TECHNICAL REPORT NO. 10
(4th Edition)

THE ECONOMY OF SOUTHEASTERN WISCONSIN

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Chapter I

INTRODUCTION

An important and necessary step in the regional planning process is the projection of the probable nature and magnitude of changes in factors which are largely beyond the influence of the planning process but which must be considered in the preparation of a comprehensive plan. Among the most important of these factors are those relating to the size, distribution, and composition of the population and to the number, distribution, and types of employment opportunities, or jobs. Accordingly, the Regional Planning Commission periodically carries out demographic studies—resulting in projections of the future size, distribution, and composition of the resident population—and economic studies—resulting in projections of the future number, distribution, and types of jobs—as a basis for updating and extending the comprehensive plan for physical development of the Region.

The Commission has undertaken a number of in-depth analyses of the Region's population and economic base since 1960. The major demographic analyses have generally coincided with the release of information from the Federal decennial census of population and housing; the major economic base analyses have generally been carried out concurrently with the demographic studies.

This report constitutes the fourth edition of SEWRPC Technical Report No. 10, *The Economy of Southeastern Wisconsin*. It documents the findings of the economic analyses conducted by the Commission in 2004 and sets forth new employment projections for the Region to the year 2035. This report is a companion to the fourth edition of SEWRPC Technical Report No. 11, *The Population of Southeastern Wisconsin*, which documents a concurrent analysis of the regional population and sets forth population projections to the year 2035. The afore-referenced reports were prepared in tandem to ensure consistency between the Commission's long-range employment and population projections. Together, the new employment and population projections presented in these reports provide an important part of the basis for updating and extending the currently adopted regional land use and transportation plans, along with other elements of the comprehensive plan for Southeastern Wisconsin, to the year 2035.

PREVIOUS ECONOMIC ANALYSES AND PROJECTIONS

In 1962, the Commission retained the State Planning Division of the Wisconsin Department of Resource Development to conduct an economic base study of the Region, resulting in the preparation of an initial set of employment projections for the Region through the year 1985. During the course of the Commission's initial land use-transportation planning study begun in 1963, those employment projections were updated and extended to 1990, providing a basis for the initial design year 1990 regional land use and transportation plans. In subsequent studies over the course of the next several decades, the Commission employment projections were extended to 2000, to 2010, and to 2020—serving as a basis for the updates of the Commission's land use and transportation plans and other plan elements with corresponding design years. The reports documenting previous Commission economic studies and employment projections are listed in Table 1.[1]

The Commission's most recent employment projections for the Region were prepared for the thirty-year period 1990 to 2020. The projections are documented in SEWRPC Technical Report No. 10 (3rd Edition), *The Economy of Southeastern Wisconsin*, dated October 1995. As part of that work, the Commission prepared a range of employment projections attendant to "high-growth," "intermediate-growth," and "low-growth" scenarios for the Region. The intermediate-growth projections were used as the basis for the preparation of year 2020 regional land use and transportation plans.

The year 2020 employment projections are re-presented for the Region and its seven counties in Figure 1, along with actual employment levels in the Region through 2003.[2] The Commission projections are intended to provide an indication of the long-term trend in future employment levels, irrespective of shorter term business cycle impacts on employment levels. As shown on Figure 1, the Region as a whole experienced rapid employment growth for most of the 1990s, trending along the high-growth projection. With the exception of a slight decrease in 1991, total employment in the Region increased each year between 1990 and 2000—a trend that can be traced back to 1983. Since 2000, however, the Region has experienced a decrease in total employment, with the number of jobs decreasing by nearly 4 percent between 2000 and 2003. With this decrease, the actual employment level for the Region overall closely approximated the intermediate-growth projection for 2003. For four counties—Kenosha, Ozaukee, Washington, and Waukesha—the actual employment level exceeded the high-growth projection for 2003. For Milwaukee, Racine, and Walworth Counties, the actual employment level was less than the low-growth projection for 2003.

CURRENT ECONOMIC ANALYSES AND PROJECTIONS

In anticipation of updating the adopted regional land use and transportation plans and other elements of the comprehensive plan for the Region, the Commission undertook another in-depth analysis of the regional economy in 2004. This analysis provided the basis for the preparation of new employment projections, those projections being extended 15 years beyond the previous projections, to the year 2035. The analysis work and the preparation of new projections were carried out with the assistance of the Commission's Advisory Committee on Regional Population and Economic Forecasts. The membership of that Committee is set forth on the inside front cover of this report.

The new employment projections are presented in Chapter III of this report. As in the past, the Commission has projected a range of future employment levels—low, intermediate, and high—for the Region. The intermediate projection is considered the most likely to be achieved for the Region overall; it is envisioned that this projection would be used as the basis for the preparation of the new year 2035 regional land use and transportation plans. The high and low projections were developed in recognition of the considerable uncertainty that is inherent in any effort to predict future socioeconomic conditions. The high and low projections are intended to provide an indication of the range of employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

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[1]*A detailed chronology of Commission economic studies over the past four decades is presented in Chapter I of SEWRPC Technical Report No. 10 (3rd Edition),* The Economy of Southeastern Wisconsin, *dated October 1995.*

[2]*The county-level intermediate-growth projections shown on Figure 1 represent minor adjustments of the intermediate-growth projections set forth in Technical Report No. 10 (3rd Edition) made as part of the year 2020 regional land use plan—those adjustments having been made to create a more centralized distribution of employment within the Region relative to Milwaukee County, under planned conditions. It should also be noted that the base year (1990) employment levels—the starting point for the projections—have been adjusted to reflect small revisions to historic employment level data made by the U.S. Bureau of Economic Analysis since the preparation of the Commission projections.*

Table 1

REPORTS DOCUMENTING PREVIOUS COMMISSION ECONOMIC ANALYSES AND PROJECTIONS

Name of Publication	Date
SEWRPC Planning Report No. 3, *The Economy of Southeastern Wisconsin*	June 1963
SEWRPC Planning Report No. 7, *Land Use-Transportation Study*, Volume Two, *Forecasts and Alternative Plans: 1990*	June 1966
SEWRPC Technical Report No. 10, *The Economy of Southeastern Wisconsin*	December 1972
SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin–2000* , Volume II, *Alternative and Recommended Plans*	May 1978
SEWRPC Technical Report No. 25, *Alternative Futures for Southeastern Wisconsin*	December 1980
SEWRPC Technical Report No. 10 (2nd Edition), *The Economy of Southeastern Wisconsin*	May 1984
SEWRPC Planning Report No. 40, *A Regional Land Use Plan for Southeastern Wisconsin-2010*	January 1992
SEWRPC Technical Report No. 10 (3rd Edition), *The Economy of Southeastern Wisconsin*	October 1995

Source: SEWRPC.

INDUSTRY CLASSIFICATION USED IN THIS REPORT

When this analysis of the Region's economy was being conducted, a major shift was underway in the system used to classify industries. The Standard Industrial Classification (SIC) system, the widely accepted classification system in use since the 1930s, was being replaced by the North American Industry Classification System (NAICS). Some economic statistics reporting entities began using NAICS in 1997; others were making the transition at the time of this study or were contemplating a transition in the next several years. Significant differences between SIC and NAICS make comparisons of SIC and NAICS data for many industry groups infeasible, and severely constrain efforts to convert historic time series data from SIC to NAICS.

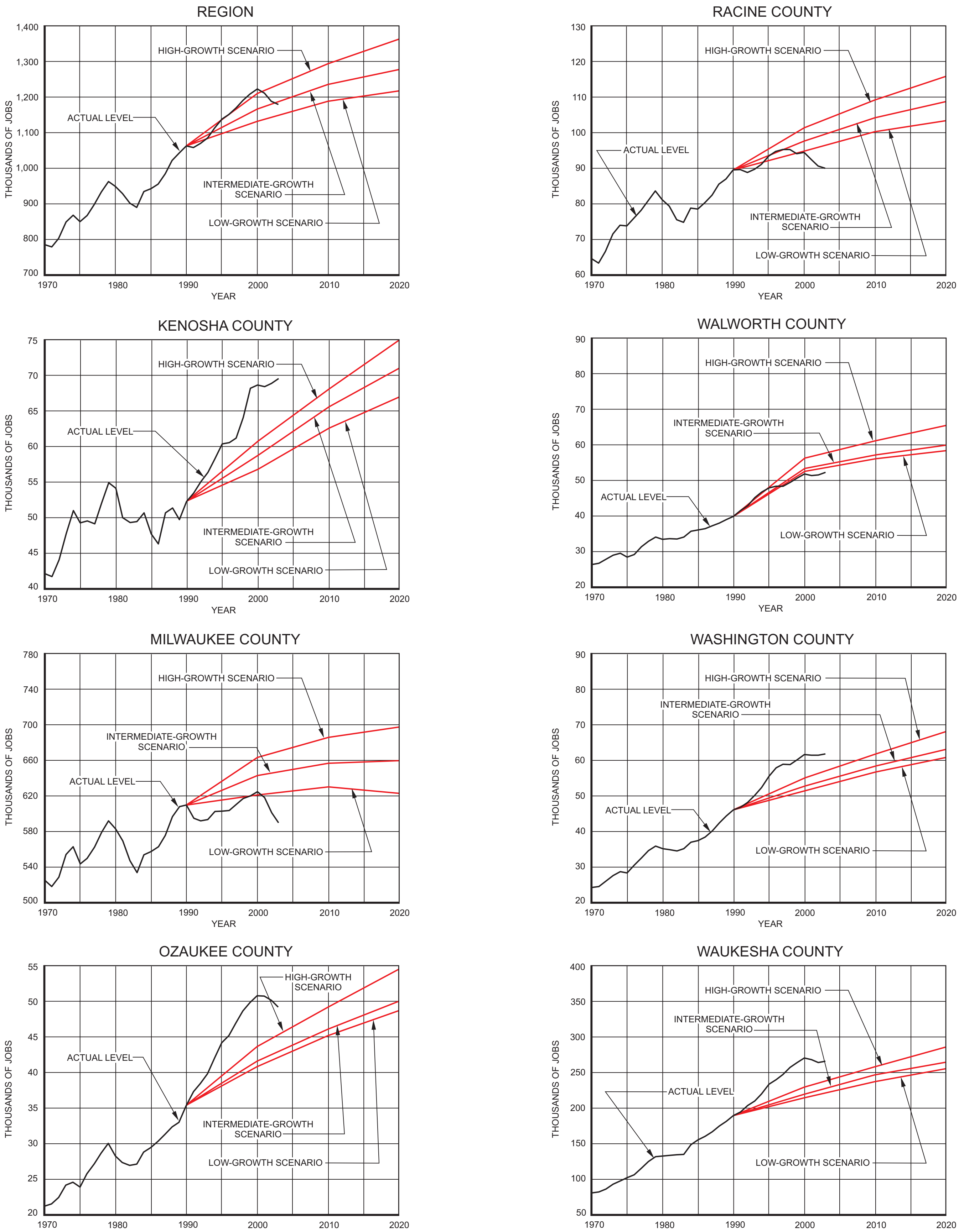
The Commission economic analyses require extensive data regarding existing and historic employment levels by industry. Such data are important to an understanding of the structure of the economy and changes in that structure over time, and they provide an important part of the basis for the preparation of new long-range employment projections. At the time of this analysis, employment-by-industry data based upon the SIC system were available for the Region, the State, and the Nation, from several secondary sources going back at least three decades; similar long-term historic trend data were not available based upon NAICS. Moreover, other-agency employment projections available at the time of this analysis were generally based upon the SIC system. Given the importance of consistent historic time series data regarding employment by industry to the Commission's analyses, along with the desirability of being able to relate the new Commission employment projections with those prepared by other agencies, a determination was made to utilize SIC-based data throughout this report.

PURPOSE OF THIS REPORT

This report, then, documents the findings of the economic analyses conducted by the Commission in 2004 and sets forth new employment projections for the Region to the year 2035. Following this introductory chapter, Chapter II of this report presents current and historical information on selected measures of economic activity, including the Region's labor force, the number and type of jobs, and personal income levels. Chapter III presents a new set of employment projections, covering the period 2000 to 2035. Chapter IV is a summary chapter.

Figure 1

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2020



NOTE: The Commission employment projections for the year 2020, presented above, were prepared using 1990 base year data.

Source: U.S. Bureau of Economic Analysis; Wisconsin Department of Workforce Development; and SEWRPC.

Chapter II

MEASURES OF ECONOMIC ACTIVITY

INTRODUCTION

Current and historic information on the Region's economic base is important to the comprehensive planning program for the Region. Such information contributes to an understanding of existing development patterns and historic trends in the development of the Region, and provides a framework for preparing the employment projections required as a basis for updating the regional land use plan, the regional transportation plan, and other elements of the comprehensive plan for the Region. This chapter presents current and historic information on selected measures of economic activity in the Region, including the Region's labor force, the number and type of jobs in the Region, and personal income levels in the Region.

LABOR FORCE

Regional Labor Force Size

The labor force is that segment of the resident population which can be most closely related to the economy. By definition, the civilian labor force of an area consists of all of its residents who are 16 years of age or over and who are either employed at one or more nonmilitary jobs or are temporarily unemployed. Labor force data are often referred to as "place-of-residence" data, since the labor force is enumerated on the basis of the residence of individuals in the labor force. Changes in the size, composition, and distribution of an area's civilian labor force can reflect changes in the area's economy; changes in population levels, especially in the working-age groups; and changes in the personal decision-making patterns of area residents regarding whether to seek work, continue working, or retire.

As indicated in Table 2, the civilian labor force of the Region was 1,008,400 persons in 2000, compared to 934,200 persons in 1990. The increase of 74,200 persons in the regional civilian labor force during the 1990s compares to increases of 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 in both the 1960s and 1950s.[1]

As further indicated in Table 2, in relative terms, the Region's labor force grew at a somewhat slower rate than both the State and the national labor force during the 1990s. As a result, the Region's share of the State labor force decreased from 37 to 35 percent, with the Region's share of the national labor force also declining slightly.

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[1]*Through 1960, the labor force age was defined based upon the population 14 years and older. Since 1970, the labor force age has been defined based upon the population 16 years and older. The effect of the change in definition on comparative analyses is minimal. The number of employed persons in the Region aged 14 and 15 in 1970 was approximately 7,600, or about 1 percent of the total regional labor force.*

Table 2

CIVILIAN LABOR FORCE IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2000

Year	Region			Wisconsin			United States			Regional Labor Force as a Percent of:	
	Persons in the Labor Force	Change from Preceding Year		Persons in the Labor Force	Change from Preceding Year		Persons in the Labor Force	Change from Preceding Year			
		Number	Percent		Number	Percent		Number	Percent	Wisconsin	United States
1950	538,716	- -	- -	1,396,383	- -	- -	59,303,720	- -	- -	38.6	0.91
1960	636,901	98,185	18.2	1,527,722	131,339	9.4	68,144,079	8,840,359	14.9	41.7	0.93
1970	736,078	99,177	15.6	1,774,008	246,286	16.1	80,051,046	11,906,967	17.5	41.5	0.92
1980	876,152	140,074	19.0	2,263,413	489,405	27.6	104,449,817	24,398,771	30.5	38.7	0.84
1990	934,153	58,001	6.6	2,517,238	253,825	11.2	123,473,450	19,023,633	18.2	37.1	0.76
2000	1,008,394	74,241	7.9	2,869,236	351,998	14.0	137,668,798	14,195,348	11.5	35.1	0.73

NOTE: The 1950 and 1960 censuses defined the labor force as those persons age 14 and older who were employed or temporarily unemployed. The 1970, 1980, 1990, and 2000 censuses defined the labor force as those persons age 16 and older who were employed or temporarily unemployed. The significance of this shift in definitions involving the two age groups is considered minimal in the Region. For example, the number of employed persons in the Region age 14 and 15 in 1970 was approximately 7,600 persons, or about 1 percent of the regional labor force.

Source: U.S. Bureau of the Census and SEWRPC.

The gender makeup of the civilian labor force changed slightly during the 1990s, with the female component increasing from just under 47 percent of the labor force in 1990 to about 48 percent in 2000, and the male component experiencing a corresponding decrease. During the four decades prior to 1990, the gender makeup of the labor force changed dramatically. The female component increased from 29 percent in 1950 to 47 percent in 1990, while the male component decreased from 71 percent to 53 percent (see Table 3 and Figure 2).

For the Region as a whole, the civilian labor force participation rate (the civilian labor force as a percent of the total labor force-age population) stood at 68.2 percent in 2000, a slight increase from 67.6 percent in 1990. The four decades prior to 1990 saw significant increases in the civilian labor force participation rate, from 56.6 percent in 1950 to the 1990 rate of 67.6 percent. The long-term trend in the civilian labor force participation rate is the net effect of increased relative participation by females and decreased relative participation by males (see Figure 3).

Labor Force Distribution by County

Current and historic civilian labor force levels are presented by county in the Region in Table 4 and Figure 4. During the 1990s, each county in the Region except Milwaukee County experienced a significant increase in the labor force. Waukesha County experienced the largest labor force increase (31,600 persons) during the 1990s. Kenosha, Ozaukee, Racine, Walworth, and Washington Counties experienced labor force increases ranging from 5,100 to 14,400 persons. Milwaukee County's labor force decreased by 10,100 persons.

The past decade saw further change in the relative distribution of the labor force among the counties within the Region, continuing long-term trends in this respect. Milwaukee County's share of the regional labor force decreased by about five percentage points during the 1990s. Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties increased at least slightly in their relative share, while Racine County's share of the regional labor force did not change. Over the past 50 years, the most notable changes in the labor force distribution have been the increase in Waukesha County's share, from 6 percent to 20 percent of the total regional labor force, and the decrease in Milwaukee County's share, from 72 percent to 47 percent (see Figure 5). The long-term changes in the relative distribution of the labor force evident in Table 4 and Figures 4 and 5 generally mirror the changes in the relative distribution of the regional population over the past decades.

It should be noted that there has been a rapid increase in the labor force in counties located immediately south of the Region (see Table 5). During the 1990s, the labor force in Lake and McHenry Counties (Illinois), combined, increased by about 97,500 persons, exceeding the increase of 74,200 for the entire Southeastern Wisconsin Region. By 2000, the combined labor force of Lake and McHenry Counties stood at 464,500 persons—nearly half the size of the labor force of the Region. These Counties represent a potential supply of labor for the expanding job base in the southern portion of the Region.

Table 3

CIVILIAN LABOR FORCE GENDER COMPOSITION AND CIVILIAN LABOR FORCE PARTICIPATION RATES FOR THE REGION: 1950-2000

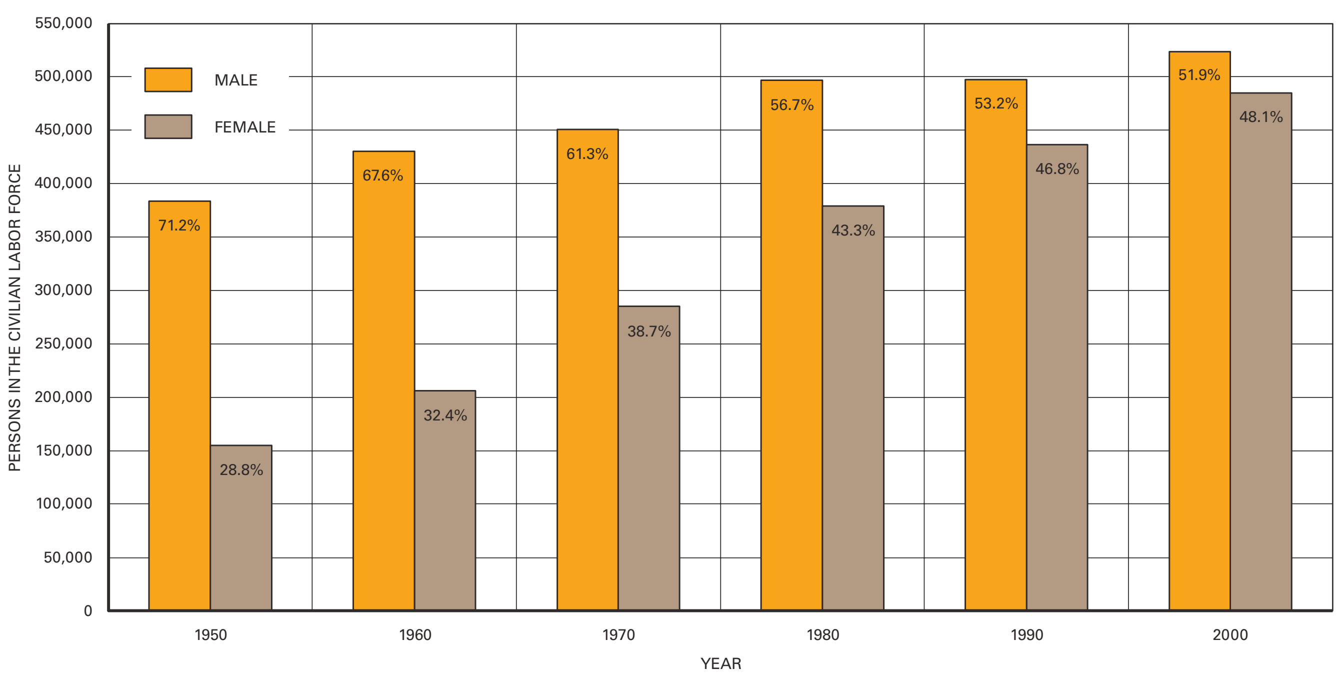
Year	Civilian Labor Force						Civilian Labor Force Participation Rate[a]		
	Males		Females		Total				
	Number	Percent	Number	Percent	Number	Percent	Male	Female	Total
1950	383,648	71.2	155,068	28.8	538,716	100.0	82.2	32.0	56.6
1960	430,601	67.6	206,300	32.4	636,901	100.0	80.5	36.5	57.9
1970	451,094	61.3	284,984	38.7	736,078	100.0	79.6	45.4	61.6
1980	496,957	56.7	379,195	43.3	876,152	100.0	78.6	54.3	65.9
1990	497,262	53.2	436,891	46.8	934,153	100.0	76.1	60.0	67.6
2000	523,358	51.9	485,036	48.1	1,008,394	100.0	73.8	63.0	68.2

[a]*Indicates persons in the labor force as a percent of the workforce-age population for males, females, and the total population.*

Source: U.S. Bureau of the Census and SEWRPC.

Figure 2

GENDER COMPOSITION OF THE CIVILIAN LABOR FORCE IN THE REGION: 1950-2000



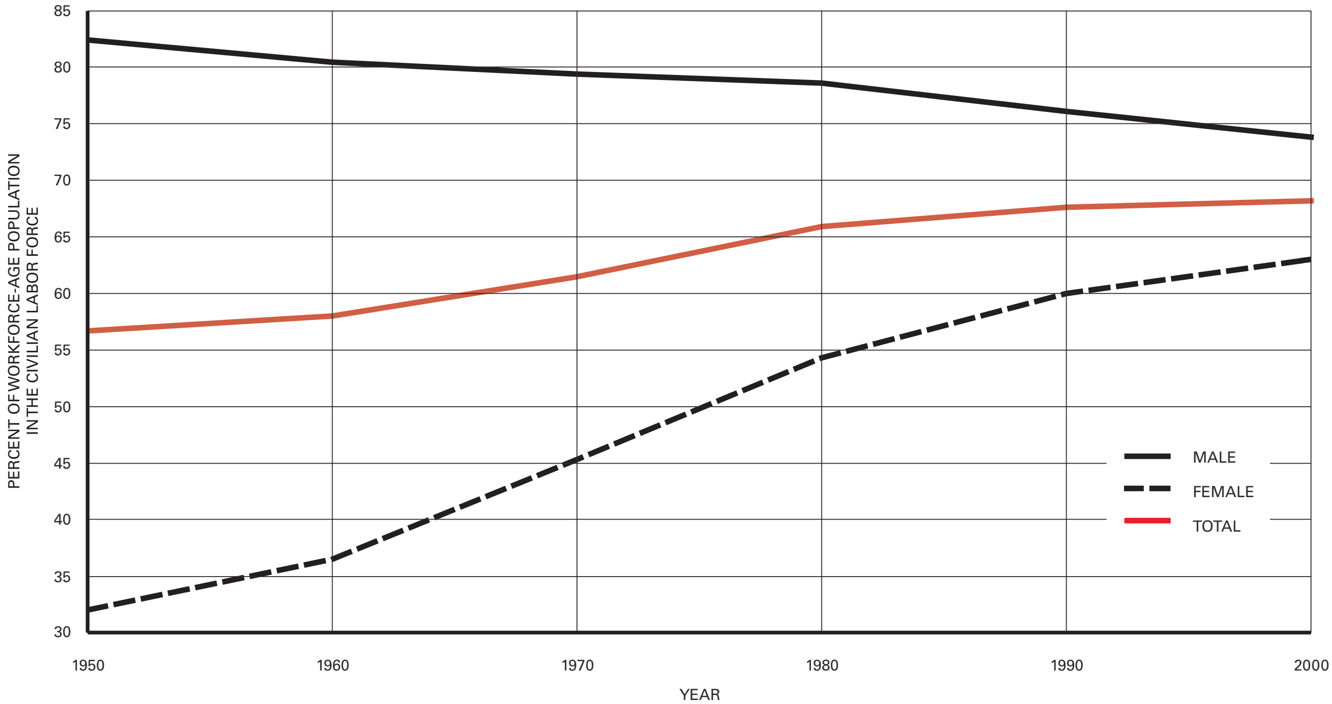
Source: U.S. Bureau of the Census and SEWRPC.

EMPLOYMENT

Information regarding the number and type of employment opportunities, or jobs, in an area is an important measure of the size and structure of the area's economy. This section presents information regarding existing employment levels, including employment by industry, in the Region and related historic trend information.

Figure 3

CIVILIAN LABOR FORCE PARTICIPATION RATES IN THE REGION: 1950-2000



Source: U.S. Bureau of the Census and SEWRPC.

The information on employment levels presented in this report is from the U.S. Bureau of Economic Analysis (BEA). The BEA data are considered to be the most complete employment data, insofar as they reflect both wage and salary employment and the self-employed. BEA data reflect full-time and part-time jobs.

Wage and salary employment comprised 89 percent of the total nonmilitary employment reported by the BEA for the Region in 2000. BEA wage and salary employment level data are based largely on employment data collected under state Unemployment Insurance (UI) programs for UI-covered employment. The BEA supplements that data with available information regarding non-UI-covered wage and salary employment, such as private elementary and secondary school employees, private household employees, and employees covered by the Railroad Unemployment Insurance system. In general, annual employment levels for wage and salary workers as reported by the BEA are derived by the BEA as the average of 12 monthly observations for each year. BEA data regarding wage and salary employment indicate employment levels by place of work.

The self-employed comprised about 11 percent of the total nonmilitary employment reported by BEA for the Region in 2000. BEA data regarding the self-employed pertain to sole proprietorships and individuals in partnerships other than limited partners. The BEA derives information regarding the self-employed primarily from Federal income tax records. BEA data in this regard reflect the total number of sole proprietorships or partnerships active at any time during the year—as opposed to the annual average measure used for wage and salary employment. BEA data regarding the location of work of self-employed individuals is based upon the tax filing address, which is typically the filer's residence.

The smallest geographic area for which BEA employment data are available is the county. Essentially, the county-level BEA employment data represent "place-of-work" data; that is, they indicate the number of jobs within a

Table 4

CIVILIAN LABOR FORCE IN THE REGION BY COUNTY: 1950-2000

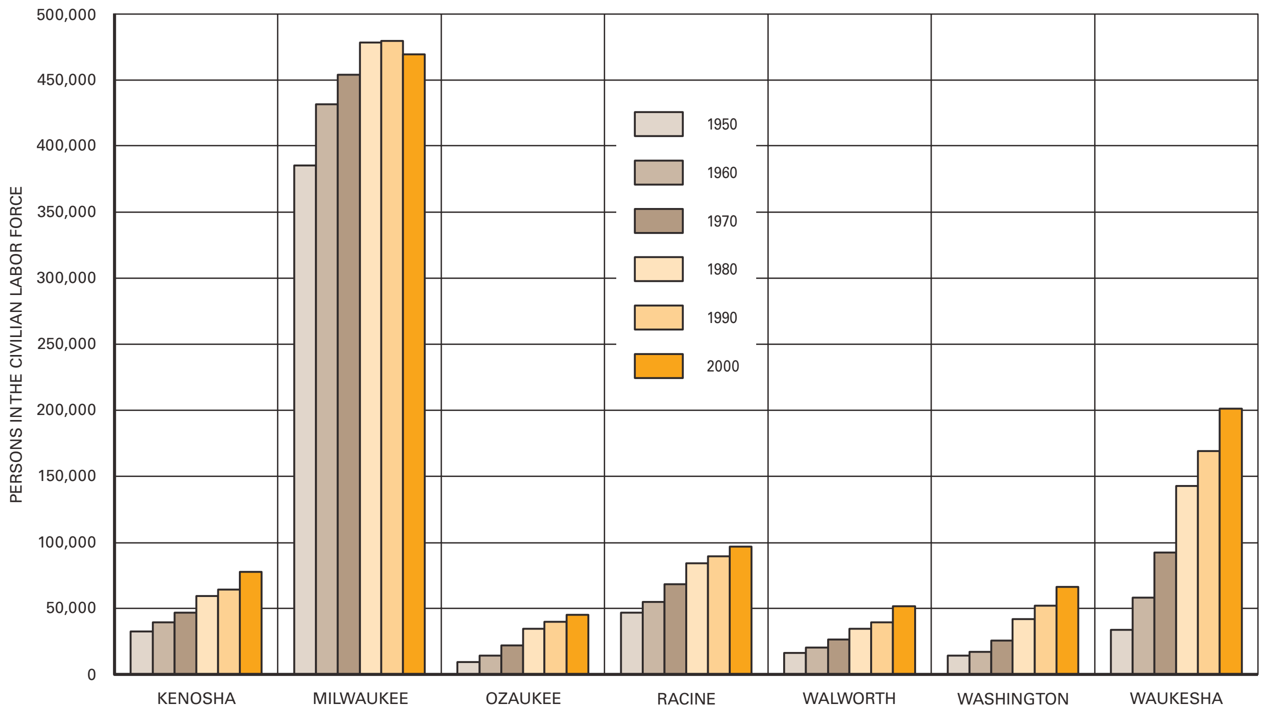
Year	Kenosha County				Milwaukee County				Ozaukee County				Racine County			
	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent			Number	Percent			Number	Percent	
1950	32,535	- -	- -	6.0	385,261	- -	- -	71.5	9,645	- -	- -	1.8	46,771	- -	- -	8.7
1960	39,726	7,191	22.1	6.2	431,746	46,485	12.1	67.8	14,438	4,793	49.7	2.3	54,947	8,176	17.5	8.6
1970	47,171	7,445	18.7	6.4	454,085	22,339	5.2	61.7	22,105	7,667	53.1	3.0	68,255	13,308	24.2	9.3
1980	59,625	12,454	26.4	6.8	478,184	24,099	5.3	54.6	34,468	12,363	55.9	3.9	84,330	16,075	23.6	9.6
1990	64,192	4,567	7.7	6.9	479,374	1,190	0.2	51.3	40,114	5,646	16.4	4.3	89,356	5,026	6.0	9.6
2000	77,709	13,517	21.1	7.7	469,257	-10,117	-2.1	46.5	45,219	5,105	12.7	4.5	96,861	7,505	8.4	9.6

Year	Walworth County				Washington County				Waukesha County				Region			
	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent			Number	Percent			Number	Percent	
1950	16,448	- -	- -	3.1	14,255	- -	- -	2.6	33,801	- -	- -	6.3	538,716	- -	- -	100.0
1960	20,444	3,996	24.3	3.2	17,384	3,129	22.0	2.7	58,216	24,415	72.2	9.2	636,901	98,185	18.2	100.0
1970	26,345	5,901	28.9	3.6	25,727	8,343	48.0	3.5	92,390	34,174	58.7	12.5	736,078	99,177	15.6	100.0
1980	34,727	8,382	31.8	4.0	42,044	16,317	63.4	4.8	142,774	50,384	54.5	16.3	876,152	140,074	19.0	100.0
1990	39,642	4,915	14.2	4.2	52,106	10,062	23.9	5.6	169,369	26,595	18.6	18.1	934,153	58,001	6.6	100.0
2000	51,861	12,219	30.8	5.2	66,496	14,390	27.6	6.6	200,991	31,622	18.7	19.9	1,008,394	74,241	7.9	100.0

Source: U.S. Bureau of the Census and SEWRPC.

Figure 4

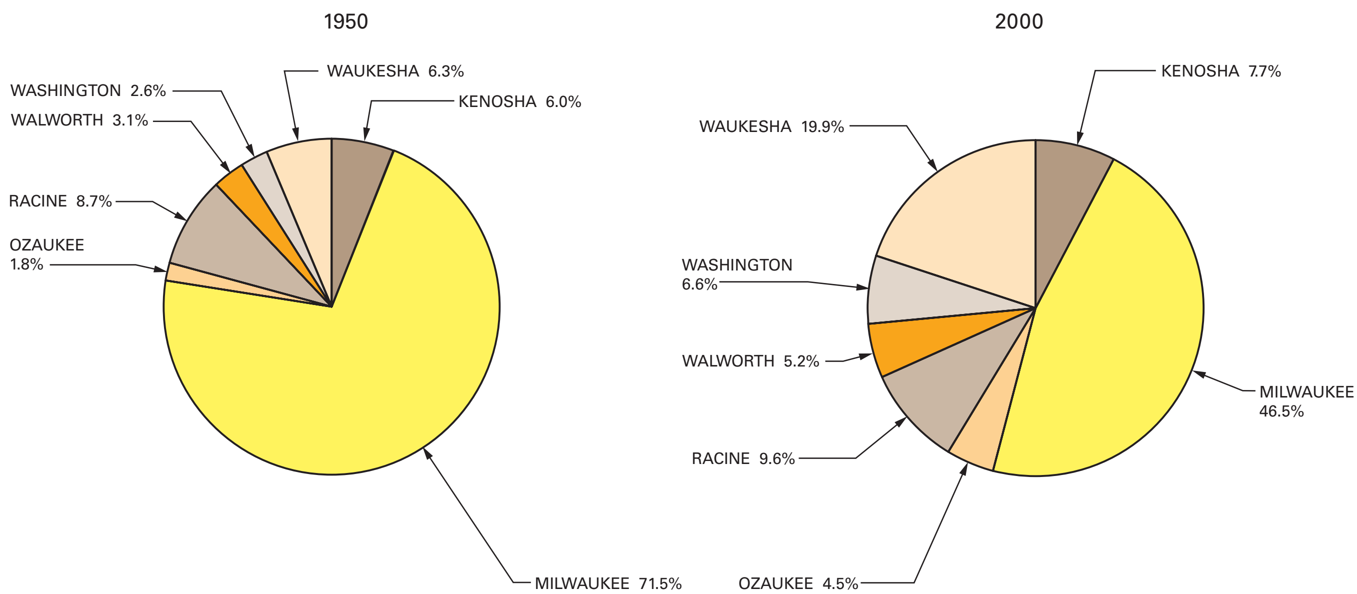
CIVILIAN LABOR FORCE IN THE REGION BY COUNTY: 1950-2000



Source: U.S. Bureau of the Census and SEWRPC.

Figure 5

SHARE OF REGIONAL CIVILIAN LABOR FORCE BY COUNTY: 1950 AND 2000



Source: U.S. Bureau of the Census and SEWRPC.

Table 5

CIVILIAN LABOR FORCE IN LAKE AND MCHENRY COUNTIES, ILLINOIS: 1970-2000

Year	Lake County			McHenry County		
	Persons in the Labor Force	Change from Preceding Year		Persons in the Labor Force	Change from Preceding Year	
		Number	Percent		Number	Percent
1970	143,466	- -	- -	46,534	- -	- -
1980	210,864	67,398	47.0	74,264	27,730	59.6
1990	267,826	56,962	27.0	99,168	24,904	33.5
2000	324,353	56,527	21.1	140,125	40,957	41.3

Source: U.S. Bureau of the Census and SEWRPC.

given county. The exception to this would be self-employed individuals whose tax filing address is in a different county than his or her place of work.

Regional Employment Levels [2]

Total employment in the Region stood at 1,222,800 jobs in 2000, compared to 1,062,600 jobs in 1990. The increase of 160,200 jobs during the 1990s compares to 114,400 during the 1980s, 163,300 during the 1970s, 111,900 during the 1960s, and 99,500 during the 1950s (see Table 6).

In relative terms, employment in the Region grew at a somewhat slower rate than both the State and the Nation during the 1990s. As a result, the Region's share of total State employment decreased from about 38 percent to about 36 percent, with the Region's share of national employment also showing a slight decrease.

Historically, employment levels, both nationally and within the Region, tend to fluctuate in the short-term, rising and falling in accordance with business cycles. The long period of nearly uninterrupted job growth between 1983 and 2000 is unusual in this respect. Nationally and within the Region, total employment increased each year during that time, with the exception of a slight decrease in 1991 (see Region trend in Figure 6).

The extended period of employment growth in the Region described above ended after 2000. Total employment in the Region has decreased each year since 2000. Estimated total employment in the Region stood at 1,179,000 jobs in 2003, about 4 percent below the 2000 level.

Employment Distribution by County

Information on current and historic employment levels is presented by county in the Region in Table 7 and Figure 7 and 8. Each county in the Region experienced an increase in employment between 1990 and 2000. With an increase of 81,100 jobs, Waukesha County accounted for just over half of the total increase in the Region's employment during the 1990s. Among the other six counties, the growth in employment during the 1990s ranged from 4,800 jobs in Racine County to 16,500 jobs in Kenosha County.

Between 1990 and 2000, Milwaukee and Racine Counties decreased in their share of total regional employment while the share of each of the other five counties increased at least slightly. Over the past five decades, Milwaukee County has experienced a substantial decrease in its share of regional employment; Waukesha County has experienced a substantial increase; and Ozaukee, Walworth, and Washington Counties have experienced gradual increases. In Kenosha and Racine Counties, the share of total regional employment in 2000 was about the same as in 1950, with some fluctuations occurring over the intervening decades.

Substantial job growth has also occurred in the counties located immediately south of the Region. As indicated in Table 8, employment in Lake and McHenry Counties (Illinois), combined, increased by about 146,800 jobs during the 1990s, approaching the increase of 160,200 for the entire Southeastern Wisconsin Region. By 2000, total employment in Lake and McHenry Counties combined stood at 505,200 jobs. A significant number of Kenosha and Walworth County residents find employment in Northeastern Illinois.

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[2] *The Bureau of Economic Analysis periodically revises its historic data series on employment levels. The BEA-based employment data presented in this report reflect data released by the BEA in spring 2003. These data differ slightly from employment data previously released by the BEA and presented in the previous editions of this report.*

Table 6

EMPLOYMENT IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2000

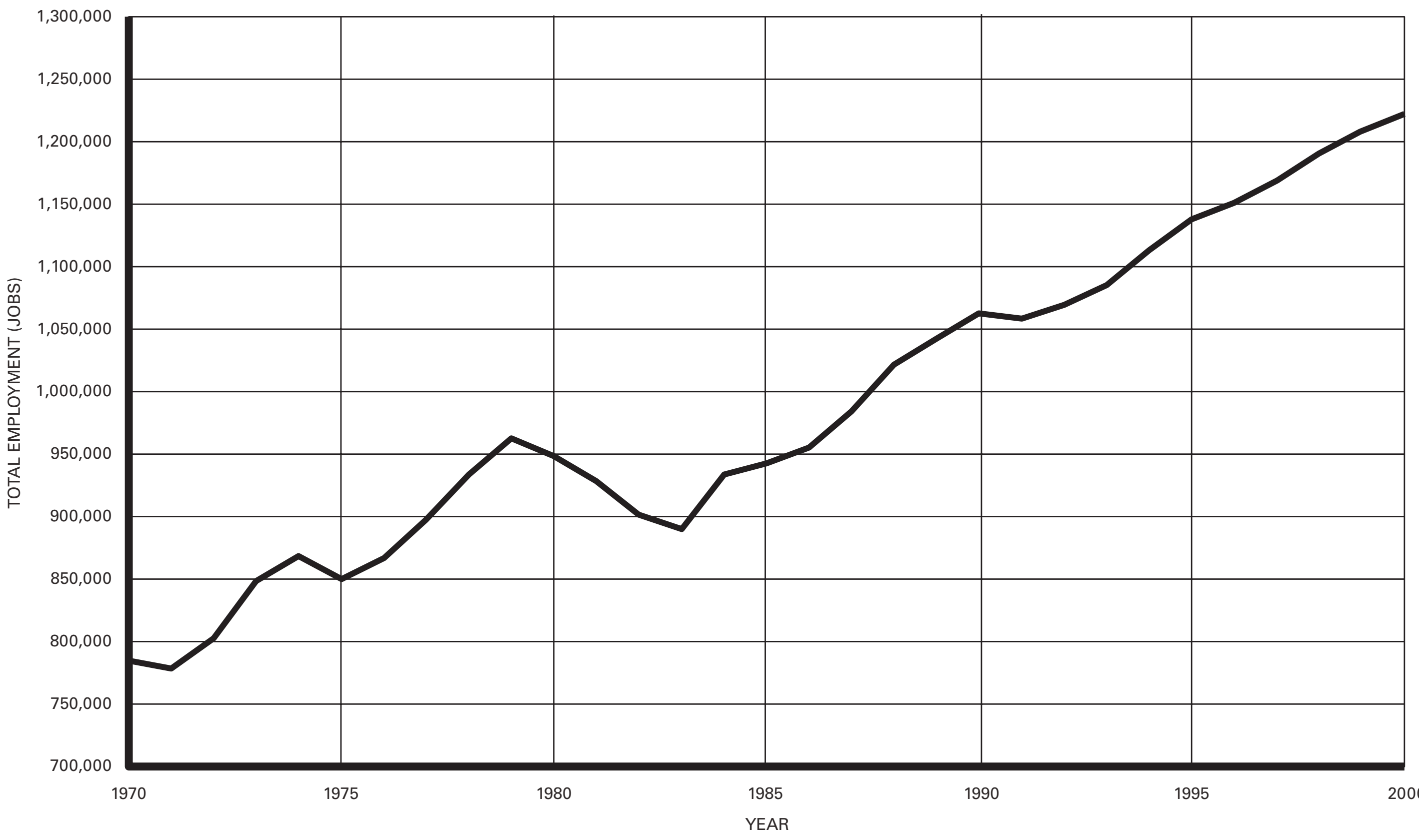
	Region			Wisconsin			United States			Regional Employment as a Percent of:	
		Change from Preceding Year			Change from Preceding Year			Change from Preceding Year			
Year	Jobs	Number	Percent	Jobs	Number	Percent	Jobs	Number	Percent	Wisconsin	United States
1950	573,500	- -	- -	1,413,400	- -	- -	61,701,200	- -	- -	40.6	0.93
1960	673,000	99,500	17.3	1,659,400	246,000	17.4	72,057,000	10,355,800	16.8	40.6	0.93
1970	784,900	111,900	16.6	1,929,100	269,700	16.3	88,049,600	15,992,600	22.2	40.7	0.89
1980	948,200	163,300	20.8	2,429,800	500,700	26.0	111,730,200	23,680,600	26.9	39.0	0.85
1990	1,062,600	114,400	12.1	2,810,400	380,600	15.7	136,708,900	24,978,700	22.4	37.8	0.78
2000	1,222,800	160,200	15.1	3,421,800	611,400	21.8	165,209,800	28,500,900	20.8	35.7	0.74

NOTE: Excludes military employment, which amounted to 6,900 jobs in the Region, 18,800 jobs in Wisconsin, and 2,074,000 jobs in the United States in 2000.

Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 6

EMPLOYMENT IN THE REGION: 1970-2000



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Employment by Industry

Information regarding employment levels by industry provides valuable insight into the structure of the economy of an area and changes in that structure over time. This section presents current (2000) and historic employment levels for general industry groupings and for more detailed "dominant" and "subdominant" groupings. With the exception of government employment, the industry-related employment data presented in this section are based upon the Standard Industrial Classification (SIC) system. As presented herein, government employment includes

Table 7

EMPLOYMENT IN THE REGION BY COUNTY: 1950-2000

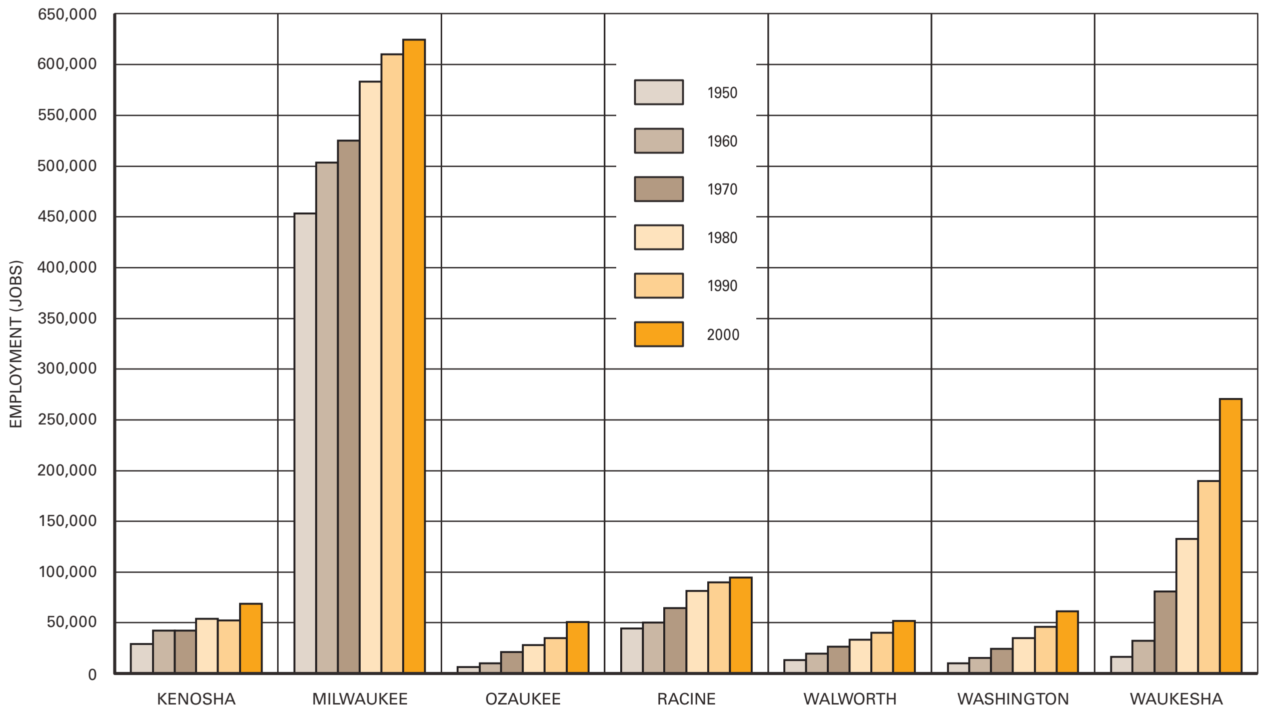
Year	Kenosha County				Milwaukee County				Ozaukee County				Racine County			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent			Number	Percent			Number	Percent	
1950	29,100	- -	- -	5.1	453,500	- -	- -	79.1	6,600	- -	- -	1.1	44,500	- -	- -	7.7
1960	42,200	13,100	45.0	6.3	503,300	49,800	11.0	74.8	10,200	3,600	54.5	1.5	49,900	5,400	12.1	7.4
1970	42,100	-100	-0.2	5.4	525,200	21,900	4.4	66.9	21,300	11,100	108.8	2.7	64,600	14,700	29.5	8.2
1980	54,100	12,000	28.5	5.7	583,200	58,000	11.0	61.5	28,200	6,900	32.4	3.0	81,200	16,600	25.7	8.6
1990	52,200	-1,900	-3.5	4.9	609,800	26,600	4.6	57.4	35,300	7,100	25.2	3.3	89,600	8,400	10.3	8.4
2000	68,700	16,500	31.6	5.6	624,600	14,800	2.4	51.1	50,800	15,500	43.9	4.2	94,400	4,800	5.4	7.7

Year	Walworth County				Washington County				Waukesha County				Region			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent			Number	Percent			Number	Percent	
1950	13,200	- -	- -	2.3	10,200	- -	- -	1.8	16,400	- -	- -	2.9	573,500	- -	- -	100.0
1960	19,600	6,400	48.5	2.9	15,200	5,000	49.0	2.3	32,600	16,200	98.8	4.8	673,000	99,500	17.3	100.0
1970	26,400	6,800	34.7	3.4	24,300	9,100	59.9	3.1	81,000	48,400	148.5	10.3	784,900	111,900	16.6	100.0
1980	33,500	7,100	26.9	3.5	35,200	10,900	44.9	3.7	132,800	51,800	64.0	14.0	948,200	163,300	20.8	100.0
1990	39,900	6,400	19.1	3.8	46,100	10,900	31.0	4.3	189,700	56,900	42.8	17.9	1,062,600	114,400	12.1	100.0
2000	51,800	11,900	29.8	4.2	61,700	15,600	33.8	5.0	270,800	81,100	42.8	22.2	1,222,800	160,200	15.1	100.0

Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 7

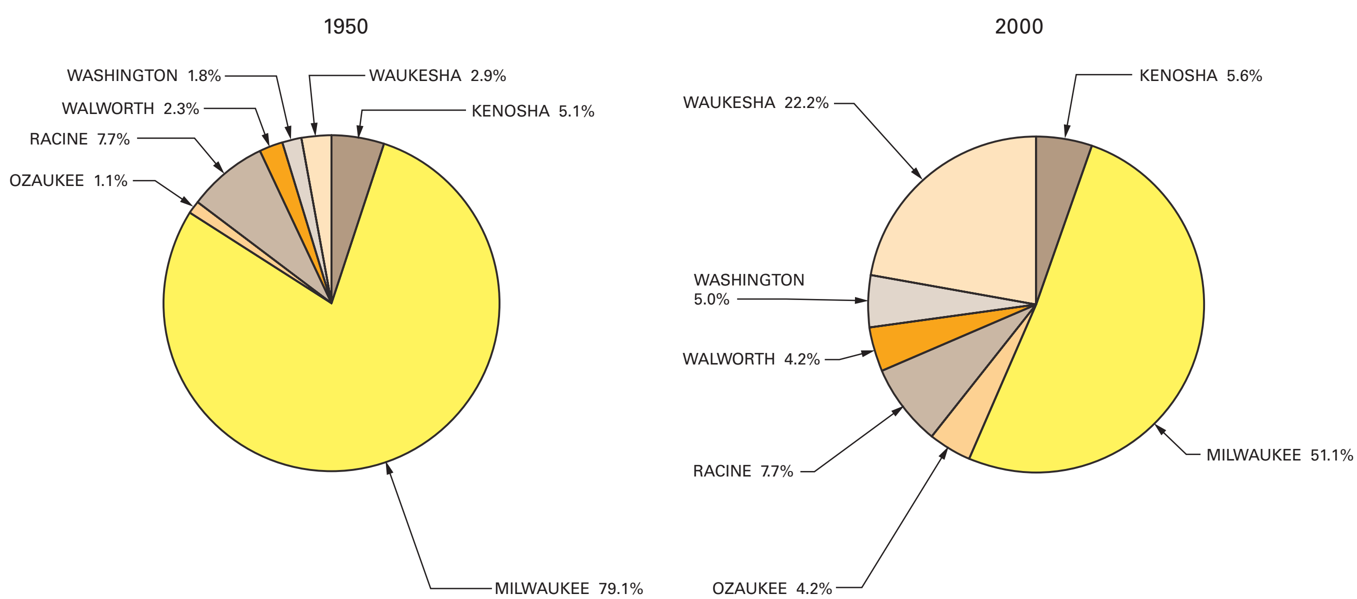
EMPLOYMENT IN THE REGION BY COUNTY: 1950-2000



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 8

SHARE OF REGIONAL EMPLOYMENT BY COUNTY: 1950 AND 2000



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Table 8

EMPLOYMENT IN LAKE AND MCHENRY COUNTIES, ILLINOIS: 1970-2000

Year	Lake County			McHenry County		
	Jobs	Change from Preceding Year		Jobs	Change from Preceding Year	
		Number	Percent		Number	Percent
1970	134,000	- -	- -	41,900	- -	- -
1980	186,500	52,500	39.2	56,400	14,500	34.6
1990	275,300	88,800	47.6	83,100	26,700	47.3
2000	393,900	118,600	43.1	111,300	28,200	33.9

NOTE: Excludes military employment, which amounted to 25,500 jobs in Lake County in 2000.

Source: U.S. Bureau of Economic Analysis and SEWRPC.

all employees who work for government agencies and enterprises, regardless of the SIC code of such entities; this is consistent with employment data reporting by the U.S. Bureau of Economic Analysis, the primary source of employment level data for this chapter.

General Industry Grouping

Current and historic job levels by general industry group are presented for the Region, Wisconsin, and the United States in Table 9 and Figure 9. As shown on that table and figure, the 1990s saw a continuation of a shift in the regional economy from a manufacturing to a service orientation, documented in previous Commission economic studies. Manufacturing employment in the Region was virtually unchanged during the 1990s, following a 15 percent decrease during the 1980s, and a modest 4 percent increase during the 1970s. Conversely, service-related employment increased substantially during each of the past three decades—by 33 percent during the 1990s, 41 percent during the 1980s, and 53 percent during 1970s. Due to these differential growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 32 percent in 1970 to 18 percent in 2000, while service-related employment increased from 18 percent in 1970 to 33 percent in 2000. In comparison to the manufacturing and services industry groups, other major industry groups—such as wholesale trade, retail trade, government, and finance, insurance, and real estate—have been relatively stable in terms of their share of total employment in the Region over the last three decades.

The State of Wisconsin and the United States have likewise experienced a major shift from manufacturing to service-related employment. However, the trend in manufacturing employment for the State overall has been more robust than for the Region. Manufacturing employment in the State increased by 24 percent between 1970 and 2000; the Region's manufacturing employment decreased by 12 percent during this time. While historically the Region exceeded the State in the proportion of manufacturing jobs relative to total jobs, by 2000 the Region and State had about the same proportion of jobs in manufacturing—just over 18 percent. In comparison, manufacturing jobs comprised about 12 percent of all jobs in the Nation in 2000.

Dominant and Subdominant Industries

Further insight into the structure of the regional economy can be obtained through an analysis of the Region's "dominant" and "subdominant" industries. Dominant industries, as defined by the Regional Planning Commission, are those industries that account for 4.0 percent or more of the total regional employment, while subdominant industries are those that account for 2.0 percent to 3.9 percent. The Commission has identified dominant and subdominant industries in terms of major industry groups—that is, two-digit level categories—as identified under the Standard Industrial Classification System (SIC), or aggregations of SIC major industry groups.[3]

Dominant and subdominant industries in the Region in 2000 are listed in Table 10. Eight industries were accorded dominant status in 2000. In combination, they accounted for 63.4 percent of total regional employment. Dominant industries, along with their percent of total regional employment in 2000, were as follows: construction (4.4 percent); transportation, communication, and utilities (4.5 percent); wholesale trade (5.3 percent); retail

[3]*Under the Standard Industrial Classification (SIC) system, major industry groups are identified by the first two digits of the four-digit SIC coding system.*

Table 9

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1970-2000

		Region											
		Employment								Percent Change in Employment			
		1970		1980		1990		2000					
General Industry Group	SIC Code	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	1970-1980	1980-1990	1990-2000	1970-2000
Agriculture	01-02	12,000	1.5	10,000	1.0	7,200	0.7	6,000	0.5	-16.7	-28.0	-16.7	-50.0
Construction	15-17	32,400	4.1	33,900	3.6	45,100	4.2	53,800	4.4	4.6	33.0	19.3	66.0
Manufacturing	20-39	254,400	32.4	264,200	27.9	223,500	21.0	224,300	18.3	3.9	-15.4	0.4	-11.8
Transportation, Communication, and Utilities	40-42; 44-49	38,500	4.9	42,200	4.4	46,300	4.4	54,800	4.5	9.6	9.7	18.4	42.3
Wholesale Trade	50-51	37,200	4.7	46,200	4.9	55,300	5.2	64,400	5.3	24.2	19.7	16.5	73.1
Retail Trade	52-59	133,900	17.1	153,900	16.2	185,400	17.4	193,700	15.8	14.9	20.5	4.5	44.7
Finance, Insurance, and Real Estate	60-67	47,600	6.1	75,600	8.0	81,800	7.7	93,700	7.7	58.8	8.2	14.5	96.8
Services	70-89	141,800	18.1	216,700	22.8	304,700	28.7	406,000	33.2	52.8	40.6	33.2	186.3
Government and Government Enterprises[a]	Not Applicable	84,400	10.8	101,100	10.7	106,200	10.0	114,400	9.3	19.8	5.0	7.7	35.5
Other[b]	07-09; 10-14; 99	2,700	0.3	4,400	0.5	7,100	0.7	11,700	1.0	63.0	61.4	64.8	333.3
Total	- -	784,900	100.0	948,200	100.0	1,062,600	100.0	1,222,800	100.0	20.8	12.1	15.1	55.8

		Wisconsin											
		Employment								Percent Change in Employment			
		1970		1980		1990		2000					
General Industry Group	SIC Code	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	1970-1980	1980-1990	1990-2000	1970-2000
Agriculture	01-02	148,400	7.7	150,800	6.2	114,700	4.1	101,300	3.0	1.6	-23.9	-11.7	-31.7
Construction	15-17	85,300	4.4	97,300	4.0	124,500	4.4	176,500	5.2	14.1	28.0	41.8	106.9
Manufacturing	20-39	510,500	26.5	567,900	23.4	574,100	20.4	632,600	18.5	11.2	1.1	10.2	23.9
Transportation, Communication, and Utilities	40-42; 44-49	89,600	4.6	103,400	4.3	122,800	4.4	156,100	4.6	15.4	18.8	27.1	74.2
Wholesale Trade	50-51	73,700	3.8	104,400	4.3	125,800	4.5	150,500	4.4	41.7	20.5	19.6	104.2
Retail Trade	52-59	332,800	17.3	411,300	16.9	499,700	17.8	590,300	17.2	23.6	21.5	18.1	77.4
Finance, Insurance, and Real Estate	60-67	102,300	5.3	173,100	7.1	185,000	6.6	231,000	6.7	69.2	6.9	24.9	125.8
Services	70-89	314,700	16.3	492,500	20.3	697,200	24.8	957,900	28.0	56.5	41.6	37.4	204.4
Government and Government Enterprises[a]	Not Applicable	260,000	13.5	311,000	12.8	339,500	12.1	384,200	11.2	19.6	9.2	13.2	47.8
Other[b]	07-09; 10-14; 99	11,800	0.6	18,100	0.7	27,100	0.9	41,400	1.2	53.4	49.7	52.8	250.8
Total	- -	1,929,100	100.0	2,429,800	100.0	2,810,400	100.0	3,421,800	100.0	26.0	15.7	21.8	77.4

		United States											
		Employment								Percent Change in Employment			
		1970		1980		1990		2000					
General Industry Group	SIC Code	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total	1970-1980	1980-1990	1990-2000	1970-2000
Agriculture	01-02	3,961,000	4.5	3,798,000	3.4	3,153,000	2.3	3,110,000	1.9	-4.1	-17.0	-1.4	-21.5
Construction	15-17	4,398,800	5.0	5,654,200	5.1	7,260,800	5.3	9,523,300	5.7	28.5	28.4	31.2	116.5
Manufacturing	20-39	19,687,400	22.4	20,781,100	18.6	19,697,200	14.4	19,107,800	11.6	5.6	-5.2	-3.0	-2.9
Transportation, Communication, and Utilities	40-42; 44-49	4,865,500	5.5	5,672,100	5.1	6,568,600	4.8	8,262,400	5.0	16.6	15.8	25.8	69.8
Wholesale Trade	50-51	4,172,700	4.7	5,741,700	5.1	6,711,500	4.9	7,582,100	4.6	37.6	16.9	13.0	81.7
Retail Trade	52-59	13,698,800	15.6	17,883,900	16.0	22,920,500	16.8	27,387,300	16.6	30.6	28.2	19.5	99.9
Finance, Insurance, and Real Estate	60-67	6,125,400	7.0	8,756,000	7.8	10,712,600	7.9	13,206,800	8.0	42.9	22.3	23.3	115.6
Services	70-89	17,029,800	19.3	24,999,600	22.4	38,709,600	28.3	53,440,800	32.3	46.8	54.8	38.1	213.8
Government and Government Enterprises[a]	Not Applicable	12,841,000	14.6	16,257,000	14.5	18,478,000	13.5	20,666,000	12.5	26.6	13.7	11.8	60.9
Other[b]	07-09; 10-14; 99	1,269,200	4	2,186,600	2.0	2,497,100	1.8	2,923,300	1.8	72.3	14.2	17.1	130.3
Total	- -	88,049,600	100.0	111,730,200	100.0	136,708,900	100.0	165,209,800	100.0	26.9	22.4	20.8	87.6

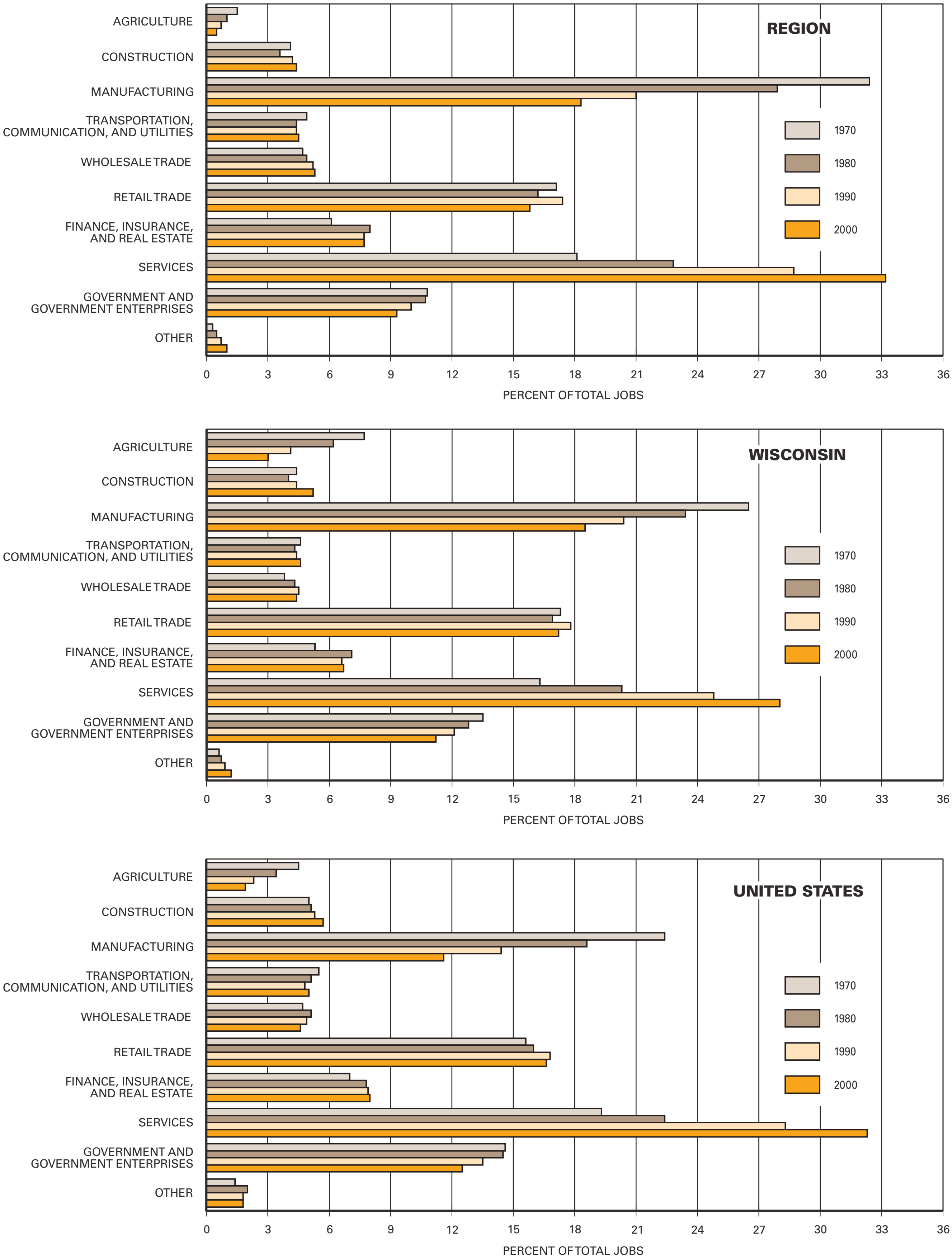
[a]*Includes all nonmilitary government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 9

PERCENT DISTRIBUTION OF EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1970, 1980, 1990, AND 2000



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Table 10

DOMINANT AND SUBDOMINANT INDUSTRIES IN THE REGION IN 2000 AND CHANGES IN THOSE INDUSTRIES SINCE 1970

		1970		1980		1990		2000		1970-2000 Change		Percentage Point Change in Regional Employment 1970-2000
Industry	SIC Code	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent	
Dominant Industries: 2000												
Construction	15-17	32,400	4.1	33,900	3.6	45,100	4.2	53,800	4.4	21,400	66.0	0.3
Transportation, Communication, and Utilities	40-42; 44-49	38,500	4.9	42,200	4.4	46,300	4.4	54,800	4.5	16,300	42.3	-0.4
Wholesale Trade	50-51	37,200	4.7	46,200	4.9	55,300	5.2	64,400	5.3	27,200	73.1	0.6
Retail Trade	52-59	133,900	17.1	153,900	16.2	185,400	17.4	193,700	15.8	59,800	44.7	-1.3
Finance, Insurance, and Real Estate	60-67	47,600	6.1	75,600	8.0	81,800	7.7	93,700	7.7	46,100	96.8	1.6
Business Services	73	17,100	2.2	36,800	3.9	72,000	6.8	102,800	8.4	85,700	501.2	6.2
Health Services	80	38,300	4.9	63,500	6.7	79,900	7.5	97,700	8.0	59,400	155.1	3.1
Government and, Government Enterprises[a]	Not Applicable	84,400	10.8	101,100	10.7	106,200	10.0	114,400	9.3	30,000	35.5	-1.5
Subtotal Dominant Industries		429,400	54.8	553,200	58.4	672,000	63.2	775,300	63.4	345,900	80.6	8.6
Subdominant Industries: 2000												
Printing and Publishing	27	15,400	2.0	16,700	1.8	23,500	2.2	24,500	2.0	9,100	59.1	0.0
Fabricated Metal Products	34	24,400	3.1	31,900	3.4	26,700	2.5	25,600	2.1	1,200	4.9	-1.0
Industrial Machinery and Equipment	35	70,000	8.9	74,900	7.8	55,500	5.2	48,000	3.9	-22,000	-31.4	-5.0
Electronic and Other Electrical Equipment	36	35,900	4.6	35,500	3.7	23,400	2.2	27,000	2.2	-8,900	-24.8	-2.4
Social Services	83	6,200	0.8	12,000	1.3	18,200	1.7	34,300	2.8	28,100	453.2	2.0
Subtotal Subdominant Industries		151,900	19.4	171,000	18.0	147,300	13.8	159,400	13.0	7,500	4.9	-6.4
Other Industries: 2000												
All Other Manufacturing	20-26; 28-33; 37-39	108,700	13.8	105,200	11.1	94,400	8.9	99,200	8.1	-9,500	-8.7	-5.7
All Other Services	70-72; 75-79; 81-82; 84-89	80,200	10.2	104,400	11.0	134,600	12.7	171,200	14.0	91,000	113.5	3.8
Agriculture	01-02	12,000	1.5	10,000	1.0	7,200	0.7	6,000	0.5	-6,000	-50.0	-1.0
Other[b]	07-09; 10-14; 99	2,700	0.3	4,400	0.5	7,100	0.7	11,700	1.0	9,000	333.3	0.7
Subtotal Other Employment	- -	203,600	25.8	224,000	23.6	243,300	23.0	288,100	23.6	84,500	41.5	-2.2
Total Regional Employment	- -	784,900	100.0	948,200	100.0	1,062,600	100.0	1,222,800	100.0	437,900	55.8	- -

[a]*Includes all nonmilitary government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of the Census (County Business Patterns), Wisconsin Department of Workforce Development, and SEWRPC.

trade (15.8 percent); finance, insurance, and real estate (7.7 percent); business services (8.4 percent); health services (8.0 percent); and government (9.3 percent). For the first time since the monitoring of dominant and subdominant industries began in 1960, no manufacturing industry group was accorded dominant status.

As further indicated in Table 10, five industries were accorded subdominant status in 2000. Together, these industries accounted for 13.0 percent of total regional employment. Four of the five subdominant industries are in the manufacturing sector—including printing and publishing (2.0 percent of total employment); fabricated metal products (2.1 percent); industrial machinery and equipment (3.9 percent); and electronic and other electrical equipment (2.2 percent). Social services, which accounted for 2.8 percent of total regional employment in 2000, comprised the other subdominant industry.

Also evident in Table 10 are changes in the status of certain dominant and subdominant industries over the past three decades. For example, the manufacture of industrial machinery and equipment was a dominant industry

Table 11

CIVILIAN LABOR FORCE AND AVAILABLE JOBS IN THE REGION: 1970-2000

Year	Total Civilian Labor Force	Employed Civilian Labor Force	Total Available Jobs
1970	736,078	708,800	784,852
1980	876,152	826,456	948,228
1990	934,153	882,716	1,062,622
2000	1,008,394	954,443	1,222,815

Source: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis, and SEWRPC.

in 1970, 1980, and 1990, but declined to subdominant status in 2000; while social services achieved subdominant status for the first time in 2000. Certain industries—particularly, the manufacturing industries of transportation equipment, food and beverage, and primary metals—have declined in relative share of total employment and are no longer accorded the status as subdominant industries, as they were in 1970 and 1980; these industries do not appear on Table 10.[4]

Relationship between Labor Force and Employment Levels

The number of jobs indicated by the Bureau of Economic Analysis and the civilian labor force indicated by the U.S. Bureau of the Census are presented together for the Region for census years from 1970 to 2000 in Table 11. As indicated, the number of jobs reported by the BEA exceeds the employed civilian labor force reported by the Census Bureau for each year. In general, this may be attributed to individuals holding more than one job. As further indicated in Table 11, the amount by which the number of jobs exceeds the employed labor force has increased for each reporting year since 1970. This would suggest an increase in the rate of multiple jobholding during this time.

Survey information regarding the rate of multiple jobholding itself is somewhat limited. The only known survey information regarding multiple jobholding is from the Current Population Survey, a joint data collection effort of the U.S. Bureau of the Census and the U.S. Bureau of Labor Statistics. Multiple jobholders are identified in the Current Population Survey based upon responses to a question regarding whether the respondent had more than one job or business during the previous week. In reporting its results, the Census Bureau excludes certain situations—such as persons with two self-employed jobs—from the count of multiple jobholders. The Current Population Survey indicates that multiple jobholders constituted about 8 percent of all employed persons in Wisconsin in 2000. An unknown portion of these multiple jobholders would have held more than two jobs.

The multiple jobholding rate indicated by the Current Population Survey is lower than the rate suggested by the data regarding total jobs and the labor force in the Region presented in Table 11. It is believed that part of this discrepancy is due to differences in methodology among the various statistical reporting agencies. For example, the question regarding multiple jobholding in the Current Population Survey is oriented to the week prior to the survey date, while the BEA tabulation of self-employed jobs reflects individuals involved in proprietorships and partnerships active at any time during a reporting year.

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[4]The SIC system was revised over the years to reflect changes in the structure of the nation's economy. Such changes are reflected in the historic time series employment-by-industry data presented in Table 10 and throughout this report. The effect of these changes is not entirely clear nor readily quantified. It is believed that the most significant changes in this respect include the following: 1) the creation in 1972 of the category of "social services" largely from certain industries previously included in the "other services" category in Table 10; 2) a shift in 1987 of certain industries—including "management and public relations" and "research and development laboratories"—from "business services" to a newly created SIC category, "engineering, accounting, research, management, and related services," which is included in "other services" on Table 10; and 3) a shift in 1987 of certain industries included in the "electronic and other electrical equipment" category to "industrial machinery and equipment" and to "measuring, analyzing, and controlling instruments," the latter being included in "other manufacturing" in Table 10.

PERSONAL INCOME

Another indicator of the general trend of the economy of an area is personal income. The Federal census provides a consistent historic data series on personal income levels. Income data reported in each decennial census are for the year prior to the census. Throughout this section, historic income levels have been converted to constant dollars to provide a more meaningful comparison of change in income over time.[5]

As indicated in Table 12 and Figure 10, per capita income in the Region stood at $22,800 in 1999. Regional per capita income, as measured in constant dollars, increased by 16 percent during the 1990s, rebounding from a modest 4 percent increase observed during the 1980s. Historically, the per capita income level for the Region has been higher than for the State and the Nation, with the relative differences in this respect generally decreasing in recent decades however. In 1999, the regional per capita income exceeded the per capita income of the State and Nation by 7 percent and 6 percent, respectively.

As indicated in Table 12 and Figure 11, median family income in the Region stood at $57,400 in 1999. The median family income, as measured in constant dollars, increased by 10 percent during the 1990s, following a 4 percent decrease during the previous decade. Median family income for the Region as reported in the decennial censuses has consistently exceeded the State and Nation. In 1999, the Region median family income exceeded that of the State and Nation by 9 percent and 15 percent, respectively.

Table 13 indicates significant differences in current per capita income levels among the seven counties in the Region. The highest per capita income levels were in Ozaukee County ($31,900) and Waukesha County ($29,200). Among the other five counties, per capita income ranged from $19,900 in Milwaukee County to $24,300 in Washington County. As further indicated in Table 13, income patterns within the Region have changed significantly since 1959, when Milwaukee County had the highest per capita income. Between 1959 and 1999, the increase in constant dollar per capita income ranged from 53 percent in Milwaukee County to 164 percent in Ozaukee County. Per capita income also more than doubled in Waukesha County (136 percent increase), Washington County (129 percent increase), and Walworth County (110 percent increase) during this time. As indicated in Table 14, a similar pattern of variation is evident in current (1999) county median family income levels and changes in county median family income over the past four decades.

SUMMARY

This chapter has presented current and historical information on selected measures of economic activity in the Region, including the Region's labor force, the number and type of jobs in the Region, and personal income levels in the Region. A summary of key information presented in this chapter follows.

Labor Force Size and Characteristics

- The civilian labor force of an area consists of all of its residents who are 16 years of age or over and who are either employed at one or more nonmilitary jobs or are temporarily unemployed. The civilian labor force of the Region was 1,008,400 persons in 2000, compared to 934,200 persons in 1990. The increase of 74,200 persons in the regional civilian labor force during the 1990s compares to increases of 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 in both the 1960s and 1950s.

- In relative terms, the Region's labor force grew at a somewhat slower rate than both the State and the national labor force during the 1990s. As a result, the Region's share of the State labor force decreased from 37 to 35 percent, with the Region's share of the national labor force also declining slightly.

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[5] *Income figures have been converted to constant 1999 dollars using the U.S. Bureau of Labor Statistics Consumer Price Index (CPI) for all urban consumers for the Milwaukee-Racine area.*

Table 12

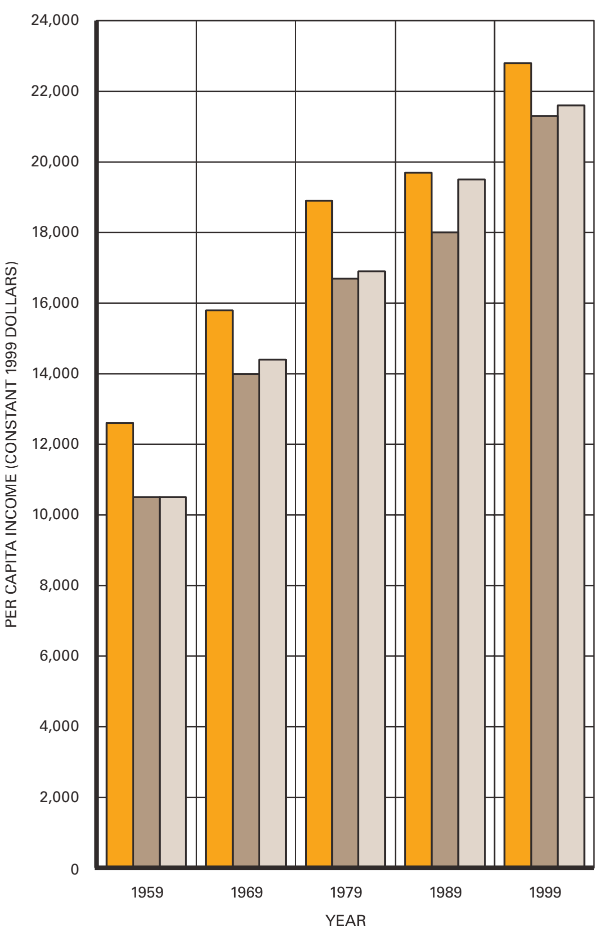
PERSONAL INCOME LEVELS IN THE UNITED STATES, WISCONSIN, AND THE REGION: 1959-1999

Geographic Area	1959	1969	1979	1989	1999	Percent Change 1959-1969	1969-1979	1979-1989	1989-1999	1959-1999
United States										
Per Capita Income										
Reported Dollars	$1,800	$3,100	$7,300	$14,400	$21,600	72.2	135.5	97.3	50.0	1,100.0
Constant 1999 Dollars	10,500	14,400	16,900	19,500	21,600	37.1	17.4	15.4	10.8	105.7
Median Family Income										
Reported Dollars	5,700	9,600	19,900	35,200	50,000	68.4	107.3	76.9	42.0	777.2
Constant 1999 Dollars	32,200	44,200	46,100	47,700	50,000	37.3	4.3	3.5	4.8	55.3
Wisconsin										
Per Capita Income										
Reported Dollars	$1,800	$3,000	$7,200	$13,300	$21,300	66.7	140.0	84.7	60.2	1,083.3
Constant 1999 Dollars	10,500	14,000	16,700	18,000	21,300	33.3	19.3	7.8	18.3	102.9
Median Family Income										
Reported Dollars	5,900	10,100	20,900	35,100	52,900	71.2	106.9	67.9	50.7	796.6
Constant 1999 Dollars	33,700	46,400	48,400	47,500	52,900	37.7	4.3	-1.9	11.4	57.0
Region										
Per Capita Income										
Reported Dollars	$2,200	$3,400	$8,200	$14,600	$22,800	54.5	141.2	78.0	56.2	936.4
Constant 1999 Dollars	12,600	15,800	18,900	19,700	22,800	25.4	19.6	4.2	15.7	81.0
Median Family Income										
Reported Dollars	6,900	11,200	23,500	38,500	57,400	62.3	109.8	63.8	49.1	731.9
Constant 1999 Dollars	39,300	51,600	54,400	52,200	57,400	31.3	5.4	-4.0	10.0	46.1

Source: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and SEWRPC.

Figure 10

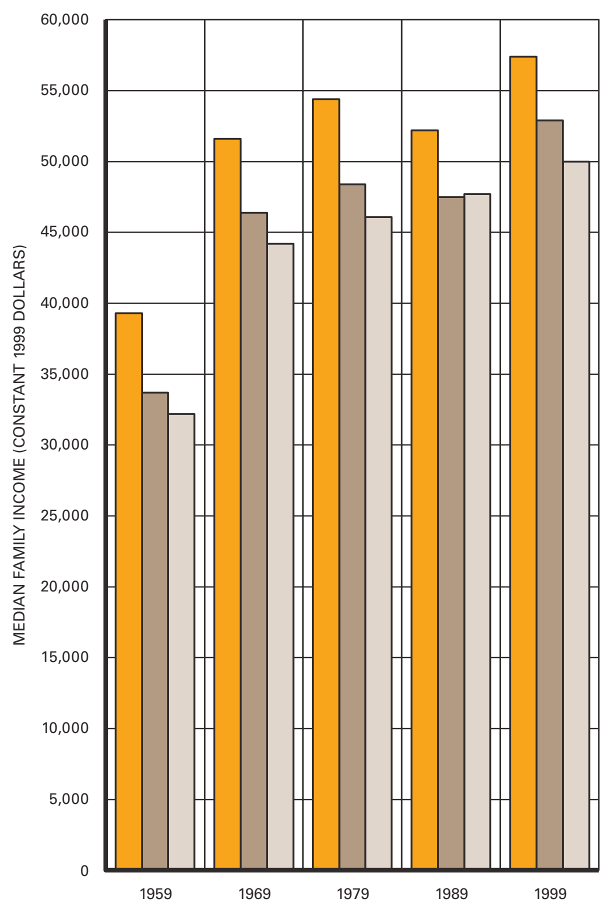
PER CAPITA INCOME IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1959-1999



Source: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and SEWRPC.

Figure 11

MEDIAN FAMILY INCOME IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1959-1999



Source: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and SEWRPC.

Table 13

PER CAPITA PERSONAL INCOME LEVELS IN THE REGION BY COUNTY: 1959-1999

Geographic Area	1959	1969	1979	1989	1999	Percent Change 1959-1969	1969-1979	1979-1989	1989-1999	1959-1999
Kenosha County										
Reported Dollars	$2,200	$3,100	$7,800	$13,300	$21,200	40.9	151.6	70.5	59.4	863.6
Constant 1999 Dollars	12,400	14,200	17,900	18,000	21,200	14.5	26.1	0.6	17.8	71.0
Milwaukee County										
Reported Dollars	$2,300	$3,500	$8,000	$13,400	$19,900	52.2	128.6	67.5	48.5	765.2
Constant 1999 Dollars	13,000	16,100	18,400	18,100	19,900	23.8	14.3	-1.6	9.9	53.1
Ozaukee County										
Reported Dollars	$2,100	$3,700	$9,600	$19,200	$31,900	76.2	159.5	100.0	66.1	1,419.0
Constant 1999 Dollars	12,100	17,100	22,300	26,100	31,900	41.3	30.4	17.0	22.2	163.6
Racine County										
Reported Dollars	$2,100	$3,300	$8,000	$14,000	$21,800	57.1	142.4	75.0	55.7	938.1
Constant 1999 Dollars	11,900	15,000	18,400	19,000	21,800	26.1	22.7	3.3	14.7	83.2
Walworth County										
Reported Dollars	$1,800	$2,900	$7,100	$13,500	$21,200	61.1	144.8	90.1	57.0	1,077.8
Constant 1999 Dollars	10,100	13,500	16,500	18,300	21,200	33.7	22.2	10.9	15.8	109.9
Washington County										
Reported Dollars	$1,900	$3,100	$7,600	$14,700	$24,300	63.2	145.2	93.4	65.3	1,178.9
Constant 1999 Dollars	10,600	14,500	17,600	20,000	24,300	36.8	21.4	13.6	21.5	129.2
Waukesha County										
Reported Dollars	$2,200	$3,600	$9,200	$18,100	$29,200	63.6	155.6	96.7	61.3	1,227.3
Constant 1999 Dollars	12,400	16,800	21,300	24,600	29,200	35.5	26.8	15.5	18.7	135.5
Southeastern Wisconsin Region										
Reported Dollars	$2,200	$3,400	$8,200	$14,600	$22,800	54.5	141.2	78.0	56.2	936.4
Constant 1999 Dollars	12,600	15,800	18,900	19,700	22,800	25.4	19.6	4.2	15.7	81.0

Source: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and SEWRPC.

Table 14

MEDIAN FAMILY INCOME LEVELS IN THE REGION BY COUNTY: 1959-1999

Geographic Area	1959	1969	1979	1989	1999	Percent Change 1959-1969	1969-1979	1979-1989	1989-1999	1959-1999
Kenosha County										
Reported Dollars	$6,900	$10,400	$23,200	$35,700	$56,500	50.7	123.1	53.9	58.3	718.8
Constant 1999 Dollars	39,300	47,900	53,600	48,300	56,500	21.9	11.9	-9.9	17.0	43.8
Milwaukee County										
Reported Dollars	$7,000	$11,000	$22,000	$34,000	$47,200	57.1	100.0	54.5	38.8	574.3
Constant 1999 Dollars	39,600	50,600	50,800	46,100	47,200	27.8	0.4	-9.3	2.4	19.2
Ozaukee County										
Reported Dollars	$7,200	$12,600	$27,800	$47,600	$72,500	75.0	120.6	71.2	52.3	906.9
Constant 1999 Dollars	40,700	58,200	64,200	64,500	72,500	43.0	10.3	0.5	12.4	78.1
Racine County										
Reported Dollars	$6,700	$11,000	$23,800	$38,000	$56,300	64.2	116.4	59.7	48.2	740.3
Constant 1999 Dollars	38,200	50,600	55,100	51,500	56,300	32.5	8.9	-6.5	9.3	47.4
Walworth County										
Reported Dollars	$5,700	$9,700	$20,800	$36,100	$55,300	70.2	114.4	73.6	53.2	870.2
Constant 1999 Dollars	32,400	44,700	48,100	49,000	55,300	38.0	7.6	1.9	12.9	70.7
Washington County										
Reported Dollars	$6,200	$11,300	$24,000	$42,200	$63,500	82.3	112.4	75.8	50.5	924.2
Constant 1999 Dollars	35,300	52,000	55,400	57,200	63,500	47.3	6.5	3.2	11.0	79.9
Waukesha County										
Reported Dollars	$7,200	$12,800	$27,600	$49,100	$71,800	77.8	115.6	77.9	46.2	897.2
Constant 1999 Dollars	40,900	59,000	63,900	66,500	71,800	44.3	8.3	4.1	8.0	75.6
Southeastern Wisconsin Region										
Reported Dollars	$6,900	$11,200	$23,500	$38,500	$57,400	62.3	109.8	63.8	49.1	731.9
Constant 1999 Dollars	39,300	51,600	54,400	52,200	57,400	31.3	5.4	-4.0	10.0	46.1

Source: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and SEWRPC.

- The gender makeup of the civilian labor force changed slightly during the 1990s, with the female component increasing from just under 47 percent of the labor force in 1990 to about 48 percent in 2000, and the male component experiencing a corresponding decrease. During the four decades prior to 1990, the gender makeup of the labor force changed dramatically. The female component increased from 29 percent in 1950 to 47 percent in 1990, while the male component decreased from 71 percent to 53 percent.

- For the Region as a whole, the civilian labor force participation rate (the civilian labor force as a percent of the total labor force-age population) stood at 68.2 percent in 2000, a slight increase from 67.6 percent in 1990. The four decades prior to 1990 saw significant increases in the civilian labor force participation rate, from 56.6 percent in 1950 to the 1990 rate of 67.6 percent. The long-term trend in the civilian labor force participation rate is the net effect of increased relative participation by females and decreased relative participation by males.

- The past decade saw further change in the relative distribution of the labor force among the counties within the Region, continuing long-term trends in this respect. Milwaukee County's share of the regional labor force decreased by about five percentage points during the 1990s. Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties increased at least slightly in their relative share, while Racine County's share of the regional labor force did not change. Over the past fifty years, the most notable changes in the labor force distribution have been the increase in Waukesha County's share, from 6 percent to 20 percent of the total regional labor force, and the decrease in Milwaukee County's share, from 72 percent to 47 percent.

Number and Type of Jobs

- Total employment in the Region stood at 1,222,800 jobs in 2000, compared to 1,062,600 jobs in 1990. The increase of 160,200 jobs during the 1990s compares to 114,400 during the 1980s, 163,300 during the 1970s, 111,900 during the 1960s, and 99,500 during the 1950s.

- In relative terms, employment in the Region grew at a somewhat slower rate than both the State and the Nation during the 1990s. As a result, the Region's share of total State employment decreased from about 38 percent to about 36 percent, with the Region's share of national employment also showing a slight decrease.

- Historically, employment levels, both nationally and within the Region, tend to fluctuate in the short-term, rising and falling in accordance with business cycles. The long period of nearly uninterrupted job growth between 1983 and 2000 is unusual in this respect. Nationally and within the Region, total employment increased each year during that time, with the exception of a slight decrease in 1991. This extended period of employment growth ended after 2000. Total employment in the Region has decreased each year since 2000. Estimated total employment in the Region stood at 1,179,000 jobs in 2003, about 4 percent below the 2000 level.

- Between 1990 and 2000, Milwaukee and Racine Counties decreased in their share of total regional employment while the share of each of the five other counties increased at least slightly. Over the past five decades, Milwaukee County has experienced a substantial decrease in its share of regional employment; Waukesha County has experienced a substantial increase; and Ozaukee, Walworth, and Washington Counties have experienced gradual increases. In Kenosha and Racine Counties, the share of total regional employment in 2000 was about the same as in 1950, with some fluctuations occurring over the intervening decades.

- The 1990s saw a continuation of a shift in the regional economy from a manufacturing to a service orientation, documented in previous Commission economic studies. Manufacturing employment in the Region was virtually unchanged during the 1990s, following a 15 percent decrease during the 1980s, and a modest 4 percent increase during the 1970s. Conversely, service-related employment increased substantially during each of the past three decades—by 33 percent during the 1990s, 41 percent during the 1980s, and 53 percent during 1970s. Due to these differential growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 32 percent in 1970 to 18 percent in 2000, while service-related employment increased from 18 percent in 1970 to 33 percent in 2000. In comparison to the manufacturing and services industry groups, other major industry groups—such as wholesale trade, retail trade, government, and finance, insurance, and real estate—have been relatively stable in terms of their share of total employment in the Region over the last three decades.

Personal Income

- Per capita income in the Region stood at $22,800 in 1999. Regional per capita income, as measured in constant dollars, increased by 16 percent during the 1990s, rebounding from a modest 4 percent increase observed during the 1980s. Historically, the per capita income level for the Region has been higher than for the State and the Nation, with the relative differences in this respect generally decreasing in recent decades.

- Median family income in the Region stood at $57,400 in 1999. The median family income, as measured in constant dollars, increased by 10 percent during the 1990s, following a 4 percent decrease during the previous decade. Median family income for the Region as reported in the decennial censuses has consistently exceeded the State and Nation.

Chapter III

EMPLOYMENT PROJECTIONS

INTRODUCTION

The primary purpose of this study is to prepare new projections of employment in the Region as part of the basis for updating and extending the regional land use and transportation plans and other elements of the comprehensive plan for the physical development of the Region. This chapter describes the methodology used in the preparation of employment projections to the year 2035 and presents the resulting projections. In addition, this chapter compares the new employment projections with similar projections prepared by other agencies and projections previously prepared by the Commission. This chapter concludes with a discussion of the relationship between the new employment projections and the concurrently-prepared population projections, as documented in a companion technical report (SEWRPC Technical Report No. 11, 4th Edition, *The Population of Southeastern Wisconsin*).

NATURE OF THE PROJECTIONS

Under the current economic study, as in prior studies, the Commission has projected a range of future employment levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty that surrounds any effort to predict future socioeconomic conditions. The intermediate projection is considered the most likely to be achieved for the Region overall, and, in this sense, constitutes the Commission's "forecast," to be used as a basis for the preparation of the regional land use and transportation plans.[1] The high and low projections are intended to provide an indication of the range of employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

PROJECTION TARGET DATE

The target year for the Commission's projections is determined largely by the requirements of the planning work which utilizes those projections—the regional land use and transportation plans and other elements of the comprehensive plan for the Region. The land use pattern, the supporting transportation system, and other infrastructure must be planned in consideration of anticipated demand at some future time—with estimates of demand dependent on anticipated future employment, population, and household levels.

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[1]*This usage is consistent with the generally accepted distinction between the terms "projection" and "forecast." A projection is an indication of the future value of a variable, such as population or employment levels, under a set of assumptions which affect that variable. Typically, more than one projection is developed, each with its own set of assumptions. A forecast, on the other hand, involves an element of judgment, it being the projection deemed most likely to occur.*

In planning for physical facility systems, this future time, or "design year," is usually established by the expected life of the facilities to be constructed in implementation of the plan. Depending upon the particular facilities involved, this design year may be from 20 to more than 50 years in the future. It can be argued that the design year for land use development should be extended farther into the future than that for physical facilities because of the basic irreversibility of many land development decisions. However, practical considerations—including reliability concerns—dictate that the land use plan design year be scaled to the facility design year requirement.

Based upon the foregoing considerations, it was determined that new projections of employment for the Region should be prepared for the period 2000 to 2035. Such projections would support the preparation of a design year 2035 regional land use plan, which—with appropriate staging over the course of the planning period—would be consistent with the State of Wisconsin comprehensive planning guidelines. Such projections would also support the preparation of a new regional transportation system plan, which would be consistent with plan timeframe requirements established in Federal transportation planning programs.

GENERAL ECONOMIC OUTLOOK

The 1990s were marked by a recession in the early years followed by robust economic growth, setting a record for uninterrupted economic expansion in the post World War II period. That expansion came to a rather abrupt end in 2001 with the terrorist attacks of 9/11, the collapse of the "dotcom" market, and a general contraction in the economy. A downturn in manufacturing preceded the general economic decline and, from an employment perspective, is still very slow to recover.

The recession of 2001 was fairly dramatic, especially for the manufacturing sector.[2] Wisconsin and the Region lost 66,000 and 44,000 jobs, respectively, from 2000 to 2003. The manufacturing sector was particularly hard hit. The State lost over 90,000 manufacturing jobs from 2000 to 2003, while the Region lost 38,400 manufacturing jobs. Within the Region, the retail trade industry was also adversely affected by the recession and subsequent slow recovery, losing 5,600 jobs from 2000 to 2003. Conversely, the service sector in the Region gained 13,600 jobs during the same period.

Throughout the recent business cycles, the structure of the regional, State, and national economies continued to change. There has been a general sectoral shift in the regional, State, and national economies from a goods producing economy to services providing economy. Manufacturing employment has declined as a percentage of total employment while the service sector employment share has expanded. Wisconsin is one of the leading manufacturing states in the Nation, but its share of manufacturing employment is expected to decrease over time. This trend is also expected to continue in the Region.

In addition to sectoral changes, significant changes in labor force trends may be expected. Especially toward the middle of the projection period, growth in the labor force of the Region may be expected to be diminished, as much of the large baby-boom generation reaches retirement age. Absent a large-scale net migration of workers to the Region, which is considered unlikely, the Region may be expected to experience a leveling off in the labor force midway through the projection period.[3] These labor force trends may also be expected, in varying degrees, at the State and national levels, as a result of the aging of the population.

The sectoral shifts in employment noted above and described in greater detail in Chapter II are not unique to Southeastern Wisconsin; they are State and national phenomena as well. Moreover, as noted above, labor force

[2]*According to the Business Cycle Dating Committee of the National Bureau of Economic Research, the recent recession extended from March to November of 2001, and accordingly, that recession is referred to in this report as the recession of 2001. It should be noted that within the Region, average annual employment declined from 2000 to 2001, and continued to decline in 2002 and 2003.*

[3]*Estimates of the civilian labor force in the Region over the course of the projection period are presented later in this chapter.*

trends may be expected to be affected by the aging of the population not only in the Region, but also in the State and Nation. In light of this, there appears to be no reason to conclude that the regional economy is likely to significantly increase or decrease in strength relative to the State or Nation over the course of the projection period. While there are some indications that the Region's economy has diminished marginally relative to the State and Nation over the past several decades—for example, a gradual decline in the Region's share of total State and national employment, as reported in Chapter II—a material change in the relative competitiveness of the regional economy has not occurred, and is not expected.

As noted earlier, under the current study, the Commission has projected a range of future employment levels—high, intermediate, and low—for the Region. The intermediate employment projection is consistent with the general economic outlook described above; it envisions that the regional economy would generally maintain its competitive position, but would not significantly increase or decrease in strength relative to the rest of the State and Nation. The high projection, on the other hand, would be expected to be achieved only if the regional economy were to become significantly more competitive relative to the State and Nation, resulting in the creation of a significantly greater number of employment opportunities, and inducing a substantial net in-migration of workers to fill those jobs. Conversely, the low projection would be expected to be achieved only with a stagnating regional economy that becomes substantially less competitive in relation to the rest of the State and Nation in the coming decades.

Literature specifically addressing the long-range economic outlook of the seven-county Southeastern Wisconsin Region is very limited. While more literature is available regarding the general economic outlook of Wisconsin and the Midwest, much of that is limited to consideration of the next five to 10 years. Among the available literature are the various publications of the Federal Reserve Bank of Chicago, including the "Chicago Fed Letter" newsletter series and a report entitled *Assessing the Midwest Economy—Looking Back for the Future*, dated 1997; economic outlooks for Wisconsin prepared by the Wisconsin Department of Revenue, including *Wisconsin Long-Term Economic Forecast*, dated 2001, and "Wisconsin Economic Outlook," a quarterly report series; a report prepared by the Wisconsin Department of Workforce Development entitled *Wisconsin Projections 2000-2010*, dated 2003; and a report published by the University of Wisconsin-Madison entitled *Wisconsin's Economy in the Year 2010*, dated 2000. None of the available literature suggest that the economy of Wisconsin or Midwest will become more competitive relative to the rest of the Nation in the years ahead. One of the most frequently cited concerns about future economic growth in Wisconsin and the Midwest is the ability to maintain the necessary labor force.

REGIONAL EMPLOYMENT PROJECTIONS TO 2035

In the current economic study, as in prior studies, the Commission utilized a disaggregate approach to the preparation of employment projections. This approach involves the explicit consideration of employment in selected industry groups and the preparation of projections for those groups. The industry categories for which employment projections were prepared include the dominant and subdominant industries identified in Chapter II of this report and certain residual industry groups. As indicated in Chapter II, dominant industries are those which account for at least 4.0 percent of total regional employment; subdominant industries are those which account for 2.0 percent to 3.9 percent.[4] The specific industry groups for which employment projections were prepared are listed in Table 15.

The projections for each industry were developed based upon a consideration of past industry trends, available indicators of future trends nationally and in the State and Region, and relative industry and sector strength in the Region as compared to State and national industries and sectors. Projections by State agencies, such as the Department of Workforce Development and the Department of Revenue, and other recently published projections,

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[4]*With the exception of government employment, the industry groupings presented in this report are based upon the Standard Industrial Classification (SIC) system. As presented in this report, government employment includes all employees who work for government agencies and enterprises, regardless of the SIC code of such entities.*

Table 15

INDUSTRY CATEGORIES FOR YEAR 2035 REGIONAL EMPLOYMENT PROJECTIONS

Industry	Status	SIC Code
Manufacturing:		
Printing and Publishing	Subdominant	27
Fabricated Metal Products	Subdominant	34
Industrial Machinery and Equipment	Subdominant	35
Electronic and Other Electrical Equipment	Subdominant	36
All Other Manufacturing	Not Applicable	20-26; 28-33; 37-39
Construction	Dominant	15-17
Retail Trade	Dominant	52-59
Wholesale Trade	Dominant	50-51
Transportation, Communication, and Utilities	Dominant	40-42; 44-49
Services:		
Business Services	Dominant	73
Health Services	Dominant	80
Social Services	Subdominant	83
All Other Services	Not Applicable	70-72; 75-79; 81-82; 84-89
Finance, Insurance, and Real Estate	Dominant	60-67
Government and Government Enterprises[a]	Dominant	Not Applicable
Agriculture	Not Applicable	01-02
Other[b]	Not Applicable	07-09; 10-14; 99

[a]*Includes all nonmilitary government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U.S. Bureau of Economic Analysis and SEWRPC

such as those in the report *Wisconsin's Economy in the Year 2010*,[5] were consulted. The projected employment levels take into account the employment declines of the 2001 recession and use 2003 data estimates as the last historical data points.

The preparation of the employment projections for the Region was carried out in tandem and coordinated with the preparation of population projections for the Region. It was considered critical that the projected employment trends be consistent with the labor force trends which could be expected in light of projected changes in the regional population. As noted above, a leveling off in the regional labor force may be expected, particularly toward the middle of the projection period, as a result of the aging of the population. This leveling off in the labor force may be expected to moderate the number of jobs able to be accommodated in the Region. This expectation was an important consideration in the preparation of the employment projections under this study.

Projected Total Employment

As indicated in Table 16 and Figure 12, under the intermediate projection, total employment in the Region would recover from the reduced levels of the early 2000s, experiencing fairly strong growth until about the middle of the projection period. At that time, employment growth is projected to moderate, coinciding with the anticipated leveling off in the labor force, particularly as large numbers of baby-boomers retire. Relatively modest employment growth is envisioned over the last 10 years of the projection period. The intermediate projection envisions total employment of 1,368,300 jobs in the Region in 2035, an increase of 145,500 jobs, or 12 percent, over the 2000 level of 1,222,800 jobs.

As further indicated in Table 16 and Figure 12, the high projection indicates that employment in the Region could be as high as 1,509,600 jobs in 2035, an increase of about 286,800 jobs, or 24 percent, over the 2000 level. The low projection indicates that employment in the Region could be as low as 1,267,500 jobs in 2035, about 44,700 jobs, or 4 percent, over the 2000 level.

The sectoral changes that have occurred in the Region in recent decades are projected to continue. Under the intermediate projection, total manufacturing employment in the Region is projected at 160,400 jobs in 2035, compared to 224,300 jobs in 2000, never recovering from job losses of the recent recession. Conversely, service sector employment would experience substantial growth, from 406,000 jobs in 2000 to 590,000 jobs in 2035. By 2035, manufacturing employment would comprise 12 percent of total employment in the Region, compared to 18 percent in 2000. Service sector employment would comprise 43 percent of all jobs in the Region in 2035, compared to 33 percent in 2000. Similar sectoral changes are expected under the high and low projections.

[5]*D.K. Winters, W.A. Strang, and J.P. Klus,* Wisconsin's Economy in the Year 2010*, University of Wisconsin-Madison, 2000.*

Table 16

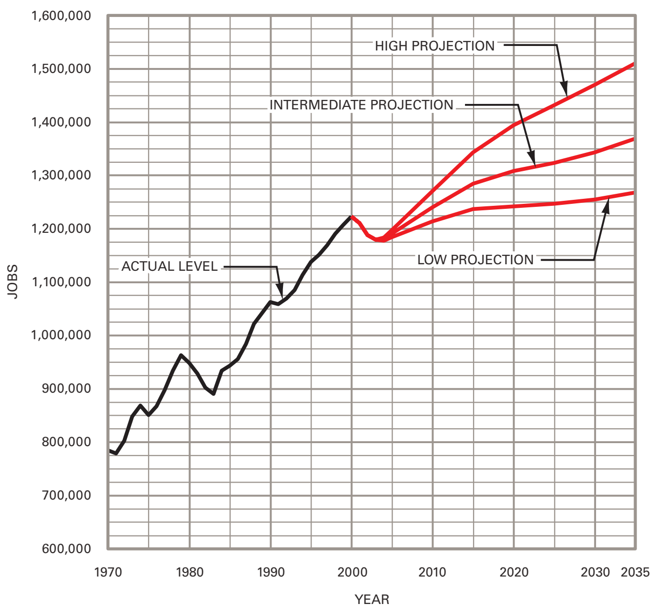
ACTUAL AND PROJECTED TOTAL EMPLOYMENT IN THE REGION: 2000-2035

Year	High Projection			Intermediate Projection			Low Projection		
	Jobs	Change from Preceding Year		Jobs	Change from Preceding Year		Jobs	Change from Preceding Year	
		Absolute	Percent		Absolute	Percent		Absolute	Percent
Actual Employment:									
2000	1,222,800	- -	- -	1,222,800	- -	- -	1,222,800	- -	- -
Projected Employment:									
2005	1,197,300	-25,500	-2.1	1,190,600	-32,200	-2.6	1,184,000	-38,800	-3.2
2010	1,270,600	73,300	6.1	1,240,100	49,500	4.2	1,213,300	29,300	2.5
2015	1,343,200	72,600	5.7	1,284,400	44,300	3.6	1,236,600	23,300	1.9
2020	1,393,900	50,700	3.8	1,308,200	23,800	1.9	1,244,200	7,600	0.6
2025	1,431,200	37,300	2.7	1,323,100	14,900	1.1	1,246,700	2,500	0.2
2030	1,469,800	38,600	2.7	1,343,100	20,000	1.5	1,254,500	7,800	0.6
2035	1,509,600	39,800	2.7	1,368,300	25,200	1.9	1,267,500	13,000	1.0
Change:									
2000-2035	- -	286,800	23.5	- -	145,500	11.9	- -	44,700	3.7

Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 12

TOTAL EMPLOYMENT PROJECTIONS FOR THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Projections of employment by industry for the Region through the year 2035 are presented in Tables 17 and 18. A description of projected employment trends on an industry-by-industry basis follows.

Projected Employment by Industry

Manufacturing Industries—Overview

Following the deep recession of the early 1980s, the regional manufacturing sector demonstrated a relatively stable level of employment through much of the 1980s and 1990s, but recently lost numerous jobs. The outlook for manufacturing in the Region does not look promising, except for the printing and publishing sector. Labor intensive sectors may be expected to continue to lose workers due to productivity gains and to lower-cost foreign competition. Labor supply may be a problem for the manufacturing sector toward the middle of the projection period.

A key factor expected to impact the manufacturing sector in the Region, and for that matter the State and the Nation, is the movement of jobs overseas. Overseas labor, particularly in Asia, is substantially cheaper than the American counterpart. Low overseas labor costs more than offset the transportation costs of raw materials and finished goods to market. Some of this dynamic will change as the overseas demand for personnel and material raises prices, decreasing the margins for goods produced overseas. However, that shift is not expected to offset job losses in U.S. manufacturing over the foreseeable future.

Also affecting manufacturing employment in the Region, State, and Nation is productivity gains in the sector. Manufacturing output continues to increase, but it is done with less labor. As a result, there is relatively less demand for manufacturing labor even within growing manufacturing industries.

Table 17

PROJECTED EMPLOYMENT BY INDUSTRY GROUP IN THE REGION: 2035

Industry	2000 Employment		Projected 2035 Employment					
			High		Intermediate		Low	
	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total
Manufacturing:								
Printing and Publishing	24,500	2.0	27,900	1.8	24,700	1.8	22,800	1.8
Fabricated Metal Products	25,600	2.1	12,800	0.9	11,600	0.9	10,700	0.9
Industrial Machinery and Equipment	48,000	3.9	27,800	1.8	24,900	1.8	22,900	1.8
Electronic and Other Electrical Equipment	27,000	2.2	16,800	1.1	15,300	1.1	14,100	1.1
All Other Manufacturing	99,200	8.1	89,400	5.9	83,900	6.1	77,600	6.1
Subtotal Manufacturing	224,300	18.3	174,700	11.5	160,400	11.7	148,100	11.7
Construction	53,800	4.4	62,600	4.1	57,100	4.2	53,200	4.2
Retail Trade	193,700	15.8	223,900	14.8	205,400	15.0	190,600	15.0
Wholesale Trade	64,400	5.3	68,800	4.6	64,400	4.7	59,600	4.7
Transportation, Communication, and Utilities	54,800	4.5	56,700	3.8	51,100	3.7	47,800	3.8
Services:								
Business Services	102,800	8.4	188,200	12.5	164,600	12.0	152,500	12.0
Health Services	97,700	8.0	148,100	9.8	132,000	9.7	122,400	9.7
Social Services	34,300	2.8	69,900	4.6	62,100	4.5	57,400	4.5
All Other Services	171,200	14.0	257,500	17.1	231,300	16.9	213,300	16.8
Subtotal Services	406,000	33.2	663,700	44.0	590,000	43.1	545,600	43.0
Finance, Insurance, and Real Estate	93,700	7.7	113,200	7.5	103,600	7.6	96,400	7.6
Government and Government Enterprises[a]	114,400	9.3	123,100	8.2	115,300	8.4	106,900	8.4
Agriculture	6,000	0.5	5,200	0.3	4,800	0.4	4,500	0.4
Other[b]	11,700	1.0	17,700	1.2	16,200	1.2	14,800	1.2
Total Regional Employment	1,222,800	100.0	1,509,600	100.0	1,368,300	100.0	1,267,500	100.0

Industry	Projected Change: 2000-2035					
	High		Intermediate		Low	
	Number	Percent	Number	Percent	Number	Percent
Manufacturing:						
Printing and Publishing	3,400	13.9	200	0.8	-1,700	-6.9
Fabricated Metal Products	-12,800	-50.0	-14,000	-54.7	-14,900	-58.2
Industrial Machinery and Equipment	-20,200	-42.1	-23,100	-48.1	-25,100	-52.3
Electronic and Other Electrical Equipment	-10,200	-37.8	-11,700	-43.3	-12,900	-47.8
All Other Manufacturing	-9,800	-9.9	-15,300	-15.4	-21,600	-21.8
Subtotal Manufacturing	-49,600	-22.1	-63,900	-28.5	-76,200	-34.0
Construction	8,800	16.4	3,300	6.1	-600	-1.1
Retail Trade	30,200	15.6	11,700	6.0	-3,100	-1.6
Wholesale Trade	4,400	6.8	0	0.0	-4,800	-7.5
Transportation, Communication, and Utilities	1,900	3.5	-3,700	-6.8	-7,000	-12.8
Services:						
Business Services	85,400	83.1	61,800	60.1	49,700	48.3
Health Services	50,400	51.6	34,300	35.1	24,700	25.3
Social Services	35,600	103.8	27,800	81.0	23,100	67.3
All Other Services	86,300	50.4	60,100	35.1	42,100	24.6
Subtotal Services	257,700	63.5	184,000	45.3	139,600	34.4
Finance, Insurance, and Real Estate	19,500	20.8	9,900	10.6	2,700	2.9
Government and Government Enterprises[a]	8,700	7.6	900	0.8	-7,500	-6.6
Agriculture	-800	-13.3	-1,200	-20.0	-1,500	-25.0
Other[b]	6,000	51.3	4,500	38.5	3,100	26.5
Total Regional Employment	286,800	23.5	145,500	11.9	44,700	3.7

[a]*Includes all nonmilitary government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U.S. Bureau of Economic Analysis and SEWRPC.

Table 18

PROJECTED EMPLOYMENT BY INDUSTRY GROUP IN THE REGION: 2010, 2020, 2030, AND 2035

Industry	Existing 2000	Projected Employment (number of jobs)											
		High				Intermediate				Low			
		2010	2020	2030	2035	2010	2020	2030	2035	2010	2020	2030	2035
Manufacturing:													
Printing and Publishing	24,500	23,300	25,900	27,200	27,900	22,700	24,000	24,300	24,700	21,900	22,500	22,600	22,800
Fabricated Metal Products	25,600	16,400	14,800	13,300	12,800	15,700	14,000	12,200	11,600	15,500	13,400	11,400	10,700
Industrial Machinery and Equipment	48,000	33,500	32,100	29,100	27,800	32,000	29,400	26,100	24,900	30,700	27,600	24,200	22,900
Electronic and Other Electrical Equipment	27,000	19,700	19,200	17,400	16,800	19,300	18,000	15,900	15,300	18,500	16,800	14,700	14,100
All Other Manufacturing	99,200	89,000	90,400	89,200	89,400	87,400	86,300	83,900	83,900	85,100	82,100	78,000	77,600
Subtotal Manufacturing	224,300	181,900	182,400	176,200	174,700	177,100	171,700	162,400	160,400	171,700	162,400	150,800	148,100
Construction	53,800	55,400	59,500	61,300	62,600	53,600	56,000	56,500	57,100	52,300	53,400	53,200	53,200
Retail Trade	193,700	196,400	210,100	219,100	223,900	192,200	198,100	202,400	205,400	187,600	188,600	189,600	190,600
Wholesale Trade	64,400	61,500	65,700	67,600	68,800	60,400	62,600	63,400	64,400	59,300	59,900	59,300	59,600
Transportation, Communication, and Utilities	54,800	52,500	55,500	55,800	56,700	50,900	51,400	50,500	51,100	50,100	49,400	47,500	47,800
Services:													
Business Services	102,800	127,200	156,600	178,500	188,200	122,800	141,800	156,600	164,600	120,700	135,400	146,600	152,500
Health Services	97,700	111,300	126,400	139,800	148,100	108,900	118,200	126,100	132,000	106,900	112,400	118,000	122,400
Social Services	34,300	47,200	58,200	66,400	69,900	45,700	53,500	59,100	62,100	44,700	50,800	54,900	57,400
All Other Services	171,200	201,400	227,700	247,400	257,500	197,700	216,300	226,600	231,300	194,200	206,300	211,200	213,300
Subtotal Services	406,000	487,100	568,900	632,100	663,700	475,100	529,800	568,400	590,000	466,500	504,900	530,700	545,600
Finance, Insurance, and Real Estate	93,700	101,000	109,700	112,900	113,200	98,800	103,100	103,600	103,600	96,800	97,600	97,000	96,400
Government and Government Enterprises[a]	114,400	115,700	120,400	122,200	123,100	113,500	114,900	114,900	115,300	110,800	108,600	107,000	106,900
Agriculture	6,000	5,400	5,400	5,200	5,200	5,300	5,100	4,900	4,800	5,200	4,900	4,600	4,500
Other[b]	11,700	13,700	16,300	17,400	17,700	13,200	15,300	16,100	16,200	13,000	14,500	14,800	14,800
Total Regional Employment	1,222,800	1,270,600	1,393,900	1,469,800	1,509,600	1,240,100	1,308,200	1,343,100	1,368,300	1,213,300	1,244,200	1,254,500	1,267,500

[a] *Includes all nonmilitary government agencies and enterprises, regardless of SIC code.*

[b] *Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U.S. Bureau of Economic Analysis and SEWRPC.

The rate of decline in manufacturing employment may be expected to mitigate somewhat in the later years of the projection period as increased economic growth in the U.S. and globally increases the demand for manufactured products. The labor force may also be expected to show some expansion, supplying a slightly larger labor pool for manufacturing and other industries.

Printing and Publishing

One manufacturing industry that is projected to retain its overall strength is printing and publishing. The printing and publishing industry (SIC Code 27) includes establishments engaged in printing, in services for the printing trade such as bookbinding, and in publishing newspapers, books, and periodicals. The outlook for this industry is promising due the continuing expansion of periodical publications and bookbinding, which are expected to offset the slower growth in newspaper publishing. Investment in the latest technology to control costs and product quality will be another force driving the printing and publishing industry. The gains in the demand for printing and publishing services may be expected to offset the substitution of capital for labor.

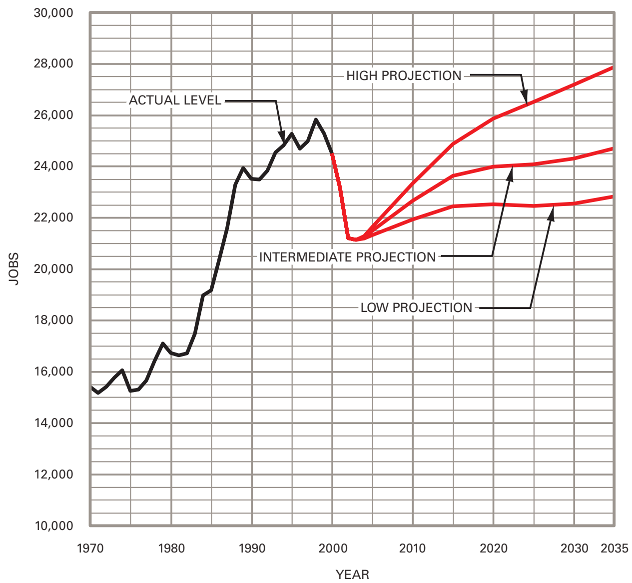
Under the intermediate projection, employment in printing and publishing would recover from the recent recession over the first half of the projection period and remain relatively stable over the second half (see Figure 13). The projected level of 24,700 jobs in 2035 is nearly the same as the year 2000 level (24,500 jobs). Under the high projection, employment in printing and publishing would increase to 27,900 by the year 2035, about 14 percent higher than the level in 2000. The low projection indicates that employment in printing and publishing could be as low as 22,800 jobs in 2035, about 7 percent below the level in 2000.

Fabricated Metal Products

The fabricated metal products industry (SIC Code 34) includes establishments engaged in producing metal products such as metal cans, tinware, hand tools, cutlery, general hardware, fabricated structural metal

Figure 13

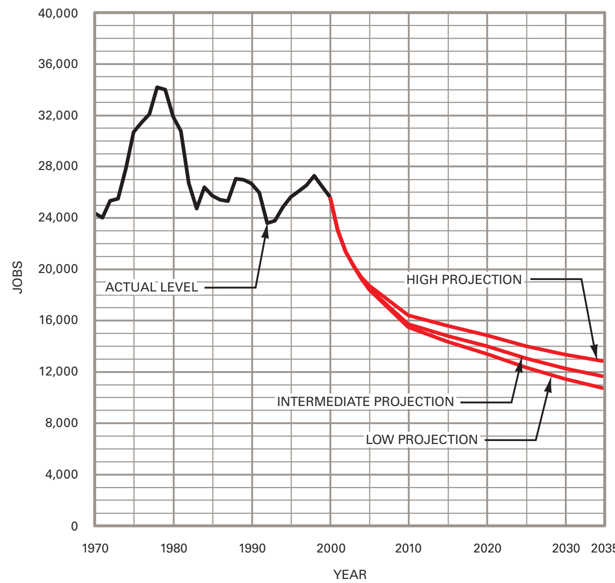
EMPLOYMENT PROJECTIONS FOR THE PRINTING AND PUBLISHING INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 14

EMPLOYMENT PROJECTIONS FOR THE FABRICATED METAL PRODUCTS INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

products, metal forgings, and metal stampings. The fabricated metal industry in the Region prospered in the 1970s, but then encountered some difficult times in the 1980s as well as in recent years. This pattern of decline is expected to continue over the 30-year projection period. Much of the fabricated metal industry is moving overseas, and cheaper labor is being used to remain competitive in the global marketplace.

Employment in fabricated metal products is not expected to recover from the decreases of the late 1990s and early 2000s. Under the intermediate projection, employment in fabricated metal products would decrease throughout the projection period, from 25,600 jobs in 2000 to 11,600 jobs in 2035, a decrease of 55 percent (see Figure 14). Even under the high projection, employment in fabricated metal products would decrease significantly, by 50 percent, to 12,800 jobs in 2035. Under the low projection, the employment level would decrease by 58 percent, to 10,700 jobs in 2035.

Industrial Machinery and Equipment

The industrial machinery and equipment industry (SIC Code 35) includes establishments engaged in the manufacturing of a range of industrial and commercial machinery and equipment. It includes the manufacturing of engines and turbines, farm and garden machinery, construction and materials handling machinery, and metalworking machinery. This category also includes the manufacturing of computer and office equipment, although this is very limited in the Region.

The industrial machinery and equipment industry suffered in the early 1980s and, while the industry employment stabilized after 1983, recent employment levels indicate the continuation of the earlier downward trend. The decline in the number of jobs may be attributed, at least in part, to restructuring in order to remain globally competitive.

Under the intermediate projection, employment in industrial machinery and equipment would decrease from 48,000 jobs in 2000 to 24,900 jobs in 2035, a decrease of 48 percent (see Figure 15). Under the high projection, employment in industrial machinery and equipment would approximate 27,800 jobs in 2035, about 42 percent below the 2000 level. The low projection envisions an employment level of 22,900 jobs in 2035, a 52 percent decrease from 2000.

Electronic and Other Electrical Equipment

The electronic and other electrical equipment industry (SIC Code 36) includes establishments engaged in the manufacturing of such products as electricity distribution equipment, electrical industrial apparatus, household appliances, electrical lighting and wiring equipment, and electronic components and accessories. As the electronic and other electrical equipment sector continues the substitution of capital for labor in order to automate production, employment levels may be expected to decline. Cost competition may be expected to force the industry to cut costs either through productivity increases or overseas outsourcing.

Employment in the electronic and other electrical equipment industry is not expected to recover from the losses of the early 2000s (see Figure 16). Commission projections indicate that employment in this industry may be expected to range between 14,100 and 16,800 in 2035, compared to 27,000 in 2000. Under the intermediate projection, employment in this industry would approximate 15,300 jobs in 2035, a 43 percent decrease from the 2000 level.

Other Manufacturing

This category consists of a wide range of manufacturing activities which, taken individually, are not large enough, in terms of their employment levels, to be accorded dominant or subdominant status. After a substantial decrease in the early 1980s, other manufacturing employment in the Region fluctuated for a number of years before stabilizing in the latter half of the 1990s (see Figure 17). Other manufacturing employment in the Region again decreased significantly in the early 2000s. A recovery from the reduced levels of the early 2000s is not expected.

As indicated in Figure 17, under the intermediate projection, other manufacturing employment would approximate 83,900 jobs in the Region in 2035, a decrease of about 15 percent from the year 2000 level of 99,200 jobs. The high projection envisions 89,400 other manufacturing jobs in 2035, a decrease of 10 percent from the 2000 level. The low projection indicates that other manufacturing employment could be as low as 77,600 jobs in 2035, about 22 percent below the 2000 level.

Construction

The construction industry includes establishments engaged in all forms of building construction as well as heavy construction such as the construction of roads, bridges, and sewer and water lines, and sewage treatment facilities. Construction industry employment includes employment in activity involving new construction, additions, alterations, reconstructions, installations, and repairs.

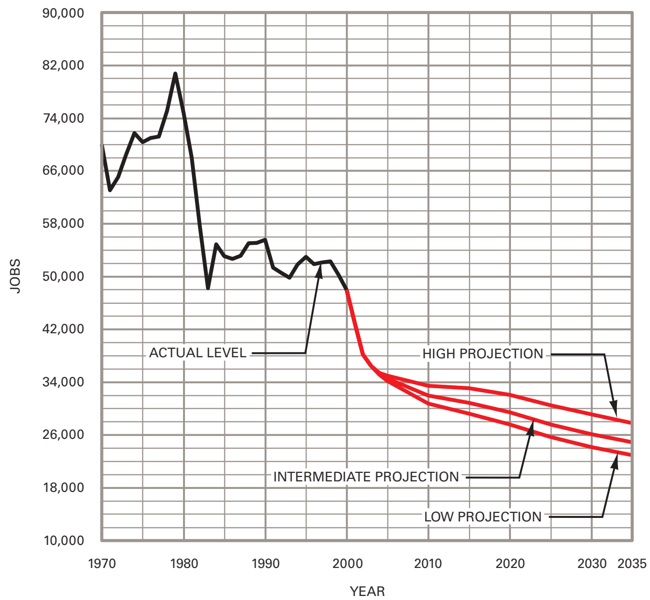
The economic expansion of the 1990s created many opportunities for the construction industry. Nonresidential and residential construction grew at impressive rates. Following the rapid increase during the 1990s, construction employment declined somewhat during the early 2000s. It is envisioned that construction employment will recover fairly rapidly from the reduced levels of the early 2000s, and increase through the middle of the projection period. Under an intermediate projection, construction employment would approximate 57,100 jobs in 2035, about 6 percent greater than the 2000 level of 53,800 jobs. Under the high projection, construction employment could be as high as 62,600 jobs, an increase of 16 percent over 2000. Under the low projection, construction employment in 2035 would approximate the year 2000 level (see Figure 18).

Retail Trade

The retail trade industry includes establishments engaged in selling merchandise primarily for personal or household consumption. It includes a wide variety of establishments, ranging from discount department stores to automobile dealerships to restaurants and coffee shops.

Figure 15

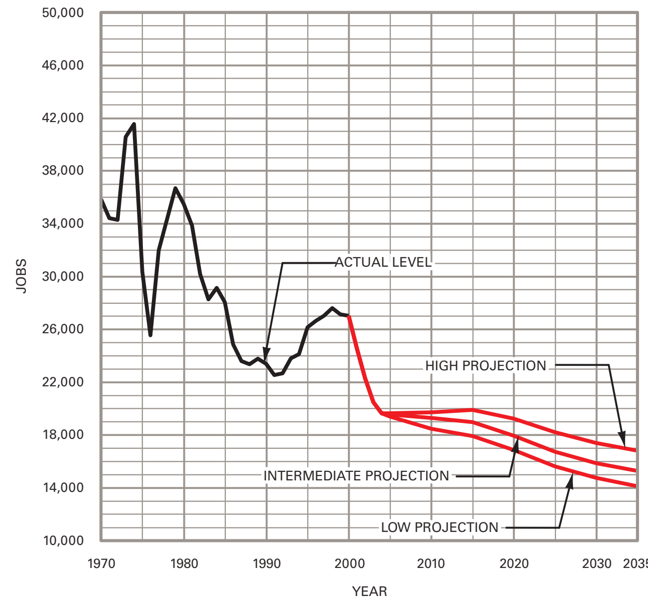
EMPLOYMENT PROJECTIONS FOR THE INDUSTRIAL MACHINERY AND EQUIPMENT INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 16

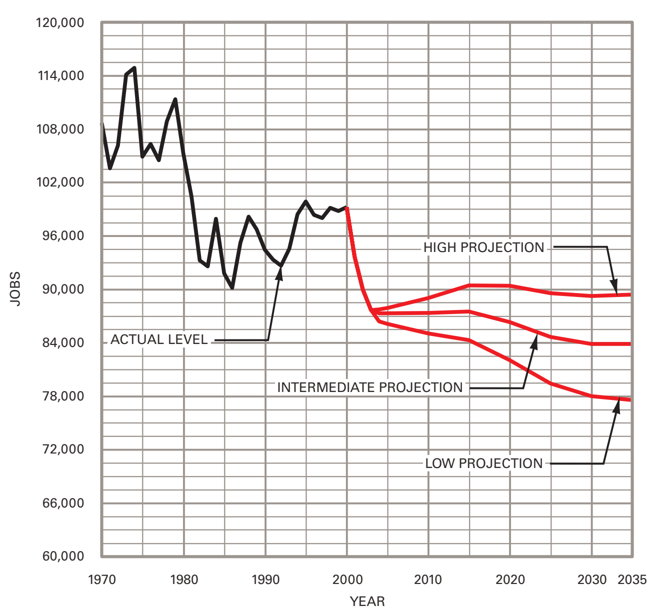
EMPLOYMENT PROJECTIONS FOR THE ELECTRONIC AND OTHER ELECTRICAL EQUIPMENT INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 17

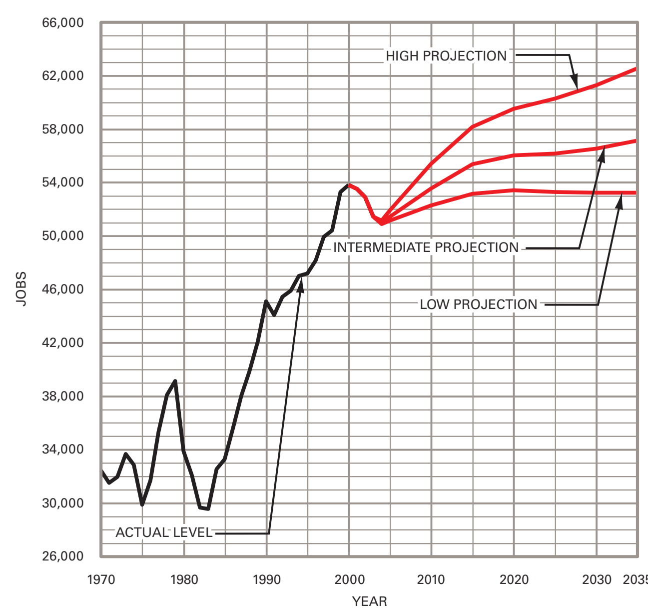
EMPLOYMENT PROJECTIONS FOR ALL OTHER MANUFACTURING INDUSTRIES IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 18

EMPLOYMENT PROJECTIONS FOR THE CONSTRUCTION INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

The retail industry in Southeastern Wisconsin experienced robust employment growth in the 1980s and some continued growth in the 1990s. Under the high projection, the long-term trend of generally strong growth in retail employment is expected to continue. Following a recovery from the job losses of the early 2000s, retail employment is projected to increase steadily, reaching 223,900 jobs in 2035 under the high projection, an increase of 16 percent over the 2000 level. Under this scenario a healthy economy and increases in personal income may be expected to raise the demand for consumer goods, thus allowing the sector to sustain the high number of jobs.

The intermediate projection envisions that retail employment in the Region would approximate 205,400 jobs in 2035, about 6 percent greater than the 2000 level (see Figure 19). The intermediate projection envisions that, with the expansion of e-commerce, retail establishments would experience competition for consumer attention and for minimizing supplier costs. In addition, labor could be expected to be a limiting factor for employment growth. The aging of the baby-boomers and the lower wages associated with the retail sector would tend to limit the labor supply for the industry.

Under the low projection, the more sluggish regional economy would lead to less consumer spending and decrease the industry’s labor demand to serve fewer customers. The low projection envisions that retail employment would approximate 190,600 jobs in 2035, about 2 percent below the 2000 level.

Wholesale Trade

The wholesale trade industry includes establishments primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractor, or professional business customers; or to other wholesalers.

The highly competitive nature of wholesale trade, low margins, and the constant need to control costs may be expected to limit the overall growth in wholesale trade employment. The wholesale trade sector is linked to the manufacturing sector. The recent decline in manufacturing employment recently is reflected in the decline in wholesale trade employment. Inasmuch as the employment outlook for the manufacturing sector is not promising, the wholesale trade sector is not projected to support a large increase in employment.

Under the intermediate projection, wholesale trade industry employment would gradually recover from the job losses experienced in the early 2000s; only by the year 2035 would the number of wholesale trade industry jobs return to the year 2000 level of 64,400 jobs (see Figure 20). The high projection indicates that wholesale trade industry employment could be as high as 68,800 jobs by 2035, an increase of 7 percent from the 2000 level. Under the low projection, wholesale trade industry employment would approximate 59,600 jobs, about 8 percent lower than the 2000 level.

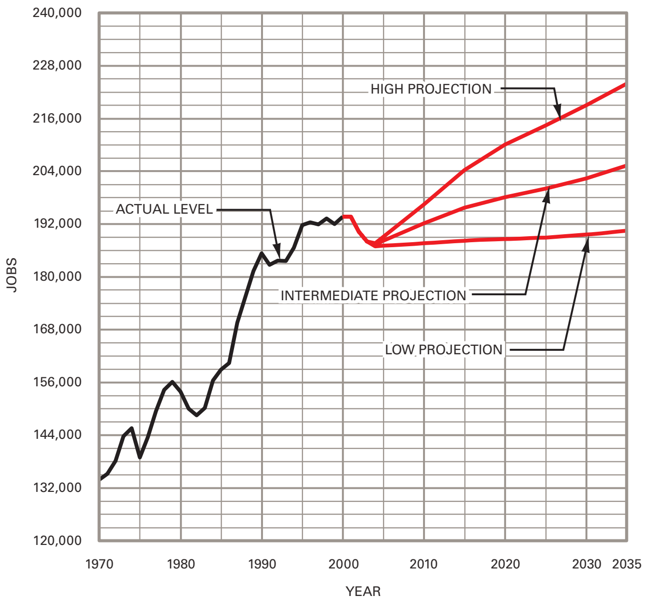
Transportation, Communication, and Utilities

The transportation, communication, and utilities industry includes establishments which provide—to the general public or to other business enterprises—all forms of passenger and freight transportation; shipping services; communications services; and gas, electricity, steam, water or sanitary services. In this report, government-owned enterprises which provide such services are included in the “government and government enterprises” category, discussed in a later section.

The transportation, communication, and utilities industry experienced generally robust and steady growth from 1970 to 2000. However, industry employment levels dropped significantly from 2000 to 2003 due to the recession and industry consolidation. At least some recovery in employment levels may be expected in the first half of the projection period. Most of the employment growth may be expected in the transportation sector as increased demand for shipping expands the motor freight and warehousing segment. Passenger airline employment may also be expected to contribute jobs as the demand for air travel continues to grow. In contrast, the communications and utility segments may be expected to lose jobs. The decrease is expected as a result of technology continuing to displace labor and cost pressures associated with the new open access competitive operating environment.

Figure 19

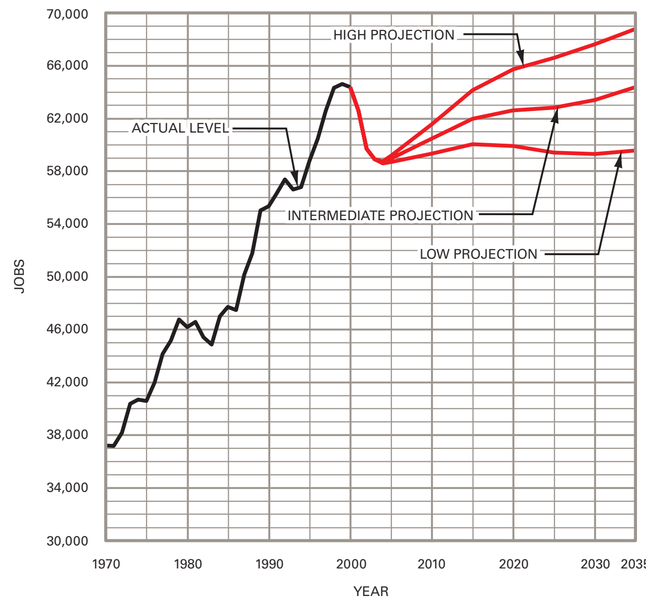
EMPLOYMENT PROJECTIONS FOR THE RETAIL TRADE INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 20

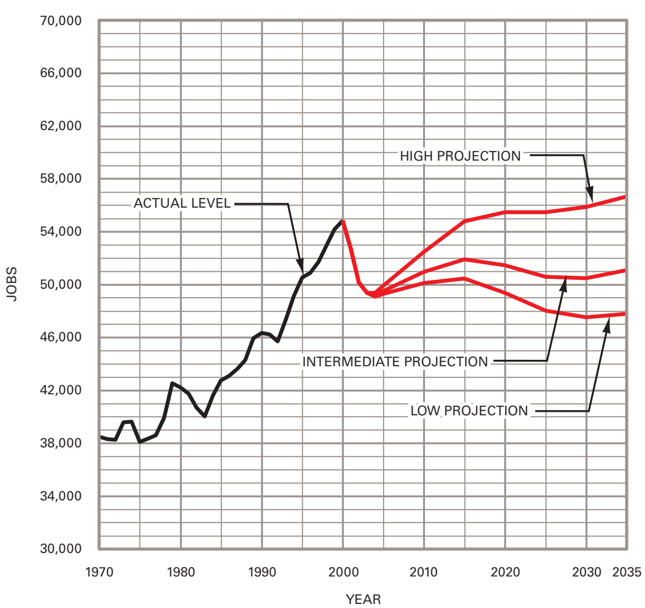
EMPLOYMENT PROJECTIONS FOR THE WHOLESALE TRADE INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 21

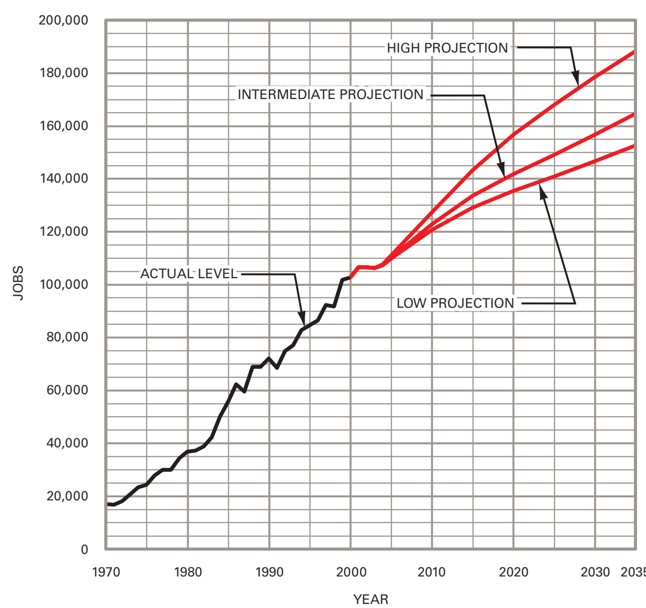
EMPLOYMENT PROJECTIONS FOR THE TRANSPORTATION, COMMUNICATION, AND UTILITIES INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 22

EMPLOYMENT PROJECTIONS FOR THE BUSINESS SERVICES INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Under the intermediate projection, employment in transportation, communication, and utilities within the Region would experience some recovery from the losses of the early 2000s; however, the employment level would remain below the year 2000 level over the projection period. Under the intermediate projection, employment would approximate 51,100 jobs in 2035, about 7 percent lower than the 2000 level (see Figure 21). Under the high projection, employment would approximate 56,700 jobs in 2035, about 4 percent more than in 2000. The low projection indicates that employment could be as low as 47,800 jobs in 2035, about 13 percent lower than the 2000 level.

Services—Overview

The greatest gains in employment for the Region, the State, and the Nation may be expected to be in the services sector. This continues a trend that is now decades old. Employment in the business services sector, in particular, may be expected to experience significant growth. As companies focus on core competencies, cost competition, and market expansion, many tasks that were completed in-house will be subcontracted to other firms specializing in auxiliary tasks such as marketing, payroll, human resources, and information technology.

Employment in the health and social services sectors may also be expected to increase at relatively rapid rates. The most profound effect on health and social services in the Region will be the aging of the population. As the baby-boomers reach retirement age, health and social services will be in greater demand, directly affecting employment in these sectors. The outlook for entertainment services is also promising; rising personal income and retirees having more leisure time are expected to play a role in that growth.

Business Services

The business services industry includes establishments primarily engaged in providing services to businesses—including such services as advertising, computer programming and data processing, security systems services, and building cleaning and maintenance services. Establishments primarily engaged in providing engineering, accounting, research, management, and related services are not included in this category; rather, they are included in the "other services" category, below. It should be noted that the business services industry includes "help supply" firms, primarily engaged in supplying temporary or continuing help on a contract or fee basis to other establishments; the workers provided in this manner remain on the payroll of the supplying firm. The workers supplied by such firms comprised nearly 40 percent of the total employment in the business services industry in the Region in 2000.

The business services industry has been on a path of rapid growth since 1970 and the industry is projected to remain on a strong, although somewhat reduced, growth rate. The projected growth in business services is predicated upon a continuation of the trend in business management practices to focus on core competencies and increasingly outsource support services like advertising, facilities services, equipment rental, and temporary staffing services. Also, as new businesses are created along with economic expansion, the demand for business services may be expected to increase.

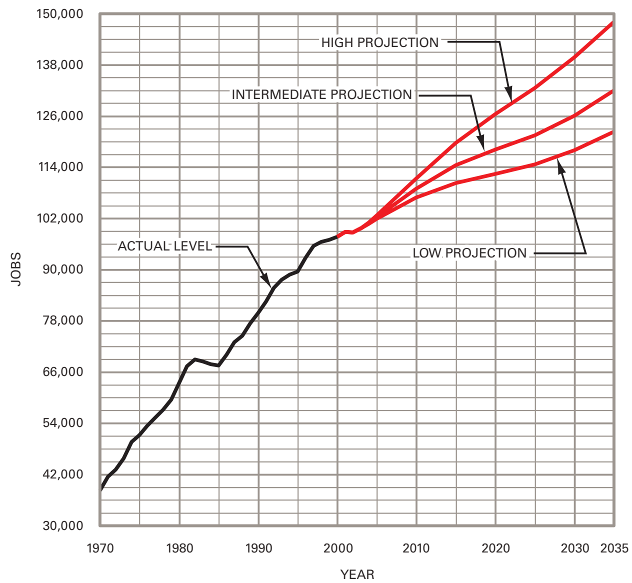
As indicated in Figure 22, under the intermediate projection, business services employment is expected to increase to 164,600 jobs in 2035, a 60 percent increase over the 2000 level of 102,800 jobs. Under the high projection, employment in the business services sector would approximate 188,200 jobs, about 83 percent more than in 2000. Even under the low projection, the outlook for the business services sector is promising, with employment envisioned to reach 152,500 jobs in 2035, an increase of 48 percent over the 2000 level.

Health Services

The health services industry includes establishments primarily engaged in furnishing medical, surgical, and other health services—including hospitals; offices and clinics of doctors and other health care practitioners; nursing, convalescent, and rest homes which provide medical care; medical and dental laboratories; and home health care services. The demand for health services may be expected to continue to increase with population growth and the aging of the baby-boomers.

Figure 23

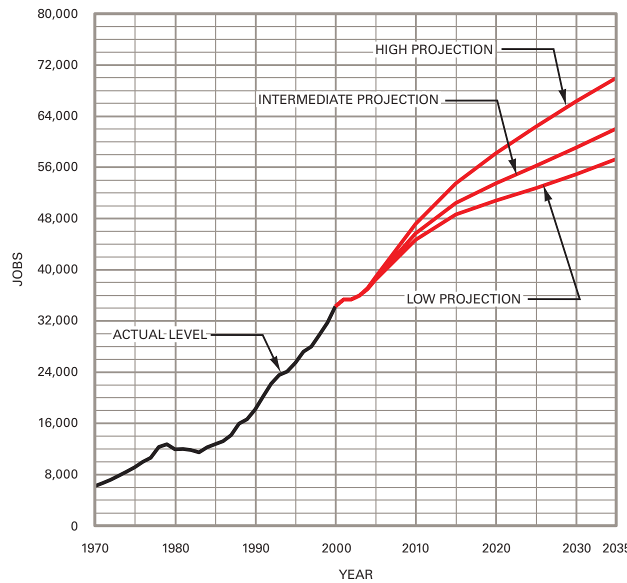
EMPLOYMENT PROJECTIONS FOR THE HEALTH SERVICES INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 24

EMPLOYMENT PROJECTIONS FOR THE SOCIAL SERVICES INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Under the intermediate projection, employment in health services would approximate 132,000 jobs in 2035, an increase of about 35 percent over the 2000 level of 97,700 jobs (see Figure 23). The high projection indicates that health services employment could be as high as 148,100 jobs in 2035, a 52 percent increase over 2000. The low projection envisions 122,400 jobs in health services in 2035, an increase of 25 percent over 2000.

Social Services

The social services industry includes establishments that provide help and rehabilitation services to individuals with needs requiring special care and to the disabled and disadvantaged. This industry group also includes child day-care facilities and certain residential facilities for children, the aged, and others with limits on ability for self-care, but where medical care is not a major element.

The social services industry has been growing rapidly since the late 1980s and the trend is projected to continue. With the aging of the baby-boomers and the movement to out-patient care, more home-based assisted living care will be demanded. Childcare services may be expected to increase, given the projected gradual increase in the number of young children. In order to meet these needs, the social services industry is expected to expand employment.

As indicated in Figure 24, under the intermediate projection, social services employment would increase from 34,300 jobs in 2000 to 62,100 jobs in 2035, a relative increase of 81 percent. The high projection indicates that social services employment could be as high as 69,900 jobs in 2035, a 104 percent increase over the 2000 level. The low projection also envisions strong employment growth in social services, anticipating 57,400 jobs in 2035, a 67 percent increase over the 2000 level.

Other Services

This category includes those service activities which, taken individually, are not large enough, in terms of their employment levels, to be accorded dominant or subdominant status. This residual category includes a wide range of service establishments including, among others, lodging places; laundry and dry-cleaning facilities; funeral homes; automotive repair facilities; miscellaneous repair shops; motion picture theaters and various other amusement and recreation places; and establishments which provide engineering, accounting, research, management, and related services.

The employment level in other services has been increasing steadily and the trend is projected to continue to 2035. Much of the growth in engineering, accounting, research, management and related services is attributable to outsourcing by existing firms and to support of new business. These consulting services maybe expected to grow by exporting their services out-of-state. Thus they are less constrained by local population growth than most other service sectors.

Entertainment services are more closely tied to population growth, but are expected to grow fairly rapidly with economic expansion and increased personal income. In addition, more demand for recreational activities on the part of baby-boomers, with increased leisure time in their retirement years, may be expected to add to the employment growth of the sector.

The intermediate projection envisions that employment in other services would reach 231,300 jobs in 2035, an increase of 35 percent from the 2000 level of 171,200 jobs (see Figure 25). Under the high projection, other services employment would approximate 257,500 jobs in 2035, a 50 percent increase over 2000. The low projection envisions other services employment of 213,300 jobs in 2035, a 25 percent increase over 2000.

Finance, Insurance, and Real Estate

This industry includes a range of establishments operating primarily in the fields of finance, insurance, and real estate, including banks and credit unions; other personal and business credit institutions; security brokerages; insurance carriers, agencies, and brokerages; real estate agencies; and land development firms.

Changes in government legislation, the increasing use of the internet, and demographic trends may be expected to affect this industry. Legislation allowing financial institutions to provide a greater variety of financial products and services may be expected to result in growth in this industry. On the other hand, new technology applications, including increasing internet transaction capabilities and data base management tools will continue to be used to control costs, as firms substitute technology for labor. Overall, the historic strong growth in finance, insurance, and real estate may be expected to moderate somewhat. However, this industry group may be expected to continue to be an important employment sector.

As indicated in Figure 26, under the intermediate projection, employment in finance, insurance, and real estate would approximate 103,600 jobs in the year 2035, an 11 percent increase over the 2000 level of 93,700 jobs. The high projection indicates that employment in this sector could reach 113,200 jobs, a 21 percent increase over 2000. Under the low projection, slower population growth may be expected to moderate the demand for finance, insurance, and real estate services, with the result that projected employment in this sector would approximate 96,400 jobs in 2000, about 3 percent more than in 2000.

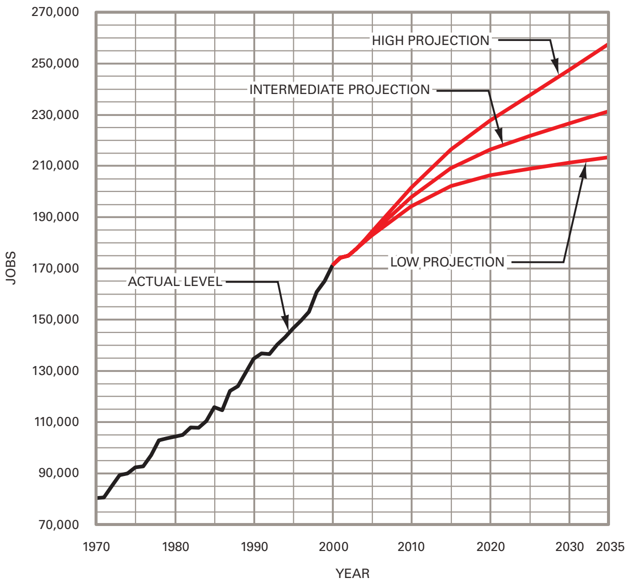
Government and Government Enterprises

This category includes employment in all nonmilitary government agencies and enterprises, regardless of SIC code. This includes city, village, town, county, State, and Federal units and agencies of government; public schools; publicly owned enterprises; and the U.S. Postal Service.

Government employment in the Region grew steadily throughout most of the 1970s. This was not the case in the 1980s, when several years of decline were followed by rapid recovery. The 1990s saw moderate growth in government employment. Current severe government budgetary pressures may be expected to result in a reduction in government employment in the short-term. In the long-term, baby-boomer retirements from

Figure 25

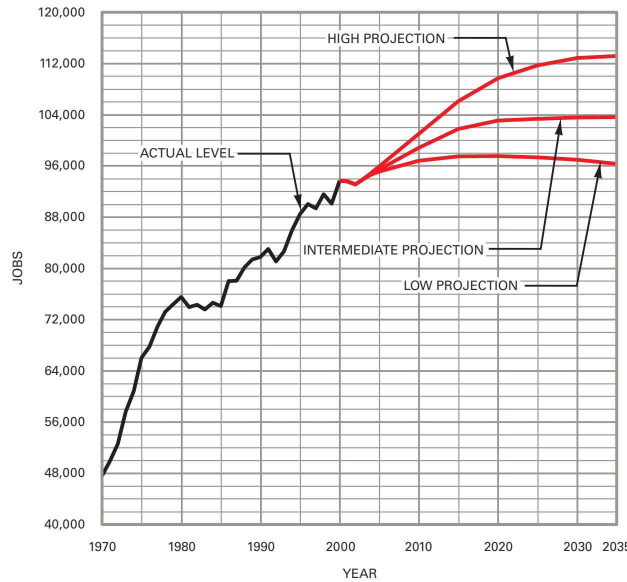
EMPLOYMENT PROJECTIONS FOR ALL OTHER SERVICE INDUSTRIES IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 26

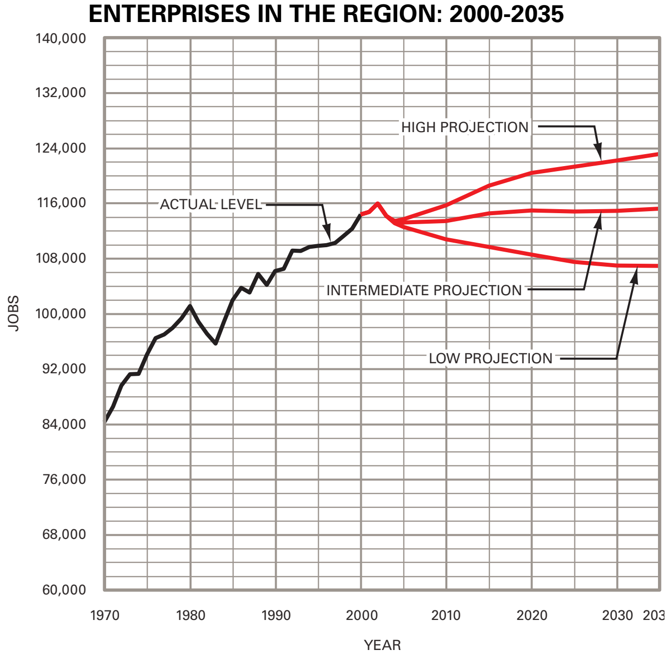
EMPLOYMENT PROJECTIONS FOR THE FINANCE, INSURANCE, AND REAL ESTATE INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 27

EMPLOYMENT PROJECTIONS FOR GOVERNMENT AND GOVERNMENT ENTERPRISES IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

government, in combination with greater efficiencies through better use of technology and continued budgetary constraints, may be expected to dampen growth in government employment.

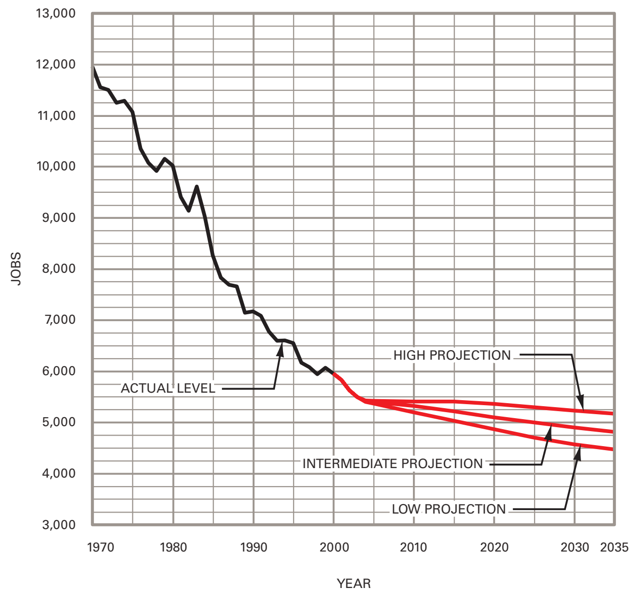
As indicated in Figure 27, under the intermediate projection, government employment in the Region is expected to approximate 115,300 jobs in 2035, about 1 percent more than the year 2000 level of 114,400 jobs. Under the high projection, government employment would increase to 123,100 jobs in 2035, an increase of about 8 percent over 2000. Under the low projection, government employment would decrease to about 106,900 jobs, about 7 percent below the 2000 level.

Agriculture

This industry includes establishments (e.g., farms, orchards, greenhouses, nurseries) primarily engaged in the production of crops, plants, and trees, excluding forestry operations. It also includes establishments (e.g., farms, dairies, feedlots, egg production facilities) primarily engaged in raising livestock for sale or for the sale of livestock products. While the agricultural sector constitutes a small and declining share of the regional economy, it still constitutes a viable

Figure 28

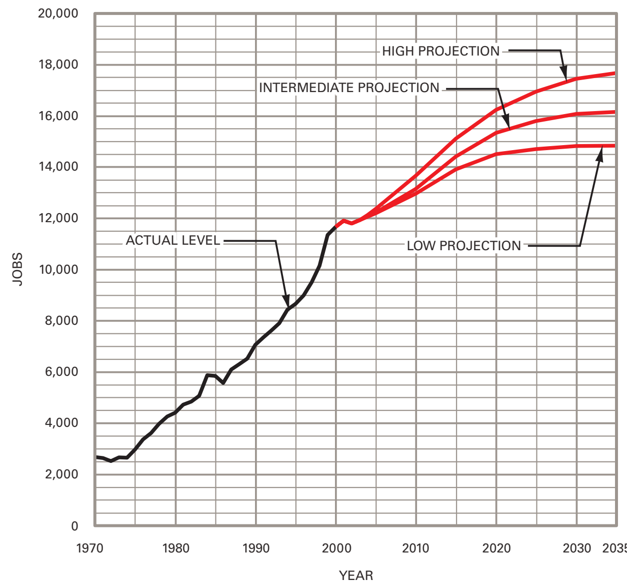
EMPLOYMENT PROJECTIONS FOR THE AGRICULTURAL (FARM) INDUSTRY IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 29

EMPLOYMENT PROJECTIONS FOR ALL OTHER INDUSTRIES IN THE REGION: 2000-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

economic sector. Wisconsin agriculture is expected to hold a comparative advantage in the dairy and vegetable segments. However, due to continued technological advances in genetics and mechanization, cost pressures from national and global competition, and modern management practices, the employment levels in agriculture may be expected to continue to decline. The continued conversion of farmland to urban uses may also be expected to reduce agricultural employment in the Region.

Commission projections indicate that agricultural employment in the Region would range between 4,500 and 5,200 jobs in 2035, compared to 6,000 jobs in 2000. Under the intermediate projection, agricultural employment in the Region would approximate 4,800 jobs in 2035, a decrease of 20 percent from the 2000 level (see Figure 28).

Other Employment

This residual employment category includes establishments engaged in activities not elsewhere classified—including forestry, commercial fishing, mining, and agricultural services. The latter includes, among others, certain crop services, veterinary services, and lawn and garden services. Employment in this category has been experiencing steady growth for several decades and the trend is projected to continue. Many of these jobs involve outsourced services such as crop fertilizing and harvesting and landscaping services.

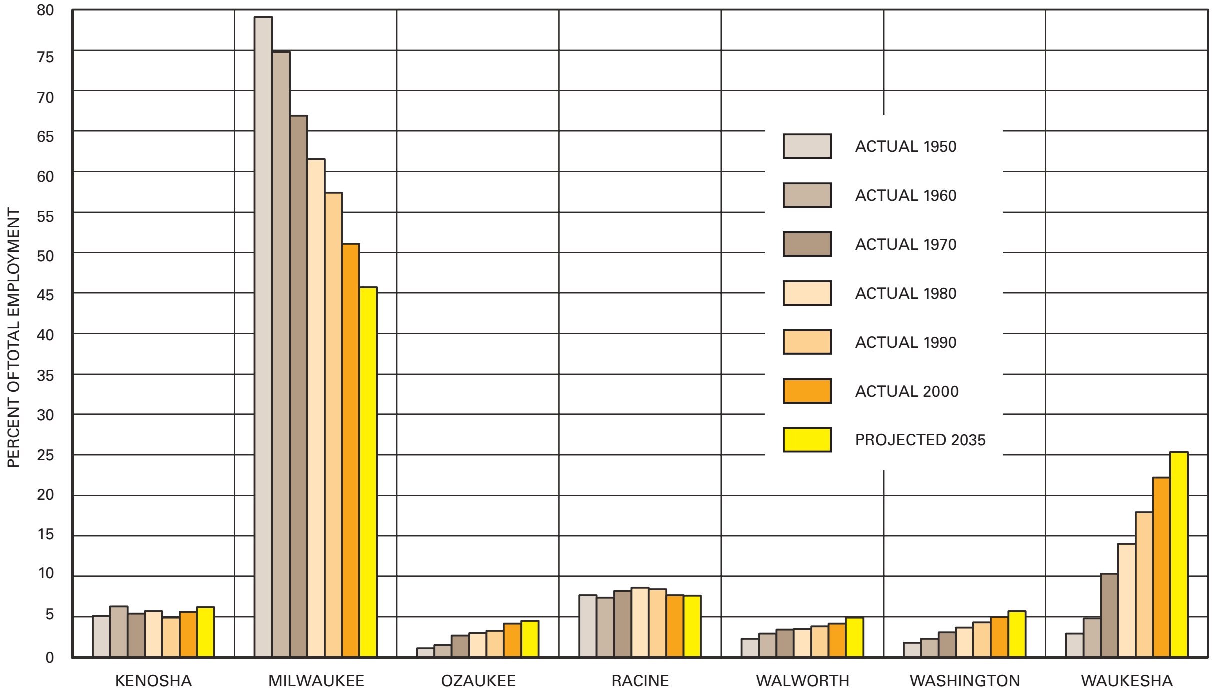
Commission projections indicate that employment in this category would range between 14,800 and 17,700 jobs in 2035, compared to 11,700 jobs in 2000. Under the intermediate projection, employment in this category would approximate 16,200 jobs in 2035, an increase of 39 percent from the 2000 level (see Figure 29).

PROJECTED DISTRIBUTION OF EMPLOYMENT BY COUNTY

Historic information regarding the distribution of jobs by county in the Region was presented in Chapter II of this report. That information is re-presented graphically in Figure 30. As indicated, the largest distributional changes in employment have occurred in Milwaukee and Waukesha Counties. Over the past five decades, Milwaukee

Figure 30

ACTUAL AND PROJECTED EMPLOYMENT DISTRIBUTION IN THE REGION BY COUNTY: 1950-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

County has experienced a substantial decrease in its share of regional employment, while Waukesha County has experienced a substantial increase. Ozaukee, Walworth, and Washington Counties have experienced gradual increases. In Kenosha and Racine Counties, the share of total regional employment in 2000 was about the same as in 1950, with some fluctuations occurring over the intervening decades.

As further indicated in Figure 30, Commission projections for the year 2035 envision a continuation of historic trends in the distribution of jobs within the Region but at a moderated pace. It is envisioned that Milwaukee County's share of total regional employment would decrease by just over five percentage points between 2000 and 2035, while Waukesha County's share would increase by just over three percentage points. It is further envisioned that Kenosha, Ozaukee, Walworth, and Washington Counties would experience relative increases of less than one percentage point and that Racine County's relative share would remain essentially unchanged. Each projection—high, intermediate, and low—envisions similar changes in the relative distribution of jobs between 2000 and 2035.

The number of jobs by county under the Commission high, intermediate, and low projections is presented in Table 19 and Figure 31. Under the intermediate projection—considered to be the most likely to occur—employment in Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties would increase by 20 to 30 percent between 2000 and 2035. Employment in Racine County would increase by 10 percent. It is envisioned that total employment in Milwaukee County in 2035 would approximate the year 2000 level, with some redistribution of employment within the County anticipated.

Table 19

ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY COUNTY: 2000-2035

County	Actual Employment: 2000 Number of Jobs	Actual Employment: 2000 Percent of Region	Projected Employment: 2035 High Projection Number of Jobs: 2035	High Projection Change: 2000-2035 Number	High Projection Change: 2000-2035 Percent	Intermediate Projection Number of Jobs: 2035	Intermediate Projection Change: 2000-2035 Number	Intermediate Projection Change: 2000-2035 Percent	Low Projection Number of Jobs: 2035	Low Projection Change: 2000-2035 Number	Low Projection Change: 2000-2035 Percent	Percent of Region Jobs[b]
Kenosha	68,700	5.6	93,700	25,000	36.4	85,000	16,300	23.7	78,700	10,000	14.6	6.2
Milwaukee	624,600	51.1	689,500	64,900	10.4	624,900	300	- -[a]	578,900	-45,700	-7.3	45.7
Ozaukee	50,800	4.2	68,100	17,300	34.1	61,700	10,900	21.5	57,200	6,400	12.6	4.5
Racine	94,400	7.7	114,700	20,300	21.5	104,000	9,600	10.2	96,300	1,900	2.0	7.6
Walworth	51,800	4.2	73,800	22,000	42.5	66,900	15,100	29.2	62,000	10,200	19.7	4.9
Washington	61,700	5.0	86,700	25,000	40.5	78,600	16,900	27.4	72,800	11,100	18.0	5.7
Waukesha	270,800	22.2	383,100	112,300	41.5	347,200	76,400	28.2	321,600	50,800	18.8	25.4
Region	1,222,800	100.0	1,509,600	286,800	23.5	1,368,300	145,500	11.9	1,267,500	44,700	3.7	100.0

[a]*Less than one percent.*

[b]*Applies to all projections.*

Source: U.S. Bureau of Economic Analysis and SEWRPC.

COMPARISON TO PRIOR COMMISSION EMPLOYMENT PROJECTIONS

As indicated in Chapter I, the Commission has conducted a number of major economic analyses over the past four decades, with each leading to the preparation of a new set of employment projections and with each succeeding set of projections extended further into the future. Each set of projections was prepared in consideration of the most current information on employment trends available at the time and then-available indicators of future employment change. These projections provided the basis for the selection of a forecast that was utilized in the subsequent preparation of regional land use and transportation plans extended to the new forecast year.

Previous Commission employment forecasts are re-presented along with the Commission high, intermediate, and low employment projections for 2035 in Figure 32. It should be noted that historic employment level data are subject to periodic rebenchmarking by the various employment statistical reporting agencies. Owing to such rebenchmarking, the historic employment data available for the respective Commission forecasts has evolved over time. For example, the currently reported total employment level for the Region for the year 1980 (948,200 jobs) is about 64,000 jobs more than the figure of 884,200 jobs reported for that year when the Commission employment forecast for the period 1980-2010 was prepared. In Figure 32, the initially prepared employment projections for 1960-1990, 1970-2000, and 1980-2010 have been adjusted to compensate for the changes in the underlying historic trend data.[6]

As shown on Figure 32, previous Commission employment projections have generally conformed well to actual employment levels. In reviewing the Commission projections against actual employment levels, it should be recognized that the Commission forecasts are intended to provide an indication of the overall long-range trend in employment, irrespective of shorter-term business cycle fluctuations.

As noted earlier, the intermediate employment projection for the year 2035—which is expected to serve as the basis for the year 2035 regional land use and transportation plans—envisions that employment within the Region would recover from the reduced levels of the early 2000s, reaching a level of 1,368,300 jobs by 2035—about 12 percent more than existed in 2000. This compares to the forecast increase of 20 percent in total employment

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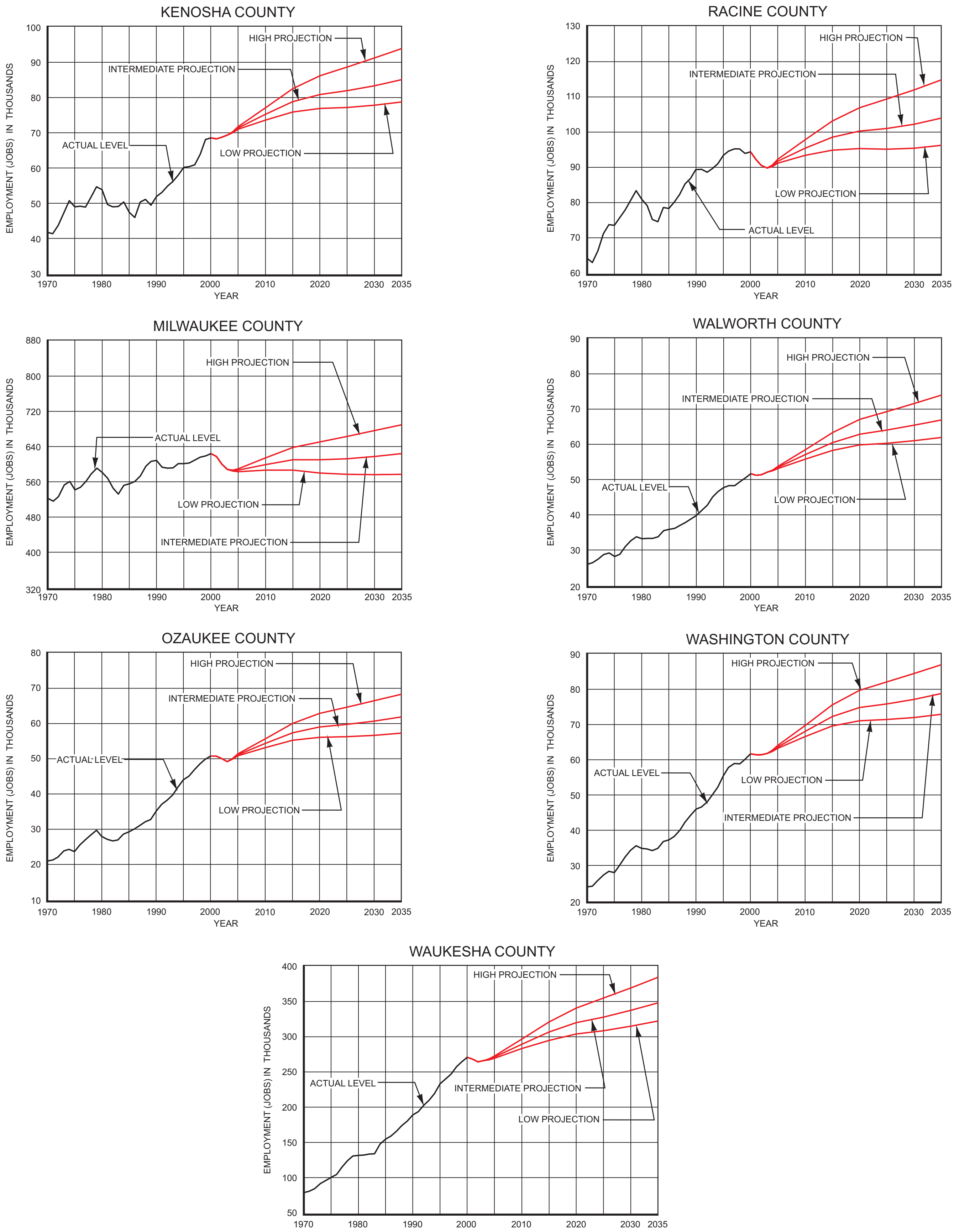
[6]*Specifically, the following adjustments were made to the initially prepared forecasts 1) the initial forecast employment levels for 1960-1990 were adjusted upward by 57,000 jobs; 2) the initial forecast employment levels for 1970-2000 were adjusted upward by 43,300 jobs; and 3) the initial forecast employment levels for 1980-2010 were adjusted upward by 64,000 jobs.*

Figure 31

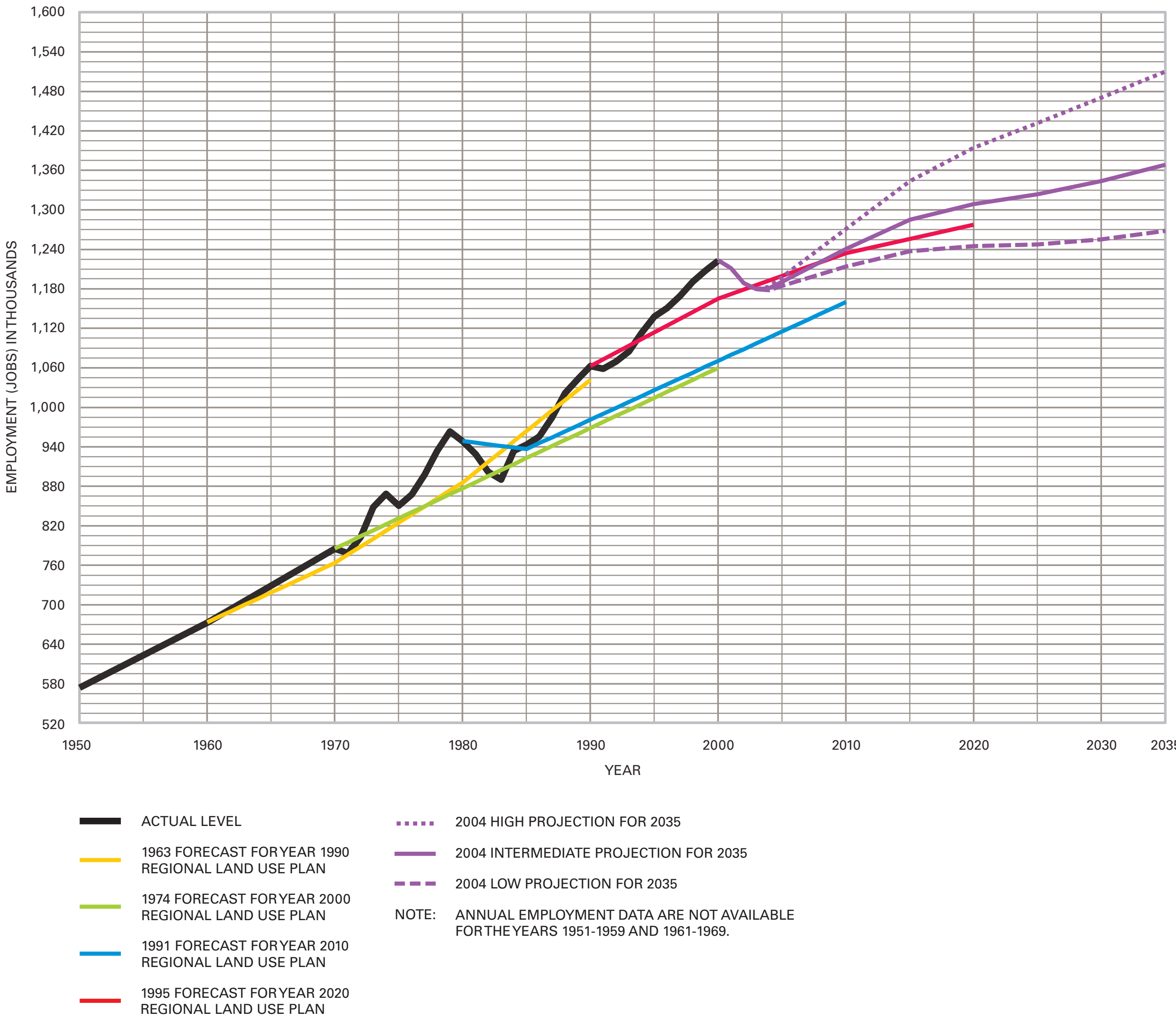
ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY COUNTY: 1950-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 32

COMPARISON OF YEAR 2035 EMPLOYMENT PROJECTIONS WITH PRIOR COMMISSION FORECASTS



Source: U.S. Bureau of Economic Analysis and SEWRPC.

over the 30-year period from 1990 to 2020 indicated in the previous Commission forecast prepared in 1995. The intermediate employment projection of 1,368,300 jobs for the year 2035 is 7 percent greater than the forecast of 1,277,100 jobs for the year 2020 indicated in the previous projection cycle.

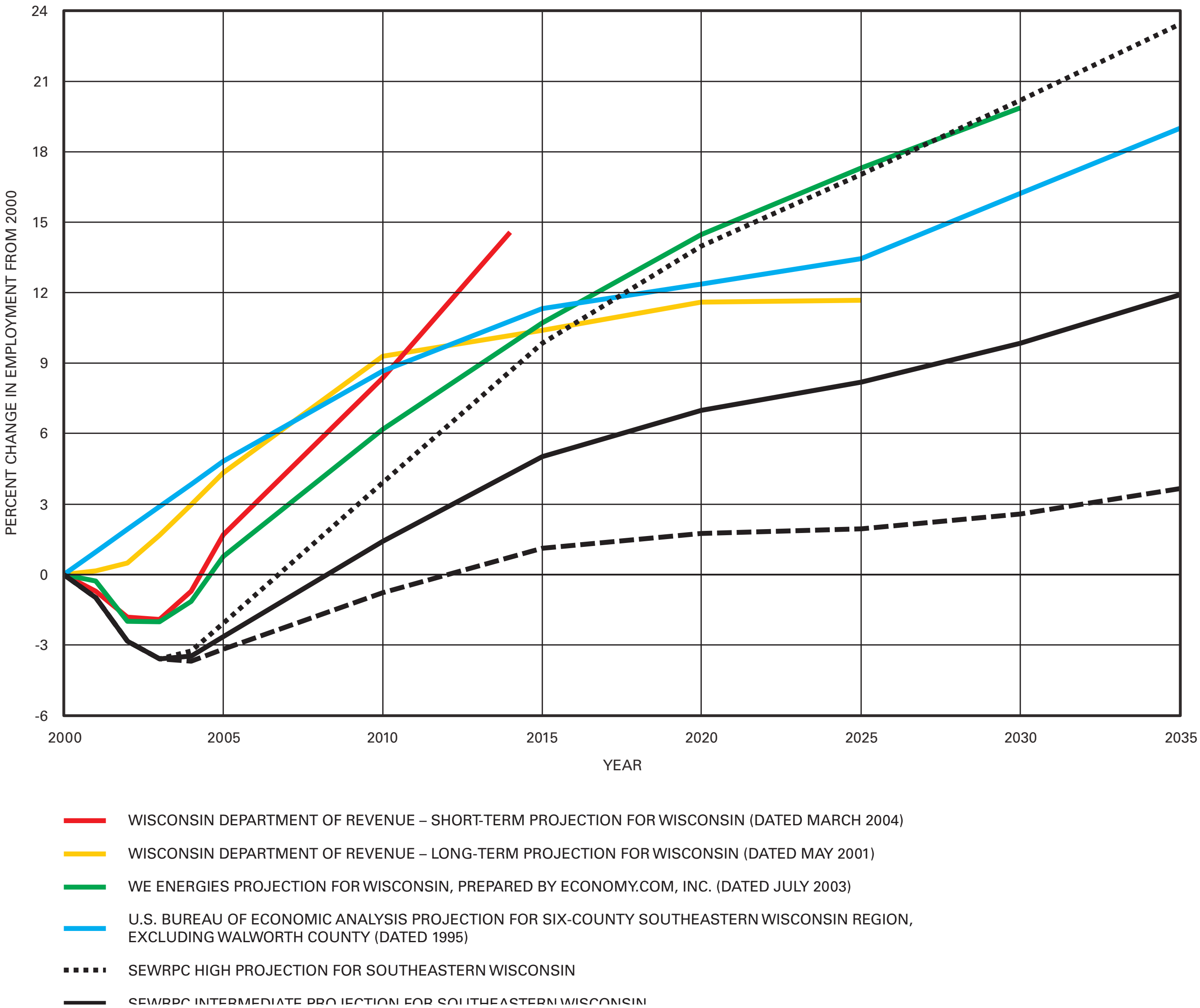
COMPARISON TO OTHER AGENCY EMPLOYMENT PROJECTIONS

The Commission employment projections are compared with other agency employment projections for the Region and State in Figure 33. Included in Figure 33 are Wisconsin Department of Revenue short-term (through the year 2014) and long-term employment (through the year 2025) projections for Wisconsin; We Energies projections for Wisconsin through the year 2030;[7] and U.S. Bureau of Economic Analysis projections for the six-county area comprised of Kenosha, Milwaukee, Ozaukee, Racine, Washington, and Waukesha Counties through

[7] *The We Energies employment projections were prepared for We Energies by Economy.com, Inc.*

Figure 33

COMPARISON OF COMMISSION AND OTHER AGENCY EMPLOYMENT PROJECTIONS



Source: U.S. Bureau of Economic Analysis; Wisconsin Department of Revenue; We Energies and Economy.com, Inc.; and SEWRPC.

the year 2035.[8] Because of the different geographic areas and the different time periods involved, the projections are presented in terms of the relative change in employment projected for each area from the year 2000. It should be recognized that the projections presented in Figure 33 were prepared at different points in time. The Bureau of Economic Analysis projections were prepared in 1995. The We Energies projections were prepared in 2003. The Wisconsin Department of Revenue long-term projections were prepared in 2001, while the Department's short-term projections were prepared in 2004.

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[8]*The U.S. Bureau of Economic Analysis employment projection was available for the years 2005, 2010, 2015, 2025, and 2045. The figures for 2020, 2030, and 2035 were derived by interpolation.*

Only the most recently prepared projections are able to fully reflect the actual employment losses of the early 2000s. These losses are evident in the We Energies projection for Wisconsin and in the Department of Revenue short-term projection for Wisconsin, as well as in the Commission projection for the Region. As indicated, the employment losses in the Region during the early 2000s were more severe than the losses in the State overall, and the recovery is projected to take somewhat longer.

It is noteworthy that the Wisconsin Department of Revenue long-term projection for Wisconsin and the Bureau of Economic Analysis projection for the six-county area both indicate a leveling off in employment toward the middle of the projection period. That is similar to the pattern envisioned for the Region under the new Commission projections, particularly the intermediate and low projections. As noted earlier, within the Region, this leveling off in employment coincides with an expected leveling off in the regional labor force.

In addition to the other agency employment projections presented on Figure 33, the Wisconsin Department of Workforce Development (DWD) has prepared an employment projection for Department-defined "workforce development areas," which can be aggregated to represent the seven-county Southeastern Wisconsin Region. Prepared in November 2003, the DWD projection indicates that employment in the Region would increase by 10.6 percent between 2000 and 2010. Given the actual employment decrease that occurred within the Region between 2000 and 2003, the DWD projection implies very strong growth in employment in the Region in the second half of this decade.

RELATIONSHIP TO 2035 POPULATION PROJECTIONS

The preparation of the Commission employment projections for the Region as presented in this chapter was carried out in tandem and coordinated with the preparation of population projections for the Region, which are documented in SEWRPC Technical Report No. 11 (4th Edition), *The Population of Southeastern Wisconsin*. In this respect, it was considered critical that labor force trends which could be expected in light of projected changes in population in the Region be consistent with the projected employment trends.

Projections of future labor force levels in the Region were developed based upon the population projections as presented in the aforementioned technical report and anticipated future labor force participation rates. Labor force participation rates that could be expected within the Region were developed based upon labor force participation rates projected for the Nation by the U.S. Bureau of Labor Statistics (BLS). The BLS has projected an increase in the labor force participation rate for most age groups for females during the period from 2000 to 2015. For males, the BLS has projected stable or slightly declining participation rates for each age group, except the 65-74 year-age-group—which is projected to increase—between 2000 and 2015. After 2015, the BLS projects generally stable or declining labor force participation rates for virtually all male and female age groups.

Under this study, it was assumed that the civilian labor force participation rates by age and sex for the Region would change at the relative rates of change projected by the BLS for the Nation through the year 2015.[9] For the remainder of the projection period, the civilian labor force participation rates for the Region were assumed to remain unchanged. The projected civilian labor force participation rates for the Region, derived in this manner, are presented in Table 20.

For purposes of the intermediate growth scenario, then, the projected labor force for the Region was derived by applying the assumed future labor force participation rates to the intermediate population projection by age and sex. This was done for five year intervals over the 2000-2035 projection period. Estimates of future labor force levels which might be expected under high- and low-growth scenarios for the Region were also prepared. The high-growth labor force was derived under the assumption the relationship (ratio) between the high-growth labor

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[9] *At the time of the preparation of this report, U.S. Bureau of Labor Statistics civilian labor force participation rate projections by age and sex for the Nation were available for five-year points in time beginning in 2010. Participation rates for the year 2005 were derived by interpolation between 2000 and 2010.*

Table 20

ACTUAL AND PROJECTED CIVILIAN LABOR FORCE PARTICIPATION RATES IN THE REGION: 2000-2035

Age and Gender	Year			
	2000	2005	2010	2015 to 2035
Males				
Age 16-24	70.17	69.86	69.45	69.76
Age 25-34	87.68	87.59	87.40	87.30
Age 35-44	88.85	88.75	88.56	88.47
Age 45-54	89.04	88.64	88.24	87.73
Age 55-64	69.80	69.70	69.49	69.28
Age 65-74	24.57	26.28	27.89	29.10
Age 75 and Older	8.94	8.83	8.60	8.83
Females				
Age 16-24	72.27	73.41	74.44	75.59
Age 25-34	78.75	81.43	84.01	85.97
Age 35-44	78.62	80.04	81.37	82.59
Age 45-54	80.54	82.22	83.90	85.05
Age 55-64	57.66	59.55	61.44	63.11
Age 65-74	16.62	18.08	19.43	20.78
Age 75 and Older	4.53	4.78	5.03	5.66

Source: U.S. Bureau of Labor Statistics, U.S. Bureau of the Census, and SEWRPC.

force and intermediate-growth labor force would be similar to the relationship between the projected high-growth population and the projected intermediate-growth population. A similar assumption was made for purposes of the low-growth scenario.

The resulting projections of the civilian labor force are presented for the Region in Table 21 and Figure 34. As indicated, the intermediate projection envisions that the labor force would increase by about 113,800 persons, or 11 percent, between 2000 and 2015. Subsequently, the labor force is projected to stabilize, increasing by only about 5,600 persons between 2015 and 2025. A modest increase in the labor force of about 16,500 persons is indicated for the final 10 years of the projection period. Thus, the intermediate projection envisions a labor force of 1,144,300 persons in the year 2035, an overall increase of 135,900 persons, or about 14 percent, over 2000, with much of the increase occurring during the first half of the projection period.

As further indicated in Table 21, the high projection envisions relatively strong growth in the labor force from 2000 to 2015, followed by substantially reduced growth over the following two decades. The high projection envisions a labor force of about 1,257,500 persons in the year 2035, an increase of about 249,100 persons, or 25 percent, over 2000. The low projection envisions a modest increase in the labor force between 2000 and 2015, followed by a decrease. Under the low projection, the labor force in 2035 would be about 1,051,000 persons—or about 42,600 persons, or 4 percent, greater than the 2000 level.

As indicated in Figure 34, the anticipated leveling off of the civilian labor force after 2015, particularly under the intermediate- and low-growth scenarios, represents a significant departure from the long-term trend of steady labor force growth. The moderation of growth in the labor force would result, to a large extent, from anticipated changes in the age composition of the Region's population, particularly as baby-boomers enter their retirement years. By the year 2015, about 70 percent of the large baby boom generation will have reached the age of 55. In addition to the effects of aging of the population, the assumed stabilizing of labor force participation rates midway through the projection period also contributes to the projected moderation of growth in the labor force.

The rates of change in the labor force through the year 2035, as described above, are consistent with the projected rates of change in employment under each growth scenario. Thus, as indicated earlier in this chapter, employment in the Region is projected to increase by 12 percent under an intermediate-growth scenario, 24 percent under a high-growth scenario, and 4 percent under a low-growth scenario. The relative increases in the labor force expected under the intermediate-, high-, and low-growth scenarios, as indicated in Table 21, very closely approximate these projected employment increases. This would indicate basic conformity between the regional employment projections and population projections.

Implicit in the above conclusion is an assumption that the rate of multiple jobholding by individuals in the labor force would not change significantly over the projection period. If a significant change in multiple jobholding patterns were to occur, that could be expected to impact the number of jobs which the Region would be able to support.

Table 21

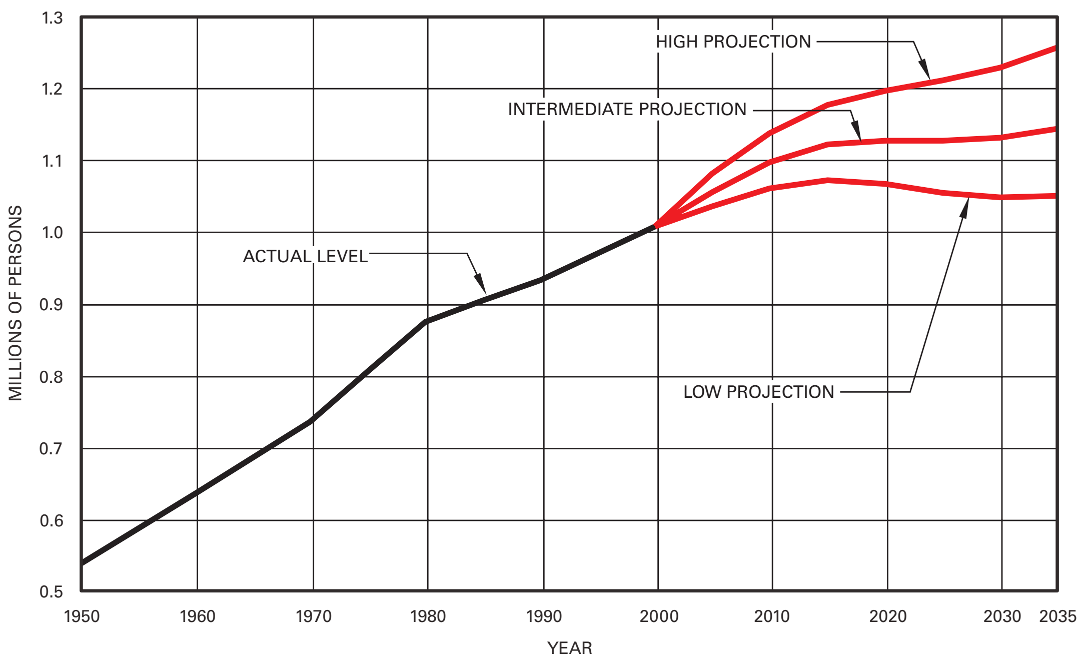
ACTUAL AND PROJECTED CIVILIAN LABOR FORCE IN THE REGION: 2000-2035

Year	High Projection			Intermediate Projection			Low Projection		
	Civilian Labor Force	Change from Preceding Year		Civilian Labor Force	Change from Preceding Year		Civilian Labor Force	Change from Preceding Year	
		Absolute	Percent		Absolute	Percent		Absolute	Percent
Actual 2000	1,008,400	- -	- -	1,008,400	- -	- -	1,008,400	- -	- -
Projected:									
2005	1,081,400	73,000	7.2	1,056,100	47,700	4.7	1,036,600	28,200	2.8
2010	1,137,700	56,300	5.2	1,097,100	41,000	3.9	1,061,100	24,500	2.4
2015	1,177,500	39,800	3.5	1,122,200	25,100	2.3	1,072,900	11,800	1.1
2020	1,197,100	19,600	1.7	1,127,500	5,300	0.5	1,066,700	-6,200	-0.6
2025	1,211,400	14,300	1.2	1,127,800	300	0.0	1,055,400	-11,300	-1.1
2030	1,230,000	18,600	1.5	1,132,000	4,200	0.4	1,049,200	-6,200	-0.6
2035	1,257,500	27,500	2.2	1,144,300	12,300	1.1	1,051,000	1,800	0.2
Change: 2000-2035	- -	249,100	24.7	- -	135,900	13.5	- -	42,600	4.2

Source: U.S. Bureau of Labor Statistics, U.S. Bureau of the Census, and SEWRPC.

Figure 34

ACTUAL AND PROJECTED CIVILIAN LABOR FORCE IN THE REGION: 1950-2035



SUMMARY

This chapter has presented new employment projections for the Southeastern Wisconsin Region for the period from 2000 to 2035. The previous Commission projections, prepared in 1995, pertained to the period from 1990 to 2020. In the current economic study, as in prior studies, the Commission utilized a disaggregate approach to the preparation of employment projections. This approach involves the explicit consideration of employment in selected industry groups and the preparation of projections for those groups. The industry categories for which employment projections were prepared include the dominant and subdominant industries identified in Chapter II of this report and certain residual industry groups. Dominant industries are those which account for at least 4.0 percent of total regional employment; subdominant industries are those which account for 2.0 percent to 3.9 percent.

The projections for each industry were developed based upon a consideration of past industry trends, available indicators of future trends nationally and in the State and Region, and relative industry and sector strength in the Region as compared to State and national industries and sectors. Projections by State agencies and other recently published projections were consulted. The projected employment levels take into account the employment declines of the 2001 recession and use 2003 data estimates as the last historical data points.

The preparation of the employment projections for the Region was carried out in tandem and coordinated with the preparation of population projections for the Region.[10] It was considered critical that the projected employment trends be consistent with the labor force trends which could be expected in light of projected changes in the regional population. Commission population projections indicate that a leveling off in the regional labor force may be expected, particularly toward the middle of the projection period, as a result of the aging of the population. This leveling off in the labor force may be expected to moderate the number of jobs able to be accommodated in the Region. This expectation was an important consideration in the preparation of the employment projections under this study.

Under the current economic study, as in prior studies, the Commission has projected a range of future employment levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty that surrounds any effort to predict future socioeconomic conditions. The intermediate projection prepared under this study is considered the most likely to be achieved for the Region overall, and, in this sense, constitutes the Commission’s forecast, to be used as a basis for the preparation of the new regional land use and transportation plans and other elements of the comprehensive plan for the Region. The high and the low projections are intended to provide an indication of the range of employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

The intermediate employment projection assumes that the Region would generally maintain its competitive position, but would not significantly increase or decrease in strength relative to the rest of the State and Nation. The high projection, on the other hand, would be expected to be achieved only if the regional economy were to become significantly more competitive relative to the State and Nation, resulting in the creation of a significantly greater number of employment opportunities, and inducing a substantial net in-migration of workers to fill those jobs. Conversely, the low projection would be expected to be achieved only with a stagnating regional economy that becomes substantially less competitive in relation to the rest of the State and Nation in the coming decades.

A summary of the employment projections for the Region for the period from 2000 to 2035 as presented in this chapter follows:

- Under the intermediate projection, total employment in the Region would recover from the reduced levels of the early 2000s, experiencing fairly strong growth until about the middle of the projection period. At that time, employment growth is projected to moderate, coinciding with an anticipated leveling off in the labor force, particularly as large numbers of baby-boomers retire. Relatively modest employment growth is envisioned over the last 10 years of the projection period. The intermediate projection envisions total employment of 1,368,300 jobs in the Region in 2035, an increase of 145,500 jobs, or 12 percent, over the 2000 level of 1,222,800 jobs. The high projection indicates that employment in the Region could be as high as 1,509,600 jobs in 2035, an increase of about 286,800 jobs, or 24 percent, over the 2000 level. The low projection indicates that employment

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[10] *The population projections are documented in SEWRPC Technical Report No. 11 (4th Edition),* The Population of Southeastern Wisconsin.

in the Region could be as low as 1,267,500 jobs in 2035, about 44,700 jobs, or 4 percent, over the 2000 level.

- As noted above, the intermediate employment projection for the year 2035—which is expected to serve as the basis for the year 2035 regional land use and transportation plans—envisions that employment within the Region would increase by 12 percent between 2000 and 2035. Much of the growth would occur in the first half of the projection period, following a recovery from the reduced employment levels of the early 2000s. In comparison, the previous Commission employment forecast, prepared in 1995, had envisioned a 20 percent increase in employment over the 30 year period from 1990 to 2020. The intermediate projection of 1,368,300 jobs for the year 2035 is 7 percent greater than the forecast of 1,277,100 jobs for the year 2020 indicated in the previous projection cycle.

- The sectoral changes—particularly, a shift from a goods producing economy to a services providing economy—that have occurred in the Region in recent decades are projected to continue. The general outlook for manufacturing in the Region does not appear promising, except for the printing and publishing sector. A key factor expected to impact the manufacturing sector in the Region, and for that matter the State and the Nation, is the movement of jobs overseas. Overseas labor, particularly in Asia, is substantially cheaper than the American counterpart. Low overseas labor costs more than offset the transportation costs of raw materials and finished goods to market. Some of this dynamic will change as the overseas demand for personnel and material raises prices, decreasing the margins for goods produced overseas. However, that shift is not expected to offset job losses in U.S. manufacturing over the foreseeable future. Also affecting manufacturing employment in the Region, State, and Nation is productivity gains in the sector. Manufacturing output continues to increase, but it is done with less labor. As a result, there is relatively less demand for manufacturing labor even within growing manufacturing industries. Under the intermediate projection, total manufacturing employment in the Region is projected at 160,400 jobs in 2035, compared to 224,300 jobs in 2000, never recovering from job losses of the recent recession. By 2035, manufacturing employment would comprise 12 percent of total employment in the Region, compared to 18 percent in 2000.

- Employment in the services sector may be expected to experience substantial growth, continuing a trend that is now decades old. Employment in the business services sector, in particular, may be expected to experience significant growth. As companies focus on core competencies, cost competition, and market expansion, many tasks that were completed in-house will be subcontracted to other firms specializing in auxiliary tasks such as marketing, payroll, human resources, and information technology. Employment in the health and social services sectors may also be expected to increase at relatively rapid rates. The most profound effect on health and social services in the Region will be the aging of the population. As the baby-boomers reach retirement age, health and social services will be in greater demand, directly affecting employment in these sectors. The outlook for entertainment services is also promising; rising personal income and retirees having more leisure time are expected to play a role in that growth. Under the intermediate projection, total service-related employment in the Region is projected at 590,000 jobs in 2035, compared to 406,000 jobs in 2000. By 2035, service sector employment would comprise 43 percent of total employment in the Region, compared to 33 percent in 2000.

- The projected rates of change in employment for the Region between 2000 and 2035 are consistent with the projected rates of change in the regional labor force. The regional labor force was projected based upon the concurrently-prepared high, intermediate, and low population projections and anticipated future labor force participation rates. The results indicate that, between 2000 and 2035, the regional labor force would increase by 14 percent under the intermediate projection, 25 percent under the high projection, and 4 percent under the low projection. The relative increases in employment—12 percent under an intermediate-growth scenario, 24 percent under a high-growth scenario, and 4 percent under a low-growth scenario—very closely approximate these projected labor force increases. This would indicate basic conformity between the regional employment projections and population projections.

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Chapter IV

SUMMARY

This report constitutes the fourth edition of SEWRPC Technical Report No. 10, *The Economy of Southeastern Wisconsin*. It documents the findings of the economic analyses conducted by the Commission in 2004 and sets forth employment projections for the Region to the year 2035. This report is a companion to the fourth edition of SEWRPC Technical Report No. 11, *The Population of Southeastern Wisconsin*, which documents a concurrent analysis of the regional population and sets forth population projections to the year 2035. The aforereferenced reports were prepared in tandem to ensure consistency between the Commission's long-range employment and population projections. Together the new employment and population projections presented in these reports provide an important part of the basis for updating and extending the currently adopted regional land use and transportation plans, along with other elements of the comprehensive plan for the Southeastern Wisconsin Region, to the year 2035.

This report consists of four chapters. The introductory chapter, Chapter I, provides a brief overview of previous Commission economic analyses and projections. Chapter II presents current and historical information on selected measures of economic activity for the Region. Chapter III presents a new set of employment projections, covering the period 2000 to 2035. This, the final chapter, provides an overall summary of the economic inventory and analysis findings and of the new employment projections for the Region set forth in this report.

MEASURES OF ECONOMIC ACTIVITY

Current and historic information on the Region's economy is important to the comprehensive planning program for the Region. Such information contributes to an understanding of existing development patterns and historic trends in the development of the Region and provides a framework for preparing employment projections. Current and historical information on selected measures of economic activity in the Region, including the Region's labor force, the number and type of jobs in the Region, and personal income levels in the Region, is presented in Chapter II of this report. A summary of key information presented in that chapter follows.

- The civilian labor force of an area consists of all of its residents who are 16 years of age or over and who are either employed at one or more nonmilitary jobs or are temporarily unemployed. The civilian labor force of the Region was 1,008,400 persons in 2000, compared to 934,200 persons in 1990. The increase of 74,200 persons in the regional civilian labor force during the 1990s compares to increases of 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 in both the 1960s and 1950s.

- In relative terms, the Region's labor force grew at a somewhat slower rate than both the State and the national labor force during the 1990s. As a result, the Region's share of the State labor force decreased from 37 to 35 percent, with the Region's share of the national labor force also declining slightly.

- The gender makeup of the civilian labor force changed slightly during the 1990s, with the female component increasing from just under 47 percent of the labor force in 1990 to about 48 percent in 2000, and the male component experiencing a corresponding decrease. During the four decades prior to 1990, the gender makeup of the labor force changed dramatically. The female component increased from 29 percent in 1950 to 47 percent in 1990, while the male component decreased from 71 percent to 53 percent.

- For the Region as a whole, the civilian labor force participation rate (the civilian labor force as a percent of the total labor force-age population) stood at 68.2 percent in 2000, a slight increase from 67.6 percent in 1990. The four decades prior to 1990 saw significant increases in the civilian labor force participation rate, from 56.6 percent in 1950 to the 1990 rate of 67.6 percent. The long-term trend in the civilian labor force participation rate is the net effect of increased relative participation by females and decreased relative participation by males.

- The past decade saw further change in the relative distribution of the labor force among the counties within the Region, continuing long-term trends in this respect. Milwaukee County's share of the regional labor force decreased by about 5 percentage points during the 1990s. Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties increased at least slightly in their relative share, while Racine County's share of the regional labor force did not change. Over the past 50 years, the most notable changes in the labor force distribution have been the increase in Waukesha County's share, from 6 percent to 20 percent of the total regional labor force, and the decrease in Milwaukee County's share, from 72 percent to 47 percent.

- Total employment in the Region stood at 1,222,800 jobs in 2000, compared to 1,062,600 jobs in 1990. The increase of 160,200 jobs during the 1990s compares to 114,400 during the 1980s, 163,300 during the 1970s, 111,900 during the 1960s, and 99,500 during the 1950s.

- In relative terms, employment in the Region grew at a somewhat slower rate than both the State and the Nation during the 1990s. As a result, the Region's share of total State employment decreased from about 38 percent to about 36 percent, with the Region's share of national employment also showing a slight decrease.

- Historically, employment levels, both nationally and within the Region, tend to fluctuate in the short-term, rising and falling in accordance with business cycles. The long period of nearly uninterrupted job growth between 1983 and 2000 is unusual in this respect. Nationally and within the Region, total employment increased each year during that time, with the exception of a slight decrease in 1991. This extended period of employment growth ended after 2000. Total employment in the Region has decreased each year since 2000. Estimated total employment in the Region stood at 1,179,000 jobs in 2003, about 4 percent below the 2000 level.

- Between 1990 and 2000, Milwaukee and Racine Counties decreased in their share of total regional employment while the share of each of the five other counties increased at least slightly. Over the past five decades, Milwaukee County has experienced a substantial decrease in its share of regional employment; Waukesha County has experienced a substantial increase; and Ozaukee, Walworth, and Washington Counties have experienced gradual increases. In Kenosha and Racine Counties, the share of total regional employment in 2000 was about the same as in 1950, with some fluctuations occurring over the intervening decades.

- The 1990s saw a continuation of a shift in the regional economy from a manufacturing to a service orientation, documented in previous Commission economic studies. Manufacturing employment in the Region was virtually unchanged during the 1990s, following a 15 percent decrease during the 1980s, and a modest 4 percent increase during the 1970s. Conversely, service-related employment increased substantially during each of the past three decades—by 33 percent during the 1990s, 41 percent during the 1980s, and 53 percent during 1970s. Due to these differential growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 32 percent in 1970 to 18 percent in 2000, while service-related employment increased from 18 percent in 1970 to 33 percent in 2000. In comparison to the manufacturing and services industry groups, other major industry groups—such as wholesale trade, retail trade, government, and finance, insurance, and real estate—have been relatively stable in terms of their share of total employment in the Region over the last three decades.

- Per capita income in the Region stood at $22,800 in 1999. Regional per capita income, as measured in constant dollars, increased by 16 percent during the 1990s, rebounding from a modest 4 percent increase observed during the 1980s. Historically, the per capita income level for the Region has been higher than for the State and the Nation, with the relative differences in this respect generally decreasing in recent decades.

- Median family income in the Region stood at $57,400 in 1999. The median family income, as measured in constant dollars, increased by 10 percent during the 1990s, following a 4 percent decrease during the previous decade. Median family income for the Region as reported in the decennial censuses has consistently exceeded the State and Nation.

YEAR 2035 EMPLOYMENT PROJECTIONS

In the current economic study, as in prior studies, the Commission utilized a disaggregate approach to the preparation of employment projections. This approach involves the explicit consideration of employment in selected industry groups and the preparation of projections for those groups. The industry categories for which employment projections were prepared include “dominant” and “subdominant” industries and certain residual industry groups. Dominant industries are those which account for at least 4.0 percent of total regional employment; subdominant industries are those which account for 2.0 percent to 3.9 percent.

The projections for each industry were developed based upon a consideration of past industry trends, available indicators of future trends nationally and in the State and Region, and relative industry and sector strength in the Region as compared to State and national industries and sectors. Projections by State agencies and other recently published projections were consulted. The projected employment levels take into account the employment declines of the 2001 recession and use 2003 data estimates as the last historical data points.

The preparation of the employment projections for the Region was coordinated with the preparation of population projections for the Region. It was considered critical that the projected employment trends be consistent with the labor force trends which could be expected in light of projected changes in the regional population. Commission population projections indicate that a leveling off in the regional labor force may be expected, particularly toward the middle of the projection period, as a result of the aging of the population. This leveling off in the labor force may be expected to moderate the number of jobs able to be accommodated in the Region. This expectation was an important consideration in the preparation of the employment projections under this study.

Under the current economic study, as in prior studies, the Commission has projected a range of future employment levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty that surrounds any effort to predict future socioeconomic conditions. The intermediate projection prepared under this study is considered the most likely to be achieved for the Region overall, and, in this sense, constitutes the Commission’s forecast, to be used as a basis for the preparation of the new regional land use and transportation plans and other elements of the comprehensive plan for the Region. The high and the low projections are intended to provide an indication of the range of employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

The intermediate employment projection assumes that the Region would generally maintain its competitive position, but would not significantly increase or decrease in strength relative to the rest of the State and Nation. The high projection, on the other hand, would be expected to be achieved only if the regional economy were to become significantly more competitive relative to the State and Nation, resulting in the creation of a significantly greater number of employment opportunities, and inducing a substantial net in-migration of workers to fill those jobs. Conversely, the low projection would be expected to be achieved only with a stagnating regional economy that becomes substantially less competitive in relation to the rest of the State and Nation in the coming decades.

The methodology and assumptions underlying the new employment projections are further explained in Chapter III of this report. A summary of the resulting projections, as presented in Chapter III, follows:

- Under the intermediate projection, total employment in the Region would recover from the reduced levels of the early 2000s, experiencing fairly strong growth until about the middle of the projection period. At that time, employment growth is projected to moderate, coinciding with an anticipated leveling off in the labor force, particularly as large numbers of baby-boomers retire. Relatively modest employment growth is envisioned over the last 10 years of the projection period. The intermediate projection envisions total employment of 1,368,300 jobs in the Region in 2035, an increase of 145,500 jobs, or 12 percent, over the 2000 level of 1,222,800 jobs. The high projection indicates that employment in the Region could be as high as 1,509,600 jobs in 2035, an increase of about 286,800 jobs, or 24 percent, over the 2000 level. The low projection indicates that employment in the Region could be as low as 1,267,500 jobs in 2035, about 44,700 jobs, or 4 percent, over the 2000 level.

- As noted above, the intermediate employment projection for the year 2035—which is expected to serve as the basis for the year 2035 regional land use and transportation plans—envisions that employment within the Region would increase by 12 percent between 2000 and 2035. Much of the growth would occur in the first half of the projection period, following a recovery from the reduced employment levels of the early 2000s. In comparison, the previous Commission employment forecast, prepared in 1995, had envisioned a 20 percent increase in employment over the 30 year period from 1990 to 2020. The intermediate projection of 1,368,300 jobs for the year 2035 is 7 percent greater than the forecast of 1,277,100 jobs for the year 2020 indicated in the previous projection cycle.

- The sectoral changes—particularly, a shift from a goods producing economy to a services providing economy—that have occurred in the Region in recent decades are projected to continue. The general outlook for manufacturing in the Region does not appear promising, except for the printing and publishing sector. A key factor expected to impact the manufacturing sector in the Region, and for that matter the State and the Nation, is the movement of jobs overseas. Overseas labor, particularly in Asia, is substantially cheaper than the American counterpart. Low overseas labor costs more than offset the transportation costs of raw materials and finished goods to market. Some of this dynamic will change as the overseas demand for personnel and material raises prices, decreasing the margins for goods produced overseas. However, that shift is not expected to offset job losses in U.S. manufacturing over the foreseeable future. Also affecting manufacturing employment in the Region, State, and Nation is productivity gains in the sector. Manufacturing output continues to increase, but it is done with less labor. As a result, there is relatively less demand for manufacturing labor even within growing manufacturing industries. Under the intermediate projection, total manufacturing employment in the Region is projected at 160,400 jobs in 2035, compared to 224,300 jobs in 2000, never recovering from job losses of the recent recession. By 2035, manufacturing employment would comprise 12 percent of total employment in the Region, compared to 18 percent in 2000.

- Employment in the services sector may be expected to experience substantial growth, continuing a trend that is now decades old. Employment in the business services sector, in particular, may be expected to experience significant growth. As companies focus on core competencies, cost competition, and market expansion, many tasks that were completed in-house will be subcontracted to other firms specializing in auxiliary tasks such as marketing, payroll, human resources, and information technology. Employment in the health and social services sectors may also be expected to increase at relatively rapid rates. The most profound effect on health and social services in the Region will be the aging of the population. As the baby-boomers reach retirement age, health and social services will be in greater demand, directly affecting employment in these sectors. The outlook for entertainment services is also promising; rising personal income and retirees having more leisure time are expected to play a role in that growth. Under the intermediate projection, total service-related employment in the Region is projected at 590,000 jobs in 2035, compared to 406,000 jobs in 2000. By 2035, service sector employment would comprise 43 percent of total employment in the Region, compared to 33 percent in 2000.

- The projected rates of change in employment for the Region between 2000 and 2035 are consistent with the projected rates of change in the regional labor force. The regional labor force was projected based upon the concurrently-prepared high, intermediate, and low population projections and anticipated future labor force participation rates. The results indicate that, between 2000 and 2035, the regional labor force would increase by 14 percent under the intermediate projection, 25 percent under the high projection, and 4 percent under the low projection. The relative increases in employment—12 percent under the intermediate projection, 24 percent under the high projection, and 4 percent under the low projection—very closely approximate these projected labor force increases. This would indicate basic conformity between the regional employment projections and population projections.

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APPENDIX

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Appendix A

EMPLOYMENT BY GENERAL INDUSTRY GROUP FOR THE UNITED STATES, WISCONSIN, AND THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1970-2000

This appendix presents annual employment levels by industry for the period from 1970 through 2000 for the United States, Wisconsin, and the Southeastern Wisconsin Region by county, as indicated by the U.S. Bureau of Economic Analysis in data released in spring 2003. The Bureau of Economic Analysis periodically revises its historic data series on employment levels. The data presented in this appendix differ slightly from employment level data previously released by the Bureau of Economic Analysis and presented in previous editions of this report.

Table A-1

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE UNITED STATES: 1970-2000

	General Industry Group										
Year	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	3,961,000	4,398,800	19,687,400	4,865,500	4,172,700	13,698,800	6,125,400	17,029,800	12,841,000	1,269,200	88,049,600
1971	3,916,000	4,458,200	18,854,600	4,828,200	4,231,000	14,023,600	6,371,800	17,365,000	13,193,000	1,284,000	88,525,400
1972	3,871,000	4,732,900	19,345,800	4,924,500	4,337,900	14,389,400	6,696,100	18,301,200	13,584,000	1,314,400	91,497,200
1973	3,896,000	5,074,300	20,413,200	5,072,700	4,529,200	15,012,100	7,138,300	19,204,400	13,952,000	1,374,300	95,666,500
1974	3,968,000	5,043,600	20,400,400	5,144,900	4,655,800	15,291,800	7,339,400	19,691,500	14,403,000	1,445,400	97,383,800
1975	3,948,000	4,664,300	18,654,600	4,981,300	4,871,000	15,165,400	7,331,000	20,247,800	14,852,000	1,535,200	96,250,600
1976	3,972,000	4,769,800	19,372,300	4,995,200	5,012,200	15,792,800	7,583,900	20,959,700	14,964,000	1,622,300	99,044,200
1977	3,857,000	5,089,100	20,090,000	5,163,400	5,174,300	16,437,700	7,983,500	21,855,500	15,192,000	1,731,700	102,574,200
1978	3,756,000	5,610,700	20,968,400	5,416,100	5,441,600	17,290,600	8,281,200	23,054,400	15,552,000	1,867,600	107,238,600
1979	3,764,000	5,906,200	21,498,000	5,627,400	5,672,600	17,780,500	8,538,100	24,082,600	15,972,000	2,022,700	110,864,100
1980	3,798,000	5,654,200	20,781,100	5,672,100	5,741,700	17,883,900	8,756,000	24,999,600	16,257,000	2,186,600	111,730,200
1981	3,750,000	5,566,300	20,663,200	5,711,300	5,832,900	18,118,900	8,849,000	25,808,600	16,054,000	2,425,800	112,780,000
1982	3,657,000	5,354,300	19,269,900	5,649,800	5,722,500	18,169,100	8,873,300	26,849,500	15,938,000	2,462,900	111,946,300
1983	3,880,000	5,471,900	18,921,700	5,580,300	5,689,300	18,551,100	8,896,600	28,073,400	15,961,000	2,380,400	113,405,700
1984	3,669,000	6,092,900	19,884,400	5,799,500	5,985,000	19,534,400	9,167,500	29,604,500	16,174,000	2,484,900	118,396,100
1985	3,466,000	6,465,500	19,778,600	5,894,900	6,136,100	20,261,800	9,492,000	31,241,500	16,492,000	2,537,300	121,765,700
1986	3,335,000	6,789,400	19,488,700	5,934,000	6,171,700	20,682,100	10,075,400	32,543,100	16,824,000	2,350,900	124,194,300
1987	3,275,000	6,944,800	19,548,800	6,111,900	6,317,400	21,472,900	10,399,500	33,928,300	17,163,000	2,421,800	127,583,400
1988	3,281,000	7,172,400	19,886,000	6,222,700	6,478,800	22,124,500	10,663,400	35,879,600	17,549,000	2,446,500	131,703,900
1989	3,200,000	7,293,500	19,992,500	6,361,600	6,704,300	22,687,600	10,663,400	37,170,900	17,935,000	2,422,000	134,430,800
1990	3,153,000	7,260,800	19,697,200	6,568,600	6,711,500	22,920,500	10,712,600	38,709,600	18,478,000	2,497,100	136,708,900
1991	3,104,000	6,811,000	19,025,700	6,579,200	6,627,100	22,776,400	10,521,400	39,470,400	18,566,000	2,531,600	136,012,800
1992	3,057,000	6,825,600	18,708,900	6,487,700	6,681,800	23,024,000	10,291,600	40,368,900	18,776,000	2,429,600	136,651,100
1993	3,130,000	7,012,700	18,712,000	6,714,000	6,569,200	23,466,600	10,501,900	41,811,100	18,975,000	2,569,900	139,462,400
1994	3,084,000	7,393,100	19,011,700	6,919,300	6,701,900	24,372,500	10,803,500	43,012,800	19,193,000	2,670,800	143,162,600
1995	3,106,000	7,731,500	19,186,300	7,076,200	6,930,500	25,204,200	11,037,800	44,768,100	19,352,000	2,673,200	147,065,800
1996	3,073,000	8,028,700	19,186,900	7,243,200	7,012,100	25,859,700	11,368,600	46,468,700	19,427,000	2,721,300	150,389,200
1997	3,086,000	8,410,500	19,388,200	7,425,500	7,188,100	26,227,200	11,736,100	48,174,400	19,592,000	2,831,200	154,059,200
1998	3,126,000	8,797,900	19,507,300	7,721,400	7,388,400	26,318,600	12,453,900	50,125,000	19,874,000	2,833,700	158,146,200
1999	3,157,000	9,253,400	19,213,800	7,977,800	7,467,300	26,816,800	12,600,300	51,715,100	20,187,000	2,885,800	161,274,300
2000	3,110,000	9,523,300	19,107,800	8,262,400	7,582,100	27,387,300	13,206,800	53,440,800	20,666,000	2,923,300	165,209,800

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-2

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN WISCONSIN: 1970-2000

Year	General Industry Group: Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	148,414	85,303	510,476	89,584	73,713	332,825	102,268	314,765	259,976	11,797	1,929,121
1971	146,917	84,047	487,222	89,426	75,214	338,827	107,246	325,042	265,793	11,335	1,931,069
1972	148,459	84,570	503,291	90,204	77,096	343,376	114,439	344,071	273,551	11,295	1,990,352
1973	148,262	90,109	540,594	92,426	80,784	359,731	126,208	366,349	277,023	11,708	2,093,194
1974	150,678	88,489	554,516	93,331	81,791	365,831	134,241	379,274	275,705	12,139	2,135,995
1975	152,734	83,635	515,668	91,079	91,864	352,996	145,970	394,225	284,964	13,210	2,126,345
1976	147,206	89,924	528,454	91,115	94,418	367,204	149,266	414,778	294,967	14,131	2,191,463
1977	145,687	99,635	547,114	94,534	97,627	385,193	156,846	436,484	296,448	14,894	2,274,462
1978	145,298	105,923	576,676	98,514	100,367	400,067	161,688	459,314	299,532	16,102	2,363,481
1979	150,588	108,706	597,767	102,774	104,592	413,528	167,641	477,484	305,762	17,349	2,446,191
1980	150,849	97,265	567,875	103,386	104,402	411,318	173,136	492,491	311,025	18,090	2,429,837
1981	143,358	93,014	550,607	103,326	105,745	406,474	170,322	505,512	305,624	19,164	2,403,146
1982	141,868	87,138	505,834	101,461	103,371	404,499	169,046	523,001	304,676	19,530	2,360,424
1983	149,475	86,912	493,145	100,563	103,043	408,935	165,813	531,337	303,810	19,919	2,362,952
1984	140,712	94,918	526,408	105,500	106,120	424,785	168,646	554,136	312,252	22,264	2,455,741
1985	129,653	96,997	521,178	107,999	106,732	434,110	167,291	580,667	318,662	22,674	2,485,963
1986	123,367	103,410	524,150	108,769	107,279	441,302	175,773	600,047	321,972	21,674	2,527,743
1987	121,490	108,143	542,670	111,999	113,749	460,514	173,976	618,303	320,543	24,939	2,596,326
1988	121,341	112,004	565,547	114,319	118,094	470,030	176,743	646,277	327,557	24,737	2,676,649
1989	114,330	117,105	573,290	117,844	124,189	485,209	177,707	668,486	332,417	24,966	2,735,543
1990	114,701	124,497	574,066	122,793	125,765	499,720	185,053	697,198	339,502	27,065	2,810,360
1991	113,370	125,332	562,783	125,393	127,495	502,613	188,504	720,603	342,654	28,192	2,836,939
1992	109,712	133,947	564,956	125,757	130,039	510,448	189,313	744,676	354,724	28,073	2,891,645
1993	108,198	136,347	576,466	130,418	131,413	514,913	195,195	768,320	358,493	29,806	2,949,569
1994	108,871	143,178	600,734	133,957	133,794	533,195	205,771	793,500	360,902	31,286	3,045,188
1995	108,795	146,960	619,853	138,629	137,140	552,463	209,390	817,679	363,038	32,663	3,126,610
1996	103,689	152,391	619,997	140,666	139,658	564,377	213,875	846,191	366,594	33,778	3,181,216
1997	103,170	158,586	627,868	142,986	143,023	569,380	213,301	876,298	368,703	35,057	3,238,372
1998	101,263	163,648	638,097	148,227	147,422	567,581	221,954	898,972	372,617	37,057	3,296,838
1999	103,045	173,440	635,461	152,050	148,672	580,022	222,112	929,662	377,538	40,746	3,362,748
2000	101,276	176,531	632,567	156,124	150,468	590,333	230,975	957,892	384,203	41,449	3,421,818

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-3

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE SOUTHEASTERN WISCONSIN REGION: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	11,956	32,438	254,379	38,490	37,189	133,931	47,620	141,812	84,360	2,677	784,852
1971	11,553	31,499	240,217	38,303	37,170	135,223	49,926	145,444	86,597	2,640	778,572
1972	11,505	31,969	246,288	38,258	38,163	138,174	52,605	153,342	89,625	2,522	802,451
1973	11,252	33,689	264,419	39,580	40,372	143,768	57,652	163,544	91,285	2,665	848,226
1974	11,291	32,868	272,080	39,642	40,703	145,639	60,826	171,366	91,332	2,651	868,398
1975	11,068	29,877	251,503	38,105	40,576	138,955	66,070	176,788	94,148	2,971	850,061
1976	10,355	31,696	249,575	38,344	41,976	143,575	67,803	183,980	96,485	3,365	867,154
1977	10,072	35,321	255,418	38,598	44,148	149,533	70,877	192,819	97,045	3,619	897,450
1978	9,922	38,087	268,783	39,931	45,138	154,341	73,244	202,213	97,984	3,971	933,614
1979	10,156	39,125	279,859	42,529	46,735	156,165	74,448	210,183	99,361	4,261	962,822
1980	10,023	33,880	264,234	42,204	46,165	153,920	75,571	216,692	101,136	4,403	948,228
1981	9,407	32,097	249,633	41,754	46,578	150,048	73,969	221,563	98,865	4,722	928,636
1982	9,136	29,663	224,575	40,686	45,400	148,500	74,304	227,537	97,120	4,840	901,761
1983	9,614	29,554	211,266	40,011	44,841	150,222	73,602	230,055	95,689	5,075	889,929
1984	9,017	32,527	227,260	41,600	46,981	156,505	74,661	240,552	98,901	5,879	933,883
1985	8,270	33,279	217,819	42,736	47,718	158,971	74,164	251,820	101,993	5,837	942,607
1986	7,829	35,599	213,381	43,081	47,464	160,476	78,080	260,165	103,791	5,571	955,437
1987	7,693	38,044	218,821	43,611	50,156	169,639	78,110	268,901	103,138	6,095	984,208
1988	7,659	39,860	226,873	44,272	51,784	175,384	80,228	283,251	105,823	6,303	1,021,437
1989	7,147	42,061	226,494	45,920	55,025	181,343	81,395	292,366	104,244	6,515	1,042,510
1990	7,172	45,090	223,518	46,329	55,328	185,364	81,806	304,741	106,215	7,059	1,062,622
1991	7,085	44,077	216,638	46,246	56,320	182,747	83,078	308,086	106,542	7,350	1,058,169
1992	6,772	45,441	213,232	45,693	57,381	183,687	81,104	319,334	109,133	7,615	1,069,392
1993	6,595	45,898	216,454	47,355	56,608	183,624	82,682	328,637	109,127	7,913	1,084,893
1994	6,605	47,008	223,994	49,114	56,786	186,676	85,940	338,730	109,723	8,438	1,113,014
1995	6,553	47,181	229,861	50,534	58,799	191,811	88,500	345,995	109,869	8,663	1,137,766
1996	6,169	48,170	227,586	50,874	60,455	192,424	90,072	356,002	109,993	8,990	1,150,735
1997	6,080	49,942	228,635	51,702	62,555	191,931	89,376	368,794	110,289	9,506	1,168,810
1998	5,941	50,425	232,105	52,971	64,303	193,331	91,618	378,840	111,289	10,147	1,190,970
1999	6,071	53,289	227,845	54,180	64,619	192,024	90,111	395,503	112,381	11,354	1,207,377
2000	5,960	53,833	224,362	54,840	64,377	193,674	93,744	405,975	114,383	11,667	1,222,815

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-4

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN KENOSHA COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	1,369	1,568	16,521	1,352	715	7,408	1,344	6,896	4,828	109	42,110
1971	1,308	1,557	15,248	1,582	734	7,399	1,333	7,225	5,239	98	41,723
1972	1,289	1,654	16,445	1,468	786	7,503	1,531	7,631	5,662	128	44,097
1973	1,248	1,682	18,621	1,366	866	8,066	1,747	8,130	5,887	135	47,748
1974	1,240	1,695	20,845	1,628	954	8,156	1,838	8,521	5,939	162	50,978
1975	1,282	1,661	18,127	1,533	1,060	8,318	2,088	8,795	6,214	167	49,245
1976	1,243	1,678	17,584	1,594	980	8,331	2,191	9,038	6,517	348	49,504
1977	1,244	1,830	16,323	1,760	1,035	8,470	2,345	9,190	6,621	329	49,147
1978	1,258	2,778	17,118	1,895	1,157	8,724	2,413	9,580	6,751	352	52,026
1979	1,283	3,807	18,454	1,813	1,096	8,878	2,366	9,885	6,942	376	54,900
1980	1,253	3,103	18,241	1,720	981	9,085	2,299	10,120	6,909	413	54,124
1981	1,152	2,249	15,735	1,584	998	8,769	2,125	10,258	6,709	368	49,947
1982	1,112	2,087	14,942	1,312	1,029	8,542	2,047	11,068	6,913	235	49,287
1983	1,158	1,917	15,604	1,376	1,003	8,384	1,900	10,828	7,008	235	49,413
1984	1,068	1,966	16,280	1,498	1,005	8,646	1,919	10,912	7,095	278	50,667
1985	964	1,980	12,826	1,499	1,116	8,661	1,978	11,271	7,117	307	47,719
1986	898	2,025	10,771	1,578	1,117	8,924	2,133	11,294	7,255	305	46,300
1987	868	2,474	13,685	1,653	1,210	9,628	2,241	11,564	6,899	406	50,628
1988	841	2,389	14,467	1,706	1,202	9,960	2,301	11,308	6,808	387	51,369
1989	767	2,478	11,618	1,858	1,225	10,496	2,556	11,780	6,505	399	49,682
1990	742	2,841	10,382	1,809	1,496	11,776	2,846	13,269	6,589	480	52,230
1991	704	2,943	10,102	1,795	2,041	11,641	2,911	14,134	6,665	496	53,432
1992	648	3,109	10,188	1,866	2,221	12,355	2,821	14,341	6,934	559	55,042
1993	638	3,102	10,551	1,975	2,274	12,662	3,046	14,509	6,999	607	56,363
1994	637	3,217	10,680	2,077	2,405	13,173	3,103	15,253	7,009	659	58,213
1995	635	3,359	11,215	2,052	2,363	13,876	3,276	15,618	7,305	658	60,357
1996	603	3,345	11,540	2,078	2,336	12,964	3,222	16,181	7,588	680	60,537
1997	593	3,403	11,584	2,224	2,536	12,375	3,094	16,783	7,822	746	61,160
1998	584	3,619	12,363	2,248	2,873	12,662	3,392	17,487	8,040	811	64,079
1999	593	3,911	13,095	2,585	3,281	13,196	3,535	18,747	8,313	943	68,199
2000	583	4,048	12,801	2,651	3,267	13,349	3,726	18,706	8,534	989	68,654

[a] *Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b] *Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-5

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN MILWAUKEE COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	688	18,181	167,370	29,521	29,219	89,702	36,645	98,063	54,756	997	525,142
1971	613	16,983	156,818	29,180	28,548	91,436	38,357	99,442	55,788	970	518,135
1972	569	17,612	157,877	29,028	28,436	93,042	39,271	104,671	57,293	954	528,753
1973	508	18,264	166,953	30,273	29,881	95,551	42,518	111,668	57,658	1,038	554,312
1974	473	17,636	168,348	29,723	29,963	96,482	44,108	117,550	57,364	1,035	562,682
1975	438	15,141	157,218	27,471	28,452	88,850	45,882	120,607	58,600	1,086	543,745
1976	387	16,121	153,185	27,322	29,237	91,083	46,649	125,058	59,548	1,205	549,795
1977	363	17,453	155,163	26,915	29,986	94,140	48,015	129,710	59,492	1,261	562,498
1978	347	18,113	161,016	27,668	30,197	96,126	48,844	135,752	59,632	1,432	579,127
1979	366	18,283	165,001	29,978	30,971	95,125	49,897	140,684	60,392	1,454	592,151
1980	368	16,203	155,522	29,368	30,862	93,044	50,752	144,300	61,379	1,377	583,175
1981	346	16,062	147,645	28,567	30,508	89,110	49,880	147,021	58,739	1,578	569,456
1982	341	14,588	131,772	27,501	29,196	86,748	49,421	148,359	57,584	1,630	547,140
1983	364	14,368	119,207	26,705	28,399	87,308	49,255	150,952	55,825	1,688	534,071
1984	337	15,417	123,480	27,482	29,285	89,252	50,480	157,392	58,772	2,009	553,906
1985	304	15,808	117,224	28,431	28,657	90,091	50,080	163,559	61,470	1,951	557,575
1986	283	16,437	112,905	28,550	28,541	89,773	52,469	169,461	62,453	1,836	562,708
1987	282	16,710	111,523	28,199	29,732	96,759	53,144	175,182	61,846	1,943	575,320
1988	284	17,491	112,966	28,348	30,233	101,716	55,351	184,076	64,321	2,004	596,790
1989	255	17,748	112,647	29,712	32,445	104,987	55,678	189,971	62,493	2,066	608,002
1990	266	18,859	110,768	29,467	30,405	103,307	54,337	196,657	63,452	2,269	609,787
1991	270	18,141	106,266	29,043	29,567	98,949	54,721	193,074	62,436	2,371	594,838
1992	248	17,417	101,607	28,234	29,912	97,331	51,162	200,146	63,779	2,341	592,177
1993	217	17,017	100,692	29,357	28,396	95,650	51,756	204,353	63,645	2,283	593,366
1994	202	17,277	103,082	30,619	27,527	96,077	52,358	208,701	64,062	2,439	602,344
1995	183	15,937	101,930	30,820	28,459	97,255	53,748	208,300	63,600	2,395	602,627
1996	152	16,197	98,957	30,623	28,486	97,527	54,157	212,829	62,456	2,348	603,732
1997	131	16,978	98,254	31,083	28,918	97,426	53,866	219,228	62,167	2,484	610,535
1998	126	16,661	96,892	32,384	29,120	97,687	53,965	224,907	62,530	2,675	616,947
1999	130	17,526	93,295	33,817	28,476	93,100	52,759	235,158	62,858	2,944	620,063
2000	128	17,813	90,010	34,299	27,912	92,746	52,627	242,826	63,291	2,987	624,639

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-6

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN OZAUKEE COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	1,483	858	8,708	679	283	3,362	979	2,805	1,932	167	21,256
1971	1,353	791	8,787	667	285	3,462	1,034	2,995	1,994	189	21,557
1972	1,273	917	8,930	692	469	3,403	1,239	3,255	2,070	211	22,459
1973	1,173	1,094	9,529	722	560	3,631	1,557	3,480	2,220	212	24,178
1974	1,099	1,017	9,651	562	581	3,718	1,708	3,748	2,298	215	24,597
1975	1,110	997	8,127	562	674	3,903	2,111	3,812	2,445	166	23,907
1976	1,063	1,110	9,052	552	794	4,293	2,125	4,085	2,540	182	25,796
1977	1,049	1,229	9,425	595	845	4,394	2,346	4,479	2,627	222	27,211
1978	1,045	1,281	10,227	582	1,070	4,313	2,433	4,769	2,718	227	28,665
1979	1,046	1,311	10,997	598	1,103	4,593	2,354	5,008	2,762	260	30,032
1980	1,006	1,148	9,047	603	1,068	4,572	2,289	5,441	2,764	312	28,250
1981	925	1,070	7,853	582	1,029	4,730	2,241	5,904	2,758	304	27,396
1982	872	1,058	7,042	605	1,003	4,748	2,285	6,312	2,727	322	26,974
1983	922	1,059	6,977	647	1,030	4,871	2,185	6,448	2,730	305	27,174
1984	867	1,213	7,930	644	1,028	5,161	2,226	6,647	2,764	349	28,829
1985	798	1,248	8,127	699	1,107	5,214	2,183	6,946	2,783	353	29,458
1986	758	1,275	8,362	738	1,124	5,221	2,369	7,311	2,825	354	30,337
1987	748	1,362	8,946	821	1,238	5,413	2,229	7,321	2,841	412	31,331
1988	749	1,420	8,931	801	1,384	5,615	2,240	7,871	2,912	438	32,361
1989	707	1,370	9,183	813	1,413	6,052	2,258	7,808	2,931	442	32,977
1990	711	1,493	9,682	876	1,421	6,543	2,505	8,567	3,034	477	35,309
1991	704	1,579	9,539	925	1,604	6,854	2,584	9,702	3,327	480	37,298
1992	677	1,709	9,936	872	1,590	6,842	2,542	10,376	3,382	518	38,444
1993	665	1,783	10,390	885	1,804	7,046	2,650	10,704	3,358	531	39,816
1994	667	1,815	11,327	873	1,853	7,173	2,904	11,469	3,415	564	42,060
1995	665	2,030	12,040	908	1,856	7,410	3,037	12,180	3,400	637	44,163
1996	629	2,009	12,124	952	1,818	7,936	3,116	12,484	3,424	684	45,176
1997	625	2,113	12,600	1,052	1,904	7,944	3,117	13,390	3,491	704	46,940
1998	609	2,064	12,875	1,116	1,979	7,931	3,705	14,030	3,588	732	48,629
1999	624	2,145	12,884	1,130	1,964	8,329	3,994	14,286	3,597	862	49,815
2000	612	2,170	12,953	1,190	2,082	8,575	4,309	14,205	3,764	913	50,773

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-7

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN RACINE COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	2,031	2,510	25,220	2,529	1,886	10,286	2,727	10,383	6,762	279	64,613
1971	1,986	2,686	23,608	2,260	1,898	10,152	2,734	10,922	6,871	299	63,416
1972	2,014	2,541	25,391	2,115	2,181	10,525	3,050	11,534	7,024	278	66,653
1973	1,996	2,729	27,881	2,271	2,306	11,237	3,061	12,512	7,241	296	71,530
1974	2,047	2,621	29,486	2,287	2,438	11,397	3,296	12,877	7,276	274	73,999
1975	1,976	2,613	27,571	2,331	2,506	11,563	3,842	13,589	7,585	277	73,853
1976	1,815	2,596	28,434	2,460	2,719	11,997	3,995	13,877	7,841	268	76,002
1977	1,752	2,866	29,005	2,522	2,804	12,303	4,230	14,487	7,928	287	78,184
1978	1,717	3,162	30,359	2,460	2,718	12,897	4,375	14,849	8,066	315	80,918
1979	1,765	3,073	32,034	2,219	2,751	13,556	4,491	15,441	7,978	345	83,653
1980	1,740	2,525	30,155	2,306	2,511	13,429	4,388	15,817	7,946	367	81,184
1981	1,624	2,333	28,136	2,339	2,618	14,047	4,108	15,923	7,869	383	79,380
1982	1,578	2,045	24,844	2,189	2,594	14,154	3,736	16,650	7,351	402	75,543
1983	1,660	2,082	23,756	2,331	2,590	14,183	3,629	16,644	7,504	459	74,838
1984	1,546	2,368	26,087	2,336	2,657	14,871	3,638	17,491	7,404	487	78,885
1985	1,406	2,498	25,122	2,232	2,443	15,179	3,758	18,042	7,345	522	78,547
1986	1,322	2,734	25,026	2,906	2,441	15,563	4,142	18,402	7,369	502	80,407
1987	1,297	2,868	25,401	3,006	2,594	16,000	4,236	19,023	7,479	575	82,479
1988	1,284	3,125	26,403	3,016	2,554	16,377	4,223	20,273	7,698	567	85,520
1989	1,185	3,581	26,909	2,985	2,915	16,519	4,028	20,527	7,800	608	87,057
1990	1,186	3,944	26,988	2,927	2,931	17,085	4,263	21,645	7,923	666	89,558
1991	1,165	3,724	26,121	3,014	3,000	16,409	4,391	22,854	8,221	694	89,593
1992	1,105	3,688	24,569	2,944	3,007	16,552	4,412	23,416	8,398	686	88,777
1993	1,084	3,801	24,444	3,055	2,911	16,452	4,391	24,464	8,422	729	89,753
1994	1,099	3,904	25,598	3,074	2,745	16,687	4,384	24,493	8,383	751	91,118
1995	1,102	4,064	26,161	3,420	2,839	16,805	4,320	25,545	8,446	819	93,521
1996	1,042	4,166	26,161	3,466	3,073	16,993	4,411	25,736	8,775	908	94,731
1997	1,033	4,370	26,206	3,480	3,357	16,555	4,114	26,437	8,824	918	95,294
1998	1,003	4,487	26,103	3,128	3,590	16,633	3,901	26,693	8,780	993	95,311
1999	1,032	4,570	24,920	2,860	3,837	16,322	3,974	26,634	8,913	1,059	94,121
2000	1,011	4,493	24,385	2,859	3,831	16,317	4,104	27,268	9,146	1,033	94,447

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-8

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN WALWORTH COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	2,612	1,146	5,372	970	364	5,035	983	5,209	4,461	216	26,368
1971	2,582	1,132	5,716	1,049	358	4,859	1,087	5,304	4,465	212	26,764
1972	2,622	1,209	5,914	1,168	493	5,050	1,274	5,367	4,479	196	27,772
1973	2,611	1,319	6,407	1,232	471	5,292	1,393	5,626	4,498	190	29,039
1974	2,664	1,286	6,667	1,344	498	5,224	1,462	5,756	4,444	199	29,544
1975	2,505	1,247	5,505	1,128	722	5,245	1,608	5,740	4,590	226	28,516
1976	2,255	1,340	5,686	1,050	767	5,559	1,697	5,851	4,778	217	29,200
1977	2,123	1,483	6,359	1,142	925	5,936	1,830	6,532	4,785	239	31,354
1978	2,034	1,569	6,778	1,179	1,093	6,346	1,896	6,933	4,832	262	32,922
1979	2,060	1,584	7,164	1,016	1,105	6,943	1,867	7,075	4,991	266	34,071
1980	2,011	1,384	6,845	1,042	1,079	6,808	1,847	7,151	5,064	287	33,518
1981	1,873	1,350	6,788	1,023	1,170	6,706	1,839	7,378	5,224	307	33,658
1982	1,802	1,386	6,447	1,078	1,255	6,682	1,870	7,551	5,235	282	33,588
1983	1,912	1,414	6,521	1,051	1,216	6,773	1,797	7,699	5,400	273	34,056
1984	1,813	1,536	7,638	1,166	1,027	7,075	1,798	7,894	5,468	315	35,730
1985	1,683	1,580	7,524	1,210	1,096	7,041	1,760	8,341	5,556	343	36,134
1986	1,611	1,728	7,395	1,242	1,120	7,143	1,901	8,181	5,732	355	36,408
1987	1,602	1,922	7,536	1,259	1,249	7,297	1,803	8,094	6,046	465	37,273
1988	1,619	1,934	7,971	1,289	1,319	7,211	1,799	8,357	6,044	462	38,005
1989	1,530	2,082	8,117	1,197	1,374	7,427	1,706	8,703	6,397	472	39,005
1990	1,565	2,314	7,904	1,398	1,305	7,687	1,848	9,027	6,383	526	39,957
1991	1,576	2,364	8,268	1,451	1,449	7,698	2,028	9,502	6,615	530	41,481
1992	1,529	2,537	8,586	1,426	1,416	8,557	1,975	9,635	6,756	567	42,984
1993	1,488	2,517	10,363	1,510	1,559	8,692	1,956	9,758	6,797	584	45,224
1994	1,499	2,683	10,844	1,592	1,629	8,716	2,004	10,349	6,780	639	46,735
1995	1,490	2,700	10,965	1,726	1,649	8,997	2,108	11,158	6,474	646	47,913
1996	1,404	2,938	10,605	1,818	1,709	8,754	2,209	11,926	6,313	730	48,406
1997	1,388	2,933	9,881	1,927	1,841	8,815	2,316	12,216	6,337	754	48,408
1998	1,355	3,025	10,293	1,893	1,910	8,960	2,548	12,353	6,334	798	49,469
1999	1,386	3,101	10,001	1,982	1,845	9,162	2,634	13,075	6,528	906	50,620
2000	1,360	3,101	10,152	2,012	1,831	9,403	2,900	13,553	6,571	932	51,815

[a]*Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b]*Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-9

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN WASHINGTON COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	2,002	1,104	9,255	1,013	323	3,753	1,130	3,161	2,377	208	24,326
1971	1,975	1,169	9,203	1,038	412	3,750	1,191	3,103	2,513	214	24,568
1972	1,989	1,237	10,081	1,053	482	3,777	1,356	3,344	2,653	201	26,173
1973	1,980	1,279	10,534	1,037	539	4,034	1,570	3,599	2,890	212	27,674
1974	2,004	1,204	11,015	1,039	463	4,177	1,803	3,818	3,000	195	28,718
1975	1,971	1,303	9,478	1,036	814	4,169	2,182	3,987	3,204	223	28,367
1976	1,864	1,477	10,372	1,105	911	4,400	2,265	4,514	3,359	227	30,494
1977	1,817	1,831	10,698	1,131	1,012	4,757	2,486	5,156	3,483	246	32,617
1978	1,789	2,008	11,612	1,130	987	5,000	2,614	5,577	3,619	274	34,610
1979	1,880	2,046	12,009	1,165	1,138	5,296	2,620	5,716	3,758	291	35,919
1980	1,919	1,785	10,900	1,139	1,003	5,552	2,659	5,956	3,954	293	35,160
1981	1,858	1,708	10,108	1,127	1,029	5,685	2,583	6,166	4,340	299	34,903
1982	1,858	1,605	9,146	1,189	954	5,977	2,749	6,557	4,229	298	34,562
1983	1,955	1,619	9,387	1,248	960	6,207	2,573	6,655	4,217	328	35,149
1984	1,842	1,902	9,802	1,379	959	6,671	2,618	7,220	4,289	354	37,036
1985	1,695	1,971	9,387	1,480	999	6,998	2,609	7,662	4,340	374	37,515
1986	1,610	2,249	9,787	1,428	1,220	6,895	2,745	7,815	4,388	380	38,517
1987	1,585	2,470	10,672	1,482	1,278	7,118	2,663	8,142	4,408	429	40,247
1988	1,589	2,567	11,906	1,688	1,356	7,194	2,603	8,682	4,444	438	42,467
1989	1,496	2,772	12,895	1,616	1,427	7,651	2,735	8,769	4,569	442	44,372
1990	1,511	2,960	12,923	1,667	1,642	7,912	2,876	9,283	4,840	506	46,120
1991	1,505	2,967	12,423	1,758	1,779	8,057	2,898	9,983	4,913	572	46,855
1992	1,455	3,373	12,036	1,789	1,798	8,534	2,892	10,630	5,078	616	48,201
1993	1,411	3,482	12,573	1,948	1,893	8,814	3,130	11,144	5,072	649	50,116
1994	1,403	3,608	13,320	2,095	1,991	9,065	3,495	11,517	5,140	714	52,348
1995	1,382	3,599	14,959	2,173	2,106	9,665	3,531	11,916	5,411	759	55,501
1996	1,298	3,517	15,964	2,199	2,361	9,729	3,649	12,605	5,719	800	57,841
1997	1,278	3,574	16,384	2,300	2,640	9,632	3,626	12,994	5,700	839	58,967
1998	1,255	3,451	16,810	2,393	2,585	9,464	3,582	12,609	5,820	929	58,898
1999	1,276	3,558	16,942	2,273	2,851	9,979	3,591	12,788	5,852	1,030	60,140
2000	1,255	3,746	17,307	2,313	2,946	10,152	3,738	13,152	6,018	1,064	61,691

[a] *Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b] *Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.

Table A-10

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN WAUKESHA COUNTY: 1970-2000

Year	General Industry Group										
	Agriculture	Construction	Manufacturing	Transportation, Communication, and Utilities	Wholesale Trade	Retail Trade	Finance, Insurance, and Real Estate	Services	Government and Government Enterprises[a]	Other[b]	Total Employment
1970	1,771	7,071	21,933	2,426	4,399	14,385	3,812	15,295	9,244	701	81,037
1971	1,736	7,181	20,837	2,527	4,935	14,165	4,190	16,453	9,727	658	82,409
1972	1,749	6,799	21,650	2,734	5,316	14,874	4,884	17,540	10,444	554	86,544
1973	1,736	7,322	24,494	2,679	5,749	15,957	5,806	18,529	10,891	582	93,745
1974	1,764	7,409	26,068	3,059	5,806	16,485	6,611	19,096	11,011	571	97,880
1975	1,786	6,915	25,477	4,044	6,348	16,907	8,357	20,258	11,510	826	102,428
1976	1,728	7,374	25,262	4,261	6,568	17,912	8,881	21,557	11,902	918	106,363
1977	1,724	8,629	28,445	4,533	7,541	19,533	9,625	23,265	12,109	1,035	116,439
1978	1,732	9,176	31,673	5,017	7,916	20,935	10,669	24,753	12,366	1,109	125,346
1979	1,756	9,021	34,200	5,740	8,571	21,774	10,853	26,374	12,538	1,269	132,096
1980	1,726	7,732	33,524	6,026	8,661	21,430	11,337	27,907	13,120	1,354	132,817
1981	1,629	7,325	33,368	6,532	9,226	21,001	11,193	28,913	13,226	1,483	133,896
1982	1,573	6,894	30,382	6,812	9,369	21,649	12,196	31,040	13,081	1,671	134,667
1983	1,643	7,095	29,814	6,653	9,643	22,496	12,263	30,829	13,005	1,787	135,228
1984	1,544	8,125	36,043	7,095	11,020	24,829	11,982	32,996	13,109	2,087	148,830
1985	1,420	8,194	37,609	7,185	12,300	25,787	11,796	35,999	13,382	1,987	155,659
1986	1,347	9,151	39,135	6,639	11,901	26,957	12,321	37,701	13,769	1,839	160,760
1987	1,311	10,238	41,058	7,191	12,855	27,424	11,794	39,575	13,619	1,865	166,930
1988	1,293	10,934	44,229	7,424	13,736	27,311	11,711	42,684	13,596	2,007	174,925
1989	1,207	12,030	45,125	7,739	14,226	28,211	12,434	44,808	13,549	2,086	181,415
1990	1,191	12,679	44,871	8,185	16,128	31,054	13,131	46,293	13,994	2,135	189,661
1991	1,161	12,359	43,919	8,260	16,880	33,139	13,545	48,837	14,365	2,207	194,672
1992	1,110	13,608	46,310	8,562	17,437	33,516	15,300	50,790	14,806	2,328	203,767
1993	1,092	14,196	47,441	8,625	17,771	34,308	15,753	53,705	14,834	2,530	210,255
1994	1,098	14,504	49,143	8,784	18,636	35,785	17,692	56,948	14,934	2,672	220,196
1995	1,096	15,492	52,591	9,435	19,527	37,803	18,480	61,278	15,233	2,749	233,684
1996	1,041	15,998	52,235	9,738	20,672	38,521	19,308	64,241	15,718	2,840	240,312
1997	1,032	16,571	53,726	9,636	21,359	39,184	19,243	67,746	15,948	3,061	247,506
1998	1,009	17,118	56,769	9,809	22,246	39,994	20,525	70,761	16,197	3,209	257,637
1999	1,030	18,478	56,708	9,533	22,365	41,936	19,624	74,815	16,320	3,610	264,419
2000	1,011	18,462	56,754	9,516	22,508	43,132	22,340	76,265	17,059	3,749	270,796

[a] *Includes all non-military government agencies and enterprises, regardless of SIC code.*

[b] *Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.*

Source: U. S. Bureau of Economic Analysis and SEWRPC.