

CHAPTER 2

TRENDS, ISSUES, AND OPPORTUNITIES ELEMENT

Information regarding existing conditions and historic trends with respect to the demographic and economic base, the natural environment, and the man-made environment is essential to the comprehensive planning process. An extensive database has been developed by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) pertaining to these and other aspects of the Southeastern Wisconsin Region, updating that database periodically. A major inventory update effort was carried out by SEWRPC in the early 2000's in support of the preparation of new land use and transportation plans and other elements of the comprehensive plan for the Region, including Waukesha County and the Village of Eagle. This chapter presents a summary of the results of that inventory update pertaining to the population, land use, water supply, the natural resource base and the agricultural resource base.

Much of the demographic data in this chapter is from the U.S. Bureau of the Census. This data is collected every ten years and is derived from both short and long form questionnaires. The short form provides a complete count of all persons living in the United States along with over 300 tables with counts and cross tabulations of race, ethnicity, gender, and age data. The long form is sent to 1 out of every 6 households in the United States. It provides sample data for topics related to education, housing, income, and other social and economic issues.

DEMOGRAPHIC AND ECONOMIC BASE

Population Growth by County

In 1930, Waukesha County had approximately 52,000 residents. Waukesha County and the Village of Eagle began to experience significant population growth in the 1950s. From 1960 to 2005, the county population more than doubled. Between 1970 and 2005, the Village of Eagle population increased from 745 to 1,772 as population, business, and industry migrated from the City of Milwaukee and City of Waukesha to outlying areas.

Waukesha County Community Population Trends

Between 1970 and 1980 the majority of the county's growth in population occurred in cities and towns. In fact, 46 percent took place in cities, 44 percent in towns, and only 10 percent in villages. Between 1990 and 2000 the growth in cities remained the same (46 percent) with a more even distribution of growth between villages (31 percent) and towns (23 percent). In 2005, an estimated 20 percent of the total county population lived in towns (75,626 people), 24 percent resided in villages (91,157 people) and 56 percent were residents of cities (210,565). The Village of Sussex experienced the largest population growth of any village gaining 7,003 people from 1970 to 2005. The Village of Eagle had an increase in population of 1,027, which may have been partly spurred by the growth adjacent to its boundary. (Table 2-1).

Components of Population Change

Population change can be attributed to natural increase and net migration. Natural increase is the balance between births and deaths in an area over a given period of time; it can be measured directly from historical records on the number of births and deaths for an area. Net migration is the balance between migration to and from an area over a given period of time; as a practical matter, net migration is often determined as a derived number, obtained by subtracting natural increase from total population change for the time period concerned.

Table 2-1
POPULATION GROWTH FOR COMMUNITIES
IN THE GREATER EAGLE AREA: 1970-2005

Community	1970	1980	1990	2000	2005
Town of Eagle	1,250	1,758	2,028	3,117	3,492
Town of Mukwonago	1,930	4,979	5,967	6,868	7,482
Town of Ottawa	1,698	2,795	2,988	3,758	3,850
Village of Eagle	745	1,008	1,182	1,707	1,772
Village of Mukwonago	2,367	4,014	4,464	6,162	6,506
Village of North Prairie	669	938	1,322	1,571	1,855
Waukesha County	231,335	280,203	304,715	360,767	377,348

Source: U.S Bureau of the Census and the Wisconsin Department of Administration

Racial Composition

Over 96 % of residents in the Village of Eagle were White in 2000. According to census data, the Hispanic population is 52, the African American population is 4, and the Asian population is 5 in the Village of Eagle. However, the population of Waukesha County continues to grow more diverse, as the Hispanic population in the county nearly doubled from 5,448 to 9,503 between 1990 and 2000. Asians made up the third largest racial group within Waukesha County with nearly 5,400 people.

Household Trends

In addition to population, the number of households, or occupied housing units, is of importance in land use and public facility planning. Households directly influence the demand for urban land as well as the demand for transportation and other public facilities and services. A household includes all persons who occupy a housing unit—defined by the Census Bureau as a house, an apartment, a mobile home, a group of rooms, or a single-room that is occupied, or intended for occupancy, as separate living quarters. In 2000, slightly over 76 percent (103,373) of the total housing units in Waukesha County were owner occupied. According to the 2000 census, the Village of Eagle’s number of owner occupied residences was approximately 13% above the Waukesha County average, while the number for rental units was 13% below the County average. The number of households in the Village of Eagle increased by 190 households, or 47 percent, from 402 households in 1990 to 592 households in 2000. In Waukesha County municipalities, owner occupied housing ranges from 56.5% to 99% of total housing stock, with the Village of Eagle in the upper 1/2 of the County.

Table 2-2
OWNER VS. RENTER OCCUPIED UNITS FOR COMMUNITIES
IN THE GREATER EAGLE AREA: 2000

Community	Owner Occupied	Percent	Renter Occupied	Percent
Town of Eagle	1,049	93.8	69	6.2
Town of Mukwonago	2,184	97.5	57	2.5
Town of Ottawa	1,232	89.6	143	10.4
Village of Eagle	529	89.4	63	10.6
Village of Mukwonago	1,516	63.4	876	36.6
Village of North Prairie	455	85.7	76	14.3
Waukesha County Total	103,373	76.4	31,856	23.6

Source: U.S. Bureau of the Census

Household Size

In 2000, The Village of Eagle’s average household size was 2.88, and tied for 12th highest in the County. This figure continues to decline and is occurring on a regional, state, and national scale as families continue to become smaller. According to SEWRPC, the average household size in southeastern Wisconsin will be somewhere between 2.56 and 2.65 persons in 2020. It is assumed that this average household size is reasonable for single family detached dwellings but not for multi-family households as each unit in a multi-family structure typically has a much smaller household size. As well, it is likely that a sizeable percentage of any multi-family housing that develops in the Village of Eagle will function as senior housing with a small household size. Therefore, it is assumed that multi-family housing will only yield an average household size of 1.2 persons. A growing population with a decreasing household size has implications for development of housing stock, demand for future water and sanitary sewer capacity, land use, and other utilities and community facilities.

Table 2 - 3
AVERAGE HOUSEHOLD SIZE FOR COMMUNITIES
IN THE GREATER EAGLE AREA: 2000

Community	Average Household Size
Town of Eagle	2.97
Town of Mukwonago	3.14
Town of Ottawa	2.73
Village of Eagle	2.88
Village of Mukwonago	2.54
Village of North Prairie	2.96
Waukesha County	2.63

Source: U.S. Bureau of the Census

Median Age

Waukesha County’s median age is increasing. The median age in 1970 was 27, and in 2000 reached 38.1. The Village of Eagle had the lowest median age in the area at 32.8 years old, and was well below the County’s median age of 38.1 in 2000. (Table 2-4)

Age Composition

The 45 to 64 age, and 65 and over age groups, will continue to grow in number reflecting the aging of “baby boomers”. The population aged 25 to 44 will begin to decrease as a smaller age cohort born in the 1970s moves into this age group. This changing age composition will have implications for school districts, labor, housing, and transportation. In 2000, 38.0% of the population in the Village of Eagle was between the age of 25 and 44 years, and 17.6% was between the ages of 45 to 64 years. These age trends indicate a smaller percentage of elderly reside in the Village compared to communities in the rest of Waukesha County.

Table 2 - 4
POPULATION BY AGE GROUP AND MEDIAN AGE FOR COMMUNITIES
IN THE GREATER EAGLE AREA: 2000

Municipality	Under 5 yrs.	5 - 14	15 - 24	25 - 44	45 - 64	65 and Over	Median Age
Town of Eagle	226	532	326	1,030	799	204	36.9
Town of Mukwonago	426	1,316	856	2,128	1,839	303	36.7
Town of Ottawa	206	596	409	999	1,118	430	41.1
Village of Eagle	164	306	175	649	301	112	32.8
Village of Mukwonago	434	864	882	1,980	1,328	674	33.9
Village of North Prairie	98	296	188	515	392	92	36.3
Waukesha County	23,096	54,805	41,587	107,439	90,406	43,434	38.1

Source: U.S. Bureau of the Census

Household Income

Waukesha County has a substantially higher median household income than adjacent counties. The median household income was \$62,839 in 2000 for Waukesha County. This figure was over 60 percent higher than the median household income in Milwaukee County. The median household income in the Village of Eagle ranked 12th lowest out of 37 communities and slightly lower than the Waukesha County average by \$539. (Table 2-5)

Table 2-5
MEDIAN HOUSEHOLD INCOME FOR COMMUNITIES
IN THE GREATER EAGLE AREA: 1999

Community	Median Household Income
Town of Eagle	\$69,071
Town of Mukwonago	\$75,067
Town of Ottawa	\$69,493
Village of Eagle	\$62,300
Village of Mukwonago	\$56,250
Village of North Prairie	\$70,781
Waukesha County	\$62,839

Source: U.S. Bureau of the Census

Employment Trends

Waukesha County has continued to enhance its economy through new job creation. Waukesha County experienced a 43 percent growth in employment from 1990 to 2000 resulting in a net addition of 81,100 jobs. Although, Milwaukee County has nearly three times as many jobs as Waukesha, it recorded only a 2 percent increase in jobs during the 1990s. Waukesha County like the rest of Wisconsin has experienced a decline in manufacturing as a percent of total employment. Despite this fact, Waukesha County is still above the 12% national average for manufacturing employment, as approximately 21 percent of all jobs in Waukesha County are in manufacturing. Service employment has increased significantly in Waukesha County over the last decade and now is the most important sector for jobs, accounting for 28 percent of all jobs within the county. (Table 2-6)

The US Census Bureau information does not designate the types of the jobs available in the Village of Eagle, only what types of jobs the residents of the Village are employed in. According to the 2000 US Census there are 952 Village residents over 16 years of age that are employed. The Census information indicates that 273 or 28.7% are management, professional and related occupations, 103 or 10.8% are service occupations, 280 or 29.4% are sales and office occupations, 121 or 12.7% are in construction or extraction occupations, 175 or 18.4% are in production, transportation and material moving occupation and 0 of the jobs are in farming, fishing, and forestry. The major types of industries that the residents of the Village are employed in are; manufacturing at 260 or 27.3%, educational health and social services at 154 or 16.2%, retail trade at 108 or 11.3%, professional, scientific management and administrative at 74 or 7.8 %, and construction at 72 or 7.6%.

Table 2-6

WAUKESHA COUNTY EMPLOYMENT INDUSTRY TRENDS: 1990-2000

Waukesha County	1990	2000	1990-2000 Number Change in Employment	2000 Percent of Total Employment
Agriculture	1,191	1,011	-180	1%
Construction	12,679	18,462	5,783	7%
Manufacturing	44,871	56,754	11,883	21%
Transportation, Communication and Utilities	8,185	9,516	2,434	4%
Wholesale Trade	16,128	22,508	6,380	8%
Retail Trade	31,054	43,132	12,078	16%
Finance, Insurance and Real Estate	13,131	22,340	9,209	8%
Services	46,293	76,265	29,979	28%
Government and Government Enterprises	13,994	17,059	3,065	7%
Other	2,135	3,749	1,614	1%

Source: U.S Bureau of Economic Analysis and SEWRPC

Educational Attainment

In the State of Wisconsin, 31 percent of residents age 25 and over have earned an associate, bachelors, graduate, or professional degree. Waukesha County has the third highest percentage of people with educational degrees in Wisconsin. Over 41 percent of people 25 years of age and older have an associate, bachelors, graduate, or professional degree within Waukesha County. Only Dane with 49.5 percent and Ozaukee at 45.6 percent have higher percentages in Wisconsin. Within Waukesha County municipalities, this figure ranges from 18 percent in the Village of Butler to 70 percent in the Village of Chenequa. The Village of Eagle has a relatively low percentage of residents with advanced educational degrees. (Table 2-7).

Table 2-7

**RESIDENTS OF AGE 25 AND OVER WITH ASSOCIATES,
BACHELOR’S, GRADUATE, OR PROFESSIONAL DEGREES
FOR COMMUNITIES IN THE GREATER EAGLE AREA: 2000**

Community	Number	Percent
Town of Eagle	673	34.2
Town of Mukwonago	1,757	42.3
Town of Ottawa	959	37.5
Village of Eagle	309	26.9
Village of Mukwonago	1,381	35.0
Village of North Prairie	370	36.6

Source: U.S. Bureau of the Census

Summary of the Population Characteristic of Village of Eagle

The median age of Village’s residents at the time of the census was 32.8 years of age; with 49.7 % being males and 50.3 % being females. The 1990, census indicated that the Village of Eagle had a population of 1,182. The 2000, census showed the population of the Village at 1,707 persons, which was a 69.2% jump in the population. The 2010, population projection by Wisconsin Department of Administration projects the population to be 1,912 persons, and the Village currently has a population of 1,801 in 2007. The average household size in 2000, was 2.88 persons per household. Assuming development densities in the Village will remain constant, it is anticipated by the year 2035, that the Village’s population will be 2,414, which is an increase of 613 people or 213 households. These 213 households will add an average of 7.6 dwellings to the landscape per year.

URBAN GROWTH AND DEVELOPMENT

SEWRPC relies on two types of inventories and analyses in order to monitor urban growth and development in Southeastern Wisconsin—an urban growth ring analysis and a land use inventory. The urban growth ring analysis delineates the outer limits of concentrations of urban development and depicts the urbanization over the past 150 years. When related to urban population levels, the urban growth ring analysis provides a good basis for calculating urban population and household densities. By contrast, SEWRPC’s land use inventory is a more detailed inventory that places all land and water areas into one of 66 discrete land use categories, providing a basis for analyzing specific urban and non-urban land uses. Both the urban growth ring analysis and the land use inventory have been updated to the year 2000 under the continuing regional planning program, and therefore serve as the basis for the land use trends present in this Plan.

Urban Growth Ring Analysis

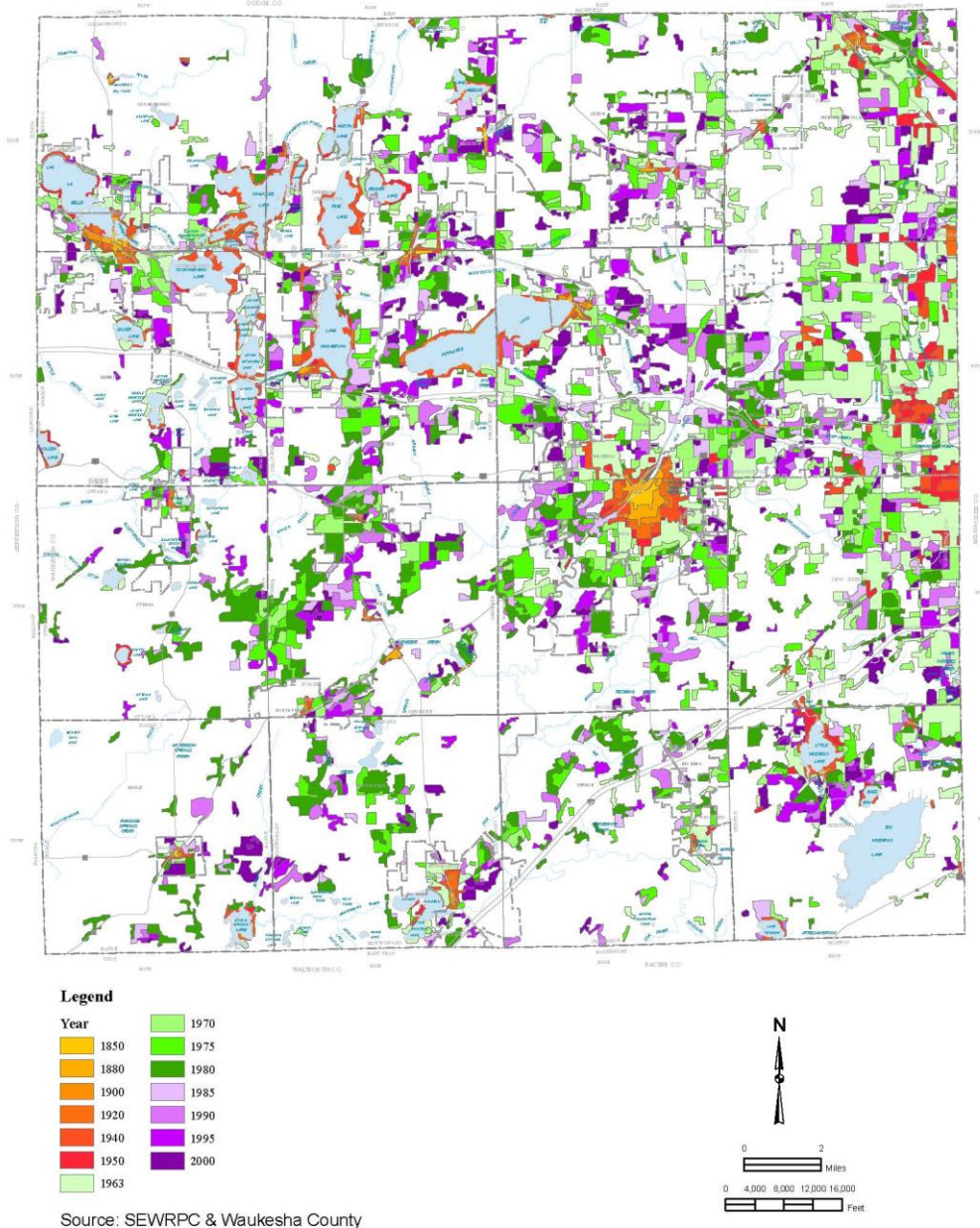
The urban growth ring analysis shows the historical pattern of urban settlement, growth, and development since 1850 for selected points in time. Areas identified as urban under this time series analysis include areas where residential structures or other buildings have been constructed in relatively compact groups, thereby indicating a concentration of residential, commercial, industrial, governmental, institutional, or other urban land uses. In addition, the identified urban areas encompass certain open space lands such as urban parks and small areas being preserved for resource conservation purposes within the urban areas.

As part of the urban growth ring analysis, urban growth for the years prior to 1940 was identified using a variety of sources, including the records of local historical societies, land subdivision plat records, farm plat maps, U. S Geological Survey maps, and Wisconsin Geological and Natural History Survey records. Urban growth for the years 1940, 1950, 1963, 1970, 1980, 1990, and 2000 was identified using aerial photographs. Because of limitations inherent in the source materials, information presented for the years prior to 1940 represents the extent of urban development at approximately those points in time, whereas the information presented for later years can be considered precisely representative of those respective points in time. The urban growth ring analysis, updated through 2000, is presented graphically on Map 2-1.

Map 2-1

HISTORIC GROWTH RING ANALYSIS IN WAUKESHA COUNTY: 1850-2000

Historic Urban Growth in Waukesha County: 1850-2000



Population Projections

Projections are estimates of the population for future dates. They illustrate plausible courses of future population change based on assumptions about future births, deaths, international migration, and domestic migration.

While projections and estimates may appear similar, there are some distinct differences between the two measures. Estimates are for the past, while projections are based on assumptions about future demographic trends. Estimates generally use existing data collected from various sources, while projections must assume what demographic trends will be in the future.

In the report, *The Population of Southeastern Wisconsin*, SEWRPC projected a range of future population and household levels – using high, intermediate, and low growth scenarios for Waukesha County. The analysis uses the cohort-component projection model that projects population based on births, deaths, and migration rates. (Previously said fertility, survival, and migration rates). After analyzing the data, the intermediate growth projection was used for land use planning purposes. The intermediate population projection predicts a modest increase in birth rates, a slight improvement in death rates, and a relatively stable migration pattern through 2035. The intermediate projection of growth for Waukesha County is slightly higher than projections developed by the Wisconsin Department of Administration. At the community level it is more difficult to project future population growth, demographic trends, or domestic migration or movement from one community to another. This last variable is influenced by age, marriage, income, housing availability, and percentage of renters vs. homeowners. Between 1995 and 2000, over 66,000 Waukesha County residents moved to different houses within communities in the County. As a result, the projections for communities are a best projection guess, but may end up being quite different at the community level 30 years into the future.

Population Projections for Waukesha County and the Greater Eagle Area

The projected population for the Waukesha County planning analysis area in 2035, is 446,768 persons. This is a projected increase of 86,000 persons, or about 23.8 %, over the 2000 population level of 360,800. Existing and projected population, households and job totals for planning analysis areas are set forth in Table 2-8 and Table 2-9, and presented on the planning area Map 2-2. More detailed discussion regarding employment and other economic trends are presented in Chapter 6. Based on projected population growth in the urban areas of the “Greater Eagle Area” there are no public sewer services proposed for the period ending in 2035.

Table 2-8

POPULATION PROJECTIONS FOR COMMUNITIES IN THE GREATER EAGLE AREA: 2010-2035

Community	2010	2015	2020	2025	2030	2035
Town of Eagle	3,817	4,138	4,451	4,793	5,156	5,554
Town of Mukwonago	7,631	7,989	8,346	8,765	9,153	9,571
Town of Ottawa	4,057	4,191	4,327	4,497	4,641	4,795
Village of Eagle	1,912	2,005	2,097	2,205	2,306	2,414
Village of Mukwonago	6,839	7,131	7,422	7,770	8,084	8,423
Village of North Prairie	1,900	2,048	2,193	2,353	2,520	2,702
Waukesha County (Total)	386,460	397,922	409,570	424,472	436,986	446,768

Source: Wisconsin Department of Administration

Note: The projections for years 2030 and 2035 were made with simple trend extrapolation techniques by the University of Wisconsin Applied Population Laboratory. These projections are built upon the Wisconsin Department of Administration’s Demographic Services Center’s population projections for municipalities (through 2025) and for counties (through 2030).

Table 2-9

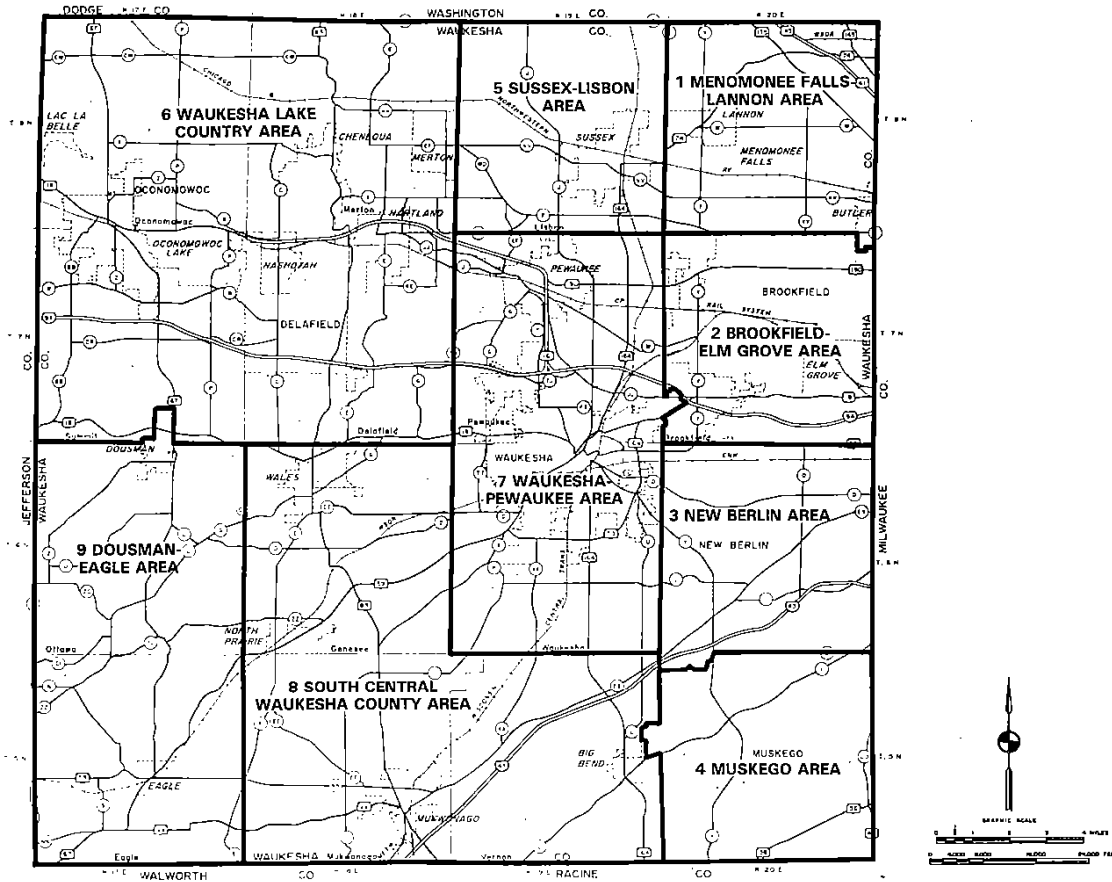
EXISTING 2000 AND PLANNED 2035 POPULATION, HOUSEHOLDS AND EMPLOYMENT BY WAUKESHA COUNTY PLANNING AREA

County and Planning Analysis Area (See Map 2-2)	Population				Households				Jobs			
	Existing 2000	Planned Increment: 2000 - 2035		Total 2035	Existing 2000	Planned Increment: 2000 - 2035		Total 2035	Existing 2000	Planned Increment: 2000 - 2035		Total 2035
		Number	Percent			Number	Percent			Number	Percent	
Waukesha												
1	35,500	9,200	25.9	44,700	14,200	4,300	30.3	18,500	43,800	9,800	22.4	53,600
2	50,900	6,300	12.4	57,200	19,000	3,200	16.8	22,200	58,500	6,500	11.1	65,000
3	38,200	7,200	18.8	45,400	14,500	3,400	23.4	17,900	27,000	7,400	27.4	34,400
4	21,400	9,400	43.9	30,800	7,500	3,800	50.7	11,300	7,400	1,300	17.6	8,700
5	18,400	7,200	39.1	25,600	6,600	3,100	47.0	9,700	9,300	4,300	46.2	13,600
6	59,400	16,300	27.4	75,700	21,800	7,100	32.6	28,900	31,500	13,400	42.5	44,900
7	93,800	20,500	21.9	114,300	36,800	9,600	26.1	46,400	78,900	10,400	13.2	89,300
8	32,900	7,300	22.2	40,200	11,200	3,200	28.6	14,400	11,500	7,800	67.8	19,300
9	10,300	2,600	25.2	12,900	3,600	1,200	33.3	4,800	2,900	2,000	69.0	4,900
Total	360,800	86,000	23.8	446,800	135,200	38,900	28.8	174,100	270,800	62,900	23.2	333,700

Source: SEWRPC. All figures rounded to the nearest hundred

Map 2-2

WAUKESHA COUNTY PLANNING AREAS



Source: SEWRPC.

Land Use Inventory

SEWRPC land use inventory is intended to serve as a relatively precise record of land use at selected points in time. The land use classification system used in the inventory consists of nine major categories which are divisible into 66 sub-categories, making the inventory suitable for both land use and transportation planning, adaptable to storm water drainage, public utility, and community facility planning, and compatible with other land use classification systems. Aerial photographs serve as the primary basis for identifying existing land use, augmented by field surveys as appropriate.

The first regional land use inventory was prepared by SEWRPC in 1963 and has been updated periodically, with the most recent inventory prepared using aerial photographs taken in spring of 2000. As part of the year 2000 land use inventory, the delineation of existing land use was referenced to real property boundary information, increasing the precision of the land use inventory and making it more useable to public agencies and private interests. However, year 2000 land use inventory data are not strictly comparable with data from the 1990 and prior inventories. The data remains suitable for denoting general land use trends. The results of the year 2000 land use inventory are presented along with the results of prior land use inventories in Table 2-10.

Table 2-10

LAND USE ACRES FOR VILLAGE OF EAGLE: 1963-2000

Land Use Category ^a	1963	1970	1980	1990	2000
Urban:					
Residential	121.0	123.7	209.6	222.3	288.8
Commercial	5.5	5.5	5.7	5.3	4.8
Industrial	2.1	2.1	1.1	5.5	22.9
Transportation, Communication, and Utilities	53.6	55.5	70.4	76.2	110.2
Governmental and Institutional	19.2	19.2	19.1	24.2	30.0
Recreational	13.5	30.0	30.0	30.0	31.5
Subtotal Urban	214.9	236.0	335.9	363.5	488.2
Non-urban:					
Agricultural	518.3	502.1	422.5	370.1	185.6
Unused and Other Open Lands	28.6	23.5	11.8	36.6	96.4
Natural Areas – Surface Water	0.0	0.0	0.0	0.0	0.0
Natural Areas – Wetlands	10.6	10.6	1.8	1.8	1.5
Natural Areas – Woodlands	3.2	3.3	3.3	3.3	3.8
Subtotal Non-Urban	560.7	539.5	439.4	411.8	287.3
Total	775.6	775.5	775.3	775.3	775.5

Note: As part of the regional land use inventory for the year 2000, the delineation of existing land use was referenced to real property boundary information, which was not available for the 1990 and prior inventories. This change increases the precision of the land use inventory and makes it more useable to public agencies and private interests. As a result of the change, however, year 2000 land use inventory data are not strictly comparable with data from the 1990 and prior inventories. The most significant effect of the change is to increase the transportation, communication, and utilities category—as a result of using actual street and highway rights-of-way as part of the 2000 land use inventory, as opposed to the use of narrower estimated rights-of-way in prior inventories.

Land Use Change: 1963-2000

Residential development was responsible for the most significant land use change within Village since 1963. Over 167 acres of land was converted to residential use as the Village gained over 334 households between 1970, and 2000. Agricultural lands experienced the greatest loss of any land use within the Village between 1963 and 2000. Nearly 333 acres of agricultural lands were converted to other land uses.

NATURAL RESOURCES

Groundwater Supply

The importance of groundwater as a source of water supply in Waukesha County and Southeastern Wisconsin can be shown by analyzing water-use data. In Waukesha County, nearly all of the water supply has historically been obtained from the groundwater system. Groundwater use and total water use in Waukesha County have risen steadily since 1985, increasing by about 36 % over the period 1985 to 2000.

Recharge to groundwater is derived almost entirely from precipitation and from private waste water systems. Much of the groundwater in shallow aquifers originates from precipitation that has fallen and infiltrated within a radius of about 20 or more miles from where it is found. On the average, precipitation annually brings about 32 inches of water to the surface area of the county. It is estimated that approximately 80 % of that total is lost by evapo-transpiration. Of the remaining water, part runs off in streams and part becomes groundwater. It is likely that the average annual groundwater recharge to shallow aquifers is 10 to 15 % of annual precipitation.

To document the utilization of the shallow aquifers in the county, it may be assumed, for example, that, on the average, 10 % of the annual precipitation reaches groundwater. So, the average groundwater recharge in the County would be about 88 million gallons per day (mgd). The estimated daily use of groundwater for the County in 2000 was about 38 mgd, which is about 43 % of the total amount of groundwater assumed to be recharged in a given year.

This indicates that there is an adequate annual groundwater recharge to satisfy water demands on the shallow aquifer system in Waukesha County on a countywide basis. However, the availability on a localized area basis will vary depending upon usage, pumping system configuration, and groundwater flow patterns. However, the situation is different for the deep aquifers where withdrawals of groundwater cause supply/demand imbalance in areas of concentrated use of groundwater.

Surface Water Resources

The Village of Eagle has no significant areas of surface water. However, the adjacent Town has two lakes that comprise approximately 347 acres. Eagle Spring Lake in the southeast corner of the township is 311 acres and includes 9 small islands. Beaver Dam Lake in the northwest corner of the township is 36 acres in area. Surface water within the northern section of the Town of Eagle drains into the first 7 miles of the Scuppernong River, which is a tributary to the Bark River in Jefferson County. The remaining surface water drains into Jericho creek which is a tributary for the Mukwonago and Fox Rivers. The Bark, Fox and Rock Watersheds are all west of the sub-continental divide and drain west into the Mississippi River basin.

Planning History of the Village of Eagle

For over two decades the Village has shown a commitment to planning. A Land Use Plan for the Village of Eagle: 2000 was completed in September 1983. In 1998 a Water System Master plan that included a detailed analysis of future population growth and land use was completed. And on March 22, 2001 a Visioning workshop was held at the Village Hall from 6:30 to 10:30 p.m. to gain citizen input on an up-date to the Village Comprehensive Plan. Based on the citizen participation 19 issues and opportunities were discussed, which later led to the establishment of 12 general Goal statements. The resulting document, "Year 2021 Comprehensive Plan for the Village of Eagle" created by Ruckert/Mielke addresses a majority of the Smart Growth Law requirements. Because of this Plan document much of the background research has already been completed.

In order to fully comply with the new Comprehensive Planning Law (Wisconsin Statutes: ss 66.025) the Village of Eagle is required to up-date its comprehensive plan to address issues and elements including: land use, housing, economics development, agricultural, natural and cultural resources, transportation, utilities and community facilities, inter-governmental cooperation, and implementation. The Village therefore created, distributed, and compiled the results of a new survey in 2007. The survey loosely based on the survey sent out to other communities by Waukesha County in 2006, assessed the Village citizen's attitudes and opinions on long-range growth and development issues. It was the intent that the survey would also contribute to, and be part of, the public involvement process for the Village's Comprehensive Plan, and would aid in establishment of goals and objectives for the Village.

Survey Results

The survey was designed to provide the decision makers of the Village of Eagle with accurate, up-to-date information regarding the views of the Village residents regarding planning issues. The Village questionnaires were mailed to 694 households in the Village of Eagle, in October of 2007. A total of 134 questionnaires were returned, for a response rate of 19.3%. The estimates provided in the Village summary report were expected to be accurate within a $\pm 4.9\%$ with a 95% confidence. A summary of the Village survey results follows.

Quality of Life

The questionnaire indicated that issues such as the recycling and garbage collection, low crime rate, and available emergency services had the highest percentage of satisfaction. Issues concerning the natural environment and open space, rural atmosphere, and water quantity & quality were also ranked above 60% satisfaction. It is assumed that these areas were the top three reasons that people choose to live in Waukesha County and in the Village of Eagle. Furthermore, 35.0% of the Village of Eagle residents said that the quality of life had declined during the last 5 to 10 years, 17.1% said it had improved, and 25.3% believe it had not changed. Village residents were most dissatisfied with the amount of Shopping Opportunities (64%), lack of Planning and Zoning (31%) and Employment Opportunities (28%). Items listed as having the greatest impact on the Village included Land Development (25%), followed closely by Available Shopping at (19%). The survey did not determine if the impacts added to improving or declining the quality of life, but by cross-referencing answers it was apparent that a lack of retail opportunity had a negative impact.

Agricultural, Natural, and Cultural Resources

The Village has no available agricultural lands. However, maintaining natural environment/open space had a 74% satisfaction rating, rural character of the area (69%), and maintaining water quality of lakes and streams (60%) were considered very important in maintaining the quality of life. The Village survey did not address protection of natural resources cultural resources, or farmlands. But this sentiment came out during the Village's later listening session.

Community Services and Facilities

When Village residents were asked about performance of services, solid waste management "garbage collection"(85%) and library services (80%) were rated "excellent" or "good". The recycling program (74%), police protection (73%), and park and recreation facilities (72%) were also rated high. Satisfaction with current Planning and Zoning practices rated the lowest of 14 services with 23 % rating it as "excellent" or "good" while 20% rated it "poor" or "very poor".

Housing

When given County growth data, 43% of the residents thought the rate of growth was about right, 53% thought too much development had occurred, and 3% said there was too little. A majority of the Village residents (58%) "agreed" or "strongly agreed" that the County needs more housing for senior citizens, while 28 % supported owner-occupied single-family housing, and 27% supported a need for affordable housing. An overwhelming majority of Village residents (82%) believed homeowners should be allowed to make modifications to existing dwellings to enable elderly or disabled relatives to live with them. In terms of lot size 37% preferred larger lots, while 43% preferred a mix of large and small lots within the Village.

Economic Development

Village residents rated their satisfaction with various types of businesses, and ranked the 3 most important future businesses for the Village. Residents were most satisfied with recreational services (40%), industrial (34%), and medical services (33%). However, the question left some doubt as to whether the satisfaction was for the current businesses or the encouragement of additional businesses. Clearly 71% of the respondents favored business retention.

Transportation

This component was evaluated separately. However, under community services snow removal was considered excellent or good by (66%) of the respondents. When evaluated under "Quality of Life" (44%) were satisfied with the roads and traffic, while only 28% were dissatisfied. This survey did not address the desire for more biking and walking trails, but citizens did comment favorable on the need for this during the visioning session.

Land Use

This component was addressed in combination with other elements, but no specific questions regarding land use were asked.

Overall, the Village's survey which was conducted in 2007, reinforced the Village's Smart Growth Listening Session meeting in 2008, as the residents continued to support the retention and protection of the rural atmosphere, preserving the natural resources such as water quality for lakes and streams, and ground water. The Village's survey indicated that 31% were dissatisfied with the amount of development with 25% indicating it lead to a decline in the quality of life. There was an underlying feeling that development was occurring too quickly without following a well established plan, or proper zoning standards.

At the Village's Smart Growth Listening Session meeting which was conducted in September 2007 issues that were discussed as strengths and weaknesses by the citizens were as follows;

Strengths:

- 1) Garbage collection services
- 2) Low crime and good emergency service
- 3) Natural environment/open space & park and recreation availability
- 4) Nice rural atmosphere
- 5) Ample water supply and high quality lakes and streams

Weaknesses:

- 1) Lack of shopping opportunity
- 2) Land Use Planning and Zoning
- 3) Lack of employment opportunity
- 4) Poor road conditions or ineffective traffic patterns
- 5) Lack of locally available medical services

After analyzing the two surveys and the comments at the Village's Smart Growth Listening Session meeting, it is felt that many of the major directives of the current Land Use Plan will continue and be consistent with the objectives of the updated Waukesha County Development Plan and the 2035 Regional Land Use Plan which is discussed in Chapter 3.