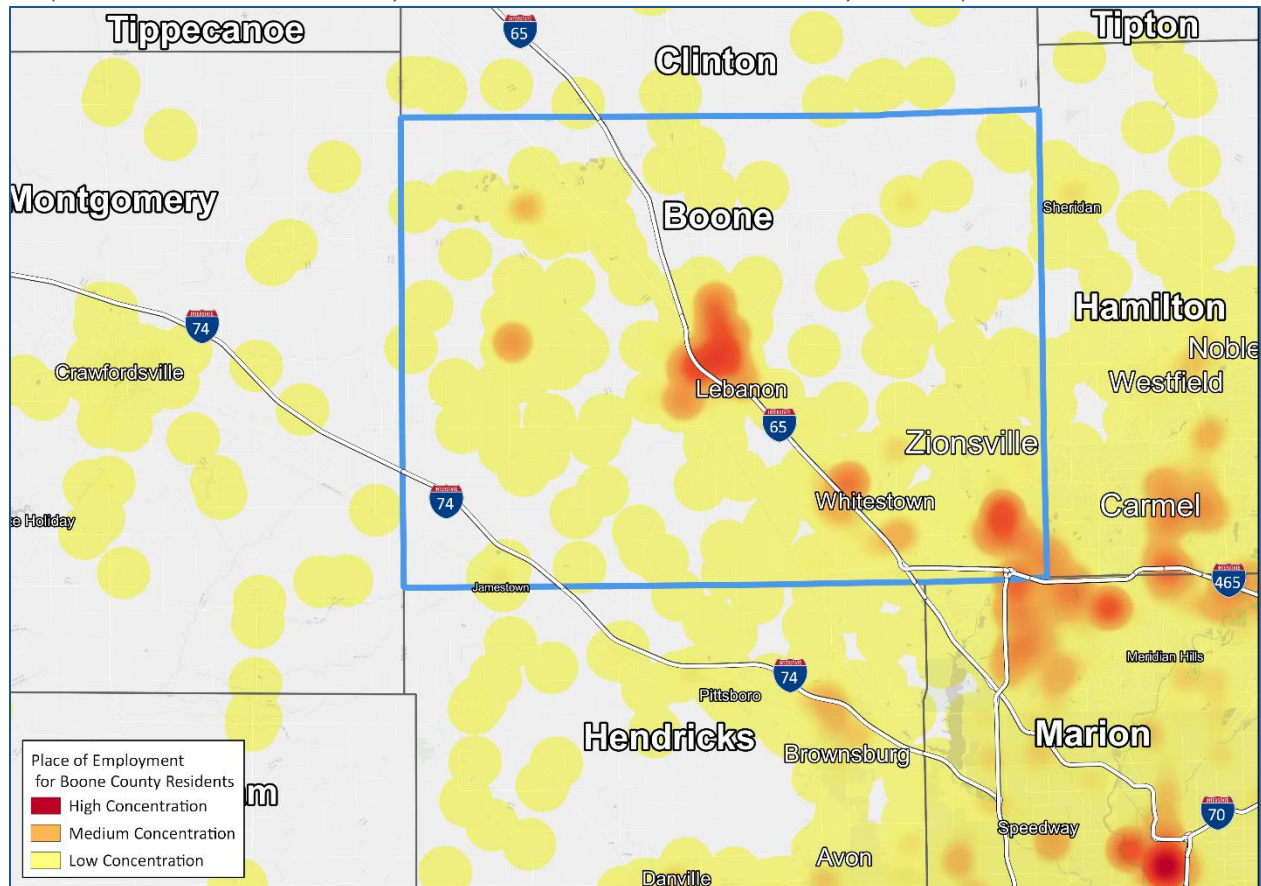
Map 7Map 7 shows the location of where people who live in Boone County work. As shown, a large portion of Boone County residents also work in the County. However, a significant number work in Marion County, particularly in Indianapolis and along I-465 at the intersection with I-65 near the border between Marion and Boone County. Other than around Lebanon, downtown Indianapolis has the highest concentration of places of employment of Boone County residents.

Map 7: Where Boone County Residents Work



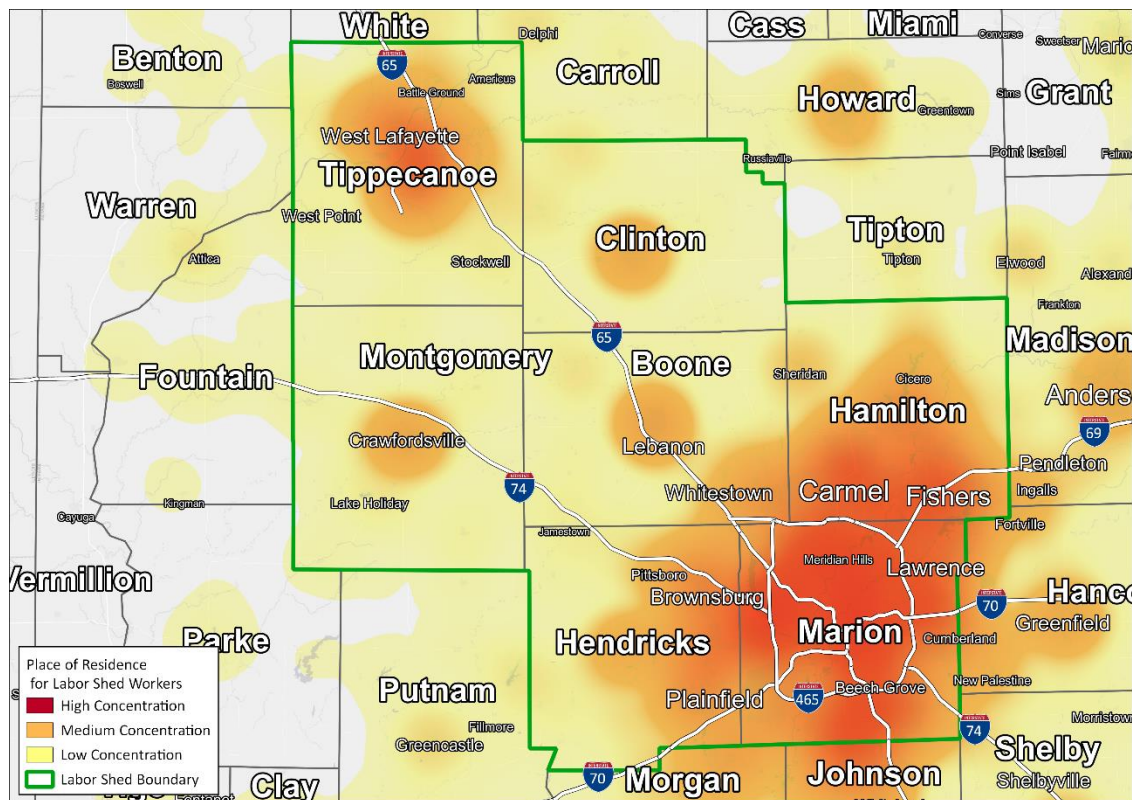
Map 8 presents same information as Map 3 but with a closer look at Boone County. Key locations of work for people in Boone County are in Lebanon, Whitestown, and southeastern Zionsville. The large concentration of workers in the western portion of the county between Thorntown and Advance likely represents the Western-Boone Junior-Senior High School in Dover.

Map 8: Where Boone County Residents Work – Boone County Closeup



Workers within the labor shed are geographically spread out across the counties within the labor shed as well as surrounding areas. The highest concentration of workers covers large portions of Marion, Hamilton, Hendricks, and Tippecanoe counties. In Montgomery, Boone and Clinton counties the highest number of labor shed workers are concentrated in Crawfordsville, Lebanon, and Frankfort respectively. In Boone County, there is also a large concentration of residents in Zionsville who work in the labor shed.

Map 9: Where Labor Shed Workers Live





Map 10: Where Labor Shed Residents Work

