TECHNICAL REPORT NO. 10
(5th Edition)

THE ECONOMY OF SOUTHEASTERN WISCONSIN

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Special acknowledgment is due Ms. Kathryn E. Sobottke, SEWRPC Principal Specialist, for her efforts in the preparation of this report.

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The preparation of this report was financed in part through a joint planning grant from the Wisconsin Department of Transportation and the U.S. Department of Transportation, Federal Highway and Federal Transit Administrations. The contents of this report do not necessarily reflect the official views or policy of the Wisconsin Department of Transportation and the U.S. Department of Transportation.

April 2013

Inside Region	$10.00
Outside Region	$20.00

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Figure Page

Chapter III

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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; the major economic base analyses have generally been carried out concurrently with the demographic studies.

This report constitutes the fifth 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 2012-2013 and sets forth new employment projections for the Region to the year 2050. This report is a companion to the fifth 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 2050. The aforementioned 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 2050.

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, to 2020, and to 2035—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.

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
SEWRPC Technical Report No. 10, (4th Edition), *The Economy of Southeastern Wisconsin*	July 2004

Source: SEWRPC.

The Commission's most recent employment projections for the Region were prepared for the period 2003 to 2035. The projections are documented in SEWRPC Technical Report No. 10 (4th Edition), *The Economy of Southeastern Wisconsin*, dated July 2004. 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 2035 regional land use and transportation plans.

The year 2035 employment projections are shown for the Region and its seven counties in Figure 1, along with actual employment levels in the Region through 2011.[1] 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. Under those projections, it was envisioned that total employment in the Region would increase from about 1.18 million jobs in 2003 to a 2035 level of about 1.51 million jobs under a high-growth scenario, 1.37 million jobs under the intermediate-growth scenario, and 1.27 million jobs under the low-growth scenario.

As shown on Figure 1, actual employment in the Region as a whole increased steadily from 2003 through 2007, trending just above the high-growth projection. Employment in the Region decreased by about 59,000 jobs from 2008 to 2010, reflecting the major economic recession. Owing to this decrease, actual employment levels for the Region and five of its seven counties were somewhat lower than the projected range for the year 2011 (see Table 2).

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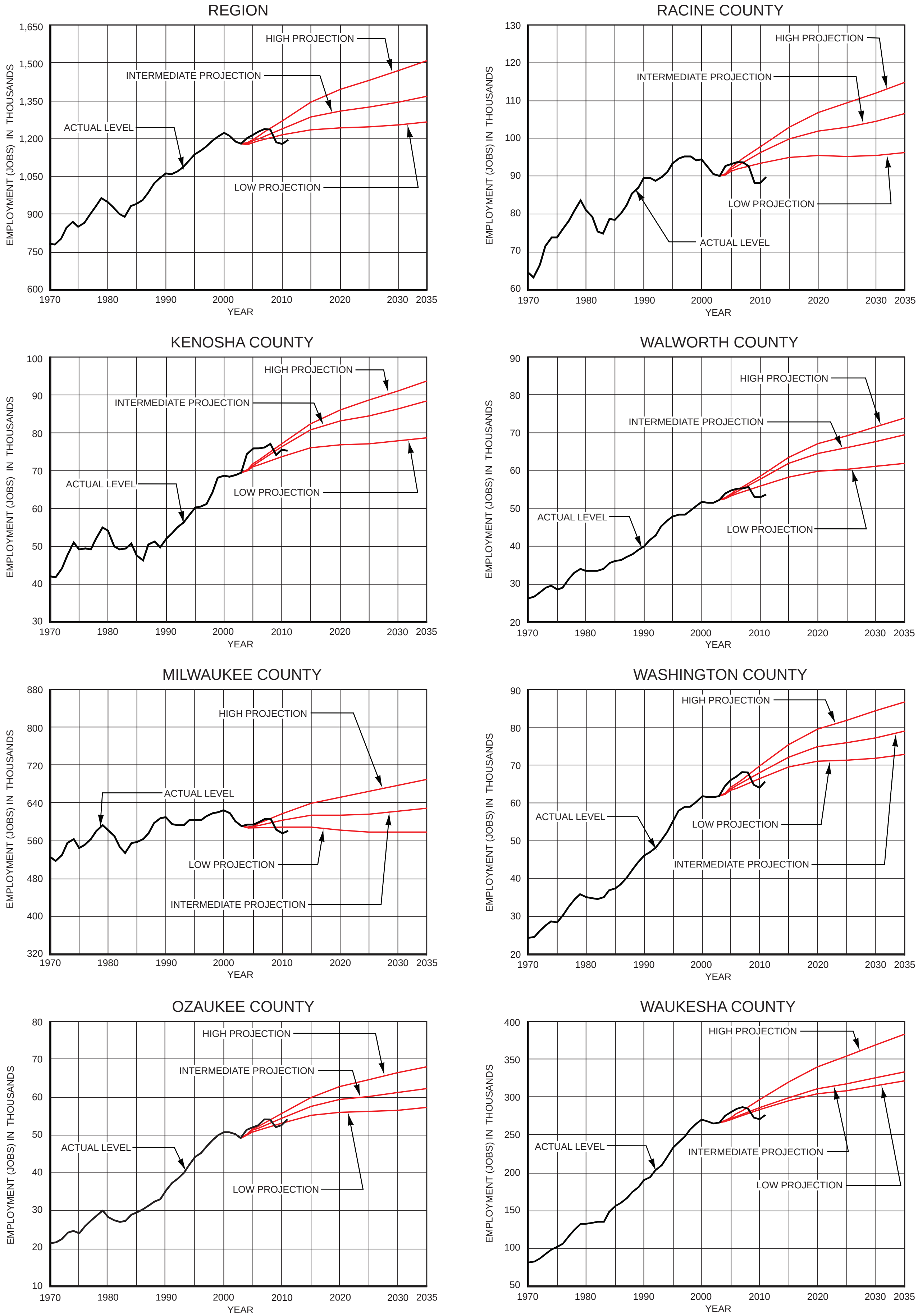
[1]*The county-level intermediate-growth projections shown on Figure 1 represent minor adjustments of the intermediate-growth projections set forth in Technical Report No. 10 (4th Edition) made as part of the year 2035 regional land use plan—those adjustments having been made to reflect local land use plans.*

Figure 1

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2035



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

Table 2

ACTUAL AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 2011

County	Actual 2011 Jobs[a]	Projected 2011 Jobs		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha	74,800	78,200	77,100	74,100
Milwaukee	577,800	620,200	604,100	587,900
Ozaukee	54,100	56,600	55,000	53,500
Racine	89,600	98,900	96,900	93,800
Walworth	53,500	59,500	58,500	56,400
Washington	65,400	70,800	68,800	67,100
Waukesha	275,400	301,000	288,500	285,200
Region	1,190,600	1,285,200	1,248,900	1,218,000

[a]*The employment levels for the year 2011 reported by the U.S. Bureau of Economic Analysis (BEA) as presented on this table are subject to revision in future data releases by the BEA.*

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

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 initiated another in-depth analysis of the regional economy in 2012. 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 2050. 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 2050 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.

PURPOSE OF THIS REPORT

This report, then, documents the findings of the economic analyses conducted by the Commission in 2012-2013 and sets forth new employment projections for the Region to the year 2050. 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 2010 to 2050. Chapter IV is a summary chapter.

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.

Information regarding the labor force presented in this chapter is from the U.S. Bureau of the Census. Specifically, labor force information for the year 2010 is from the Census Bureau's American Community Survey. Historic labor force information for the period from 1950 to 2000 is from the Census Bureau's decennial census.[1]

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[1]*In addition to the Census Bureau labor force data presented in this chapter, labor force data are available from the Local Area Unemployment Statistics (LAUS) program, a cooperative Federal-state effort, which relies upon a number of data sources—including the national Current Population Survey, employment information from state unemployment insurance programs, and others—to estimate the size and employment status of the labor force. The LAUS-reported labor force for the Region was 1 percent and 3 percent greater than that reported by the Census Bureau for 1990 and 2000 respectively, and 4 percent lower than that reported by the Census Bureau for 2010.*

Table 3

CIVILIAN LABOR FORCE IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2010

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
2010	1,078,983	70,589	7.0	3,080,461	211,225	7.4	155,917,013	18,248,215	13.3	35.0	0.69

NOTES: The 1950 and 1960 censuses defined the labor force as those persons age 14 and older who were employed or temporarily unemployed. Since then, the labor force has been defined as those persons age 16 and older who were employed or temporarily unemployed.

On this table, labor force data for 1950-2000 are from the decennial censuses, while labor force data for 2010 are from the American Community Survey.

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

As indicated in Table 3, the civilian labor force of the Region was about 1,079,000 persons in 2010, compared to about 1,008,400 persons in 2000. The increase of 70,600 persons in the regional civilian labor force during the 2000s compares to increases of 74,200 during the 1990s, 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 during the 1960s and 1950s.

As further indicated in Table 3, in relative terms, the Region's labor force grew at a somewhat slower rate than the Nation's labor force during the 2000s. As a result, the Region's share of the Nation's labor force decreased from 0.73 percent to 0.69 percent. The Region's labor force grew at about the same relative rate as the State labor force between 2000 and 2010. The Region's share of the State labor force remained at about 35 percent in 2010.

The gender makeup of the civilian labor force changed slightly during the 2000s, with the female component increasing by about 0.6 of a percentage point to 48.7 percent of the total labor force in 2010. The gender makeup of the labor force changed dramatically between 1950 and 1990. The female component of the Region's labor force increased from 28.8 percent in 1950 to 46.8 percent in 1990, with the male component experiencing a corresponding decrease (see Table 4 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 2010, the same as in 2000. The period from 1950 to 1990 saw a significant increase in the civilian labor force participation rate—from 56.6 percent in 1950 to 67.6 percent in 1990. The long-term trend in the civilian labor force participation rate is the net effect of the increased rate of participation by females and decreased rate of participation by males (see Figure 3).

As noted earlier, the labor force includes working age individuals who are employed or temporarily unemployed. The employed/unemployed status of the labor force varies with business cycles. Unemployment in the regional labor force was especially high in the late 2000s, a reflection of the continuing impacts of the economic recession that began in December 2007. The unemployment rate for the Region was 10.5 percent in 2010, nearly double the rates reported in the 1980, 1990, and 2000 censuses (see Table 5). Similarly high unemployment rates were observed for the State overall and for the Nation in the late 2000s.

Table 4

CIVILIAN LABOR FORCE GENDER COMPOSITION AND CIVILIAN LABOR FORCE PARTICIPATION RATES FOR THE REGION: 1950-2010

	Civilian Labor Force						Civilian Labor Force Participation Rate[a]		
	Males		Females		Total				
Year	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
2010	553,475	51.3	525,508	48.7	1,078,983	100.0	72.3	64.2	68.2

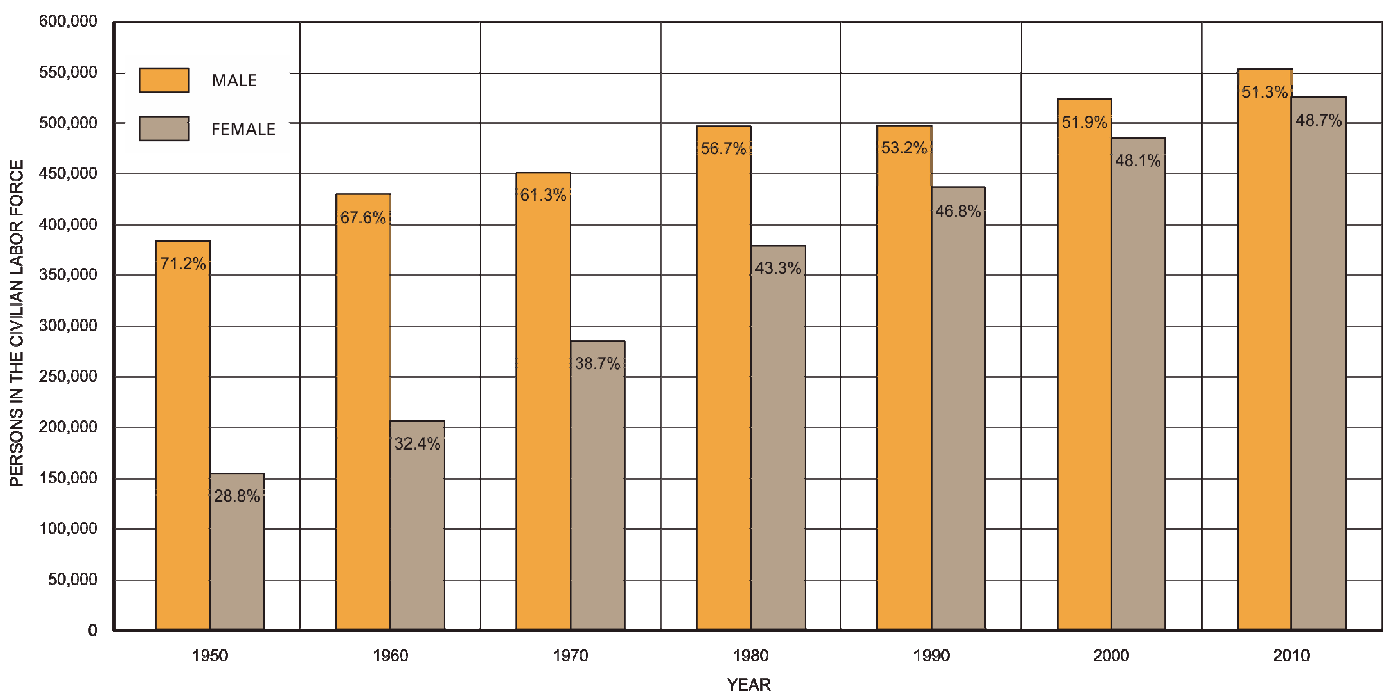
NOTE: On this table, labor force data for 1950-2000 are from the decennial censuses, while labor force data for 2010 are from the American Community Survey.

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

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

Figure 2

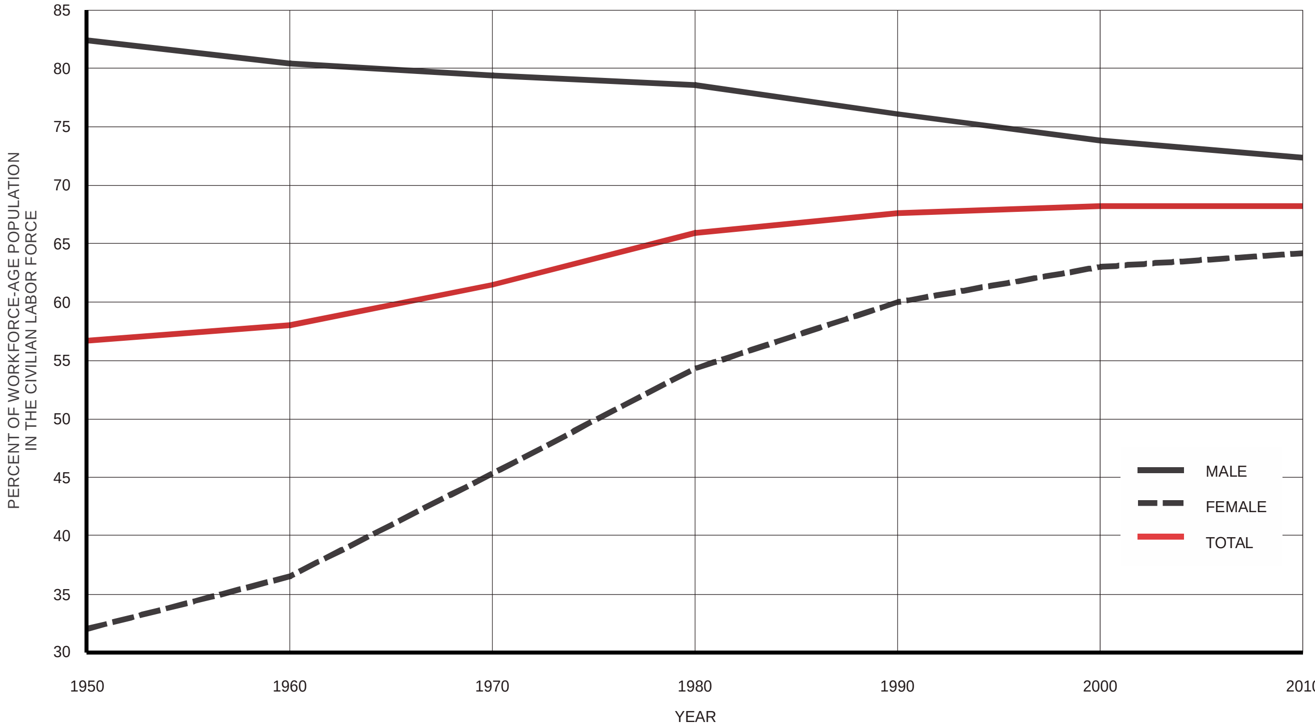
GENDER COMPOSITION OF THE CIVILIAN LABOR FORCE IN THE REGION: 1950-2010



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

Figure 3

CIVILIAN LABOR FORCE PARTICIPATION RATES IN THE REGION: 1950-2010



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

Labor Force Distribution by County

Current and historic civilian labor force levels are presented by county in the Region in Table 6 and Figure 4. Each county in the Region experienced an increase in the labor force between 2000 and 2010. Milwaukee County experienced the largest labor force increase (24,600 persons); the other six counties experienced increases ranging from about 2,000 persons in Ozaukee County to about 16,100 persons in Waukesha County.

The past decade saw slight change in the relative distribution of the labor force among the counties within the Region. Milwaukee County's share of the regional labor force decreased by about 0.7 of a percentage point during the 2000s. In each of the other six counties, the share of the Region's labor force remained about the same or increased slightly.

Historically, the most notable changes in the labor force distribution within the Region have been the increase in Waukesha County's share of the regional labor force—from 6.3 percent in 1950 to 20.1 percent in 2010—and the decrease in Milwaukee County's share—from 71.5 percent in 1950 to 45.8 percent in 2010 (see Figure 5). The long-term changes in the relative distribution of the labor force generally mirror the changes in the relative distribution of the regional population over the past decades.

The Illinois counties immediately south of the Region continued to experience an increase in their labor force between 2000 and 2010, but at somewhat reduced rates compared to previous decades (see Table 7). During the 2000s, the labor force in Lake and McHenry Counties (Illinois), combined, increased by about 84,000 persons, exceeding the increase of 70,600 for the entire Southeastern Wisconsin Region. By 2010, the combined labor force of Lake and McHenry Counties stood at 548,400 persons—more than 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.

EMPLOYMENT

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.

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 about 85 percent of the total nonmilitary employment reported by the BEA for the Region in 2010. BEA wage and salary employment 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.

Table 5

EMPLOYMENT STATUS OF THE CIVILIAN LABOR FORCE IN THE REGION: 1950-2010

Year	Civilian Labor Force			Unemployment Rate
	Employed	Unemployed	Total	
1950	524,553	14,163	538,716	2.6
1960	612,723	24,178	636,901	3.8
1970	708,800	27,278	736,078	3.7
1980	826,456	49,696	876,152	5.7
1990	882,716	51,437	934,153	5.5
2000	954,443	53,951	1,008,394	5.4
2010	965,465	113,518	1,078,983	10.5

NOTE: On this table, labor force data for 1950-2000 are from the decennial censuses, while labor force data for 2010 are from the American Community Survey.

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

The self-employed comprised about 15 percent of the total nonmilitary employment reported by BEA for the Region in 2010. 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 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]

The number of jobs in the Region, as reported by the Bureau of Economic Analysis fluctuated somewhat over the course of the last decade. As shown on Figure 6, the number of jobs in the Region decreased during the early

[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 November 2012. These data differ slightly from employment data previously released by the BEA and presented in the previous editions of this report.*

Table 6

CIVILIAN LABOR FORCE IN THE REGION BY COUNTY: 1950-2010

Year	Kenosha County				Milwaukee 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
		Number	Percent			Number	Percent	
1950	32,535	- -	- -	6.0	385,261	- -	- -	71.5
1960	39,726	7,191	22.1	6.2	431,746	46,485	12.1	67.8
1970	47,171	7,445	18.7	6.4	454,085	22,339	5.2	61.7
1980	59,625	12,454	26.4	6.8	478,184	24,099	5.3	54.6
1990	64,192	4,567	7.7	6.9	479,374	1,190	0.2	51.3
2000	77,709	13,517	21.1	7.7	469,257	-10,117	-2.1	46.5
2010	86,819	9,110	11.7	8.0	493,831	24,574	5.2	45.8

Year	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
		Number	Percent			Number	Percent	
1950	9,645	- -	- -	1.8	46,771	- -	- -	8.7
1960	14,438	4,793	49.7	2.3	54,947	8,176	17.5	8.6
1970	22,105	7,667	53.1	3.0	68,255	13,308	24.2	9.3
1980	34,468	12,363	55.9	3.9	84,330	16,075	23.6	9.6
1990	40,114	5,646	16.4	4.3	89,356	5,026	6.0	9.6
2000	45,219	5,105	12.7	4.5	96,861	7,505	8.4	9.6
2010	47,183	1,964	4.3	4.4	100,279	3,418	3.5	9.3

Year	Walworth County				Washington 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
		Number	Percent			Number	Percent	
1950	16,448	- -	- -	3.1	14,255	- -	- -	2.6
1960	20,444	3,996	24.3	3.2	17,384	3,129	22.0	2.7
1970	26,345	5,901	28.9	3.6	25,727	8,343	48.0	3.5
1980	34,727	8,382	31.8	4.0	42,044	16,317	63.4	4.8
1990	39,642	4,915	14.2	4.2	52,106	10,062	23.9	5.6
2000	51,861	12,219	30.8	5.2	66,496	14,390	27.6	6.6
2010	57,858	5,997	11.6	5.4	75,948	9,452	14.2	7.0

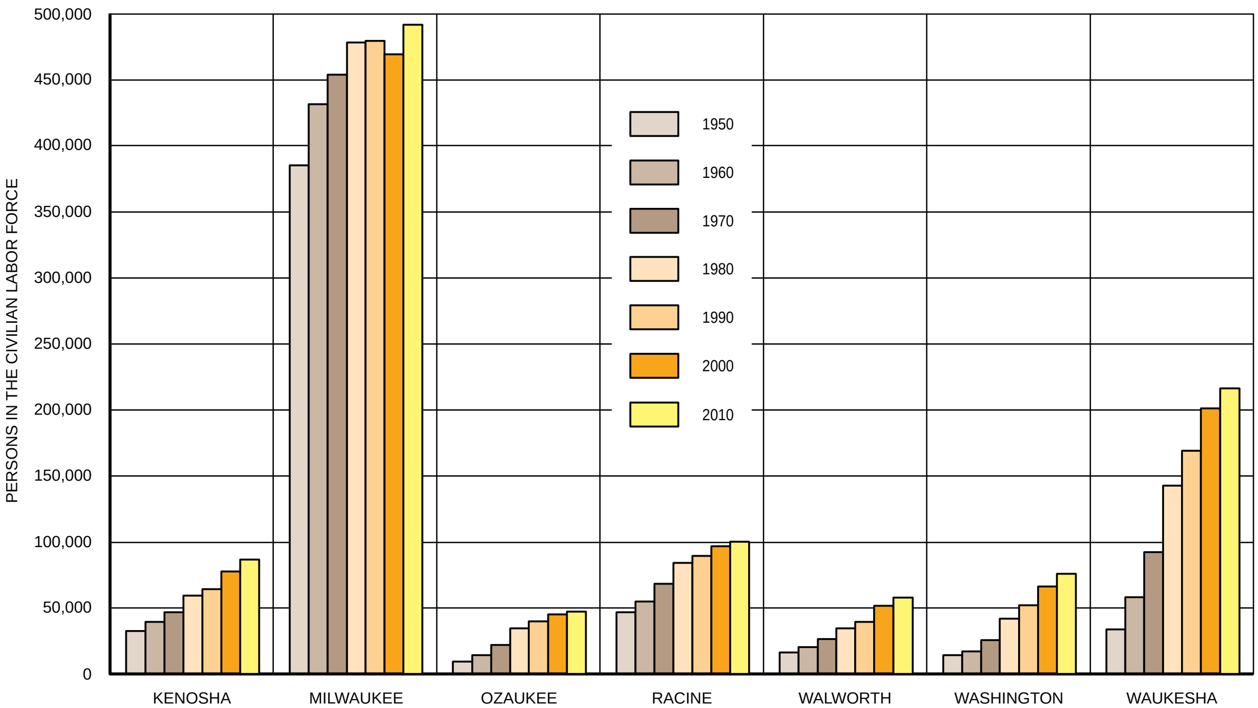
Year	Waukesha County				Region			
	Persons in Labor Force	Change from Preceding Year		Percent of Region Total	Persons in Labor Force	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent	
1950	33,801	- -	- -	6.3	538,716	- -	- -	100.0
1960	58,216	24,415	72.2	9.2	636,901	98,185	18.2	100.0
1970	92,390	34,174	58.7	12.5	736,078	99,177	15.6	100.0
1980	142,774	50,384	54.5	16.3	876,152	140,074	19.0	100.0
1990	169,369	26,595	18.6	18.1	934,153	58,001	6.6	100.0
2000	200,991	31,622	18.7	19.9	1,008,394	74,241	7.9	100.0
2010	217,065	16,074	8.0	20.1	1,078,983	70,589	7.0	100.0

NOTE: On this table, labor force data for 1950-2000 are from the decennial censuses, while labor force data for 2010 are from the American Community Survey.

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

Figure 4

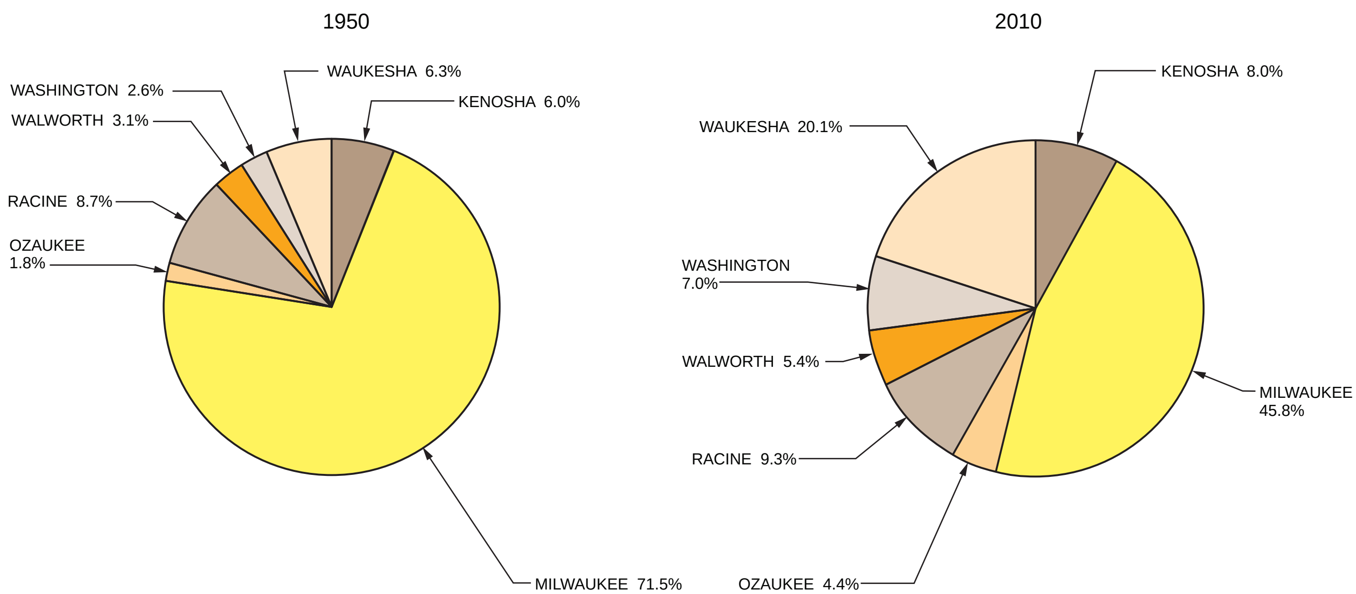
CIVILIAN LABOR FORCE IN THE REGION BY COUNTY: 1950-2010



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

Figure 5

SHARE OF REGIONAL CIVILIAN LABOR FORCE BY COUNTY: 1950 AND 2010



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

Table 7

CIVILIAN LABOR FORCE IN LAKE AND MCHENRY COUNTIES, ILLINOIS: 1970-2010

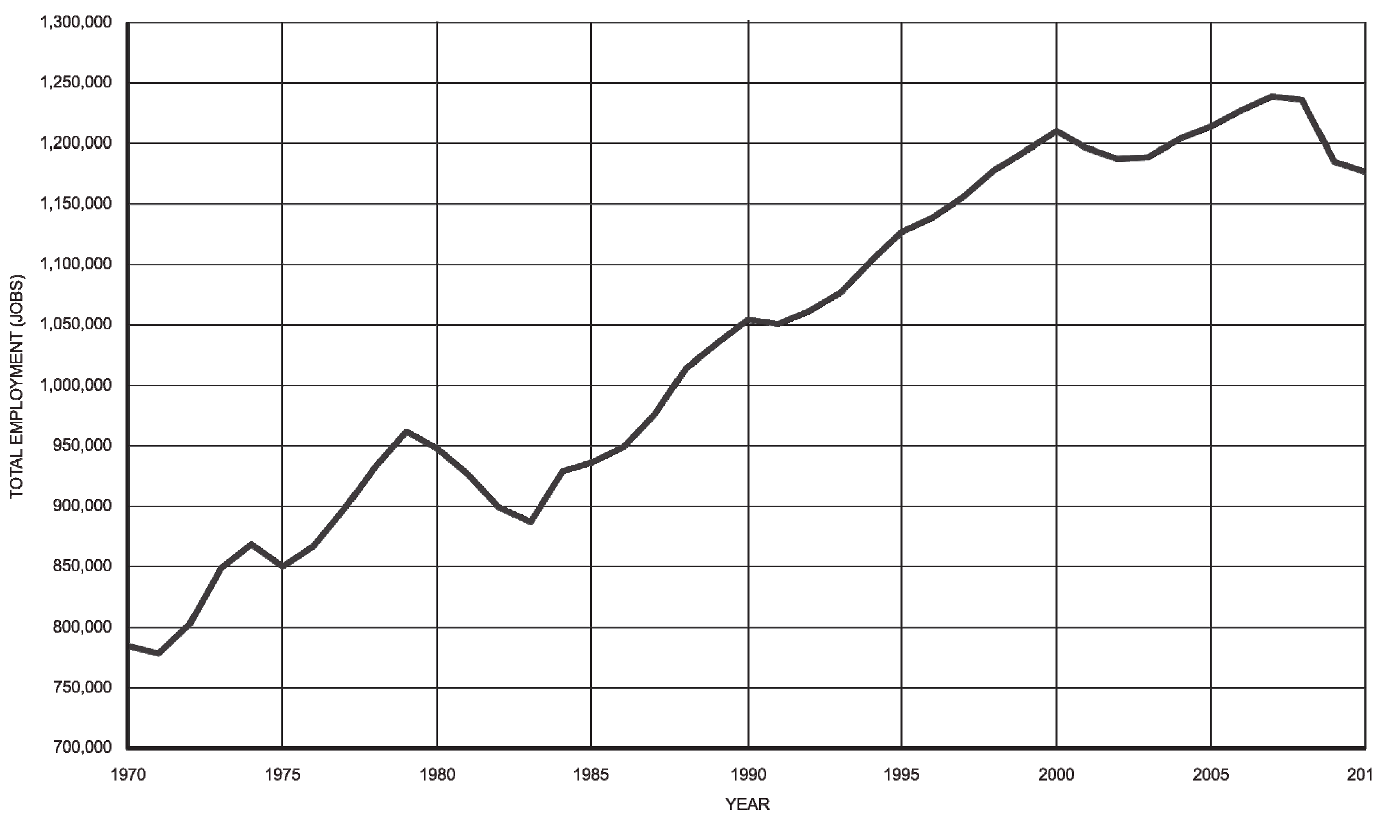
Year	Lake County			McHenry County		
	Persons in Labor Force	Change from Preceding Year		Persons in Labor Force	Change from Preceding Year	
		Number	Percent		Number	Percent
1970	143,466	- -	- -	46,534	- -	- -
1980	210,864	67,398	47.0	74,264	27,730	59.6
1990	267,826	56,962	27.0	99,168	24,904	33.5
2000	324,353	56,527	21.1	140,125	40,957	41.3
2010	375,543	51,190	15.8	172,902	32,777	23.4

NOTE: On this table, labor force data for 1970-2000 are from the decennial censuses, while labor force data for 2010 are from the American Community Survey.

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

Figure 6

EMPLOYMENT IN THE REGION: 1970-2010



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

2000s, increased through the mid-2000s, and then decreased after 2008. The number of jobs in the Region stood at 1,176,600 in 2010, about 33,200 jobs, or 2.7 percent, less than in 2000. The reduction in jobs after 2008 coincides with the national economic recession.

Table 8

EMPLOYMENT IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2010

	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	88,045,600	15,988,600	22.2	40.7	0.89
1980	945,900	161,000	20.5	2,423,800	494,700	25.6	111,482,200	23,436,600	26.6	39.0	0.85
1990	1,054,000	108,100	11.4	2,789,200	365,400	15.1	135,612,900	24,130,700	21.6	37.8	0.78
2000	1,209,800	155,800	14.8	3,385,800	596,600	21.4	163,303,800	27,690,900	20.4	35.7	0.74
2010	1,176,600	-33,200	-2.7	3,422,300	36,500	1.1	171,525,700	8,221,900	5.0	34.4	0.69

NOTE: Excludes military employment, which amounted to 6,100 jobs in the Region, 16,700 jobs in Wisconsin, and 2,101,000 jobs in the United States in 2010.

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

Prior to the 2000s, the Region had experienced a substantial net increase in jobs each decade going back to at least 1950. The Region gained 155,800 jobs during the 1990s; 108,100 during the 1980s; 161,000 during the 1970s; 111,900 during the 1960s; and 99,500 during the 1950s (see Table 8).

As a result of the net loss of jobs during the 2000s, the Region's share of the State's jobs decreased from 35.7 to 34.4 percent, while the Region's share of the Nation's jobs decreased from 0.74 to 0.69 percent. The Region's share of the State's employment has decreased each decade since 1970; its share of the Nation's employment has decreased each decade since 1960.

Employment Distribution by County

Information on current and historic employment levels is presented by county in the Region in Table 9 and Figures 7 and 8. Five Counties—Kenosha, Ozaukee, Walworth, Washington, and Waukesha—experienced at least a slight net increase in employment during the 2000s, despite sustaining recession-related job losses near the end of the decade. For these counties, the employment increases between 2000 and 2010 ranged from 1,000 jobs in Waukesha County to 7,000 jobs in Kenosha County. Conversely, total employment in Milwaukee County and Racine County decreased by about 42,900 jobs and 5,500 jobs, respectively, between 2000 and 2010.

Between 2000 and 2010, 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 six decades, Milwaukee County has experienced a substantial decrease in its share of regional employment—from 79.1 percent in 1950 to 48.9 percent in 2010. Waukesha County's share increased from 2.9 percent to 22.8 percent during that time.

Immediately south of the Region, Lake and McHenry Counties (Illinois) both experienced a moderate increase in employment—23,600 jobs and 10,800 jobs, respectively—during the 2000s (see Table 10). Total employment in these two counties combined stood at 534,800 jobs in 2010. A significant number of Kenosha and Walworth County residents find employment in Northeastern Illinois.

Employment by Industry

Information regarding employment levels by industry group—such as manufacturing, retail, and services—provides valuable insight into the structure of the economy of an area and changes in that structure over time. Accordingly, current and historic information regarding the industry mix of employment in the Region is

Table 9

EMPLOYMENT IN THE REGION BY COUNTY: 1950-2010

Year	Kenosha County				Milwaukee County			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent	
1950	29,100	- -	- -	5.1	453,500	- -	- -	79.1
1960	42,200	13,100	45.0	6.3	503,300	49,800	11.0	74.8
1970	42,100	-100	-0.2	5.4	525,200	21,900	4.4	66.9
1980	54,000	11,900	28.3	5.7	581,700	56,500	10.8	61.5
1990	51,800	-2,200	-4.1	4.9	604,700	23,000	4.0	57.4
2000	67,900	16,100	31.1	5.6	618,300	13,600	2.2	51.1
2010	74,900	7,000	10.3	6.4	575,400	-42,900	-6.9	48.9

Year	Ozaukee County				Racine County			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent	
1950	6,600	- -	- -	1.1	44,500	- -	- -	7.7
1960	10,200	3,600	54.5	1.5	49,900	5,400	12.1	7.4
1970	21,300	11,100	108.8	2.7	64,600	14,700	29.5	8.2
1980	28,200	6,900	32.4	3.0	81,000	16,400	25.4	8.6
1990	35,100	6,900	24.5	3.3	88,900	7,900	9.8	8.4
2000	50,400	15,300	43.6	4.2	93,800	4,900	5.5	7.8
2010	52,500	2,100	4.2	4.5	88,300	-5,500	-5.9	7.5

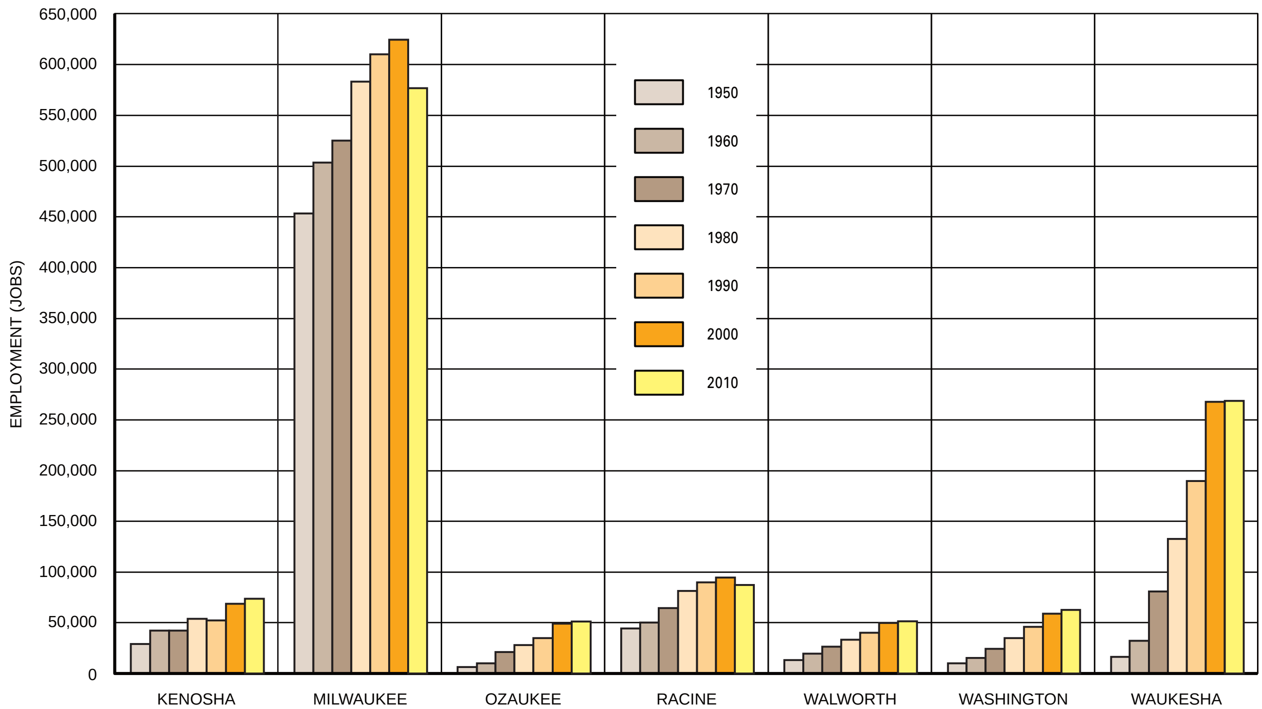
Year	Walworth County				Washington County			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent	
1950	13,200	- -	- -	2.3	10,200	- -	- -	1.8
1960	19,600	6,400	48.5	2.9	15,200	5,000	49.0	2.3
1970	26,400	6,800	34.7	3.4	24,300	9,100	59.9	3.1
1980	33,400	7,000	26.5	3.5	35,100	10,800	44.4	3.7
1990	39,600	6,200	18.6	3.8	45,800	10,700	30.5	4.3
2000	51,200	11,600	29.3	4.2	60,300	14,500	31.7	5.0
2010	52,700	1,500	2.9	4.5	63,900	3,600	6.0	5.4

Year	Waukesha County				Region			
	Jobs	Change from Preceding Year		Percent of Region Total	Jobs	Change from Preceding Year		Percent of Region Total
		Number	Percent			Number	Percent	
1950	16,400	- -	- -	2.9	573,500	- -	- -	100.0
1960	32,600	16,200	98.8	4.8	673,000	99,500	17.3	100.0
1970	81,000	48,400	148.5	10.3	784,900	111,900	16.6	100.0
1980	132,500	51,500	63.6	14.0	945,900	161,000	20.5	100.0
1990	188,100	55,600	42.0	17.9	1,054,000	108,100	11.4	100.0
2000	267,900	79,800	42.4	22.1	1,209,800	155,800	14.8	100.0
2010	268,900	1,000	0.4	22.8	1,176,600	-33,200	-2.7	100.0

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

Figure 7

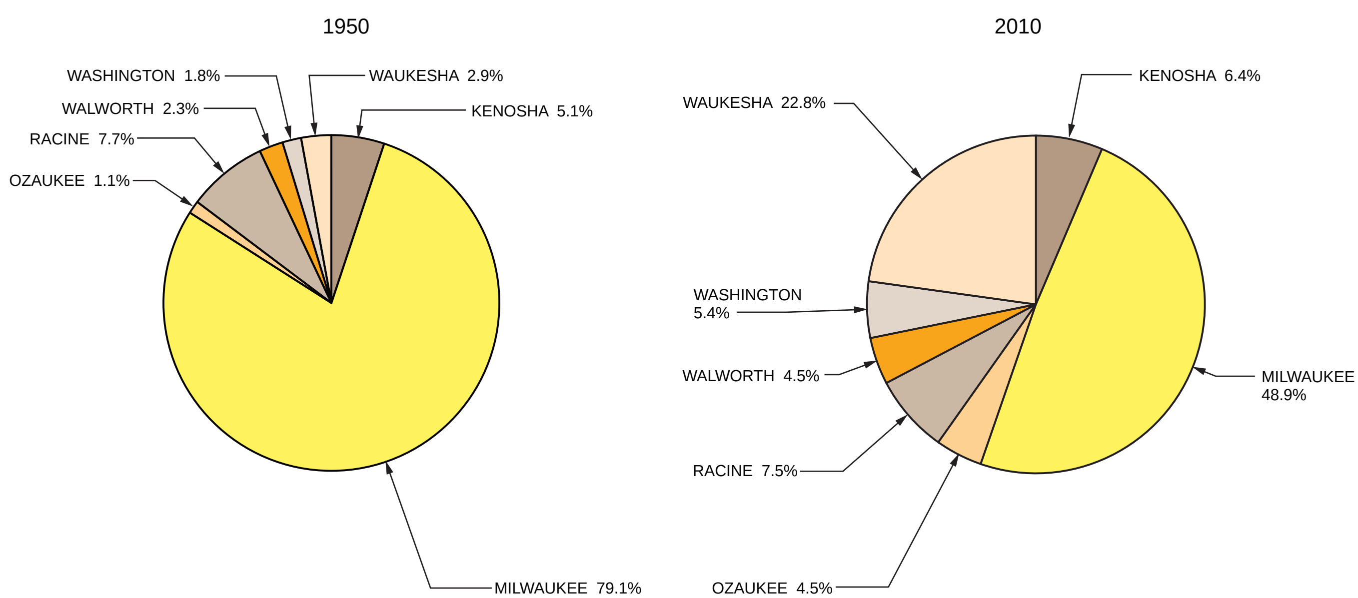
EMPLOYMENT IN THE REGION BY COUNTY: 1950-2010



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

Figure 8

SHARE OF REGIONAL EMPLOYMENT BY COUNTY: 1950 AND 2010



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

Table 10

EMPLOYMENT IN LAKE AND MCHENRY COUNTIES, ILLINOIS: 1970-2010

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	186,200	52,200	39.0	56,300	14,400	34.4
1990	273,100	86,900	46.7	82,500	26,200	46.5
2000	390,000	116,900	42.8	110,400	27,900	33.8
2010	413,600	23,600	6.1	121,200	10,800	9.8

NOTE: Excludes military employment, which amounted to 17,500 jobs in Lake County, and 600 jobs in McHenry County in 2010.

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

presented in this section. It is important to note that significant changes have occurred in the classification of jobs by industry group since the previous edition of this report. The North American Industry Classification System (NAICS) has replaced the prior Standard Industrial Classification System (SIC). In this chapter, employment-by-industry data for the years 2001-2010 are based largely on the North American Industry Classification System. Employment-by-industry data for the years 1970-2000 are based upon the Standard Industrial Classification System—with adjustments made to certain industry groups to achieve as much consistency with the NAICS data as possible. Additional explanation of the employment-by-industry data is presented in Table 11.

As indicated in Table 12, employment in services accounted for nearly one half (49.7 percent) of all employment in the Region in 2010. Retail employment[3] accounted for 15.8 percent, followed by manufacturing with 12.6 percent and government[4] with 10.0 percent. Employment in wholesale trade (4.1 percent), construction (3.9 percent), farming (0.4 percent), and other industries (3.5 percent) accounted for the balance of the Region's jobs. Relative to the Nation overall, the Region had a somewhat higher percentage of jobs in manufacturing and somewhat lower percentage of jobs in government.

Historic trends in the industry mix of employment in the Region going back to 1970 are presented in Table 13 and Figure 9. The 2000s saw the continuation of a long-term shift in the regional economy from a manufacturing to a service orientation. Manufacturing employment in the Region decreased by 31.0 percent during the 2000s, and by 37.6 percent over the last four decades. Conversely, service-related employment increased by 9.9 percent during the 2000s, and by 183 percent over the last four decades. Due to these differing growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 30.2 percent in 1970 to 12.6 percent in 2010, while service-related employment increased from 26.3 percent in 1970 to 49.7 percent in 2010. The State of Wisconsin and the United States have experienced a similar major shift from manufacturing to service-related employment.

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[3]*As presented in this report, "retail" employment includes the standard NAICS retail categories (NAICS codes 44 and 45) plus food services and drinking places (NAICS 722).*

[4]*As presented in this report, "government" employment includes all employees who work for governmental agencies and enterprises, regardless of the NAICS codes of such entities.*

Table 11

EMPLOYMENT-BY-INDUSTRY DATA IN THIS REPORT

- The source of employment data used in this report is the U.S. Bureau of Economic Analysis (BEA) Regional Economic Accounts series. The BEA data reflect both wage and salary employment and the self-employed. BEA data includes full-time and part-time jobs. BEA county-level employment-by-industry data for the years 2001 to 2010 reflect the North American Industry Classification System (NAICS), while BEA county-level employment-by-industry data for years prior to 2001 reflect the Standard Industrial Classification System (SIC). The NAICS system has generally replaced the SIC system in economic analyses. The two systems differ somewhat in terms of the types of jobs included in the various industry groupings.
- In this report, the employment-by-industry data reported for the years 2001-2010 are based on BEA data for those years—data which reflect the North American Industry Classification System. In this report, "retail" employment includes the standard NAICS retail employment categories (NAICS codes 44 and 45), plus the food services/drinking places category (NAICS code 722). This combination is necessary to provide continuous time series data for retail employment in the Region required for the Commission's continuing planning program.
- In this report, the employment-by-industry data for the years 1970-2000 are based largely on BEA data for those years—data which reflect the Standard Industrial Classification System. However, adjustments were made to the data for certain SIC industries—specifically, manufacturing, wholesale trade, and services—in order to achieve as much consistency as possible with corresponding NAICS-based data for the years 2001-2010.
- In this report "government" employment includes all employees who work for government agencies and enterprises, regardless of the NAICS code of such entities. Government employment includes, among others, Federal, State, county, and local government staff; police; firefighters; public utility workers; and public school teachers.

Source: SEWRPC.

Table 12

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE REGION, WISCONSIN, AND THE UNITED STATES: 2010

General Industry Group	Region		Wisconsin		United States	
	Jobs	Percent of Total	Jobs	Percent of Total	Jobs	Percent of Total
Agriculture	5,200	0.4	92,900	2.7	2,657,000	1.5
Construction	45,900	3.9	156,700	4.6	8,863,700	5.2
Manufacturing	148,100	12.6	445,200	13.0	12,107,900	7.1
Wholesale Trade	48,800	4.1	123,200	3.6	6,045,000	3.5
Retail Trade[a]	185,800	15.8	570,500	16.7	27,850,200	16.2
Services	584,400	49.7	1,470,700	43.0	83,207,100	48.5
Government[b]	117,700	10.0	420,600	12.3	22,578,000	13.2
Other	40,700	3.5	142,500	4.1	8,216,800	4.8
Total	1,176,600	100.0	3,422,300	100.0	171,525,700	100.0

[a]Retail trade employment includes the standard NAICS retail employment categories (NAICS codes 44 and 45), plus food services/drinking places (NAICS code 722).

[b]Government employment includes all employees who work for government agencies and enterprises, regardless of the NAICS code of such entities. Government employment includes, among others, Federal, State, county, and local government staff; police; firefighters; public utility workers; and public school teachers.

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

Table 13

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE REGION: 1970-2010

General Industry Group	1970		1980		1990		2000		2010	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Agriculture	12,000	1.5	10,000	1.0	7,200	0.7	5,900	0.5	5,200	0.4
Construction	32,400	4.1	33,700	3.6	44,300	4.2	53,000	4.4	45,900	3.9
Manufacturing	237,500	30.2	246,500	26.1	208,400	19.8	214,500	17.7	148,100	12.6
Wholesale Trade	31,200	4.0	38,500	4.1	46,100	4.4	53,700	4.4	48,800	4.1
Retail Trade	133,900	17.1	152,600	16.1	182,900	17.3	190,800	15.8	185,800	15.8
Services	206,400	26.3	317,900	33.6	416,800	39.5	531,900	44.0	584,400	49.7
Government	84,400	10.8	101,100	10.7	106,100	10.1	116,400	9.6	117,700	10.0
Other	47,100	6.0	45,600	4.8	42,200	4.0	43,600	3.6	40,700	3.5
Total	784,900	100.0	945,900	100.0	1,054,000	100.0	1,209,800	100.0	1,176,600	100.0

General Industry Group	Change 1970-1980		Change 1980-1990		Change 1990-2000		Change 2000-2010		Change 1970-2010	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture	-2,000	-16.7	-2,800	-28.0	-1,300	-18.1	-700	-11.9	-6,800	-56.7
Construction	1,300	4.0	10,600	31.5	8,700	19.6	-7,100	-13.4	13,500	41.7
Manufacturing	9,000	3.8	-38,100	-15.5	6,100	2.9	-66,400	-31.0	-89,400	-37.6
Wholesale Trade	7,300	23.4	7,600	19.7	7,600	16.5	-4,900	-9.1	17,600	56.4
Retail Trade	18,700	14.0	30,300	19.9	7,900	4.3	-5,000	-2.6	51,900	38.8
Services	111,500	54.0	98,900	31.1	115,100	27.6	52,500	9.9	378,000	183.1
Government	16,700	19.8	5,000	4.9	10,300	9.7	1,300	1.1	33,300	39.5
Other	-1,500	-3.2	-3,400	-7.5	1,400	3.3	-2,900	-6.7	-6,400	-13.6
Total	161,000	20.5	108,100	11.4	155,800	14.8	-33,200	-2.7	391,700	49.9

NOTE: See Table 11 for explanation of industry categories and data sources.

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

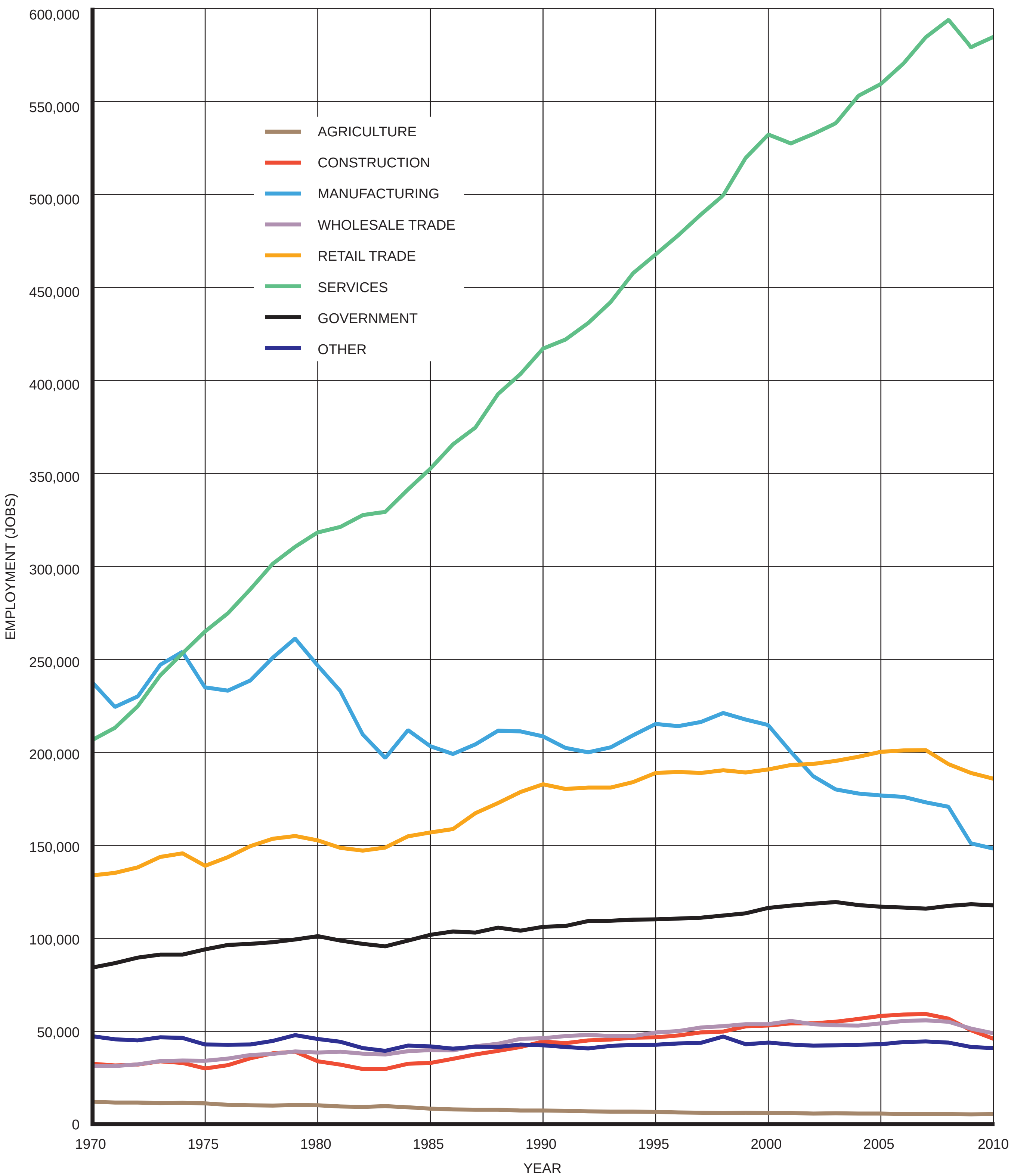
In comparison to the manufacturing and services industry groups, other major industry groups—including construction, wholesale trade, retail trade, and government—have been relatively stable in terms of their share of total employment in the Region over the last four decades.

As noted above, employment in services accounted for nearly 50 percent of all employment in the Region in 2010. Service employment is further broken down by sector in Table 14. As indicated in that table, health care and social assistance employment accounted for 26.4 percent of all service employment in 2010, followed by administrative and waste management services (12.7 percent); finance and insurance (11.6 percent); and professional, scientific, and technical services (10.8 percent). Among the various service sectors, the health care/social assistance sector gained the most jobs during the past decade, increasing by about 21,000 jobs between 2001 and 2010.

It should be recognized that the data regarding employment by industry may be affected by changing hiring and staffing arrangements. Of growing concern in this regard are companies that rely upon workers who are provided through staffing agencies and through other out-sourcing arrangements. Employees provided through staffing agencies and other outsourcing agencies are likely to be classified as service workers, even though they may actually work in a manufacturing, retail, wholesale, or other environment.

Figure 9

EMPLOYMENT BY GENERAL INDUSTRY GROUP IN THE REGION: 1970-2010



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

Table 14

SERVICES EMPLOYMENT BY SERVICE SECTOR IN THE REGION: 2001 AND 2010

Service Sector	2001			2010			Change: 2001-2010	
	Jobs	Percent of Service Jobs	Percent of Total Jobs	Jobs	Percent of Service Jobs	Percent of Total Jobs	Number	Percent
Information	25,000	4.7	2.1	19,700	3.4	1.7	-5,300	-21.2
Finance and insurance	63,900	12.1	5.3	67,700	11.6	5.8	3,800	5.9
Real estate and rental and leasing	33,600	6.4	2.8	44,100	7.5	3.7	10,500	31.3
Professional, scientific, and technical services	60,900	11.6	5.1	63,300	10.8	5.4	2,400	3.9
Management of companies and enterprises	16,900	3.2	1.4	24,000	4.1	2.0	7,100	42.0
Administrative and waste management services	73,500	14.0	6.1	74,100	12.7	6.3	600	0.8
Educational services	28,100	5.3	2.3	37,900	6.5	3.2	9,800	34.9
Health care and social assistance	133,500	25.3	11.2	154,500	26.4	13.1	21,000	15.7
Arts, entertainment, and recreation	21,000	4.0	1.8	25,500	4.4	2.2	4,500	21.4
Accommodation[a]	9,400	1.8	0.8	8,900	1.5	0.8	-500	-5.3
Other services	61,300	11.6	5.1	64,700	11.1	5.5	3,400	5.5
Total	527,100	100.0	44.1	584,400	100.0	49.7	57,300	10.9

[a]*Excludes food service and drinking places (NAICS code 722).*

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

PERSONAL INCOME

Another indicator of the general trend of the economy of an area is personal income. Information regarding personal income presented in this chapter is from the U.S. Bureau of the Census. Specifically, personal income information for the year 2010 is from the Census Bureau's American Community Survey. Personal income information for prior years is from the Census Bureau's decennial 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 15, per capita income in the Region stood at $25,900 in 2010. Per capita income in the Region, measured in constant dollars, decreased by 11.3 percent during the 2000s. Constant dollar per capita income for Wisconsin and the Nation also decreased. Historically, the per capita income level for the Region has been higher than for the State and the Nation. However, in 2010 per capita income for the Region, State, and Nation were about the same (see Figure 10).

As further indicated in Table 15, median family income in the Region stood at $65,400 in 2010. The median family income for the Region, as measured in constant dollars, decreased by 11.0 percent during the 2000s, with the constant dollar median family income for the State and Nation decreasing as well. Median family income for the Region as reported by the Census Bureau has consistently exceeded the State and Nation. In 2010, the Region median family income exceeded that of the State and Nation by 5.3 percent and 7.9 percent, respectively (see Figure 11).

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[5]*Income figures have been converted to constant 2010 dollars using the U.S. Bureau of Labor Statistics Consumer Price Index (CPI) for all urban consumers for the Milwaukee-Racine area.*

There are considerable differences in personal income levels among the seven counties in the Region. As indicated in Table 16, the highest per capita income levels in 2010 were in Ozaukee County ($39,000) and Waukesha County ($34,900). Among the other five counties, per capita income ranged from $22,400 in Milwaukee County to $28,800 in Washington County. Each of the seven counties experienced a decrease in constant dollar per capita income during the 2000s.

As indicated in Table 17, a similar pattern of variation is evident among the counties in the Region with respect to median family income levels. The highest median family income levels in 2010 were in Ozaukee County ($89,200) and Waukesha County ($87,600). Among the other five counties, median family income ranged from $50,700 in Milwaukee County to $74,400 in Washington County. Each of the seven counties also experienced a decrease in constant dollar median family income during the 2000s.

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 1,079,000 persons in 2010, compared to 1,008,400 persons in 2000. The increase of 70,600 persons in the regional civilian labor force during the 2000s compares to increases of 74,200 during the 1990s, 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 during both the 1960s and 1950s.

- In relative terms, the Region's labor force grew at a somewhat slower rate than the Nation's labor force during the 2000s. As a result, the Region's share of the Nation's labor force decreased from 0.73 to 0.69 percent. The Region's labor force grew at about the same relative rate as the State labor force between 2000 and 2010. The Region's share of the State labor force remained at about 35 percent in 2010.

- The gender makeup of the civilian labor force changed slightly during the 2000s, with the female component increasing by about 0.6 of a percentage point to 48.7 percent of the total labor force in 2010. The gender makeup of the labor force changed dramatically between 1950 and 1990. The female component increased from 28.8 percent in 1950 to 46.8 percent in 1990, with the male component experiencing a corresponding decrease.

- 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 2010, the same as in 2000. The period from 1950 to 1990 saw a significant increase in the civilian labor force participation rate—from 56.6 percent in 1950 to 67.6 percent in 1990. The long-term trend in the civilian labor force participation rate is the net effect of the increased rate of participation by females and decreased rate of participation by males.

- The past decade saw slight change in the relative distribution of the labor force among the counties within the Region. Milwaukee County's share of the regional labor force decreased by about 0.7 of a percentage point during the 2000s. In each of the other six counties, the share of the Region's labor force remained about the same or increased slightly. Historically, the most notable changes in the labor force distribution within the Region have been the increase in Waukesha County's share of the regional labor force—from 6.3 percent in 1950 to 20.1 percent in 2010—and the decrease in Milwaukee County's share—from 71.5 percent in 1950 to 45.8 percent in 2010.

Table 15

PERSONAL INCOME LEVELS IN THE UNITED STATES, WISCONSIN, AND THE REGION: 1969-2010

Geographic Area	1969	1979	1989	1999	2010	Percent Change 1969-1979	1979-1989	1989-1999	1999-2010	1969-2010
United States										
Per Capita Income										
Reported Dollars	$ 3,100	$ 7,300	$14,400	$21,600	$26,100	135.5	97.3	50.0	20.8	741.9
Constant 2010 Dollars	18,300	21,600	25,000	27,700	26,100	18.0	15.7	10.8	-5.8	42.6
Median Family Income										
Reported Dollars	9,600	19,900	35,200	50,000	60,600	107.3	76.9	42.0	21.2	531.3
Constant 2010 Dollars	56,700	58,900	61,100	64,100	60,600	3.9	3.7	4.9	-5.5	6.9
Wisconsin										
Per Capita Income										
Reported Dollars	$ 3,000	$ 7,200	$13,300	$21,300	$25,500	140.0	84.7	60.2	19.7	750.0
Constant 2010 Dollars	17,700	21,300	23,100	27,300	25,500	20.3	8.5	18.2	-6.6	44.1
Median Family Income										
Reported Dollars	10,100	20,900	35,100	52,900	62,100	106.9	67.9	50.7	17.4	514.9
Constant 2010 Dollars	59,600	61,900	60,900	67,800	62,100	3.9	-1.6	11.3	-8.4	4.2
Region										
Per Capita Income										
Reported Dollars	$ 3,400	$ 8,200	$14,600	$22,800	$25,900	141.2	78.0	56.2	13.6	661.8
Constant 2010 Dollars	20,100	24,300	25,300	29,200	25,900	20.9	4.1	15.4	-11.3	28.9
Median Family Income										
Reported Dollars	11,200	23,500	38,500	57,400	65,400	109.8	63.8	49.1	13.9	483.9
Constant 2010 Dollars	66,100	69,600	66,800	73,500	65,400	5.3	-4.0	10.0	-11.0	-1.1

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

Number and Type of Jobs

- The number of jobs in the Region, as reported by the U.S. Bureau of Economic Analysis fluctuated somewhat over the course of the last decade. The number of jobs in the Region decreased during the early 2000s, increased through the mid-2000s, and then decreased after 2008. The number of jobs in the Region stood at 1,176,600 in 2010, about 33,200 jobs, or 2.7 percent, less than in 2000. The reduction in jobs after 2008 coincides with the national economic recession.

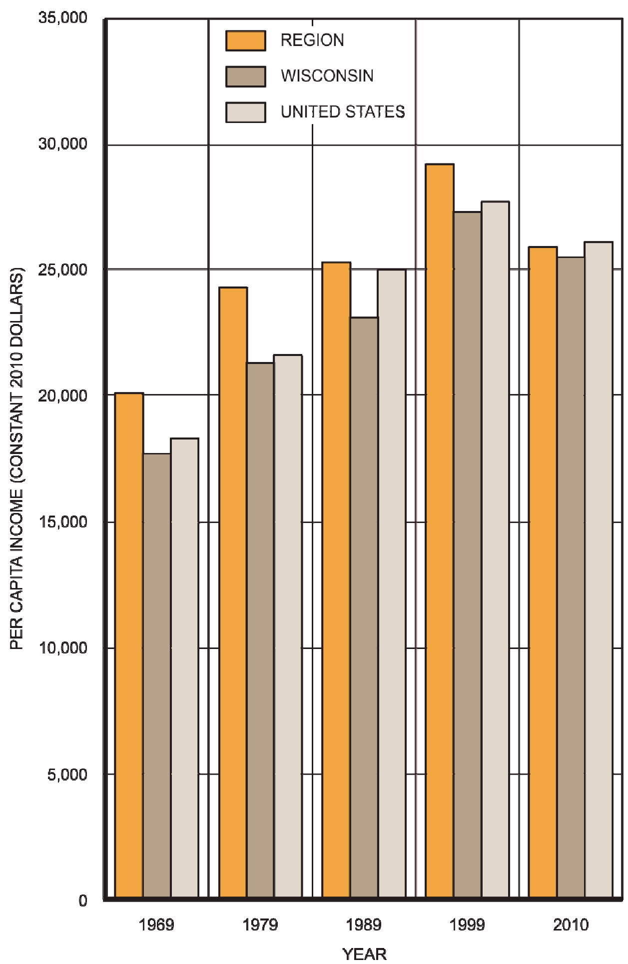
- Prior to the 2000s, the Region had experienced a substantial net increase in jobs each decade going back to at least 1950. The Region gained 155,800 jobs during the 1990s; 108,100 during the 1980s; 161,000 during the 1970s; 111,900 during the 1960s; and 99,500 during the 1950s.

- As a result of the net loss of jobs during the 2000s, the Region's share of the State's jobs decreased from 35.7 to 34.4 percent, while the Region's share of the Nation's jobs decreased from 0.74 to 0.69 percent. The Region's share of the State's employment has decreased each decade since 1970; its share of the Nation's employment has decreased each decade since 1960.

- Five Counties in the Region—Kenosha, Ozaukee, Walworth, Washington, and Waukesha—experienced at least a slight net increase in employment during the 2000s, despite sustaining recession-related job losses near the end of the decade. For these counties, the employment increases between 2000 and 2010

Figure 10

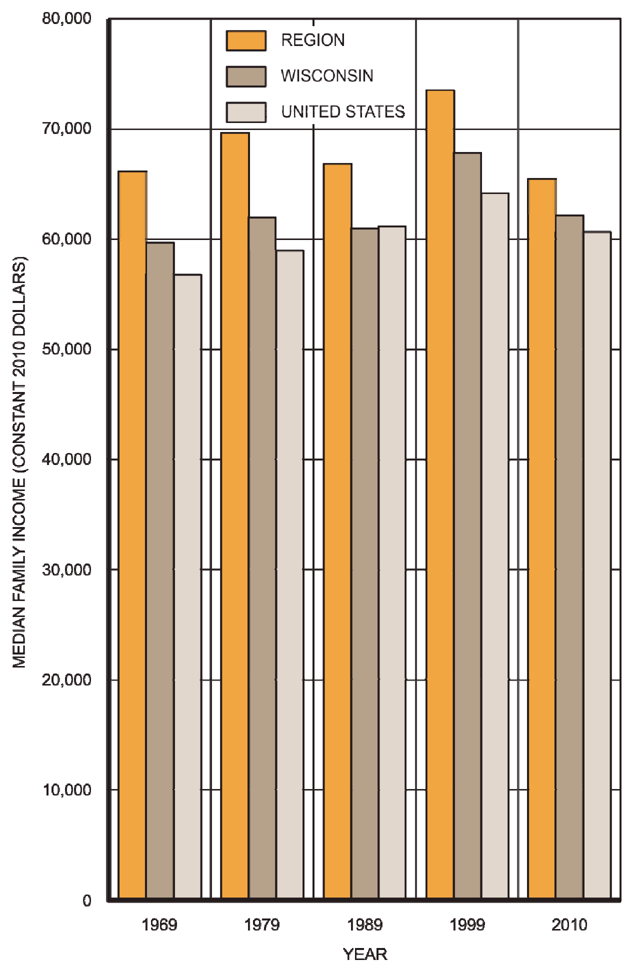
PER CAPITA INCOME IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1969-2010



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: 1969-2010



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

ranged from 1,000 jobs in Waukesha County to 7,000 jobs in Kenosha County. Conversely, total employment in Milwaukee County and Racine County decreased by about 42,900 jobs and 5,500 jobs, respectively, between 2000 and 2010.

- Between 2000 and 2010, 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 six decades, Milwaukee County has experienced a substantial decrease in its share of regional employment—from 79.1 percent in 1950 to 48.9 percent in 2010. Waukesha County's share increased from 2.9 percent to 22.8 percent during that time.

- The 2000s saw a continuation of a long-term shift in the regional economy from a manufacturing to a service orientation. Manufacturing employment in the Region decreased by 31.0 percent during the 2000s, and by 37.6 percent over the last four decades. Conversely, service-related employment increased by 9.9 percent during the 2000s, and by 183 percent over the last four decades. Due to these differing growth

Table 16

PER CAPITA INCOME LEVELS IN THE REGION BY COUNTY: 1969-2010

Geographic Area	1969	1979	1989	1999	2010	Percent Change 1969-1979	Percent Change 1979-1989	Percent Change 1989-1999	Percent Change 1999-2010	Percent Change 1969-2010
Kenosha County										
Reported Dollars	$ 3,100	$ 7,800	$13,300	$21,200	$25,500	151.6	70.5	59.4	20.3	722.6
Constant 2010 Dollars	18,300	23,100	23,100	27,200	25,500	26.2	0.0	17.7	-6.3	39.3
Milwaukee County										
Reported Dollars	$ 3,500	$ 8,000	$13,400	$19,900	$22,400	128.6	67.5	48.5	12.6	540.0
Constant 2010 Dollars	20,700	23,700	23,300	25,500	22,400	14.5	-1.7	9.4	-12.2	8.2
Ozaukee County										
Reported Dollars	$ 3,700	$ 9,600	$19,200	$31,900	$39,000	159.5	100.0	66.1	22.3	954.1
Constant 2010 Dollars	21,900	28,400	33,300	40,900	39,000	29.7	17.3	22.8	-4.6	78.1
Racine County										
Reported Dollars	$ 3,300	$ 8,000	$14,000	$21,800	$25,600	142.4	75.0	55.7	17.4	675.8
Constant 2010 Dollars	19,500	23,700	24,300	27,900	25,600	21.5	2.5	14.8	-8.2	31.3
Walworth County										
Reported Dollars	$ 2,900	$ 7,100	$13,500	$21,200	$24,200	144.8	90.1	57.0	14.2	734.5
Constant 2010 Dollars	17,100	21,000	23,400	27,200	24,200	22.8	11.4	16.2	-11.0	41.5
Washington County										
Reported Dollars	$ 3,100	$ 7,600	$14,700	$24,300	$28,800	145.2	93.4	65.3	18.5	829.0
Constant 2010 Dollars	18,300	22,500	25,500	31,100	28,800	23.0	13.3	22.0	-7.4	57.4
Waukesha County										
Reported Dollars	$ 3,600	$ 9,200	$18,100	$29,200	$34,900	155.6	96.7	61.3	19.5	869.4
Constant 2010 Dollars	21,300	27,200	31,400	37,400	34,900	27.7	15.4	19.1	-6.7	63.8
Region										
Reported Dollars	$ 3,400	$ 8,200	$14,600	$22,800	$25,900	141.2	78.0	56.2	13.6	661.8
Constant 2010 Dollars	20,100	24,300	25,300	29,200	25,900	20.9	4.1	15.4	-11.3	28.9

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

Table 17

MEDIAN FAMILY INCOME LEVELS IN THE REGION BY COUNTY: 1969-2010

Geographic Area	1969	1979	1989	1999	2010	Percent Change 1969-1979	Percent Change 1979-1989	Percent Change 1989-1999	Percent Change 1999-2010	Percent Change 1969-2010
Kenosha County										
Reported Dollars	$10,400	$23,200	$35,700	$56,500	$65,500	123.1	53.9	58.3	15.9	529.8
Constant 2010 Dollars	61,400	68,700	62,000	72,400	65,500	11.9	-9.8	16.8	-9.5	6.7
Milwaukee County										
Reported Dollars	$11,000	$22,000	$34,000	$47,200	$50,700	100.0	54.5	38.8	7.4	360.9
Constant 2010 Dollars	65,000	65,100	59,000	60,500	50,700	0.2	-9.4	2.5	-16.2	-22.0
Ozaukee County										
Reported Dollars	$12,600	$27,800	$47,600	$72,500	$89,200	120.6	71.2	52.3	23.0	607.9
Constant 2010 Dollars	74,400	82,300	82,600	92,900	89,200	10.6	0.4	12.5	-4.0	19.9
Racine County										
Reported Dollars	$11,000	$23,800	$38,000	$56,300	$62,200	116.4	59.7	48.2	10.5	465.5
Constant 2010 Dollars	65,000	70,500	65,900	72,100	62,200	8.5	-6.5	9.4	-13.7	-4.3
Walworth County										
Reported Dollars	$ 9,700	$20,800	$36,100	$55,300	$61,200	114.4	73.6	53.2	10.7	530.9
Constant 2010 Dollars	57,300	61,600	62,700	70,800	61,200	7.5	1.8	12.9	-13.6	6.8
Washington County										
Reported Dollars	$11,300	$24,000	$42,200	$63,500	$74,400	112.4	75.8	50.5	17.2	558.4
Constant 2010 Dollars	66,700	71,100	73,200	81,300	74,400	6.6	3.0	11.1	-8.5	11.5
Waukesha County										
Reported Dollars	$12,800	$27,600	$49,100	$71,800	$87,600	115.6	77.9	46.2	22.0	584.4
Constant 2010 Dollars	75,600	81,700	85,200	92,000	87,600	8.1	4.3	8.0	-4.8	15.9
Region										
Reported Dollars	$11,200	$23,500	$38,500	$57,400	$65,400	109.8	63.8	49.1	13.9	483.9
Constant 2010 Dollars	66,100	69,600	66,800	73,500	65,400	5.3	-4.0	10.0	-11.0	-1.1

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

rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 30.2 percent in 1970 to 12.6 percent in 2010, while service-related employment increased from 26.3 percent in 1970 to 49.7 percent in 2010. The State of Wisconsin and the United States have experienced a similar major shift from manufacturing to service-related employment. In comparison to the manufacturing and services industry groups, other major industry groups—including construction, wholesale trade, retail trade, and government—have been relatively stable in terms of their share of total employment in the Region over the last four decades.

Personal Income

- Per capita income in the Region stood at $25,900 in 2010. Per capita income in the Region, measured in constant dollars, decreased by 11.3 percent during the 2000s. Constant dollar per capita income for Wisconsin and the Nation also decreased. Historically, the per capita income level for the Region has been higher than for the State and the Nation. However, in 2010 per capita income for the Region, State, and Nation were about the same.

- Median family income in the Region stood at $65,400 in 2010. The median family income for the Region, as measured in constant dollars, decreased by 11.0 percent during the 2000s, with the constant dollar median family income for the State and Nation decreasing as well. Median family income for the Region as reported by the Census Bureau has consistently exceeded the State and Nation. In 2010, the Region median family income exceeded that of the State and Nation by 5.3 percent and 7.9 percent, respectively.

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Chapter III

EMPLOYMENT PROJECTIONS

INTRODUCTION

The primary purpose of this study is to prepare new projections of employment levels, or number of jobs, in the Region to be used as a 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 Southeastern Wisconsin Region. This chapter describes the methodology used in the preparation of employment projections to the year 2050 and presents the resulting projections. This chapter also compares the new employment projections with similar projections prepared by other agencies and projections previously prepared by the Commission.

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 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 year 2050 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 long-range 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 over the long term—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.*

The new employment projections were prepared for the period 2010 to 2050. Such projections will support the preparation of new long-range regional land use and transportation plans for that time period. This timeframe will ensure that those plans are consistent with Federal transportation planning requirements. The projections will also provide a basis for other long-range regional planning efforts and will be available for use in county and local comprehensive planning and public facility planning.

REGIONAL EMPLOYMENT PROJECTIONS TO 2050

The approach used in the preparation of the year 2050 employment projections, as in previous Commission employment projections, involved the disaggregation of total employment in the Region into major industry groups and the preparation of projections for each group. The industry groups for which projections were prepared are indicated in Table 18. They consist, for the most part of industry sectors, or groups of sectors, as defined under the North American Industry Classification System (NAICS).[2] The "government" group includes employment at all government agencies and enterprises, regardless of the NAICS code.

Table 18

INDUSTRY CATEGORIES FOR YEAR 2050 REGIONAL EMPLOYMENT PROJECTIONS

Industry	NAICS Code
Manufacturing	31-33
Construction	23
Wholesale Trade	42
Retail Trade[a]	44, 45, and 722
Services	51-71, 721, and 81
Transportation, Warehousing, and Utilities	48, 49, and 22
Government[b]	- -
Agriculture	111 and 112
Other (Unclassified)	- -

[a]*Includes the NAICS retail sectors (NAICS 44-45) and the NAICS subsector of food services and drinking places (NAICS 722).*

[b]*Includes all nonmilitary government agencies and enterprises, regardless of NAICS code.*

Source: SEWRPC.

For each major industry group, employment projections were developed based upon a consideration of historic trends, time series analyses, projections from other agencies, and various economic outlooks. Among the materials considered in developing the industry-by-industry projections were the following:

- The historic trend in annual employment levels for each industry for the period from 1970 to 2010 and preliminary information on employment levels in 2011. Historic trend information on employment levels by industry in the Region was presented in the previous chapter of this report.
- Linear and nonlinear extrapolations to the year 2050 of historic employment trends.
- Industry-by-industry employment projections prepared by Woods & Poole Economics, Inc. for the Region for the years 2010 to 2040.
- Industry-by-industry employment projections prepared by Moody's Analytics for the Region for the years 2010 to 2040.
- Industry-by-industry employment projections prepared by Economic Modeling Specialists, Inc. (EMSI) for the Region for the years 2012 to 2022.

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[2]*In the projections, "retail" employment includes the standard NAICS categories (NAICS codes 44 and 45), plus the food services and drinking places category (NAICS code 722). This combination is necessary to provide continuous time series data for retail employment in the Region required for the Commission's continuing planning program.*

- Industry-by-industry employment projections prepared by the Wisconsin Department of Workforce Development for the Region for the years 2008 to 2018.

- Industry-by-industry employment projections prepared by the Wisconsin Department of Workforce Development for Wisconsin for the years 2008 to 2018.

- Industry-by-industry employment projections prepared by the U.S. Bureau of Labor Statistics for the Nation for the years 2010 to 2020.

A set of projections was assembled for each major industry group, drawing from the above resources. This process necessarily took into account that these resources make use of a variety of projection techniques and cover different time periods, target dates, and geographic areas. Shorter-term projections were extended to 2050 as appropriate. When considering projections for areas other than the Region, the focus was on relative rates of change, rather than the absolute change, for the respective industry groups. In addition, differences in employment data sources and classification systems used in these resources were necessarily considered. This process generally resulted in a range of possible future employment levels for each major industry group. From within the range for each major industry group, an intermediate projection was chosen to represent the most likely growth path, and high and low projections were chosen to represent growth paths that could conceivably be achieved under significantly higher and lower growth scenarios for the Region. The resulting total employment levels under the high-, intermediate-, and low-growth scenarios for the Region were reviewed in light of the future labor force levels that could be expected in the Region under the Commission's new high, intermediate, and low population projections. The industry-by-industry employment projections under each scenario were then adjusted as appropriate to provide general consistency between the total number of jobs and the projected population and labor force. The relationship between the projected employment and the projected population and associated labor force is described later in this chapter.

As previously indicated, the Commission's new employment projections are long-range projections, as required for the Commission's continuing regional planning program. These projections are intended to provide an indication of future trends in employment over the next four decades needed as a basis for the preparation of the next generation of the regional land use and transportation plans and other elements of the comprehensive plan for Southeastern Wisconsin. Given the focus on long-range future trends, the new employment projections do not reflect the fluctuation in employment levels that may be expected to occur as a result of periods of growth and decline in the economy typically associated with shorter-term business cycles.

Projected Total Employment

Projections of total employment for the Region through the year 2050 are presented in Table 19 and Figure 12. Under the intermediate-growth scenario, employment in the Region would increase from 1,176,600 jobs in 2010 to 1,386,900 jobs in 2050, an increase of 210,300 jobs, or 18 percent. Under the high-growth scenario, total employment in the Region would increase to about 1,544,600 jobs in 2050, an increase of 368,000 jobs, or 31 percent over 2010. Under the low-growth scenario, total employment would increase to about 1,240,400 jobs in 2050, an increase of 63,800 jobs, or 5 percent, over 2010.

It is important to recognize that employment in the Region was unusually low in 2010, the base year of the new projections, as a result of the major economic recession that began in late 2007. Owing to the recession, total employment in the Region decreased from an all-time high of 1,238,600 jobs in 2007 to 1,176,600 in 2010, a reduction of 62,000 jobs, or 5 percent (see Figure 12). Projected total employment in the Region for the year 2050 under the intermediate-growth scenario is 12 percent greater than peak level of 2007. Projected total employment for the year 2050 under the high-growth scenario is 25 percent greater than the 2007 level. Under the low-growth scenario, projected year 2050 employment in the Region is about the same as the 2007 level.

Table 19

ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION: 2010-2050

Year	Actual and Projected Jobs		
Actual: 2010	1,176,600		
Projected Employment	High Projection	Intermediate Projection	Low Projection
2020	1,268,600	1,229,200	1,192,600
2030	1,360,600	1,281,800	1,208,600
2040	1,452,600	1,334,400	1,224,600
2050	1,544,600	1,386,900	1,240,400
Projected Change in Employment: 2010-2050			
Number of Jobs	368,000	210,300	63,800
Percent Change	31.3	17.9	5.4

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

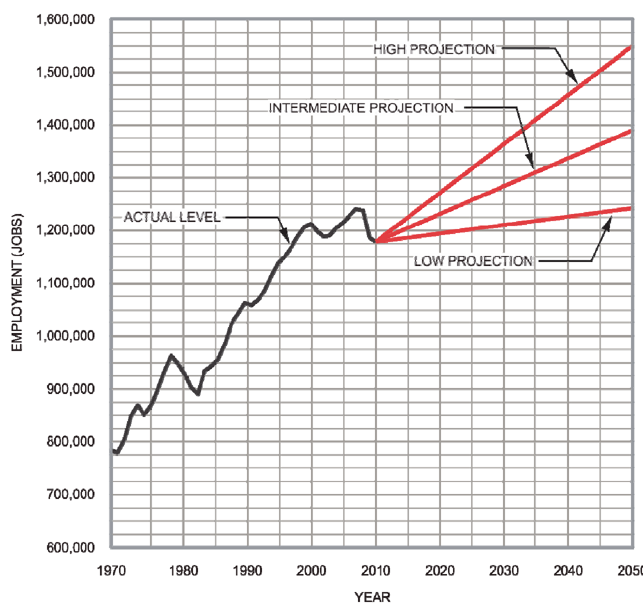
Projected Employment by Industry

Projected employment for major industry groups in the Region is presented in Table 20 and Figure 13. In general, the new employment projections indicate the continuation of the long-term shift in the regional economy from a manufacturing to a service orientation, described in Chapter II. This shift is expected to occur under each growth scenario. The following discussion pertains primarily to the intermediate-growth scenario.

- **Manufacturing Employment**
  Employment in manufacturing has decreased significantly over the past four decades, with particularly large reductions occurring during the early 1980s and early 2000s and—most recently—during the recession of the late 2000s. The proportion of manufacturing jobs relative to total jobs in the Region decreased from 30 percent in 1970 to 13 percent in 2010. Under the intermediate projection, manufacturing employment is expected to continue to decrease over the long term, from 148,100 jobs in 2010 to 119,200 jobs in 2050, a decrease of 28,900 jobs, or 20 percent. Under this scenario, manufacturing would account for 9 percent of all jobs in the Region in 2050.

Figure 12

TOTAL EMPLOYMENT PROJECTIONS FOR THE REGION: 2010-2050



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

- **Service Employment**
  Employment in the service sector increased substantially over the past four decades. The proportion of service jobs in the Region increased from 26 percent in 1970 to 50 percent in 2010. Under the intermediate projection, service industry employment is expected to increase over the long term, from 584,400 jobs in 2010 to 756,400 jobs in 2050, an increase of 172,000 jobs, or 29 percent. Service employment would represent 55 percent of all jobs in the Region in 2050. Growth in service industry employment would account for about 82 percent of the projected total increase in jobs in the Region between 2010 and 2050 under the intermediate-growth scenario.

- **Construction Employment**
  Employment in construction was severely impacted by the recession of the late 2000s, with construction employment decreasing by 13,200 jobs, or 22 percent, between 2007 and 2010. For an extended period prior to the recession, construction employment growth in the Region had been very strong, approximately doubling between the early 1980s and the start of the recession in 2007. Under the intermediate-growth scenario, construction employment in the Region is expected to increase to 63,300 jobs in 2050, an increase of 17,400 jobs, or 38 percent, over the reduced level of 45,900 jobs in 2010. The projected year 2050 construction employment for the Region under the intermediate-growth scenario is 4,200 jobs, or 7 percent, greater than the peak level that occurred in 2007.

- **Retail Employment**
  Retail employment was also significantly impacted by the recession of the late 2000s, with the number of jobs in the retail sector in the Region decreasing by 15,400, or 8 percent, between 2007 and 2010. Prior to the recession, retail employment growth in the Region had been fairly steady, increasing by about 36 percent between the early 1980s and the start of the recession in 2007. Under the intermediate-growth scenario, retail employment in the Region is expected to increase to 211,900 jobs in 2050, an increase of 26,100 jobs, or 14 percent, over the reduced level of 185,800 jobs in 2010. The projected year 2050 employment in the retail sector under the intermediate-growth scenario is 10,700 jobs, or 5 percent, greater than peak level for the Region experienced in 2007.

- **Wholesale and Transportation/Warehousing Employment**
  Employment in the wholesale sector and in the transportation/warehousing sector decreased somewhat during the recession of the late 2000s. Under the intermediate-growth scenario, employment in wholesaling is expected to increase from the reduced level of 48,800 jobs in 2010 to 59,800 jobs in 2050, an increase of 11,000 jobs, or 23 percent. The projected year 2050 employment in wholesaling is 4,100 jobs, or 7 percent, greater than the peak level for the Region that occurred in 2007. Under the intermediate-growth scenario, employment in transportation/warehousing[3] is expected to increase from 38,200 jobs in 2010 to 45,400 jobs in 2050, an increase of 7,200 jobs, or 19 percent. The projected year 2050 employment in transportation/warehousing is 4,000 jobs, or 10 percent, greater than the peak level for the Region that occurred in 2007.

- **Government Employment**
  Under the intermediate-growth scenario, government employment would increase moderately—by about 6,700 jobs, or 6 percent—from 117,700 jobs in 2010 to 124,400 jobs in 2050. The projected moderate increase in government employment is consistent with budget tightening anticipated at all levels of government for the foreseeable future.

- **Agricultural Employment**
  Agricultural employment in the Region, consisting for the most part of employment on farms, decreased significantly—by about 50 percent—between 1970 and 2000. Agricultural employment continued to decrease during the 2000s, but not as steeply as in prior decades. Under the intermediate-growth scenario, agricultural employment in the Region is projected to decrease further, from about 5,200 jobs in 2010 to about 4,000 jobs in 2050. Despite this declining employment, the agricultural sector is expected to remain an important part of the regional economy in the coming decades.

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[3]*Includes employment in private utilities.*

Table 20

PROJECTED EMPLOYMENT BY INDUSTRY GROUP IN THE REGION: 2010-2050

Industry	Actual Employment: 2010		Projected Employment: 2050					
			High Projection		Intermediate Projection		Low Projection	
	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	148,100	12.6	143,000	9.3	119,200	8.6	95,400	7.7
Construction	45,900	3.9	71,300	4.6	63,300	4.5	57,300	4.6
Wholesale Trade	48,800	4.2	66,700	4.3	59,800	4.3	52,400	4.2
Retail Trade	185,800	15.8	244,100	15.8	211,900	15.3	192,600	15.5
Services	584,400	49.7	828,200	53.6	756,400	54.5	684,700	55.2
Transportation, Warehousing, and Utilities	38,200	3.2	50,300	3.3	45,400	3.3	42,500	3.4
Government	117,700	10.0	133,400	8.6	124,400	9.0	109,700	8.9
Agriculture	5,200	0.4	5,100	0.3	4,000	0.3	3,300	0.3
Other (unclassified)	2,500	0.2	2,500	0.2	2,500	0.2	2,500	0.2
Total	1,176,600	100.0	1,544,600	100.0	1,386,900	100.0	1,240,400	100.0

Industry	Projected Change: 2010-2050					
	High Projection		Intermediate Projection		Low Projection	
	Number	Percent	Number	Percent	Number	Percent
Manufacturing	-5,100	-3.4	-28,900	-19.5	-52,700	-35.6
Construction	25,400	55.3	17,400	37.9	11,400	24.8
Wholesale Trade	17,900	36.7	11,000	22.5	3,600	7.4
Retail Trade	58,300	31.4	26,100	14.0	6,800	3.7
Services	243,800	41.7	172,000	29.4	100,300	17.2
Transportation, Warehousing, and Utilities	12,100	31.7	7,200	18.8	4,300	11.3
Government	15,700	13.3	6,700	5.7	-8,000	-6.8
Agriculture	-100	-1.9	-1,200	-23.1	-1,900	-36.5
Other (unclassified)	0	0.0	0	0.0	0	0.0
Total	368,000	31.3	210,300	17.9	63,800	5.4

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

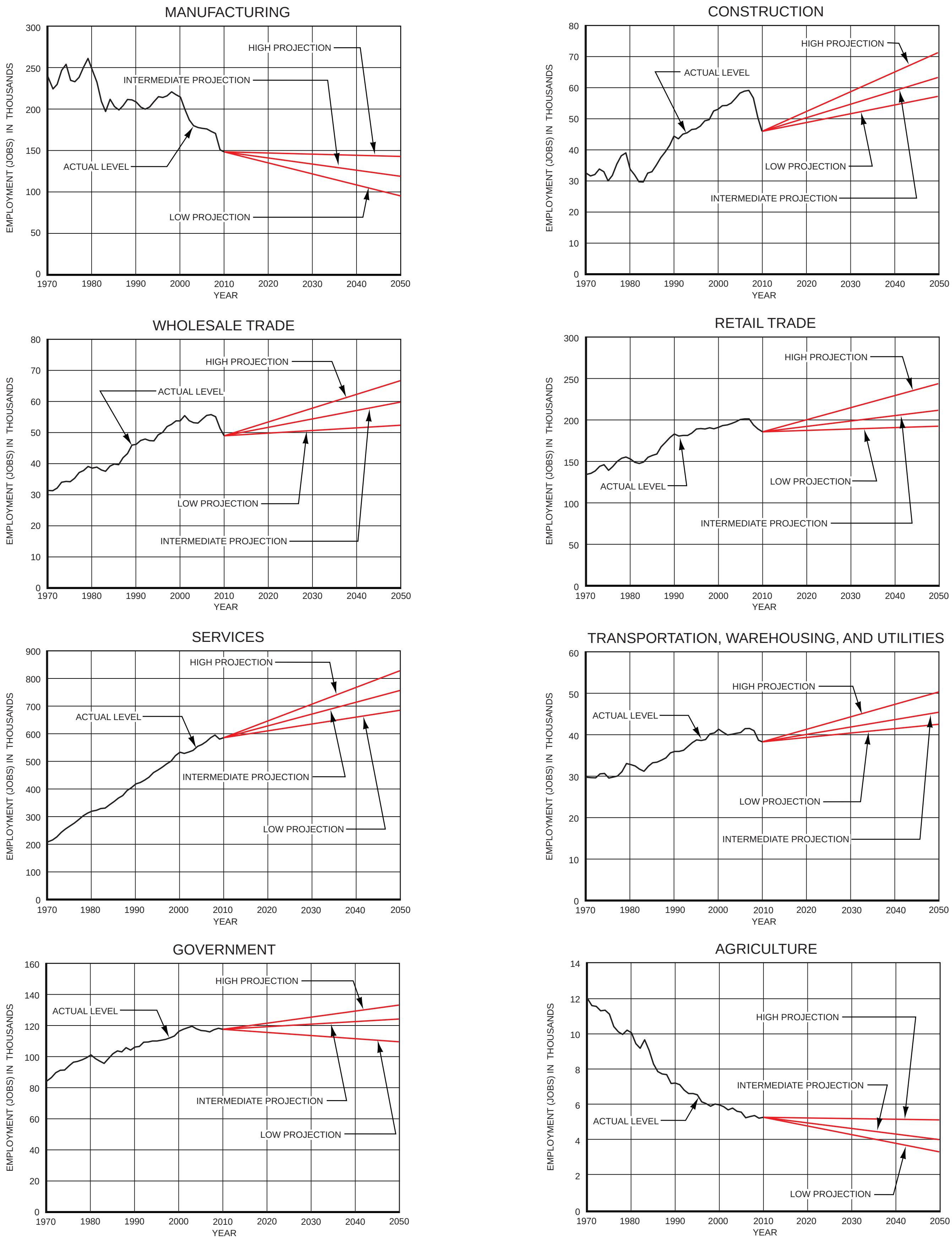
PROJECTED EMPLOYMENT DISTRIBUTION BY COUNTY

Historic information regarding the changing distribution of jobs by county in the Region was presented in Chapter II of this report. The largest distributional changes in employment have occurred in Milwaukee and Waukesha Counties. Over the past six decades, Milwaukee County's share of regional employment decreased by 30.2 percent, while Waukesha County's share increased by 19.9 percent. The share of the other five counties in the Region combined increased by 10.3 percent (see Table 9 and Figures 7 and 8 in Chapter II).

Commission projections for the year 2050 are based upon a continuation of historic trends in the distribution of jobs within the Region, but at a moderated pace. These projections consider a number of factors, including the historic trend in the number of jobs by county and the historic trend in each county's share of total regional employment. Also considered was the general pattern of planned commercial and industrial development identified in long-range county and community comprehensive plans as well as major commitments of public utilities to serve such development.

Figure 13

ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY INDUSTRY: 1970-2050



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

Table 21

ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY COUNTY: 2010-2050

	Actual Employment: 2010		Projected Employment: 2050									
			High Projection			Intermediate Projection			Low Projection			
				Change: 2010-2050			Change: 2010-2050			Change: 2010-2050		
County	Number of Jobs	Percent of Region	Number of Jobs: 2050	Number	Percent	Number of Jobs: 2050	Number	Percent	Number of Jobs: 2050	Number	Percent	Percent of Region Jobs[a]
Kenosha	74,900	6.4	112,800	37,900	50.6	101,300	26,400	35.2	90,600	15,700	21.0	7.3
Milwaukee	575,400	48.9	678,100	102,700	17.8	608,900	33,500	5.8	544,500	-30,900	-5.4	43.9
Ozaukee	52,500	4.5	77,200	24,700	47.0	69,300	16,800	32.0	62,000	9,500	18.1	5.0
Racine	88,300	7.5	125,100	36,800	41.7	112,300	24,000	27.2	100,500	12,200	13.8	8.1
Walworth	52,700	4.5	77,200	24,500	46.5	69,300	16,600	31.5	62,000	9,300	17.6	5.0
Washington	63,900	5.4	97,300	33,400	52.3	87,400	23,500	36.8	78,100	14,200	22.2	6.3
Waukesha	268,900	22.8	376,900	108,000	40.2	338,400	69,500	25.8	302,700	33,800	12.6	24.4
Region	1,176,600	100.0	1,544,600	368,000	31.3	1,386,900	210,300	17.9	1,240,400	63,800	5.4	100.0

[a]*Applies to all projections.*

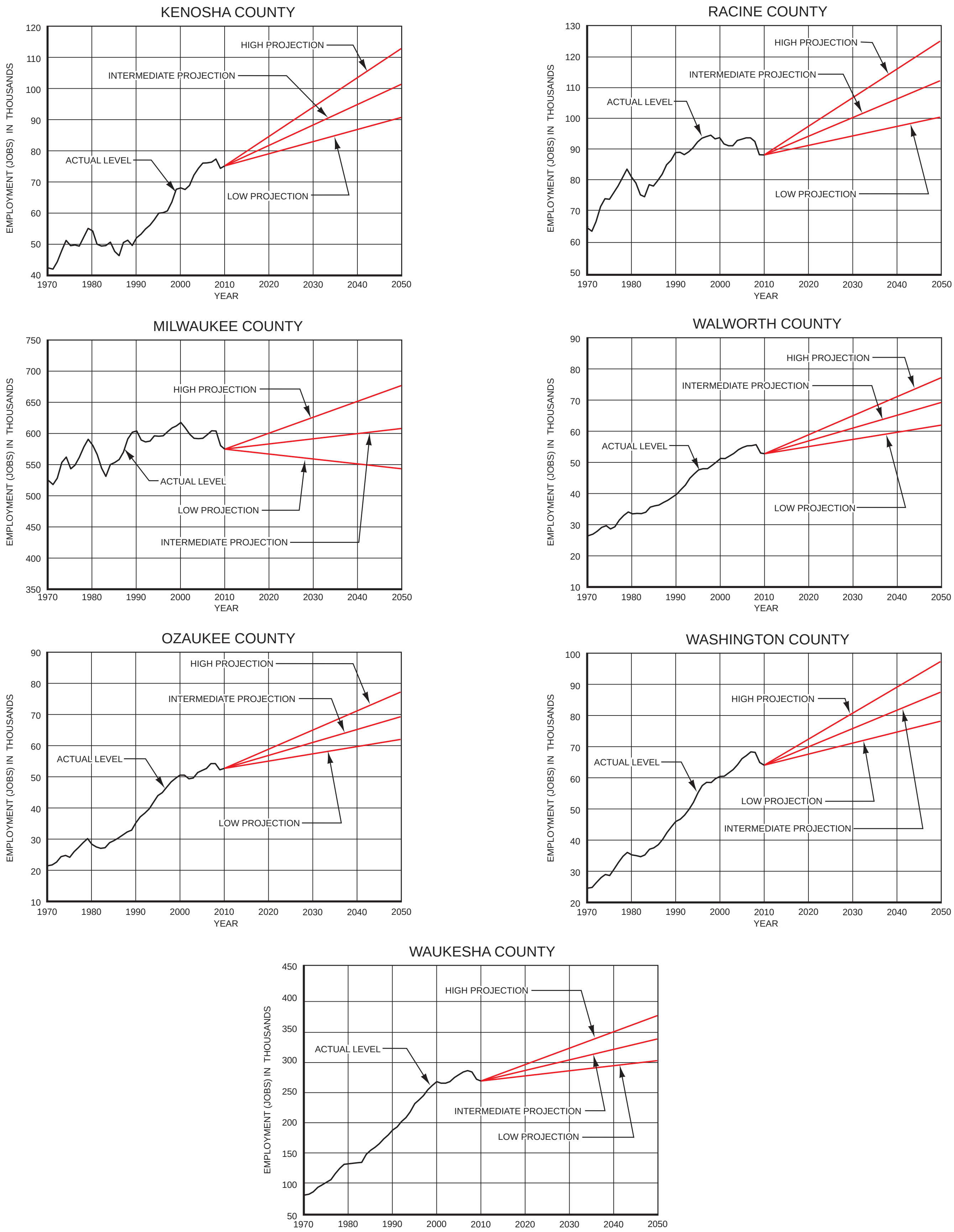
Source: U.S. Bureau of Economic Analysis and SEWRPC.

As indicated in Table 21, under the Commission's projections, the decrease in Milwaukee County's share of regional employment and the increase in Waukesha County's share would be moderated over the projection period. The share of each of the other five counties would increase slightly, by less than 1.0 percent. Four of these five Counties—Kenosha, Ozaukee, Walworth, and Washington—experienced a slight increase in their share of regional employment over the past 20 or more years. Racine County experienced a slight decrease in its share of regional employment in recent decades. The projection for Racine County envisions a modest reversal of this trend over the course of the projection period, given the significant amount of land identified for future commercial and industrial development in the County and community comprehensive plans, along with the recent and planned future extension of utility service to such areas.

The number of jobs by county under the high-, intermediate-, and low-growth scenarios is presented in Table 21 and Figure 14. Under the intermediate projection—considered to be the most likely to occur—employment in Kenosha, Ozaukee, Racine, Walworth, and Washington Counties would increase by 16,600 to 26,400 jobs, or by 27 to 37 percent between 2010 and 2050. Waukesha County would increase by 69,500 jobs, or 26 percent, between 2010 and 2050. Employment in Milwaukee County would increase by 33,500 jobs, or about 6 percent, between 2010 and 2050. Milwaukee County's year 2050 employment level would be slightly higher than the level that occurred in 2007, just prior to the job losses tied to the recession of the late 2000s.

Figure 14

ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY COUNTY: 1970-2050



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

RELATIONSHIP BETWEEN THE COMMISSION YEAR 2050 EMPLOYMENT AND POPULATION PROJECTIONS

The preparation of the Commission employment projections for the Region as presented in this chapter was carried out in tandem with the preparation of population projections for the Region for the same time period, as documented in SEWRPC Technical Report No. 11 (5th Edition), *The Population of Southeastern Wisconsin*. This section focuses on the relationship between projected employment and the projected population and the associated labor force for the Region. It provides an estimate of the size of the labor force that could be expected in light of the projected population, along with an estimate of the number of jobs which that labor force could accommodate.

Table 22

LABOR FORCE PARTICIPATION RATES IN THE REGION: 2010 AND 2050

Age Group	Labor Force Participation Rates by Age and Sex			
	Males		Females	
	Actual 2010	Assumed 2050	Actual 2010	Assumed 2050
16-24	62.8	62.8	65.1	65.1
25-34	90.7	90.7	82.4	82.4
35-44	90.8	90.8	80.4	80.4
45-54	86.4	86.4	81.7	81.7
55-64	71.7	71.7	66.0	66.0
65-74	28.9	31.3	22.1	25.4
75 and Older	8.2	10.1	4.5	6.1

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

Projected Future Labor Force

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 or temporarily unemployed. Current and historic trend information regarding the Region’s labor force is presented in the first part of Chapter II.

For purposes of this analysis, projections of future labor force levels in the Region were developed based upon future population levels by age and sex for the Region from the Commission’s year 2050 population projections, along with reasonable assumptions regarding future labor force participation rates by age and sex. For purposes of this analysis, it was assumed that, for most age-sex groups, the labor force participation rate would remain essentially unchanged, at 2010 levels, over the projection period. It was assumed that there would be a modest increase in the rate for individuals age 65 and over (see Table 22). This reflects several factors: people are living longer; with greater education and investment in their careers, seniors may choose to remain longer in their jobs; and many seniors are facing changing financial prospects for their retirement years.

Table 23 indicates the size of the labor force in the Region that may be expected based upon the Commission’s projected population by age and sex and the assumed future labor force participation rates. Under the high-growth scenario, the regional labor force would increase by 208,400 persons, or 19 percent, from 1,079,000 persons in 2010 to 1,287,400 persons in 2050. Under the intermediate-growth scenario, the labor force would increase by 92,300 persons, or 9 percent, to 1,171,300 persons. Under a low-growth scenario, the labor force would actually decrease slightly—by 8,500 persons, or about 1 percent—to 1,070,500 persons. These patterns of change stand in marked contrast to the considerably more rapid growth in the Region’s labor force over the past 40 years.[4] The expected reduced growth in the labor force is directly related to the aging of the population, as a large segment of the workforce enters those age groups with lower labor force participation rates. Despite the fact that some seniors may work longer than in the past, as assumed in this analysis, the retirement of large numbers of seniors may be expected to dampen growth in the overall labor force in the coming decades.

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[4]*The Region’s labor force increased by 70,600 persons during the 2000s, 74,200 persons during the 1990s, 58,000 persons during the 1980s, and 140,100 persons during the 1970s.*

Table 23

POPULATION AND CIVILIAN LABOR FORCE IN THE REGION: ACTUAL 2010 AND PROJECTED 2050

Year	Population in the Region			Civilian Labor Force in the Region		
		Projected Change in the Population: 2010-2050			Projected Change in the Labor Force: 2010-2050	
	Population[a]	Number	Percent	Labor Force[b]	Number	Percent
Actual 2010	2,020,000	- -	- -	1,079,000	- -	- -
Projected 2050						
High Growth	2,577,700	557,700	27.6	1,287,400	208,400	19.3
Intermediate Growth	2,354,000	334,000	16.5	1,171,300	92,300	8.6
Low Growth	2,159,800	139,800	6.9	1,070,500	-8,500	-0.8

[a]*SEWRPC population projections for the Region as presented in SEWRPC Technical Report No. 11 (5th Edition),* The Population of Southeastern Wisconsin.

[b]*The projected labor force was developed from SEWRPC year 2050 population projections by age and sex, along with assumptions regarding future labor force participation rates by age and sex, as indicated in Table 22.*

Source: SEWRPC.

It should be recognized that, even with little or no change in age- and sex-specific labor force participation rates, the overall labor force participation rate (total labor force divided by the total labor force-age population) may be expected to decrease in the decades ahead—again, largely due to the aging of the population. Based upon the Commission's projected population by age and sex and the assumed age- and sex-specific labor force rates indicated in Table 22, the overall labor force participation rate for the Region may be expected to be about 62 percent under each growth scenario in 2050, compared to about 68 percent in 2010. This long-term decline in the overall labor force rate is consistent with the projected decrease in the labor force participation rate prepared by the U.S. Bureau of Labor Statistics for the Nation as a whole.[5]

Estimated Employment Levels Able to Be Accommodated by the Labor Force

As part of this analysis, assumptions were also necessarily made regarding future unemployment rates and the extent of multiple job-holding in the Region. For purposes of this analysis, unemployment rates of 4.0, 5.0 and 6.0 percent were assumed under the high-, intermediate-, and low-growth scenarios, respectively. These were deemed to be representative of the long-term average rates that could reasonably be expected under the three growth scenarios.

The measure of multiple job-holding used in this analysis is the ratio between the total number of jobs in the Region and the employed labor force. This ratio is presented for the years for which data are available for the Region for the period from 1990 to 2010 in Table 24. This ratio has fluctuated somewhat over the past 20 years, as indicated in that table. For purposes of this analysis, under each growth scenario, a range of future multiple job-holding factors—from 1.19 to 1.27—was considered, consistent with the range observed in the Region between 1990 and 2010.[6]

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[5]*Projections of the U.S. Bureau of Labor Statistics indicate that the overall labor force participation rate for the Nation will decline from about 65 percent in 2010 to about 59 percent in 2050.*

[6]*This method for calculating multiple job-holding is consistent with the economic data sets utilized in this report. The results indicate a greater degree of multiple job-holding than is indicated by some surveys.*

Table 25 indicates the range in the number of jobs that could potentially be accommodated by the projected population for each growth scenario, under the foregoing assumptions regarding labor force participation rates, the rate of unemployment, and multiple job-holding rates. This analysis assumes that the balance between the number of residents of the Region who commute to jobs outside the Region and the number of nonresidents who commute to jobs inside the Region will not change substantially over the projection period. The number of jobs potentially associated with the projected labor force ranges from 1.48 million to 1.57 million jobs under the high-growth scenario; 1.33 million to 1.41 million jobs under the intermediate-growth scenario; and 1.20 million to 1.28 million jobs under the low-growth scenario. As further indicated in Table 25, the projected year 2050 job levels in the Region under the high-, intermediate-, and low-growth scenarios as presented in this chapter—1.54 million, 1.39 million, and 1.24 million—are within these ranges. This would indicate basic consistency between the projected employment levels and the projected population and associated labor force in the Region under each growth scenario.

Table 24

ACTUAL MULTIPLE JOB-HOLDING RATES IN THE REGION: 1990-2010

Year	Employed Civilian Labor Force[a]	Jobs[b]	Multiple Job-Holding Rate[c]
1990	882,716	1,054,032	1.194
2000	954,443	1,209,816	1.268
2007	990,316	1,238,599	1.251
2008	1,030,741	1,235,945	1.199
2009	984,738	1,185,186	1.204
2010	965,465	1,176,600	1.219

[a]*This table presents available data from the U.S. Census Bureau on the total employed labor force for the Region for the period 1990 to 2010. Data for 1990 and 2000 are from the decennial census. Data for 2007-2010 are from the Census Bureau's American Community Survey.*

[b]*The number of jobs is from the U.S. Bureau of Economic Analysis.*

[c]*Calculated as the number of jobs divided by the employed labor force.*

Source: U.S. Bureau of the Census, 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 five 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 employment 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 presented along with the Commission high, intermediate, and low employment projections for 2050 in Figure 15.[7] Also shown on this figure is the actual trend in employment in the Region since 1950. In reviewing the past Commission forecasts 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-related employment level fluctuations. The business cycle impact on employment levels is particularly evident in the decrease in employment in the Region after 2007 that is associated with the major recession of the late 2000s.

[7]*It should be noted that historic employment level data are subject to re-benchmarking by the various employment statistical reporting agencies. Owing to such re-benchmarking, 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 (945,900 jobs) is about 61,700 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 15, the initially prepared employment projections for 1960-1990, 1970-2000, 1980-2010, and 1990-2020 have been adjusted to compensate for changes in the underlying historic trend data.*

Table 25

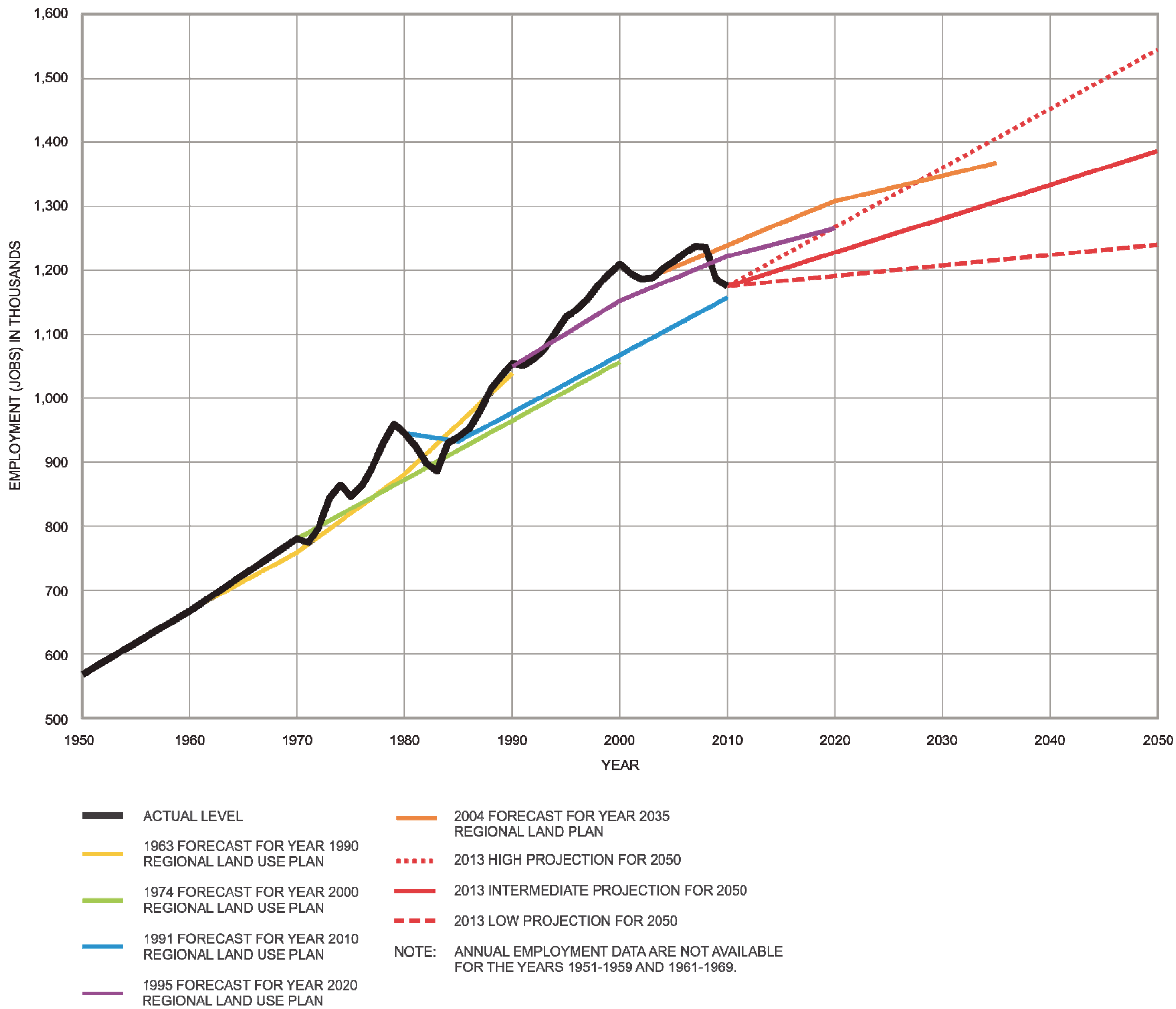
ESTIMATED NUMBER OF JOBS ABLE TO BE ACCOMMODATED BY THE PROJECTED POPULATION AND ASSOCIATED LABOR FORCE IN THE REGION AND COMPARISON TO THE PROJECTED NUMBER OF JOBS: 2050

Growth Scenario	Projected Population: 2050	Projected Labor Force: 2050	Assumed Unemployment Rate: 2050	Multiple Job-holding Factor—Assumed Range: 2050		Jobs Able to be Accommodated by Projected Labor Force: 2050		Projected Jobs: 2050
				From	To	From	To	
High	2,577,700	1,287,400	4.0	1.194	1.268	1,475,700	1,567,100	1,544,600
Intermediate......	2,354,000	1,171,300	5.0	1.194	1.268	1,328,600	1,410,900	1,386,900
Low	2,159,800	1,070,500	6.0	1.194	1.268	1,201,500	1,276,000	1,240,400

Source: SEWRPC.

Figure 15

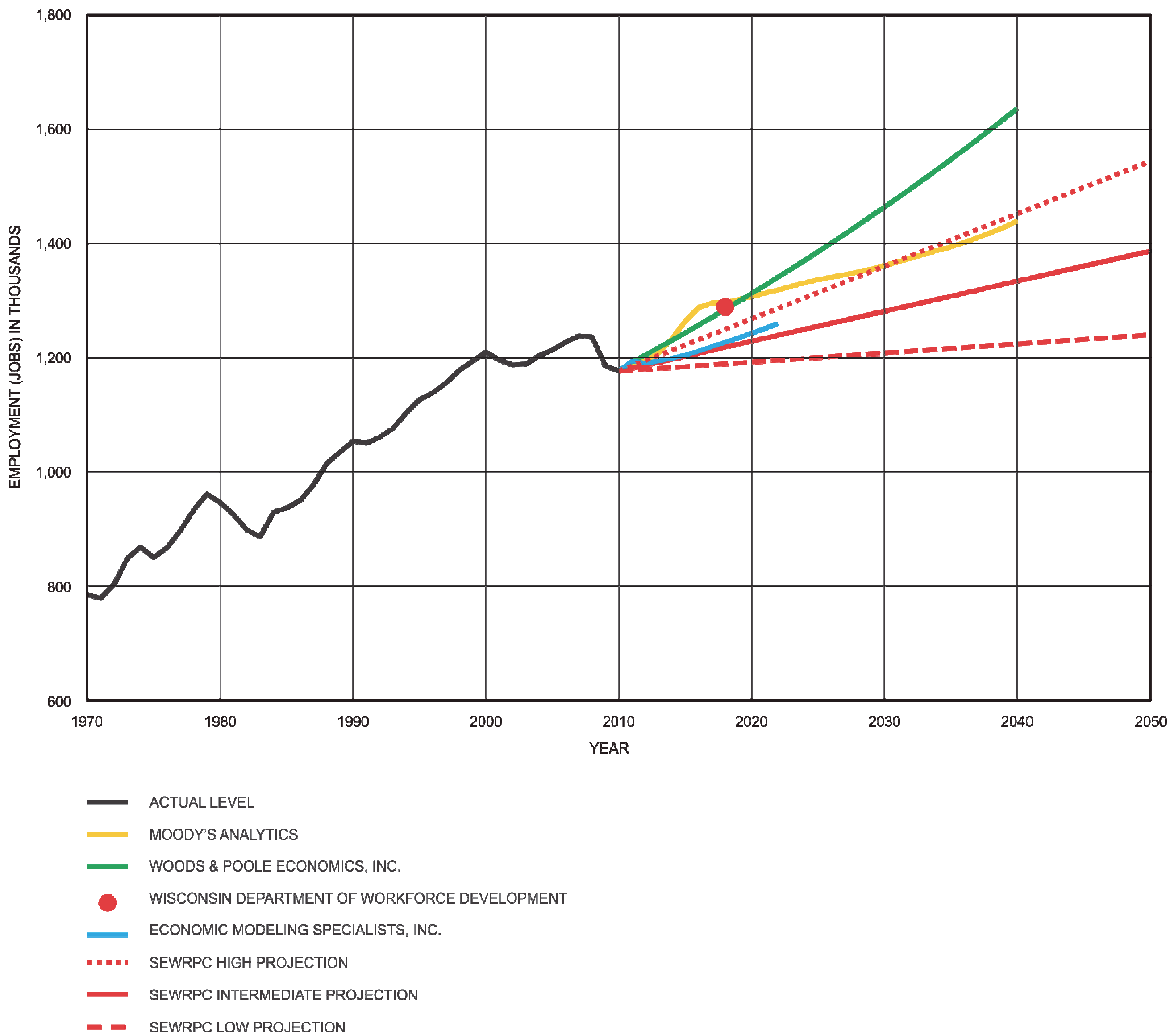
COMPARISON OF YEAR 2050 EMPLOYMENT PROJECTIONS WITH PRIOR COMMISSION FORECASTS



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

Figure 16

COMPARISON OF COMMISSION AND OTHER AGENCY EMPLOYMENT PROJECTIONS FOR THE REGION



Source: U.S. Bureau of Economic Analysis; Wisconsin Department of Workforce Development; Moody's Analytics; Woods & Poole Economics, Inc.; EMSI; and SEWRPC.

As noted earlier, the intermediate employment projection for the year 2050—which is expected to serve as the basis for the year 2050 regional land use and transportation plans—envisions that employment in the Region will increase from about 1,176,600 jobs in 2010 to about 1,386,900 jobs in 2050. The intermediate employment projection for the year 2050 is somewhat higher than the forecast of 1,368,300 jobs for the year 2035 indicated in the previous Commission projections.

COMPARISON TO OTHER-AGENCY EMPLOYMENT PROJECTIONS

The Commission's year 2050 projections of total jobs in the Region are compared with other-agency employment projections in Figure 16. Included in Figure 16 are the projections of Woods & Poole Economics, Inc. for the year 2040; Moody's Analytics for the year 2040; Economic Modeling Specialists, Inc. (EMSI) for the year 2022; and the Wisconsin Department of Workforce Development for the year 2018. The other-agency employment projections were prepared at different points in time and cover differing time periods.[8] Those other-agency projections which rely upon employment data other than U.S. Bureau of Economic Analysis data were adjusted as appropriate to provide for a meaningful comparison to the Commission projections.

Among the other-agency projections, the EMSI projection of total employment, which extends through the year 2022, is the most consistent with the new Commission projections. The Woods and Poole projection of total jobs is substantially greater than the Commission projections. The projection by Moody's Analytics envisions a rapid rebound in employment following the recent recession. After 2020, the pace of employment growth projected by Moody's Analytics is fairly similar to the Commission's intermediate projection.

SUMMARY

This chapter has presented new employment projections for the Southeastern Wisconsin Region for the period from 2010 to 2050. The previous Commission projections, prepared in 2004, pertained to the period from 2003 to 2035. The preparation of the new employment projections was carried out in tandem and coordinated with the preparation of new population projections for the Region, also for the period from 2010 to 2050.

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 consideration of employment in major industry groups and the preparation of projections for those groups. For each industry group, employment projections were developed based upon a consideration of historic trends, time series analyses, projections from other agencies, and various economic outlooks. The resulting total employment levels for the Region were reviewed in light of the future labor force levels that could be expected in the Region under the Commission's new population projections. The industry-by-industry employment projections were then adjusted as appropriate to provide general consistency between the total number of jobs and the projected population and labor force.

Under the current economic study, as in prior studies, the Commission 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 year 2050 regional land use and transportation plans. 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.

The Commission's new employment projections represent long-range projections, as required for the Commission's continuing regional planning program. These projections are intended to provide an indication of future trends in employment over the next four decades needed as a basis for the preparation of the next generation of the regional land use and transportation plans and other elements of the comprehensive plan for Southeastern Wisconsin. Given the focus on long-range future trends, the new employment projections do not reflect the fluctuation in employment levels that may be expected to occur as a result of periods of growth and decline in the economy typically associated with shorter-term business cycles.

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[8]*The other-agency projections presented in Figure 16 are those that were available in January 2013. The projections of Woods & Poole, Moody's Analytics, and EMSI are frequently revised and extended. The projections of the Wisconsin Department of Workforce Development are revised and extended every two years.*

A summary of the employment projections for the Region for the period from 2010 to 2050 as presented in this chapter follows:

- Under the intermediate-growth scenario—considered the most likely to occur—employment in the Region would increase from 1,176,600 jobs in 2010 to 1,386,900 jobs in 2050, an increase of 210,300 jobs, or 18 percent. Under the high-growth scenario, total employment in the Region would increase to about 1,544,600 jobs in 2050, an increase of 368,000 jobs, or 31 percent, over 2010. Under the low-growth scenario, total employment would increase to about 1,240,400 jobs in 2050, an increase of 63,800 jobs, or 5 percent, over 2010. These projections are generally consistent with the size of the labor force that could be expected in the Region under the Commission's year 2050 population projections for each growth scenario. Growth in the labor force over the forecast period is expected to be significantly slower than in the past—to a great extent, the result of the large baby-boom generation (those born from 1946 through 1964) entering their retirement years.

- It is important to recognize that employment in the Region was unusually low in 2010, the base year of the new projections, as a result of the major economic recession that began in late 2007. Owing to the recession, total employment in the Region decreased from an all-time high of 1,238,600 jobs in 2007 to 1,176,600 in 2010, a reduction of 62,000 jobs, or 5 percent. Projected total employment in the Region for the year 2050 under the intermediate-growth scenario is 12 percent greater than the peak level of 2007. Projected total employment for the year 2050 under the high-growth scenario is 25 percent greater than the 2007 level. Under the low-growth scenario, projected year 2050 employment in the Region is about the same as the 2007 level.

- The new employment projections indicate the continuation of the long-term shift in the regional economy from a manufacturing to a service orientation. This shift is expected to occur under each growth scenario. Under the intermediate-growth scenario, manufacturing employment is expected to continue to decrease over the long term, from 148,100 jobs in 2010 to 119,200 jobs in 2050, a decrease of 28,900 jobs, or 20 percent. Under this scenario, manufacturing would account for 9 percent of all jobs in the Region in 2050, compared to 13 percent in 2010, 20 percent in 1990, and 30 percent in 1970. Under the intermediate-growth scenario, service industry employment is expected to increase from 584,400 jobs in 2010 to 756,400 jobs in 2050, an increase of 172,000 jobs, or 29 percent. Service employment would represent 55 percent of all jobs in the Region in 2050, compared to 50 percent in 2010, 40 percent in 1990, and 26 percent in 1970.

- Historically, there has been a significant change in the distribution of jobs among the counties in the Region. The largest distributional changes in employment have occurred in Milwaukee and Waukesha Counties. Over the past six decades, Milwaukee County's share of regional employment decreased by 30 percent, while Waukesha County's share increased by 20 percent. The share of the other five counties in the Region combined increased by 10 percent. Under the Commission's projections, the historical decrease in Milwaukee County's share of regional employment and the increase in Waukesha County's share would be moderated over the projection period. The share of each of the other five counties would increase slightly. Under the intermediate projection, employment in Kenosha, Ozaukee, Racine, Walworth, and Washington Counties would increase by 16,600 to 26,400 jobs, or by 27 to 37 percent, between 2010 and 2050. Waukesha County would increase by 69,500 jobs, or 26 percent, between 2010 and 2050. Employment in Milwaukee County would increase by 33,500 jobs, or about 6 percent, between 2010 and 2050. Milwaukee County's year 2050 employment level would be slightly higher than the level that occurred in 2007, just prior to the job losses tied to the recession of the late 2000s.

Chapter IV

SUMMARY

This report constitutes the fifth 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 2012-2013 and sets forth new employment projections for the Region to the year 2050. This report is a companion to the fifth edition of SEWRPC Technical Report No. 11, *The Population of Southeastern Wisconsin*, which documents a concurrent analysis of the regional population and sets forth new population projections to the year 2050. The aforementioned 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 2050.

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 in the Region. Chapter III presents a new set of employment projections covering the period 2010 to 2050. 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 1,079,000 persons in 2010, compared to 1,008,400 persons in 2000. The increase of 70,600 persons in the regional civilian labor force during the 2000s compares to increases of 74,200 during the 1990s, 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 during both the 1960s and 1950s.

- In relative terms, the Region's labor force grew at a somewhat slower rate than the Nation's labor force during the 2000s. As a result, the Region's share of the Nation's labor force decreased from 0.73 to 0.69 percent. The Region's labor force grew at about the same relative rate as the State labor force between 2000 and 2010. The Region's share of the State labor force remained at about 35 percent in 2010.

- The gender makeup of the civilian labor force changed slightly during the 2000s, with the female component increasing by about 0.6 of a percentage point to 48.7 percent of the total labor force in 2010. The gender makeup of the labor force changed dramatically between 1950 and 1990. The female component increased from 28.8 percent in 1950 to 46.8 percent in 1990, with the male component experiencing a corresponding decrease.

- 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 2010, the same as in 2000. The period from 1950 to 1990 saw a significant increase in the civilian labor force participation rate—from 56.6 percent in 1950 to 67.6 percent in 1990. The long-term trend in the civilian labor force participation rate is the net effect of the increased rate of participation by females and decreased rate of participation by males.

- The past decade saw a slight change in the relative distribution of the labor force among the counties within the Region. Milwaukee County's share of the regional labor force decreased by about 0.7 of a percentage point during the 2000s. In each of the other six counties, the share of the Region's labor force remained about the same or increased slightly. Historically, the most notable changes in the labor force distribution within the Region have been the increase in Waukesha County's share of the regional labor force—from 6.3 percent in 1950 to 20.1 percent in 2010—and the decrease in Milwaukee County's share—from 71.5 percent in 1950 to 45.8 percent in 2010.

- The number of jobs in the Region, as reported by the U.S. Bureau of Economic Analysis, fluctuated somewhat over the course of the last decade. The number of jobs in the Region decreased during the early 2000s, increased through the mid-2000s, and then decreased after 2008. The number of jobs in the Region stood at 1,176,600 in 2010, about 33,200 jobs, or 2.7 percent, less than in 2000. The reduction in jobs after 2008 coincides with the national economic recession.

- Prior to the 2000s, the Region had experienced a substantial net increase in jobs each decade going back to at least 1950. The Region gained 155,800 jobs during the 1990s; 108,100 during the 1980s; 161,000 during the 1970s; 111,900 during the 1960s; and 99,500 during the 1950s.

- As a result of the net loss of jobs during the 2000s, the Region's share of the State's jobs decreased from 35.7 to 34.4 percent, while the Region's share of the Nation's jobs decreased from 0.74 to 0.69 percent. The Region's share of the State's employment has decreased each decade since 1970; its share of the Nation's employment has decreased each decade since 1960.

- Five Counties in the Region—Kenosha, Ozaukee, Walworth, Washington, and Waukesha—experienced at least a slight net increase in employment during the 2000s, despite sustaining recession-related job losses near the end of the decade. For these counties, the employment increases between 2000 and 2010 ranged from 1,000 jobs in Waukesha County to 7,000 jobs in Kenosha County. Conversely, total employment in Milwaukee County and Racine County decreased by about 42,900 jobs and 5,500 jobs, respectively, between 2000 and 2010.

- Between 2000 and 2010, 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 six decades, Milwaukee County has experienced a substantial decrease in its share of regional employment—from 79.1 percent in 1950 to 48.9 percent in 2010. Waukesha County's share increased from 2.9 percent to 22.8 percent during that time.

- The 2000s saw a continuation of a long-term shift in the regional economy from a manufacturing to a service orientation. Manufacturing employment in the Region decreased by 31.0 percent during the 2000s, and by 37.6 percent over the last four decades. Conversely, service-related employment increased by 9.9

percent during the 2000s, and by 183 percent over the last four decades. Due to these differing growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 30.2 percent in 1970 to 12.6 percent in 2010, while service-related employment increased from 26.3 percent in 1970 to 49.7 percent in 2010. The State of Wisconsin and the United States have experienced a similar major shift from manufacturing to service-related employment. In comparison to the manufacturing and services industry groups, other major industry groups—including construction, wholesale trade, retail trade, and government—have been relatively stable in terms of their share of total employment in the Region over the last four decades.

- Per capita income in the Region stood at $25,900 in 2010. Per capita income in the Region, measured in constant dollars, decreased by 11.3 percent during the 2000s. Constant dollar per capita income for Wisconsin and the Nation also decreased. Historically, the per capita income level for the Region has been higher than for the State and the Nation. However, in 2010 per capita income for the Region, State, and Nation were about the same.

- Median family income in the Region stood at $65,400 in 2010. The median family income for the Region, as measured in constant dollars, decreased by 11.0 percent during the 2000s, with the constant dollar median family income for the State and Nation decreasing as well. Median family income for the Region as reported by the Census Bureau has consistently exceeded the State and Nation. In 2010, the Region median family income exceeded that of the State and Nation by 5.3 percent and 7.9 percent, respectively.

YEAR 2050 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 consideration of employment in major industry groups and the preparation of projections for those groups. For each industry group, employment projections were developed based upon a consideration of historic trends, time series analyses, projections from other agencies, and various economic outlooks. The resulting total employment levels for the Region were reviewed in light of the future labor force levels that could be expected in the Region under the Commission's new population projections. The industry-by-industry employment projections were then adjusted as appropriate to provide general consistency between the total number of jobs and the projected population and labor force.

Under the current economic study, as in prior studies, the Commission 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 year 2050 regional land use and transportation plans. 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.

The Commission's new employment projections represent long-range projections, as required for the Commission's continuing regional planning program. These projections are intended to provide an indication of future trends in employment over the next four decades needed as a basis for the preparation of the next generation of the regional land use and transportation plans and other elements of the comprehensive plan for Southeastern Wisconsin. Given the focus on long-range future trends, the new employment projections do not reflect the fluctuation in employment levels that may be expected to occur as a result of periods of growth and decline in the economy typically associated with shorter-term business cycles.

A summary of the employment projections for the Region for the period from 2010 to 2050 as presented in Chapter III of this report follows:

- Under the intermediate-growth scenario—considered the most likely to occur—employment in the Region would increase from 1,176,600 jobs in 2010 to 1,386,900 jobs in 2050, an increase of 210,300 jobs, or 18 percent. Under the high-growth scenario, total employment in the Region would increase to about 1,544,600 jobs in 2050, an increase of 368,000 jobs, or 31 percent, over 2010. Under the low-growth scenario, total employment would increase to about 1,240,400 jobs in 2050, an increase of 63,800 jobs, or 5 percent, over 2010. These projections are generally consistent with the size of the labor force that could be expected in the Region under the Commission's year 2050 population projections for each growth scenario. Growth in the labor force over the forecast period is expected to be significantly slower than in the past—to a great extent, the result of the large baby-boom generation (those born from 1946 through 1964) entering their retirement years.

- It is important to recognize that employment in the Region was unusually low in 2010, the base year of the new projections, as a result of the major economic recession that began in late 2007. Owing to the recession, total employment in the Region decreased from an all-time high of 1,238,600 jobs in 2007 to 1,176,600 in 2010, a reduction of 62,000 jobs, or 5 percent. Projected total employment in the Region for the year 2050 under the intermediate-growth scenario is 12 percent greater than the peak level of 2007. Projected total employment for the year 2050 under the high-growth scenario is 25 percent greater than the 2007 level. Under the low-growth scenario, projected year 2050 employment in the Region is about the same as the 2007 level.

- The new employment projections indicate the continuation of the long-term shift in the regional economy from a manufacturing to a service orientation. This shift is expected to occur under each growth scenario. Under the intermediate-growth scenario, manufacturing employment is expected to continue to decrease over the long term, from 148,100 jobs in 2010 to 119,200 jobs in 2050, a decrease of 28,900 jobs, or 20 percent. Under this scenario, manufacturing would account for 9 percent of all jobs in the Region in 2050, compared to 13 percent in 2010, 20 percent in 1990, and 30 percent in 1970. Under the intermediate-growth scenario, service industry employment is expected to increase from 584,400 jobs in 2010 to 756,400 jobs in 2050, an increase of 172,000 jobs, or 29 percent. Service employment would represent 55 percent of all jobs in the Region in 2050, compared to 50 percent in 2010, 40 percent in 1990, and 26 percent in 1970.

- As previously noted, there has been a significant change in the distribution of jobs among the counties in the Region over the past decades. The largest distributional changes in employment have occurred in Milwaukee and Waukesha Counties. Over the past six decades, Milwaukee County's share of regional employment decreased by 30 percent, while Waukesha County's share increased by 20 percent. The share of the other five counties in the Region combined increased by 10 percent. Under the Commission's projections, the historical decrease in Milwaukee County's share of regional employment and the increase in Waukesha County's share would be moderated over the projection period. The share of each of the other five counties would increase slightly. Under the intermediate projection, employment in Kenosha, Ozaukee, Racine, Walworth, and Washington Counties would increase by 16,600 to 26,400 jobs, or by 27 to 37 percent, between 2010 and 2050. Waukesha County would increase by 69,500 jobs, or 26 percent, between 2010 and 2050. Employment in Milwaukee County would increase by 33,500 jobs, or about 6 percent, between 2010 and 2050. Milwaukee County's year 2050 employment level would be slightly higher than the level that occurred in 2007, just prior to the job losses tied to the recession of the late 2000s.