2019 WORKFORCE PROFILE

Door County

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2019 Wisconsin Overview

The county workforce profiles provide snapshots of the labor market for each of the 72 Wisconsin counties. In addition to a static PDF version, each county profile will be available as an interactive document in which the reader can do additional manipulation of some tables. The profiles begin with an overview of the entire state's labor market outlook. From there, the profiles highlight the respective labor market with analyses of the current and projected population and labor force, community patterns, industries, occupations, and wages. We conclude each profile with an examination of the impact of automation on the county's workforce.

Record Economic Expansion

The economic expansion is now the longest on record. This current expansion surpassed the previous mark of 120 months set in the 1991-2001 stretch in June 2019. What has been good for the country has been good for Wisconsin and most other states.

Months
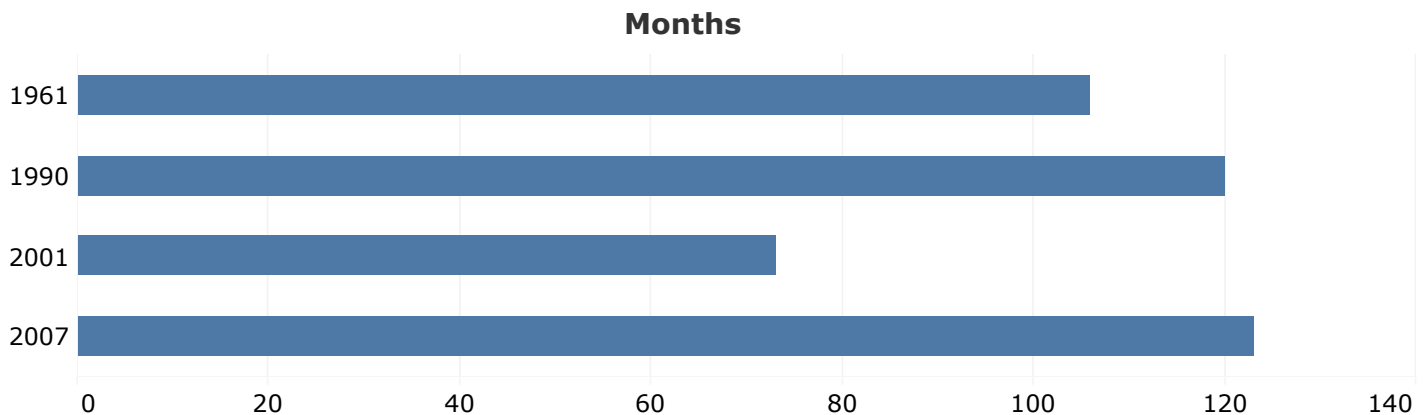
*Bureau of Labor Statistics, OEA

Wisconsin's workforce and employment numbers have attained new highs. Employment exceeded the 3 million mark in the summer of 2016. Wisconsin jobs reached new highs in 2019 with not-seasonally adjusted, total non-farm jobs breaking through 3 million at 3.026 million in June 2019. The state's unemployment rate has reached lows not seen since at least 1976, 2.8% in the months of April and May of 2019. New unemployment rate lows were also recorded for the U.S. as a whole at 3.6%. Thirty of 72 Wisconsin counties reached new job highs in the last two years. Thirty state counties hit new unemployment rate lows. Initial and continued unemployment insurance claims have been tracking at 40-year lows over the past three years.

Given that new records are being set largely across the board for expansion longevity, employment highs, and unemployment lows, the question turns to when will the trends reverse.

Economic expansions don't die of old age. Expansions are usually curtailed by decreasing jobs, spending, investments, inflation, or interest rate pressures. Decreasing jobs lead to lower incomes that result in less consumption, which is the driving force in the U.S. economy. Employment numbers are not good indicators of pending recessions. In fact, they are a lagging indicator of economic downturns and recoveries.

What's next in the short-run?

As this is being written in November 2019, job numbers are still climbing, earnings and income are rising, retail sales are expanding, debt-to-income ratio is low, and inflation is subdued at about 2%. Housing sales are relatively flat, vehicle sales have leveled off, and some European countries' economies are sagging. The primary unknown at the moment is the status of tariff and trade policy on the North American countries' trade agreement and trade with China. The uncertainty is dampening capital investment, injecting volatility in the equity markets, and causing household cogitation.

What are the long-run influences?

The primary long-term challenge facing Wisconsin's economic future is its workforce quantity. The demographic situation facing the state, other upper Midwest states, and most western state economies will advance unaltered in the coming decades. The number of retiring baby boomers nearly match the influx of new workers, resulting in a slow growing workforce that is constraining employers' abilities across industries to secure talent. Many businesses report the lack of available workers have hindered expansion and, in some cases, even curtailed their ability to meet current product orders.

Wisconsin Population and Labor Force
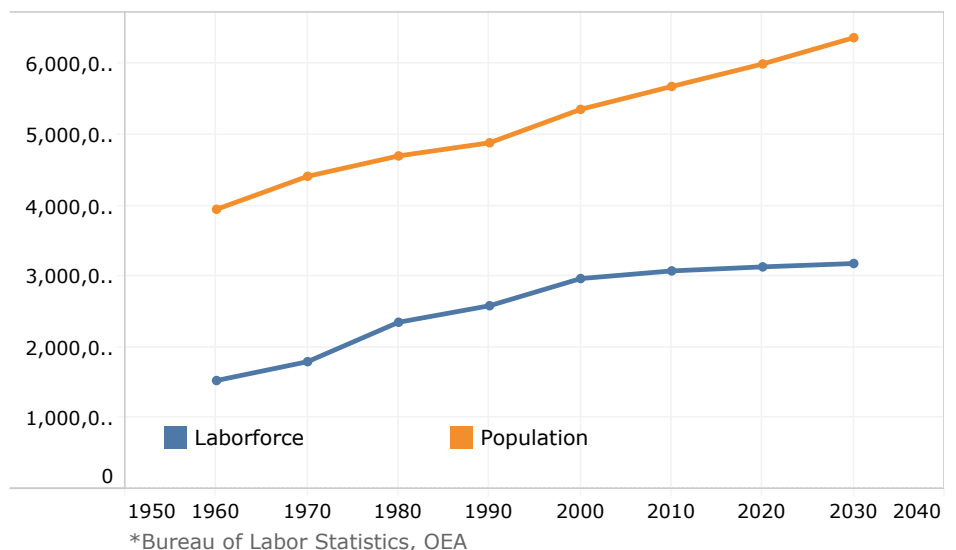
The blue-line, orange-line graph to the right portrays the labor force facing Wisconsin and other upper-Midwest states. While Wisconsin's population will continue to grow over the next 20 years, the workforce faces serious constraints. The curve began to flatten in 2008 as the first baby boomers (those born in 1946) reached age 62 and began to leave the workforce.

*Bureau of Labor Statistics, OEA

Baby boomers continue to exit the workforce in great numbers. However, the labor force participation rates for workers over 55 years of age have risen significantly. The need or want to remain in the workforce has assisted in staving off more severe worker shortages.

Our analysis shows a marked decrease in per capita personal income growth in the coming decades. The consequences for shared tax burden will be real and require new policy discussions about the social contract for infrastructure and government services.

One of the remedies for labor scarcity and increased productivity is the incorporation of labor-saving technology in the workplace. As such, not only does Wisconsin have a quantity challenge, the state must also make all available workers technologically savvy. The propensity for automation varies by occupation, but routine activities are the most susceptible to displacement.

To summarize, the state needs to find every body it can and get everybody trained up to their maximum potential.

Door County
Population and Demographics

Since the 2010 Census, population growth in Door County kept in line with the state rate but lagged behind the nation. During this time, Door County's population grew by 678 residents (2.4%). This population growth over the past eight years is a change of pace compared to the 3.0% reduction experienced during the 2002-2010 time period. Nevertheless the data is consistent with the observations made earlier about current and future workforce challenges. Over 30% of the population growth was accounted for by Sturgeon Bay, the county's largest municipality. The Town of Brussels was the only municipality within the top ten to experience a population decrease, albeit a very minor decrease.

### 10 Most Populous Municipalities in County

	2010 Census	2018 Final Estimate D	Numeric Change	Percent Change
Sturgeon Bay, City	9,144	9,363	219	2.40%
Sevastopol, Town	2,628	2,723	95	3.61%
Nasewaupee, Town	2,061	2,101	40	1.94%
Liberty Grove, Town	1,734	1,778	44	2.54%
Egg Harbor, Town	1,342	1,399	57	4.25%
Gardner, Town	1,194	1,224	30	2.51%
Brussels, Town	1,136	1,132	-4	-0.35%
Forestville, Town	1,096	1,103	7	0.64%
Baileys Harbor, Town	1,022	1,069	47	4.60%
Gibraltar, Town	1,021	1,060	39	3.82%
Door County	27,785	28,463	678	2.44%
United States	308,400,408	327,167,434	18,767,026	6.09%
Wisconsin	5,686,986	5,816,231	129,245	2.27%

Source: Demographic Services Center, Wisconsin Department of Administration

Components of Change

Door County's -3.3% natural increase rate shows that the number of births alone was not enough to maintain population growth. This aligns with the county's age profile. According to the Census Bureau, Door County is the fourth oldest county in the state in terms of median age (52.3 years). In addition, population projections from the Department of Administration (DOA) suggest that over 38% of the local population will be at least 65 years old by 2030. On the other side of the same coin, the strong net migration rate of 5.7% reflects the county's reputation as a popular destination for incoming retirees.
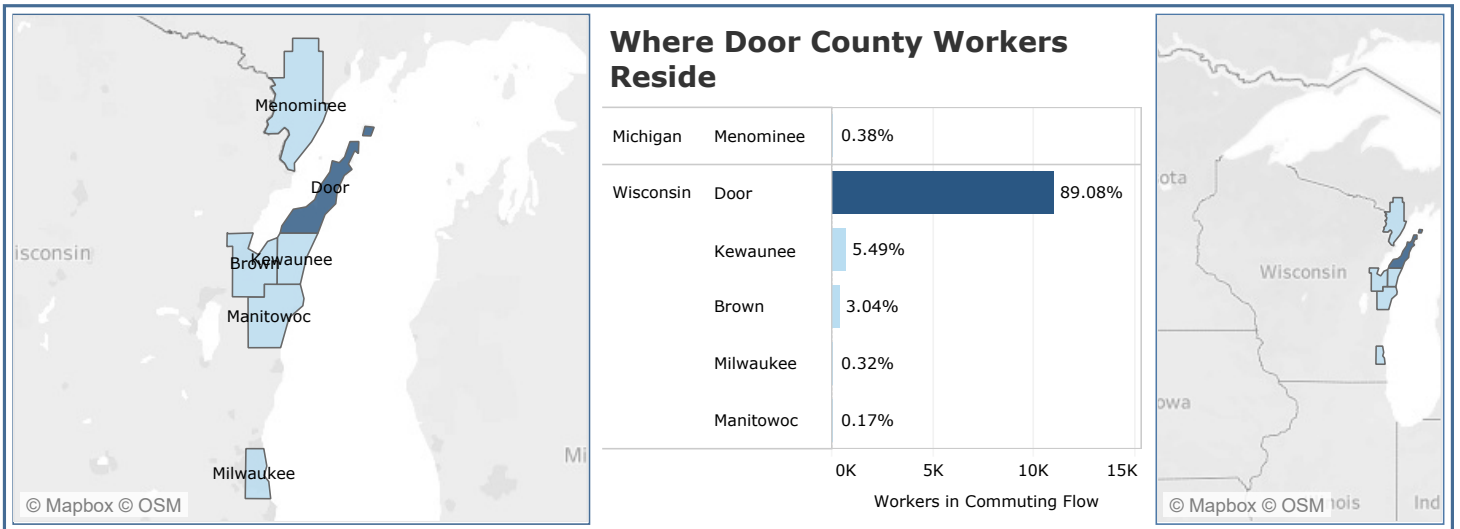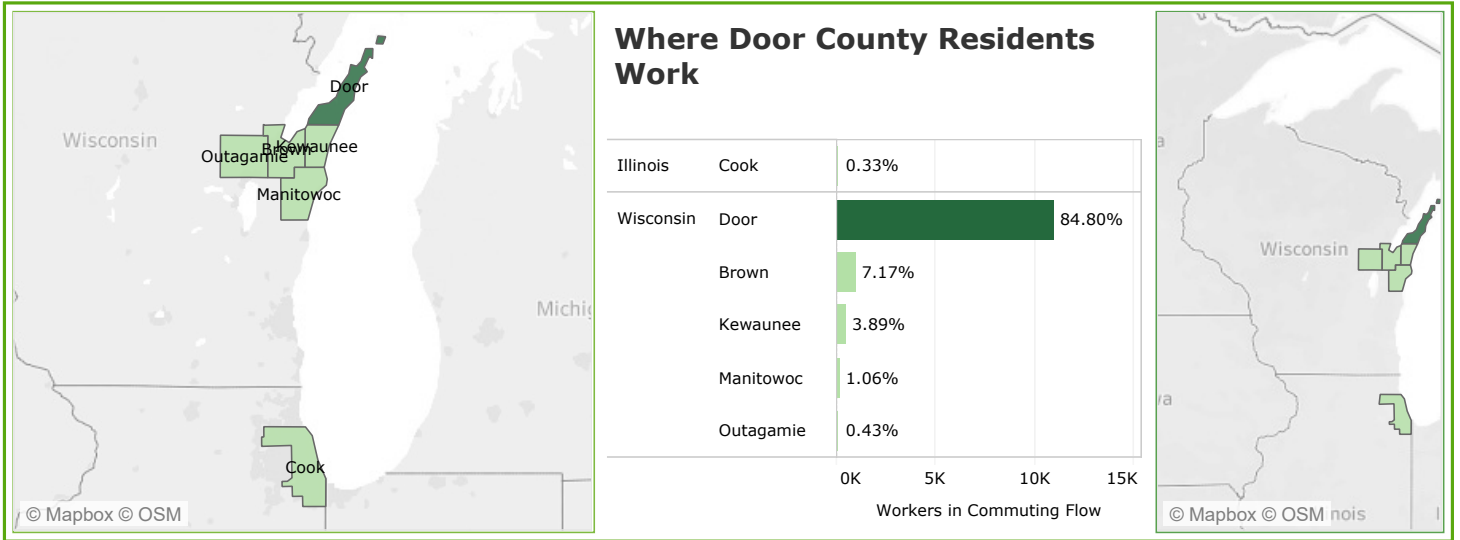
Components of Population Change

Source: Demographic Services Center, Wisconsin Department of Administration

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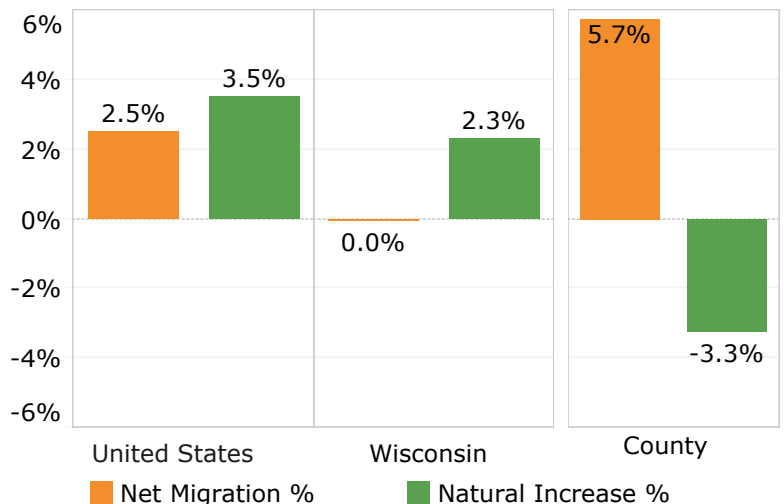
Door County Worker Commute

Residents Work

Just under 85% of Door County's employed residents work within its borders. This is the second highest retention rate among all seventeen counties in Northeast Wisconsin, only trailing Brown County. Part of this phenomenon can be explained by the fact that Door County is part of a peninsula and hence does not have a larger number of bordering counties to draw workers out of the county.

Where Door County Residents Work

		Workers in Commuting Flow	
Illinois	Cook	0.33%	
Wisconsin	Door		84.80%
	Brown	7.17%	
	Kewaunee	3.89%	
	Manitowoc	1.06%	
	Outagamie	0.43%	

© Mapbox © OSM

Where Door County Workers Reside

|		Workers in Commuting Flow	
Michigan	Menominee	0.38%	
Wisconsin	Door		89.08%
	Kewaunee	5.49%	
	Brown	3.04%	
	Milwaukee	0.32%	
	Manitowoc	0.17%	

© Mapbox © OSM

Workers Reside

Over 89% of people who work in Door County live here as well, which is the highest rate in Northeast Wisconsin. Door County has a net commuting deficit of over 1,700 people, which means that more people commute outside of the county than into it. A little over 1,000 people commute into the county primarily from Kewaunee and Brown Counties.

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Labor Force Dynamics

As expected, the share of the labor force looking for work spiked in the early 2000's following the burst of the dot-com bubble and again later in the decade after the much more severe financial crisis. At its peak in 2011, the unemployment rate in the county was 12.0%. The steady reduction of the unemployment rate since then is consistent with trends at the state and national levels. While the current economic expansion is certainly a significant reason why the current unemployment rate is near record lows, we cannot ignore the ways in which the ever-changing demographic landscape applies pressure on local employers to find and retain talent.

Door County Unemployment Rates - Not Seasonally Adjusted
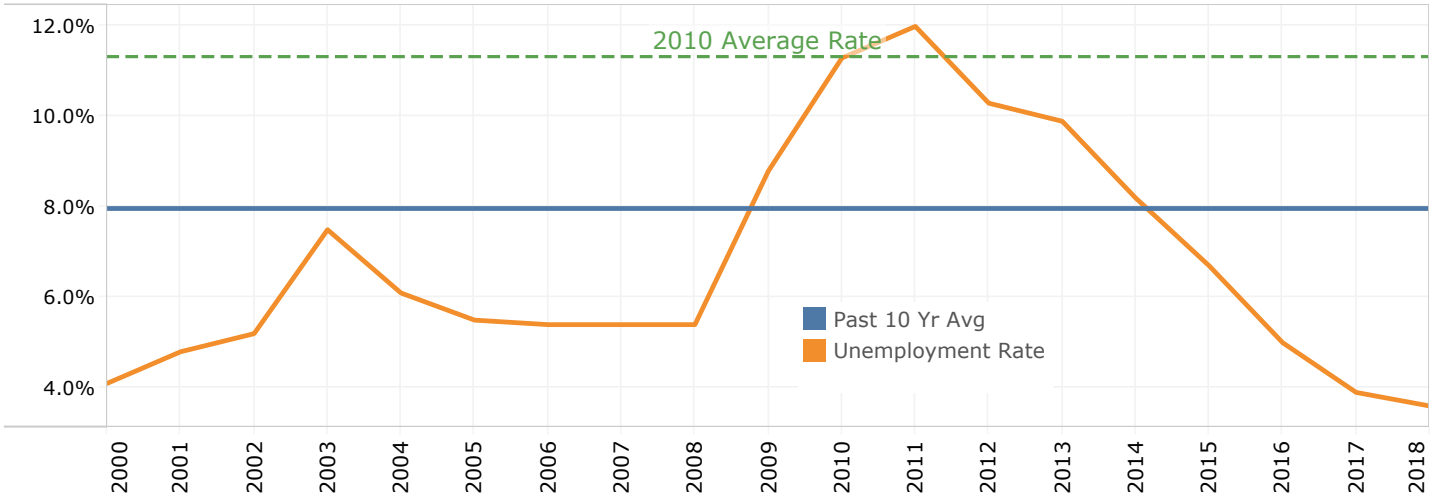
Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

Population and Labor Force
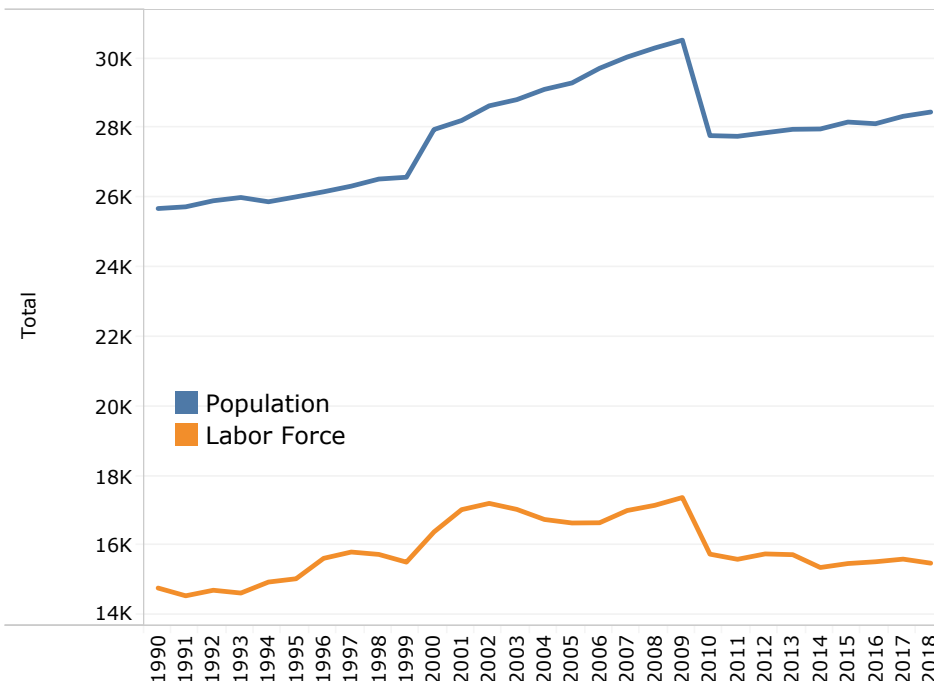
Source: Local Area Unemployment Statistics, Bureau of Labor Statistics and Wisconsin Deparment of Administration

Door County Labor Force Components

Throughout the 1990s and 2000s, Door County experienced three multi-year periods of incremental labor force growth that reached relative peaks in 1997, 2002, and 2009. However, this upward trend abruptly ended in 2010 as the county's labor force declined by over 9% and has yet to recover. Over the course of the economic recovery, employment steadily increased while unemployment decreased by roughly the same amount. As a result, the overall labor force has remained mostly flat.

Industry Employment and Wages
2018 Employment and Wage Distribution by Industry
Door County

	2018 Annual Average Employment	1-year change	Total Payroll (2018)	
Trade, Transportation, Utilities	2,471	29	$72,395,361	
Public Administration	957	26	$28,846,614	
Professional & Business Services	537	18	$18,890,393	
Other services	711	1	$15,301,030	
Natural Resources	205	-19	$5,870,953	
Manufacturing	2,335	-91	$117,451,485	
Leisure & Hospitality	3,018	-50	$61,852,307	
Information	170	2	$5,711,276	
Financial Activities	390	0	$16,144,345	
Education & Health	2,278	58	$103,812,290	
Construction	655	18	$32,712,834	
All industries	13,728	-6	$478,988,888	

Legend: ■ % of Total Employment ■ % of Total Payroll

Chart x-axis: 5.00% 10.00% 15.00% 20.00%

Source: WI DWD, Labor Market Information, QCEW, June 2019

Employment within the county decreased by six jobs. The Manufacturing and Leisure & Hospitality sectors lost 141 jobs. Most of the county's industries gained employment, with much of the gains taking place in the sectors of Education & Health, Trade, Transportation, and Utilities, and Public Administration. Two industries accounted for 46% of payroll: Education & Health, and Manufacturing.

The four largest industry sectors in Door County are Leisure & Hospitality, Education & Health, Trade, Transportation & Utilities, and Manufacturing. Within Leisure & Hospitality, employment is concentrated in Food and Beverage Services, Accommodation/Lodging, and Recreation. The county also boasts several different manufacturing clusters, including Machinery Manufacturing and Fabricated Metal Products.

2018 Average Annual Wage by Industry

	Wisconsin Average Annual Wage	County Average Annual Wage	2018 % Wisconsin	1-Year % Change*
Trade, Transportation, Utilities	$41,901	$29,298	69.9%	-0.7%
Public Administration	$47,859	$30,143	63.0%	-1.5%
Professional & Business Services	$60,729	$35,178	57.9%	-3.0%
Other services	$30,674	$21,520	70.2%	0.4%
Natural Resources	$39,444	$28,639	72.6%	2.9%
Manufacturing	$58,048	$50,300	86.7%	0.6%
Leisure & Hospitality	$18,757	$20,494	109.3%	-0.6%
Information	$73,577	$33,596	45.7%	-5.6%
Financial Activities	$71,474	$41,396	57.9%	-3.8%
Education & Health	$49,185	$45,572	92.7%	-0.3%
Construction	$61,909	$49,943	80.7%	2.2%
All Industries	$48,891	$34,891	71.4%	-0.5%

Except for Leisure & Hospitality, the average annual wages in every other industry are below state levels, which could be partly due to differences in occupational mixes. However, this alone does not sufficiently address the topic of income and earnings for Door County's residents. A different picture emerges when one looks at per capita personal income (PCPI), which is a more comprehensive measure that includes other monetary sources. Door County's PCPI of $59,196 is the third highest in Wisconsin and is well above the state average of $48,941 (BEA, 2017).

Source: WI DWD, Labor Market Information, QCEW, June 2019
*Difference in the 2018 share of Wisconsin and the 2017 share of Wisconsin

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Industry Employment Projections
Bay Area WDA - Industry Projections 2016-2026
Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Outagamie, Shawano, and Sheboygan Counties

Industry	2016 Employment	Projected 2026 Employment	Employment Change	Percent Change
Total All Industries	453,608	486,252	32,644	7.2%
Natural Resources and Mining	6,117	6,681	564	9.2%
Construction	19,966	21,923	1,957	9.8%
Manufacturing	89,944	90,897	953	1.1%
Trade, Transportation, and Utilities	78,648	83,741	5,093	6.5%
Information	3,492	2,760	-732	-21.0%
Financial Activities	25,054	26,866	1,812	7.2%
Professional and Business Services	40,364	45,622	5,258	13.0%
Education and Health Services	82,026	89,117	7,091	8.6%
Leisure and Hospitality	41,913	48,517	6,604	15.8%
Other Services (except Government)	23,540	24,994	1,454	6.2%
Public Administration	22,101	23,107	1,006	4.6%
Self Employed and Unpaid Family Workers	20,443	22,027	1,584	7.7%

Source: Office of Economic Advisors, Wisconsin Department of Workforce Development, December 2018

Even though there is much to be gained from understanding past and current trends, DWD also produces projections of industry and occupational employment to identify areas of future growth. The data presented above and on the next page have been produced as part of DWD's two-year long employment projections cycle, with the current cycle projecting employment from 2016 to 2026. Future employment estimates are calculated by using historical employment data from several different sources, including the Quarterly Census of Employment and Wages (QCEW) and Current Employment Statistics (CES) programs, as well as the Population Survey (CPS). These projections are presented for the 11 county Bay Area Workforce Development Area, which includes more than just the area directly impacted by the Door County economy. Industry employment in the county comprises 3.2% of employment in the region. However, employment and economic dynamics are similar enough within all parts of the region to comment on general trends.

Regional employment is expected to grow by 7.2% over the 10-year period, or over 32,000 jobs. As illustrated by the fact that four sectors account for over 70% of the increase in local employment, this growth is not expected to be evenly distributed across industries. It is anticipated that both Education & Health Services and Leisure & Hospitality will each increase by over 6,000 jobs, along with both the Professional & Business Services and Trade, Transportation, & Utilities industries gaining just over 5,000 workers as well. Information is the only sector in the Bay Area that is expected to experience a decrease in employment. It is important to note that these projections only cover the number of filled positions, so industries that are already having difficulties with talent attraction and retention in this labor market are expected to see their employment gains restricted as a result. Industry-specific attention in the region to develop pipelines of talent is exemplified by the efforts of the Northeast Wisconsin Manufacturing Alliance and the more recent establishments of industry alliances in both Information Technology (IT) and Construction.

Occupational Employment Projections
Bay Area WDA - Occupation Projections 2016-2026
Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Outagamie, Shawano, and Sheboygan Counties

Occupation Title	2016 Employment	2026 Projected Employment	Occupational Openings	Percent Change (2016-2026)	
Total, All	453,610	486,250	55,310	7.2%	
Management	24,660	27,300	2,240	10.7%	
Business and Financial Operations	22,310	24,660	2,330	10.5%	
Computer and Mathematical	8,650	10,110	760	16.9%	
Architecture and Engineering	8,360	9,100	690	8.9%	
Life, Physical, and Social Science	2,440	2,650	250	8.6%	
Community and Social Service	6,320	7,240	820	14.6%	
Legal	1,430	1,540	100	7.7%	
Education, Training, and Library	24,210	25,490	2,210	5.3%	
Arts, Design, Entertainment, Sports, and Media	6,380	6,750	680	5.8%	
Healthcare Practitioners and Technical	21,810	23,930	1,400	9.7%	
Healthcare Support	9,900	11,120	1,290	12.3%	
Protective Service	9,210	9,650	1,120	4.8%	
Food Preparation and Serving Related	36,430	42,210	7,170	15.9%	
Building and Grounds Cleaning and Maintenan..	12,450	13,060	1,650	4.9%	
Personal Care and Service	19,330	22,670	3,470	17.3%	
Sales and Related	43,350	45,360	6,200	4.6%	
Office and Administrative Support	62,870	64,340	7,350	2.3%	
Farming, Fishing, and Forestry	3,760	4,060	610	8.0%	
Construction and Extraction	19,870	21,590	2,230	8.7%	
Installation, Maintenance, and Repair	18,140	19,530	1,890	7.7%	
Production	59,070	58,650	6,540	-0.7%	
Transportation and Material Moving	32,660	35,230	4,320	7.9%	

Legend:
- ■ Annual Growth
- ■ Labor Force Exits
- ■ Occupational Transfers

DWD's occupational projections are widely used for the purposes of workforce and career planning. This current cycle of projections implements the new separations methodology, which more accurately captures the churns of the labor market by estimating the number of openings as a result of workers who leave the labor force entirely (exits) or workers who change jobs and leave an occupation (transfers). By looking at the table we can get a better idea of the occupations that will be in demand in the future. The fastest growing occupational groups in terms of percentage change are Personal Care and Service, Computer and Mathematical, Food Preparation and Serving, Community and Social Service, and Healthcare Support.

Around 40% of the projected annual openings in the Bay Area are concentrated in three occupational groups: Sales, Office and Administrative Support, and Production. This result might be unexpected to some because all three of these areas are projected to grow less than the Bay Area overall. Taking a more detailed look at the sources of openings will help explain why. Even though there are several occupational groups that have a larger number of openings due to growth, the number of openings as a result of exits and transfers is more than enough to compensate. One of the main takeaways here is that there will be jobs in fields not associated with "high growth" due to the openings brought about by other causes.

Automation Exposure by Workforce Development Area
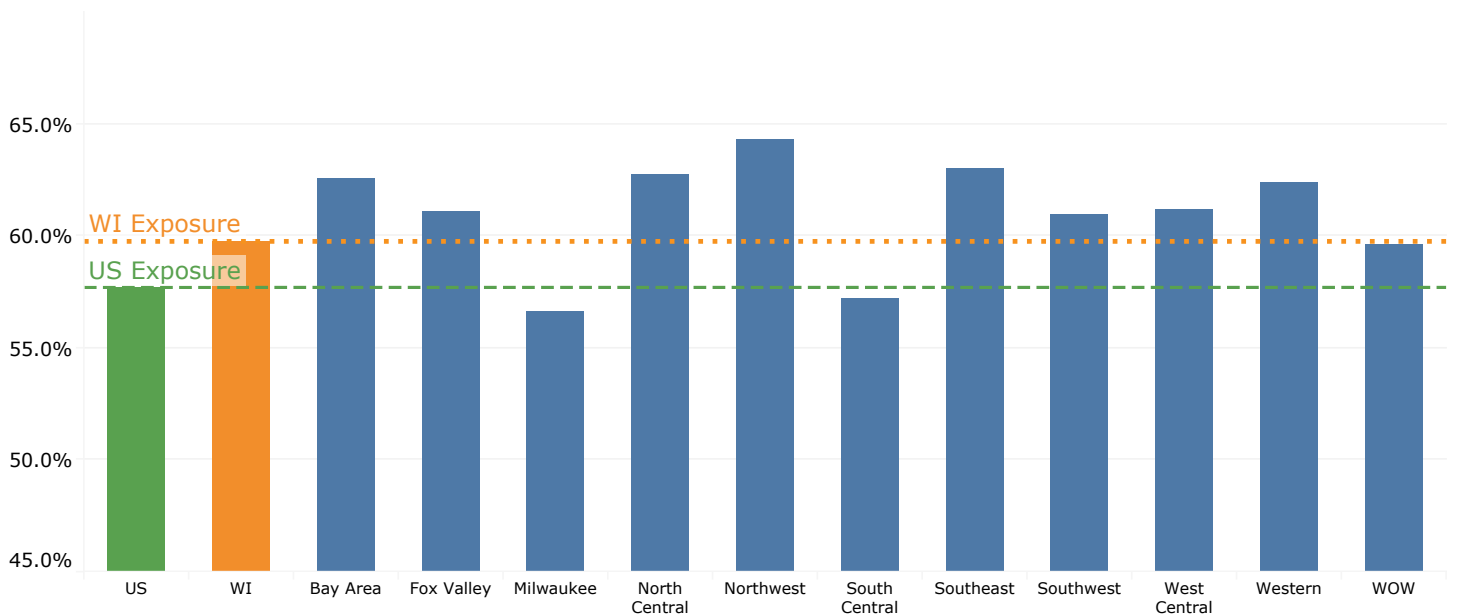
Source: The Future of Employment: How Susceptible are Jobs to Computerisation, C.B. Frey and M.A. Osborne, September 17, 2013, Oxford Martin School, University of Oxford; OES
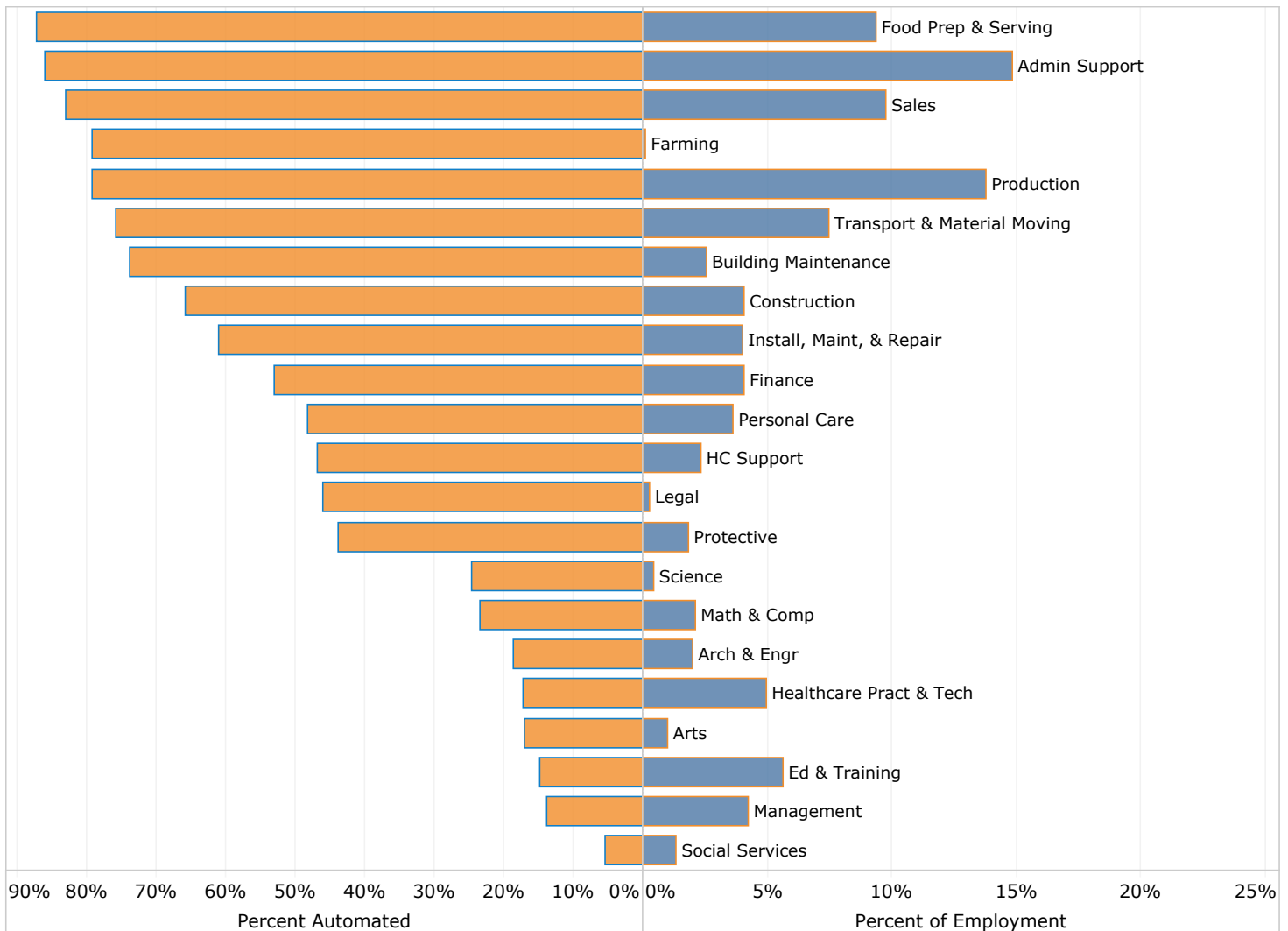
Technological advancements are changing the occupational landscape of the nation and Wisconsin is no exception. Developments in the fields of artificial intelligence, the internet of things (ability of electronic devices to communicate with each other), autonomous transportation, and many others are widely expected to have significant impacts on the nature of work, both in terms of the job mix and the skillsets needed to succeed in the labor market. By merging occupational-level probabilities of automation from a 2013 Oxford study with employment data from the Occupational Employment Statistics data set, we are able to estimate the overall level of exposure to automation and compare it across different geographies, which is identified in the chart above.

The overall level of automation exposure is slightly higher in the Bay Area (63%) than it is for Wisconsin as a whole (60%). This difference is largely accounted for by comparing the occupational compositions between the two areas. The data reveals that the Bay Area has a relatively higher share of workers in occupations that have higher than average automation exposure, particularly in the fields of Production, Construction and Extraction, Food Preparation, and Sales. Conversely The Bay Area also has a relatively lower share of employment in areas with less automation exposure such as Healthcare, Computer and Mathematics, and Business and Financial Operations.

Further analysis of the interactions between automation and other occupational characteristics yields some interesting conclusions that have broad implications on the labor market. Automation exposure is anticipated to continue contributing to inequality both in terms of wages and education. In other words, automation exposure has a strong tendency to decrease as wages and educational requirements associated with the job increase. Technological advancements can also help mitigate the workforce quantity challenge by enhancing labor productivity, which is essential for continued economic prosperity without increasing labor force. Of note, these developments are also anticipated to accelerate the evolution of workplace skills, which puts additional emphasis on the roles of postsecondary education and upskilling while still on the job.

Automation Exposure by Occupation Group
for Bay Area WDA
Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Outagamie, Shawano, and Sheboygan Counties

Food Prep & Serving
Admin Support
Sales
Farming
Production
Transport & Material Moving
Building Maintenance
Construction
Install, Maint, & Repair
Finance
Personal Care
HC Support
Legal
Protective
Science
Math & Comp
Arch & Engr
Healthcare Pract & Tech
Arts
Ed & Training
Management
Social Services

90% 80% 70% 60% 50% 40% 30% 20% 10% 0% | 0% 5% 10% 15% 20% 25%

Percent Automated | Percent of Employment

Source: The Future of Employment: How Susceptible are Jobs to Computerisation, C.B. Frey and M.A. Osborne,
September 17, 2013, Oxford Martin School, University of Oxford; OES

The chart on this page takes another look at job automation by breaking it down across different occupations. Both the level of automation exposure and share of local employment are given for each of the 22 occupational groups. With this information, we can get a better idea of how the local labor market might be impacted. These entries are sorted by automation exposure in descending order, so the occupational groups near the top are the ones most likely to experience changes. One noteworthy observation is that the jobs with the highest shares of employment (e.g. Production and Administrative Support) are also the ones most exposed to automation. Going down the list we see that, in general, occupations with lower shares of employment are less exposed to automation. These differences are mainly due to the skillsets needed for each job. For example, repetitive occupations that don't require a high degree of manual dexterity, problem solving, creativity, or adaption are more likely to be automated. Based on the data the impacts of automation are not expected to be evenly distributed across the various sectors of the economy, which should help explain the variability in automation exposure that we see across different regions in Wisconsin. In addition, the ability of the workforce to adapt to these rapid changes will be an essential ingredient of continued economic progress going forward.

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