

CHAPTER 5: REGIONAL ECONOMY

INTRODUCTION

Economic development is an area of planning that can be tied to all of the other elements in this document. In a fundamental planning context, economic development is a tool that can be used to create jobs, increase wages and tax bases for communities and enhance worker training opportunities.

This chapter examines economic components of the region by evaluating population, labor force information, average wages, personal per capita income information, and industry specific information. For most of the data included in this report, the years 1990 and 2000 serve as baseline years and subsequent data is the most recent available, depending upon the source.

LABOR FORCE & UNEMPLOYMENT

The region's economic activity and well being is reflected to a large degree by the number and types of jobs available. Labor force data¹ indicate the extent to which people are able to find jobs, the rate at which they are dropping out of the labor force, and the percent of people unable to find work. Table 34 shows detailed labor force information for persons 16 and older.

Historic and Projected Labor Force

Between 1990 and 2000, the region's labor force grew to 345,573, which was a 13 percent increase (Figure 14). Between 2000 and 2007, the number of individuals counted as a part of the labor force declined. In 2004, the Region experienced a drop in the labor force, but has since rebounded and exceeded previous levels.

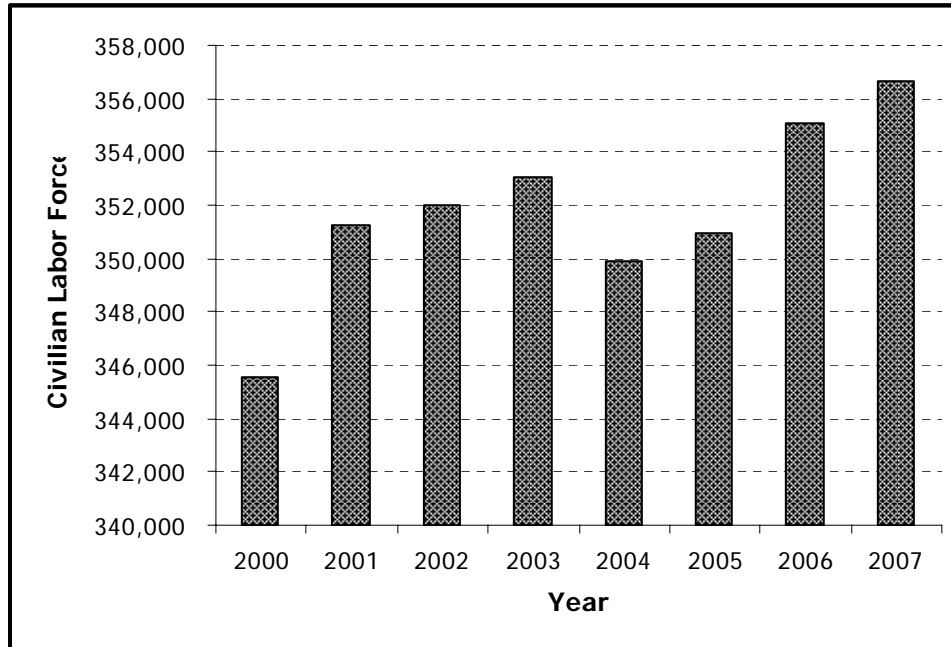
Labor force projections indicate that the region's future labor force is inherently tied to the aging population (Figure 15). As the Baby-Boom generation begins to leave the workforce over the next 10 to 15 years, the growth in total labor force nearly comes to a standstill. One of the greatest challenges facing the regional economy is how to accommodate skilled workers as they reach retirement age. Key issues include exploring how to utilize their skills for as long as possible through non-traditional employment, as well as how to create mechanisms (e.g. phased retirement) to pass on their skills to younger generations.

Unemployment

Figure 16 shows that the state's (4.7 percent) and the region's (4.7 percent) 2007 annual average unemployment rates were higher than the national average. Historically, unemployment rates for the region have been lower than that of the state and nation. More recently, the region and state's unemployment rates have risen higher than that of the nation.

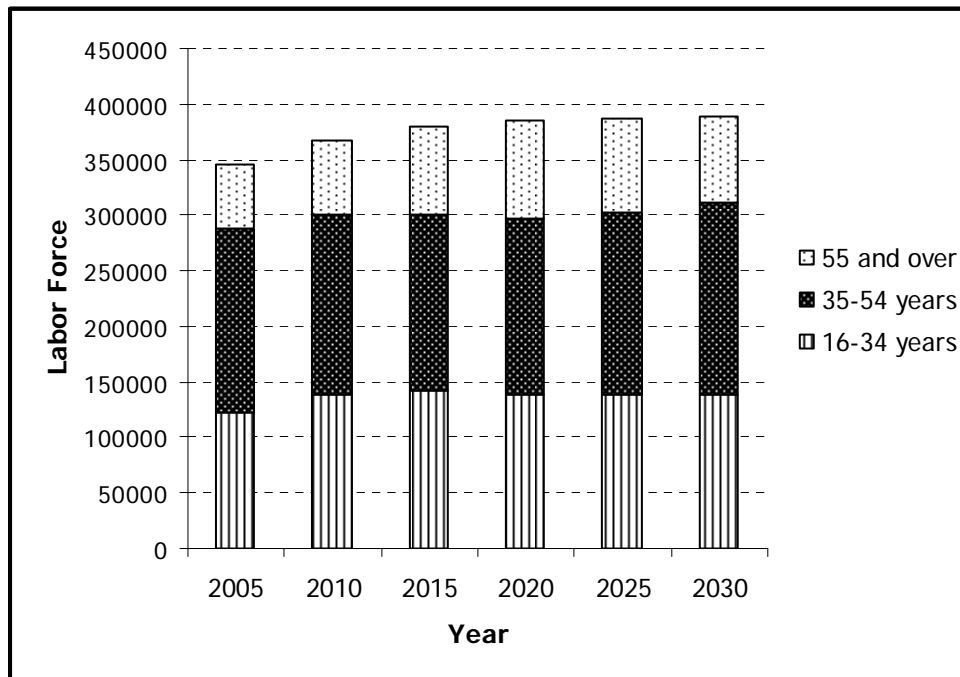
¹ The labor force is composed of those with a job, the employed, and those without a job and actively looking for one, the unemployed. Persons without a job and those not looking for one are not considered in the labor force.

Figure 14. Regional Civilian Labor Force, 2000 – 2007



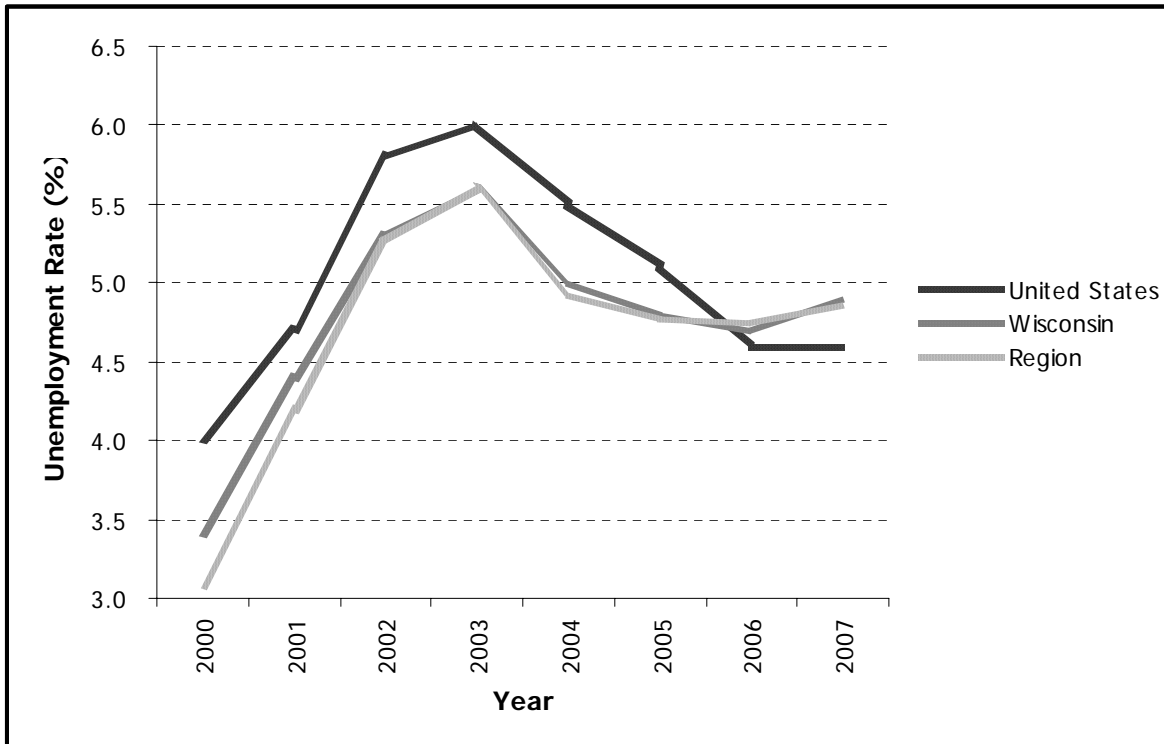
Source: Wisconsin Department of Workforce Development, Office of Economic Advisors, Unemployment Rates and Labor Force Estimates.

Figure 15. Projected Labor Force, by Age Cohort, 2005-2030



Source: Wisconsin Department of Workforce Development, Office of Economic Advisors, 2008

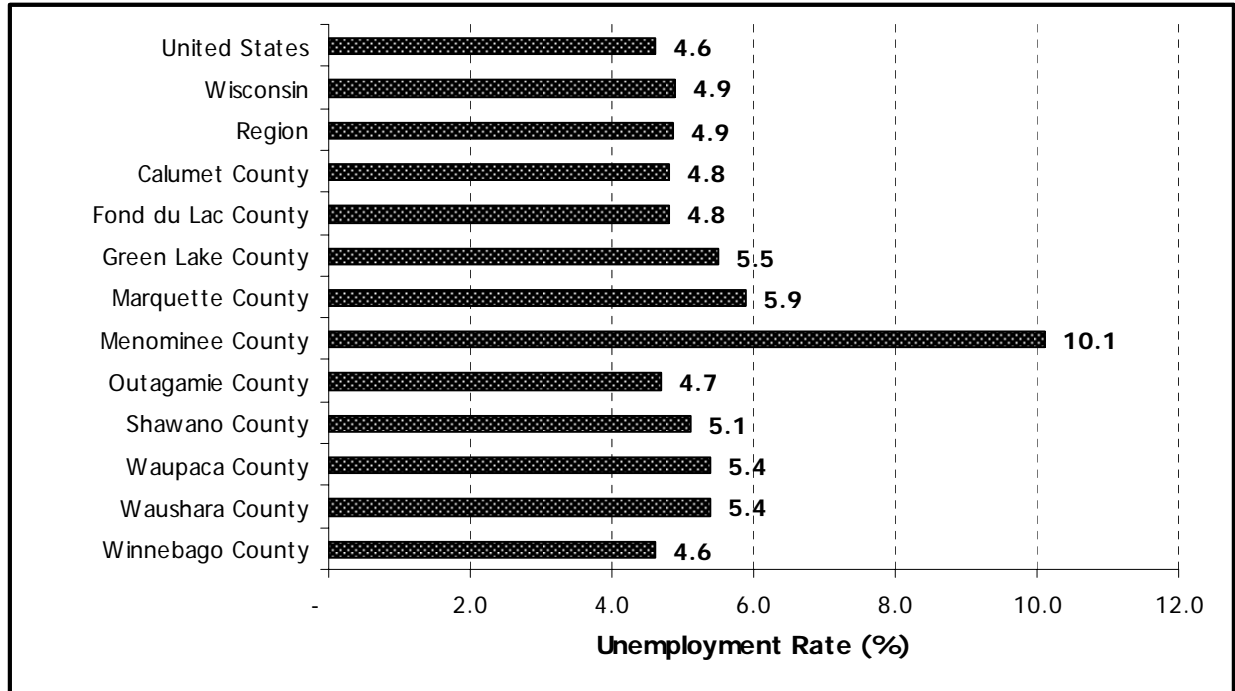
Figure 16. Region, State, and U.S. Unemployment Rates, 2000 – 2007
Not Seasonally Adjusted



Source: Wisconsin Department of Workforce Development. LAUS Benchmark and Estimates Reports, 2008.

Figure 17 shows unemployment rates for each of the counties in the region. Menominee County continues to experience the highest level of unemployment (10.1 percent), a decrease from 2006 (11.1 percent). Marquette County has the second highest rate of unemployment, but has experienced a decline in the rate from 9.2 percent (2004) to 7.5 percent (2005) to 5.9 percent (2006 & 2007). Winnebago County has the lowest unemployment rate (4.6 percent) followed by Outagamie County (4.7 percent), and Fond du Lac and Calumet counties (both at 4.8 percent). As such, the region's urban counties continue to exhibit lower unemployment rates than rural counties.

Figure 17. Average Unemployment Rates, 2007



Source: Wisconsin Department of Workforce Development. LAUS Benchmark and Estimates Reports, 2008.

Table 34. Civilian Labor Force Average Annual Figures for the Population Aged 16 Years and Older*

| | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | % Change 2000-2007 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| United States | | | | | | | | | | |
| Civilian Labor Force | 125,840,000 | 142,583,000 | 143,734,000 | 144,863,000 | 146,510,000 | 147,401,000 | 149,320,000 | 151,428,000 | 153,124,000 | 7.4% |
| Employed | 118,793,000 | 136,891,000 | 136,933,000 | 136,485,000 | 137,736,000 | 139,252,000 | 141,730,000 | 144,427,000 | 146,047,000 | 6.7% |
| Unemployed | 7,047,000 | 5,692,000 | 6,801,000 | 8,378,000 | 8,774,000 | 8,149,000 | 7,591,000 | 7,001,000 | 7,078,000 | 24.3% |
| Unemployment Rate (%) | 5.6 | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.1 | 4.6 | 4.6 | 15.0% |
| Wisconsin | | | | | | | | | | |
| Civilian Labor Force | 2,598,898 | 2,996,091 | 3,030,998 | 3,021,068 | 3,033,674 | 3,019,501 | 3,030,971 | 3,068,930 | 3,089,321 | 3.1% |
| Employed | 2,486,129 | 2,894,884 | 2,897,937 | 2,860,915 | 2,862,587 | 2,867,125 | 2,884,838 | 2,923,762 | 2,937,903 | 1.5% |
| Unemployed | 112,769 | 101,207 | 133,061 | 160,153 | 171,087 | 152,376 | 146,133 | 145,168 | 151,418 | 49.6% |
| Unemployment Rate (%) | 4.3 | 3.4 | 4.4 | 5.3 | 5.6 | 5.0 | 4.8 | 4.7 | 4.9 | 44.1% |
| East Central Region | | | | | | | | | | |
| Civilian Labor Force | 305,876 | 345,573 | 351,273 | 351,989 | 353,054 | 349,899 | 350,920 | 355,055 | 356,675 | 3.2% |
| Employed | 292,758 | 334,948 | 336,552 | 333,472 | 333,301 | 332,644 | 334,155 | 338,191 | 339,308 | 1.3% |
| Unemployed | 13,118 | 10,625 | 14,721 | 18,517 | 19,753 | 17,255 | 16,765 | 16,864 | 17,367 | 63.5% |
| Unemployment Rate (%) | 4.3 | 3.1 | 4.2 | 5.3 | 5.6 | 4.9 | 4.8 | 4.7 | 4.9 | 58.4% |
| Calumet County | | | | | | | | | | |
| Civilian Labor Force | 21,493 | 24,193 | 24,561 | 24,815 | 25,182 | 25,024 | 25,171 | 25,433 | 25,640 | 6.0% |
| Employed | 20,086 | 23,547 | 23,590 | 23,568 | 23,945 | 23,993 | 24,123 | 24,394 | 24,416 | 3.7% |
| Unemployed | 1,407 | 646 | 971 | 1,247 | 1,237 | 1,031 | 1,048 | 1,039 | 1,224 | 89.5% |
| Unemployment Rate (%) | 6.50 | 2.70 | 4.00 | 5.00 | 4.90 | 4.10 | 4.20 | 4.10 | 4.80 | 77.8% |
| Share of District Workforce (%) | 7.0 | 7.0 | 7.0 | 7.0 | 7.1 | 7.2 | 7.2 | 7.2 | 7.2 | 2.7% |
| Fond du Lac County | | | | | | | | | | |
| Civilian Labor Force | 48,845 | 55,970 | 56,621 | 56,943 | 56,650 | 56,230 | 56,049 | 56,646 | 56,357 | 0.7% |
| Employed | 46,350 | 54,293 | 54,325 | 54,152 | 53,624 | 53,568 | 53,426 | 53,975 | 53,660 | -1.2% |
| Unemployed | 2,495 | 1,677 | 2,296 | 2,791 | 3,026 | 2,662 | 2,623 | 2,671 | 2,697 | 60.8% |
| Unemployment Rate (%) | 5.10 | 3.00 | 4.10 | 4.90 | 5.30 | 4.70 | 4.70 | 4.70 | 4.80 | 60.0% |
| Share of District Workforce (%) | 16.0 | 16.2 | 16.1 | 16.2 | 16.0 | 16.1 | 16.0 | 16.0 | 15.8 | -2.4% |
| Green Lake County | | | | | | | | | | |
| Civilian Labor Force | 9,466 | 10,775 | 11,008 | 10,890 | 10,830 | 10,571 | 10,316 | 10,478 | 10,495 | -2.6% |
| Employed | 8,882 | 10,354 | 10,432 | 10,195 | 10,080 | 9,951 | 9,705 | 9,899 | 9,918 | -4.2% |
| Unemployed | 584 | 421 | 576 | 695 | 750 | 620 | 611 | 579 | 577 | 37.1% |
| Unemployment Rate (%) | 6.20 | 3.90 | 5.20 | 6.40 | 6.90 | 5.90 | 5.90 | 5.50 | 5.50 | 41.0% |
| Share of District Workforce (%) | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.0 | 2.9 | 3.0 | 2.9 | -5.6% |
| Marquette County | | | | | | | | | | |
| Civilian Labor Force | 6,017 | 7,547 | 7,764 | 7,793 | 7,959 | 7,879 | 7,877 | 7,858 | 8,275 | 9.6% |
| Employed | 5,621 | 7,155 | 7,267 | 7,225 | 7,316 | 7,355 | 7,386 | 7,388 | 7,786 | 8.8% |
| Unemployed | 396 | 392 | 497 | 568 | 643 | 524 | 491 | 470 | 489 | 24.7% |
| Unemployment Rate (%) | 6.60 | 5.20 | 6.40 | 7.30 | 8.10 | 6.70 | 6.20 | 6.00 | 5.90 | 13.5% |
| Share of District Workforce (%) | 2.0 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 6.2% |

| | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | % Change 2000-2007 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|
| Menominee County | | | | | | | | | | |
| Civilian Labor Force | 1,167 | 1,646 | 1,691 | 1,721 | 1,705 | 1,654 | 1,650 | 1,674 | 1,689 | 2.6% |
| Employed | 1,060 | 1,502 | 1,510 | 1,508 | 1,518 | 1,470 | 1,482 | 1,488 | 1,518 | 1.1% |
| Unemployed | 107 | 144 | 181 | 213 | 187 | 184 | 168 | 186 | 171 | 18.8% |
| Unemployment Rate (%) | 9.20 | 8.70 | 10.70 | 12.40 | 11.00 | 11.10 | 10.20 | 11.10 | 10.10 | 16.1% |
| Share of District Workforce (%) | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | -0.6% |
| Outagamie County | | | | | | | | | | |
| Civilian Labor Force | 84,570 | 93,563 | 94,523 | 94,485 | 95,309 | 94,648 | 95,163 | 96,278 | 96,412 | 3.0% |
| Employed | 81,862 | 90,868 | 90,730 | 89,439 | 89,975 | 90,045 | 90,790 | 91,819 | 91,899 | 1.1% |
| Unemployed | 2,708 | 2,695 | 3,793 | 5,046 | 5,334 | 4,603 | 4,373 | 4,459 | 4,513 | 67.5% |
| Unemployment Rate (%) | 3.20 | 2.90 | 4.00 | 5.30 | 5.60 | 4.90 | 4.60 | 4.60 | 4.70 | 62.1% |
| Share of District Workforce (%) | 27.6 | 27.1 | 26.9 | 26.8 | 27.0 | 27.1 | 27.1 | 27.1 | 27.0 | -0.2% |
| Shawano County | | | | | | | | | | |
| Civilian Labor Force | 18,378 | 22,135 | 22,531 | 22,547 | 22,836 | 22,298 | 22,481 | 22,558 | 23,010 | 4.0% |
| Employed | 17,461 | 21,344 | 21,465 | 21,342 | 21,559 | 21,152 | 21,365 | 21,410 | 21,839 | 2.3% |
| Unemployed | 917 | 791 | 1,066 | 1,205 | 1,277 | 1,146 | 1,116 | 1,148 | 1,171 | 48.0% |
| Unemployment Rate (%) | 5.00 | 3.60 | 4.70 | 5.30 | 5.60 | 5.10 | 5.00 | 5.10 | 5.10 | 41.7% |
| Share of District Workforce (%) | 6.0 | 6.4 | 6.4 | 6.4 | 6.5 | 6.4 | 6.4 | 6.4 | 6.5 | 0.7% |
| Waupaca County | | | | | | | | | | |
| Civilian Labor Force | 22,990 | 27,919 | 28,272 | 28,261 | 28,465 | 28,092 | 28,094 | 28,579 | 28,077 | 0.6% |
| Employed | 21,892 | 26,994 | 26,987 | 26,766 | 26,837 | 26,605 | 26,583 | 27,150 | 26,565 | -1.6% |
| Unemployed | 1,098 | 925 | 1,285 | 1,495 | 1,628 | 1,487 | 1,511 | 1,429 | 1,512 | 63.5% |
| Unemployment Rate (%) | 4.80 | 3.30 | 4.50 | 5.30 | 5.70 | 5.30 | 5.40 | 5.00 | 5.40 | 63.6% |
| Share of District Workforce (%) | 7.5 | 8.1 | 8.0 | 8.0 | 8.1 | 8.0 | 8.0 | 8.0 | 7.9 | -2.6% |
| Waushara County | | | | | | | | | | |
| Civilian Labor Force | 9,072 | 11,842 | 12,421 | 12,398 | 12,664 | 12,493 | 12,641 | 12,884 | 13,838 | 16.9% |
| Employed | 8,524 | 11,353 | 11,771 | 11,633 | 11,833 | 11,740 | 11,931 | 12,157 | 13,089 | 15.3% |
| Unemployed | 548 | 489 | 650 | 765 | 831 | 753 | 710 | 727 | 749 | 53.2% |
| Unemployment Rate (%) | 6.00 | 4.10 | 5.20 | 6.20 | 6.60 | 6.00 | 5.60 | 5.60 | 5.40 | 31.7% |
| Share of District Workforce (%) | 3.0 | 3.4 | 3.5 | 3.5 | 3.6 | 3.6 | 3.6 | 3.6 | 3.9 | 13.2% |
| Winnebago County | | | | | | | | | | |
| Civilian Labor Force | 83,878 | 89,983 | 91,881 | 92,136 | 91,454 | 91,010 | 91,478 | 92,667 | 92,882 | 3.2% |
| Employed | 81,020 | 87,538 | 88,475 | 87,644 | 86,614 | 86,765 | 87,364 | 88,511 | 88,618 | 1.2% |
| Unemployed | 2,858 | 2,445 | 3,406 | 4,492 | 4,840 | 4,245 | 4,114 | 4,156 | 4,264 | 74.4% |
| Unemployment Rate (%) | 3.40 | 2.70 | 3.70 | 4.90 | 5.30 | 4.70 | 4.50 | 4.50 | 4.60 | 70.4% |
| Share of District Workforce (%) | 27.4 | 26.0 | 26.2 | 26.2 | 25.9 | 26.0 | 26.1 | 26.1 | 26.0 | 0.0% |

Source: Wisconsin Department of Workforce Development, LAUS Benchmark and Estimates Reports, 2008.

* Not Seasonally Adjusted

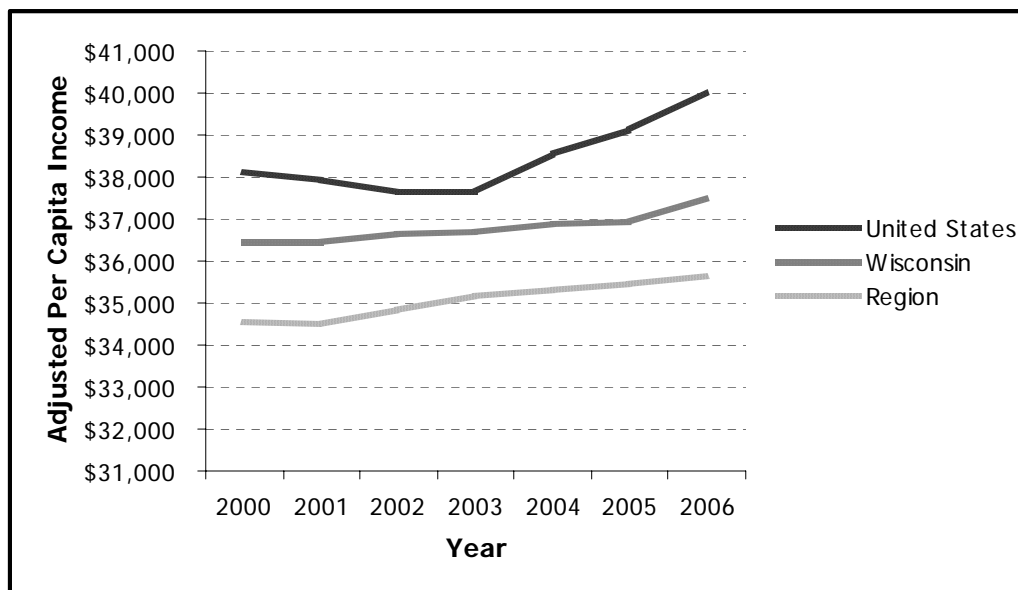
WAGES AND INCOME

Per Capita Personal Income

Per capita personal income is widely used as an indicator of the economic well-being of residents in an area. Changes in these figures provide evidence that regions and states are becoming more or less wealthy as compared to a regional or national benchmark. It is a measure of all income sources, wages and salaries, asset income and transfer payments divided by total population.

Historically, the region's per capita income has been lower than that of the state or nation. In fact, between 2003 and 2006, the region's "real" per capita income (adjusted for inflation) has been growing at a slower rate (0.5 percent per year) than that of the state (0.8 percent per year) or the nation (2.1 percent per year). Figure 17 provides a graphic depiction of this.

Figure 18. Real per Capita Income 2000-2006; in 2008 Dollars (\$)



Source: U.S. Bureau of Economic Analysis, REIS, 2000-2006; CPI Inflation Calculator; Bureau of Labor Statistics; <http://data.bls.gov/cgi-bin/cpicalc.pl>

Table 35 presents the state, region, and county per capita incomes and how these income levels compare as a percentage of U.S. per capita income (PCI). In 2007, urban counties (Calumet, Fond du Lac, Outagamie and Calumet) maintained PCI levels higher than that of the region as a whole (\$32,709). Only Calumet and Outagamie counties surpassed the state PCI level (\$34,405), while no counties surpassed the national PCI (\$36,714). PCI levels were drastically lower than the national, state, and regional levels for Menominee County, where the PCI is 53 percent of the national level. Waushara and Marquette counties have the next lowest PCI, and have both experienced a decline in share of national PCI over time.

All counties experienced a "real" increase in per capita income between 2000 and 2007, when adjusting for inflation. Waupaca County experienced the largest increase (9.0 percent), while Waushara County experienced the smallest increase (0.2 percent).

Table 35: Personal per Capita Income and Percent of U.S. Average

| | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | % Change 2000-2006 | Adusted for Inflation |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------------------|--------------------------|
| United States | | | | | | | | | | |
| Per Capita Income | \$19,477 | \$29,845 | \$30,574 | \$30,821 | \$31,504 | \$33,123 | \$34,757 | \$36,714 | 23.0% | 5.1% |
| Wisconsin | | | | | | | | | | |
| Per Capita Income | \$18,072 | \$28,570 | \$29,377 | \$29,992 | \$30,705 | \$31,697 | \$32,829 | \$34,405 | 20.4% | 2.9% |
| Percent of US PCI | 93 | 96 | 96 | 97 | 97 | 96 | 94 | 94 | -2.1% | n/a |
| Region | | | | | | | | | | |
| Per Capita Income | \$17,292 | \$27,074 | \$27,806 | \$28,511 | \$29,441 | \$30,342 | \$31,482 | \$32,709 | 20.8% | 3.2% |
| Percent of US PCI | 89 | 91 | 91 | 93 | 93 | 92 | 91 | 89 | -1.8% | n/a |
| Calumet | | | | | | | | | | |
| Per Capita Income | \$16,600 | \$28,663 | \$29,928 | \$31,396 | \$32,127 | \$32,908 | \$34,529 | \$36,107 | 26.0% | 7.6% |
| Percent of US PCI | 85 | 96 | 98 | 102 | 102 | 99 | 99 | 98 | 2.1% | n/a |
| Fond du Lac | | | | | | | | | | |
| Per Capita Income | \$18,163 | \$27,718 | \$28,195 | \$29,345 | \$30,171 | \$30,919 | \$31,745 | \$32,923 | 18.8% | 1.5% |
| Percent of US PCI | 93 | 93 | 92 | 95 | 96 | 93 | 91 | 90 | -3.2% | n/a |
| Green Lake | | | | | | | | | | |
| Per Capita Income | \$16,855 | \$25,785 | \$26,214 | \$26,301 | \$27,091 | \$28,954 | \$30,265 | \$31,761 | 23.2% | 5.2% |
| Percent of US PCI | 87 | 86 | 86 | 85 | 86 | 87 | 87 | 87 | 1.2% | n/a |
| Marquette | | | | | | | | | | |
| Per Capita Income | \$14,319 | \$20,567 | \$21,494 | \$22,350 | \$22,714 | \$23,846 | \$24,400 | \$25,297 | 23.0% | 5.1% |
| Percent of US PCI | 74 | 69 | 70 | 73 | 72 | 72 | 70 | 69 | 0.0% | n/a |
| Menominee | | | | | | | | | | |
| Per Capita Income | \$ 9,714 | \$15,970 | \$17,865 | \$18,104 | \$18,610 | \$18,371 | \$18,968 | \$19,472 | 21.9% | 4.1% |
| Percent of US PCI | 50 | 54 | 58 | 59 | 59 | 55 | 55 | 53 | -1.9% | n/a |
| Outagamie | | | | | | | | | | |
| Per Capita Income | \$18,264 | \$29,082 | \$29,663 | \$30,141 | \$30,974 | \$32,034 | \$33,177 | \$34,446 | 18.4% | 1.2% |
| Percent of US PCI | 94 | 97 | 97 | 98 | 98 | 97 | 95 | 94 | -3.1% | n/a |
| Shawano | | | | | | | | | | |
| Per Capita Income | \$13,351 | \$22,178 | \$23,326 | \$23,793 | \$24,507 | \$25,756 | \$26,715 | \$27,497 | 24.0% | 5.9% |
| Percent of US PCI | 69 | 74 | 76 | 77 | 78 | 78 | 77 | 75 | 1.4% | n/a |
| Waupaca | | | | | | | | | | |
| Per Capita Income | \$15,780 | \$24,808 | \$25,734 | \$26,595 | \$27,435 | \$28,778 | \$30,574 | \$31,662 | 27.6% | 9.0% |
| Percent of US PCI | 81 | 83 | 84 | 86 | 87 | 87 | 88 | 86 | 3.6% | n/a |
| Waushara | | | | | | | | | | |
| Per Capita Income | \$14,254 | \$20,917 | \$21,534 | \$20,801 | \$21,241 | \$22,783 | \$23,590 | \$24,639 | 17.8% | 0.6% |
| Percent of US PCI | 73 | 70 | 70 | 67 | 67 | 69 | 68 | 67 | -4.3% | n/a |
| Winnebago | | | | | | | | | | |
| Per Capita Income | \$18,424 | \$28,206 | \$28,910 | \$29,687 | \$31,063 | \$31,466 | \$32,572 | \$33,874 | 20.1% | 2.6% |
| Percent of US PCI | 95 | 95 | 95 | 96 | 99 | 95 | 94 | 92 | -3.2% | n/a |

Source: U.S. Bureau of Economic Analysis, REIS, 2008 (Per Capita Income Values not adjusted for inflation); CPI Inflation Calculator used for % Change 2000-2006 adjusted for inflation; Bureau of Labor Statistics; <http://data.bls.gov/cgi-bin/cpicalc.pl>

Average Weekly Wages

Reviewing wage information allows for insight into industry-specific rates of pay at the county and state level. Tables 36 and 37 present average wage information for the region (2-digit North American Industrial Classification System (NAICS)). Appendix C contains 3-digit NAICS income data. According to wage information provided by the Wisconsin Department of Workforce Development, Bureau of Workforce Information, Labor Market Statistics, seven counties within the district experienced increases in their “real” (adjusted for inflation) average weekly wages for all industries between 2000 and 2007. Between 2000 and 2007, the region’s “real” Average Weekly Wage (AWW; adjusted for inflation) increased (0.7 percent) at a lower rate than that of the State (3 percent). At the county level, Greek Lake (6.9 percent) and Waushara (11.2 percent) counties experienced the greatest increase in “real” AWW. The “real” AWW for Calumet (-10.1 percent), Marquette (-1.9 percent), and Shawano (-1.3 percent) counties decreased between the same time period.

Table 36. Average Weekly Wage for All Industries, 1990-2007

| | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | % Change 2000-2007 | Adjusted for Inflation |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------|---------------------------|
| Wisconsin | \$ 406 | \$ 590 | \$ 607 | \$ 624 | \$ 643 | \$ 668 | \$ 683 | \$ 708 | \$ 732 | 24.1% | 3.0% |
| Region | \$ 398 | \$ 574 | \$ 587 | \$ 597 | \$ 614 | \$ 643 | \$ 658 | \$ 672 | \$ 696 | 21.3% | 0.7% |
| Calumet | \$ 351 | \$ 512 | \$ 510 | \$ 472 | \$ 478 | \$ 519 | \$ 526 | \$ 539 | \$ 554 | 8.2% | -10.1% |
| Fond du Lac | \$ 388 | \$ 554 | \$ 562 | \$ 573 | \$ 596 | \$ 611 | \$ 628 | \$ 642 | \$ 667 | 20.4% | 0.0% |
| Green Lake | \$ 311 | \$ 449 | \$ 469 | \$ 480 | \$ 496 | \$ 528 | \$ 533 | \$ 555 | \$ 578 | 28.7% | 6.9% |
| Marquette | \$ 297 | \$ 425 | \$ 431 | \$ 451 | \$ 452 | \$ 461 | \$ 473 | \$ 492 | \$ 502 | 18.1% | -1.9% |
| Menominee | \$ 300 | \$ 443 | \$ 452 | \$ 451 | \$ 461 | \$ 491 | \$ 490 | \$ 510 | \$ 541 | 22.1% | 1.4% |
| Outagamie | \$ 425 | \$ 592 | \$ 610 | \$ 620 | \$ 635 | \$ 663 | \$ 681 | \$ 698 | \$ 722 | 22.0% | 1.3% |
| Shawano | \$ 289 | \$ 429 | \$ 440 | \$ 454 | \$ 461 | \$ 481 | \$ 492 | \$ 502 | \$ 510 | 18.9% | -1.3% |
| Waupaca | \$ 333 | \$ 484 | \$ 495 | \$ 513 | \$ 526 | \$ 557 | \$ 583 | \$ 576 | \$ 587 | 21.3% | 0.7% |
| Waushara | \$ 262 | \$ 380 | \$ 374 | \$ 411 | \$ 430 | \$ 457 | \$ 471 | \$ 484 | \$ 509 | 33.9% | 11.2% |
| Winnebago | \$ 436 | \$ 647 | \$ 665 | \$ 676 | \$ 697 | \$ 733 | \$ 747 | \$ 760 | \$ 788 | 21.8% | 1.2% |

Source: Wisconsin Department of Workforce Development, Bureau of Workforce Information - Labor Market Information, <http://WORKnet.Wisconsin.gov>. CPI Inflation Calculator used for % Change 2000-2007 adjusted for inflation; Bureau of Labor Statistics; <http://data.bls.gov/cgi-bin/cpicalc.pl>

Generally, a portion of higher paying industry groups fall within the manufacturing sector in the production of durable and non-durable products. Average weekly wages in these industries are among the highest in the region. Regional examples include wages of \$1,197 in paper manufacturing in Winnebago County and \$1,096 in transportation equipment manufacturing in Outagamie County.

Other higher paying industry groups include construction, utilities, information, financial activities, and professional business and technical services. In Calumet County, for example, telecommunications industry groups reported a \$1,127 average weekly wage. In Winnebago County, Internet Service Providers (ISPs), web search portals, and data processing groups reported a \$1,554 average weekly wage. In the financial investment and related activities group, very high average weekly wages were seen in Fond du Lac (\$1,909), Green Lake (\$1,669) and Winnebago (\$2,419) counties.

Table 37. 2007 County NAICS Wage Data, Annual (Average wage in dollars per week)

| | Calumet | Fond du Lac | Green Lake | Marquette | Menominee | Douglas | Shawano | Waupaca | Waushara | Winnebago | Region |
|---|---------|-------------|------------|-----------|-----------|---------|---------|---------|----------|-----------|--------|
| Total, All Industries (All Ownership) | 554 | 667 | 578 | 502 | 541 | 722 | 510 | 587 | 509 | 788 | 596 |
| Total, All Industries (All Private Ownership) | 548 | 660 | 581 | 496 | 401 | 715 | 503 | 587 | 473 | 792 | 576 |
| Total, All Industries (All Government) | 603 | 712 | 559 | 529 | 547 | 796 | 535 | 583 | 630 | 759 | 625 |
| Natural Resources and Mining | | | | | | | | | | | |
| 11 Agriculture, Forestry, Fishing & Hunting | 494 | 444 | 468 | 417 | - | - | - | - | 494 | - | 463 |
| 21 Mining | 654 | 702 | 1,080 | - | - | - | - | - | 1,059 | - | 874 |
| Construction | | | | | | | | | | | |
| 23 Construction | 721 | 941 | 916 | 713 | - | 931 | 624 | 655 | 505 | 903 | 768 |
| Manufacturing | | | | | | | | | | | |
| 31 Manufacturing | 802 | 673 | 560 | 735 | - | 773 | 585 | 727 | 404 | 845 | 678 |
| 32 Manufacturing | 668 | 724 | 714 | 607 | - | 976 | 651 | 722 | 504 | 1,042 | 734 |
| 33 Manufacturing | 808 | 964 | 729 | 624 | - | 957 | 715 | 877 | 723 | 949 | 816 |
| Trade, Transportation, Utilities | | | | | | | | | | | |
| 22 Utilities | 867 | 1,175 | 1,205 | 566 | - | 1,362 | 991 | 822 | 1,077 | 857 | 991 |
| 42 Wholesale Trade | 696 | 806 | 774 | 591 | - | 962 | 756 | 790 | 813 | 816 | 778 |
| 44 Retail Trade | 382 | 422 | 398 | 312 | 340 | 440 | 379 | 367 | 361 | 398 | 380 |
| 45 Retail Trade | 324 | 329 | 386 | 442 | - | 412 | 392 | 336 | 416 | 364 | 378 |
| 48 Transportation And Warehousing | 542 | 693 | 606 | 482 | - | 681 | 498 | 474 | 596 | 751 | 591 |
| 49 Transportation And Warehousing | 780 | 801 | 751 | 736 | 712 | 875 | 723 | 794 | 728 | 953 | 785 |
| Information | | | | | | | | | | | |
| 51 Information | 464 | 625 | 648 | 619 | - | - | 545 | 654 | 607 | 943 | 638 |
| Financial Activities | | | | | | | | | | | |
| 52 Finance And Insurance | 637 | 844 | 795 | 524 | - | 1,023 | 635 | 736 | 580 | 839 | 735 |
| 53 Real Estate And Rental And Leasing | 268 | 425 | 551 | 281 | - | 574 | 458 | 288 | 308 | 537 | 410 |
| Professional and Business Services | | | | | | | | | | | |
| 54 Professional And Technical Services | 560 | 839 | - | - | - | 955 | 592 | 576 | 485 | 1,199 | 744 |
| 55 Mgmt. Of Companies And Enterprises | 912 | 630 | - | - | - | 1,476 | 799 | - | - | 1,946 | 1,153 |
| 56 Administrative And Waste Services | 149 | 414 | 329 | 456 | - | 451 | 382 | - | 250 | 556 | 373 |
| Educational and Health Services | | | | | | | | | | | |
| 61 Educational Services | 603 | 680 | 632 | 598 | 676 | 777 | 587 | 598 | 603 | 700 | 645 |
| 62 Health Care And Social Assistance | 611 | 793 | 630 | 358 | 615 | 847 | 530 | 588 | 452 | 725 | 615 |
| Leisure and Hospitality | | | | | | | | | | | |
| 71 Arts, Entertainment, And Recreation | 245 | 227 | 267 | 200 | - | 261 | 369 | 195 | 175 | 359 | 255 |
| 72 Accommodation And Food Services | 142 | 192 | 199 | 169 | - | 209 | 173 | 172 | 180 | 193 | 181 |
| Other Services and Public Admin. | | | | | | | | | | | |
| 81 Other Services, Ex. Public Admin | 224 | 356 | 356 | 404 | 192 | 370 | 254 | 376 | 346 | 347 | 323 |
| 92 Public Administration | 599 | 741 | 481 | 480 | 528 | 787 | 499 | 467 | 657 | 748 | 599 |
| 99 Unclassified | - | - | - | - | - | - | - | - | - | - | - |

100

Source: Wisconsin Department of Workforce Development, Quarterly Census of Employment and Wages (ES202), <http://WORKnet.Wisconsin.gov> (ECWRPC, Tabulated by A. Cottrell, 8/08)

Blanks indicate employment information is withheld; "-" indicates that no employment data was reported in the industry group.

Lower paying industry groups include the retail trade as well as leisure and hospitality, particularly the accommodation and food service group. For example, in Calumet County the Food Services and Drinking Places industry group reported a \$140 average weekly wage, and in Outagamie County that same group reported a \$202 average weekly wage.

INDUSTRY GROUPS & CLUSTERS

Gaining an understanding of the regional economy requires knowledge about the growth and decline of sectors. This analysis takes a 3-pronged approach in assessing industry groups: 1) historic and projected employment, by sector; 2) calculation of location quotients; and 3) analysis of industry clusters.

Employment by Sector

Historic Trends

In general, “goods producing” industries have experienced a decline in employment, while “service producing” industries have seen increases in employment, as is evident in Table 38. More specifically, the number of jobs in manufacturing has eroded over time. Between 2000 and 2007, the region lost 17.2 percent of jobs in this Super Sector. Over the same time period, the fastest growing industries proved to be Information (82.7 percent), Professional & Business Services (37.9 percent), Financial Activities (24.6 Percent), and Natural Resources and Mining (20 percent).

Table 38. Regional Employment by Super Sector, 1990-2007

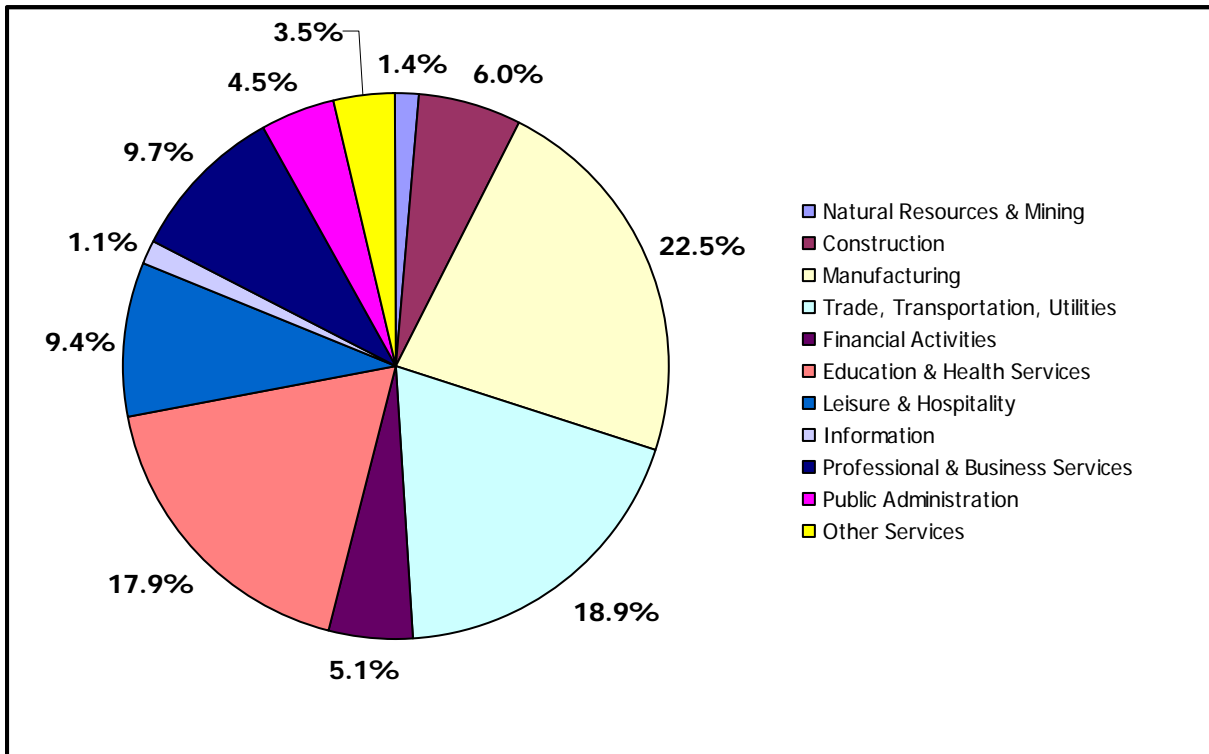
| | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | % Change, 2000-2007 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------------------|
| Goods Producing Industries | | | | | | | | | | |
| Natural Resources & Mining | 2,667 | 3,319 | 3,552 | 3,534 | 3,525 | 3,531 | 3,721 | 3,893 | 3,984 | 20.0% |
| Construction | 10,936 | 17,252 | 17,077 | 16,617 | 16,743 | 16,738 | 16,902 | 16,689 | 16,946 | -1.8% |
| Manufacturing | 68,622 | 77,322 | 74,105 | 69,962 | 64,017 | 63,324 | 63,956 | 64,330 | 64,031 | -17.2% |
| Service Producing Industries | | | | | | | | | | |
| Trade, Transportation, Utilities | 43,019 | 53,186 | 54,260 | 52,181 | 52,307 | 53,769 | 53,396 | 53,330 | 53,804 | 1.2% |
| Financial Activities | 9,925 | 11,691 | 12,338 | 13,835 | 13,747 | 13,829 | 13,647 | 14,416 | 14,564 | 24.6% |
| Education & Health Services | 32,596 | 43,666 | 45,519 | 46,691 | 47,075 | 47,094 | 48,090 | 48,850 | 50,839 | 16.4% |
| Leisure & Hospitality | 18,891 | 23,499 | 24,501 | 24,674 | 25,575 | 25,799 | 26,057 | 26,478 | 26,649 | 13.4% |
| Information | 2,478 | 1,736 | 3,257 | 1,923 | 488 | 228 | 2,881 | 2,978 | 3,172 | 82.7% |
| Professional & Business Services | 10,814 | 20,003 | 19,852 | 21,969 | 25,293 | 25,269 | 26,492 | 26,970 | 27,576 | 37.9% |
| Other Services | 7,716 | 9,149 | 9,194 | 9,258 | 9,248 | 9,323 | 9,509 | 9,621 | 9,877 | 8.0% |
| Public Administration | 8,216 | 11,971 | 12,101 | 12,395 | 12,422 | 12,621 | 12,592 | 12,954 | 12,655 | 5.7% |
| Unclassified | 13 | - | - | 8 | - | - | - | - | - | n/a |
| Total Employment | 215,893 | 272,794 | 275,756 | 273,047 | 270,440 | 271,525 | 277,243 | 280,509 | 284,097 | 4.1% |

Source: Wisconsin Department of Workforce Development, *Quarterly Census of Employment and Wages (ES202)*, 2008.

Existing Conditions

As seen in Figure 19, the majority of employment continues to be in Manufacturing (22.5 percent), despite recent declines. Employment in service sector industries, such as Trade, Transportation, and Utilities (18.9 percent) and Education and Health Services (17.9 percent) are not far behind.

Figure 19. Employment Share, By Super Sector, 2007



Source: Wisconsin Department of Workforce Development, Quarterly Census of Employment and Wages (ES202), 2008

Table 39 presents a more detailed summary of industry specific employment, by county (2-digit NAICS code) from the Wisconsin Department of Workforce Development (DWD) for 2007. Appendix D contains industry specific employment by 3-digit NAICS code.

Table 39: 2007 2-Digit NAICS Employment Data, Annual

| | Calumet | Fond du Lac | Green Lake | Marquette | Menominee | Outagamie | Shawano | Waupaca | Waushara | Winnebago | Region |
|---|---------|-------------|------------|-----------|-----------|-----------|---------|---------|----------|-----------|---------|
| Total, All Industries (All Ownership) | 13,201 | 45,987 | 7,054 | 4,041 | 2,046 | 104,588 | 12,869 | 20,839 | 6,526 | 89,996 | 307,147 |
| Total, All Industries (All Private Ownership) | 11,762 | 40,328 | 5,957 | 3,239 | 87 | 94,608 | 9,917 | 16,782 | 5,055 | 79,145 | 266,880 |
| Total, All Industries (All Government) | 1,439 | 5,659 | 1,097 | 802 | 1,960 | 9,980 | 2,952 | 4,057 | 1,471 | 10,851 | 40,268 |
| Natural Resources and Mining | | | | | | | | | | | |
| 11 Agriculture, Forestry, Fishing & Hunting | 366 | 541 | 71 | 225 | - | - | - | - | 604 | - | 1,807 |
| 21 Mining | 320 | 251 | 56 | - | - | - | - | - | 8 | - | 635 |
| Construction | | | | | | | | | | | |
| 23 Construction | 606 | 2,723 | 380 | 157 | - | 8,499 | 495 | 786 | 255 | 3,831 | 17,732 |
| Manufacturing | | | | | | | | | | | |
| 31 Manufacturing | 849 | 1,962 | 522 | 831 | - | 4,254 | 275 | 551 | 83 | 766 | 10,093 |
| 32 Manufacturing | 153 | 1,692 | 137 | 245 | - | 9,157 | 867 | 1,262 | 113 | 12,176 | 25,802 |
| 33 Manufacturing | 2,593 | 7,152 | 868 | 194 | - | 6,107 | 857 | 3,444 | 913 | 11,264 | 33,392 |
| Trade, Transportation, Utilities | | | | | | | | | | | |
| 22 Utilities | 10 | 179 | 46 | 17 | - | 299 | 65 | 97 | 40 | 141 | 894 |
| 42 Wholesale Trade | 801 | 1,750 | 125 | 56 | - | 3,601 | 570 | 1,086 | 119 | 3,176 | 11,284 |
| 44 Retail Trade | 856 | 3,791 | 648 | 361 | 32 | 8,700 | 1,075 | 1,620 | 634 | 4,385 | 22,102 |
| 45 Retail Trade | 323 | 1,884 | 168 | 25 | - | 5,238 | 535 | 467 | 142 | 3,741 | 12,523 |
| 48 Transportation And Warehousing | 228 | 1,177 | 253 | 65 | - | 2,210 | 304 | 424 | 258 | 2,507 | 7,426 |
| 49 Transportation And Warehousing | 56 | 309 | 55 | 47 | 6 | 989 | 98 | 153 | 51 | 1,616 | 3,380 |
| Information | | | | | | | | | | | |
| 51 Information | 44 | 967 | 61 | 42 | - | - | 256 | 725 | 46 | 1,756 | 3,897 |
| Financial Activities | | | | | | | | | | | |
| 52 Finance And Insurance | 359 | 1,508 | 258 | 95 | - | 6,735 | 310 | 482 | 116 | 3,044 | 12,907 |
| 53 Real Estate And Rental And Leasing | 81 | 305 | 47 | 25 | - | 827 | 103 | 126 | 28 | 682 | 2,224 |
| Professional and Business Services | | | | | | | | | | | |
| 54 Professional And Technical Services | 675 | 993 | - | - | - | 3,735 | 208 | 357 | 96 | 2,907 | 8,971 |
| 55 Mgmt. Of Companies And Enterprises | 67 | 99 | - | - | - | 953 | 116 | - | - | 3,222 | 4,457 |
| 56 Administrative And Waste Services | 944 | 1,699 | 102 | 68 | - | 7,280 | 241 | - | 60 | 3,908 | 14,302 |
| Educational and Health Services | | | | | | | | | | | |
| 61 Educational Services | 616 | 3,509 | 520 | 360 | 372 | 6,470 | 1,061 | 1,630 | 536 | 5,248 | 20,322 |
| 62 Health Care And Social Assistance | 839 | 5,216 | 1,062 | 380 | 275 | 10,199 | 1,449 | 3,658 | 608 | 12,120 | 35,806 |
| Leisure and Hospitality | | | | | | | | | | | |
| 71 Arts, Entertainment, And Recreation | 214 | 454 | 153 | 70 | - | 1,248 | 683 | 374 | 94 | 693 | 3,983 |
| 72 Accommodation And Food Services | 1,180 | 3,846 | 706 | 406 | - | 8,724 | 1,097 | 1,883 | 748 | 5,776 | 24,366 |
| Other Services and Public Admin. | | | | | | | | | | | |
| 81 Other Services, Ex. Public Admin | 326 | 1,514 | 188 | 94 | 24 | 3,733 | 445 | 415 | 128 | 3,425 | 10,292 |
| 92 Public Administration | 696 | 2,466 | 498 | 203 | 423 | 3,003 | 1,192 | 802 | 846 | 3,328 | 13,457 |
| 99 Unclassified | - | - | - | - | - | - | - | - | - | - | - |

Source: Wisconsin Department of Workforce Development, Quarterly Census of Employment and Wages (ES202), <http://WORKnet.Wisconsin.gov> (ECWRPC, Tabulated by A. Cottrell, 8/08)

Blanks indicate employment information is withheld; "-" indicates there was no employment reported in the industry group.

Future Conditions

Regional employment is anticipated to increase 15.7 percent between 2007 and 2018. The majority of growth will likely occur in the "Service Producing industries", although most of the "Goods Producing Industries" are expected to experience an increase in employment. Over the same time period, the fastest growing industries are expected to be Professional and Business Services (26.4 percent), Financial Activities (25.3 percent), Education and Health Services (24.5 percent), and Construction (21.4 percent). In addition, Manufacturing can be expected to increase employment by 8.4 percent, despite recent declines.

Super Sectors expected to create the most amount of jobs are: Trade, Transportation & Utilities; Education & Health Services; and Professional & Business Services. The only super sector expected to experience a decline in employment is Natural Resources and Mining, which will decline by 166 jobs, or -1.0 percent.

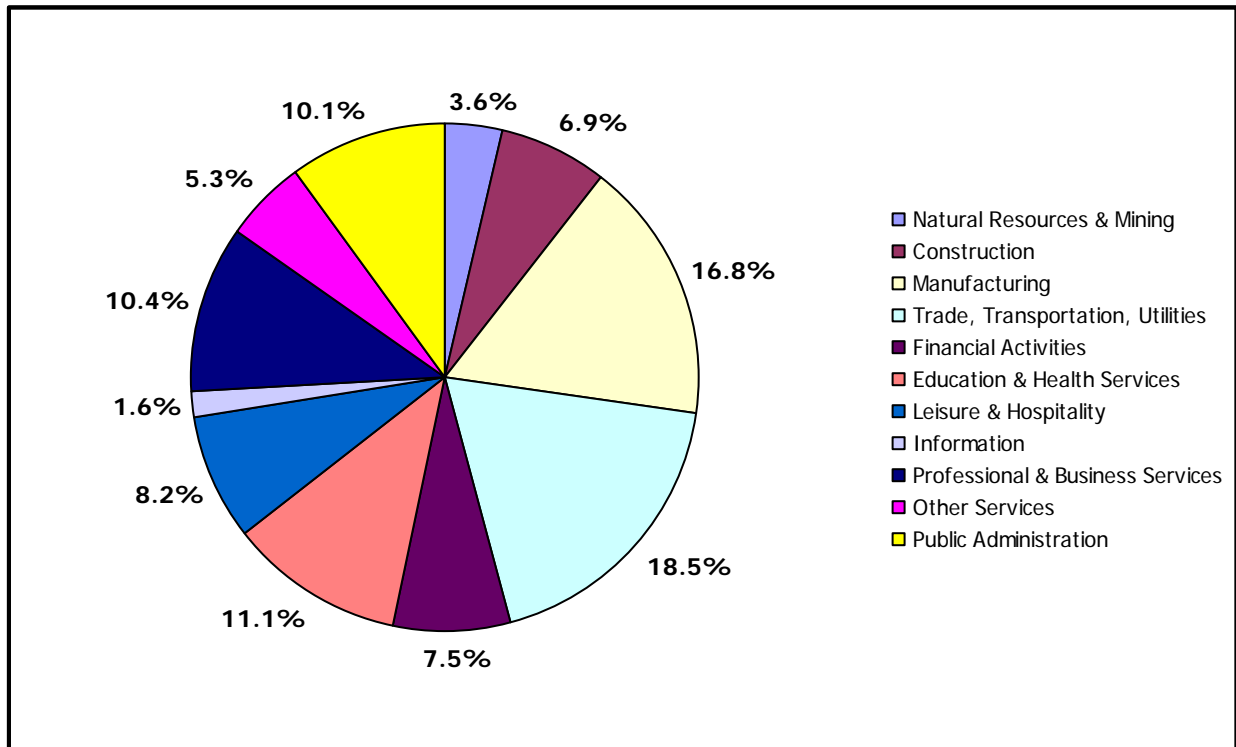
Table 40. Projected Employment by Super Sector, 2007*-2018

| | 2007 | 2010 | 2015 | 2018 | Change 2007-2018 | % Change 2007-2018 |
|-------------------------------------|----------------|----------------|----------------|----------------|---------------------|-----------------------|
| Goods Producing Industries | | | | | | |
| Natural Resources & Mining | 16,618 | 16,494 | 16,447 | 16,452 | (166) | -1.0% |
| Construction | 26,057 | 28,298 | 30,574 | 31,642 | 5,585 | 21.4% |
| Manufacturing | 71,358 | 72,078 | 75,019 | 77,346 | 5,988 | 8.4% |
| Service Producing Industries | | | | | | |
| Trade, Transportation, Utilities | 74,005 | 78,459 | 82,827 | 84,811 | 10,806 | 14.6% |
| Financial Activities | 27,637 | 30,729 | 33,482 | 34,617 | 6,980 | 25.3% |
| Education & Health Services | 40,890 | 44,537 | 48,766 | 50,895 | 10,005 | 24.5% |
| Leisure & Hospitality | 32,485 | 34,747 | 36,883 | 37,814 | 5,329 | 16.4% |
| Information | 6,453 | 6,881 | 7,252 | 7,428 | 975 | 15.1% |
| Professional & Business Services | 37,714 | 41,956 | 45,943 | 47,677 | 9,963 | 26.4% |
| Other Services | 21,114 | 22,368 | 23,663 | 24,254 | 3,140 | 14.9% |
| Public Administration | 42,689 | 44,303 | 45,742 | 46,325 | 3,636 | 8.5% |
| Total Employment | 397,020 | 420,850 | 446,598 | 459,261 | 62,241 | 15.7% |

Source: Fox Valley Workforce Development Board, 2008: EMSI Complete Employment - Spring 2008 Release v. 2

* Note: EMSI 2007 Employment Estimates vary from WDWD (as in Tables 38 & 39) due to different data sources

As seen in Figure 20, by 2018, the region's employment base has become more diversified. Manufacturing (16.8 percent) has been surpassed by Trade, Transportation & Utilities as having the highest share of regional employment. Service industries, such as Education & Health Services (11.1 percent) and Leisure and Hospitality are anticipated to provide the third and fourth largest share of jobs (10.4 percent).

Figure 20. Projected Employment Share, by Super Sector, 2018

3-digit NAICS code projections were also calculated for the 89 subsectors. They can be seen in Appendix E. Subsectors with the fastest rate of growth between 2007 and 2018 can be seen in Table 41. Likewise, the ten subsectors with the greatest number of jobs created, as projected for 2018, can be seen in Table 42. Three subsectors were identified as having a high rate of growth and anticipated job creation: Plastics and Rubber Products Manufacturing; Real Estate; and Ambulatory Health Care Services.

Table 41. Top 10 Subsectors, by Rate of Growth, 2007-2018

| Rank | NAICS | Subsector Description | % Change 2007-2018 | Change 2007-2018 |
|-----------|------------|---|-----------------------|---------------------|
| 1 | 211 | Oil and gas extraction | 67% | 55 |
| 2 | 516 | Internet publishing and broadcasting | 53% | 9 |
| 3 | 326 | Plastics and rubber products manufacturing | 51% | 2,389 |
| 4 | 523 | Securities, commodity contracts, and investments | 51% | 1,782 |
| 5 | 712 | Museums, historical sites, zoos and parks | 46% | 76 |
| 6 | 525 | Funds, trusts, and other financial vehicles | 45% | 191 |
| 7 | 316 | Leather and allied product manufacturing | 38% | 16 |
| 8 | 487 | Scenic and sightseeing transportation | 38% | 10 |
| 9 | 531 | Real estate | 37% | 3,320 |
| 10 | 621 | Ambulatory health care services | 34% | 3,692 |
| 10 | 114 | Fishing, hunting and trapping | 34% | 74 |
| 10 | 562 | Waste management and remediation services | 34% | 164 |

Source: Fox Valley WDB, 2008: EMSI Complete Employment - Spring '08 Release v. 2

Bold indicates a subsector that is in the top 10 for rate of growth & total job growth.

Table 42. Top 10 Subsectors, by Total Job Growth, 2007-2018

| Rank | NAICS | Subsector Description | % Change 2007-2018 | Change 2007-2018 |
|-----------|------------|---|-----------------------|---------------------|
| 1 | 561 | Administrative and support services | 5,176 | 30% |
| 2 | 238 | Specialty trade contractors | 4,525 | 25% |
| 3 | 930 | Local government | 3,967 | 12% |
| 4 | 722 | Food services and drinking places | 3,916 | 17% |
| 5 | 621 | Ambulatory health care services | 3,692 | 34% |
| 6 | 541 | Professional and technical services | 3,393 | 23% |
| 7 | 531 | Real estate | 3,320 | 37% |
| 8 | 623 | Nursing and residential care facilities | 2,718 | 33% |
| 9 | 454 | Nonstore retailers | 2,671 | 32% |
| 10 | 326 | Plastics and rubber products manufacturing | 2,389 | 51% |

Source: Fox Valley WDB, 2008: EMSI Complete Employment - Spring '08 Release v. 2

Bold indicates a subsector that is in the top 10 for rate of growth & total job growth.

Location Quotients

Calculating location quotients (LQ) provides another tool to analyze the region's economic base. Put simply, the LQ compares how specialized the region is in particular industries when compared to a larger unit of analysis, such as the state or nation. Values above 1 indicate some level of specialization; the higher the value above one, the higher the level of specialization. 2007 LQs were calculated for 2-digit and 3-digit NAICS codes.

Table 43 provides the region's LQs for 2-digit NAICS sectors, compared to the state and nation. This level of analysis provides a broad view of what sectors are specialized within the region. When compared to the state, the region is most specialized in Mining and Manufacturing. Compared to the nation, the region is most specialized in Manufacturing, and Agriculture, Forestry, Fishing and Hunting.

Appendix E provides the region's LQs for 3-digit NAICS subsectors, compared to the state and nation. This level of analysis provides a more detailed view of specific subsectors that are specialized within the region. The top 10 subsectors with the highest level of specialization (LQ), when compared to the state are displayed in Table 44. Likewise, the top ten subsectors with the highest level of specialization (LQ) when compared to the nation displayed in Table 45. Four subsectors were identified as being specialized when compared to both the state and nation; these are: paper manufacturing; primary metal manufacturing, machinery manufacturing, and textile mills.

Table 43. Location Quotients, by Sector, Compared to the State & Nation, 2007

| NAICS | Sector Description | State LQ | National LQ |
|---|--|----------|-------------|
| Natural Resources and Mining | | | |
| 11 | Agriculture, forestry, fishing and hunting | 1.20 | 1.84 |
| 21 | Mining | 2.10 | 0.47 |
| Construction | | | |
| 23 | Construction | 1.17 | 1.01 |
| Manufacturing | | | |
| 31-23 | Manufacturing | 1.24 | 2.18 |
| Trade, Transportation & Utilities | | | |
| 42 | Wholesale trade | 0.91 | 0.93 |
| 44-45 | Retail trade | 1.04 | 1.09 |
| 48-49 | Transportation and warehousing | 0.91 | 0.93 |
| 22 | Utilities | 0.58 | 0.58 |
| Information | | | |
| 51 | Information | 1.00 | 0.80 |
| Financial Activities | | | |
| 52 | Finance and insurance | 0.93 | 0.94 |
| 53 | Real estate and rental and leasing | 0.84 | 0.58 |
| Professional and Business Services | | | |
| 54 | Professional and technical services | 0.83 | 0.56 |
| 55 | Management of companies and enterprises | 1.00 | 1.14 |
| 56 | Administrative and waste services | 0.95 | 0.74 |
| Education and Health Services | | | |
| 61 | Educational services | 0.80 | 0.64 |
| 62 | Health care and social assistance | 0.85 | 0.90 |
| Leisure and Hospitality | | | |
| 71 | Arts, entertainment, and recreation | 0.84 | 0.75 |
| 72 | Accommodation and food services | 0.98 | 0.99 |
| Other Services and Public Administration | | | |
| 81 | Other services, except public administration | 1.06 | 1.04 |
| 90 | Government | 0.92 | 0.80 |

Source: Fox Valley WDB, 2008: EMSI Complete Employment - Spring '08 Release v. 2

Table 44. Top 10 Location Quotient, by Subsector, Compared to the State, 2007

| Rank | NAICS | Subsector Description | State LQ |
|----------|------------|--|-------------|
| 1 | 313 | Textile mills | 4.47 |
| 2 | 322 | Paper manufacturing | 3.10 |
| 3 | 212 | Mining, except oil and gas | 2.46 |
| 4 | 331 | Primary metal manufacturing | 2.21 |
| 5 | 336 | Transportation equipment manufacturing | 1.72 |
| 6 | 314 | Textile product mills | 1.63 |
| 7 | 315 | Apparel manufacturing | 1.54 |
| 8 | 333 | Machinery manufacturing | 1.46 |
| 9 | 482 | Rail transportation | 1.41 |
| 10 | 114 | Fishing, hunting and trapping | 1.38 |

Source: Fox Valley WDB, 2008: EMSI Complete Employment - Spring '08 Release v. 2

Bold indicates a subsector that is in the top 10 for state & national LQ

Table 45. Top 10 Location Quotient, by Subsector, Compared to the Nation, 2007

| Rank | NAICS | Subsector Description | National LQ |
|----------|------------|--|--------------|
| 1 | 322 | Paper manufacturing | 11.83 |
| 2 | 331 | Primary metal manufacturing | 4.73 |
| 3 | 333 | Machinery manufacturing | 4.13 |
| 4 | 323 | Printing and related support activities | 3.20 |
| 5 | 326 | Plastics and rubber products manufacturing | 2.63 |
| 6 | 311 | Food manufacturing | 2.54 |
| 7 | 321 | Wood product manufacturing | 2.44 |
| 8 | 313 | Textile mills | 2.11 |
| 9 | 11A | Crop and animal production | 2.10 |
| 10 | 454 | Nonstore retailers | 1.91 |

Source: Fox Valley WDB, 2008: EMSI Complete Employment - Spring '08 Release v. 2

Bold indicates a subsector that is in the top 10 for state & national LQ

Industry Clusters

For the purposes of this document, location quotients are utilized as a way to determine industry concentrations (clusters) within the region. Additional industry clusters were identified in the Northeast Wisconsin Economic Opportunity Study. The executive summary of this report is found in Appendix F. Based on the location quotient analysis, both at the 2-digit and 3-digit NAICS level, it is evident that the region is most specialized (when compared to the state and national level) in natural resources and manufacturing, with general clusters in the following:

- Agriculture, Forestry, Fishing and Hunting Cluster (NAICS 11)
- Food, Beverage and Textile Cluster (NAICS 31)
- Wood, Paper, Printing and Plastics Cluster (NAICS 32)
- Machinery, Equipment and Metal Product Cluster (NAICS 33)

As indicated in Figure 21, projected employment growth for these clusters varies significantly. For instance, between 2007 and 2018, the Agriculture, Forestry, Fishing and Hunting Cluster is expected to experience continued losses in employment, while the Machinery, Equipment and Metal Product Cluster will continue to add employees over the same time period. Combined, these clusters comprise just under 20 percent of the regions total employment.

Agriculture, Forestry, Fishing, and Hunting Cluster

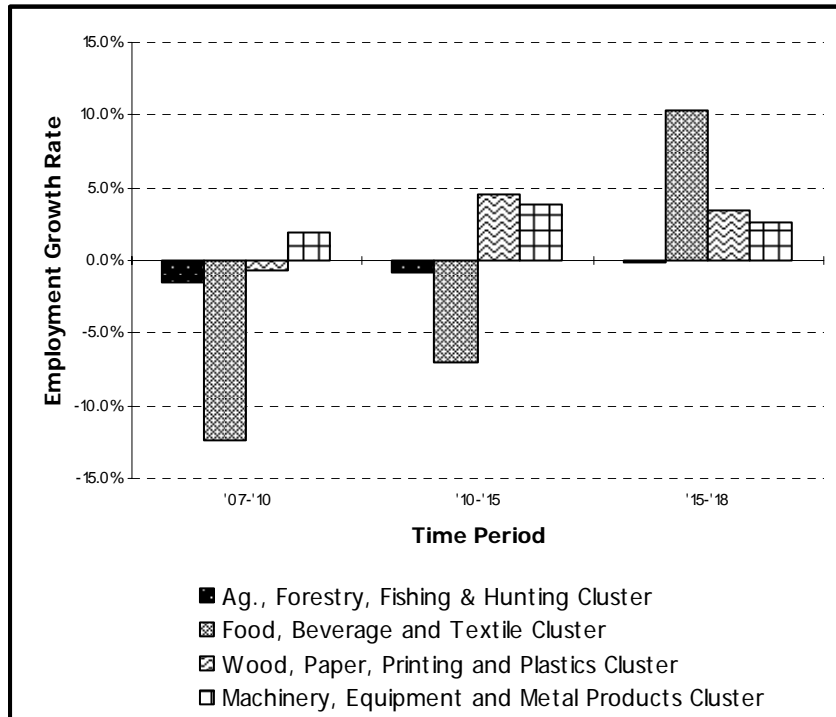
The Agriculture, Forestry, Fishing and Hunting Cluster currently employs 3.9 percent of the region's workforce. Between 2007 and 2018, the industry, as a whole, is expected to lose just under 400 jobs, or 3 percent of its employment. Within the cluster, some subsectors, such as Agriculture and Forestry Support Activities, will experience modest increases in employment over the same time period (4 percent). See Table 46 for more detailed employment and location quotient data.

Food, Beverage and Textile Cluster

The Food, Beverage, and Textile Cluster currently employs 0.5 percent of the region's workforce. Between 2007 and 2018, the industry, as a whole, is expected to lose just over 200

jobs, or 10 percent of its employment. See Table 47 for more detailed employment and location quotient data.

Figure 21. Projected Growth Rate for Industry Clusters



Source: Fox Valley WDB, 2008

Wood, Paper, Printing and Plastics Cluster

The Wood, Paper, Printing and Plastics Cluster currently employs 6.7 percent of the region's workforce. Between 2007 and 2018, the industry, as a whole, is expected to gain just over 2,000 jobs, or 8 percent of its employment. Within the cluster, most subsectors are expected to add to their current employment levels, with the exception of Paper Manufacturing, which could see a loss of over 900 jobs, or 8 percent of its employment. The Plastics and Rubber Products Manufacturing subsector is expected to grow a substantial 51 percent, adding almost 2,400 jobs to the regional economy. See Table 48 for more detailed employment and location quotient data.

Machinery, Equipment and Metal Products Cluster

The Machinery, Equipment and Metal Products Cluster currently employs 8.6 percent of the region's workforce. Between 2007 and 2018, the industry, as a whole, is expected to gain almost 3,000 jobs, or 9 percent of its employment. The vast majority of this anticipated growth can be attributed to the Primary Metal Manufacturing (1,080 jobs; 22 percent growth) and Fabricated Metal Product Manufacturing (955 jobs; 16 percent growth) subsectors. See Table 49 for more detailed employment and location quotient data.

Table 46. Agriculture, Forestry, Fishing & Hunting Cluster Employment Projections & Location Quotients

| NAICS | Description | Projected Employment | | | | 2007-2018 | | 2007 LQ | |
|------------|---|----------------------|---------------|---------------|---------------|-------------|------------|-------------|-------------|
| | | 2007 | 2010 | 2015 | 2018 | Change | Percent | State | National |
| 113 | Forestry and logging | 475 | 463 | 438 | 424 | -51 | -11% | 0.84 | 1.45 |
| 114 | Fishing, hunting and trapping | 217 | 251 | 280 | 291 | 74 | 34% | 1.38 | 0.88 |
| 115 | Agriculture & forestry support activities | 1,281 | 1,309 | 1,326 | 1,331 | 50 | 4% | 1.34 | 0.88 |
| 11A | Crop & animal production | 13,680 | 13,401 | 13,246 | 13,215 | -465 | -3% | 1.20 | 2.10 |
| 11- | Ag., Forestry, Fishing & Hunting Cluster | 15,653 | 15,424 | 15,290 | 15,261 | -392 | -3% | 1.20 | 1.84 |

Source: Fox Valley Workforce Development Board, 2008: EMSI Complete Employment - Spring 2008 Release v. 2

* LQ is for all industrial (31-33)

Table 47. Food, Beverage and Textiles Cluster Employment Projections & Location Quotients*

| NAICS | Description | Projected Employment | | | | 2007-2018 | | 2007 LQ | |
|------------|--|----------------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|
| | | 2007 | 2010 | 2015 | 2018 | Change | Percent | State* | National* |
| 312 | Beverage and tobacco product manufacturing | 250 | 238 | 215 | 207 | -43 | -17% | 0.75 | 0.53 |
| 313 | Textile mills | 878 | 740 | 657 | 810 | -68 | -8% | 4.47 | 2.11 |
| 314 | Textile product mills | 394 | 357 | 342 | 336 | -58 | -15% | 1.63 | 1.08 |
| 315 | Apparel manufacturing | 307 | 266 | 260 | 270 | -37 | -12% | 1.54 | 0.52 |
| 316 | Leather and allied product manufacturing | 42 | 39 | 50 | 58 | 16 | 38% | 0.24 | 0.44 |
| 31- | Food, Beverage and Textile Cluster | 1,871 | 1,640 | 1,524 | 1,681 | -206 | -10% | 1.24 | 2.18 |

Source: Fox Valley Workforce Development Board, 2008: EMSI Complete Employment - Spring 2008 Release v. 2

* LQ is for all industrial (31-33)

Table 48. Wood, Paper, Printing and Plastics Cluster Employment Projections & Location Quotients*

| NAICS | Description | Projected Employment | | | | 2007-2018 | | 2007 LQ | |
|------------|---|----------------------|---------------|---------------|---------------|--------------|-----------|-------------|-------------|
| | | 2007 | 2010 | 2015 | 2018 | Change | Percent | State* | National* |
| 321 | Wood product manufacturing | 3,264 | 3,310 | 3,417 | 3,485 | 221 | 7% | 1.06 | 2.44 |
| 322 | Paper manufacturing | 12,394 | 11,171 | 11,129 | 11,458 | -936 | -8% | 3.10 | 11.83 |
| 323 | Printing and related support activities | 4,870 | 4,872 | 4,931 | 4,984 | 114 | 2% | 1.28 | 3.20 |
| 324 | Petroleum and coal products manufacturing | 17 | <10 | <10 | <10 | -- | -- | -- | -- |
| 325 | Chemical manufacturing | 603 | 649 | 709 | 740 | 137 | 23% | 0.35 | 0.30 |
| 326 | Plastics and rubber products manufacturing | 4,689 | 5,616 | 6,605 | 7,078 | 2,389 | 51% | 1.28 | 2.63 |
| 327 | Nonmetallic mineral product manufacturing | 768 | 815 | 850 | 859 | 91 | 12% | 0.59 | 0.65 |
| 32- | Wood, Paper, Printing and Plastics Cluster | 26,605 | 26,433 | 27,641 | 28,604 | 2,016 | 8% | 1.24 | 2.18 |

Source: Fox Valley Workforce Development Board, 2008: EMSI Complete Employment - Spring 2008 Release v. 2

* LQ is for all industrial (31-33)

Table 49. Machinery, Equipment & Metal Products Cluster Employment Projections & Location Quotients*

| NAICS | Description | Projected Employment | | | | 2007-2018 | | 2007 LQ | |
|------------|--|----------------------|---------------|---------------|---------------|--------------|-----------|-------------|-------------|
| | | 2007 | 2010 | 2015 | 2018 | Change | Percent | State* | National* |
| 331 | Primary metal manufacturing | 5,011 | 5,416 | 5,854 | 6,091 | 1,080 | 22% | 2.21 | 4.73 |
| 332 | Fabricated metal product manufacturing | 6,038 | 6,458 | 6,834 | 6,993 | 955 | 16% | 0.71 | 1.67 |
| 333 | Machinery manufacturing | 11,274 | 11,274 | 11,611 | 11,963 | 689 | 6% | 1.46 | 4.13 |
| 334 | Computer and electronic product manufacturing | 2,098 | 2,173 | 2,237 | 2,272 | 174 | 8% | 0.81 | 0.71 |
| 335 | Electrical equipment and appliance mfg. | 761 | 721 | 721 | 733 | -28 | -4% | 0.27 | 0.75 |
| 336 | Transportation equipment manufacturing | 6,893 | 6,844 | 7,000 | 7,127 | 234 | 3% | 1.72 | 1.75 |
| 337 | Furniture and related product manufacturing | 1,012 | 958 | 927 | 919 | -93 | -9% | 0.51 | 0.78 |
| 339 | Miscellaneous manufacturing | 1,116 | 1,026 | 1,026 | 1,051 | -65 | -6% | 0.56 | 0.68 |
| 33- | Machinery, Equipment & Metal Products Cluster | 34,203 | 34,870 | 36,210 | 37,149 | 2,946 | 9% | 1.24 | 2.18 |

Source: Fox Valley Workforce Development Board, 2008: EMSI Complete Employment - Spring 2008 Release v. 2

* LQ is for all industrial (31-33)

REGIONAL STRENGTHS, WEAKNESSES, OPPORTUNITIES & THREATS

In the late spring/early summer of 2008, a qualitative survey was conducted to gauge regional perceptions regarding economic development. The survey's structure was developed as a SWOT (Strengths, Weaknesses, Opportunities, and Threats) that was designed to gauge the regions *current* strengths and weaknesses and *future* opportunities and threats.

Surveys were targeted at all residents of the region, with special attention paid to reaching private sector representatives. Commission staff collaborated with Chambers of Commerce, Economic Development Corporations and other entities to reach their private sector constituents. Surveys were distributed with the regional project inventory survey and were made available online. This survey was meant to build upon, and reaffirm the findings of the Northeast Wisconsin Economic Opportunity Study (NEWEOS) SWOT, which covered an 18-county region encompassing the East Central Wisconsin EDD and the Bay Lake EDD. In Figure 22, **bolded** items appeared in both the NEWEOS and East Central SWOT. Underlined items are those that were additions resulting from the East Central SWOT. *Italicized items* only appeared in the NEWEOS. Detailed responses from the East Central SWOT are available in Appendix G.

Figure 22. Regional Strengths, Weaknesses, Opportunities and threats for Economic Development

