

CHAPTER 2: POPULATION AND HOUSEHOLD TRENDS

INTRODUCTION

Historic socioeconomic conditions and growth patterns have implications for the future health and vitality of the region. They help define existing problems and identify available socioeconomic resources. They also represent the current and future demands for services and resources. Changes in population and households combined with existing development patterns and policy choices will determine how well the region will be able to meet the future needs of its residents.

This chapter provides a summary of historic population growth, followed by more detailed information regarding current population and household characteristics of the region. Forecasts are provided for population and households. For the purpose of this document, urban counties are defined as: Calumet, Fond du Lac, Outagamie, and Winnebago counties; while rural counties are Green Lake, Marquette, Menominee, Shawano, Waupaca and Waushara counties.

POPULATION TRENDS & CHARACTERISTICS

Historic Population

Between 1970 and 2000, the region has experienced significant population growth, growing from 475,090 persons in 1970 to 609,438 persons in 2000 (Table 2). The majority of this growth was concentrated in the four urban counties, although rural counties grew at a faster rate. Over the same time period, the region (36.1 percent) grew at a faster rate than the State (27.8 percent), but slower than that of the nation (48.4 percent).

Table 2. Historic Population Growth Rates, 1970-2007

Jurisdiction	Census 1970	Census 1980	Census 1990	Census 2000	Estimate** 2007	% Change 1970-2007	% Change 2000-2007
Nation	203,302,031	226,545,805	248,709,873	281,421,906	301,621,157	48.4%	7.2%
Wisconsin ^a	4,417,821	4,705,642	4,891,769	5,363,701	5,648,124	27.8%	5.3%
Region ^a	475,090	511,033	542,712	609,438	646,453	36.1%	6.1%
Urban	361,515	380,333	405,204	455,661	485,681	34.3%	6.6%
Rural ^a	113,575	130,700	137,508	153,777	160,772	41.6%	4.5%
Calumet	27,604	30,867	34,291	40,631	46,031	66.8%	13.3%
Fond du Lac	84,567	88,964	90,083	97,296	101,174	19.6%	4.0%
Green Lake	16,878	18,370	18,651	19,105	19,446	15.2%	1.8%
Marquette	8,865	11,672	12,321	14,555	15,319	72.8%	5.2%
Menominee	2,607	3,373	3,890	4,562	4,606	76.7%	1.0%
Outagamie	119,398	128,730	140,510	160,971	173,773	45.5%	8.0%
Shawano	32,650	35,928	37,157	40,664	42,413	29.9%	4.3%
Waupaca ^a	37,780	42,831	46,104	51,825	53,773	42.3%	3.8%
Waushara ^a	14,795	18,526	19,385	23,066	25,215	70.4%	9.3%
Winnebago	129,946	131,772	140,320	156,763	164,703	26.7%	5.1%

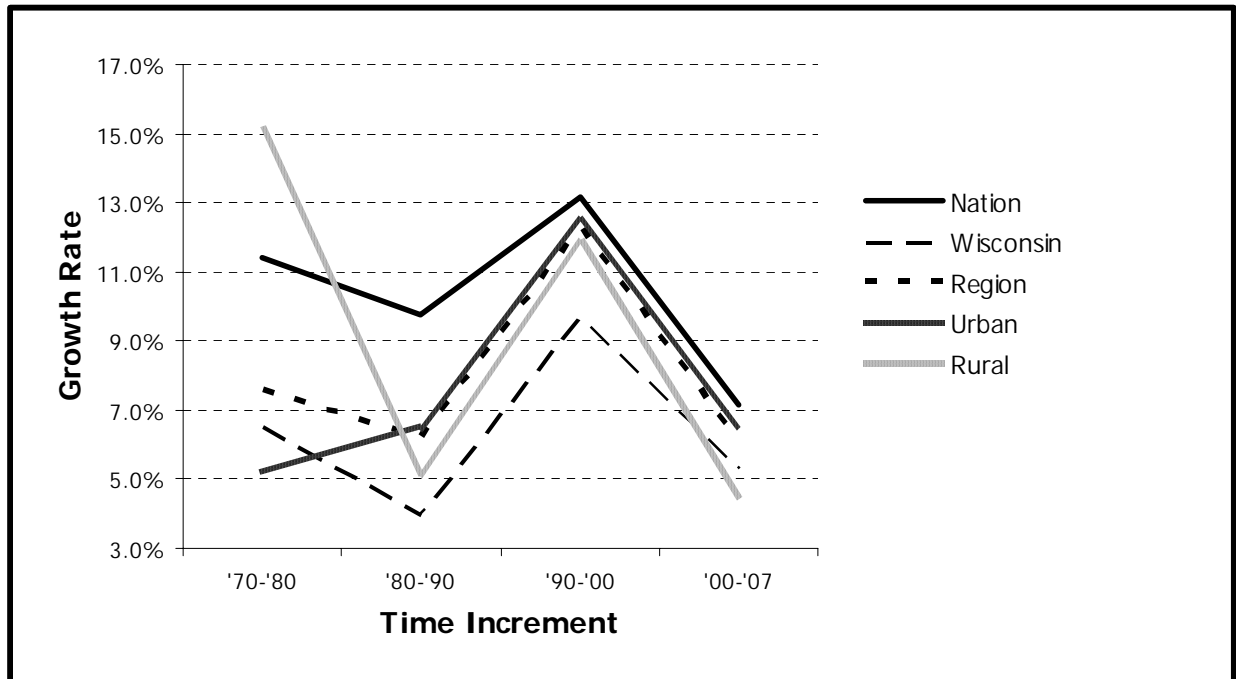
^a 2000 Census numbers have been adjusted through the Count Question Resolution Program (CQR) 8/30/02.

** National Estimate from US Census Bureau, 2007; State, Regional and County Estimates from WDOA, 2007

Source: U.S. Census: 1950, 1960, 1970, 1980, 1990, 2000, & 2007; WDOA 2007.

As depicted in Figure 4, between 2000 and 2007 the region (6.1 percent) continued to grow at a faster rate than the state (5.3 percent), but slower than the nation (7.2 percent). The fastest growing county (Calumet) grew by 13.3 percent during this time period, largely in response to the expansion of the Appleton-Neenah urbanized area. Outagamie, Winnebago and Fond du Lac counties grew by 8.0 percent, 5.1 percent, and 4.0 percent respectively. Growth in the remainder of counties varied from 9.3 percent in Waushara County to 1 percent in Menominee County.

Figure 4. Historic Growth Rates, 1970-2007



Source: US Census 1970, 1980, 1990, 2000 & DOA 2007

Map 2 depicts population change between 1970 and 2007. Areas with the highest rate of population growth include urbanized areas, such as the Fox Cities, and areas in the region that tend to attract new residents (e.g. for retirement or vacation homes), such as Waushara, Waupaca and Marquette counties, as well as those that have a high natural rate of growth, such as Menominee County.

Current Population Density

Population density reflects the degree of urbanization and impacts the demand and cost effectiveness of urban service provision. Over time, urban growth and urban services within the region have expanded and settlement patterns have increased in density. As depicted in Map 3, areas with the greatest densities tend to be incorporated communities and/or those that offer sanitary sewer and other urban services. Likewise, areas with the lowest densities tend to be those lacking urban services, such as agricultural or forested areas, or areas with a high amount of "unbuildable" features, such as wetlands.

MAP 2.

Percent Population Change 1970-2007.

MAP 3.

Population Density 2007

Population Forecasts

Table 3 presents population estimates for the region through the year 2030. These population projections are based on a combination of average growth trends over the last three Decennial Censuses (1980, 1990, and 2000), and population estimates developed by the Wisconsin Department of Administration in 2004.

Based on anticipated growth patterns and anticipated higher net migration rates, it is estimated that population in the region may increase by 24.2 percent between 2000 and 2030. It is assumed, however, that the largest rate of growth will occur during the first decade, and that the growth rate for the region will taper off in later decades. As the population ages and the rate of natural increase declines, it is expected that some rural counties will actually see their population peak between 2020 and 2025, and begin declining thereafter (e.g. Green Lake & Menominee counties).

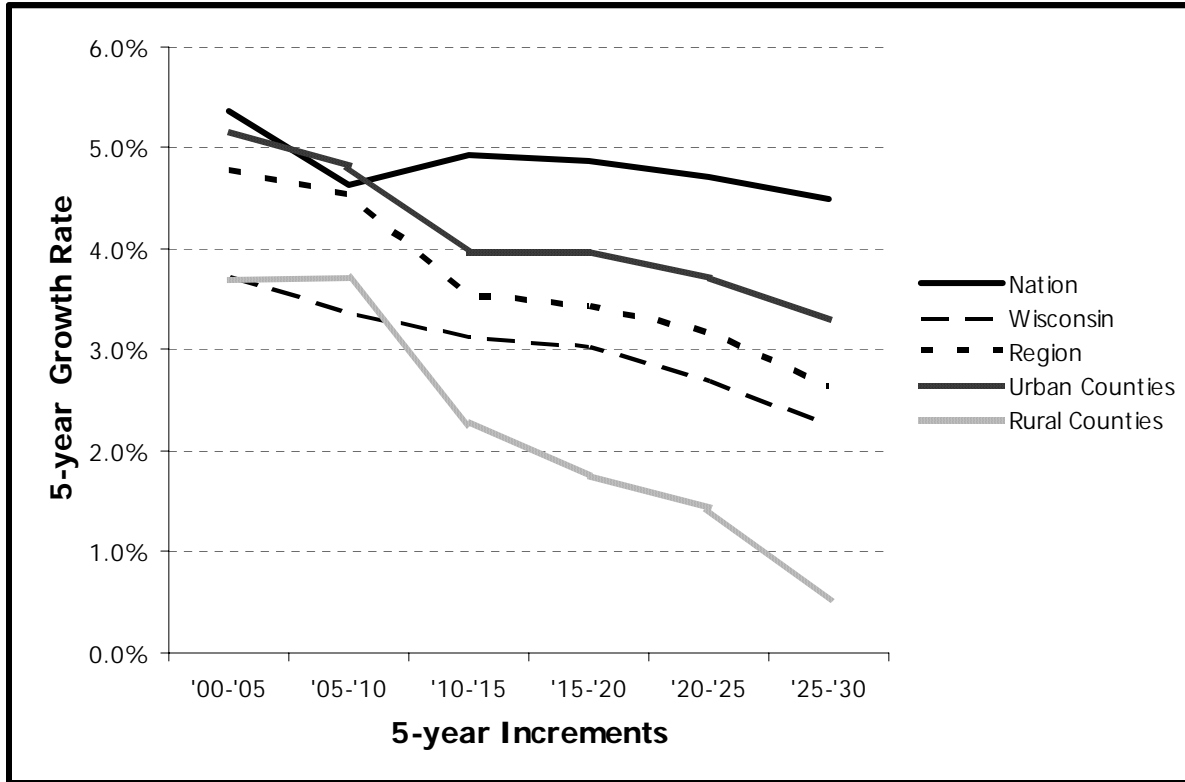
As seen in Figure 5, the region, as a whole, is anticipated to grow at a faster rate than the state, yet slower than the nation. On average, the region's urban counties (Calumet, Fond du Lac, Outagamie and Winnebago) are anticipated to grow faster than rural counties (27.6 percent v. 14.1 percent). Estimated change in population for urban counties between 2000 and 2030 is expected to vary from 50.5 percent in Calumet County to 16.1 percent in Fond du Lac County. Estimated change in population for the remaining rural counties is expected to vary from 21.6 percent in Waushara County to 4.7 percent in Green Lake County.

Table 3. Population Projections, 2000-2030

	Census 2000	2005*	2010	2015	2020	2025	2030	% Change 2000-2030
Nation	281,421,906	296,507,061	310,233,000	325,540,000	341,387,000	357,452,000	373,504,000	32.7%
Wisconsin	5,363,715	5,563,896	5,751,470	5,931,386	6,110,878	6,274,867	6,415,923	19.6%
Region	609,558	638,699	667,634	691,306	714,938	737,519	756,876	24.2%
Urban Counties	455,781	479,272	502,293	522,190	542,867	562,993	581,444	27.6%
Rural Counties	153,777	159,427	165,341	169,116	172,071	174,526	175,432	14.1%
Calumet	40,631	45,168	49,146	52,239	55,445	58,414	61,141	50.5%
Fond du Lac	97,296	100,180	103,385	106,140	108,867	111,128	112,925	16.1%
Green Lake	19,105	19,375	19,784	20,032	20,184	20,152	19,996	4.7%
Marquette	14,555	15,138	15,778	16,239	16,501	16,794	16,928	16.3%
Menominee	4,562	4,616	4,853	5,090	5,247	5,290	5,243	14.9%
Outagamie	161,091	170,680	181,224	190,570	200,012	208,688	216,874	34.6%
Shawano	40,664	42,029	43,631	44,738	45,733	46,687	47,320	16.4%
Waupaca	51,825	53,351	54,946	55,993	56,888	57,678	57,894	11.7%
Waushara	23,066	24,918	26,349	27,024	27,518	27,925	28,051	21.6%
Winnebago	156,763	163,244	168,538	173,241	178,543	184,763	190,504	21.5%

Source: U.S. Census, 2000, 2005; WI DOA 2004 & 2005; ECWRPC 2004.

* 2005 National Estimate, US Census Bureau; 2005 State, Regional & County Estimates, WDOA

Figure 5. Projected Rate of Growth, 2000-2030

Historic Age Distribution

Between 1970 and 2000, the median age rose for all counties within the region, as seen in Table 4. In 2000, rural counties, such as Green Lake (40.9 years), Marquette (40.9 years) and Waushara (42.1 years) tended to exhibit higher median ages, with the exception of Menominee County, which had the lowest median age (27.7 years). Likewise, urban counties, such as Outagamie (34.4 years), Calumet (35.2 years), Winnebago (35.4) and Fond du Lac (36.9 years), tended to have lower median ages, as these counties often attract younger, working-age persons.

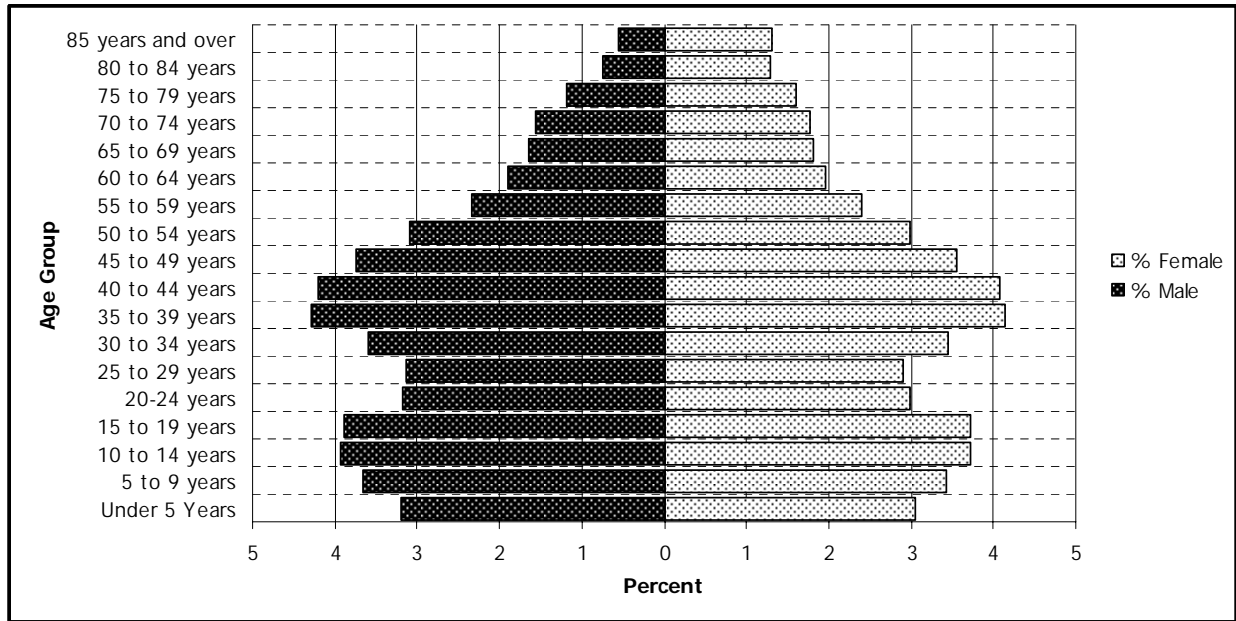
Table 4. Median Age, 1970-2000

	1970	1980	1990	2000
Wisconsin	27.2	29.4	32.9	36.0
Calumet	23.2	27.1	31.3	35.2
Fond du Lac	26.7	29.3	33.4	36.9
Green Lake	33.3	33.7	36.8	40.9
Marquette	37.5	36.1	39.1	40.9
Menominee	16.6	21.1	24.5	27.7
Outagamie	23.8	27.4	31.4	34.4
Shawano	31.7	32.5	35.3	38.5
Waupaca	34.1	32.6	35.0	38.5
Waushara	34.8	34.9	38.6	42.1
Winnebago	25.9	29.1	32.5	35.4

Source: Census 1970, 1980, 1990, 2000

Much of the increasing median age can be attributed to the aging of the “Baby Boom” generation (those born in the years following World War II). When the 2000 Census was taken, Baby Boomers were generally between the ages of 35 to 54. Figure 6, a “population pyramid” for the region, illustrates this generation as a bulge between the ages of 35 and 54. The “Echo Boom,” children of the Baby Boom-ers, is represented in the second “bulge”. (those between 5 and 20 years old).

Figure 6. Regional Population by Age and Sex – 2000



Source: US Census, 2000

As seen in Table 5, between 1970 and 2000, the Baby Boomers and the Echo Boomers moved into the working age group (20 to 64 years), attributing to a larger pool of potential workers and tax payers for the region. Over the same time period, the child-aged population (0 to 19 years) had declined as a share of the total population, and retired age adults (65 years and up) tended to increase and most recently, stabilize. This same trend was seen at the state level.

Table 5. Age Group by Percent of Population, 1970-2000

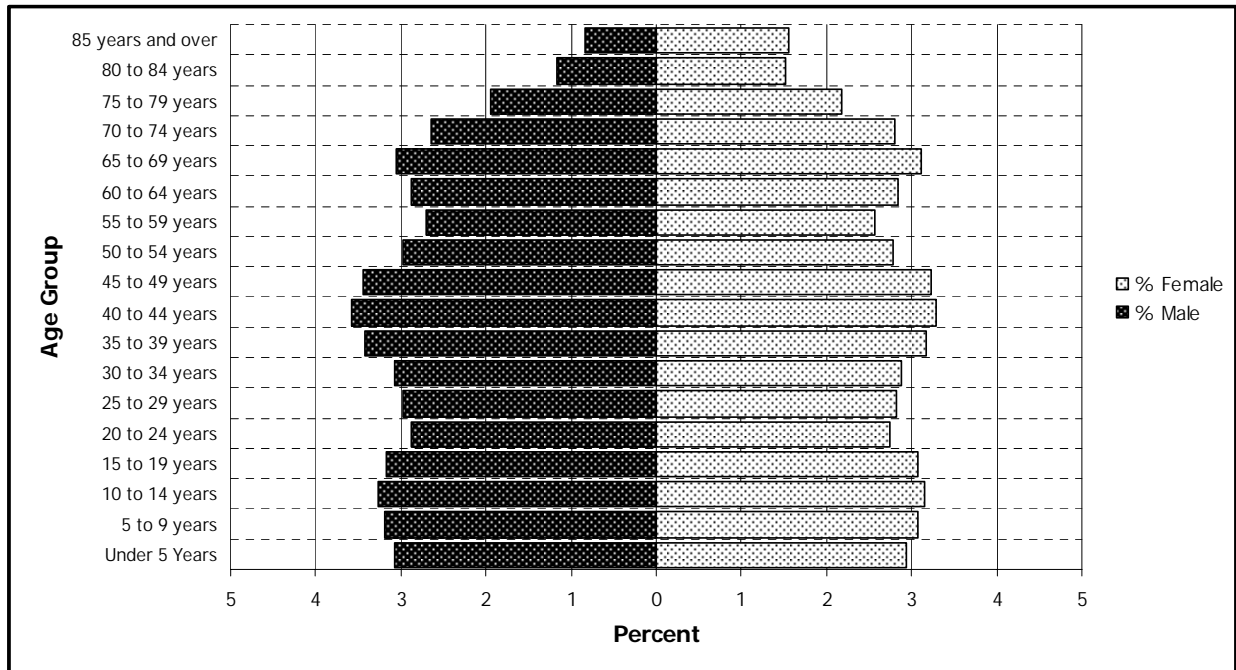
	1970	1980	1990	2000
State				
Under 5 years	8.6%	7.4%	7.4%	6.4%
5 to 19 years	31.1%	25.6%	22.0%	22.2%
20 to 64 years	49.6%	55.1%	57.3%	58.3%
65 years and up	10.7%	12.0%	13.3%	13.1%
Region				
Under 5 years	8.8%	7.6%	7.4%	6.3%
5 to 19 years	31.8%	26.2%	22.3%	22.4%
20 to 64 years	48.2%	53.6%	56.5%	57.9%
65 years and up	11.2%	12.6%	13.8%	13.5%

Source: U. S. Census, 1970, 1980, 1990 and 2000

Projected Age Distribution

As the Baby Boom and Echo Boom age, their representative bulges in the regional population period will move upwards, as depicted in Figure 7. Also, a new bulge in the 0 to 19 year age group.

Figure 7. Projected Regional Population by Age and Sex - 2030



Source: Wisconsin DOA, 2008

Table 6 shows that the region's percent of population of working age (20 to 64 years) will peak at 60.2 percent in 2015, and then begin to decline thereafter. Likewise, the share of the population of retirement age (65+) will continue to steadily increase after 2005, ending at 21 percent of total population in 2030. The state exhibits a similar trend, with slightly more remaining in the working age category, and slightly fewer in the retirement age category. The exodus of skilled workers as they retire is a major issue that the region will need to address.

Table 6. Projected Age Group by Percent of Population, 2005-2030

	2005	2010	2015	2020	2025	2030
State						
Under 5 years	6.4%	6.3%	6.3%	6.4%	6.4%	6.2%
5 to 19 years	22.2%	21.0%	19.8%	19.0%	19.0%	19.1%
20 to 64 years	58.3%	59.7%	60.5%	59.9%	57.9%	55.7%
65 years and up	13.1%	12.9%	13.3%	14.7%	16.7%	19.0%
Region						
Under 5 years	6.1%	6.1%	6.2%	6.3%	6.1%	6.0%
5 to 19 years	21.0%	19.7%	18.8%	18.6%	18.7%	18.8%
20 to 64 years	59.5%	60.5%	60.2%	58.4%	56.1%	54.2%
65 years and up	13.4%	13.7%	14.8%	16.7%	19.0%	21.0%

Source: Wisconsin DOA, 2008

Race and Hispanic Origin

Between 1970 and 2000, the region continued to diversify (Table 8). Although the majority of residents are White/Caucasian, their share of the total population dropped between 1970 (98.7 percent) and 2000 (94.6 percent). Over the same time period, the state exhibited higher levels of diversity. Native Americans (1.7 percent) comprised the next largest racial group. The Menominee Nation and part of the Oneida Nation exist within the boundaries of the region (Menominee, Outagamie and Shawano Counties), contributing a large amount to this population. Asian/Pacific Islanders (1.4 percent) were the third largest racial group. The region received a wave of Hmong immigrants (concentrated in Fond du Lac, Outagamie and Calumet Counties), contributing a large share of the population growth among the Asian/Pacific Islander population between 1970 and 2000.

According to the 2000 Census, Hispanics, who can be of any race, are the fastest growing population in the United States. They also tend to be a relatively young population. In 2000, the region's median age for Hispanics was 25.8 years, compared to the nation's median age of 25.3 years. As a result, over time, they will constitute a larger share of our nation's labor force.

Regionally, Hispanics comprise a very small share of the region and state's population, 1.9 percent and 3.6 percent respectively. Detailed trends for the 1970s, 1980s, 1990s, and into 2000 are presented in Table 7. Between 1970 and 1980, the region's Hispanic population declined dramatically; since then, the population has grown steadily and surpassed levels seen in 1970.

Table 7. Population Distribution, by Hispanic Origin (%), 1970-2000

	1970	1980	1990	2000
Wisconsin	1.42%	1.34%	1.91%	3.60%
Region	1.29%	0.63%	0.83%	1.87%
Calumet	1.98%	0.34%	0.43%	1.07%
Fond du Lac	1.40%	0.85%	1.04%	2.04%
Green Lake	0.80%	1.06%	1.03%	2.06%
Marquette	0.27%	0.84%	1.21%	1.36%
Menominee	0.00%	1.69%	1.41%	2.67%
Outagamie	1.53%	0.53%	0.70%	1.99%
Shawano	1.83%	0.24%	0.35%	1.00%
Waupaca	0.55%	0.57%	0.88%	1.38%
Waushara	1.09%	1.60%	1.96%	3.66%
Winnebago	1.11%	0.55%	0.82%	1.96%

Source: U. S. Census, 1970, 1980, 1990, 2000adj.

**Table 8. Population Distribution, by Race (%), 1970-2000
Educational Attainment**

	Year	White	African American	Native American	Asian/Pacific Islander	Other Races	Two or More Races
Wisconsin	1970	96.4%	2.9%	0.4%	0.1%	0.1%	n/a
	1980	94.5%	3.9%	0.7%	0.5%	0.5%	n/a
	1990	92.2%	5.0%	0.8%	1.1%	0.9%	n/a
	2000	88.9%	5.7%	0.9%	1.7%	1.6%	1.2%
Region	1970	98.7%	0.1%	1.0%	0.1%	0.1%	n/a
	1980	98.0%	0.1%	1.4%	0.3%	0.2%	n/a
	1990	97.0%	0.2%	1.6%	0.8%	0.3%	n/a
	2000	94.6%	0.6%	1.7%	1.4%	0.7%	0.9%
Calumet County	1970	99.7%	0.0%	0.2%	0.1%	0.0%	n/a
	1980	99.4%	0.0%	0.2%	0.3%	0.1%	n/a
	1990	98.9%	0.1%	0.4%	0.5%	0.1%	n/a
	2000	96.7%	0.3%	0.3%	1.6%	0.4%	0.7%
Fond du Lac County	1970	99.6%	0.2%	0.2%	0.1%	0.0%	n/a
	1980	99.1%	0.1%	0.1%	0.3%	0.3%	n/a
	1990	98.5%	0.3%	0.3%	0.5%	0.4%	n/a
	2000	96.2%	0.9%	0.4%	0.9%	0.8%	0.8%
Green Lake County	1970	99.9%	0.0%	0.0%	0.0%	0.0%	n/a
	1980	99.7%	0.0%	0.1%	0.0%	0.2%	n/a
	1990	98.6%	0.1%	0.2%	0.6%	0.5%	n/a
	2000	97.8%	0.2%	0.2%	0.3%	0.9%	0.6%
Marquette County*	1970	99.7%	0.0%	0.1%	0.1%	0.1%	n/a
	1980	98.9%	0.4%	0.3%	0.3%	0.2%	n/a
	1990	98.8%	0.3%	0.4%	0.1%	0.4%	n/a
	2000	97.8%	0.3%	0.4%	0.3%	0.4%	0.8%
Menominee County	1970	11.2%	0.0%	88.5%	0.0%	0.3%	n/a
	1980	10.6%	0.0%	89.4%	0.0%	0.1%	n/a
	1990	10.7%	0.0%	89.2%	0.0%	0.1%	n/a
	2000	11.6%	0.1%	87.3%	0.0%	0.3%	0.7%
Outagamie County	1970	98.9%	0.0%	0.9%	0.1%	0.1%	n/a
	1980	98.1%	0.1%	1.2%	0.5%	0.1%	n/a
	1990	96.8%	0.1%	1.4%	1.4%	0.3%	n/a
	2000	93.9%	0.5%	1.5%	2.3%	0.8%	1.0%
Shawano County	1970	96.9%	0.0%	3.0%	0.0%	0.0%	n/a
	1980	96.1%	0.0%	3.8%	0.1%	0.1%	n/a
	1990	94.9%	0.1%	4.7%	0.2%	0.1%	n/a
	2000	91.6%	0.2%	6.3%	0.4%	0.3%	1.2%
Waupaca County	1970	99.6%	0.0%	0.3%	0.0%	0.1%	n/a
	1980	99.4%	0.0%	0.2%	0.2%	0.2%	n/a
	1990	99.1%	0.0%	0.3%	0.2%	0.4%	n/a
	2000	97.9%	0.2%	0.4%	0.3%	0.5%	0.7%
Waushara County	1970	99.7%	0.1%	0.1%	0.0%	0.1%	n/a
	1980	98.7%	0.0%	0.2%	0.2%	0.9%	n/a
	1990	98.5%	0.1%	0.4%	0.2%	0.8%	n/a
	2000	96.8%	0.3%	0.3%	0.4%	1.4%	0.9%
Winnebago County	1970	99.5%	0.1%	0.2%	0.1%	0.1%	n/a
	1980	98.8%	0.3%	0.5%	0.4%	0.1%	n/a
	1990	97.5%	0.5%	0.5%	1.2%	0.3%	n/a
	2000	94.9%	1.1%	0.5%	1.9%	0.7%	0.9%

* Marquette County population by race for 2000 adjusted for geocoding errors.

Source: U. S. Census, 1970, 1980, 1990, 2000.

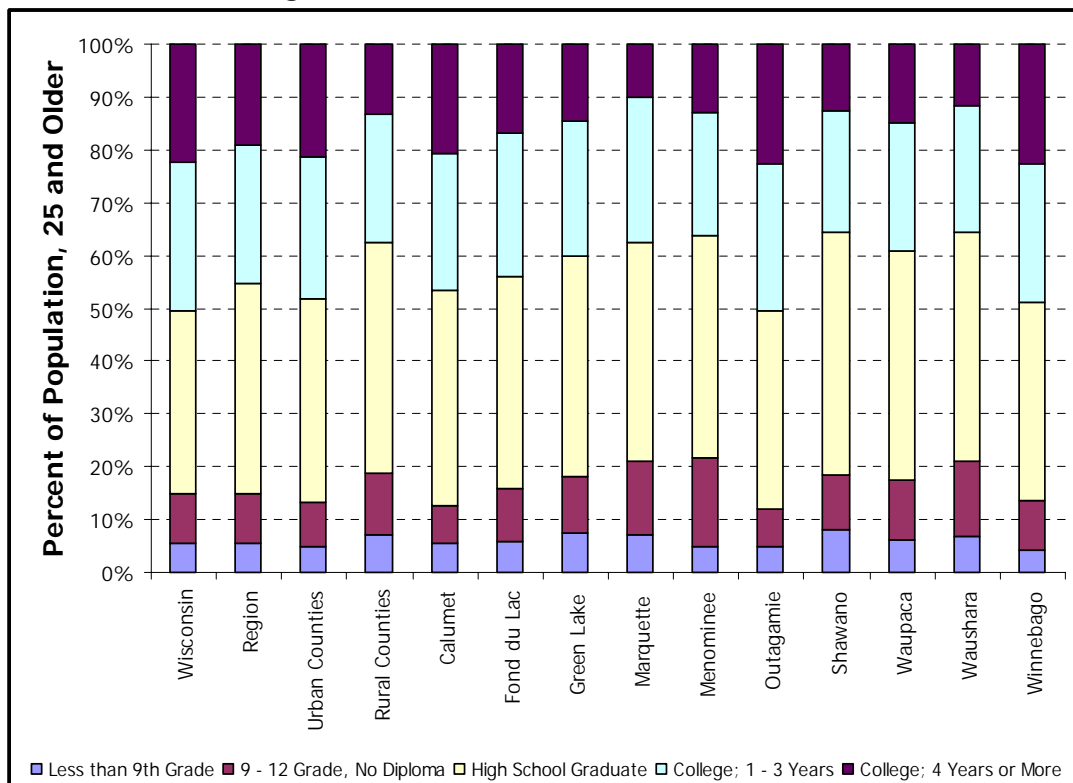
Educational Attainment

In 2000, the high school graduation rate for the region, 85.1 percent, was the same as for the state and higher than the nation, 80.4 percent. Fewer regional residents had obtained formal education beyond high school than at the state or national levels, as depicted in Figure 8. In 2000, 50.5 percent of state residents age 25 and older reported that they had obtained some form of post-secondary education, and 22.4 percent of state residents had four or more years of college education. In the region, 45.3 percent of residents had obtained post-secondary¹ education and only 19.1 percent of residents had four or more years of college education.

Educational attainment varied substantially within the region. On average, urban counties had a higher high school graduation rate, 86.6 percent, than rural counties, 81.1 percent. Urban residents were also more likely to have obtained education beyond high school. Forty-eight percent of urban county residents had obtained some form of post secondary education, compared to 37.5 percent of rural county residents. On average, 21.2 percent of urban county residents had obtained four or more years of college education, compared to 13.2 percent of rural county residents.

At the county level, high school graduation rates in the region varied from 88.1 percent in Outagamie County to 78.2 percent in Menominee County. The share of residents with four or more years of college varied from 22.8 percent in Winnebago County, where the University of Wisconsin at Oshkosh is located, to 10.1 percent in Marquette County.

Figure 8. Educational Attainment, 2000



Source: Census 2000

¹ Post-secondary education is education attained beyond completion of a high school degree.

HOUSEHOLD TRENDS & CHARACTERISTICS

Historic Households

Within the region, with the exception of Menominee County, urban counties have exhibited a higher average household size than rural counties. Urban counties have also experienced the highest declines in average household size. The decrease in average household size has largely resulted from a large increase in the number of one- and two-person households, and a decline in the number of households with five or more persons.

A detailed examination of the changes in household structure between 1970 and 2000 is presented in Table 9. Between 1970 and 2000, the region's average persons per household declined from 3.32 to 2.52. Average household size in urban counties declined from 3.39 in 1970 to 2.53 in 2000. In rural counties, average household size declined from 3.12 in 1970 to 2.50 in 2000. At the county level, the largest decline in household size occurred in Menominee County, where average household size declined from 5.10 in 1970 to 3.35 in 2000. Marquette County experienced the smallest decline in household size, decreasing from 2.96 in 1970 to 2.41 in 2000. At the state level, average household size dropped from 3.22 in 1970 to 2.50 in 2000.

Table 9. Historic Households & Average Household Size, 1970-2000

Jurisdiction	1970		1980		1990		2000	
	No. HH	Persons per HH	HHs	Persons per HH	HHs	Persons per HH	HHs	Persons per HH
Wisconsin	1,328,804	3.22	1,652,261	2.77	1,822,118	2.61	2,084,544	2.50
Region	138,383	3.32	175,303	2.84	199,686	2.63	233,576	2.52
Urban Counties	102,806	3.39	129,204	2.87	148,159	2.65	173,528	2.53
Rural Counties	35,577	3.13	46,099	2.78	51,527	2.61	60,048	2.50
Calumet County	7,342	3.70	9,694	3.15	11,772	2.89	14,910	2.70
Fond du Lac County	24,408	3.30	29,870	2.88	32,644	2.67	36,931	2.52
Green Lake County	5,481	3.10	6,734	2.69	7,189	2.56	7,703	2.43
Marquette County	2,956	2.90	4,361	2.65	4,831	2.52	5,986	2.41
Menominee County	519	5.10	799	4.22	1,079	3.57	1,345	3.35
Outagamie County	32,807	3.60	42,755	2.96	50,527	2.73	60,530	2.60
Shawano County	9,927	3.20	12,347	2.88	13,775	2.64	15,815	2.51
Waupaca County	11,784	3.10	14,954	2.76	17,037	2.62	19,863	2.51
Waushara County	4,910	3.00	6,904	2.65	7,616	2.52	9,336	2.43
Winnebago County	38,249	3.20	46,885	2.71	53,216	2.52	61,157	2.43

Source: US Census 1970, 1980, 1990, and 2000

Household Projections

Based on anticipated growth patterns, the region's population is expected to grow by 19.6 percent between 2000 and 2030, while the number of households in the region is expected to increase by 24.8 percent during the same time period, due in part to a continued decrease in household size. Between 2000 and 2030, it is expected that average household size in the

region will decrease from the current 2.52 persons per household (2000 Census) to 2.33 persons per household (Table 10).

The decline in household size is expected to be more pronounced in urban counties, which currently have higher average persons per households than most rural counties. One major factor contributing to the decrease in household size will be the aging of the Echo-Boom generation. Children of the Baby-Boomers are expected to move out of their parents' homes and form their own household during this time period.

Table 10. Projected Households & Average Household Size, 2005-2030

	2005		2010		2015		2020		2025		2030	
	No. HH	Persons per HH	No. HH	Persons per HH	No. HH	Persons per HH	No. HH	Persons per HH	No. HH	Persons per HH	No. HH	Persons per HH
State	2,190,210	2.46	2,303,238	2.42	2,406,798	2.39	2,506,932	2.37	2,592,462	2.35	2,667,688	2.33
Region	248,536	2.50	262,951	2.45	276,315	2.42	290,655	2.38	300,314	2.37	310,229	2.33
Urban Counties	185,642	2.50	196,730	2.46	207,166	2.43	218,481	2.40	226,946	2.39	235,708	2.35
Rural Counties	62,894	2.48	66,221	2.42	69,149	2.37	72,174	2.31	73,368	2.31	74,521	2.28
Calumet	16,829	2.70	18,369	2.65	19,870	2.61	21,349	2.57	22,721	2.55	23,948	2.53
Fond du Lac	38,898	2.46	40,882	2.41	42,544	2.38	45,043	2.30	45,369	2.34	46,393	2.32
Green Lake	7,895	2.42	8,189	2.37	8,415	2.34	8,602	2.30	8,710	2.27	8,769	2.24
Marquette	6303	2.36	6,675	2.31	6996	2.27	7,207	2.24	7432	2.21	7,612	2.17
Menominee	1,463	3.12	1,645	2.91	1,822	2.75	1,955	2.64	2,052	2.54	2,125	2.43
Outagamie	65,423	2.57	70,321	2.52	75,104	2.48	79,872	2.45	84,030	2.43	88,186	2.32
Shawano	16,615	2.50	17,378	2.46	18,113	2.42	19,135	2.34	19,352	2.36	19,790	2.34
Waupaca	20,857	2.48	21,903	2.42	22,773	2.37	23,796	2.30	23,998	2.32	24,202	2.30
Waushara	9,760	2.48	10,430	2.40	11,030	2.33	11,479	2.28	11,824	2.25	12,023	2.21
Winnebago	64,491	2.41	67,157	2.38	69,648	2.36	72,217	2.34	74,825	2.34	77,181	2.34

Source: ECWRPC 2004, DOA 2003

Housing Value

In 1970, urban counties had higher median housing values than rural counties. Rural county median housing values ranged from \$5,700 in Menominee County to \$14,100 in Green Lake County, while urban county median housing values ranged from \$14,400 in Fond du Lac County to \$17,600 in Outagamie County. Outagamie County was the only county in the region with a higher median housing value than the state (Table 11).

Since 1970, housing values have risen substantially. The largest growth in median housing values occurred in the 1970's. Between 1970 and 1980, median housing prices more than doubled in response to inflationary pressures during the late 1970's and increased demand as baby-boomers entered the housing market. Housing prices continued to rise during the 1980's, but at a much slower rate. Housing prices again increased substantially in the 1990's. Lower interest rates allowed home buyers the opportunity to purchase a higher valued home, and the market responded by increasing the average home size for new construction². The increased demand for starter homes and lack of supply drove the value of existing starter homes up substantially. By 2000, median housing values in the region ranged from \$72,700 in Menominee County to \$109,300 in Calumet County.

² In 1970, the average size of a new single family home was 1,500 sq. ft. By 2000, the average size of a new single family home was 2,266 sq. ft.

Since 2000, home values appreciated precipitously, in response to low interest rates, easy credit, and increased demand. Beginning around 2006, this housing “bubble” began to burst as credit became harder to acquire, demand fell, and prices stabilized, and in some cases dropped.

Table 11. Median Housing Value for Owner-Occupied Units, 1970-2000

	1970	1980	1990	2000
Wisconsin	\$17,300	\$48,600	\$62,100	\$112,200
Calumet County	\$16,300	\$45,800	\$62,200	\$109,300
Fond du Lac County	\$14,400	\$41,200	\$55,700	\$101,000
Green Lake County	\$14,100	\$38,300	\$48,400	\$90,100
Marquette County	\$9,900	\$34,300	\$45,600	\$87,000
Menominee County	\$5,700	\$26,100	\$46,700	\$72,700
Outagamie County	\$17,600	\$45,200	\$63,900	\$106,000
Shawano County	\$10,900	\$35,600	\$45,500	\$84,000
Waupaca County	\$12,400	\$37,800	\$49,300	\$89,300
Waushara County	\$10,600	\$34,700	\$45,600	\$85,100
Winnebago County	\$16,500	\$42,900	\$59,700	\$97,700

Source: U. S. Census, 1970, 1980, 1990 and 2000.

Housing Affordability

The relationship between housing costs and household income is an indicator of housing affordability, which is gauged by the proportion of household income expended for rent or home ownership costs. Rental costs include contract rent, plus the estimated average monthly cost of utilities and fuel. Owner costs include payments for mortgages, real estate taxes, fire hazard and flood insurance on the property, utilities and fuels. In 1989, the standard for determining whether rent or home ownership costs comprised a disproportionate share of income was set at 30 percent of gross household income. Households spending more than 30 percent of their income for housing may be at risk of losing their housing should they be confronted with unexpected bills or unemployment of one or more workers per household.

Homeowners

Between 1989 and 1999, housing affordability became a larger issue for homeowners in the region and the state (Table 12). The percentage of homeowners paying a disproportionate share of their income for housing in Wisconsin rose from 15 percent to 18 percent during this time period. Regionally, the share of homeowners paying a disproportionate share of their income for housing rose from 12 percent to 15 percent. Within the region, the share of homeowners in urban counties paying a disproportionate share of their income for housing increased to 15 percent. In rural counties, the share of homeowners paying a disproportionate share of their income for housing decreased slightly to 15 percent. In 1999, the share of homeowners paying more than 30 percent of their income for housing ranged from 21 percent in Marquette County to 11 percent in Waupaca County.

Renters

Census data indicates that renters throughout the region and the state had far greater difficulty finding affordable housing than homeowners (Table 12). Between 1989 and 1999, housing

affordability improved slightly for renters in both the region and the state. The percentage of renters paying a disproportionate share of their income for housing in Wisconsin declined from 36.0 percent to 32.3 percent during this time period. Regionally, the share of homeowners paying a disproportionate share of their income for housing declined from 29.5 percent to 26.6 percent. Within the region, the share of homeowners in urban counties (27 percent) paying a disproportionate share of their income was higher than renters in rural counties (25 percent). In 1999, the share of renters paying more than 30 percent of their income for housing ranged from 18.3 percent in Calumet County to 29.7 in Fond du Lac County.

Table 12 Households Paying More Than 30% of Their Income for Housing, '89-'99

	Households for which owner costs are not affordable				Households for which renter costs are not affordable			
	1989		1999		1989		1999	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Urban	9,458	11.0%	16,127	15.2%	8,200	29.8%	13,105	27.0%
Rural	4,221	16.3%	5,783	14.9%	3,014	28.8%	2,946	25.0%
Region	13,679	12.2%	21,910	15.1%	11,214	29.5%	16,051	26.6%
Wisconsin	140,026	15.1%	199,967	17.8%	209,438	36.0%	207,242	32.3%
Calumet	849	12.1%	1,304	13.2%	604	25.8%	516	18.3%
Fond du Lac	2,267	12.3%	3,371	15.3%	2,763	31.8%	2,902	29.7%
Green Lake	664	17.2%	819	18.2%	412	26.6%	417	25.8%
Marquette	356	16.1%	605	21.1%	205	27.0%	206	23.1%
Menominee	62	12.0%	117	16.5%	158	41.6%	98	28.6%
Outagamie	3,761	12.3%	5,787	15.2%	4,054	29.5%	4,203	25.4%
Shawano	1,081	16.0%	1,317	15.9%	779	28.3%	846	26.2%
Waupaca	1,421	15.8%	1,962	11.2%	1,016	27.2%	1,055	24.3%
Waushara	637	17.6%	963	19.7%	444	34.6%	324	23.4%
Winnebago	2,581	8.7%	5,665	15.6%	779	28.3%	5,484	28.2%

Source: U. S. Census, 1990 and 2000.