

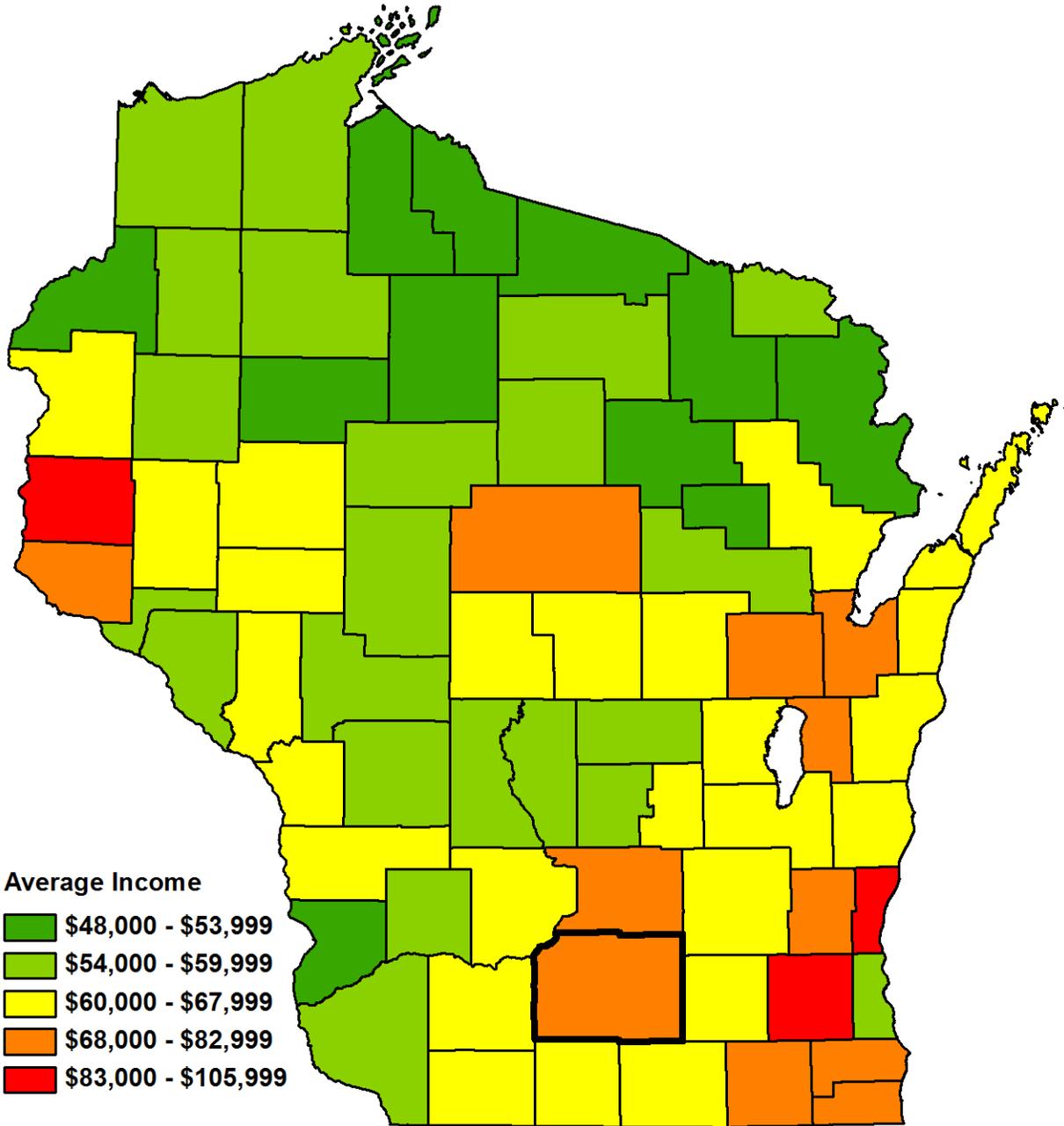


Dane County

WORKFORCE & ECONOMIC 2015 PROFILE



Average Household Income By County



Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

2015 Dane County Workforce Profile

National and State Economic Outlook

Robust economic growth after the Great Recession remains anticipated. The recession ended in June of 2009. This recovery has been the slowest of post-war cycles. U.S. gross domestic product (GDP) growth through this recovery cycle has averaged just over two percent per year. Most recoveries show growth rates in the three percent range.

As with all economic growth, benefits have accrued. Job levels are up. Wages have increased. Home values are nearly back to prerecession levels. Wisconsin total non-farm jobs have increased by 200,000 since the trough in February 2010 through October 2015. The state's manufacturing industries have gained almost 50,000 jobs. Total nominal wages paid have increased by 17 percent since bottoming out in 2009. Aggregate household real estate values have all but full recovered from the national housing devaluations that began in 2006.

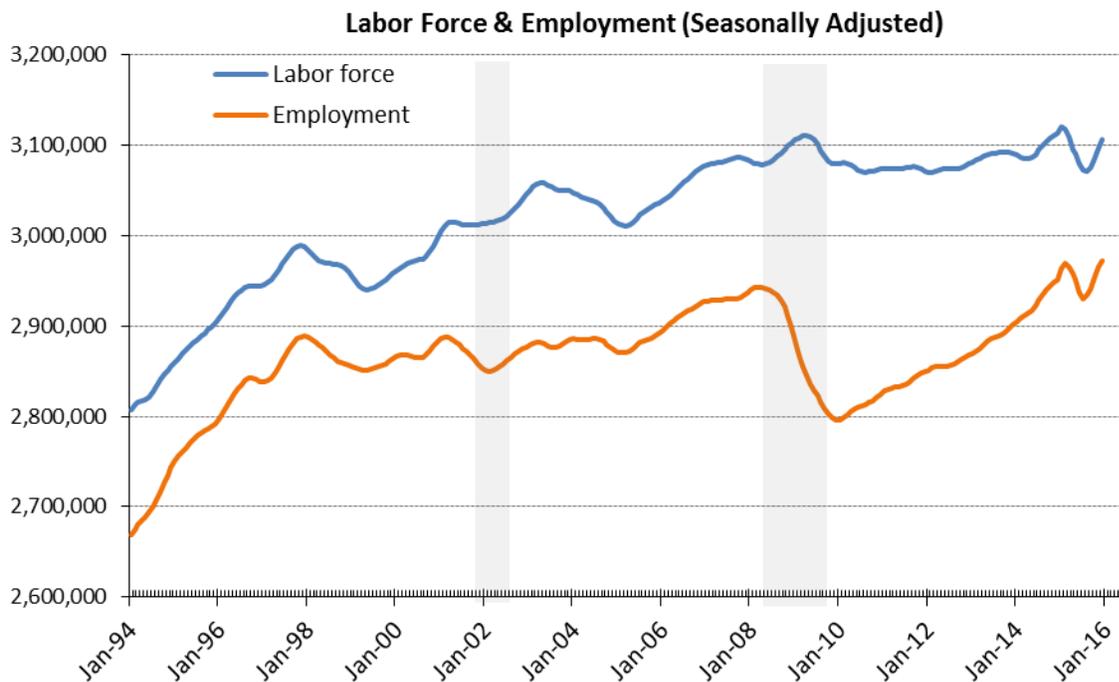
So what is it, six years after the recession ended, that is holding the national economy back from even stronger growth? A variety of factors are having an impact, such as: flat real wages, lack of business investment, focus of business investment, slower global economic growth, a stronger U.S. currency and its impact on U.S. and Wisconsin exports, and snug government capital and operations budgets.

The silver lining may be that the slower the growth, the longer the recovery will last. This recovery is 70 months old as of December 2015 with no expected downturn in sight. The average growth period of post-war business cycles is 58.4 months.

Workforce Outlook

On the workforce front, there is much discussion of the "skills gap" – the inability of employers to find and keep skilled workers. One anecdote often voiced is that Wisconsin companies could expand business if only they could find and retain skilled workers.

Wisconsin has never had more people employed and the unemployment rate is registering low levels not seen since the early 2000s. However, as has been discussed repeatedly over the years (Winters, Strang, & Klus, 2000; Winters, Gehrke, Grosso, & Udalova, 2009; Wisconsin Taxpayer Alliance, 2015), Wisconsin faces a quantity challenge and, as a consequence, a skills challenge.



Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

2015 Dane County Workforce Profile

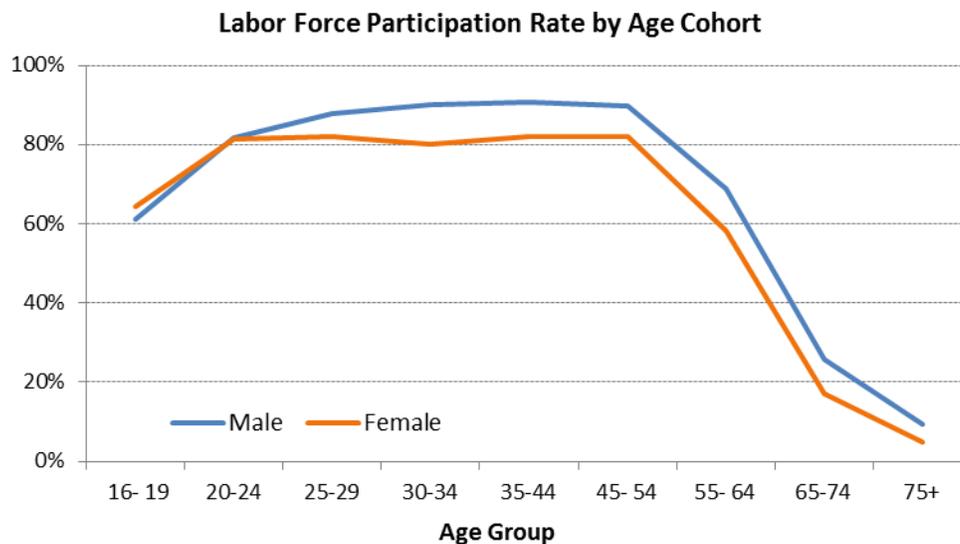
Businesses will be competing not only with each other for workers with similar skills, but also with entities of other disciplines. For example, one company may try to recruit a math teacher to become a computer programmer. Then the school will have to find another math teacher from, say, an insurance company, which, in turn, may try to recruit someone out of health care. The point is that without enough workers to go around, some businesses will end up short of talent.

This is true not only of highly skilled workers, but for all positions. Even retail and restaurant operations are displaying help-wanted signs.

During the late 1990s when the U.S. economic expansion was setting new longevity marks, there was a similar quantity challenge. The national unemployment rate fell to 3.8 percent in July 2000 and Wisconsin's unemployment rate fell to 3.0 percent in July of 1999. Two recessions alleviated the labor quantity constraints from 2001 to 2014. Now the U.S. unemployment rate is down to 5.0 percent (Wisconsin December 2015 seasonally adjusted unemployment rate was 4.3 percent), GDP is only growing at 2.0 percent, and businesses are already experiencing quantity challenges.

The major change in the labor force during this period is that now the Baby Boomers are fifteen years older and leaving the labor force in unprecedented numbers. The oldest Baby Boomers (born in 1946) will be 70 years old in 2016. The youngest (born in 1964) will be 52 years old, a mere three years from a rapid decline in their participation in the labor force.

Below is a graph of the labor force participation rate (LFPR) by age cohort. The LFPR drops precipitously after age 55. The bulk of the Baby Boomers are now over age 55.



Source: Bureau of Labor Statistics

Wisconsin's overall labor force participation rate peaked in the late 1990s and the employment-to-population ratio (e/pop) peaked in 1997 at 72.9 percent. The 2014 e/pop rate was above the 2010 low of 63.4 percent, at 64.7 percent.

The exit of Baby Boomers (people born between 1946 and 1964) from the labor market will affect future growth of Wisconsin's e/pop rate.

Population growth and age distribution will drive labor force availability in local and regional labor sheds. Below are county level demographic and economic characterizations. The primary factor driving economic trends in future years will be workforce developments and talent access.



Population and Demographics

Dane County's 10 Most Populous Municipalities

	April 2010 Census	January 2015 Estimate	Numeric Change	Proportional Change
United States	308,400,408	320,289,069	11,888,661	3.9%
Wisconsin	5,686,986	5,753,324	66,338	1.2%
Dane County	488,073	508,379	20,306	4.2%
Madison, City	233,209	242,216	9,007	3.9%
Sun Prairie, City	29,364	31,810	2,446	8.3%
Fitchburg, City	25,260	26,321	1,061	4.2%
Middleton, City	17,442	18,810	1,368	7.8%
Waunakee, Village	12,097	12,901	804	6.6%
Stoughton, City	12,611	12,698	87	0.7%
Verona, City	10,619	11,871	1,252	11.8%
Oregon, Village	9,231	9,575	344	3.7%
De Forest, Village	8,936	9,223	287	3.2%
McFarland, Village	7,808	7,946	138	1.8%

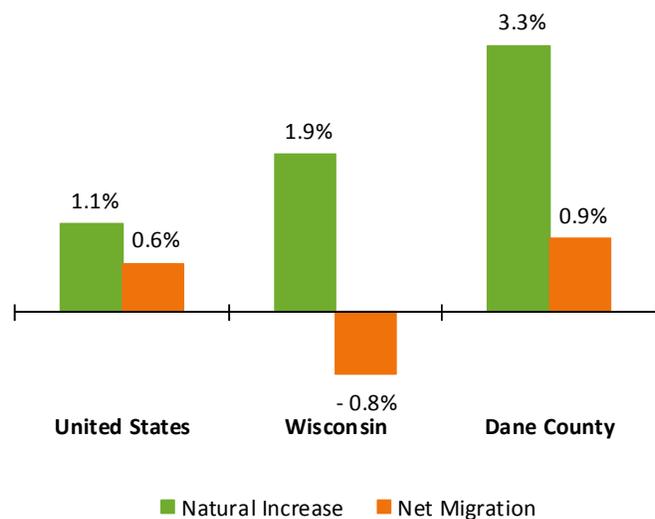
Source: Demographic Services Center, Wisconsin Department of Administration

Dane County added an estimate of 20,306 residents from April 2010 to January 2015, ranking as the 2nd largest county in the state at the end of the period. The strong rate of increase, 4.2 percent, stands well above the state increase of 1.2 percent and slightly above a national increase of 3.9 percent.

Population change is driven by two factors: natural change and migration. A natural increase of the population occurs when there are more births than deaths. Migration affects net employment change in an area positively when the number of people moving into the area is larger than the number of people moving out. In the case of Dane County, growth comes mostly from natural increase. As shown on the chart, Dane's rate natural increase is 3.3 percent while its net migration rate is 0.9 percent. Dane County's natural increase rate was significantly higher than the state's 1.9 percent and the nation's 1.1 percent. The county's positive migration rate contrasts with the state's negative rate of -0.8 percent and stands somewhat above the nation's 0.6 percent.

The table above lists Dane County's ten most populous municipalities as of January 2015. Dane County's population is highly concentrated in Madison, which accounts for almost 48 percent of the population, and is more evenly distributed across the rest of the top municipalities. The ten largest municipalities account for three-quarters of the county's population.

Components of Population Change



Source: Demographic Services Center, Wisconsin Department of Administration

Labor Force Dynamics

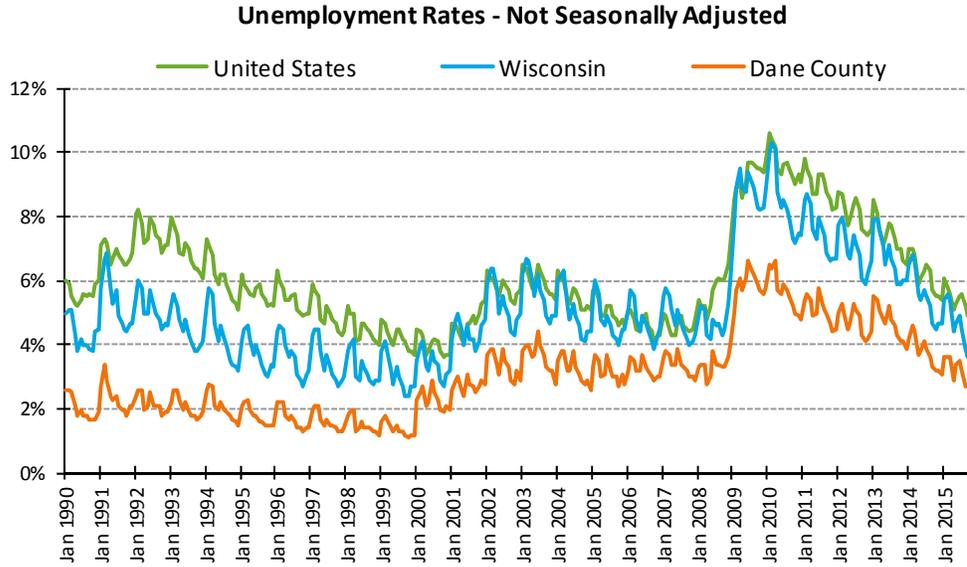
The chart to the right plots the monthly rates of unemployment for Dane County, Wisconsin and the U.S. over the last two decades.

Since the early 1990s, Dane County's unemployment rate followed the state and national trends in general. As in the state and the nation, the unemployment rate in Dane County declined in the second half of the 1990s, reaching a historical low level towards the end of the decade.

The rate of unemployment climbed up again in the early 2000s recession. An important difference with the 1990s is that the recovery after the early 2000s recession was relatively weak in terms of job creation. As the chart shows, the employment recovery between 2003 and 2007 did not result in a significant decline in the unemployment rate. This is explained by an unprecedented low rate of job creation in the early phase of the last employment upturn. The subsequent increase in job creation was interrupted by the Great Recession, which was characterized by a rapid and massive destruction of jobs across regions, industrial sectors and demographic

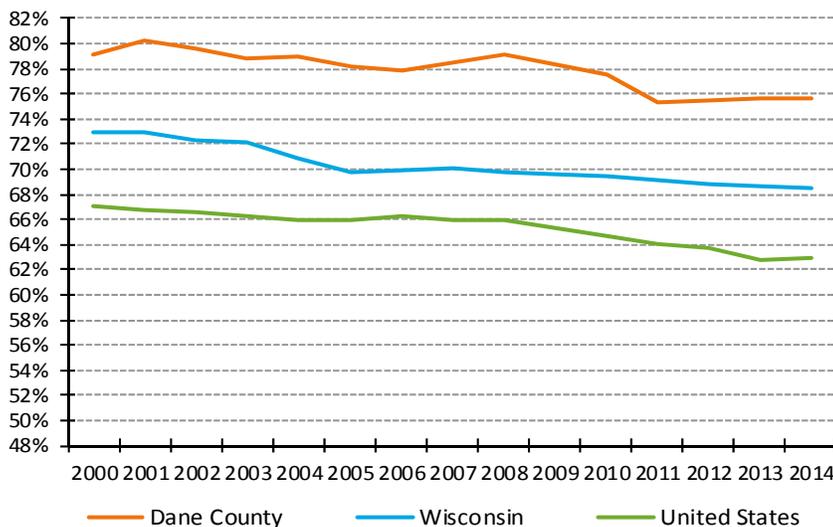
groups. The current recovery did result in a sharp decline in the unemployment rate, but the unemployment rate has not yet reached the historically low levels achieved at the end of the 1990s.

The labor force participation rate (LFPR) is the labor force (sum of employed and unemployed) divided by the population ages 16 and older. Dane's LFPR was 75.7 percent in 2014, almost thirteen percentage points above the national rate (62.9 percent) and more than three points above the state rate (68.5 percent).



Source: Local Area Unemployment Statistics, Bureau of Labor Statistics

Labor Force Participation Rates

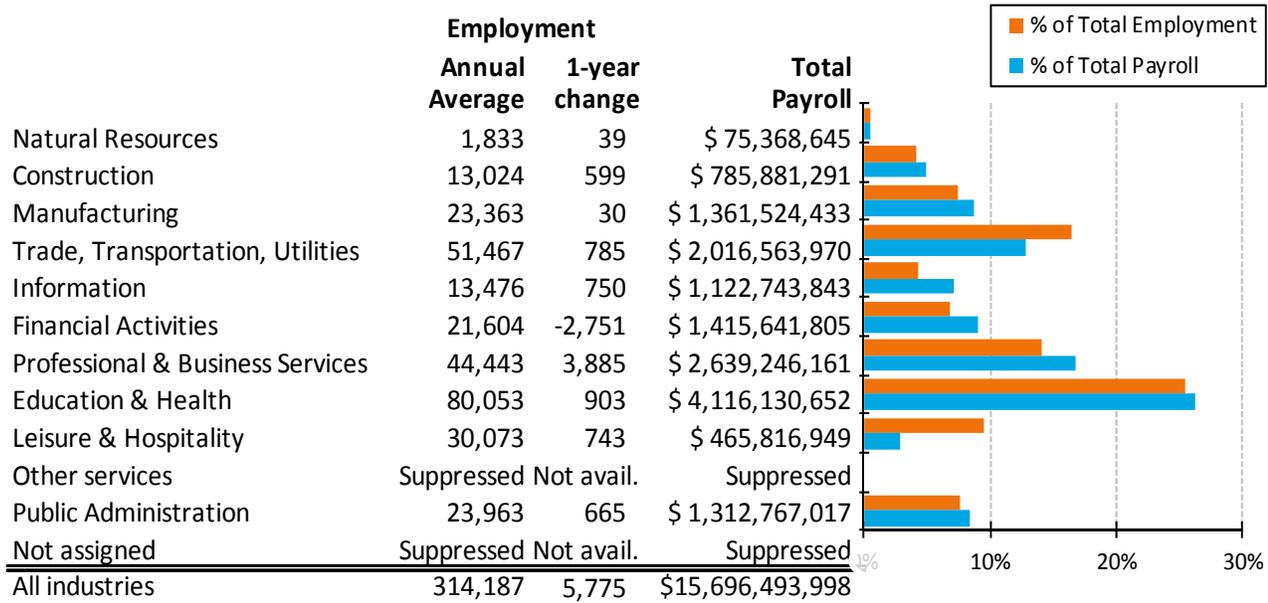


Source: Current Population Survey, U.S. Department of Commerce, Census Bureau



Industry Employment and Wages

2014 Employment and Wage Distribution by Industry in Dane County



Source: WI DWD, DET, BWITS, Quarterly Census Employment and Wages, June 2015

The three largest sectors in Dane County in 2014 were Education and Health, Trade, Transportation and Utilities and Professional and Business services, with the three of them accounting for 56 percent of total employment, and 56 percent of total payroll.

Dane County’s annual average wage was \$49,959 in 2014, representing 114 percent of the statewide average of \$43,856. Compared with the statewide averages, all sectors reported higher annual wages, except for Leisure and Hospitality. Dane County’s highest-paying sector in 2014 was Information, with an average wage of \$83,314, followed by Financial Activities (\$65,527), Construction (\$60,341) and Professional and Business Services (\$59,385). The employment performance of these sectors in 2014 was positive. The sharp decline in Financial

Activities and the significant increase in Professional and Business Services is due to a reclassification of establishments.

Dane’s lowest-paying sector in 2014 was Leisure & Hospitality, with an average wage of \$15,490, which is typically followed by Other Services (value suppressed). In 2014, Leisure and Hospitality added 743 jobs.

Average Annual Wage by Industry Division in 2014

	Wisconsin Average Annual Wage	Dane County Average Annual Wage	Percent of Wisconsin	1-year % change
All industries	\$ 43,856	\$ 49,959	113.9%	1.5%
Natural Resources	\$ 36,156	\$ 41,118	113.7%	4.1%
Construction	\$ 55,317	\$ 60,341	109.1%	2.9%
Manufacturing	\$ 54,365	\$ 58,277	107.2%	2.4%
Trade, Transportation & Utilities	\$ 37,362	\$ 39,182	104.9%	2.2%
Information	\$ 62,482	\$ 83,314	133.3%	5.5%
Financial Activities	\$ 61,884	\$ 65,527	105.9%	-0.1%
Professional & Business Services	\$ 52,386	\$ 59,385	113.4%	8.5%
Education & Health	\$ 44,829	\$ 51,418	114.7%	-3.6%
Leisure & Hospitality	\$ 16,055	\$ 15,490	96.5%	2.5%
Other Services	\$ 25,847	Suppressed	Not avail.	Not avail.
Public Administration	\$ 44,462	\$ 54,783	123.2%	1.5%

Source: WI DWD, Labor Market Information, QCEW, June 2015

Employment Projections

South Central Workforce Development Area Industry Projections, 2012-2022

Columbia, Dane, Dodge, Jefferson, Marquette and Sauk Counties

Industry	2012	Projected	Change (2012-2022)	
	Employment	2022 Employment	Employment	Percent
All Industries	451,788	502,449	50,661	11%
Natural Resources	8,002	7,795	-207	-3%
Construction	16,190	20,135	3,945	24%
Manufacturing	53,471	55,630	2,159	4%
Trade, Transportation, and Utilities	74,382	80,664	6,282	8%
Information	12,951	14,795	1,844	14%
Financial Activities	28,375	31,541	3,166	11%
Professional and Business Services	47,888	57,766	9,878	21%
Education and Health Services	85,657	98,743	13,086	15%
Leisure and Hospitality	44,030	49,495	5,465	12%
Other Services	13,625	15,078	1,453	11%
Public Administration	39,742	41,401	1,659	4%
Self-Employed and Unpaid Family Workers	27,475	29,406	1,931	7%

Source: Office of Economic Advisors, Wisconsin Department of Workforce Development, September 2015.

The table above presents ten-year regional employment projections by industry sector for the South Central Workforce Development Area (WDA), which is comprised of Columbia, Dane, Dodge, Jefferson, Marquette and Sauk counties. The change in the number of jobs from 2012 to 2022 represents new jobs expected to be created during the period.

In 2014, Dane County had the largest share of the region’s employment, with 71 percent of the region’s jobs. Sauk and Dodge had nearly 8 percent each, Jefferson 7.5 percent, Columbia nearly 5 percent, and Marquette less than 1 percent. Ten-year regional employment is projected to exceed statewide job growth of 7.1 percent. Jobs in the area are expected to increase 11 percent between 2012 and 2022, with average annual growth of 1.1 percent or 5,066 jobs per year. Employment in the area exceeded projections, growing by 5,843 new jobs or 1.3 percent during 2014.

The South Central WDA accounted for nearly 15 percent of total statewide employment in 2012 and is expected to add 23 percent of the state’s total new jobs by 2022. Almost 70 percent of the expected new jobs in the South Central WDA are concentrated in four industries: Education and Health Services (26 percent), Professional and Business Services (19 percent), Trade, Transportation and Utilities (12 percent) and Leisure and Hospitality (11 percent). The fastest growing sectors are Construction (24 percent in 2012-20122), Professional and Business Services (21 percent), Educational and Health Services (15 percent) and Information (14 percent).

Within the larger education and health services sector, health services employment is expected to grow faster than educational services. The professional and business services sector provides professional, technical, and administrative services to businesses. A significant portion of recent and projected growth in this sector is in the employment services subsector, which often provides businesses with temporary workers. These workers may work in a variety of industries such as health care or manufacturing, but as long as they are employed by an employment services establishment, their jobs are counted in the professional and business services sector, even if they are a nurse working in a hospital or a welder working in a manufacturing plant.



Employment Projections

South Central Workforce Development Area Occupation Projections, 2012-2022

Columbia, Dane, Dodge, Jefferson, Marquette and Sauk Counties

Occupation Group	Employment				Average Annual Openings			Median Annual Wage
	2012	2022	Change (2012-2022)		Due to Growth	Due to Replacement	Total Openings	
			Number	Percent				
All Occupations	451,788	502,449	50,661	11%	5,245	10,572	15,817	\$ 36,526
Management	25,095	27,804	2,709	11%	275	508	783	\$ 90,340
Business and Financial	25,244	28,425	3,181	13%	322	499	821	\$ 58,391
Computer and Mathematical	18,142	21,541	3,399	19%	340	314	654	\$ 70,106
Architecture and Engineering	9,040	9,860	820	9%	85	214	299	\$ 63,466
Life, Physical, and Social Science	8,119	8,961	842	10%	85	242	327	\$ 52,854
Community and Social Service	6,685	7,290	605	9%	60	157	217	\$ 38,747
Legal	3,398	3,972	574	17%	58	55	113	\$ 66,548
Education, Training, and Library	24,534	26,981	2,447	10%	245	494	739	\$ 44,292
Arts, Entertainment and Media	8,419	9,343	924	11%	102	190	292	\$ 44,471
Healthcare Practitioners	22,558	26,887	4,329	19%	434	464	898	\$ 63,546
Healthcare Support	11,150	13,140	1,990	18%	199	212	411	\$ 29,136
Protective Service	10,100	10,859	759	8%	77	309	386	\$ 31,990
Food Preparation and Serving	35,784	39,838	4,054	11%	405	1,364	1,769	\$ 19,247
Building & Grounds Maintenance	15,540	18,177	2,637	17%	264	320	584	\$ 23,250
Personal Care and Service	18,444	21,573	3,129	17%	313	354	667	\$ 22,577
Sales and Related	41,603	45,029	3,426	8%	344	1,258	1,602	\$ 24,488
Office and Administrative Support	65,385	70,218	4,833	7%	576	1,473	2,049	\$ 33,912
Farming, Fishing, and Forestry	2,587	2,528	-59	-2%	3	70	73	\$ 27,495
Construction and Extraction	16,583	19,854	3,271	20%	327	269	596	\$ 48,592
Installation, Maintenance, Repair	15,868	17,582	1,714	11%	176	361	537	\$ 42,730
Production	39,100	41,513	2,413	6%	285	801	1,086	\$ 32,391
Transportation & Material Moving	28,410	31,074	2,664	9%	269	643	912	\$ 30,395

Source: Office of Economic Advisors, Wisconsin Department of Workforce Development, September 2015

Expected employment growth by occupation offers an important additional source of information on the types of jobs included in a ten-year employment projection. The table above displays projected total job openings through 2022, which includes openings resulting from creation of new jobs (Change column) and also replacement openings in previously created jobs that are anticipated to occur as incumbent workers leave those positions, necessitating the hiring of new workers to replace them (Replacement Openings column).

Large numbers of baby boomers are expected to retire within the next few years, which is why projected replacement openings exceed the number of openings expected to occur as a result of job growth. This phenomenon is occurring not only in the South Central region, but throughout the state economy as well. The largest number of job openings are projected in Office and Administrative Support, Food Preparation and Servings, and Sales and Related. Large numbers of replacement openings are projected in those occupations that are not expected to grow significantly, such as Production. This is especially common in occupations with older workforces and large numbers of anticipated retirements during the projection period, as well as low-wage occupations such as Food Service and Preparation, which tend to have younger workforces but higher rates of employee turnover.

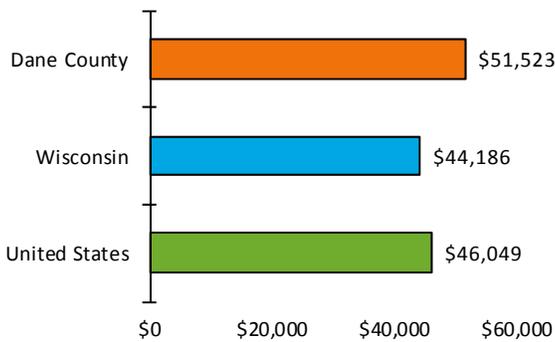
Personal Income

	2004 Nominal Per Capita Personal Income	2004 Per Capita Personal Income in 2014 dollars	2014 Per Capita Personal Income	Nominal Change in Per Capita Personal Income (2004 - 2014)	Inflation-adjusted Change in Per Capita Personal Income (2004 - 2014)
United States	\$34,316	\$41,709	\$46,049	34.2%	10.4%
Wisconsin	\$33,350	\$40,534	\$44,186	32.5%	9.0%
Dane County	\$39,782	\$48,352	\$51,523	29.5%	6.6%

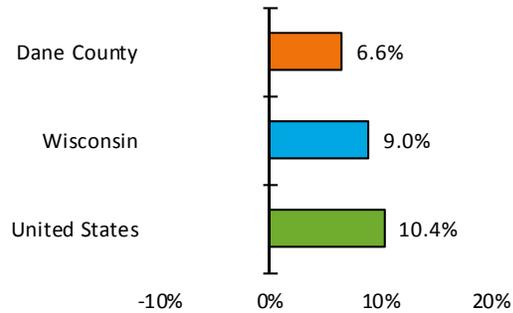
Source: Bureau of Economic Analysis

Total Personal Income (TPI) is the sum of three components, namely (i) employment earnings; (ii) property income (dividends, interest and rental income); and (iii) personal current transfers receipts (government payments like social security, Medicare, Medicaid and unemployment insurance). Dane County's TPI in 2014 was \$26.6 billion, or 10.5 percent of the state's \$254 billion total. Its 10-year inflation-adjusted TPI growth was 21.3 percent, significantly faster than the state rate of 13.7 percent, and somewhat faster than the national rate of 20.1 percent.

2014 Per Capita Personal Income



2004 - 2014 Change in Per Capita Personal Income, Inflation-adjusted



Source: Bureau of Economic Analysis

Per Capita Personal Income (PCPI) is TPI divided by the total population. This average income figure is often used as a measure of economic development and standard of living. In 2014, Dane County's PCPI was \$51,523, above both the state's \$44,186 and the nation's \$46,049. Dane County's PCPI ranks 3rd highest in Wisconsin and is the highest in the South Central Workforce Development Area.

The change over time of PCPI is one of the most important indicators of economic performance at the county level. In 2004-2014, inflation-adjusted growth of Dane County's PCPI was 6.6 percent, below the state's 9.0 percent and the nation's 10.4 percent. Dane's PCPI growth ranks 62nd in Wisconsin, being the fourth highest in the South Central WDA after Dodge County (15.4 percent), Marquette County (8.7 percent) and Columbia County (7.1 percent).

For More Information:

Matias Scaglione

Regional Economist — South Central WDA

Phone: (608) 266-3177 Email: matias.scaglione@dwd.wisconsin.gov

<http://dwd.wisconsin.gov/oea>