



Credit: Craig Schreiner

## 6.1 INTRODUCTION

Long-range planning requires projections of future conditions that affect plan design and implementation, but do not lie entirely within the scope of governmental activity. The land use component of the regional plan must seek to accommodate the future demand for land in the Region, which primarily depends on future population, household, and employment levels. The transportation component of the regional plan must seek to accommodate the future travel needs associated with the regional land use plan. Therefore, future population, household, and employment level projections are critical to planning for future land use and transportation for the Region.

The Commission completed projections of population, households, and employment for the period from 2010 to 2050 following the major analysis of regional population and employment summarized in Chapter 2.<sup>1</sup> These projections are intended to provide a basis for preparing the year 2050 regional land use and transportation plan and for updating other elements of the comprehensive plan for the Region. Past trends, the results of the 2010 Census, and the most recent economic base data were considered in preparing the projections. The projections were prepared with the guidance of the Commission's Advisory Committee on Regional Population and Economic Forecasts. The Committee includes individuals from the public and private sectors with expertise in the area of socioeconomic projections and population and economic trends in the Region.

**Population, household, and employment projections provide a basis for preparing VISION 2050.**

<sup>1</sup> This represents the sixth set of population and employment projections for the Region prepared by the Commission. The first projections were prepared in the 1960s as a basis for the initial design year 1990 regional land use and transportation plans. Since then the projections have been updated and extended to 2000, 2010, 2020, and 2035—serving as a basis for the preparation of the regional land use and transportation plans with corresponding design years. The projections are typically updated following the release of information from the 10-year Census of population.

This chapter presents the year 2050 projections and an overview of their underlying methodology and assumptions. The population and household projections are fully documented in SEWRPC Technical Report No. 11 (5th Edition), *The Population of Southeastern Wisconsin*. The employment projections are fully documented in SEWRPC Technical Report No. 10 (5th Edition), *The Economy of Southeastern Wisconsin*. These reports were prepared in tandem to ensure consistency between the Commission’s long-range population, household, and employment projections.

**The intermediate-growth scenario is considered the most likely to occur for the Region as a whole.**

As in previous projection efforts, the Commission has projected a range of future population, household, and employment levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty in any effort to predict future socioeconomic conditions. The Commission’s Advisory Committee on Regional Population and Economic Forecasts considered the intermediate projection the most likely to occur for the Region as a whole. The high and low projections are intended to provide an indication of the range of population, household, and employment levels that could conceivably occur under significantly higher or lower, but nevertheless plausible, growth scenarios for the Region.

**VISION 2050 recommendations may alter somewhat the distribution of population, households, jobs, and urban land uses within the Region to better achieve the long-range vision.**

It is envisioned that the intermediate projections will be used as the basis for VISION 2050, indicating the approximate future population, household, and employment levels in the Region that the plan should be designed to accommodate. It should be noted, however, that the projections—particularly the county-level projections—are not intended to be construed as numbers to which the plan must strictly adhere. It is recognized that during the course of the planning process, recommendations may be made to alter somewhat the distribution of population, households, jobs, and urban land use within the Region in order to better achieve the long-range vision for the Region.

This chapter also presents projections of future personal income levels for the Region through the year 2050. Income projections are needed for certain aspects of the land use-transportation planning process. For example, projected future income levels are considered in estimating future automobile availability for households in the Region, as is required for determining future needs for transportation facilities and services.

## 6.2 PROJECTION METHODOLOGY AND ASSUMPTIONS

This section provides an overview of the methodology and assumptions used to prepare the population, household, and employment projections for the year 2050. The projection methodology and assumptions are documented in detail in the aforementioned technical reports.

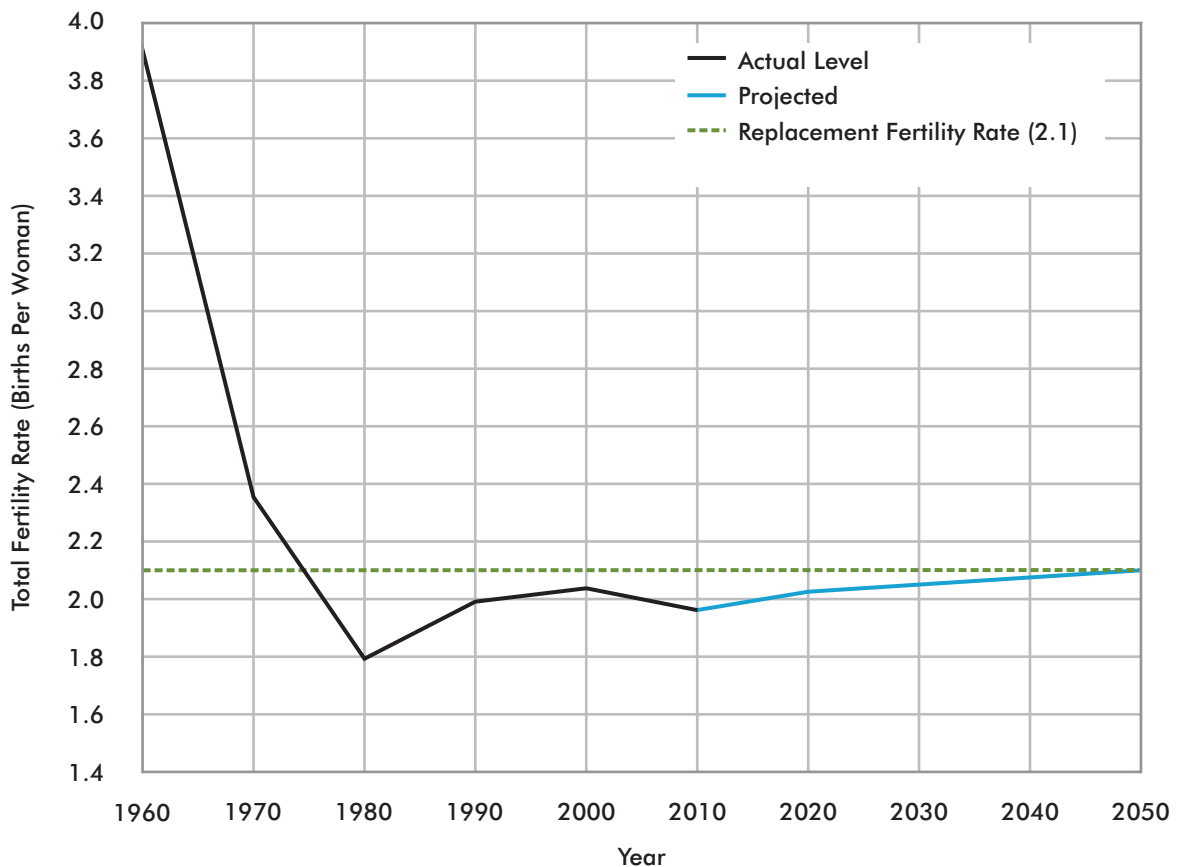
### Population Projections—Methodology and Assumptions

The population projections were developed using a cohort-component population projection model, with specific assumptions made regarding vital events that affect population levels, including births, deaths, and migration.<sup>2</sup> In general, the intermediate projection envisions a modest increase in fertility rates, a modest improvement in survival rates, and a gradual, modest improvement in net migration for the Region. The same assumptions regarding future fertility rates and survival rates were used for the high-,

**The population projections were developed using a cohort-component model.**

<sup>2</sup> *The cohort-component model is a widely used population projection method. Its name reflects the fact that the method involves disaggregating the population into cohorts, or subgroups, based on characteristics such as age and gender, and explicitly considering the three components of population change—births, deaths, and migration—with respect to each cohort.*

**Figure 6.1**  
**Historic and Projected Total Fertility Rate for the Region**



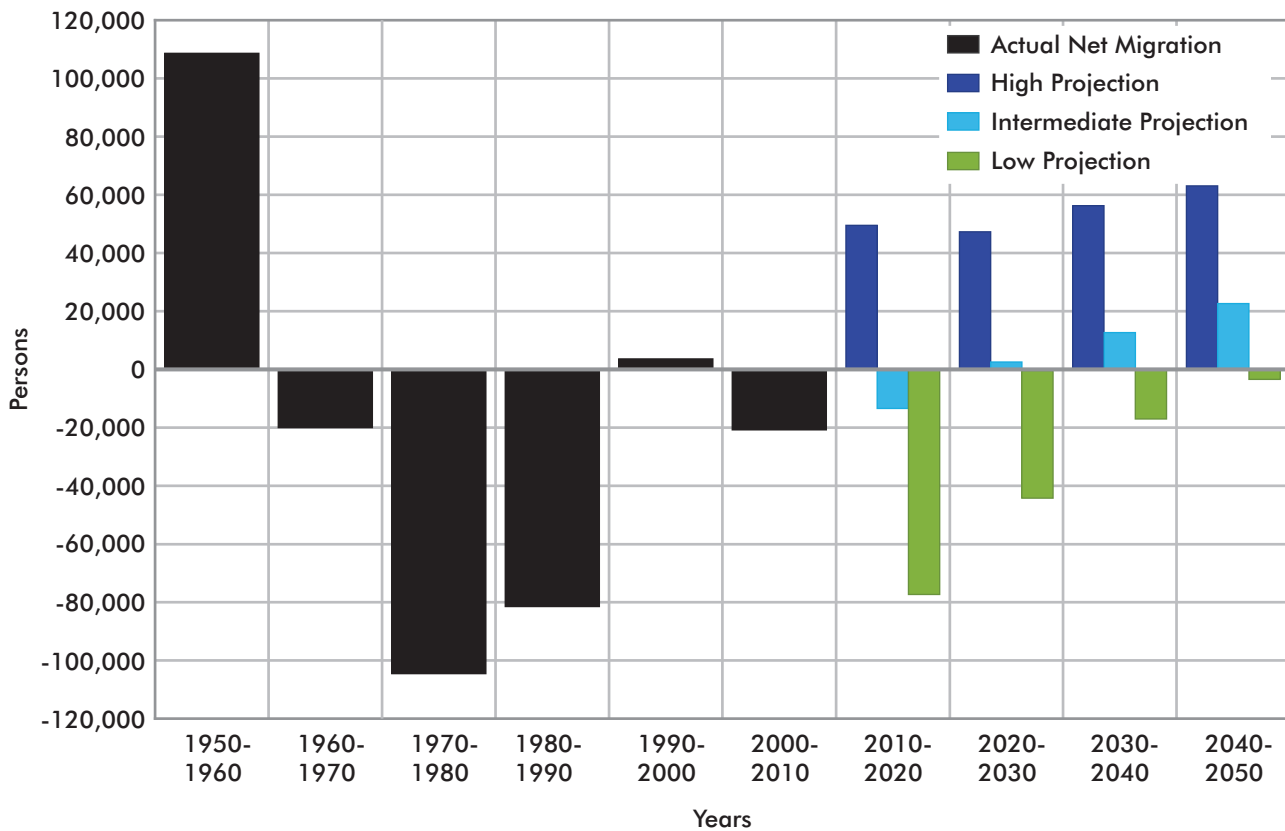
Source: U.S. Bureau of the Census, Wisconsin Department of Health Services, and SEWRPC

intermediate-, and low-growth scenarios. The projections differ primarily in terms of assumed future migration.

Figure 6.1 shows that the Region’s total fertility rate decreased dramatically between 1960 and 1980 and has been relatively stable since 1990. The fertility rate did increase somewhat between 1990 and 2000 and then decreased again between 2000 and 2010. The lower total fertility rate in 2010 can be traced in part to reduced births during the economic recession that began in late 2007. The total fertility rate for the Region is projected to rebound from the reduced rate of 2010 and then increase gradually over the projection period to about 2.1 births per childbearing-age female in 2050. The fertility rates of younger females under age 25 are projected to continue to decrease, while the fertility rates of females over age 30 are projected to increase. This is consistent with trends over the past two decades.

There has been a steady increase in survival rates in the Region, a trend that goes back many decades. The new population projections assume a continuation of this long-term trend. For the new projections, current survival rates by age and sex were projected forward based on an assumption that the age and sex specific survival rates for counties in the Region would improve at the same relative rate as projected for the State overall, under State population projections. Male life expectancy in the Region would increase

**Figure 6.2**  
**Historic and Projected Net Migration for the Region**



Source: U.S. Bureau of the Census, Wisconsin Department of Health Services, and SEWRPC

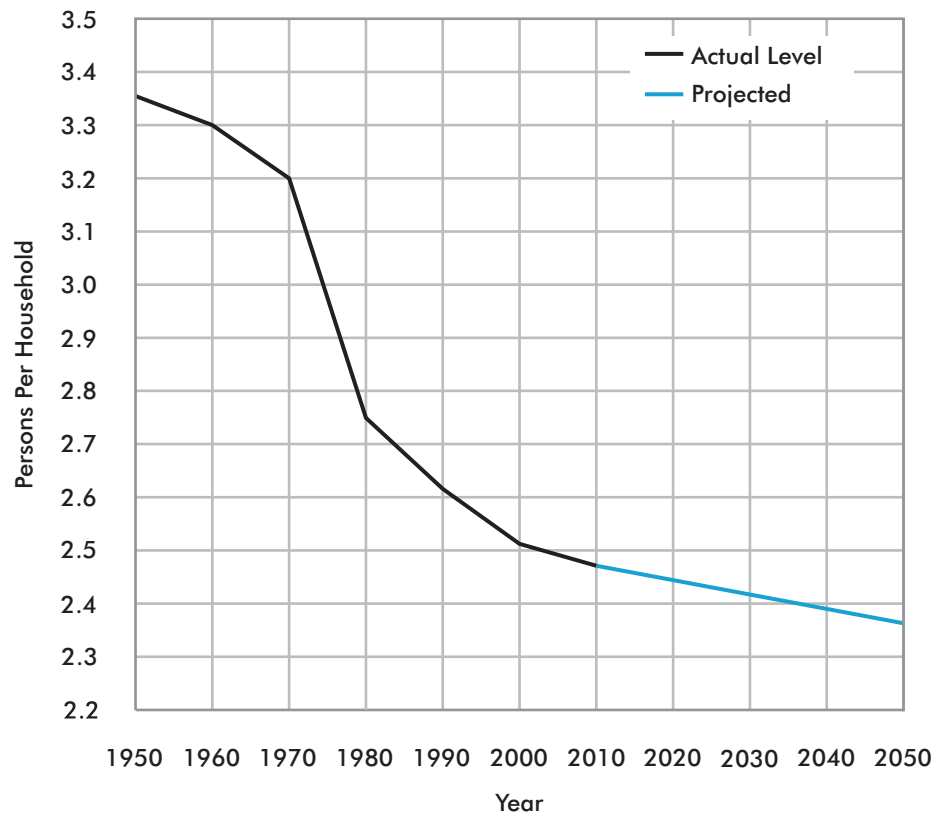
by 5.6 years, from 76.4 years in 2010 to 82.0 years in 2050. Female life expectancy would increase by 4.9 years, from 81.3 years in 2010 to 86.2 years in 2050.

**The entire Baby Boomer population will have reached the age of 65 by the year 2030. The need for replacement workers may be expected to impact migration levels as the Baby Boomer population leaves the workforce.**

Future migration levels for the Region will depend upon a number of factors including, among others, government immigration policies, the number of employment opportunities (jobs) within the Region, and the need for workers. With the aging of the regional population—in particular, the aging of the large Baby Boomer population, the oldest of whom are now entering retirement age—the future need for workers to accommodate economic growth in the Region is an especially important consideration. The entire Baby Boomer population (those born from 1946 through 1964) will have reached the age of 65 by the year 2030. The need for replacement workers may well be expected to have an impact on migration levels as the Baby Boomer population leaves the workforce.

The pattern of migration for the Region would change from one of modest net out-migration early in the projection period to one of modest net in-migration later in the projection period under the intermediate-growth scenario (see Figure 6.2). This assumes modest economic growth in the Region over the long term and the need for additional workers as Baby Boomers retire from the workforce. There would be relatively steady net migration of population into the Region over the entire projection period under the high-growth scenario. There would be significant net out-migration from the Region under the low-growth scenario.

**Figure 6.3**  
**Actual and Projected Household Size in the Region: 1950-2050**



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

### Household Projections—Methodology and Assumptions

Changes in the number and size of households in the Region will accompany the changes in the size of the resident population. The methodology for projecting households involved projecting the population residing in households (as opposed to group quarters)<sup>3</sup> and the average household size for each county in the Region. The projected average household size was applied to the projected household population by county and the projected number of households for 2050 was the result.

It was assumed that the relative shares of the population residing in households and group quarters by age group would remain about the same over the projection period under all three growth scenarios. It was also assumed that average household sizes would continue to decrease, although at a reduced rate. The same household sizes were assumed under the three growth scenarios. The projected average household size for the Region overall is shown in Figure 6.3.

### Employment Projections—Methodology and Assumptions

The Commission used a disaggregate approach to prepare employment projections for the year 2050, as it has done in past studies. This approach

<sup>3</sup> A household includes all persons who occupy a housing unit, which is defined by the Census Bureau as a house, apartment, mobile home, group of rooms, or single room that is occupied, or intended for occupancy, as separate living quarters. Persons not living in households are classified by the Census Bureau as living in group quarters, such as correctional facilities, college dormitories, and military quarters.

involves the consideration of employment in major industry groups—such as manufacturing, retail trade, service, and government—and the preparation of projections for each group. High, intermediate, and low projections were developed for each major industry based on a consideration of historic trends, time series analyses, projections from other agencies, and various economic outlooks. The resulting total employment level for the Region was reviewed in light of the future labor force levels that could be expected under the Commission’s 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.

**The Region’s population is projected to increase to 2,354,000 persons by 2050, which is a 17% increase over 2010.**

The Commission’s employment projections are long-range projections intended to provide an indication of future trends in employment through 2050 needed as a basis for preparing VISION 2050. The 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 because of the focus on long-range future trends.

### **6.3 POPULATION PROJECTIONS**

Commission population projections for the year 2050 are shown in Table 6.1 and Figure 6.4. The Region’s population is projected to increase from about 2.02 million persons in 2010 to 2.58 million persons in 2050 under the high-growth scenario, 2.35 million persons under the intermediate-growth scenario, and 2.16 million persons under the low-growth scenario. The balance of this section focuses on the intermediate population projection, which is intended to serve as a basis for preparing VISION 2050.

The Region’s population would increase by about 334,000 persons, or 17 percent, over the 40-year projection period, from 2,020,000 persons in 2010 to 2,354,000 persons in 2050, under the intermediate-growth scenario. Population growth would range between 40,000 and 51,000 persons during each five-year period from 2010 to 2035. Growth would range between 33,000 and 36,000 persons during the three five-year periods between 2035 and 2050. While most of the population growth would result from natural increase, the level of natural increase is projected to decline significantly over the projection period. Although the number of births is expected to increase moderately over the projection period, the number of deaths occurring during the period is expected to increase substantially as a result of deaths occurring to the aging Baby Boom population. This accounts for the projected decline in natural increase.

Each county in the Region would increase in population over the projection period under the intermediate-growth scenario. Kenosha County is projected to have the largest relative increase in population among the seven counties, in part because of its proximity to the rapidly urbanizing Northeastern Illinois Region. This influence is also expected to contribute to population growth in Walworth County. Population increases projected for the seven counties under the intermediate-growth scenario between 2010 and 2050 are as follows:

- Kenosha County: 71,600 persons (43 percent increase)
- Milwaukee County: 28,900 persons (3 percent increase)

**Table 6.1**  
**Actual and Projected Population in the Region by County: 2010-2050**

<b>Data Item</b>	<b>Kenosha County</b>			<b>Milwaukee County</b>		
Actual Population: 2010	166,400			947,800		
Percent of Region: 2010	8.2			46.9		
Projected Population:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	180,100	174,600	170,700	961,200	952,600	938,400
2020	192,500	183,700	175,500	976,800	959,800	934,300
2025	205,600	193,300	182,700	991,600	966,500	930,000
2030	219,100	202,800	189,800	1,003,800	970,800	923,800
2035	232,500	212,000	197,200	1,013,100	972,600	920,000
2040	244,700	220,700	204,100	1,021,000	973,300	915,300
2045	255,900	229,200	210,900	1,029,100	974,300	910,900
2050	267,400	238,000	216,000	1,038,500	976,700	908,100
Change: 2010-2050						
Population	101,000	71,600	49,600	90,700	28,900	-39,700
Percent	60.7	43.0	29.8	9.6	3.0	-4.2
Percent of Region: 2050	10.4	10.1	10.0	40.3	41.5	42.1
<b>Data Item</b>	<b>Ozaukee County</b>			<b>Racine County</b>		
Actual Population: 2010	86,400			195,400		
Percent of Region: 2010	4.3			9.7		
Projected Population:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	90,500	88,600	87,700	203,800	198,000	194,900
2020	96,000	92,000	89,600	210,000	202,000	196,800
2025	100,700	95,600	91,700	217,300	207,300	199,500
2030	105,300	99,100	93,500	224,700	212,400	201,800
2035	109,500	102,200	95,200	231,400	217,000	203,600
2040	113,400	104,700	96,500	237,600	220,900	205,300
2045	116,900	106,800	97,800	244,000	224,400	206,500
2050	120,500	109,100	99,200	250,700	227,700	207,500
Change: 2010-2050						
Population	34,100	22,700	12,800	55,300	32,300	12,100
Percent	39.5	26.3	14.8	28.3	16.5	6.2
Percent of Region: 2050	4.7	4.6	4.6	9.7	9.7	9.6
<b>Data Item</b>	<b>Walworth County</b>			<b>Washington County</b>		
Actual Population: 2010	102,200			131,900		
Percent of Region: 2010	5.1			6.5		
Projected Population:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	109,800	106,800	104,800	143,100	138,200	134,900
2020	116,900	111,900	108,000	151,600	144,600	137,600
2025	124,300	117,100	111,700	160,500	151,300	141,600
2030	131,400	122,100	115,300	169,700	158,000	146,900
2035	138,300	126,900	118,500	178,600	164,500	151,800
2040	145,300	131,500	121,300	187,200	170,300	156,100
2045	151,700	136,000	124,000	195,300	175,500	159,600
2050	158,300	140,600	126,800	203,400	180,500	162,800
Change: 2010-2050						
Population	56,100	38,400	24,600	71,500	48,600	30,900
Percent	54.9	37.6	24.1	54.2	36.8	23.4
Percent of Region: 2050	6.1	6.0	5.9	7.9	7.7	7.5
<b>Data Item</b>	<b>Waukesha County</b>			<b>Region</b>		
Actual Population: 2010	389,900			2,020,000		
Percent of Region: 2010	19.3			100.0		
Projected Population:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	411,400	401,900	395,600	2,099,900	2,060,800	2,027,000
2020	430,800	414,900	401,500	2,174,600	2,109,000	2,043,300
2025	451,700	428,700	409,300	2,251,600	2,159,700	2,066,400
2030	472,100	442,500	417,400	2,326,000	2,207,800	2,088,400
2035	491,300	454,600	424,600	2,394,800	2,249,800	2,110,800
2040	507,600	464,400	429,200	2,456,900	2,285,800	2,127,900
2045	522,700	472,600	434,200	2,515,700	2,318,700	2,143,900
2050	539,000	481,400	439,400	2,577,700	2,354,000	2,159,800
Change: 2010-2050						
Population	149,100	91,500	49,500	557,700	334,000	139,800
Percent	38.2	23.5	12.7	27.6	16.5	6.9
Percent of Region: 2050	20.9	20.4	20.3	100.0	100.0	100.0

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

- Ozaukee County: 22,700 persons (26 percent increase)
- Racine County: 32,300 persons (17 percent increase)
- Walworth County: 38,400 persons (38 percent increase)
- Washington County: 48,600 persons (37 percent increase)
- Waukesha County: 91,500 persons (24 percent increase)

**Persons age 65 and over are projected to nearly double by 2050.**

Table 6.2 and Figure 6.5 show that the projections anticipate continued change in the age composition of the regional population through 2050. The broad age groups 0-19 years, 20-44 years, and 45-64 years are projected to be relatively stable, while persons age 65 and over are projected to nearly double. Persons age 65 and over would comprise about 21 percent of the population in 2050, compared to about 13 percent in 2010. This pattern reflects the aging of the Baby Boomer population. The changing age composition of the population is expected to have a range of impacts, including the availability of labor force in the Region and an increased demand for a variety of housing types and sizes. County-level population projections by age and sex are presented for the intermediate-growth scenario in Technical Report No. 11.

**Trends from 1980 to 2010 indicate that the minority share of the regional population may increase to 45% by 2050.**

In addition to changes in the overall size and age characteristics of the regional population, continued change in the racial/ethnic makeup of the regional population may be expected in the years ahead. Table 6.3 shows the actual racial/ethnic composition of the regional population in 2010 and the projected racial/ethnic composition of the regional population in 2050, based on a continuation of the pattern of change from 1980 to 2010.<sup>4</sup> The minority share of the regional population would increase from 29 percent in 2010 to nearly 45 percent in 2050. A set of national population projections released by the Census Bureau in 2008 shows a similar nationwide trend. The minority share of the total national population would increase from 36 percent in 2010 to 54 percent in 2050.

## 6.4 HOUSEHOLD PROJECTIONS

Commission household projections for the year 2050 are shown in Table 6.4 and Figure 6.6. The number of households in the Region is projected to increase from about 0.80 million households in 2010 to 1.06 million households in 2050 under the high-growth scenario, to 0.97 million households under the intermediate-growth scenario, and to 0.89 million households under the low-growth scenario. The balance of this section focuses on the intermediate household projection.

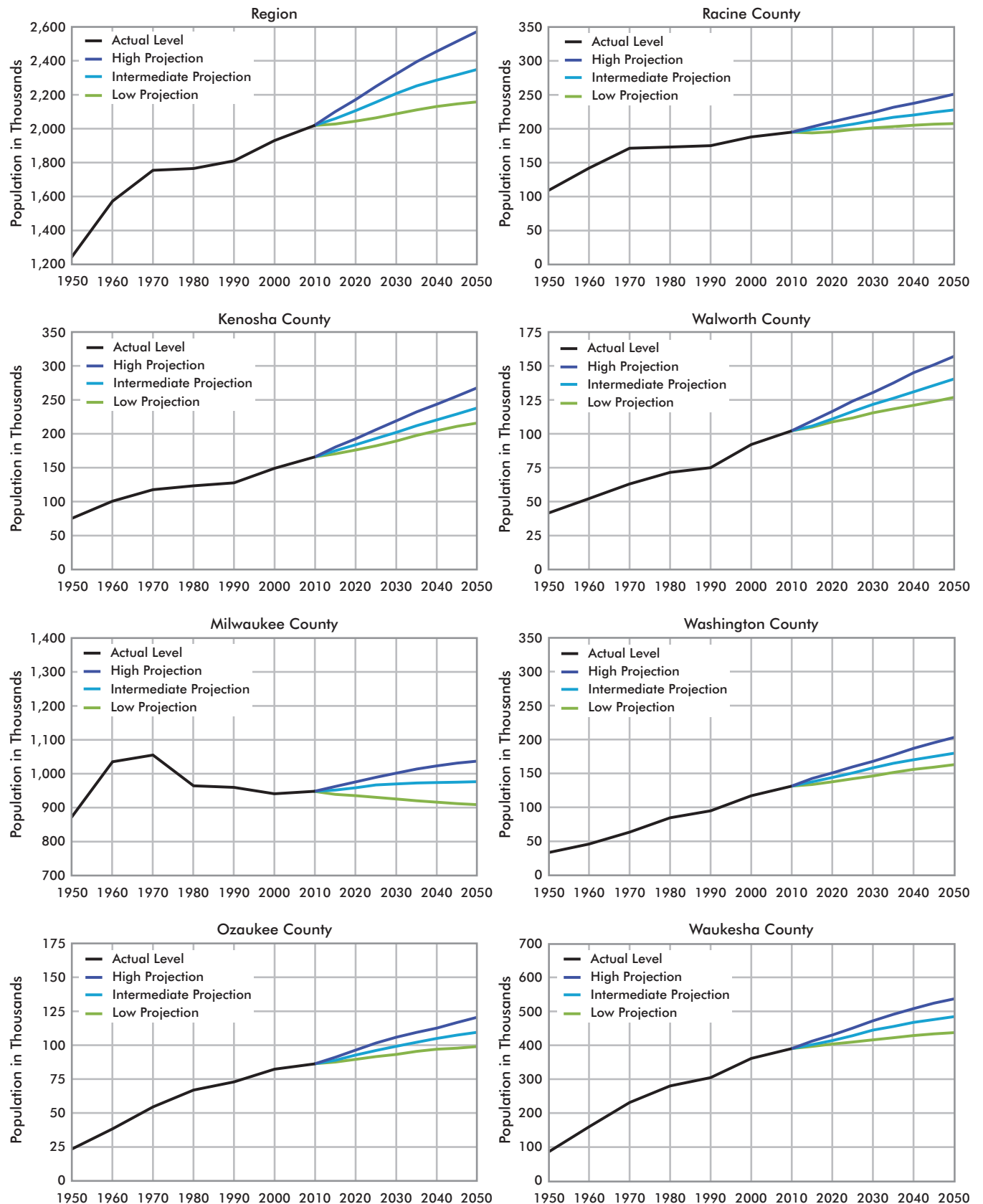
**Households are projected to increase to 972,400 by 2050, which is a 22% increase over 2010.**

The number of households in the Region would increase by about 172,300 households, or 22 percent, from about 800,100 households in 2010 to 972,400 households in 2050, under the intermediate-growth scenario. This exceeds the projected relative increase in population under the intermediate-growth scenario (17 percent). The number of households in each county in the Region would also increase under the intermediate-growth scenario at a greater rate than population. Household increases projected for the seven counties under the intermediate-growth scenario between 2010 and 2050 are as follows:

<sup>4</sup> The minority population of the Region is identified based on Hispanic origin and race.



**Figure 6.4**  
**Actual and Projected Population in the Region by County: 1950-2050**



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

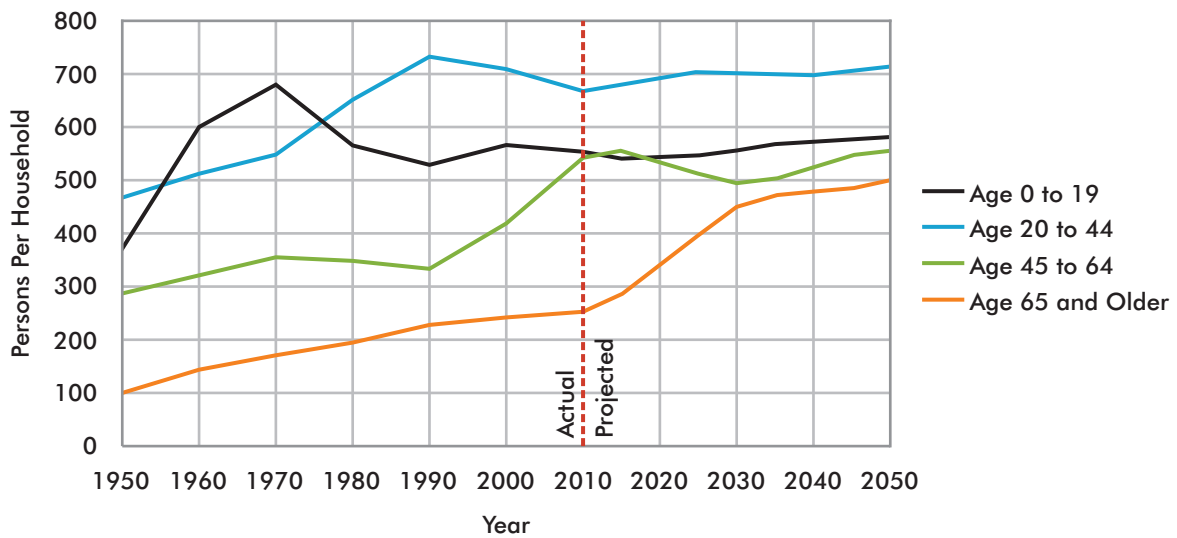
**Table 6.2  
Actual and Projected Population in the Region by Age: 2010-2050 (Intermediate Projection)**

Age Group	Year									
	2010	2015	2020	2025	2030	2035	2040	2045	2050	
Under 5	133,503	132,574	137,216	140,037	141,943	142,431	142,100	142,690	145,429	
5 to 9	137,010	132,098	131,865	137,117	140,359	142,726	143,716	143,856	144,897	
10 to 14	140,118	139,101	134,433	134,243	139,642	143,073	145,761	147,090	147,460	
15 to 19	144,926	140,458	139,757	135,145	134,923	140,421	143,954	146,775	148,232	
Subtotal 0 to 19	555,557	544,231	543,271	546,542	556,867	568,651	575,531	580,411	586,018	
20 to 24	137,595	142,227	138,007	137,820	133,270	133,024	138,287	141,607	144,168	
25 to 29	137,321	138,260	143,254	138,989	138,780	134,306	134,196	139,553	142,928	
30 to 34	128,174	138,906	139,990	146,365	142,608	142,113	137,436	137,497	143,497	
35 to 39	125,851	128,235	139,722	140,774	148,111	145,036	144,657	140,029	140,299	
40 to 44	136,456	124,949	127,657	139,230	140,077	148,037	145,673	145,563	141,035	
Subtotal 20 to 44	665,397	672,577	688,630	703,178	702,846	702,516	700,249	704,249	711,927	
45 to 49	153,577	134,804	123,656	126,410	137,859	138,682	147,039	145,233	145,348	
50 to 54	153,402	150,324	132,208	121,400	124,185	135,491	136,465	145,038	143,651	
55 to 59	132,272	146,515	144,347	127,247	116,965	119,745	130,741	131,976	140,680	
60 to 64	105,758	123,487	137,658	136,328	120,342	110,726	113,519	124,149	125,665	
Subtotal 45 to 64	545,009	555,130	537,869	511,385	499,351	504,644	527,764	546,396	555,344	
65 to 69	72,622	95,606	112,504	126,263	125,667	111,199	102,561	105,463	115,694	
70 to 74	54,925	65,029	86,265	102,150	115,300	115,462	102,581	94,932	97,968	
75 to 79	46,609	47,156	56,542	75,548	89,990	102,322	103,365	92,408	85,915	
80 to 84	39,940	36,722	37,866	46,070	62,143	74,737	85,979	87,999	79,416	
85 and Older	39,911	44,344	46,058	48,601	55,664	70,229	87,736	106,837	121,758	
Subtotal 65 and Older	254,007	288,857	339,235	398,632	448,764	473,949	482,222	487,639	500,751	
Total	2,019,970	2,060,795	2,109,005	2,159,737	2,207,828	2,249,760	2,285,766	2,318,695	2,354,040	

NOTE: Age groups which approximate the "baby-boomer" generation (persons born from 1946 through 1964) are shaded green.

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

**Figure 6.5**  
**Actual and Projected Population in the Region by**  
**General Age Group (Intermediate Projection): 1950-2050**



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

**Table 6.3**  
**Racial/Ethnic Makeup of the Regional Population: Existing 2010 and**  
**Projected 2050 Based Upon an Extrapolation of Past Trends**

Race/Ethnicity	Percentage of Total Regional Population: Actual 2010	Percentage of Total Regional Population: Projected 2050 <sup>a</sup>
Non-Hispanic White Population	71.1	55.5
Minority Population: <sup>b</sup>		
Non-Hispanic Black/African American	14.3	19.1
Non-Hispanic Other Race	4.7	8.2
Hispanic—Any Race	9.9	17.2
Subtotal	28.9	44.5
Total	100.0	100.0

<sup>a</sup> Assumes that the average annual numeric change in population for each group experienced between 1980 and 2010 would continue through 2050.

<sup>b</sup> The minority population includes persons reported in the Census as being of Hispanic origin and/or reporting their race as Black or African American, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, some other race, or more than one race.

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

- Kenosha County: 32,800 households (52 percent increase)
- Milwaukee County: 26,000 households (7 percent increase)
- Ozaukee County: 10,300 households (30 percent increase)
- Racine County: 18,100 households (24 percent increase)
- Walworth County: 19,200 households (48 percent increase)
- Washington County: 22,700 households (44 percent increase)
- Waukesha County: 43,200 households (28 percent increase)

**Average household size is expected to decrease from 2.47 in 2010 to 2.36 in 2050.**

The higher growth rate of households relative to population is expected to be accompanied by a decrease in household size for the Region as a whole and each of the seven counties, as shown on Table 6.5. The average household size for the Region is expected to decrease from 2.47 persons in 2010 to 2.36 persons in 2050. This is expected to occur because of a combination of factors, including a continued change in household types and the increase in the older population age groups.

## 6.5 EMPLOYMENT PROJECTIONS

Commission projections of total employment in the Region for 2050 are shown in Table 6.6 and Figure 6.7. Total employment in the Region is projected to increase from about 1.18 million jobs in 2010 to 1.54 million jobs in 2050 under the high-growth scenario, to 1.39 million jobs under the intermediate-growth scenario, and to 1.24 million jobs under the low-growth scenario. The balance of this section focuses on the intermediate employment projection.

**Jobs in the Region are projected to increase to 1,386,900 by 2050, which is an 18% increase over 2010, but only a 12% increase over the all-time high of 1,238,600 in 2007.**

Total employment in the Region would increase by about 210,300 jobs, or 18 percent, over the 40-year projection period, from 1,176,600 jobs in 2010 to 1,386,900 jobs in 2050, under the intermediate-growth scenario. It is important to recognize that employment in the Region was unusually low in 2010, the base year of the new projections, because of the national economic recession that began in late 2007. Total employment decreased by 62,000 jobs, or 5 percent, from an all-time high of 1,238,600 jobs in 2007. Projected total employment for the Region under the intermediate-growth scenario is 12 percent greater than the peak level of 2007.

There has been a significant change in the distribution of jobs among counties in the Region over the past decades, as described in Chapter 2. The largest distributional changes in employment among the Region's counties have occurred in Milwaukee and Waukesha Counties. Milwaukee County's share of regional employment decreased by about 30 percent over the previous six decades, while Waukesha County's share increased by about 20 percent. The share of the other five counties in the Region combined increased by about 10 percent. Commission employment projections indicate a continuation of these historic trends in the distribution of jobs within the Region, but at a moderated pace. The 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. Employment

**Table 6.4**  
**Actual and Projected Households in the Region by County: 2010-2050**

<b>Data Item</b>	<b>Kenosha County</b>			<b>Milwaukee County</b>		
Actual Households: 2010	62,600			383,600		
Percent of Region: 2010	7.8			47.9		
Projected Households:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	68,400	66,300	64,800	390,700	387,200	381,400
2020	73,700	70,300	67,200	399,100	392,100	381,600
2025	79,300	74,600	70,500	406,800	396,500	381,500
2030	85,200	78,900	73,800	413,300	399,800	380,400
2035	91,100	83,100	77,200	418,700	402,000	380,300
2040	96,600	87,100	80,500	423,800	403,900	379,900
2045	101,800	91,100	83,800	429,100	406,300	379,900
2050	107,200	95,400	86,600	435,500	409,600	380,800
Change: 2010-2050						
Households	44,600	32,800	24,000	51,900	26,000	-2,800
Percent	71.2	52.4	38.3	13.5	6.8	-0.7
Percent of Region: 2050	10.1	9.8	9.7	40.9	42.1	42.7
<b>Data Item</b>	<b>Ozaukee County</b>			<b>Racine County</b>		
Actual Households: 2010	34,200			75,700		
Percent of Region: 2010	4.3			9.5		
Projected Households:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	36,000	35,200	34,900	79,400	77,200	76,000
2020	38,300	36,700	35,800	82,500	79,400	77,300
2025	40,300	38,300	36,700	86,000	82,100	79,000
2030	42,400	39,900	37,600	89,600	84,700	80,500
2035	44,200	41,200	38,400	93,000	87,200	81,800
2040	45,900	42,300	39,000	96,200	89,500	83,100
2045	47,500	43,300	39,700	99,600	91,600	84,300
2050	49,200	44,500	40,400	103,200	93,800	85,400
Change: 2010-2050						
Households	15,000	10,300	6,200	27,500	18,100	9,700
Percent	43.9	30.1	18.1	36.3	23.9	12.8
Percent of Region: 2050	4.6	4.6	4.5	9.7	9.6	9.6
<b>Data Item</b>	<b>Walworth County</b>			<b>Washington County</b>		
Actual Households: 2010	39,700			51,600		
Percent of Region: 2010	5.0			6.4		
Projected Households:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	43,100	41,900	41,100	56,400	54,500	53,200
2020	46,300	44,300	42,700	60,100	57,300	54,600
2025	49,600	46,800	44,600	64,000	60,300	56,400
2030	53,000	49,300	46,500	68,000	63,300	58,800
2035	56,300	51,700	48,200	72,000	66,300	61,200
2040	59,700	54,000	49,800	75,900	69,000	63,200
2045	63,000	56,400	51,500	79,700	71,600	65,000
2050	66,300	58,900	53,100	83,800	74,300	67,000
Change: 2010-2050						
Households	26,600	19,200	13,400	32,200	22,700	15,400
Percent	67.0	48.4	33.8	62.4	44.0	29.8
Percent of Region: 2050	6.2	6.1	6.0	7.9	7.6	7.5
<b>Data Item</b>	<b>Waukesha County</b>			<b>Region</b>		
Actual Households: 2010	152,700			800,100		
Percent of Region: 2010	19.1			100.0		
Projected Households:	<b>High</b>	<b>Intermediate</b>	<b>Low</b>	<b>High</b>	<b>Intermediate</b>	<b>Low</b>
2015	161,600	157,900	155,400	835,600	820,200	806,800
2020	170,200	163,900	158,600	870,100	844,000	817,800
2025	179,300	170,200	162,500	905,400	868,700	831,200
2030	188,400	176,600	166,500	940,000	892,400	844,200
2035	197,000	182,200	170,200	972,300	913,600	857,200
2040	204,500	187,100	172,900	1,002,600	932,900	868,400
2045	211,800	191,400	175,800	1,032,500	951,700	879,900
2050	219,500	195,900	178,800	1,064,700	972,400	892,100
Change: 2010-2050						
Households	66,800	43,200	26,100	264,600	172,300	92,000
Percent	43.7	28.3	17.1	33.1	21.5	11.5
Percent of Region: 2050	20.6	20.2	20.0	100.0	100.0	100.0

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

increases projected for the seven counties under the intermediate-growth scenario between 2010 and 2050 are as follows:

- Kenosha County: 26,400 jobs (35 percent increase)
- Milwaukee County: 33,500 jobs (6 percent increase)
- Ozaukee County: 16,800 jobs (32 percent increase)
- Racine County: 24,000 jobs (27 percent increase)
- Walworth County: 16,600 jobs (32 percent increase)
- Washington County: 23,500 jobs (37 percent increase)
- Waukesha County: 69,500 jobs (26 percent increase)

**Projections indicate a continuation of the long-term shift from manufacturing to service jobs.**

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, as described in Chapter 2. Manufacturing jobs—which accounted for 30 percent of all jobs in 1970 and 13 percent in 2010—would comprise 9 percent of jobs in the Region in 2050 under the intermediate-growth scenario (see Table 6.7). Service jobs—which accounted for 26 percent of all jobs in 1970 and 50 percent in 2010—would comprise 55 percent in 2050. Projected changes in employment by industry group under the intermediate-growth scenario between 2010 and 2050 are as follows:

- Manufacturing: -28,900 jobs (20 percent decrease)
- Construction: 17,400 jobs (38 percent increase)
- Wholesale Trade: 11,000 jobs (23 percent increase)
- Retail Trade: 26,100 jobs (14 percent increase)
- Services: 172,000 jobs (29 percent increase)
- Transportation, Warehousing, and Utilities: 7,200 jobs (19 percent increase)
- Government: 6,700 jobs (6 percent increase)
- Agriculture: -1,200 jobs (23 percent decrease)

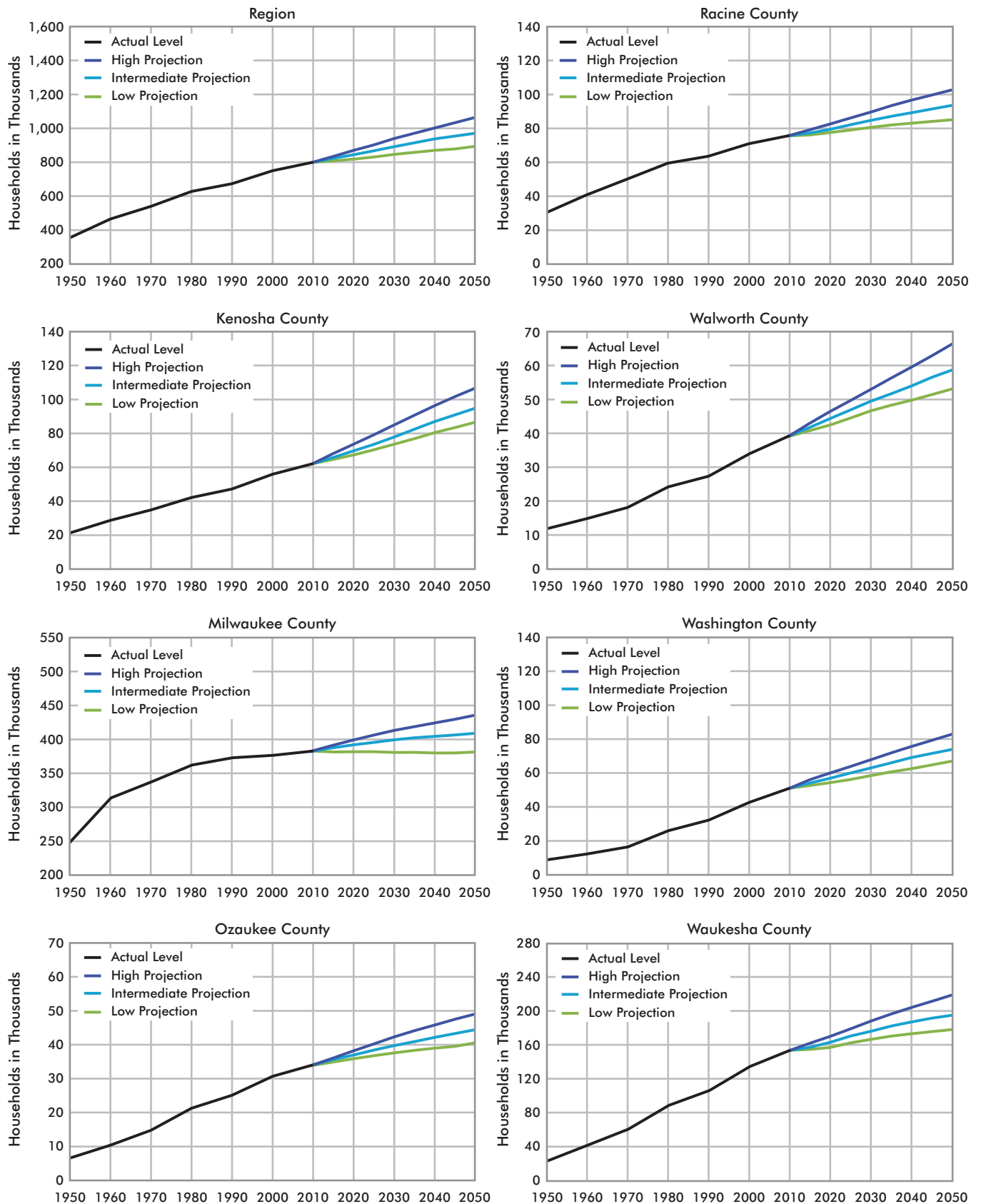
**The processes of preparing projections of future population and employment levels were closely coordinated.**

#### **Relationship between Population and Employment Projections**

The processes of preparing projections of future population and employment levels were closely coordinated to ensure consistency between the two because the labor force trends that may be expected in light of projected changes in the regional population need to be consistent with the projected employment trends. The relationship between projected employment levels and the labor force is described in this section.

Table 6.8 shows the size of the labor force in the Region that may be expected based on the Commission's projected population by age and sex and projected future labor force participation rates. The labor force would increase from 1,079,000 persons in 2010 to 1,287,400 persons in 2050 under the high-growth scenario, to 1,171,300 persons under the intermediate-growth

**Figure 6.6**  
**Actual and Projected Households in the Region by County: 1950-2050**



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

**Table 6.5**  
**Average Household Size in the Region by County: Actual 2010 and Projected 2050**

County	Average Household Size (Persons per Household)	
	Actual 2010	Projected 2050
Kenosha	2.58	2.42
Milwaukee	2.41	2.32
Ozaukee	2.47	2.39
Racine	2.52	2.36
Walworth	2.51	2.32
Washington	2.53	2.39
Waukesha	2.52	2.41
Region	2.47	2.36

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

scenario, and to 1,070,500 persons under the low-growth scenario. These projections indicate slower growth in the labor force than has occurred in the Region over the past 40 years. The expected reduced growth 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. The retirement of large numbers of seniors may be expected to dampen growth in the overall labor force in coming decades despite the fact that some seniors may work longer than in the past, which was assumed in the analysis.

Estimating the employment levels able to be accommodated by the labor force required that assumptions be made regarding unemployment and the extent of multiple job-holding. Unemployment rates of 4.0, 5.0, and 6.0 percent were assumed for 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. A range of multiple job-holding factors from 1.19 to 1.27—consistent with the range observed in the Region between 1990 and 2010—was considered for each growth scenario.

Table 6.8 shows the range in the number of jobs that could potentially be accommodated by the projected population and associated labor force under the high-, intermediate-, and low-growth scenarios based upon the foregoing assumptions. As indicated, the projected year 2050 job levels in the Region under the high-, intermediate-, and low-growth scenarios are within these ranges. This indicates basic consistency between the projected employment levels and the projected population and associated labor force in the Region under each growth scenario.

## 6.6 PERSONAL INCOME PROJECTIONS

**Income projections are based on trends from the past 40 years, which include periods of very modest growth, rapid growth, and decline.**

The Commission’s personal income projections focus on income per worker, per capita income, and mean household income. The historic trends in income per worker, per capita income, and mean household income in the Region, expressed in constant 2010 dollars, are presented in Table 6.9 and Figures 6.8 to 6.10. The impact of the major recession of the late 2000s is evident in the decrease in all three measures of personal income between 1999 and 2010.

The Commission’s projection of income per worker is based upon the assumption that the long-term trend in per worker income would be similar to that observed over the past 40 years—which includes periods of very



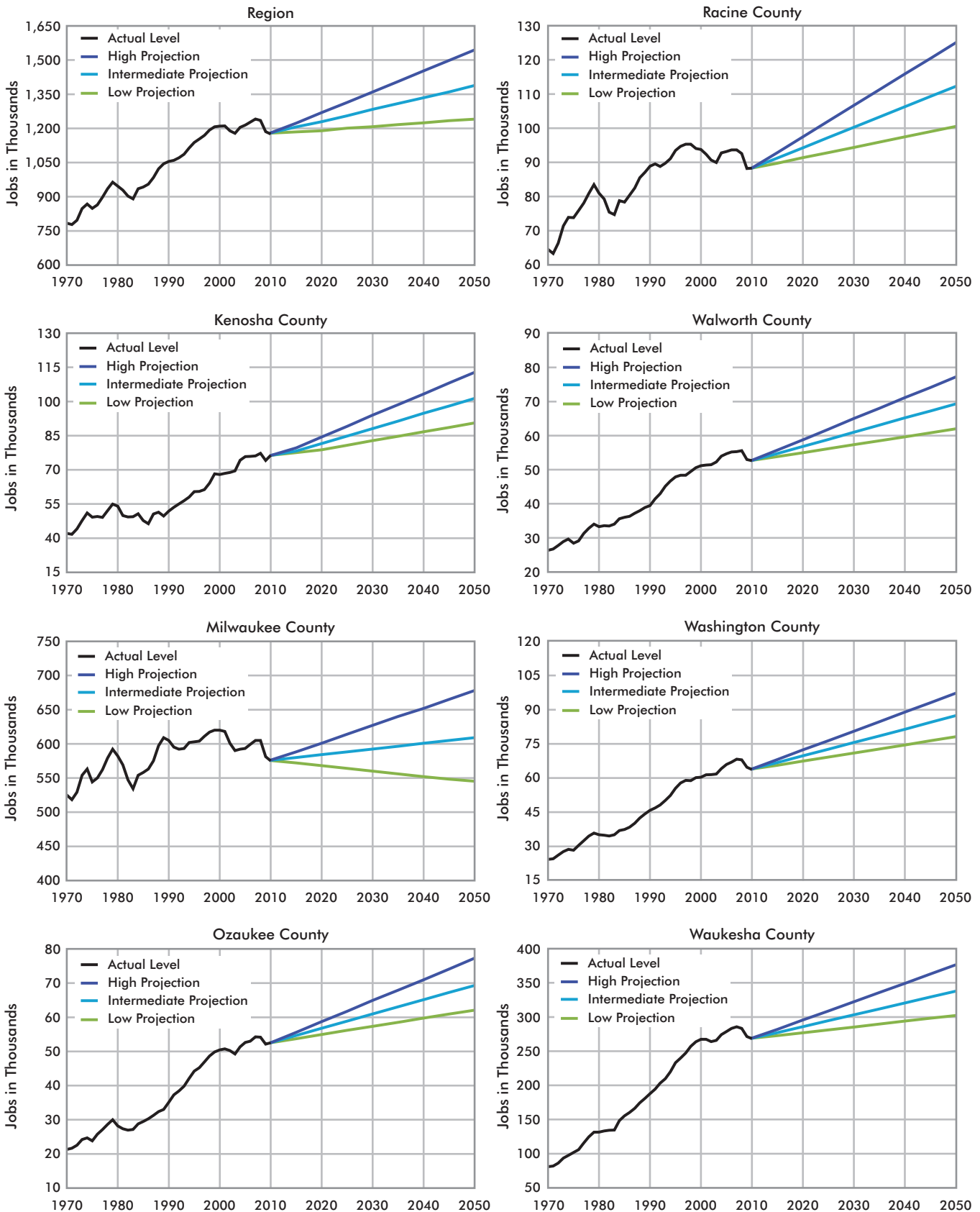
**Table 6.6**  
**Actual and Projected Employment in the Region by County: 2010-2050**

County	Actual Employment: 2010		Projected Employment: 2050												
	Number of Jobs	Percent of Region	High Projection			Intermediate Projection			Low Projection			Number of Jobs: 2050	Change: 2010-2050	Percent	Percent of Region Jobs <sup>a</sup>
			Number of Jobs: 2050	Change: 2010-2050	Percent	Number of Jobs: 2050	Change: 2010-2050	Percent	Number of Jobs: 2050	Change: 2010-2050	Percent				
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			
<b>Region</b>	<b>1,176,600</b>	<b>100.0</b>	<b>1,544,600</b>	<b>368,000</b>	<b>31.3</b>	<b>1,386,900</b>	<b>210,300</b>	<b>17.9</b>	<b>1,240,400</b>	<b>63,800</b>	<b>5.4</b>	<b>100.0</b>			

<sup>a</sup> Applies to all projections.

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

**Figure 6.7**  
**Actual and Projected Employment in the Region by County: 1970-2050**



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

**Table 6.7**  
**Projected Employment by Industry Group in the Region: 2010-2050**

Industry	Actual Employment: 2010			Projected Employment: 2050						Projected Change: 2010-2050						
	Number of Jobs		Percent of Total	High Projection		Intermediate Projection		Low Projection		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	Number of Jobs	Percent of Total	Number	Percent	Number	Percent	Number	Percent
Manufacturing	148,100	12.6	143,000	9.3	119,200	8.6	95,400	7.7	57,300	4.6	25,400	55.3	17,400	37.9	11,400	24.8
Construction	45,900	3.9	71,300	4.6	63,300	4.5	57,300	4.6	57,300	4.6	25,400	55.3	17,400	37.9	11,400	24.8
Wholesale Trade	48,800	4.2	66,700	4.3	59,800	4.3	52,400	4.2	52,400	4.2	17,900	36.7	11,000	22.5	3,600	7.4
Retail Trade	185,800	15.8	244,100	15.8	211,900	15.3	192,600	15.5	192,600	15.5	58,300	31.4	26,100	14.0	6,800	3.7
Services	584,400	49.7	828,200	53.6	756,400	54.5	684,700	55.2	684,700	55.2	243,800	41.7	172,000	29.4	100,300	17.2
Transportation, Warehousing, and Utilities	38,200	3.2	50,300	3.3	45,400	3.3	42,500	3.4	42,500	3.4	12,100	31.7	7,200	18.8	4,300	11.3
Government	117,700	10.0	133,400	8.6	124,400	9.0	109,700	8.9	109,700	8.9	15,700	13.3	6,700	5.7	-8,000	-6.8
Agriculture	5,200	0.4	5,100	0.3	4,000	0.3	3,300	0.3	3,300	0.3	-100	-1.9	-1,200	-23.1	-1,900	-36.5
Other (unclassified)	2,500	0.2	2,500	0.2	2,500	0.2	2,500	0.2	2,500	0.2	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>1,176,600</b>	<b>100.0</b>	<b>1,544,600</b>	<b>100.0</b>	<b>1,386,900</b>	<b>100.0</b>	<b>1,240,400</b>	<b>100.0</b>	<b>1,240,400</b>	<b>100.0</b>	<b>368,000</b>	<b>31.3</b>	<b>210,300</b>	<b>17.9</b>	<b>63,800</b>	<b>5.4</b>

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

**Table 6.8**  
**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

modest growth, rapid growth, and decline. The projected per worker income represents an extrapolation of the per worker income observed in the Region between 1969 and 2010.<sup>5</sup>

The projections of per capita income and mean household income were derived from the per worker income projection. Thus, projected per capita income was determined by dividing the projected aggregate personal income by the projected population, where the projected aggregate personal income was obtained by multiplying the projected per worker income by the projected employed labor force. Similarly, the projected mean household income was determined by dividing the projected aggregate personal income by the projected number of households.

**Worker income is projected to increase to \$63,000 a year in 2050, which is a 16% increase over 2010.**

As indicated in Table 6.9 and Figures 6.8 to 6.10, Commission projections indicate that per worker income in the Region would increase by 16 percent over the 40-year projection period, from \$54,200 in 2010 to \$63,000 in 2050. Per capita income would increase by 15 percent, from \$25,900 in 2010 to \$29,800 in 2050. Mean household income would increase by 10 percent, from \$65,400 in 2010 to \$72,000 in 2050.

## 6.7 SUMMARY

This chapter presents a set of population, household, and employment projections for the Region for the period from 2010 to 2050. The projections were developed by the Commission as a basis for updating and extending the regional land use and transportation plan and other elements of the comprehensive plan for the Region. The new population and household projections are fully documented in SEWRPC Technical Report No. 11 (5th Edition), *The Population of Southeastern Wisconsin*. The new employment projections are fully documented in SEWRPC Technical Report No. 10 (5th Edition), *The Economy of Southeastern Wisconsin*. These reports were prepared in tandem to ensure consistency between the Commission’s long-range population and employment projections.

As in previous projection efforts, the Commission has prepared a range of future population, household, and employment levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty in any effort to predict future socioeconomic conditions. The Commission’s Advisory Committee on Regional Population and Economic Forecasts considered the intermediate projection the most likely to occur for the Region as a whole. The high and low projections are intended to provide an indication of the range

<sup>5</sup> All personal income data presented in this section is expressed in constant 2010 dollars.

**Table 6.9**  
**Actual and Projected Personal Income Levels in the Region: 1969-2050**

Income Category	Year	Constant 2010 Dollars		
		Income Per Worker	Per Capita Income	Mean Household Income
Actual Income	1969	\$49,800	\$20,100	\$65,800
	1979	51,900	24,300	68,300
	1989	51,900	25,300	67,700
	1999	59,100	29,200	75,300
	2010	54,200	25,900	65,400
Projected Income	2050	\$63,000	\$29,800	\$72,000
Projected Change in Income				
2010-2050:				
Dollars	--	\$8,800	\$3,900	\$6,600
Percent	--	16.2	15.1	10.1

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

of population, household, and employment levels that could conceivably occur under significantly higher or lower, but nevertheless plausible, growth scenarios for the Region.

It is envisioned that the intermediate projections will be used as the basis for the year 2050 regional land use and transportation system plan, indicating the approximate future population, household, and employment levels in the Region that the plan should be designed to accommodate. It should be noted, however, that the projections—particularly the county-level projections—are not intended to be construed as numbers to which the plan must strictly adhere. It is recognized that during the course of the planning process, recommendations may be made to alter somewhat the distribution of population, households, jobs, and urban land use within the Region in order to better achieve the long-range vision for the Region.

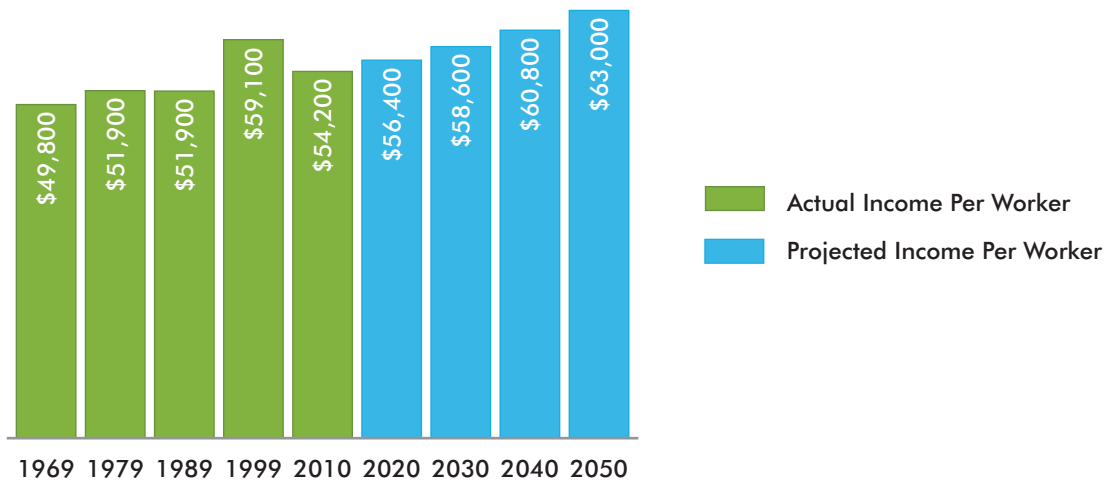
In addition to the population, household, and employment projections, this chapter presents a long-range projection of personal income levels for the Region, as required for certain aspects of the land use-transportation planning process.

The following is a summary of the year 2050 Commission projections:

**Population**

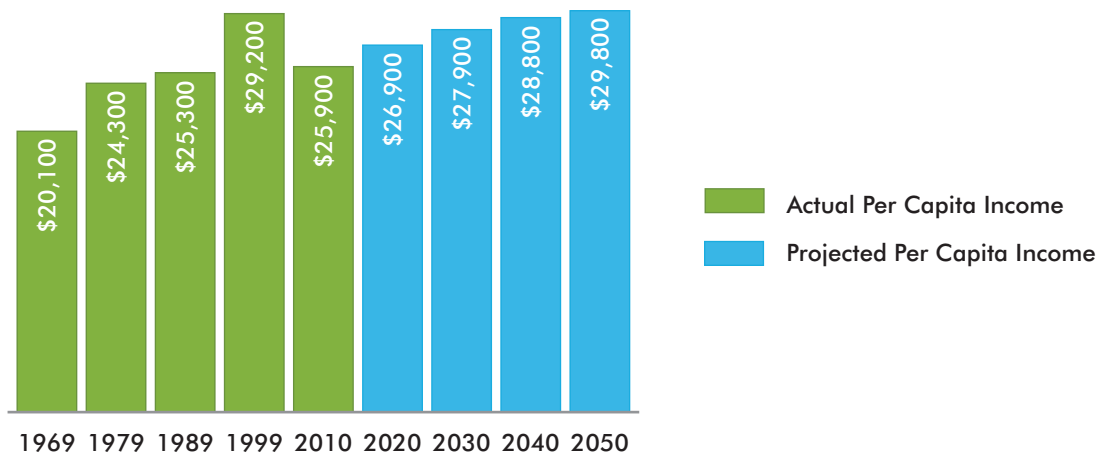
- The Commission intermediate projection indicates that the regional population would increase by 334,000 persons, or 17 percent, from 2,020,000 persons in 2010 to 2,354,000 persons in 2050. The high projection indicates that the regional population could be as high as 2,577,700 persons in 2050, an increase of about 557,700 persons, or 28 percent, over the 2010 level. Conversely, the low projection indicates that the regional population could be as low as 2,159,800 persons in 2050, an increase of 139,800 persons, or 7 percent, over 2010.
- The new projections anticipate continued change in the age composition of the regional population in the coming decades, particularly as a result of the aging of the large Baby Boomer population. Under the intermediate projection, persons age 65 and over are projected to nearly double during the projection period, accounting for about 21 percent of the total population in the Region in 2050, compared to about 13 percent in 2010.

**Figure 6.8**  
**Actual and Projected Income per Worker in the Region: 1969-2050 (Constant 2010 Dollars)**



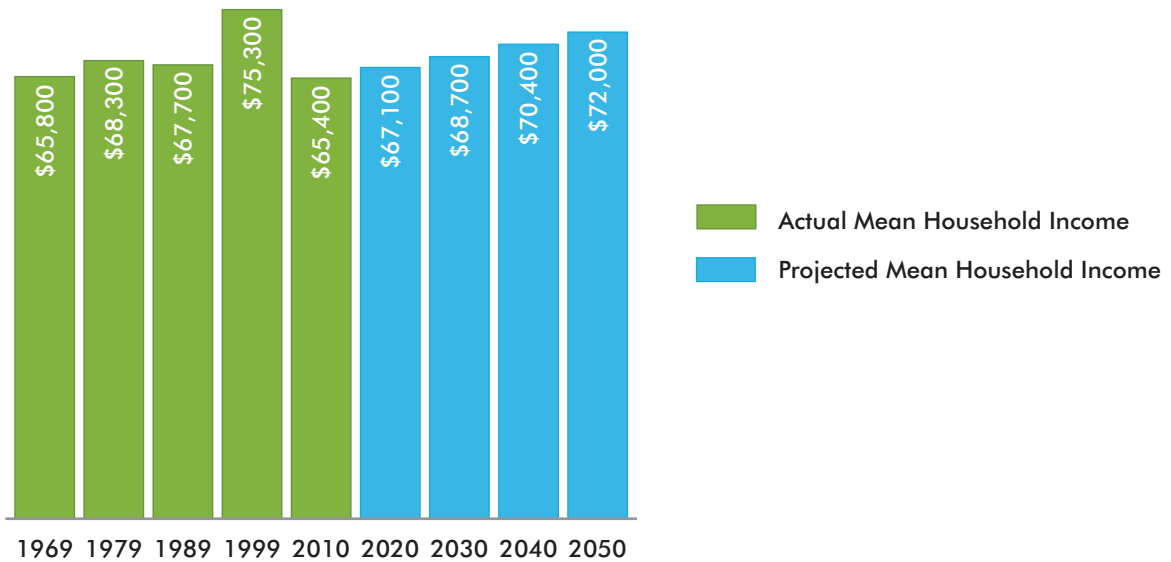
Source: U.S. Bureau of the Census and SEWRPC

**Figure 6.9**  
**Actual and Projected Per Capita Income in the Region: 1969-2050 (Constant 2010 Dollars)**



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

**Figure 6.10**  
**Actual and Projected Mean Household Income in the Region: 1969-2050 (Constant 2010 Dollars)**



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

- In addition to changes in the overall size and age characteristics of the regional population, continued change in the racial/ethnic makeup of the Region’s population may be expected in the years ahead. Extrapolation of past trends indicates a significant increase in the minority share of the regional population—from 29 percent in 2010 to nearly 45 percent in 2050—and a corresponding decrease in the non-Hispanic White share. Similar changes are projected for the Nation as a whole.

**Households**

- The intermediate projection indicates that the number of households in the Region would increase by 172,300, or 22 percent, from 800,100 households in 2010 to 972,400 households in 2050. The high projection indicates that the number of households in the Region could be as high as 1,064,700 in 2050, an increase of 264,600 households, or 33 percent, over the 2010 level. The low projection indicates that the number of households could be as low as 892,100 in 2050, an increase of 92,000 households, or 12 percent, over 2010.
- Commission projections indicate that the average household size in the Region will continue its historic decline, with the rate of decline being somewhat moderated in the coming decades. The average household size in the Region is projected to decrease by 4.5 percent during the projection period, from 2.47 persons in 2010 to 2.36 persons in 2050. The decrease in household size is expected because of a continued change in household types and the increase in older population age groups.

## **Employment**

- The intermediate-growth projection indicates that 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. 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 high-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, under the low-growth scenario. 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.
- 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 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. 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.

## **Personal Income**

- Future personal income levels were projected by extrapolating trends observed in the Region over the past four decades. Constant dollar per worker income is projected to increase by about 16 percent over the 40-year projection period, from \$54,200 in 2010 to \$63,000 in 2050. Constant dollar per capita income is projected to increase by 15 percent, from \$25,900 in 2010 to \$29,800 in 2050. Constant dollar mean household income for the Region is projected to increase by about 10 percent, from \$65,400 in 2010 to \$72,000 in 2050.