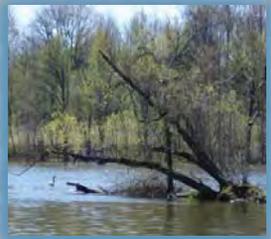


**OUTAGAMIE COUNTY**



# *Outagamie County Comprehensive Plan*



*...A look to the future...*

**DRAFT**

## **Outagamie County Comprehensive Plan**

September 2007

Prepared By:  
Outagamie County Planning Department  
410 S. Walnut Street  
Appleton, WI 54911

**DRAFT**

## Outagamie County Comprehensive Plan

September 2007

### Table of Contents

<u>Chapter</u>	<u>Page</u>
1. Issues and Opportunities	1
2. Agricultural, Natural, and Cultural Resources	23
3. Economic Development	77
4. Housing	101
5. Transportation	121
6. Utilities and Community Facilities	159
7. Land Use	181
8. Intergovernmental Cooperation	197
9. Implementation	203
<u>Appendices</u>	
A. Public Input Session Summary – 2004	
B. Community Survey Summary	
C. Public Input Sessions Summary – 2007	

## Outagamie County Comprehensive Plan

May 2007

### Table of Exhibits

<u>Chapter</u>	<u>Page</u>
1. Issues and Opportunities	
1. Outagamie County Population Trends	4
2. Outagamie County Population By Age Group	5
3. Outagamie County Population by Race	6
4. Outagamie County Education Attainment	7
5. Outagamie County Civilian Labor Force	7
6. Outagamie County Employment by Industrial Group	8
7. Outagamie County Top Ten Industry Groups	9
8. Outagamie County Top Ten Employers	10
9. Average Annual Wages by Industry Division	11
10. Income Trends	11
11. Outagamie County Population Projections by Age	12
12. Outagamie County Population Projections by Age	13
13. Outagamie County Components of Population Change	14
14. Outagamie County Population Projections by Age Groups	14
15. Outagamie County Housing Projections	15
16. Outagamie County Labor Force Projections	17
2. Agricultural, Natural, and Cultural Resources	
1. Outagamie County Agricultural Acreage	24
2. Prime Agricultural Soils Map	27
3. Outagamie County Land Use Acreages	28
4. Prime Agricultural Soils-Development Map	29
5. 2000 Agricultural Use Map	31
6. Outagamie County Lake Inventory	36
7. Outagamie County Stream Inventory	37
8. Outagamie County Streams-Drainage Divides	41
9. DNR Wetlands Map	43
10. FEMA Floodplain Map	45
11. Forests/Woodlands Map	47
12. Rare, Threatened & Endangered Species	49
13. Threatened & Endangered Species Map	50
14. Generalized Soils Map	53
15. Non-Metallic Mining Map	54

Table of Exhibits – Continued

16. Existing Park and Recreational Acreage	61
17. Recreational Resources Map	62
18. Official Historical Markers	66
19. National Register of Historic Places	67
20. Geological Resources	69
21. Ecological Resources	70
22. Public Museum Map	71
3. Economic Development	
1. Outagamie County Population Trends	79
2. Outagamie County Population by Race	79
3. Outagamie County Population By Age Group	79
4. Outagamie County Population Projections by Age Group	80
5. Outagamie County Employment by Industrial Group	81
6. Outagamie County Education Attainment	81
7. Income Trends	82
8. Outagamie County Top Ten Industry Groups	83
9. Outagamie County Top Ten Employers	83
10. Average Annual Wages by Industry Division	84
11. Industrial-Business Parks Map	90
12. Business-Industrial Parks Characteristics	91
4. Housing	
1. Outagamie County Housing Occupancy – 2000	102
2. Outagamie County Housing Units by Units in Structure	103
3. Outagamie County Housing by Year Built	103
4. Outagamie County Housing Values – 2000	104
5. Owner-Occupied Homes Sales – 2004	105
6. Outagamie County Housing Projections	106
7. Outagamie County Housing Projections by Structure	107
8. Projections Job Openings, Wisconsin 2000-2010	108
9. Outagamie County Poverty Status – 1999	109
10. Conventional/Conservation Subdivision Graphic	113
5. Transportation	
1. Highway Functional Classification Map	125
2. Outagamie County Accident Summary 2002-2004	126
3. Average Daily Traffic Counts – Selected Highways	127
4. Valley Transit System Fixed Routes Map	129
5. Fox Cities Trails Map	135
6. Outagamie County Trails Map	136

Table of Exhibits – Continued

7. Regional Trails Map	137
8. DOT Highway Improvement Plan Map	139
9. Outagamie County Rustic Roads	141
10. DOT Park & Ride Locations Map	142
11. Access Controlled Roadways Map	143
12. Fox Cities Area-Outagamie County Candidate Projects	145
13. Outagamie County Capital Improvement Program	152
14. Outagamie County Regional Airport CIP Summary	155
6. Utilities and Community Facilities	
1. Outagamie County Sanitary Permit Trends 2000-2004	162
2. Emergency Areas Map	169
3. Public Education Comparisons	171
4. Outagamie County School Districts	172
5. Libraries and Schools Map	174
6. County Facility Locations Map	177
7. Outagamie County Facility Index	178
7. Land Use	
1. Outagamie County Land Use Acreages	178
2. Land Use Acreage Breakdown	183
3. Projected Population Growth by Tier Map	184
4. Agricultural Land Values	185
5. Existing Land Use Map	191
6. Future Land Use Map	192

## 1. ISSUES AND OPPORTUNITIES

### Introduction

Outagamie County is located in the Eastern Ridges of Wisconsin, bounded by Waupaca County on the west, Waupaca and Shawano counties to the north, Brown County on the east and on the south by Calumet and Winnebago counties. It covers approximately 640 square miles and is comprised of twenty civil towns and all or part of fourteen incorporated communities. Appleton, located along the Fox River in the southern portion of the County, is the largest city and county seat. The Fox River Valley is the focal point for much of the County's population, commerce and industry.

### History

Outagamie County was once the hunting and fishing grounds of the Winnebago and Menominee Indian tribes. The Outagamie Indian tribe moved into the area after 1650 and it is from this tribe that the County derived its name. Most of the early French explorers, missionaries and fur traders who came to eastern Wisconsin, passed through this area as it is located on the Fox River-Lake Winnebago waterway. The earliest of these was Jean Nicolet, who traveled through in 1634 on his way to visit the Native Americans at Lake Winnebago.

In 1821, a delegation of Oneida Indians from New York met with representatives of the Menominee and Ho-Chunk (Winnebago) Nations to negotiate the sale of fertile open lands along the western Great Lakes. As a result, the Oneidas purchased a large section of land in a territory that would soon become Wisconsin. Led by Eleazor Williams and Chief Daniel Bread, the first movement of Oneidas to Wisconsin settled in what is now the Grand Chute and Kaukauna area. One year later a second group arrived and settled along the southern area of the Duck Creek. The present boundaries of the Oneida Reservation were established by treaty with the federal government in 1838.

The first settler was Dominique DuCharme. DuCharme established a trading post on the bank of the Fox River between 1760 and 1793. The first permanent settlement is credited to Augustin Grignon, who settled at Grand Kaukaulin (a.k.a. Kaukauna) in 1813. The permanent Grignon establishment included the DuCharme trading post. The early settlers primarily came directly from France, Germany, Holland and Ireland. Others migrated to this area after living in the New England area. Between 1840 and 1860, many new immigrants came to form new settlements and to farm. The present Outagamie County was detached from Brown County. It officially was recognized as a county on February 17, 1851. The population at that time was approximately 4,000.

Much of the County away from the Fox River was opened by the logging industry, with larger logging operations going into business in the early 1860s. The accessibility of rivers, such as the Wolf and Embarrass was extremely important to this industry. These water resources were utilized for both transportation (floating the logs downstream) and energy (operating the sawmills).

In 1855, Louis Perrot arrived in this new county. He is known as the father of the cheese-making industry, which was the forerunner of today's dairy industry. The agricultural development was significantly changed with the addition of dairying. The earliest reported farming activities in this area are credited to the Stockbridge and Munsee Indian tribes. Records indicate that they were raising potatoes, corn and small grain in the 1830's.

Logging and farming were not the only activities taking place in the early development of Outagamie County. The rivers, especially the Fox River, were natural locations for the establishment of sawmills, flourmills and eventually paper mills. The Fox River has an elevation drop of 170 feet from Lake Winnebago to Green Bay, with 150 feet of that drop occurring in Outagamie County. This drop provided an excellent source of hydroelectric power. Augustin

Grignon built a sawmill in 1818. A flourmill was built across the river from Grignon's mill in 1828. During the 1850s, the flour industry began to flourish and moved to Minneapolis. The local mills were converted to pulp and paper mills, with the first paper mill established in Appleton around 1853.

Early settlements, like Grignon's, were developed in and around the trading posts, lumber camps and missions. In 1853, the County had its first incorporated community, the Village of Appleton. Although the oldest settlement was in Kaukauna, it did not incorporate until 1885. The population of the County by this time was approximately 30,000. The incorporation of the remaining cities and villages in the County continued with the last occurring in 1967 (Nichols).

Population Characteristics

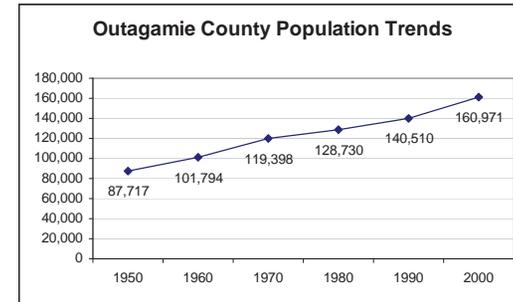
Outagamie County had an estimated 2003 population of 167,272, which was a four percent increase from the 2000 census figure of 160,971. It is the sixth largest county in the State in terms of population. The overall population density averages out to just over 260 persons per square mile. The Fox Cities region encompasses the southeastern portion of the County and it contains the majority of population. It is estimated that this region contains a population of 127,901 or 76 percent of the County's total population. The Fox Cities covers roughly 118 square miles (18 percent of the total) and has an overall population density of just over 1,080 persons per square mile. The communities included within the Fox Cities include the towns of Buchanan, Grand Chute, Greenville and Vandenbroek, as well as the municipalities of Appleton, Combined Locks, Kaukauna, Kimberly and Little Chute.

Exhibit 1-1 depicts the County's population changes from 1950 to 2000. The population grew by nearly 25 percent during the 1950s. This was a decade of urban expansion as approximately 94 percent of the total growth occurred within cities and villages. The 1960s marked the beginning of rapid population growth in the towns, with Greenville, Vandenbroek, Freedom and Grand Chute all

experiencing growth rates of 40 percent or better. The rural non-farm population increased by 60 percent during this period. Rates of growth slowed during the 1970s to 8 percent, yet the rural growth still outpaced the urban growth. By 1980, the rural non-farm population comprised over 80 percent of the rural population. Grand Chute and Buchanan were the growth rate leaders between 1980 and 1990. Both grew by more than 40 percent. The Fox Cities region of the County increased by nearly 10,000 persons over this time span. From 1990 to 2000, nearly 70 percent of the population increase occurred within the unincorporated areas of the County, led by Grand Chute (+3,902), Buchanan (+3,343) and Greenville (+3,038).

EXHIBIT 1-1  
OUTAGAMIE COUNTY POPULATION TRENDS

Census	Population	Percent Change
1950	87,717	N. A.
1960	101,794	24.6%
1970	119,398	17.3%
1980	128,730	7.8%
1990	140,510	9.2%
2000	160,971	14.6%



Source: U.S. Census Bureau, 1950 – 2000.

While the population of Outagamie County has been growing steadily, it has also been growing older. Exhibit 1-2 outlines the County's population by age group from the last four census periods. The figures clearly show little or no growth in the younger age groupings (less than 24 years of age), while the age groups 35 years of age and older growing significantly. Two age groups in particular (45-54 and 60-64) experienced greater than 50 percent growth over the past decade. The aging of the population is also indicated in the median age for the County, which has increased by over ten years since 1970.

**EXHIBIT 1-2  
OUTAGAMIE COUNTY POPULATION  
BY AGE GROUP**

AGE GROUP	CENSUS				PERCENT CHANGE		
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
0-4	11,620	10,795	11,455	11,124	-7.10%	6.11%	-2.89%
5-9	14,587	10,034	11,652	12,567	-31.21%	16.13%	7.85%
10-14	14,312	11,727	10,905	13,093	-18.06%	-7.01%	20.06%
15-19	12,333	14,065	9,818	12,220	14.04%	-30.20%	24.47%
20-24	8,960	12,185	10,036	9,816	35.99%	-17.64%	-2.19%
25-34	14,041	20,826	25,586	23,161	48.32%	22.86%	-9.48%
35-44	12,460	14,032	21,148	28,113	12.62%	50.71%	32.93%
45-54	11,608	11,855	13,565	20,924	2.13%	14.42%	54.25%
55-59	5,038	5,639	5,353	7,087	11.93%	-5.07%	32.39%
60-64	4,259	4,786	5,337	5,281	12.37%	11.51%	-1.05%
65-74	6,194	7,581	8,594	8,926	22.39%	13.36%	3.86%
75-84	3,114	4,031	5,308	6,297	29.45%	31.68%	18.63%
85+	830	1,174	1,753	2,362	41.45%	49.32%	34.74%
<b>TOTAL</b>	<b>119,356</b>	<b>128,730</b>	<b>140,510</b>	<b>160,971</b>	<b>7.85%</b>	<b>9.15%</b>	<b>14.56%</b>
<b>MEDIAN</b>	<b>23.8</b>	<b>27.4</b>	<b>31.4</b>	<b>34.4</b>	<b>15.13%</b>	<b>14.60%</b>	<b>9.55%</b>

The continued aging of the population will present long-term challenges throughout the twenty-year planning period of this document. As the baby boom generation (generally persons born from 1946 through 1965) nears retirement, demands on programs, such as Social Security and Medicare, will be increased. Additionally, as this generation leaves the workforce, there may not be an equivalent population entering the labor force. This may pose problems for segments of the economy.

The racial composition of Outagamie County has gotten more diverse with each census that is taken. Exhibit 1-3 depicts the racial makeup of the County over the last three census periods. While the population continues to be predominantly white, that percentage has declined with each census. From 1980 to 2000, the Black population has increased 1,300 percent, the Native American population has increased 50 percent, the Asian population has increased 900 percent, the segment of the population classified as Other increased 350 percent and the Hispanic population increased 370 percent.

**EXHIBIT 1-3  
OUTAGAMIE COUNTY POPULATION BY RACE**

CENSUS	WHITE	BLACK	NATIVE AMERICAN	ASIAN	OTHER	HISPANIC	TOTAL
1980	126,047	62	1,617	351	652	680	128,730
% of Total	97.9%	0.0%	1.3%	0.3%	0.5%	0.5%	100%
1990	136,043	206	1,965	1,904	392	987	140,510
% of Total	96.8%	0.1%	1.4%	1.4%	0.3%	0.7%	100%
2000	151,101	867	2,471	3,595	2,937	3,207	160,971
% of Total	93.9%	0.5%	1.5%	2.2%	1.8%	2.0%	100%

NOTE: Persons of Hispanic origin may be of any race.

Employment Characteristics

The educational attainment levels for Outagamie County are highlighted in exhibit 1-4. That table illustrates the changes in the education levels from the past three census periods. In 1980, 27 percent of the population 25 years of age and older did not have a high school diploma, while by 2000, only 12 percent fell into this category. At the other extreme, 26 percent of this age group attended college in 1980, while in 2000 that figure rose to 50 percent. Generally speaking, a high level of education equates to a labor force with higher skills. The attainment of higher skills often results in a higher earning potential.

EXHIBIT 1-4  
**OUTAGAMIE COUNTY - EDUCATION ATTAINMENT**

	1980	1990	2000
(Population 25 years and older)	69,922	86,689	102,218
Elementary (0-8 years)	12,167	7,874	4,834
High School (no diploma)	7,187	8,135	7,296
High School graduate	32,067	37,028	38,594
College (no degree)	9,179	19,180	19,516
College graduate (Associate degree or higher)	9,322	14,472	31,978

The Outagamie County labor force participation from 1996 to 2001 is illustrated in exhibit 1-5. The labor force is defined as the sum of those employed and unemployed that have actively sought work in the last month. Labor force eligible must be 16 years of age or older and not a member of an institutional population, such as a prison or an armed forces member living on a military base. The term unemployed does not necessarily include all people who are not working. For example, those who are retired or choose not to work are not considered unemployed.

EXHIBIT 1-5  
**OUTAGAMIE COUNTY – CIVILIAN LABOR FORCE**

	1996	1997	1998	1999	2000	2001
Labor Force	100,000	100,800	101,500	99,800	102,300	104,300
Employed	97,100	97,800	98,700	97,300	99,600	100,400
Unemployed	2,850	3,070	2,800	2,490	2,710	3,910
Unemployment Rate	2.9%	3.0%	2.8%	2.5%	2.7%	3.7%

Source: WI Department of Workforce Development, Local Area Unemployment Statistics, March 2002.

The Outagamie County labor force participation rate in 2001 was 85.8 percent, an increase of 0.6 percent over 2000. In comparison, the state's labor force participation rate for 2001 was 73.5 percent, while the nation's was reported to be 66.9 percent.

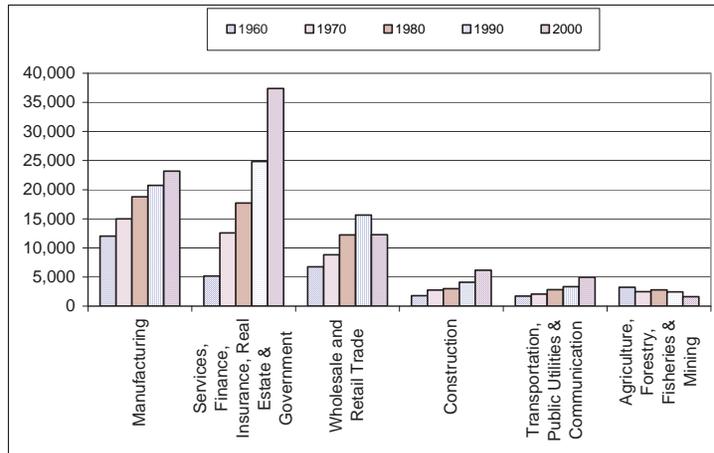
One of the trends that appear within the labor force data is the increased participation by the females of the County. In 1950, approximately 30 percent of the County's females were in the labor force. By 2000, that figure had increased to 80 percent of the female population 16 years of age or older. During that

same time span, the male labor force participation rate remained fairly constant at 80 percent, with the exception of the past decade. From 1990 to 2000, male participation in the labor force decreased to just fewer than 70 percent. The disparity between male and female labor force participation over the past decade can be attributed primarily to increasing industry diversification in the County's economy, with growth moving away from traditional, male-dominated industries, such as manufacturing.

Where the labor force is employed is shown in exhibit 1-6 in both tabular and chart format. Changes in the industry employment in Outagamie County over decades have been similar to trends occurring across the state and nation. The industry group that has been most affected has been manufacturing. Employment in manufacturing was nearly 40 percent of all the employment in 1960. By 2000, it had decreased to 27 percent. Employment within the manufacturing sector increased each decade, but not as fast as most of the other sectors. Although still a mainstay of the Outagamie County economy, manufacturing has been surpassed by the service sector as the primary employer, making up 44 percent of the total employment by 2000.

EXHIBIT 1-6  
**Employment By Industrial Group - Outagamie County**

Industrial Group	1960	1970	1980	1990	2000
Manufacturing	12,013	14,988	18,781	20,755	23,197
Services, Finance, Insurance, Real Estate & Government	5,179	12,592	17,699	24,855	37,366
Wholesale and Retail Trade	6,766	8,830	12,237	15,644	12,271
Construction	1,775	2,744	3,008	4,106	6,171
Transportation, Public Utilities & Communication	1,726	2,057	2,819	3,331	4,955
Agriculture, Forestry, Fisheries & Mining	3,253	2,469	2,789	2,439	1,636
Total Employment-Persons 16+ years old.	30,712	43,680	57,333	71,130	85,596



Source: U.S. Census Bureau, 1960 – 2000.

This shift from a manufacturing based economy is also evident in the top ten industry groups that are illustrated in exhibit 1-7. Health Services, Educational Services, and Eating & Drinking Places are the top three groups. All three could be considered “non-traditional.” In fact, only three (paper & allied products, food & kindred products, and industrial machinery & equipment) of the top ten could be considered traditional manufacturing.

**EXHIBIT 1-7  
OUTAGAMIE COUNTY – TOP TEN INDUSTRY GROUPS**

Industry Group	March 2001		Numeric Change	
	Employers	Employees	1-Year	5-Year
Health Services	218	6,876	1,090	1,129
Education Services	30	6,572	279	1,051
Eating & Drinking Establishments	248	5,821	262	-272
Paper & Allied Products	29	5,744	-88	-90
Special Trade Contractors	393	5,657	279	2,101
Business Services	218	5,563	-478	934
Food & Kindred Products	26	4,877	-15	792
Industrial Machinery & Equip.	73	4,036	-77	164
Wholesale Trade-Durable Goods	233	3,508	18	523
General Merchandise Stores	17	3,247	505	778

Source: Wisconsin Department of Workforce Development, ES-202 file tape, March 2001.

The shift from traditional manufacturing to a more service-based economy is also evident in the list of top employers, as outlined in exhibit 1-8.

**EXHIBIT 1-8  
OUTAGAMIE COUNTY – TOP TEN EMPLOYERS**

Company	Product or Service	Size
Thedacare, Inc.	General Medical and Surgical Hospitals	1,000 +
Appleton Area School District	Public School System	1,000+
Thrivent Insurance	Insurance Services	1,000+
Appleton Papers, Inc.	Coated Paper Manufacturing	1,000+
Sara Lee Corporation	Meat Production	1,000+
Fox Valley Technical College	Technical College System	1,000+
Wal-Mart Associates, Inc.	Discount Department Stores	1,000+
County of Outagamie	Executive & Legislative offices	1,000+
Miller Electric Manufacturing	Welding Machine Manufacturing	1,000+
St. Elizabeth Hospital, Inc.	General Medical & Surgical Hospital	1,000+

Source: Wisconsin Department of Workforce Development, Outagamie County Workforce Profile, January 2004.

Sixteen percent of the resident workforce is employed by one of the ten largest employers and 51 percent of the workforce is employed by one of the ten largest sectors.

Wages and Income

Wages paid by employers in the County is another vital facet of the economy. In 2001, the average annual wage paid by employers in Outagamie County was \$31,707, which is 2.5 percent higher than the state average. While the County average is lower than Winnebago County’s average of \$34,586, the disparity among various industry sectors is much less in Outagamie County. This indicates a greater degree of stability in wage structures. Average annual wages by industry are shown in exhibit 1-9.

**EXHIBIT 1-9  
AVERAGE ANNUAL WAGE BY INDUSTRY DIVISION**

	<b>Outagamie County Annual Average Wage</b>	<b>Wisconsin Annual Average Wage</b>	<b>Percent of State Average</b>
All Industries*	\$31,707	\$30,922	102.5%
Agriculture, Forestry & Fishing	\$23,144	\$22,565	102.6%
Construction	\$41,132	\$39,011	105.4%
Manufacturing	\$41,291	\$39,739	103.9%
Transportation, Communications & Utilities	\$36,763	\$36,639	100.3%
Wholesale Trade	\$37,136	\$40,521	91.6%
Retail Trade	\$15,748	\$14,596	107.9%
Finance, Insurance & Real Estate	\$42,894	\$40,933	104.8%
Services	\$27,694	\$28,775	96.2%
Total Government	\$32,959	\$33,785	97.6%

\* Mining excluded from table since wages were suppressed to maintain confidentiality.  
Source: Wis. Department of Workforce Development, *Employment, Wages and Taxes Due by Wisconsin's Unemployment Compensation Law*, 2002.

Income is another factor that provides an indication of the County's economic health. Average incomes for Outagamie County have been consistently higher than the state averages, as illustrated in exhibit 1-10, which suggests a relative level of prosperity, at least as compared to the state. Household income includes the income of the householder and all other persons 15 years old and older in the household, whether related to the householder or not. Family income is the summation of the income of the householder and all members of the family that are 15 years old or older.

**EXHIBIT 1-10  
INCOME TRENDS**

		<b>Outagamie County</b>	<b>Wisconsin</b>	<b>Percent of State Income</b>
1980	Median Household	\$19,418	\$17,680	109.8%
	Median Family	\$21,838	\$20,915	104.4%
	Per Capita	\$7,269	\$7,243	100.4%
1990	Median Household	\$33,770	\$29,442	114.7%
	Median Family	\$38,286	\$35,082	109.1%
	Per Capita	\$13,893	\$13,276	104.6%
2000	Median Household	\$49,613	\$43,791	113.3%
	Median Family	\$57,464	\$52,911	108.6%
	Per Capita	\$21,943	\$21,271	103.2%

Source: U.S. Census Bureau, 1980-2000.

Population Forecasts

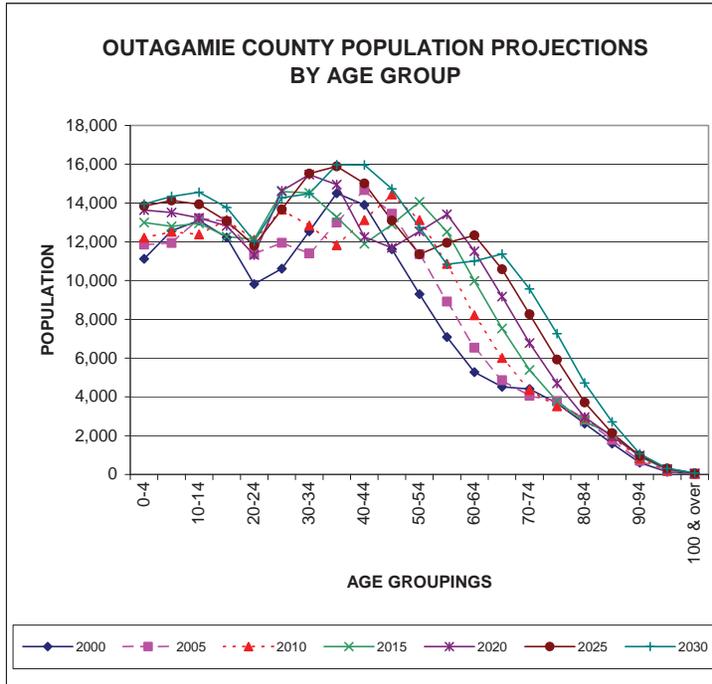
Recent population projections prepared by the Wisconsin Department of Administration indicate that Outagamie County is expected to continue to grow through the year 2030. Forecasted populations were prepared for every five years, with the largest actual increase occurring between 2000 and 2005. Based on the Department of Administration's (DOA) 2003 estimated population of the County of 167,272 the forecasted populations appear reasonable. Age group population projections are shown on exhibit 1-11 and exhibit 1-12.

**EXHIBIT 1-11  
OUTAGAMIE COUNTY POPULATION PROJECTIONS BY AGE GROUP**

<b>Age Group</b>	<b>2000 Census</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
0-4	11,124	11,855	12,212	12,991	13,633	13,845	13,942
5-9	12,567	11,937	12,522	12,797	13,509	14,127	14,336
10-14	13,093	13,209	12,383	12,953	13,227	13,935	14,560
15-19	12,223	13,060	13,131	12,267	12,819	13,066	13,764
20-24	9,837	11,367	12,102	12,125	11,319	11,806	12,033
25-29	10,639	11,950	13,660	14,589	14,631	13,673	14,270
30-34	12,577	11,403	12,841	14,520	15,470	15,520	14,485
35-39	14,527	12,996	11,819	13,270	14,950	15,892	15,972
40-44	13,615	14,668	13,115	11,899	12,252	15,013	15,962
45-49	11,625	13,450	14,455	12,889	11,692	13,101	14,733
50-54	9,306	11,361	13,115	14,057	12,533	11,355	12,730
55-59	7,090	8,919	10,866	12,515	13,416	11,952	10,841
60-64	5,281	6,537	8,212	9,986	11,511	12,334	11,008
65-69	4,524	4,857	6,006	7,536	9,177	10,584	11,365
70-74	4,404	4,055	4,352	5,386	6,776	8,264	9,564
75-79	3,672	3,790	3,513	3,776	4,700	5,928	7,266
80-84	2,625	2,831	2,931	2,737	2,961	3,713	4,717
85-89	1,590	1,794	1,962	2,053	1,951	2,133	2,714
90-94	612	706	828	924	986	961	1,070
95-99	133	167	202	245	283	312	315
100+	27	27	33	41	52	63	73
Totals	161,091	170,939	180,260	189,556	198,948	207,577	215,720
# Change	N.A.	+9,848	+9,321	+9,296	+9,392	+8,629	+8,143
% Change	N.A.	+6.1%	+5.5%	+5.2%	+5.0%	+4.3%	+3.9%

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

EXHIBIT 1-12



All of the age groups exhibit fairly consistent growth trends, with population decreases occurring only briefly in most of the categories. The 0-4, 65-69 and 95-99 age groupings show no declines, while the 100+ group has a no change from 2000 to 2005. Outagamie County is projected to be the fourth fastest growing county in the State, according to the DOA projections. The fastest growing county will be St. Croix with a 67.9 percent growth rate from 2000 to 2030. The remaining top five fastest growing counties are; Calumet (45.1%), Dane (36%), Outagamie (33.9%) and Kenosha (32.5%).

In developing the population projections for Outagamie County, the Department of Administration projected births, deaths and net migration into the County through the year 2030. Those figures are shown in exhibit 1-13.

EXHIBIT 1-13  
COMPONENTS OF POPULATION CHANGE – OUTAGAMIE COUNTY

Component	2000-05	2005-10	2010-15	2015-20	2020-25	2025-30
Births	11,533	11,968	12,833	13,441	13,663	13,758
Deaths	5,749	6,018	6,349	6,741	7,240	7,879
Natural Increase	5,784	5,950	6,484	6,700	6,423	5,879
Net Migration	4,064	3,371	2,812	2,692	2,206	2,264
Total Change	9,848	9,321	9,296	9,392	8,629	8,143

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

Another way of looking at the population projections involves looking at whether or not there is sufficient population growth in the younger age groups to offset the increases in the older age groups. Exhibit 1-14 examines the age projections in 25-year increments.

EXHIBIT 1-14  
OUTAGAMIE COUNTY POPULATION PROJECTIONS BY 25-YEAR AGE GROUPINGS

Age Group	2000	2005	2010	2015	2020	2025	2030
0-24	58,844	61,367	62,350	63,133	64,507	66,779	68,635
25-49	62,983	64,467	65,880	67,167	69,995	73,199	75,422
50-74	30,605	35,729	42,551	49,480	53,413	54,489	55,508
75+	8,659	9,315	9,469	9,776	10,933	13,110	16,155
Total	160,091	170,939	180,260	189,556	198,948	207,577	215,720

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

Exhibit 1-14 clearly shows growth trends in each of the categories, with the population under 50 growing at a slower pace than the 50 and older group until the year 2020. After that year, the greater growth occurs in the two younger age groups.

Housing Forecasts

Outagamie County had 60,530 households as of the 2000 census. The Wisconsin Department of Administration prepared household and persons per household projections through the year 2030, which are shown in exhibit 1-15. Based on those projected persons per household figures, along with the projected populations, a projection of the number of housing units can be developed.

**EXHIBIT 1-15  
OUTAGAMIE COUNTY HOUSING PROJECTIONS**

	2000	2005	2010	2015	2020	2025	2030
Total Population	161,091	170,939	180,260	189,556	198,948	207,577	215,720
Group Quarters Population	3,373	3,658	3,880	4,025	4,188	4,488	4,929
Household Population	157,718	167,281	176,380	185,531	194,760	203,079	210,791
Persons Per Household	2.61	2.53	2.52	2.49	2.46	2.44	2.41
Total Households	60,530	65,087	69,918	74,628	79,318	83,397	87,469

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

The figures shown above for projected housing units are only estimates. The household population is the total population less the population in group quarters (nursing homes, college dormitories, etc.). The population living in group quarters was approximately two percent of the 2000 population. The total household figures represent the needed year-round dwellings needed to house the projected population. Seasonal and migratory housing, as well as vacant units are not counted in these figures. Seasonal and vacant units account for approximately 3.5 percent of the County's housing stock. Therefore for planning purposes, Outagamie County needs to be able to accommodate an additional 26,939 housing units by the year 2030 to house the projected population.

Employment Forecasts

The employment projections are based on the projected population 15 years old and older. The following table highlights those figures. While trying to determine if there was going to be an adequate labor force into the near future, two specific segments of the population were looked at more closely. The first was the 65 years old and older age group. Given that a good share of this age group would be retiring from the workforce, it was decided to see what kind of trends might show up in the projections. The 2000 census reported that 17,287 persons were 65 years old or older (10.7% of the total population). By 2030, the same age group grows to 37,084 persons and its percentage of the total population grows to 17.2 percent.

The second group that was examined was the 0 to 14 year old ages. This age group totaled 36,784 persons as of the 2000 census (22.8% of the total population). By 2030, the population of this group is projected to increase to 42,838 persons, but its percentage share of the total population decreases to 19.8 percent. More people will be potentially retiring from the labor force than will be entering, based on these projections.

**EXHIBIT 1-18  
POPULATION PROJECTIONS BY AGE GROUP  
LABOR FORCE PROJECTIONS**

Age Group	2000	PROJECTED POPULATION					
		2005	2010	2015	2020	2025	2030
15-19	12,220	13,060	13,131	12,267	12,819	13,066	13,764
20-24	9,816	11,367	12,102	12,125	11,319	11,806	12,033
25-29	10,618	11,950	13,660	14,589	14,631	13,673	14,270
30-34	12,543	11,403	12,841	14,520	15,470	15,520	14,485
35-39	14,506	12,996	11,819	13,270	14,950	15,892	15,972
40-44	13,907	14,668	13,115	11,899	12,252	15,013	15,962
45-49	11,620	13,450	14,455	12,889	11,692	13,101	14,733
50-54	9,304	11,361	13,115	14,057	12,533	11,355	12,730
55-59	7,087	8,919	10,866	12,515	13,416	11,952	10,841
60-64	5,281	6,537	8,212	9,986	11,511	12,334	11,008
65-69	4,524	4,857	6,006	7,536	9,177	10,584	11,365
70-74	4,402	4,055	4,352	5,386	6,776	8,264	9,564
75-79	3,672	3,790	3,513	3,776	4,700	5,928	7,266
80+	4,987	6,525	5,956	6,000	6,233	7,182	8,889
Total	124,187	133,938	143,143	150,815	158,579	165,670	172,882

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

Plan Goals

The Wisconsin comprehensive plan legislation (1999 Wisconsin Act 9) outlines 14 goals. Each state agency is encouraged to design their programs and policies to reflect the mission of the agency and the following local comprehensive planning goals.

1. Promotion of the redevelopment of land with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.
2. Encouragement of neighborhood designs that support a range of transportation choices.
3. Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.
4. Protection of economically productive areas, including farmland and forests.

5. Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.
6. Preservation of cultural, historical and archeological sites.
7. Encouragement of coordination and cooperation among nearby units of governments.
8. Building of community identity by revitalizing main streets and enforcing design standards.
9. Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.
10. Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses.
11. Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels.
12. Balancing individual property rights with community interests and goals.
13. Planning and development of land uses that create or preserve varied and unique urban and rural communities.
14. Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens.

In addition to these statewide goals, a set of more specific goals, objectives and policies have been identified within each of the subsequent elements.

Public Input Sessions

Planning Department staff, with facilitation from the Outagamie County University of Wisconsin Extension office, held two public input sessions during the spring of 2004. Attendees were asked the following questions:

- What do you value most about Outagamie County?
- What needs to be preserved?
- What strengths contribute to the County's economic vitality?
- What threats exist to the quality of life?
- What feature/situation would you undo or change?
- What goals should be addressed by this plan?
- What is your vision for Outagamie County for the year 2025?

Highlighted as things that are valued and needs to be preserved were the area's high quality of life, natural resources, job base, friendly and caring people, and it's transportation network. Some of the stated threats include traffic congestion, drainage/stormwater runoff, loss of manufacturing jobs, and farm/non-farm conflicts. As for things that they would have changed had they the chance, included less sprawl, better stormwater management, and preservation of the family farm. The attendees answered that the following goals/visions need to be addressed by this planning effort: communities need to coordinate and cooperate, protect this area as a great place to live, work and play, protect the rights of landowners, create good jobs, and make this an area where diversity is embraced. Complete summaries of the two sessions are included in appendix A.

Additionally, a survey was sent to local units of government to gather input on issues including farmland preservation, traffic congestion, rural development, housing, transportation and economic development. A summary of the survey results is included in appendix B. Based on those responses, the following statements can be made.

- Over 90% of the respondents feel that protecting and managing natural resources is important. The protection of our water resources was rated as important by 97% of the respondents.
- Protecting private property rights is important to 95% of the respondents.
- Ninety-three percent feel traffic congestion needs controlling.
- Ninety-seven percent feel it is important to control taxes.
- Over 90% stated that development has a direct impact on community services/taxes.
- Ninety-three percent feel that communities should work together to provide services in a cost-efficient manner.
- Over 80% are concerned about groundwater contamination and protecting wildlife habitat.
- Eighty-six percent feel that the creation of new jobs is important.
- Over 80% stated that land use strategies are needed to protect community interests, with 89% saying that strategies to control and decrease stormwater runoff are needed.
- Over 80% of the respondents feel that agriculture should grow in the County and that communities should maintain the resources and services required to support the agricultural industry.

Based on the comments from the survey and the input received at the public information sessions, the following vision statement for Outagamie County was prepared:

*"Outagamie County and the Fox Cities are a prosperous, dynamic, diverse community, having a growing, knowledge-based economy with leading edge businesses and a strong agricultural base, that are recognized nationally. There exists a cooperative spirit among all governments. We have protected and enhanced the various natural, recreational and cultural resources. Outagamie County is the standard for which other counties strive."*

### L.I.F.E. Survey Results

Completed in the summer of 2006, the Leading Indicators For Excellence (LIFE) study presents an overview of the socio-economic conditions of the Fox Cities area, including Calumet, Outagamie, and Winnebago counties. The study included information gathered from three surveys, 13 focus groups, interviews with experts, and in-depth review of statistical data. The study is an update of a 2001 report. The 2006 version highlights areas of progress since the previous report, as well as areas that still need improvements. While many issues were identified, those listed below arose repeatedly and from multiple sources. They are:

1. Greater inclusion of diverse people – need for further inclusion of diverse residents (beyond racial and ethnic diversity), especially in leadership roles.
2. Economic development – the need for economic development and higher paying jobs was a strong consensus of residents, leaders, and experts. Economic development can help alleviate certain other concerns.
3. Transportation alternatives – options are needed for persons with lower incomes, persons with disabilities, the elderly, youth, shift workers, and those without automobiles.
4. Treatment for mental illness and addiction – declining access to treatment (especially for persons with low incomes or public health insurance) has left many illnesses and additions untreated leading to many negative impacts.
5. Health care access – obtaining care is a challenge for many in the area due to growing out of the pocket costs and a decrease in jobs offering health benefits. Preventive health care is seen as very important.
6. Adult training and development – there is a need for increased employment skills, literacy, parenting, financial, and other skills to improve the ability to function in life. This area was noted by many as a method to address other areas of need.

7. Regional vision – the need to create public efficiencies and related cost savings through collaboration.
8. Long-term focus – the need for area leaders to have a long term focus and to make difficult decisions to confront challenges. Health promotion, education, childcare, aging, support for disabilities or mental illness, and disaster preparedness were cited as needing a long-term focus.
9. Affordable basic needs – for those with lower to middle incomes, the challenge of making ends meet has become more difficult, especially in the areas of housing, health care, child care, and transportation.
10. Support for elderly and person with disabilities – while the number of adults and children with disabilities are growing, there have been reduced or capped levels of services.
11. Youth development – low pressure opportunities are needed for all youth in the arts and physical activities (especially for ages 6-21).
12. Affordable and quality childcare and preschool – the costs of childcare is becoming a greater challenge for many families, especially lower and middle income persons. It was also noted that more preschool and early childhood education opportunities are needed.
13. Environmental protection – urban sprawl and ecosystem fragmentation were listed as a concern. Impacts to drinking water, transportation, safety, recreation, and health were noted.
14. Affordable housing – the supply of housing for people with low and very low incomes has not kept pace with the need that is being projected. It was noted that requests for financial support for housing and utilities has grown.

The full report is available online at [www.foxcitieslifestudy.org](http://www.foxcitieslifestudy.org). A printed version of the final report is also available through the United Way of the Fox Cities.

## ← 2. AGRICULTURAL, NATURAL AND CULTURAL RESOURCES →

### Introduction

This chapter is intended to outline the significant agricultural, natural and cultural resources that exist within Outagamie County and to establish policies and programs for their conservation and effective management. It is also intended to meet the requirements of chapter 91, subchapter IV, of the Wisconsin Statutes, Agricultural Preservation Planning.

### AGRICULTURAL RESOURCES

#### Agricultural Resources Goals & Objectives

Goal: To preserve the productive agricultural lands of Outagamie County.

- Objectives:
- To define and identify prime farmland.
  - To protect current farming operations.
  - Preserve land suitable for the production of food and fiber to meet present and future needs.
  - To prevent future conflicts between urban and rural uses.

Goal: To encourage future urban development to locate near necessary public facilities.

- Objectives:
- To encourage a pattern of growth consistent with the preservation of valuable farmland within the County.
  - To promote a land use pattern that enables public facilities to be provided in an efficient and cost-effective manner.
  - To encourage the continuation of agricultural uses until such time that urban expansion is necessary.

#### Agricultural Background

The agricultural census of 1860 reported that 1,131 farms had been established within Outagamie County. That figure continued to rise until 1935 when the highest number of farms were reported (3,903). Since then, the number of farms

has been on the decline, which has mirrored both state and national trends, according to the National Agricultural Statistical Service.

Farmland has been under increasing pressure in the last decade because of a relatively poor agricultural economy prompted farmers to sell land and a robust nonfarm economy enabled many urban dwellers to realize their dream of living in the country. From 1991 to 2000, over 700,000 acres of Wisconsin farmland have been removed from agriculture. Over the same time span, Outagamie County has seen its quantity of farmland decrease by 21,000 acres, according to the Wisconsin Department of Agriculture, Trade and Consumer Protection. Land use inventories from 1971, 1980 and 2000 reveal similar trends regarding agricultural lands for Outagamie County, which are illustrated in exhibit 2-1.

**EXHIBIT 2-1  
OUTAGAMIE COUNTY AGRICULTURAL ACREAGE**

Year	Acres	Square Miles	Percent of County	Change In Acres
1971	276,672	423.3	65.7%	---
1980	259,911	406.1	63.3%	-16,761
2000	212,402	331.9	51.4%	-47,509

Source: East Central Wisconsin Regional Planning Commission, Air Photo Interpretation.

Despite the continuing loss of agricultural lands, farming is still big business in this state. Wisconsin agriculture generates more than \$51.5 billion in economic activity. This includes the direct effect of agricultural production and processing that adds value to farm products. More than 3.4 million people make up Wisconsin's workforce. Of this total, agriculture provides almost 420,000 jobs. These jobs include farm owners, on-farm employees, veterinarians, crop and livestock consultants, feed and fuel suppliers, food processors, and farm machinery manufacturers and dealers, to name a few. Agriculture accounts for \$16.5 billion in income, which is approximately 10 percent of the state's total income. Wisconsin's farms and agriculturally related businesses generate more than \$1.76 billion in local and state taxes, which does not include taxes paid to local schools. Wisconsin ranks in the top three in 20 of 48 agricultural categories

nationally and in the top ten in 32 categories for 2002, according to the 2003 Wisconsin Agricultural Statistics compiled by the United States Department of Agriculture. Wisconsin farmers earned about \$950 million in net farm income in 2003, which further shows the importance of agriculture to the overall economy.

Agricultural acreage and the number of farms have been on the decline in Outagamie County, but is still an important component of the area economy. Included below are some selected highlights from the 2002 Census of Agriculture for Outagamie County:

- There are 1,430 farms on 263,485 acres (average farm size is 184 acres). The average farm size is below the state average of 204 acres.
- The estimated value of land and buildings per farm is \$570,840, compared to a state average of \$464,127.
- The estimated value of all machinery & equipment per farm is \$89,987, compared to a state average of \$72,300.
- The market value of agricultural products sold is on average \$102,431 per farm, which is significantly higher than the state average of \$72,906.
- Countywide crop sales account for \$31,732,000 of total value, while livestock, poultry and their products account for \$114,743,000 of total value.
- There are 86,716 head of cattle and calves located on 674 farms in the County. Additionally, there are 1,703 beef cows on 132 farms and 38,000 milk cows on 334 farms.
- Outagamie County ranks as the ninth highest county in the state for the number of milk cows and milk production.
- There are 12,020 hogs and pigs located on 36 farms, 991 chicken layers on 39 farms and 3,480 broilers and other meat-type chickens on 17 farms.
- Out of the 3,824 acres of cabbage grown for processing in the state, 2,607 acres are located in Outagamie County (68%).
- There are 188,303 acres of harvested cropland spread across 1,014 farms in the County led by corn for grain (55,841 acres on 549 farms) and corn for silage (23,864 acres on 399 farms). Other significant crops in the County include, soybeans (42,514 acres) and forage (52,207 acres).
- Total income from farm-related sources (before taxes and expenses) was \$3,520,000 for the County.
- There are 341 farms that hire 1,543 workers across the County, which involves \$11,341,000 in total payroll.

While the economies of few communities rely exclusively on the farm sector, farming and the processing of farm products is still an important source of

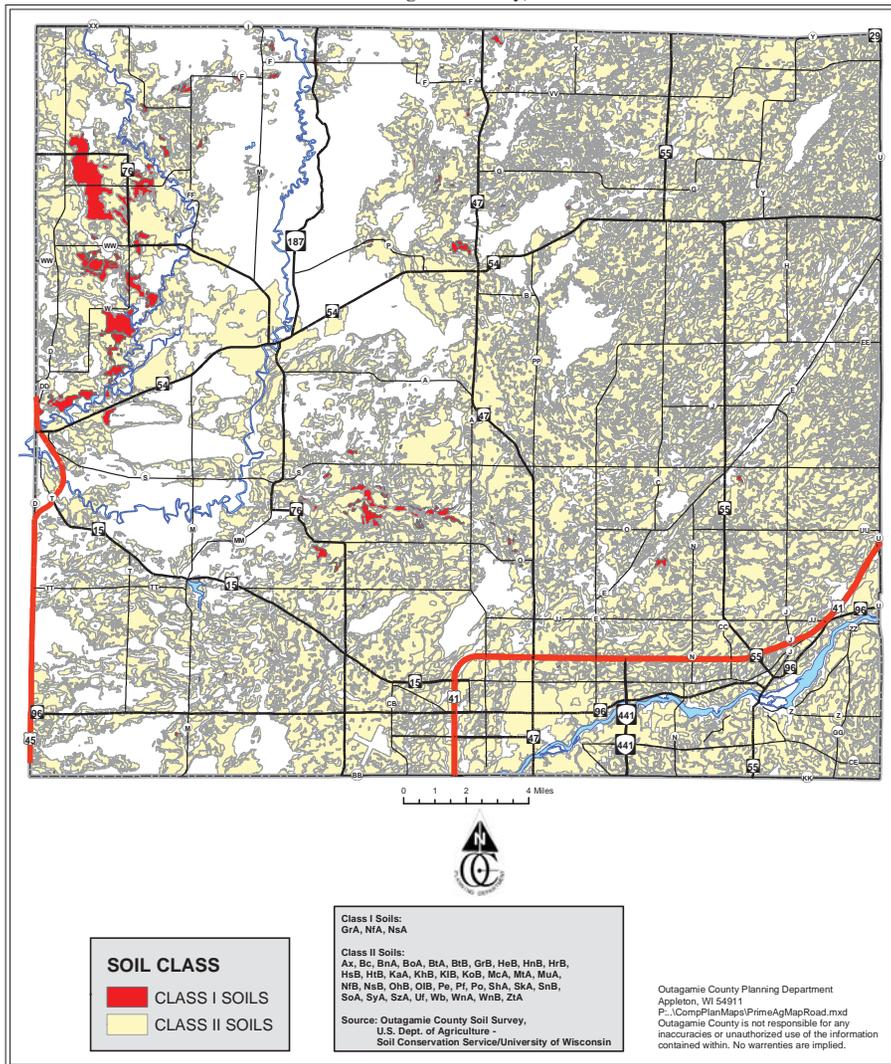
income and employment. Agriculture is a necessary component of the Outagamie County economy and the protection of farmland is critical. It is a valuable resource. It is also a nonrenewable resource. Additionally, agricultural lands provide a significant amount of revenue to the area, while requiring very few services. As development pressures increase in the rural portions of the County, so do the potential for negative impacts on agriculture. Nonfarm residents can increase the chance of nuisance complaints. Commuters now need to share the road with slow moving farm equipment. Neighbors of farming operations may be subjected to the common practices of manure spreading, night plowing and pesticide applications.

If the trend of rural development is to continue, steps need to be taken to ensure that it does not continue to consume prime farmland. The development needs to be directed towards areas where its impact on agriculture is minimized. One way of addressing that is to map prime agricultural soils in Outagamie County, as is shown in exhibit 2-2. The relationship between soils and agriculture is critical. While urban development can utilize advanced technology to overcome soil limitations, it is not often the case with regards to agriculture. That is the reason for protecting prime soils for agriculture. For the purpose of agricultural planning, soils are considered "prime" if they are classified as capability groups I or II in the USDA Soil Survey for Outagamie County. A more detailed look at the County soils is included later in this chapter, under the Natural Resource inventory.

Class I soils have the fewest limitations that restrict their use. They are generally well-drained and nearly level, with high natural fertility. These soils are well suited to all crops commonly grown in the County. Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. These soils are well suited for most crops grown in the County, especially corn, alfalfa and oats.

Prime agricultural soils cover most of Outagamie County. The larger areas of non-prime soils are part of extensive wetland areas, especially in the

**EXHIBIT 2-2**  
**PRIME AGRICULTURAL SOILS MAP**  
 Outagamie County, WI



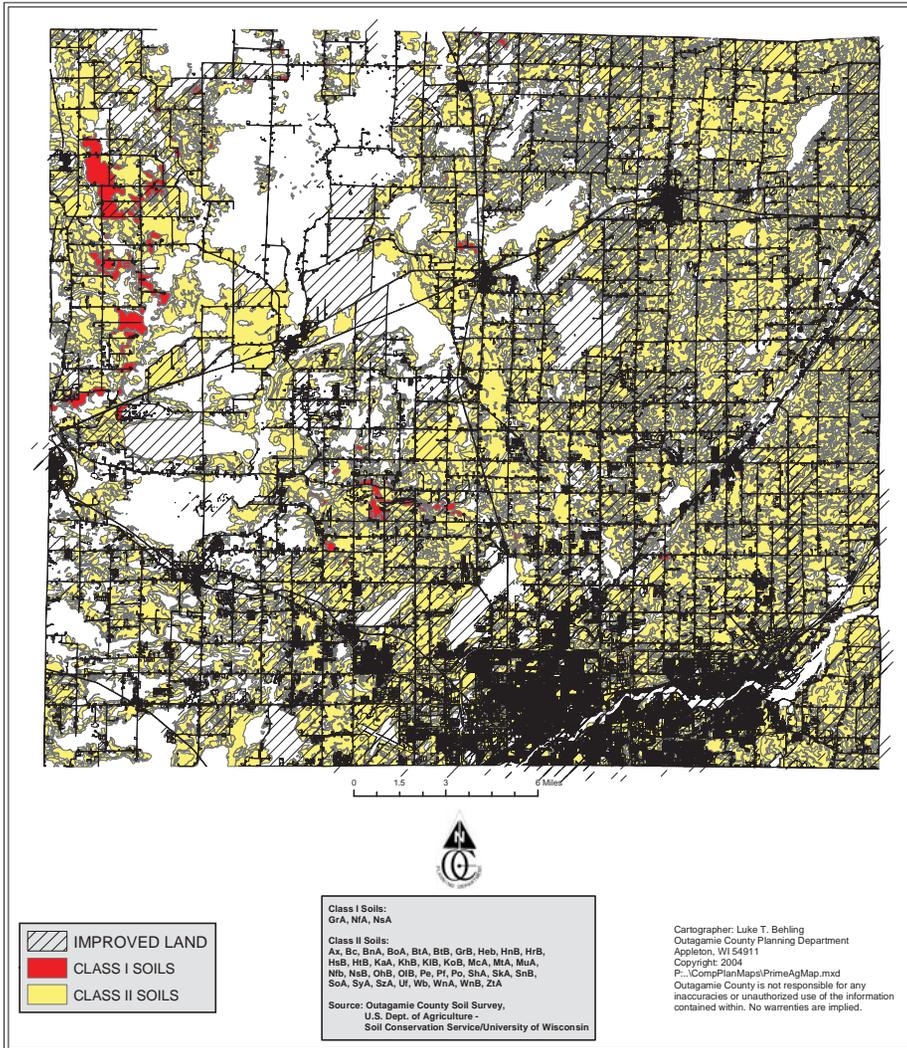
Embarrass and Wolf River basins in the Northwest part of the County. Exhibit 2-4 again shows the location of prime agricultural soils, but this time with areas of development, as of the year 2000, shown as an overlay. This exhibit helps illustrate the amount of urbanization that is taking place. As noted in the Issues and Opportunities chapter, Outagamie County has experienced consistent growth in population. The development pressure that is associated with growth has also been consistently increasing. The exhibit below shows the amount of land that development has consumed over the past few decades.

**EXHIBIT 2-3**  
**OUTAGAMIE COUNTY LAND USE ACREAGES**

LAND USE TYPE	ACRES		
	1971	1980	2000
Agricultural	276,672	259,911	212,402
Residential	17,908	21,330	26,399
Commercial	2,297	2,538	3,218
Industrial	1,377	2,346	4,286
Communication/Utilities	555	303	195
Public Facilities	2,793	1,430	2,822
Recreation/Open Space	9,386	9,561	14,480
Transportation	952	808	1,316
Vacant/Undeveloped	100,201	112,541	118,307
Road-Railroad Right-of-Way	n.a.	n.a.	19,520
Water	n.a.	n.a.	8,095
Construction	n.a.	n.a.	379
<b>Total Acres</b>	<b>412,141</b>	<b>410,768</b>	<b>412,992</b>
<b>Total Developed Acres</b>	<b>35,268</b>	<b>38,316</b>	<b>74,118</b>
<b>Population</b>	<b>119,398</b>	<b>128,730</b>	<b>160,971</b>
<b>Persons Per Developed Acre</b>	<b>3.4</b>	<b>3.4</b>	<b>2.2</b>

Source: East Central Wisconsin Regional Planning Commission,  
 Aerial Photography Interpretation

EXHIBIT 2-4  
**PRIME AGRICULTURAL SOILS MAP**  
 Outagamie County, WI



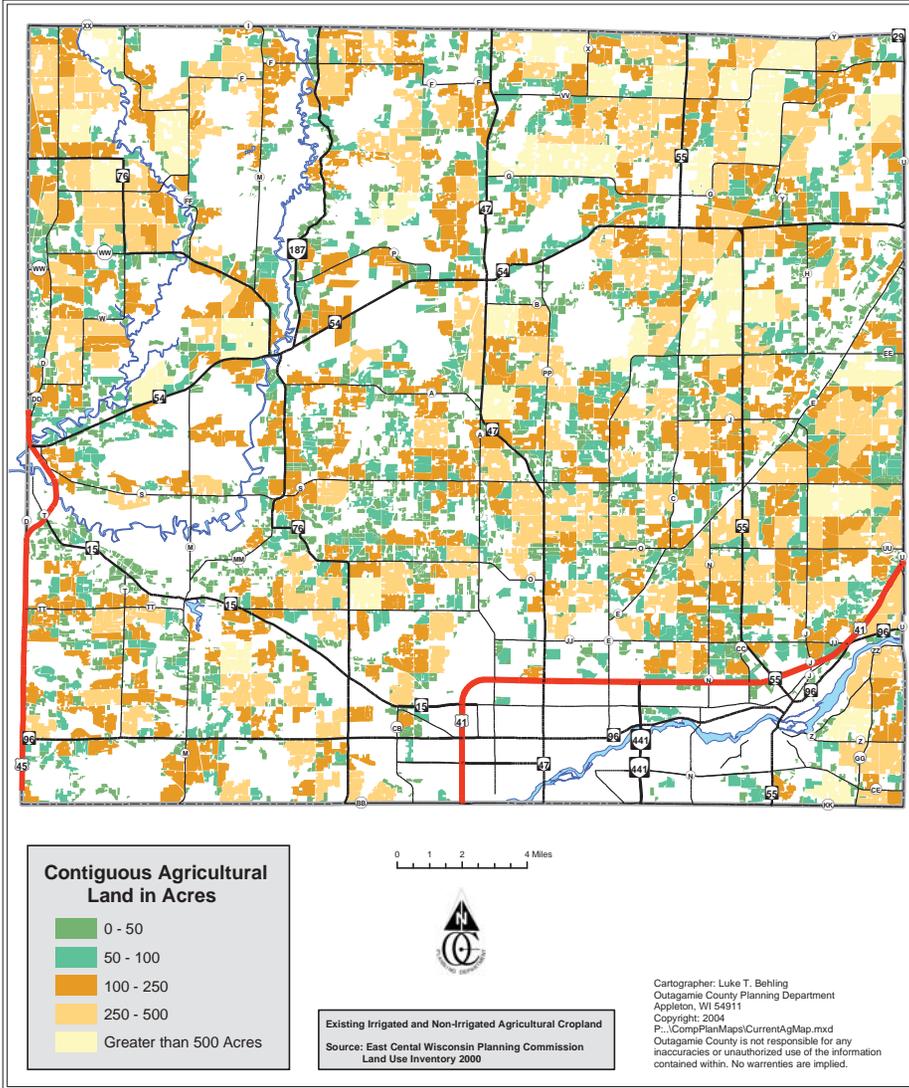
Acreage differences, especially between the 1971 and 1980 interpretations, are a result in differences in the amount of technology available. The 1971 calculations were done manually, the 1980 calculations were completed using early generation computers, and the 2000 calculations were done utilizing current GIS technology.

The developed acres include all the categories, with the exception of agriculture, vacant/undeveloped and, for the 2000 inventory, water. Previous inventories grouped water into the vacant/undeveloped category, while right-of-way acreage was split among all categories. In reviewing the population against the number of developed acres, one can see that during the 1971 and 1980 inventories the calculations worked out to 3.4 persons per developed acre of land. Meanwhile, the 2000 land use inventory indicated that there were only 2.2 persons per developed acre of land. This indicates that we are developing in a manner that is using more land – a less dense style of development. Since most of the vacant and undeveloped land are wetlands or otherwise unsuited for development, agricultural land is the only available source for future development. The conversion of some of the agricultural land is inevitable. However, if steps are not taken to slow that conversion, the future of agriculture as a viable piece of the County's economy may be in jeopardy.

Agricultural Resource Protection Tools

- Conservation Subdivisions – Also known as cluster subdivisions, this form of land division encourages the preservation of open space, natural areas or farmland. Typically, a development will have at least 50 percent of the project protected from further development, while the remaining land is divided into smaller lots that are clustered together. The area to be preserved as open space or farmland is protected indefinitely, usually through the recording of conservation easements or via deed restrictions. Land trusts (such as the Northeast Wisconsin Land Trust) can provide assistance to persons wanting to develop conservation easements.

**EXHIBIT 2-5**  
**2000 AGRICULTURAL USE MAP**  
 Outagamie County, WI



- Conservation Easements – A conservation easement is a voluntary agreement between a landowner and a land trust that limits future development alternatives. Under the easement, the landowner retains ownership and the land trust takes responsibility of the conservation of the site. There are tax benefits of this type of arrangement.
- Purchase of Development Rights (PDR) – A PDR program is one way for landowners to obtain development value for their land without selling it for development. This voluntary program pays the landowner the difference between a property's value as developable land versus farmland. For this payment, the landowner places a conservation easement on the land restricting its use to agriculture in perpetuity. This program is generally administered by a unit of government and is an expensive program.
- Transfer of Development Rights (TDR) – A TDR program is one where there are areas designated for development, while other areas are designated for preservation. This type of program generally works better if there are restrictions to the amount of development allowed, more specifically if there are density limitations. For development to take place that is at a higher density than typically allowed, a developer needs to transfer development rights from areas designated for protection. The developer must pay the landowner for the development rights, rather than a unit of government.
- Maximum lot sizes and/or maximum densities – Most zoning ordinances include language that establishes minimum lot sizes and the permissible density that is allowed within a particular zoning district. An approach some communities are taking is to look at maximum lot sizes (i.e. one acre) and setting more restrictive density (i.e. four units per forty acres) in agricultural areas.
- Right To Farm Deed Restrictions – In an effort to mitigate potential conflict, some local communities are requiring persons wishing to build in the country to read and sign a statement that essentially outlines the activities (manure spreading, night planting/harvesting, animal odors, etc.)

that may occur on neighboring farmland. This is usually done at the time a building permit is applied for and a copy of it is recorded with the deed to alert potential future owners of the home.

## NATURAL RESOURCES

### Natural Resources Goals & Objectives

Goal: To protect and sustainably manage the County's natural resources.

- Objectives:
- Ensure that environmental and aesthetic qualities are considered in the planning process.
  - Encourage wildlife management to reduce overpopulations of species.
  - Encourage the sustainable management of the County's forest resources.
  - Preserve and maintain environmentally sensitive areas.
  - Retain and improve open space resources that provide significant ecological and environmental benefits.

Goal: To ensure that development that does occur is sensitive to the environment.

- Objectives:
- To promote urban development which is environmentally sound and compatible with the natural resource base.
  - Encourage that open space considerations be designed into development projects.

Wisconsin's water – lakes, rivers, streams, groundwater and wetlands – are among the state's greatest natural resources. We, along with all plants and animals, depend on water. It is also vital for agriculture and industry. The state has responsibility for protecting water resources under the Public Trust Doctrine. As such, all waters of Wisconsin are held in trust by the state for the benefit of all. The Wisconsin Legislature has

#### **Activities requiring a WDNR permit:**

- Wharves, piers, swimming rafts – Wis. Stat. 30.13(1)
- Structures, including piers and boat shelters – Wis. Stat. 30.12
- Boathouses and houseboats – Wis. Stat. 30.121
- Bridges – Wis. Stat. 30.123
- Grading of the bank, ponds – Wis. Stat. 30.19
- Channel changes – Wis. Stat. 30.195
- Enclosures – Wis. Stat. 30.196
- Dredging – Wis. Stat. 30.20

enacted laws and charged the Department of Natural Resources (WDNR) to protect water resources. Chapters 30 and 31 of the Wisconsin Statutes gives the WDNR the authority to issue permits affecting all navigable waters. Navigable waters are waterways that have a defined bed and bank and enough water to regularly support the smallest recreational watercraft on an annual, recurring basis, including periods of high runoff. Navigable waters within Outagamie County are listed in part in exhibits 2-6 and 2-7. It is also important to note that the County has certain responsibilities as it relates to the protection of the water resources. Shoreland zoning, floodplain zoning, wetland zoning, erosion control and stormwater management are some of the regulatory tools that the County has to protect the region's waters.

Surface Water

Lakes - Outagamie County, with 33 lakes and 174 acres of lake surface area, is limited in lake surface. The vast majority of the lakes are small potholes, kettles, bayous or excavations averaging approximately three acres in size. Lake Winnebago, which is just over two miles south of the County, helps meet user demand generated in the County.

Black Otter Lake, in Hortonville, represents the County's largest lake with 75 acres. This is 43 percent of the total County surface water area classified as lakes. This lake is classified as an impoundment. It has a maximum depth of nine feet and 3.2 miles of shore land.

Allerton, Blueberry and Shaky Lakes can be classified as natural wilderness lakes. Both Allerton and Blueberry are privately owned, while Shaky Lake is owned by the State. All three lakes meet scientific area classification criteria, which identifies that the lakes value as an educational, natural and archeological resource be preserved. Exhibit 2-6 lists Outagamie County's named lakes. In addition to the water bodies listed in the DNR inventory, many other impoundments and excavations exist through the County. Two such bodies of

water exist within Kaukauna; Kelso Pond (3.5 acres) and Unnamed Pond (8.5 acres), as do others especially within the Fox Cities area that were created as a result of stormwater management concerns.

**EXHIBIT 2-6  
OUTAGAMIE COUNTY LAKE INVENTORY**

LAKE	LOCATION	TYPE	ACRES
Allerton	Bovina	Pothole	1.9
Black Otter	Hortonville	Impoundment	74.7
Blueberry	Bovina	Bayou	1.4
Mosquito Hill	Liberty	Bayou	3.8
Shaky	Dale	Pothole	1.9
Squaw	Dale	Pothole	5.5

SOURCE: Wisconsin Department of Natural Resources - "Surface Water Resources of Outagamie County"

Streams - The County's stream resources help offset its deficiency in lakes. The Fox and Wolf Rivers and their tributaries provide an additional 2,404 acres of surface water. These streams provide 93 percent of all of the County's surface water resources. There are 26 streams in Outagamie County, which extend 202 miles in total length.

The Wolf River is the longest river in the County, stretching 35.4 miles in length. Sand is the dominant bottom material and in-stream cover, especially fallen trees, is common. The river is an important recreational resource utilized for fishing, boating and as a canoe route. The river and its environs is also an excellent habitat for wildlife. Exhibit 2-7 outlines the named streams located within Outagamie County, according to a Department of Natural Resources inventory. There are additional streams in the County that are named, such as Garners Creek and Peerenboom Creek, but for whatever reason they were not included in this cited reference. In addition, there are numerous streams that are not named.

**EXHIBIT 2-7  
OUTAGAMIE COUNTY STREAM INVENTORY**

<b>STREAM</b>	<b>LOCATION</b>	<b>ACRES</b>
Apple Creek	Kaukauna	N/A
Ashwaubenon Creek	Kaukauna	N/A
Bear Creek	Ellington	36.1
Bear Creek	Maple Creek	25.5
Black Creek	Bovina	19.8
Black Otter Creek	Hortonia	13.1
Duck Creek	Oneida	54.1
Embarrass River	Liberty	264.7
Fox River	Fox Cities	1,315.2
Herman Creek	Cicero	1.7
Kankapot Creek	C. Kaukauna	0.5
Maple Creek	Maple Creek	5.7
Mud Creek	Grand Chute	7.9
Potter's Creek	Maple Creek	N/A
Rat River	Greenville	19.4
Shioc River	Bovina	93.1
Suamico River	Seymour	N/A
Toad Creek	Cicero	0.6
Wolf River	C. New London	536.4

SOURCE: Wisconsin Department of Natural Resources - "Surface Water Resources of Outagamie County"

Groundwater

Hidden beneath the land surface of the County are natural reservoirs of water known as groundwater. Groundwater is contained within the pore spaces between soil and rock particles and within cracks in rocks in formations called aquifers. Precipitation in the form of rain and snow is the source of all groundwater. Of the 28 inches of average annual rainfall received by the County, approximately 3 inches percolates down through unsaturated soil and rock formations to eventually become groundwater.

Groundwater is vitally important to the County. It is the source of water supply for County residents, with the exception of the City of Appleton. The water in aquifers is released to the surface through wells and springs, or by seepage into lakes, rivers and wetlands. Therefore, groundwater is both a reservoir used for

drinking, irrigation and industrial use and a recharge resource maintaining surface water levels during periods of low precipitation. Total groundwater use in Outagamie County is estimated to be four billion gallons annually.

Groundwater has traditionally been assumed to be a clean and safe source of drinking water. This is commonly true since groundwater recharge passing downward through soil and rock is usually effectively purified. However, this natural protection system is not always capable of preventing all problems. A growing number of groundwater contamination incidents have resulted in an increased awareness of the need for protection of this valuable resource. One such problem showing up in certain wells in the County is arsenic.

*Arsenic* - Naturally occurring arsenic contamination is prevalent in some of the sedimentary bedrock formations of northeastern Wisconsin. Approximately one-third of the private wells in Outagamie and Winnebago counties have arsenic detects exceeding a concentration of 5 parts per billion (ppb). Concentrations in several existing wells in this region are in the thousands of ppb and represent some of the highest found concentrations of naturally occurring arsenic in the world.

Results from several DNR studies indicate that the cause of the elevated concentrations of arsenic in the groundwater is associated with oxidation of sulfide-mineralized zones within most of the bedrock aquifers. The primary zone of mineralization extends some 10 feet below the base of the Platteville Dolomite, which is part of the main upper bedrock formation. If the St. Peter Sandstone is present, it lies directly below the Platteville Dolomite. The base of this dolomite and the top of the St. Peter Sandstone quite commonly contain an arsenic rich zone that may extend to ten feet or more in thickness. This arsenic-rich zone can also transcend deeper into the underlying St. Peter Sandstone as nodule or interstitial areas of high arsenic concentration and thus the need for deeply cased wells to restrict it from impacting the well water quality.

Arsenic is an element that occurs naturally in the environment, both in organic and inorganic forms. The organic forms are essentially nontoxic. However, inorganic arsenic is very toxic and doses as small as 300 milligrams (less than a teaspoon) can be lethal. Drinking water with elevated levels of arsenic ingested over a period of years can increase the chances of developing a variety of health problems, including anemia, diabetes, nerve and blood vessel damage, digestive problems and skin lesions. It has also been linked to increased risk to cancer of the skin, liver, bladder, kidney and prostate.

The DNR found the worst contamination to be within an area along the buried surface of the St. Peter Sandstone. Initially, this area was an arsenic advisory area. The DNR *recommended* special well construction specifications for new wells within the "Arsenic Advisory Area". This area is approximately about 10 miles wide and it extends from just southwest of Oshkosh to a location just west of Green Bay. However, as of October 1, 2004, a "Special Well Casing Pipe Depth Area" has been established that encompasses all of Outagamie County and Winnebago County. Within these two counties, the DNR has established well construction *requirements*, under the authority of NR 812.12(3), Wisconsin Administrative Code.

The new requirements impact all new wells constructed or reconstructed in either of the counties. The requirements are that private wells must be cased, grouted and disinfected to more stringent standards intended to significantly reduce the health risks to the well users. Each section of the County has been divided up into quarter sections. Within each quarter section the minimum depth of the well is indicated, which can vary from as little as 60 feet to as much as 610 feet in Outagamie County.

There is a shallow aquifer option that is available to the northeast and southeast portions of the County. Within these two areas, standard well construction

specifications apply if the total depth of the well is not greater than the maximum shown per quarter section into the Galena-Platteville Dolomite bedrock. This is the first bedrock layer in the eastern part of the County. The maximum shallow option depth varies from 63 to 140 feet in the northeast and from 40 to 420 feet in the southeast.

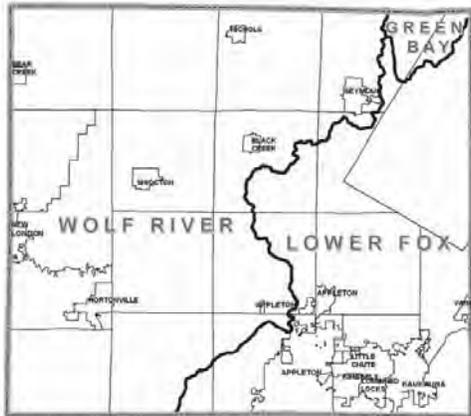
#### Topography and Drainage

Topography is the configuration of the earth's surface. The highest point in Outagamie County is approximately 1,015 feet above mean sea level at a point 3.5 miles east of Hortonville. The lowest point is about 600 feet above mean sea level where the Fox River enters Brown County, northeast of Kaukauna. Three distinctive topographic units are present in the County. In the southeast corner of the County, along both sides of the Fox River, there exists a relatively flat but well drained area formed by glacial lake deposits. The northwestern portion of the County is flat and blanketed by glacial lake deposits and recent floodplain deposits. An escarpment of Prairie du Chien dolomite bounds this area on the south and east. The remainder of the County consists of a strip approximately ten miles wide and is characterized by gently rolling morainal hills and occasional scarfs and cliffs of exposed bedrock. U.S. Geological Survey (USGS) quadrangle topographic maps are available for all of Outagamie County.

The major surface watersheds in Outagamie County are shown in exhibit 2-8. All of Outagamie County is within the Lake Michigan drainage area. The Wolf River watershed is the largest and encompasses approximately the western two-thirds of the County. It includes the sub-watersheds of the Shioc River, Middle Wolf River, North Branch & Main Stem of the Embarrass River, Wolf/New London & Bear Creek, the Lower Wolf River, and Arrowhead River & Daggets Creek. The east central and northeastern sections of the County are part of the Lower Fox watershed, which includes the sub-watersheds of Duck Creek, Apple & Ashwaubenon Creeks, Fox River-Appleton, and the Plum & Kankapot Creeks. A small area in the northeastern corner of the County is part of the Green Bay

watershed, which includes the sub-watershed of Suamico & Little Suamico Rivers.

EXHIBIT 2-8  
OUTAGAMIE COUNTY WATERSHEDS



#### Wetlands

Wetlands are those areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which have soils indicative of wet conditions (Wisconsin Administrative Code NR115). Wetlands have three common functions that make them valuable resources. Wetlands improve water quality by filtering upland erosion and pollution; they maintain and stabilize water quantity by storing and releasing water; and, they provide important habitat for wildlife.

Outagamie County has approximately 74,221 acres of wetlands in the form of swamps, marshes and bogs, according to DNR estimates from 1978-79 aerial photography. The wetlands comprise roughly 18 percent of the County's total land area. The most extensive wetland area is found along the Wolf and

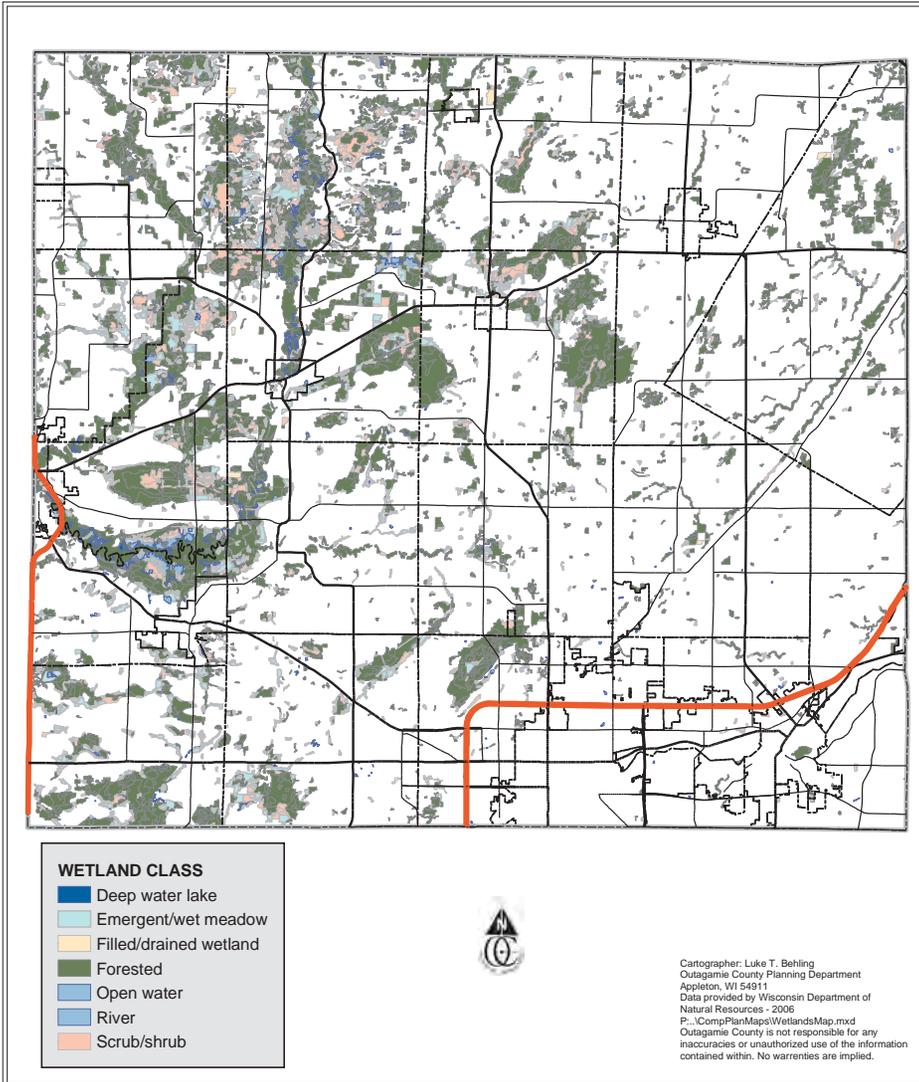
Embarrass Rivers, while other significant wetlands are located adjacent to most streams. The vast majority is located within the Wolf River watershed, or the western two-thirds of the County.

It has been estimated that less than half of the original five million acres of wetlands in Wisconsin remains. The decline in wetlands is largely the result of both public and private policy, which historically regarded them as wastelands with little or no economic return. Thousands of acres have been drained or filled to support agriculture or urbanization. The Department of Natural Resources estimates that approximately 24,000 acres of wetlands have been drained in Outagamie County since 1900. Exhibit 2-9 illustrates current wetland areas.

Outagamie County adopted a revised Shoreland-Floodplain-Wetland Ordinance in 1985 and, by reference, the 1983 Wetland Inventory Maps produced by the DNR. However, this ordinance regulates only those wetlands within the shoreland area of a navigable stream. Current management practices do not cover large areas of wetland that do not border a navigable stream.

One of the major threats to the County's wetlands is the spread of *purple loosestrife*. This plant is of European origin that was introduced to North America both as a contaminant from ship ballast and as a medicinal herb used for the treatment of diarrhea, dysentery, bleeding, and ulcers. It is a wetland perennial that now grows in all contiguous states of the country, except Florida, as well as in all the Canadian provinces. Invasion of purple loosestrife into a wetland can result in the suppression of the resident plant community. This can result in the loss of natural foods and cover, which endangers wildlife. There is no effective method to control purple loosestrife, except where it occurs in isolated stands. In these cases, the plant should be uprooted by hand and removed from the site. The U.S. Department of Agriculture (USDA) is considering biological weed

**EXHIBIT 2 - 9**  
**DNR WETLANDS**  
**Outagamie County, WI**



control. By introducing specific insects to the environment that will control the spread of the plant, the USDA hopes to at least be able to slow the plants expansion and to do it in an environmentally friendly manner.

Floodplains

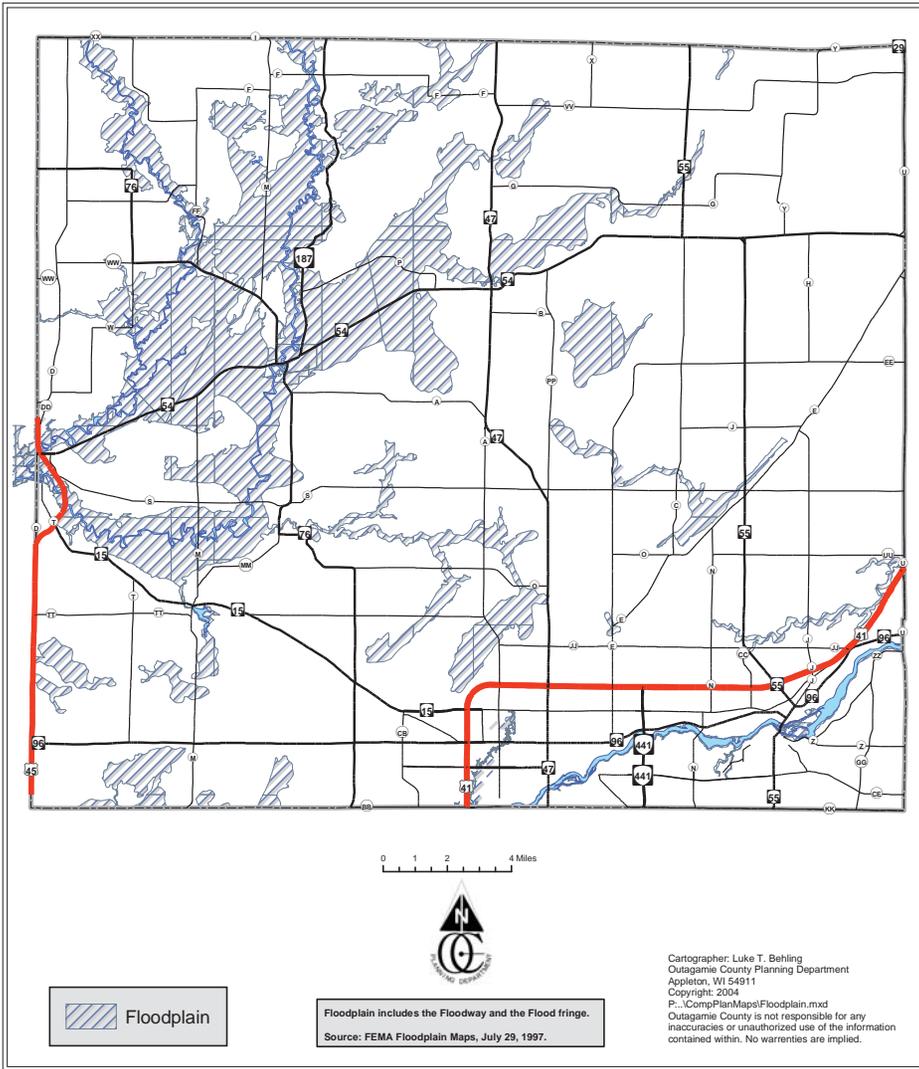
A floodplain is defined as the land that has been or may be covered by floodwater during the regional flood. The floodplain includes the floodway and the flood fringe. The floodway includes the channel of a stream and those portions of the floodplain adjoining the channel required to carry and discharge the flood flows of the regional flood. The flood fringe in that portion of the floodplain outside of the floodway, which is covered by floodwaters during the regional flood. It is generally characterized with standing water, rather than flowing water, as would occur in the floodway. A generalized floodplain map is shown in exhibit 2-10.

Woodlands

Outagamie County was almost completely forested before settlement took place. The northern portion was primarily mixed conifer-northern hardwood forest and the southern portion was generally a central hardwood forest. Scattered low, wet areas were covered with various sedges, grasses, willows and tag alder. The County's first settlers were fur traders. The lumbermen closely followed them. The locations of early settlements were often determined by the location of lumber mills and camps.

Woodlands have contributed significantly to the economy of the County. The wood products industry is the single largest employment sector. Wood resources also provide other benefits. Forests serve as visual and sound buffers; they moderate climatic extremes; they protect and conserve soils and watersheds; and wooded areas provide an environment for many species of animals. Woodlands also provide a variety of settings for recreational opportunities, such as hiking, skiing, hunting and fishing. Most of the woodland is located in the

**EXHIBIT 2-10  
FLOODPLAIN MAP  
Outagamie County, WI**



northwestern two-thirds of the County, primarily in conjunction with this area's wetlands and floodplains along the Wolf and Embarrass Rivers. Woodlands are illustrated in exhibit 2-11.

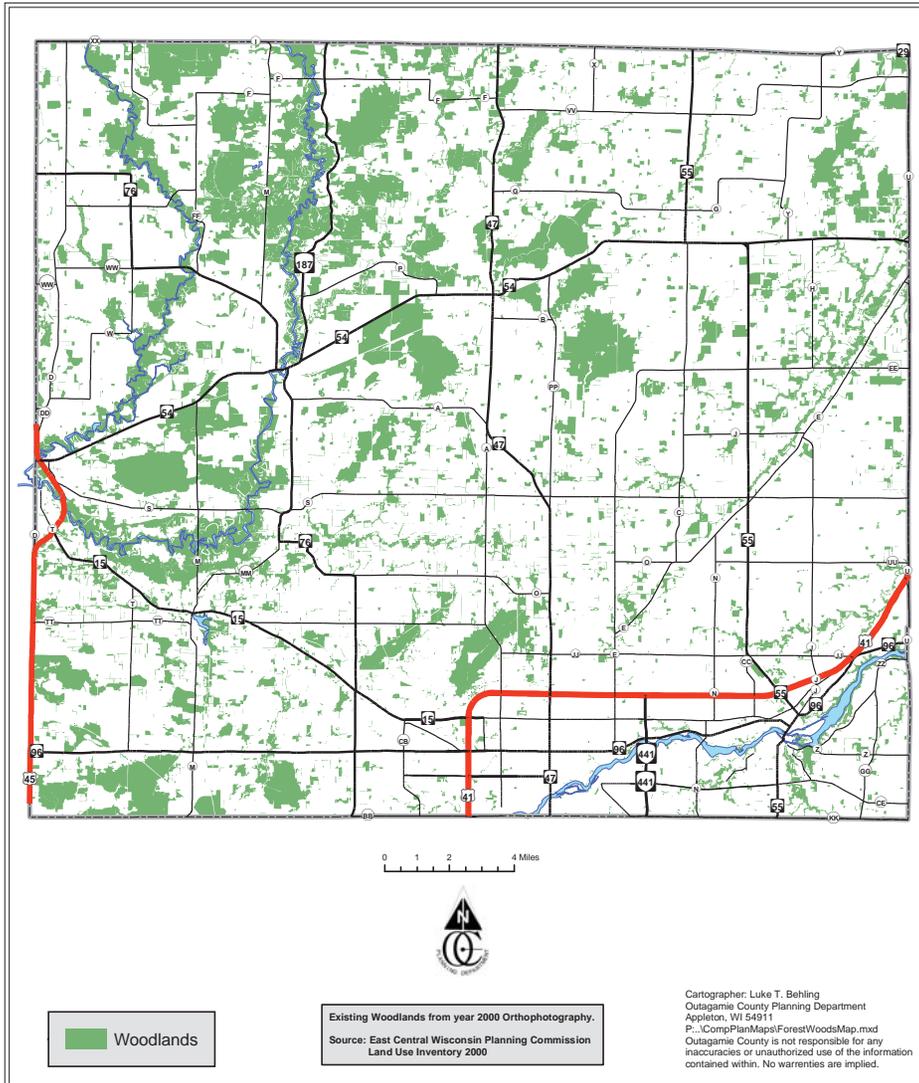
There are a total of 67,284 acres of woodland within Outagamie County, based on the 1996 DNR forest inventory. The majority of woodlands are privately owned with nearly 62,300 acres in private ownership. The remaining 4,984 acres are publicly owned with the majority of which is owned by the State. The biggest threat to the floodplain forest is the invasive *exotic reed canary grass* that can become firmly established if the bottomland forests are over harvested, thus preventing regeneration of new tree seedlings.

There are 226.58 acres of Outagamie County land enrolled in the Wisconsin Forest Crop Law program, based on 2001 information from the Department of Natural Resources. Forest Crop Law acreage is open to the public for hunting and fishing only. Participation in the Managed Forest Law program includes 16,070 acres closed to the public and 452.61 acres that are open to the public for hunting, fishing, hiking, sight seeing and cross country skiing. Both programs provide preferential taxation to private landowners in order to encourage sustainable forest management.

Wildlife

Wildlife provides a valuable recreational and economic resource to the County. There are essentially three types of wildlife grouped by habitat. Open land wildlife includes birds and mammals that use cropland, pasture and meadows. These areas attract bobwhite quail, pheasant, meadowlark, field sparrow, rabbit and red fox. Woodland wildlife includes animals that use areas of hardwoods and conifers, and associated grasses and shrubs. Wildlife attracted to these areas include ruffed grouse, thrushes, squirrels, gray fox, raccoon and deer. The last group is wetland wildlife, which includes birds and mammals that use open,

**EXHIBIT 2-11  
FORESTS / WOODLANDS  
Outagamie County, WI**



marshy, shallow water areas. Examples of wildlife found in these areas are ducks, geese, herons, muskrat, mink and beaver.

The County's surface waters attract significant numbers of ducks and geese. Large tracts of public hunting land are used almost exclusively for fall duck hunting. Mallard and teal are fairly common, especially along the Wolf and Embarrass Rivers.

Muskrats are the most common aquatic furbearers, followed in abundance by mink, beaver and otter. Upland game species found in Outagamie County include white-tailed deer, cottontail rabbit, squirrels, pheasants and ruffed grouse. Hunting is a popular recreational endeavor in this area, and demand is expected to increase.

Walleye, bass, pike and panfish account for the majority of the game fish found in the County's surface waters. The Wolf and Embarrass Rivers are classified as small mouth bass streams, however, both contain a variety of fish species. They are most noted for the walleye, white bass and sturgeon runs that they support each spring. All of the County's streams contain a strictly warm water fishery. There are no trout streams.

Threatened and Endangered Species

The Wisconsin Department of Natural Resources, through the Wisconsin Natural Heritage Inventory Program, is working to locate and document occurrences of rare species and natural communities, including state and federal endangered and threatened species. Occurrences are mapped in general terms to protect the species from destruction. Known occurrences within Outagamie County are listed in exhibit 2-12 and illustrated on exhibit 2-13.

EXHIBIT 2-13

THREATENED & ENDANGERED SPECIES

Outagamie County, WI

EXHIBIT 2-12

RARE, THREATENED & ENDANGERED SPECIES

AQUATIC OCCURRENCES:

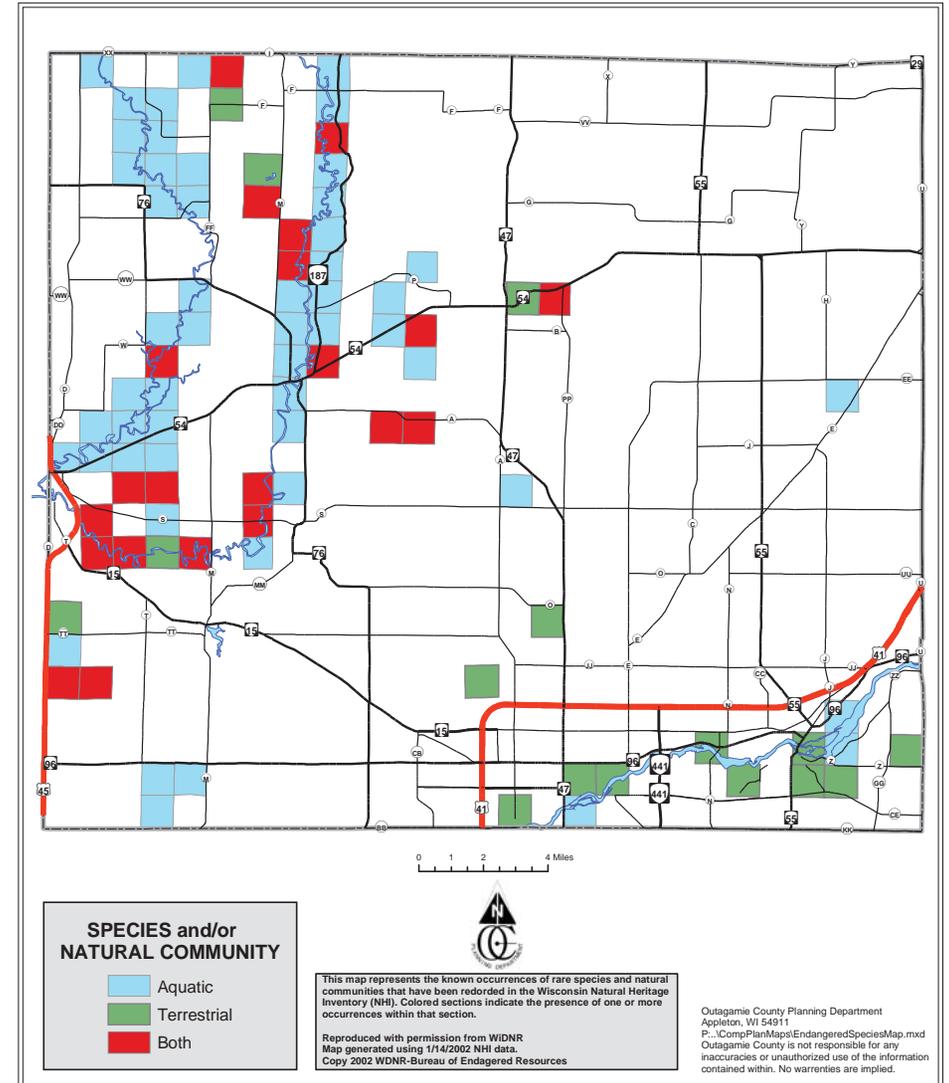
- Birds
  - Black Tern (R)
  - Red Shouldered Hawk (T)
  - Least Bittern (R)
  - American Bittern (R)
  - King Rail (R)
  - Common Moorhen (R)
  - Bald Eagle (R)
- Reptiles & Amphibians
  - Blanding's Turtle (R)
  - Wood Turtle (T)
- Fish
  - Lake Sturgeon (R)
  - Banded Killifish (R)
  - Weed Shiner (R)
- Mussels
  - Salamander Mussel (T)
  - Snuffbox (E)
  - Buckhorn (T)
  - Round Pigtoe (R)
  - Elktoe (R)
- Insects
  - Elusive Clubtail (R)
  - A Primitive Minnow Mayfly (R)
  - Dion Skipper (R)
  - Little Glassy Wing (R)
  - Mulberry Wing (R)
  - A Riffle Beetle (R)
  - Two Spotted Skipper (R)
- Plants
  - Showy Lady's Slipper (R)
  - Small Yellow Lady's Slipper (R)
  - Leafy White Orchis (R)
  - Northern Bog Sedge (R)
  - Marsh Valerian (T)
  - Rams Head Lady's Slipper (T)
- Rare Natural Communities
  - Floodplain Forest
  - Emergent Aquatic-Wild Rice
  - Northern Wet Forest
  - Hardwood swamp
  - Tamarack Poor Swamp
  - Lake Soft Bog
  - Emergent Aquatic
  - Northern Sedge Meadow
  - Northern Wet Mesic Forest
  - Alder Thicket
  - Southern Hardwood Swamp
  - Open Bog
  - Lake-Shallow, Hard, Seepage

TERRESTRIAL OCCURRENCES:

- Birds
  - Acadian Flycatcher (T)
  - Prothonotary Warbler (R)
  - Cerulean Warbler (T)
  - Barn Owl (E)
  - Henslow's Sparrow (T)
- Insects
  - Columbine Dusky Wing (R)
  - Tawny Crescent Spot (R)
  - Broad Winged Skipper (R)
  - Newman's Brocade (R)
  - Gorgone Checker Spot (R)
  - An Owllet Moth (R)
  - Karner Blue Butterfly (R)
  - Henry's Elfyn (R)
- Plants
  - Marbleseed (R)
  - Handsome Sedge (T)
  - Yellow Gentian (T)
  - Indian Cucumber Root (R)
  - Snow Trillium (T)
  - Cuckooflower (R)
  - American Gromwell (R)
- Rare Natural Communities
  - Southern Mesic Forest
  - Southern Dry Mesic Forest
  - Northern Mesic Forest
  - Mesic Floodplain Terrace
  - Northern Dry Forest

(R) = Rare  
(T) = Threatened  
(E) = Endangered

Source: Wisconsin Department of Natural Resources, Bureau of Endangered Resources, 2002.



Soils

There are seven soil associations in Outagamie County composed of 85 different soil types. A soil association is a unique natural landscape that has a distinct pattern of soils and of relief and drainage. Typically, a soil association consists of one or more major soil and some minor soils.

Most soils in the County were derived from either material deposited by the glaciers or material deposited as lacustrine sediment. This lake sediment is principally silt and fine sand. It is found primarily along the major river systems of the Wolf, Embarrass, Shioc, Black, Bear, and Rat. Most of these deposits are within three miles of the river channels. Grays, Keowns, Nichols and Shiocton soils are examples of this soil type.

An area approximately ten miles wide is covered with a reddish loam to clay loam glacial drift that extends from the northeast corner of the County to the southwest corner. Soils in this area are gently sloping to moderately steep. Examples of the soils that formed from this drift include the Hortonville, Onaway, Pella and Solona soils.

The southeastern portion of Outagamie County is covered with a reddish clay lacustrine sediment that was deposited in Glacial Lake Oshkosh. This area is nearly level, with the exception being the steep slopes of the eroded gullies. The sediment is the parent material of the Manawa, Poygan and Winneconne soils.

Some soils of the County were formed in organic material that accumulated in depressions and in old stream channels. Soils of the Carbondale, Cathro and Suamico series formed in this kind of material.

Generally, the County's soils are characterized as predominantly wet and clay-like in the southeast; wet and loam-like in the northeast, central and southwest; and, loam-like and sandy in the northwest.

The best management technique for soils is matching land use to soil capability. The soils survey for Outagamie County contains a rating system of soils according to limitations that affect their suitability for a particular use. The ratings are based on such restrictive soil features as flooding, wetness, slope, and texture of the surface layer. Soils that exhibit sensitive characteristics such as; steep slope, high bedrock or shallow groundwater should be considered as preservation areas. Generalized soils are shown in exhibit 2-14.

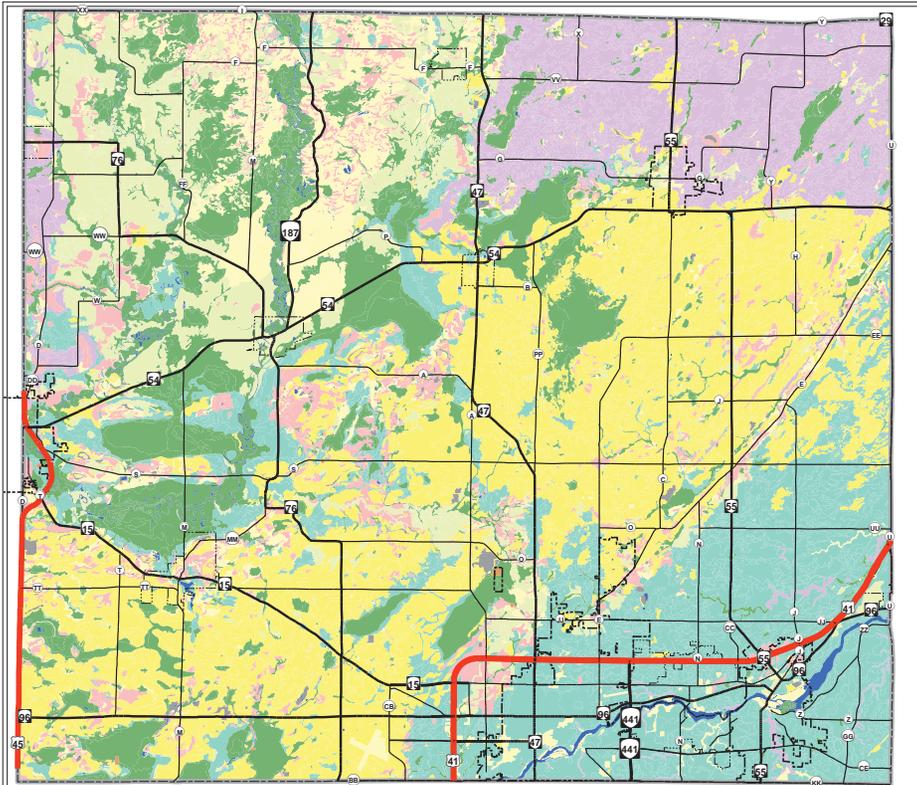
Metallic and Nonmetallic Mineral Resources

There are no known metallic mineral resources in Outagamie County. However, there are nonmetallic resources, which are extracted at various locations across the County. The extraction of mineral aggregates or nonmetallic minerals for "sale or use by the operator" is defined as "nonmetallic mining" under Chapter NR 135 of the Wisconsin Administrative Code. Quarry operations within Outagamie County that meet this definition are included in exhibit 2-15. These operations provide material for construction, landscaping, and road building/maintenance.

Wisconsin's nonmetallic mining reclamation program requires that all nonmetallic mining operations be registered, pursuant to NR135. In 2001, Outagamie County adopted their Nonmetallic Mining Reclamation Ordinance and joined four other counties (Calumet, Shawano, Waupaca, and Winnebago) to contract with the East Central Wisconsin Regional Planning Commission to administer a regional program.

There are 52 nonmetallic extraction operations registered in Outagamie County, according to 2004 records from East Central Planning. These sites encompass 1,118 acres of land, which is significantly higher than neighboring counties (Calumet-325, Shawano-620, Waupaca-465, and Winnebago-690).

EXHIBIT 2-14  
**GENERALIZED SOILS MAP**  
 Outagamie County, WI



**SOIL ASSOCIATIONS**

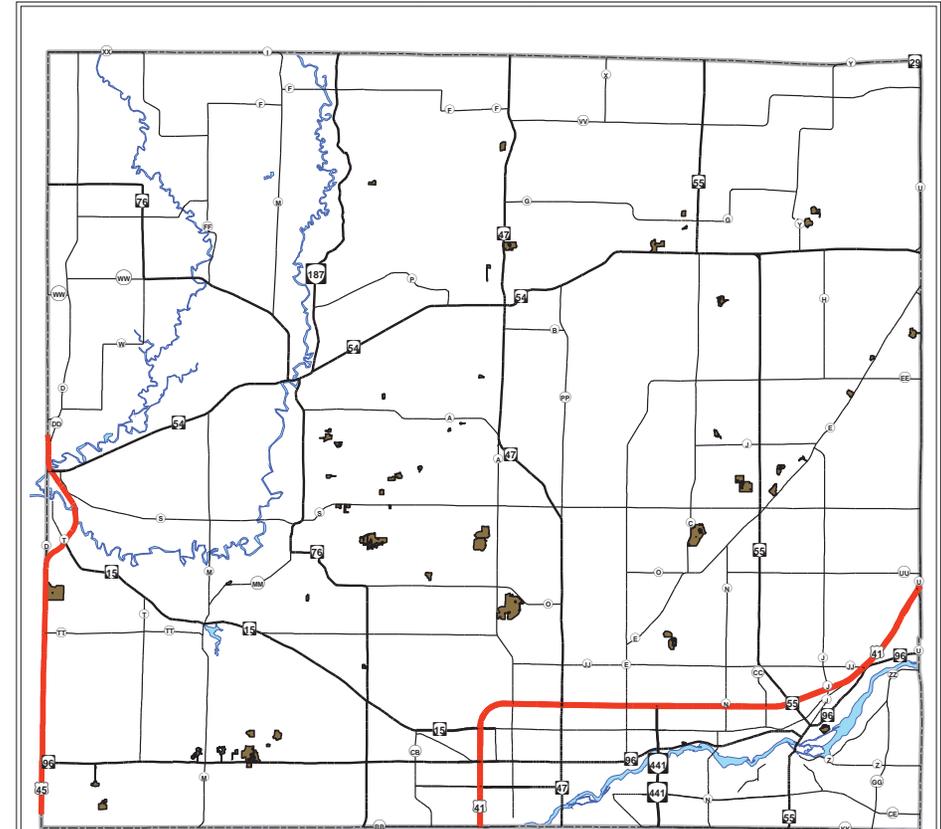
- Hortonville-Symco
- Winneconne-Manawa
- Carbondale-Keownns-Cathro
- Shiocton-Nichols
- Onaway-Solona
- Menominee-Grays-Rousseau
- Wainola-Deford-Rousseau
- Quarries, Pits and Rock Outcrops
- Landfill
- Water

0 1 2 4 Miles



Outagamie County Planning Department  
 Appleton, WI 54911  
 P:\CompPlanMaps\GeneralSoilsMap.mxd  
 Recreated from the University of Wisconsin's  
 Generalized Soil Map (1977).  
 Courtesy: U.S. Dept. of Agriculture Soil Conservation Service &  
 Research Division of the College of Agricultural  
 and Life Sciences, University of Wisconsin.  
 Outagamie County is not responsible for any  
 inaccuracies or unauthorized use of the information  
 contained within. No warranties are implied.

EXHIBIT 2-15  
**NON-METALLIC MINING**  
 Outagamie County, WI



0 1 2 4 Miles



Mining Areas

Existing Non-Metallic Mining areas from year 2000 Orthophotography.  
 Source: East Central Wisconsin Planning Commission  
 Land Use Inventory 2000

Cartographer: Luke T. Behling  
 Outagamie County Planning Department  
 Appleton, WI 54911  
 P:\CompPlanMaps\MiningMap.mxd  
 Outagamie County is not responsible for any  
 inaccuracies or unauthorized use of the information  
 contained within. No warranties are implied.

Recreational Resources

The State of Wisconsin manages nearly 9,000 acres of outdoor recreational lands available for public use within Outagamie County. This acreage is in the form of wildlife and habitat areas, which are further described below and outlined on exhibits that follow.

The *Deer Creek Wildlife Area* encompasses 1,294.56 acres in Outagamie County. There are approximately 200 additional acres to this site immediately north in Waupaca County. Located in the northwest portion of the County, this area supports a large wildlife population, including deer and a variety of waterfowl.

The *Liberty Wildlife Area* is located in west central Outagamie County, approximately two miles east of the City of New London. This 640 acre site is composed primarily of wooded wetland, as well as Embarrass River tributaries. Like all the State wildlife areas, this site supports an abundance of wildlife.

The *Mack Wildlife Area* consists of 1,337.31 acres located along the south side of Highway 54, approximately half way between the Villages of Black Creek and Shiocton. The location of this resource offers excellent opportunities for wildlife viewing. It is a popular spot to watch the swan migration during the spring of the year.

The *Maine Wildlife Area* is also located in northwest Outagamie County. It consists of 720 acres, the vast majority of which is wooded wetlands. This site includes tributaries to the Wolf River and a number of small ponds, which attracts large numbers of animals.

The *Outagamie County Wildlife Area* is located along Highways M and 187, approximately three miles north of Shiocton. This resource abuts the Wolf River and covers 685.74 acres. Access to the river makes this site very important.

*Shaky Lake Wildlife Area* is located in the southwestern portion of the county in the Town of Dale. It encompasses 220 acres and includes Shaky Lake, which is classified as a natural wilderness lake. The lake is less than two acres in size and is surrounded by wetlands.

*Spoehrs Marsh* is another state owned resource located along the Wolf River. It encompasses approximately 350 acres and is two miles north of Shiocton in the Town of Bovina. This marsh consists of two sites, the largest one is immediately adjacent to the Outagamie Wildlife Area. A smaller 14 acre site is roughly three-quarters of a mile to the south of the main portion. The state has recently purchased an additional 60 acres of land in this vicinity.

A *Watchable Wildlife Area* was created by the Wisconsin Department of Transportation in the Town of Bovina. This site is approximately 490 acres in size and is located immediately north of the Mack Wildlife Area, between Shiocton and Black Creek.

The *Wolf River Wildlife Area* is located in the Town of Hortonia, along the south side of the Wolf River. It covers 46.6 acres, making it the smallest state recreational resource in the County. This site is one mile southeast of New London and is land locked. Access to it is via the river.

The *Wolf River Bottoms Wildlife Area* is one of the newest additions to State's resources in Outagamie County. It is also the largest at 2,495.35 acres. It is located in the towns of Deer Creek and Maine a little over three miles north of Shiocton. This site consists of between 1,200 and 1,800 acres of lowland flowage. A deer proof fence confines approximately 1,800 acres. Nearly 26 miles of dikes and trails spread throughout the property. This site is heavily used by both local and migratory wildlife.

In addition to these recreational resources located within Outagamie County, the State owns and manages a number of major resources outside the borders of the County. These include the Navarino Wildlife Area (Shawano County), High Cliff State Park (Calumet County) and Hartman Creek State Park (Waupaca County).

Outagamie County administers and maintains over 900 acres of outdoor recreational lands. These sites range from small boat landing sites to large multi-use facilities.

*Barker Park* is a 29 acre facility located along the west side of the Wolf River, a short distance south of the Village of Shiocton. This park contains a boat launch and parking for up to 75 vehicles. There are also picnic tables and grills available, in addition to a well with a pump. Barker Park is one of four county-owned facilities with access to the Wolf River. The vast majority of this site is maintained as woodland, which provides for excellent wildlife habitat.

*Black Otter Lake Park* is located along the north shore of Black Otter Lake in the Village of Hortonville. This facility is approximately three acres in size and offers a boat launch, parking for 30 vehicles, picnic area and a small shelter. Immediately to the east is the Village's Alonzo Park, which is linked to this County park by a pedestrian bridge. Alonzo Park provides access to playground equipment, a trail and restrooms.

*Buchman Access* is a six acre parcel along the Wolf River, just north of Hortonville along County Highway "M". This facility provides access to this river with a boat launch. It also has parking for 25 vehicles and a small picnic area. This park also offers opportunities for shore fishing.

The *CE Trail* is approximately 5.3 miles in length and has been recently completed along the north side of highway CE, between highways 441 and

Loderbauer Road. This trail is intended to be the first of many trail/greenway segments that will eventually span the County and region.

*Koepke Access* is located three miles north of Shiocton along the Wolf River. This 5.5 acre site contains a boat launch, parking for 60 vehicles and a small picnic area. Shore fishing opportunities are available at this facility. Roughly half the site is heavily wooded and it abuts the Outagamie State Wildlife Area.

*Mosquito Hill Nature Center* is located on 428 acres east of the City of New London. This is the largest recreational facility owned by Outagamie County. The main building houses a small gift shop and numerous hands-on wildlife exhibits. It also hosts regular seminars and demonstrations on wildlife, travel and the environment. An extensive system of trails provides visitors with access to a large portion of this facility. This site also provides significant habitat for wildlife. A recent addition to Mosquito Hill was a Butterfly House. In the short time that it has been available, it has been a major visitor attraction. There is parking for approximately 60 vehicles. A pre-glacial remnant exists on this land making it a resource for geological study.

The *Pet Exercise Area* encompasses approximately ten acres of land at the northeast corner of Highway "OO" and French Road. This unique facility offers a fenced area for the purpose of providing room for household pets to run. Situated on excess landfill property, the park is very popular and is being used by both resident and non-resident pet owners.

*Plamann Park*, located just north of Appleton, is the County's heaviest used recreational facility. Situated on 258 acres of land, this park contains a manmade swimming lake with a shelter and changing facilities, baseball and softball diamonds, volleyball courts, tennis courts, 1.5 mile fitness trail, ice skating, sledding and a multi-purpose pavilion. Parking, picnic areas, shelters and restrooms are spread throughout the park. Cross-country ski trails, disk golf

courses and a children's farm are also available. Nearly one-half of the park is maintained as open space.

The *WIOUWASH Recreation Trail* is located between the Village of Hortonville and the City of Oshkosh, in Winnebago County. The trail extends a total of 19 miles, six of which are within Outagamie County. The trail accommodates snowmobiles in the winter and horseback riding, biking and jogging in the summer. A 5.5 acre parcel at the northern end near Hortonville provides access. This access site contains a small picnic area and parking. There is another small picnic area just south of Spring Road. A second access site is located in Medina adjacent to Highway 96. Long range planning has this trail extending north through Waupaca and Shawano counties, which would be one of the longest trails in Wisconsin when completed.

*Stephensville Access* is located approximately one mile west of the unincorporated community of Stephensville. The site is along the Wolf River, adjacent to Highway S. This access was recently expanded. In the past, it consisted of three acres along the north side of Highway S. A recent addition provides one acre along the south side of the highway. This site provides a boat launch, a picnic area and parking for 10 vehicles with trailers. Shore fishing opportunities also exist.

*View Ridge Park* is located on 36 acres east of the City of New London, a short distance to the northeast from Mosquito Hill. This park was formerly utilized as a downhill ski facility and had then been inactive for a number of years. This site is currently available for overnight camping for non-profit groups and organizations, such as the Boy Scouts or Girl Scouts. It is also available to groups in connection with Mosquito Hill Nature Center. The park lacks restrooms, water and electricity.

The *Wolf River Nature Area* is one of the newest additions to the County park system. Encompassing 24 acres of land within the Village of Shiocton, along the Wolf River, the parcel was purchased in 1999. The site is heavily wooded and no immediate plans are in place for the development of the site. Local schools use the site for outdoor education and nature study.

The most recent addition to the County's recreational resources is the former railroad bed that runs between Seymour and New London. The property was acquired by the State in 2003 from the Canadian National Railroad following abandonment. The State, in turn, transferred ownership to the County in 2004 as a part of the state trails network. The trail is 22.8 miles long and encompasses approximately 275 acres. It includes land located within the Town of Seymour (2.6 mi.), the City of Seymour (1.6 mi.), the Town of Cicero (.3 mi.), the Town of Black Creek (5.3 mi.), the Village of Black Creek (1.1 mi.), the Town of Bovina (5.0 mi.), the Village of Shiocton (1.3 mi.) and the Town of Liberty (5.4 mi.). The mileage segments do not add up to the total due to rounding. The facility is undeveloped at this time. The County added to sites to their park inventory in 2007. The first is a wooded area (24 acres) between the County's Brewster Street campus and Fox Valley Technical College and the second is a wooded area (38 acres) immediately north of Fox Cities Stadium. Both sites will be developed as passive recreation areas in the future.

Many of the cities, villages and towns in Outagamie County are also involved in providing outdoor recreation and open space facilities. A breakdown of all the local recreational resources is contained in exhibit 2-16.

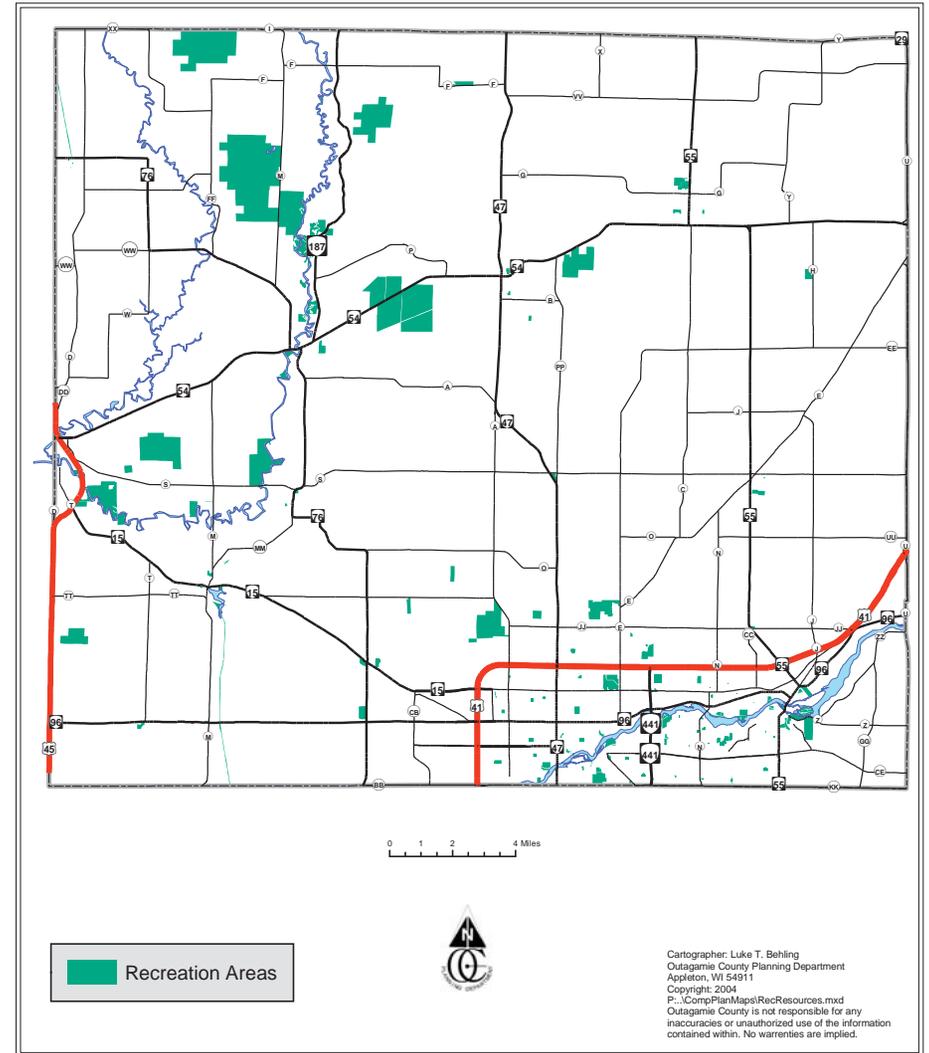
Outagamie County has a total of 16,265.5 acres of existing park and recreational land with the vast majority of that total owned and maintained by the State of Wisconsin. Privately owned facilities, primarily golf courses, account for the second largest share of the County's total recreational facilities.

**EXHIBIT 2-16  
EXISTING PARK AND RECREATIONAL ACREAGE**

COMMUNITY	LOCALLY OWNED	SCHOOL OWNED	COUNTY OWNED	STATE OWNED	PRIVATELY OWNED	TRIBAL OWNED	TOTAL
<b>CITIES</b>							
Appleton	475.5	190.0			72.0		737.5
Kaukauna	366.0	80.2	0.9		95.2		542.3
New London	14.3						14.3
Seymour	65.9	21.1	66.5		5.0		139.2
<b>VILLAGES</b>							
Bear Creek	0.9	10.0					10.9
Black Creek	17.5	2.0	13.2				19.5
Combined Locks	87.3	5.4	1.8				94.5
Hortonville	39.0	34.7	2.9		132.5		209.1
Howard							-
Kimberly	103.6	42.4	1.8				147.8
Little Chute	54.8	28.5					83.3
Nichols	66.0						66.0
Shiocton	47.1	30.0	15.7				77.1
Wrightstown					213.5		213.5
<b>TOWNS</b>							
Black Creek	10.0	446.4	64.6				456.4
Bovina			95.8	2,490.8			2,525.4
Buchanan	6.0	2.7	3.3		137.0		149.0
Center	19.3	12.2					31.5
Cicero			4.2				-
Dale	26.7		69.9	220.0			316.6
Deer Creek				2,095.3			2,095.3
Ellington	5.8		4.0	483.4			493.2
Freedom	42.0	61.6			294.1		397.7
Grand Chute	117.4	154.9	267.8		818.7		1,358.8
Greenville	118.5	39.5			350.0		508.0
Hortonia			19.8	89.1	72.5		181.4
Kaukauna							-
Liberty			530.1	680.0			1,144.4
Maine				2,924.2			2,924.2
Maple Creek							-
Oneida	44.0	37.0				762.1	843.1
Osborn							-
Seymour			32.0		205.2		205.2
Vandenbroek	5.4						5.4
<b>TOTAL ACRES</b>	<b>1,733.0</b>	<b>1,198.6</b>	<b>1,193.4</b>	<b>8,982.8</b>	<b>2,395.7</b>	<b>762.1</b>	<b>16,265.5</b>
<b>PERCENT OF TOTAL</b>	<b>11%</b>	<b>7%</b>	<b>7%</b>	<b>55%</b>	<b>15%</b>	<b>5%</b>	<b>100%</b>

NOTE: the school-owned figures include both private and public schools and they represent the gross acreage at the site, including buildings and parking.

**EXHIBIT 2-17  
RECREATIONAL RESOURCES  
Outagamie County, WI**



Natural Resource Protection Tools

Outagamie County currently utilizes a number of ordinances to preserve and protect the unincorporated area's natural resources. These include zoning controls for shorelands, floodplains, wetlands, stormwater management, and erosion control.

- Shoreland Zoning – This ordinance gives the County jurisdiction to review and approve of any development within 1,000 feet of the ordinary high water mark of any navigable lake, pond or flowage and 300 feet of the ordinary high water mark of a navigable stream. Permits are required and a minimum setback of 75 feet is maintained.

Definition – Ordinary High Water Mark = The point on a bank or shore up to which the presence and action of surface water is so continuous as to leave distinctive mark, such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation or other easily recognized characteristics.

- Floodplain Zoning – Floodplains include those areas that have been or may be covered by the floodwaters of the regional flood. A floodplain is composed of a floodway (the channel of a stream and adjoining areas required to carry regional flood flows) and the flood fringe (the area between the floodway and the regional flood limits). Development in the floodway is limited to structures not intended for human habitation, such as parking areas and some recreational facilities, and that have a low flood damage potential. Development here must also provide for little or no obstruction to the flow of floodwaters. Development in the flood fringe that is intended for human habitation must follow certain standards, including that the lowest floor be at least two feet above the flood elevation.
- Wetland Zoning – The jurisdiction of this ordinance extends to wetlands, as mapped by the Department of Natural Resources, that exist within the shoreland area. Certain agricultural and recreational activities are allowed without a permit. Other activities, such as construction of non-residential

buildings, require a permit. However, most development activities are prohibited with this zoning.

- Stormwater Management – This ordinance was designed to meet the requirements of the Department of Natural Resources and the Environmental Protection Agency as they relate to uncontrolled stormwater runoff from development activity. The intent is to manage post-construction runoff by controlling stormwater quantity (peak flows and volume) and quality.
- Erosion Control – The intent of this ordinance is to require best management practices to reduce the amount of water pollution from sediment that result from land disturbing activities. This applies to construction activities where protective ground cover is removed from an area of 4,000 square feet or more, or where filling involves 100 cubic yards or more.
- Forestry – The Department of Natural Resources provides assistance to private landowners to participate in programs that provide assistance for sustainable management of their woodlands, such as the Managed Forest Law. Additionally, they can assist landowners in forestry “best management practices” as a minimum standard for logging.
- Conservation Subdivisions – As noted in the Agricultural Resource Protection Tools section earlier in this chapter, this form of land division encourages the preservation of open space, natural areas or farmland. Typically, a development will have at least 50 percent of the project protected from further development, while the remaining land is divided into smaller lots that are clustered together. The area to be preserved as open space or farmland is protected indefinitely, usually through the recording of conservation easements or via deed restrictions.

## CULTURAL RESOURCES

### Cultural Resources Goals & Objectives

Goal: Preserve and maintain unique natural, cultural and ecological resources.

- Objectives:
- Work with local communities to identify and preserve historically significant building and structures.
  - Develop an economic development plan that integrates the area's cultural resources.
  - Promote the preservation of identified geological and ecological sites.
  - Promote urban development consistent with the distinctive community character and identity.

### Cultural Background

The historical and archeological heritage of the County, as well as the unique geological and ecological areas, adds to the unique nature of an area. These cultural resources give the citizens of the County a sense of history that is unavailable in any other form. The identification and preservation of these resources is essential to the enjoyment of this heritage. There are also economic benefits to preserving our heritage. Heritage tourism is designed to partner the preservation community and the tourism industry to demonstrate that historic places, when properly preserved, packaged and marketed, can be major attractions. In Wisconsin, heritage tourism is being conducted with association with the National Trust for Historic Preservation and it is administered through the Department of Development, Division of Tourism.

### Historical Resources

Preserving important aspects of the past can give a community a sense of continuity and meaning. This can lead efforts to foster community pride. Additionally, as land values and construction costs continue to increase, rehabilitating older structures become more cost effective.

As briefly noted in the "Issues and Opportunities" chapter, Outagamie County has a rich history that is highlighted by the Native Americans, the various explorers and missionaries that traveled the area, as well as the fur traders, lumber men and farmers. The Fox River provided a perfect environment for the establishment of industry in the County, including sawmills, flourmills and eventually paper mills. Preserving this history provides the County residents with a sense of place. It also allows for the education of new comers and visitors. The appreciation of these unique and irreplaceable resources adds to the overall quality of life of the residents of the region.

The State Historical Society maintains a list of historic buildings in the Architecture and History Inventory (AHI). The AHI does not include all of the historic buildings. It only lists those that have been reported to them, which is a small portion of the existing structures that exist. The database is continuously updated. The State Historical Society maintains a web site, which includes the most recent for information regarding buildings on the AHI. That web site is [www.wisconsinhistory.org](http://www.wisconsinhistory.org).

The following exhibits include two lists of Outagamie County properties and districts that are Official Historical Markers found in the County or are listed on the Wisconsin National Register of Historic Places.

#### EXHIBIT 2-18 OFFICIAL HISTORICAL MARKERS

COMMUNITY	SUBJECT
Appleton	First Electric Street Railway
Appleton	World's First Hydroelectric Central Station
Greenville	South Greenville Grange #225
Kaukauna	Revolutionary War Veterans
Little Chute	Treaty of the Cedars
New London	Birthplace of the American Water Spaniel

Source: State Historical Society of Wisconsin, June 2003.

EXHIBIT 2-19

**HISTORICAL RESOURCES - NATIONAL REGISTER OF HISTORIC PLACES**

COMMUNITY	SITE	LOCATION	NR DATE
Appleton	Appleton City Park District	Franklin St. Vicinity	10-25-02
Appleton	Appleton Wire Works	600 S. Atlantic St.	10-04-82
Appleton	College Avenue District	Downtown Appleton	12-02-82
Appleton	Courtney Woolen Mill	301 E. Water St.	07-15-93
Appleton	Fox River Paper Co. Dist.	Map Available	04-19-90
Appleton	Hearthstone	625 W. Prospect	12-02-74
Appleton	Lakeshore Depot	725 S. Oneida St.	03-02-82
Appleton	Lock 1-3 District	Fox River-Oneida	12-07-93
Appleton	Lock 4 Historic District	Fox River-John St.	12-07-93
Appleton	Main Hall, Lawrence Univ.	400-500 E. College	01-18-74
Appleton	Masonic Temple	330 E. College	09-12-85
Appleton	Schuetter, Henry House	330 W. Sixth St.	07-05-96
Appleton	Temple Zion and School	320 N. Durkee St.	09-18-78
Appleton	Tompkins, James, House	523 S. State St.	04-03-86
Appleton	Volksfreund Building	200 E. College Ave.	03-29-84
Appleton	Washington School	818 W. Loraine St.	06-07-84
Appleton	West Prospect Ave. District	Prospect Avenue	08-24-01
Appleton	Whorton, John Hart, House	315 W. Prospect	11-19-74
Appleton	Zion Lutheran Church	912 N. Oneida St.	06-13-86
Black Creek	Peters, George, House	305 N. Maple St.	06-18-87
Bovina	Barteau Bridge	T23N-R16E Sec 21	03-28-02
Buchanan	Rapid Croche Lock/Dam	Fox River-Co. line	12-07-93
Greenville	Greenville State Bank	252 Municipal Dr.	09-23-82
Greenville	Kronser, Hotel & Saloon	246 Municipal Dr.	07-28-88
Hortonville	Community Hall	312 W. Main Street	01-23-81
Kaukauna	Black, Merritt, House	104 River Road	03-29-84
Kaukauna	Brokaw, Norman, House	714 Grignon Street	03-29-84
Kaukauna	Fargo's Furniture Store	172-176 W. Wisc.	03-29-84
Kaukauna	Free Public Library	111 Main Avenue	03-29-84
Kaukauna	Grignon House	Augustine Street	10-18-72
Kaukauna	Holy Cross Church	309 Desnoyer St.	03-29-84
Kaukauna	Kaukauna Locks District	Fox River	12-07-93
Kaukauna	Klein Dairy Farmhouse	1018 Sullivan Ave.	03-29-84
Kaukauna	Kuehn Blacksmith/Hardware	148-152 E. Second	03-29-84
Kaukauna	Lindauer & Rupert Block	137-141 E. Second	03-29-84
Kaukauna	Martens, Julius J., Co.	124-128 E. Third	03-29-84
Kaukauna	Meade, Captain, House	309 Division St.	03-29-84
Kaukauna	Nicolet Public School	109 E. 8th Street	03-29-84
Kaukauna	Osprey Site	Address Restricted	01-21-98
Kaukauna	St. Andrews, House	320 Dixon Street	03-29-84
Kaukauna	St. Mary's Catholic Church	119 W. 7th Street	03-29-84
Kaukauna	Stribley House	705 W. Wisconsin	03-29-84
Kaukauna	U.S. Post Office	112 Main Avenue	01-22-92
Kimberly	Geenen Residence	416 N. Sidney St.	02-25-93
Little Chute	Cedar Lock/Dam District	4527 E. Wisc. Rd.	12-07-93
Little Chute	Little Chute Lock/Dam	Fox River-Mill St.	12-07-93

Source: State Historical Society of Wisconsin, June 2003.

Archeological - The scientific study of material remains can add to the knowledge of the culture of the Native Americans and the pre-settlement history of the County. Outagamie County has hundreds of known archeological sites although many more unknown sites do exist. These sites are important historical and educational resources in the understanding of this area's ancient inhabitants and once they are destroyed they are gone forever.

The State Regional Archeological Program was initiated in 1989 as part of the State Historical Society's responsibility to administer a program to identify and protect Wisconsin's past. Seven regional centers have been designated. Outagamie County is located in Region 5 (Northeast), with the contact person for the region located at the Neville Public Museum in Green Bay. The State Historical Society maintains a list of archeological sites, mounds, cemeteries and sacred areas known as the Archeological Site Inventory Database (ASI). It should be noted that the information contained in the ASI is confidential to protect the sites and the protect landowners from unwanted visitors. It also needs to be noted that under Wisconsin law, Native American burial mounds, unmarked burials and all marked and unmarked cemeteries are protected from intentional disturbance. If it is suspected that a burial site is present in an area, the Burial Sites Preservation Office needs to be contacted (800-342-7834).

Geological - The structure of the area's bedrock and its subsequent modification by glacial action is largely responsible for the physical appearance of the County. The glaciers scraped and carried away parts of the rocks, but their major effect was the material deposit on top of other rocks. Most of Outagamie County is gently rolling with drumlins, moraines and small scarps of bedrock. The northwest quarter of the County and the area along the Fox River, which were formed by glacial lake deposits, are the exception.

The exhibit below lists a few of the most significant geological features in the County. Although not listed below, local sand and gravel deposits are valuable

natural resources and are important to local economic base. Those resources are discussed further under the “Metallic and Nonmetallic Mineral Resources” portion of this chapter.

**EXHIBIT 2-20  
GEOLOGICAL RESOURCES**

<b>NAME</b>	<b>LOCATION</b>	<b>GEOLOGICAL SIGNIFICANCE</b>
Duck Creek Esker	Parallel to County Highway "E" in the Towns of Freedom and Oneida	Lurid Esker
Mosquito Hill	Two miles southeast of New London in Town of Liberty	Bedrock Outlier & Oxbow Lakes
Duck Creek Bedrock	Six miles northeast of Appleton in the Town of Freedom	Bedrock exposure in stream bed

Source: Outagamie County Natural Resource Inventory, Northeastern Wisconsin Regional Planning Commission, June 1971.

Ecological - The preservation of these areas is important for research and education purposes. Ecological sites are generally areas that exhibit rare plant and animal species, and are often small lakes showing wilderness qualities or wetlands containing unique flora or fauna. Exhibit 2-21 contains an inventory of ecological sites found in Outagamie County.

Ecological landscapes are areas of Wisconsin that differ from each other in their attributes and management opportunities. They have unique combinations of physical and biological characteristics that make up the ecosystem. Outagamie County is located within three of these landscapes: Central Lake Michigan Coastal, Southeast Glacial Plains and Northern Lake Michigan Coastal. The vast majority of the County is within the Central Lake Michigan Coastal landscape, while the Southeast Glacial Plains landscape touches on a small area of south central Outagamie County and the Northern Lake Michigan Coastal area touches on a small area in the northeastern part of the County. Further information on these landscapes is available through the Department of Natural Resources.

**EXHIBIT 2-21  
ECOLOGICAL RESOURCES**

<b>NAME</b>	<b>LOCATION</b>	<b>ECOLOGICAL TYPE</b>
Lost Lake Maple Forest	T. Bovina	Sugar Maple Forest-Alkaline Lake
Lost Bog Lake	T. Bovina Bog	Succession-Kettle Hole
Fossil Quarry	T. Oneida	Unique Quarry
Center Swamp	T. Grand Chute	Cedar Swamp
Killian Woods	T. Buchanan	Oak Forest
Outagamie County Wildlife Area	T. Maine	Marsh Community-Southern Lowland Forest
Deer Creek Wildlife Area	T. Deer Creek	Bog, wet, mesic, Aspen and sedge meadow
Mosquito Hill	T. Liberty	Southern Lowland, mesic, cedar glade & xeric prairie
Unnamed Wetland	T. Liberty	Marsh Community
Squaw Lake	T. Dale	Small wilderness lake
Shaky Lake	T. Dale	Small wilderness lake/bog
Unnamed Lake	T. Greenville	Small wilderness lake

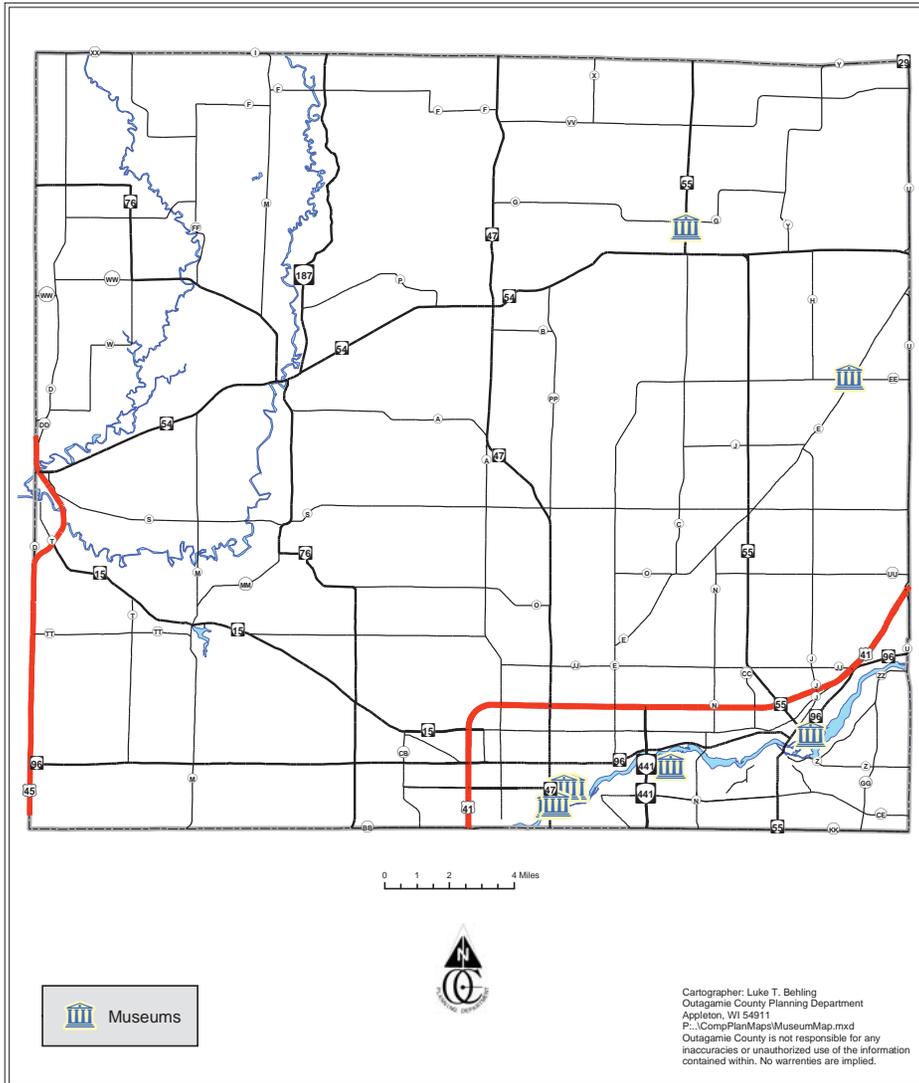
Source: Outagamie County Natural Resource Inventory, Northeastern Wisconsin Regional Planning Commission, June 1971.

Community Design

Outagamie County is a collection of different and diverse backgrounds that together define the County's character. There is the Dutch ancestry in the Little Chute area, the Native American culture in Oneida, the Irish roots in the Freedom vicinity, and much more. There is the urban development of the Fox Cities area and the farming landscapes that still dominate the rural portions of the County. It is these local identities that create the overall character of the County.

Art and cultural facilities also aid in defining the County's character. These facilities add to the quality of life for an area and can be important aspects of economic development. Retaining and attracting business to a region is often dependent on the existence of the arts and entertainment. In Outagamie County, this includes the Fox Cities Performing Arts Center, the Outagamie County Museum, the Attic Theater, Lawrence University's music and speaker series, the Oneida Nation Museum, the Outagamie County Fair and the New London Public Museum, just to name a few.

**EXHIBIT 2-22**  
**PUBLIC MUSEUMS**  
**Outagamie County, WI**



From a local community perspective, community design elements often focus on such things as enhancing points of entry to the community, downtown redevelopment, streetscape improvements, revitalizing historic buildings or districts and the like. Those are much more difficult to do on a countywide scale. So it is imperative that the County works with the local units of government to enhance and foster those local characteristics.

Cultural Resource Protection Tools

- Local Historic Commissions – In 1994, the governor signed into law a requirement that cities and villages adopt historic preservation ordinances if they have a National Register property within their jurisdiction. A local commission can assist in the identification of historic properties and assist the property owner claim tax credits for the partial reimbursement of building renovation.
- Main Street Program – Since its beginning in 1987, the Wisconsin Main Street Program has assisted communities in their efforts to preserve and revitalize their historic downtowns. Currently, there are 30 Main Street communities. Financial and program assistance is available to local communities through this program. Additional information on the program and eligibility is available through the Wisconsin Department of Commerce, Bureau of Downtown Development.
- Heritage Tourism – In 1990, the Department of Tourism, in partnership with the National Trust for Historic Preservation, established the Heritage Tourism program. This program is intended to increase awareness of history and to ensure sustainable economic development based on the combination of history and tourism. One such opportunity exists in the area as part of the Fox-Wisconsin Rivers Heritage Corridor, which stretches 250 miles from Green Bay to Prairie du Chien. This corridor contains numerous historic sites, including the lock and dam system.

- Streetscape Programs – One of the first impressions a community can make on visitors and residents alike is to present an attractive streetscape. Many communities implement tree planting programs along their streets. This not only is aesthetically pleasing, it can also reduce pollution and have a traffic calming effect. The DNR administers urban forestry assistance grants that can assist communities with a 50-50 cost share. Other streetscape strategies may include banners, planters, special pavers and/or benches, especially in the downtown area.
- Traditional Neighborhood Design (TND) – Traditional neighborhoods are generally more compact than current development trends and are mixed use developments. Existing examples can be found in the older sections of almost any city or village. They feature smaller lots, sidewalks or trails that facilitate pedestrian movement, homes with front porches, narrow streets and an interconnected street pattern. These developments include commercial, civic and open space mixed in with residential developments. The close proximity of the other uses allow for easy access to all residents, especially those unable or unwilling to drive. Every city and village with a population of at least 12,500 must enact a TND ordinance.
- Community Festivals – Festivals are good opportunities to showcase a community's heritage. They can also serve to raise awareness among the residents, which often improves community spirit. If the event is properly marketed, they can also improve the local economy by bringing non-residents to the event. Some good existing examples include Appleton's October Fest and Little Chute's Great Wisconsin Cheese Festival, which was featured in an episode on cable television's Food Network.

Agricultural Resource Recommendations

1. Utilize the information from this report as a basis for updating the County Farmland Preservation Plan.
2. Begin requiring that all homes built in the rural portions of the County have a Right To Farm Deed Restrictions in an effort to mitigate potential

- conflict. A potential homeowner would read and sign a statement that essentially outlines the activities (manure spreading, night planting/harvesting, animal odors, etc.) that may occur on neighboring farmland. This could be done at the time a building permit is applied for and a copy of it is recorded with the deed to alert potential future owners of the home.
3. The survey results, as well as the visioning sessions, pointed out the importance of agriculture to the area. Outagamie County should support purchase/transfer of development rights programs at local or regional levels to ensure the protection of large tracts of farmland, especially those tracts on the best soils for farming. The program should include lot size and density restrictions.
  4. A database should be developed in an effort to match those farmers looking to sell their land for agricultural purposes with those looking to buy.
  5. Outagamie County should actively encourage and support new agricultural techniques and activities, such as organic farming, direct marketing, value added activities like jam production, artisan cheese production or apple wine making, and agri-tourism.
  6. Encourage the development of conservation subdivisions in areas where public sewer and water is not available. The required open space could either be preserved as future agricultural lands or they could be protected as permanent environmental/wildlife corridors. The County should work with the development community to ensure that these subdivisions are done in a manner that will offer economic benefit to developers.
  7. Encourage stormwater management in rural areas in an effort to reduce the impact of development on farmland.

Natural Resource Recommendations

1. Encourage and support all efforts to improve the quality of the area water resources, including the PCB removal from the Fox River, stormwater

management and erosion control, and groundwater recharge area protection.

2. Outagamie County should update its floodplain mapping in cooperation with FEMA and the DNR to ensure more accurate representations.
3. Continue to administer and enforce the protective restrictions of the various County ordinances that focus on natural resource protection, i.e. shoreland, floodplain, wetland, stormwater and erosion. The County should work with local units of government who administer similar ordinances to develop consistent standards of protection.
4. Outagamie County should continue participating in the cooperative efforts of the Northeast Wisconsin Stormwater Consortium to improve the water quality of the entire region.
5. Promote the sharing of wells and septic systems in rural developments to gain economies of scale and to reduce costs. This is especially important for wells, given the new WDNR well casing regulations for the County regarding arsenic contamination.
6. The County should participate in the Fox Communities Groundwater Protection Partnership to work toward aquifer sustainability and groundwater recharge area protection.
7. Outagamie County should encourage the sustainable management of County's forests for healthier wooded areas and improved wildlife habitat. Encourage landowners to utilize best management practices and participate in the state Managed Forest program.
8. Outagamie County should continue to implement the State's Non-Metallic Mining Reclamation requirements. Currently, this is through a cooperative regional effort with East Central Wisconsin Regional Planning Commission.
9. Outagamie County should encourage and assist landowners to manage wildlife populations and to reduce related crop damage.
10. The County should encourage the protection of wildlife corridors, including looking at the potential for developing safe road crossings.

11. Encourage the utilization of cisterns and rain gardens to reduce stormwater runoff and increase groundwater infiltration.
12. Encourage the conservation of the region's groundwater resources, including discouraging the use of well water to fill ponds.
13. The County should promote the use of community wells to reduce the number of individual wells being drilled into the aquifer and to save money for homeowners, especially with the stricter well drilling regulations.
14. Outagamie County should encourage and assist in educational programs aimed at new rural residents. Topics could include common farm practices and how they may affect the non-farm population, nutrient management for horses, llamas, etc. and others to promote a better understanding of the differences of living in the country versus the city.

#### Cultural Resources Recommendations

1. Continue to support the protection and preservation of historical buildings and sites throughout the County.
2. Assist local communities in obtaining historic preservation funds for the inventory and ranking of locally significant buildings.
3. Promote community design and beautification efforts, including tree planting programs, Main Street redevelopment, neighborhood enhancements, and traditional neighborhood design planning.
4. Encourage and support local efforts to bring visitors into their community, especially those designed to highlight their culture. However, this may also include regular farmers markets, craft fairs or other activities that could strengthen local pride and the local economy.
5. The County should support the development of the Fox River Heritage Corridor Parkway for historical, environmental, and economic development purposes.

### 3. ECONOMIC DEVELOPMENT

#### Introduction

The Wisconsin comprehensive planning legislation requires that this chapter examine how to promote the stabilization, retention or expansion of the economic base and quality employment opportunities. To accomplish that, a number of things need to be evaluated, including the available labor force and the existing economic base. The County needs to assess its strengths and weakness with respect to attracting and retaining business, as well as determining what types of new businesses and industries is the best fit for the County. This chapter needs to identify and designate areas for future business. It also needs to include a means of evaluating and promoting the reuse of environmentally contaminated sites. Lastly, an inventory of all the economic development programs that can apply to the County needs to be completed. This background information will be used to develop an economic development strategy.

The economic development strategy will determine where future business and industry should be located and what types of support infrastructure will be required, including the transportation network. Locating future business and industry will influence where future housing should be located, which will influence where future parks, schools, churches and the like should be located. The economic development strategy will essentially drive the land use element of this plan.

#### Goals

- To promote the stabilization and expansion of the current economic base and employment opportunities.
- Promote a positive, growth oriented, entrepreneurially supportive image to attract new businesses and create additional employment.
- Promote regional collaboration to ensure maximum benefit to the regional economy.

- Support efforts to create strong relationships between government, the business community and the educational sectors to ensure that all are working together to support economic advances for the region.
- Promote the preservation of agriculture as a vital segment of the County's economy and develop additional opportunities for sustainable farming.
- Protect those natural features that enhance the area's quality of life, which is an important aspect to attracting new business and a quality workforce.

#### Labor Force Analysis

There are several measures that can be examined to determine the make-up of the existing labor force. What this chapter will include is population trends, employment data, education attainment data, and income information.

The population trends were outlined in Chapter 1 – *Issues and Opportunities*. In that chapter it was noted that the 2003 estimated population of the County was 167,272. County population trends are outlined in exhibit 3-1. That figure was 6,301 (4%) higher than the 2000 Census figures. It is a predominately white population, although the County is slowly becoming more diverse, as illustrated in exhibit 3-2. In 1980, 97.9 percent of the total population was white, while by the year 2000 that percentage has decreased to 93.9 percent. It is a population that is aging, as is illustrated in exhibit 3-3. The median age from 1980 to 2000 increased by seven years to 34.4 years of age. The largest percentage gains in age groups occurred between the ages of 35 and 64 with the aging of the baby boom generation. Population projections, as illustrated in exhibit 3-4, show the County to continue to grow (215,720 by the year 2030). However, the age groups under 50 growing at a slower pace than those 50 and older. This could very well impact the availability of future labor.

**EXHIBIT 3-1  
OUTAGAMIE COUNTY POPULATION TRENDS**

Census	Population	Percent Change
1960	101,794	24.6%
1970	119,398	17.3%
1980	128,730	7.8%
1990	140,510	9.2%
2000	160,971	14.6%

Source: U.S. Census Bureau, 1960 – 2000.

**EXHIBIT 3-2  
OUTAGAMIE COUNTY POPULATION BY RACE**

CENSUS	WHITE	BLACK	NATIVE AMERICAN	ASIAN	OTHER	HISPANIC	TOTAL
1980	126,047	62	1,617	351	652	680	128,730
% of Total	97.9%	0.0%	1.3%	0.3%	0.5%	0.5%	100%
1990	136,043	206	1,965	1,904	392	987	140,510
% of Total	96.8%	0.1%	1.4%	1.4%	0.3%	0.7%	100%
2000	151,101	867	2,471	3,595	2,937	3,207	160,971
% of Total	93.9%	0.5%	1.5%	2.2%	1.8%	2.0%	100%

Source: U.S. Census Bureau, 1980 – 2000.

NOTE: Persons of Hispanic origin may be of any race.

**EXHIBIT 3-3  
OUTAGAMIE COUNTY POPULATION  
BY AGE GROUP**

AGE GROUP	CENSUS				PERCENT CHANGE		
	1970	1980	1990	2000	1970-1980	1980-1990	1990-2000
0-4	11,620	10,795	11,455	11,124	-7.10%	6.11%	-2.89%
5-9	14,587	10,034	11,652	12,567	-31.21%	16.13%	7.85%
10-14	14,312	11,727	10,905	13,093	-18.06%	-7.01%	20.06%
15-19	12,333	14,065	9,818	12,220	14.04%	-30.20%	24.47%
20-24	8,960	12,185	10,036	9,816	35.99%	-17.64%	-2.19%
25-34	14,041	20,826	25,586	23,161	48.32%	22.86%	-9.48%
35-44	12,460	14,032	21,148	28,113	12.62%	50.71%	32.93%
45-54	11,608	11,855	13,565	20,924	2.13%	14.42%	54.25%
55-59	5,038	5,639	5,353	7,087	11.93%	-5.07%	32.39%
60-64	4,259	4,786	5,337	5,281	12.37%	11.51%	-1.05%
65-74	6,194	7,581	8,594	8,926	22.39%	13.36%	3.86%
75-84	3,114	4,031	5,308	6,297	29.45%	31.68%	18.63%
85+	830	1,174	1,753	2,362	41.45%	49.32%	34.74%
<b>TOTAL</b>	<b>119,356</b>	<b>128,730</b>	<b>140,510</b>	<b>160,971</b>	<b>7.85%</b>	<b>9.15%</b>	<b>14.56%</b>
<b>MEDIAN</b>	<b>23.8</b>	<b>27.4</b>	<b>31.4</b>	<b>34.4</b>	<b>15.13%</b>	<b>14.60%</b>	<b>9.55%</b>

Source: U.S. Census Bureau, 1980 – 2000.

**EXHIBIT 3-4  
OUTAGAMIE COUNTY POPULATION PROJECTIONS BY AGE GROUP**

Age Group	2000 Census	2005	2010	2015	2020	2025	2030
0-4	11,124	11,855	12,212	12,991	13,633	13,845	13,942
5-9	12,567	11,937	12,522	12,797	13,509	14,127	14,336
10-14	13,093	13,209	12,383	12,953	13,227	13,935	14,560
15-19	12,223	13,060	13,131	12,267	12,819	13,066	13,764
20-24	9,837	11,367	12,102	12,125	11,319	11,806	12,033
25-29	10,639	11,950	13,660	14,589	14,631	13,673	14,270
30-34	12,577	11,403	12,841	14,520	15,470	15,520	14,485
35-39	14,527	12,996	11,819	13,270	14,950	15,892	15,972
40-44	13,615	14,668	13,115	11,899	12,252	15,013	15,962
45-49	11,625	13,450	14,455	12,889	11,692	13,101	14,733
50-54	9,306	11,361	13,115	14,057	12,533	11,355	12,730
55-59	7,090	8,919	10,866	12,515	13,416	11,952	10,841
60-64	5,281	6,537	8,212	9,986	11,511	12,334	11,008
65-69	4,524	4,857	6,006	7,536	9,177	10,584	11,365
70-74	4,404	4,055	4,352	5,386	6,776	8,264	9,564
75-79	3,672	3,790	3,513	3,776	4,700	5,928	7,266
80-84	2,625	2,831	2,931	2,737	2,961	3,713	4,717
85-89	1,590	1,794	1,962	2,053	1,951	2,133	2,714
90-94	612	706	828	924	986	961	1,070
95-99	133	167	202	245	283	312	315
100+	27	27	33	41	52	63	73
Totals	161,091	170,939	180,260	189,556	198,948	207,577	215,720
# Change	N.A.	+9,848	+9,321	+9,296	+9,392	+8,629	+8,143
% Change	N.A.	+6.1%	+5.5%	+5.2%	+5.0%	+4.3%	+3.9%

Source: Demographic Services Center, Wisconsin Department of Administration, January 2004.

Labor force participation is very high in the County – 86 percent versus 74 percent for the state and 67 percent for the nation. The County's unemployment rate is generally lower than the state average. As of June 2004, the County unemployment rate was 4.6 percent, while the state figure was 5.1 percent. During the 1980s the service sector jobs began to outnumber those found in manufacturing, as illustrated in exhibit 3-5. While manufacturing has been consistently adding jobs through the years, the primary employer is now the service sector, which accounted for 44 percent of employment as of the 2000 census. The bulk of job growth is expected to take place in the service sector as well.

**EXHIBIT 3-5  
Employment By Industrial Group - Outagamie County**

Industrial Group	1960	1970	1980	1990	2000
Manufacturing	12,013	14,988	18,781	20,755	23,197
Services, Finance, Insurance, Real Estate & Government	5,179	12,592	17,699	24,855	37,366
Wholesale and Retail Trade	6,766	8,830	12,237	15,644	12,271
Construction	1,775	2,744	3,008	4,106	6,171
Transportation, Public Utilities & Communications	1,726	2,057	2,819	3,331	4,955
Agriculture, Forestry, Fisheries & Mining	3,253	2,469	2,789	2,439	1,636
<b>Total Employment-Persons 16+ years old.</b>	<b>30,712</b>	<b>43,680</b>	<b>57,333</b>	<b>71,130</b>	<b>85,596</b>

Source: U.S. Census Bureau, 1960 – 2000.

Educational attainment levels of the residents of Outagamie County are highlighted in exhibit 3-6. That table illustrates that the population 25 years and older has been increasing its level of education over the past couple of decades. As of 2000, 31.3 percent of this segment of the population had an associate college degree or higher, compared to 13 percent in 1980. The 2000 figure for college degree attainment is slightly higher than the state figure (30%). Educational attainment is closely tied to income. An educated workforce is vital to the future economy of the County and the region. The new economy is knowledge-based, which means it requires brainpower to make it work. Training and retraining the labor force will be extremely important.

**EXHIBIT 3-6  
OUTAGAMIE COUNTY - EDUCATION ATTAINMENT**

	1980	1990	2000
(Population 25 years and older)	69,922	86,689	102,218
Elementary (0-8 years)	12,167	7,874	4,834
High School (no diploma)	7,187	8,135	7,296
High School graduate	32,067	37,028	38,594
College (no degree)	9,179	19,180	19,516
College graduate (Associate degree or higher)	9,322	14,472	31,978

Source: U.S. Census Bureau, 1980 – 2000.

As noted above, education is closely tied to income. Outagamie County has had a consistently higher average income levels than the state as a whole, as noted in exhibit 3-7. The 2000 income figures show the County with a median

household income of \$49,613 (13% higher than the state), median family income of \$57,464 (9% higher than the state), and per capita income of \$21,943 (3% higher than the state). Since the education data is very similar to the state data, other reasons need to be explored to explain the difference. One explanation might be this area's historically higher dependence on high-paying manufacturing jobs. The most recent census indicated that Outagamie County had approximately five percent more of its labor force employed (27% vs. 22%) in the manufacturing sector than the state. Nationally, only eleven percent of the population is employed in manufacturing.

**EXHIBIT 3-7  
INCOME TRENDS**

		Outagamie County	Wisconsin	Percent of State Income
1980	Median Household	\$19,418	\$17,680	109.8%
	Median Family	\$21,838	\$20,915	104.4%
	Per Capita	\$7,269	\$7,243	100.4%
1990	Median Household	\$33,770	\$29,442	114.7%
	Median Family	\$38,286	\$35,082	109.1%
	Per Capita	\$13,893	\$13,276	104.6%
2000	Median Household	\$49,613	\$43,791	113.3%
	Median Family	\$57,464	\$52,911	108.6%
	Per Capita	\$21,943	\$21,271	103.2%

Source: U.S. Census Bureau, 1980-2000.

Economic Base Analysis

As mentioned in the previous section, there has been a shift from a manufacturing based economy to a service based economy. Service sector industries are growing globally, nationally, regionally and locally. This is consistent with the basis of the new economy, which is driven by knowledge, capital and innovation. A review of the County's top industry groups shows that health services and education services are the top two groups by the number of employees. That information is highlighted in exhibit 3-8. Only three of the top ten, Paper & Allied Products, Food & Kindred Products and Industrial Machinery & Equipment, are considered to be traditional manufacturing. The shift from manufacturing is also apparent in the list of top employers, which is shown in

exhibit 3-9 below. Sixteen percent of the resident workforce is employed by one of the ten largest employers, while 51 percent of the workforce is employed by one of the ten largest sectors.

**EXHIBIT 3-8  
OUTAGAMIE COUNTY – TOP TEN INDUSTRY GROUPS**

Industry Group	March 2004		Numeric Change	
	Employers	Employees	2003-04	1999-04
Food Services & Drinking Places	295	6,868	397	842
Educational Services	33	6,705	-28	731
Specialty Trade Contractors	421	5,725	223	1,007
Paper Manufacturing	27	5,609	595	288
Administrative/Support Services	179	5,162	201	-129
Food Manufacturing	30	3,987	-207	-701
Professional/Technical Services	307	3,196	271	382
Insurance & Related Activities	113	3,187	-262	410
General Merchandise Stores	18	3,176	81	902
Ambulatory Health Care Services	203	3,125	125	1,314

Source: Wisconsin Department of Workforce Development, Outagamie County Workforce Profile, November 2004.

**EXHIBIT 3-9  
OUTAGAMIE COUNTY – TOP TEN EMPLOYERS**

Company	Product or Service	Size
Theadcare, Inc.	General Medical and Surgical Hospitals	1,000+
Appleton Area School District	Public School System	1,000+
Thrivent Insurance	Insurance Services	1,000+
Appleton Papers, Inc.	Coated Paper Manufacturing	1,000+
Wal-Mart Associates, Inc.	Discount Department Stores	1,000+
Sara Lee Corp. (Hillshire Farms)	Meat Processing	1,000+
County of Outagamie	Executive & Legislative offices	1,000+
Fox Valley Technical College	Junior College	1,000+
Miller Electric Manufacturing	Welding Machine Manufacturing	1,000+
St. Elizabeth Hospital, Inc.	General Medical & Surgical Hospital	500-999

Source: Wisconsin Department of Workforce Development, Outagamie County Workforce Profile, November, 2004.

According to the Wisconsin Department of Workforce Development's job growth projections for the Fox Valley region, the largest number of jobs will be created, in order, in the following industries: education and health services (10,230), information and professional services (6,980), leisure and hospitality (3,790), trade (3,630), and construction, mining, and natural resources (3,210). These projections are for the period of 2004 to 2014.

Wages paid to employees by industry division is shown in exhibit 3-10. The average annual wage paid by employers in Outagamie County was \$31,707 in 2001, which was 2.5 percent higher than the state average. Average annual wages paid to the County workforce were higher than state averages in every industry, except wholesale trade, services and government.

**EXHIBIT 3-10  
AVERAGE ANNUAL WAGE BY INDUSTRY DIVISION**

	Outagamie County Annual Average Wage	Wisconsin Annual Average Wage	Percent of State Average
All Industries*	\$31,707	\$30,922	102.5%
Agriculture, Forestry & Fishing	\$23,144	\$22,565	102.6%
Construction	\$41,132	\$39,011	105.4%
Manufacturing	\$41,291	\$39,739	103.9%
Transportation, Communications & Utilities	\$36,763	\$36,639	100.3%
Wholesale Trade	\$37,136	\$40,521	91.6%
Retail Trade	\$15,748	\$14,596	107.9%
Finance, Insurance & Real Estate	\$42,894	\$40,933	104.8%
Services	\$27,694	\$28,775	96.2%
Total Government	\$32,959	\$33,785	97.6%

\* Mining excluded from table since wages were suppressed to maintain confidentiality.  
Source: Wis. Department of Workforce Development, *Employment, Wages and Taxes Due by Wisconsin's Unemployment Compensation Law, 2002.*

#### Strengths & Weaknesses

The intention of this section is to identify specific strengths and weaknesses of Outagamie County with regards to economic development. Two recent exercises asked for that exact same information from groups of participants. The first was as part of phase I of the *Northeast Wisconsin (N.E.W.) Economic Opportunity Study*, which included a series of community economic information gathering sessions. Two sessions were held in Outagamie County during January 2004, at which a group of local business and community leaders were invited to participate.

Strengths – those in attendance at the information gathering sessions mentioned the following items as positives for attracting and maintaining a high-growth economy in this area.

- Talented workforce
- Good work ethic
- Outstanding quality of life
- Short commute times
- Low crime
- Good schools
- Local pride/enthusiasm
- Good transportation network
- Good health care facilities
- Recreational opportunities
- Diversified business base
- Good regional cooperation
- Low housing costs
- Natural resources
- Tourism attractions
- Entrepreneurship opportunities
- Community-minded citizens
- Downtown improvements

As part of a study investigating the feasibility of establishing a regional business park in the region, the consultant that was retained to prepare the study held an information gathering session in September 2004. The strengths mentioned in that session included all of the items above and a few more that are listed below.

- Retail shopping hub
- Positive reputation
- Location within the state
- Good infrastructure
- Business confidence
- Friendly cultural climate
- Lack of slum areas
- Quality higher education
- Sites for business expansion
- Clean air and water
- Family oriented
- Optimistic mind set
- Cultural opportunities
- Affordable living

Weaknesses – the following items were mentioned as negatives at the two information gathering sessions held as part of the *N.E.W. Economic Opportunity Study*.

- Lack of “wow” factor
- Lack of unified vision
- No brand recognition
- Lack of visibility for the region
- High taxes
- Lack of R & D operations
- Educated youth leaving area
- Lack of big city amenities
- State regulations
- Too parochial
- Lack of diversity
- Provincial attitudes
- Lack of collaboration
- Lack of focus on retention
- Lack of enterprise zone
- Too conservative
- Non-local business ownership
- Lack of venture capital
- Lack of marketing plan
- Cold climate – “Frozen Tundra”

The negatives/weaknesses mentioned by those in attendance at the session with the regional business park study consultant listed many of the same issue listed above and added the following.

- Location assets lessening
- Water capacity concerns
- Electric energy concerns
- Negative perception of WI
- Lack of workforce housing
- Aging population
- Not friendly to single/childless
- Perception that nothing exists in the state north of Milwaukee-Madison
- Aging manufacturing facilities
- Labor union’s old-time attitude
- Tight labor market
- Too many governments
- Different rules per jurisdiction
- Urban sprawl
- Lack of migrant housing

The *N.E.W. Economic Opportunity Study* suggests that northeast Wisconsin needs to change from an economy that relies on the production of goods based on proximity to raw materials to one that is based on ideas, creativity and innovation. This region possesses some of the key elements for this new economy, quality of life and abundant recreational opportunities. However, it is falling behind in several critical areas, such as education attainment, innovation and collaboration. The new economy is dependant on talented and educated workers. An educated workforce will command a higher income, which will raise the overall income levels for the entire area. With a tightening labor supply and worldwide competition, attracting and keeping a skilled workforce will be a major challenge. The new economy also relies heavily upon access to capital, research and entrepreneurship. Unfortunately, lack of capital and lack of research & development facilities were listed as weaknesses of this area.

To successfully compete in the new economy, public and private partnerships in Outagamie County will need to protect and enhance the areas strengths, while simultaneously addressing our weaknesses. This area will need to go from simply a manufacturing based economy to one based on innovative ideas that develop into new products and services and add value to existing products and services.

### Targeted Businesses and Industries

A 2001 report titled *The Economic Structure of the Fox Valley: A Study of Economic Opportunity*, presented a listing of businesses and industries that have strong potential for the Fox Valley (Outagamie and Winnebago counties). That report noted that there is growth in the following areas:

- Service sectors, such as health care
- Computer and data processing
- Management and business services
- Engineering and architectural consulting services
- Advertising
- Commercial printing
- Paper related activities
- Security and commodity brokers
- Industrial patterns
- Plastic bags
- Food processing sectors

The 2004 *Northeast Wisconsin Economic Opportunity Study* states that the Fox Valley region is still very strong in the paper industries. It noted that the existing paper cluster should continue to expand into technologies developing with non-woven paper and film coated paper. Another thought presented relating to the paper cluster is to expand into biorefinery – the process of taking paper’s raw materials and generating a new line of products. A new paper/biorefinery cluster would work nicely with the forestry, agricultural and plastics clusters that could result in new products, which include energy (fuels), fabrics, packaging and composite materials. The report goes on to identify additional opportunities that have potential for the Fox Valley region, including the following:

- Specialty and organic food products
- Food processing machinery
- Printing and publishing
- Insurance products
- Production technologies
- Education and health care
- Nutraceuticals

In the 2005 report titled *Target Industry Study for the Fox Cities Region – Fox Cities Regional Business Park Strategy*, six industry clusters are identified as

good fits for the area (Calumet, Outagamie and Winnebago counties). The purpose of this study is to identify the projected demand for industrial park acreage and if the area could support a regional business park. The clusters, along with a few suggested types of activities within the cluster, are shown below.

- Specialty food products and packaging
  - Paperboard container manufacturing
  - Paper bag & coated & treated paper manufacturing
  - Plastic materials & basic forms, shapes wholesale
- Specialty and converted paper and plastics
  - Frozen food manufacturing
  - Dairy products (except frozen) manufacturing
  - Other grocery & related wholesale
- Transportation (including general aviation), security and related services
  - Motor vehicle body & trailer manufacturing
  - General freight trucking, local
  - General warehousing & storage
- Printing and Publishing
  - Printing
  - Printing support activities
  - Graphic design services
- Commercial and industrial machinery and equipment
  - Machine shops
  - Other industrial machinery manufacturing
  - Industrial supplies wholesale
- Headquarters and business and support services
  - Engineering services
  - Securities brokerage
  - Direct life, health, medical insurance carriers

The three listings of targeted industries share many of the same activities, including food processing, printing, professional services, insurance, brokers, plastics, and paper. The later two studies stressed the importance of industrial clusters to achieve greater economic synergy, job growth and job retention.

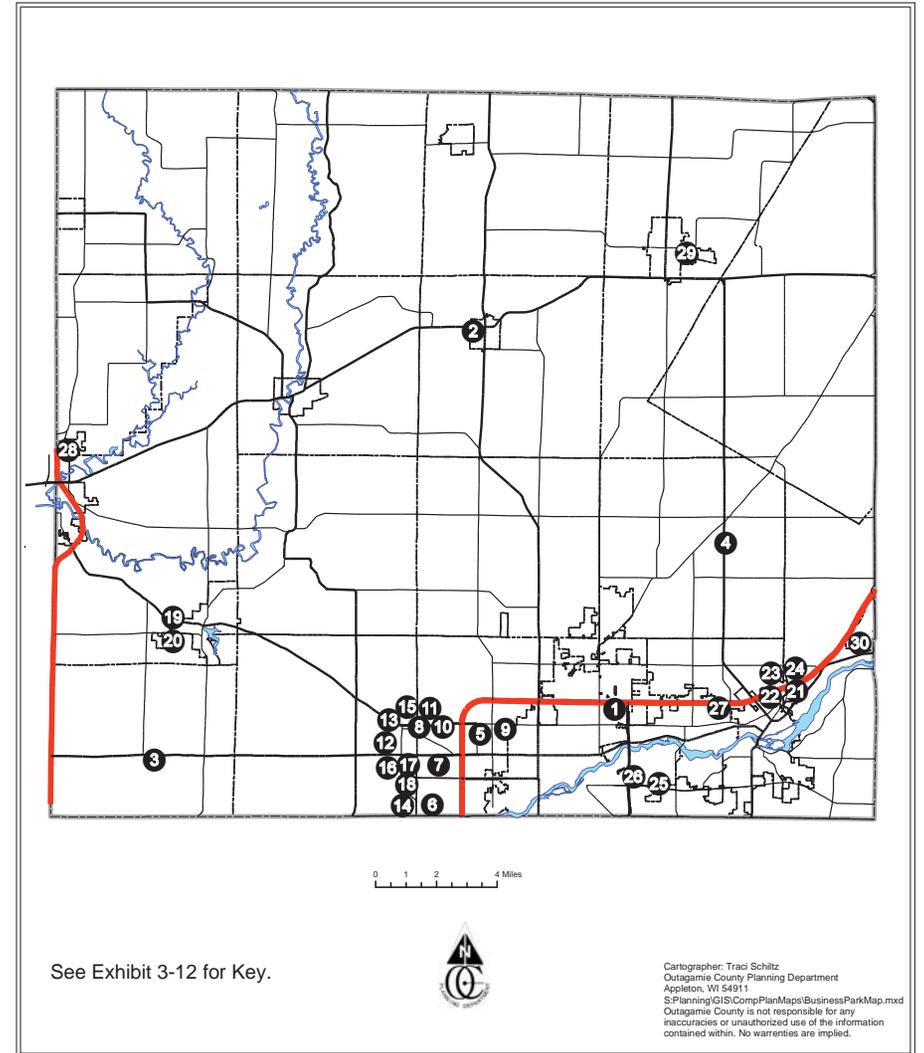
These six clusters were examined further in a 2006 study titled *Bridge to the New Economy – A Cluster-Based Strategy of the Fox Cities Economic Development Partnership*. This report suggests that these industrial clusters should be targeted, based on the strengths of the Fox Cities region.

Business-Industrial Parks

Existing business and industrial parks are highlighted in exhibit 3-11. The depiction includes both private and public lands that are set aside for business development. These parks should serve as the primary locations for business and industrial development within the County. General information regarding each of the parks is shown in exhibit 3-12. Most communities have additional vacant lands that are zoned as either commercial or industrial that are not located within designated parks. These lands are also available for future business ventures. It is estimated that several hundred acres of undeveloped commercial or industrial properties are currently available. This acreage, in addition to the nearly 1,000 acres located within existing business/industrial parks, provides the County with a solid base for future business development. In addition to the parks illustrated in exhibit 3-11, see the "Future Land Use" map in exhibit 7-6 for the location of the projected commercial and industrial land uses.

One of the findings that came out of the *Bridge to the New Economy* study was that there is sufficient acreage available within existing business and industrial parks to meet demand. Therefore, it was decided that further efforts to develop a regional park would not be pursued at this time.

**EXHIBIT 3 - 11**  
**INDUSTRIAL - BUSINESS PARKS**  
Outagamie County, WI



**EXHIBIT 3-12  
BUSINESS-INDUSTRIAL PARK CHARACTERISTICS**

Map Key	Community Park Name	Available Acres*	Zoning	Ownership
1	City of Appleton Northeast Business Park	15	Industrial	Municipal
2	Village of Black Creek Black Creek Industrial Park	40	Industrial & Commercial	Municipal
3	Town of Dale Dale Business Park	22	Industrial	Private
4	Town of Freedom Freedom Industrial Park	25	Industrial	Private
5	Town of Grand Chute Tri-Park	25	Planned Commercial	Private
6	Town of Grand Chute Southwest Business Park	48	Industrial	Private
7	Town of Grand Chute Grand Market Ind. Park	24	Light Industrial	Private
8	Town of Grand Chute Griesbach Business Park	21	Light Industrial	Private
9	Town of Grand Chute Nordale Commerce Center	30	Industrial	Private
10	Town of Grand Chute Clairemont Business Park	5	Industrial	Private
11	Town of Grand Chute Grand Chute West Business Park	21	Light Industrial	Private
12	Town of Greenville Greenville Business Park	2	Industrial	Municipal
13	Town of Greenville Northeast Asphalt Ind. Park	37	Industrial	Private
14	Town of Greenville Greenville South Ind. Park	2	Industrial	Private
15	Town of Greenville Greenville Crossing Business Park	45	Business Park	Private
16	Town of Greenville Outagamie Co. Air Industrial Park	62	Airport	Municipal
17	Town of Greenville Greenville Industrial Park	3	Industrial	Private
18	Town of Greenville Aerotech Campus	14	Planned Commercial	Private
19	Village of Hortonville Hortonville Industrial Park I	0	Industrial	Municipal
20	Village of Hortonville Hortonville Industrial Park II	94	Industrial	Municipal
21	City of Kaukauna Agricultural Develop. Center	0	Light Industrial	Municipal
22	City of Kaukauna Kaukauna Industrial Park I	2	Industrial	Municipal
23	City of Kaukauna Kaukauna Industrial Park North	16	Industrial	Municipal
24	City of Kaukauna NEW Prosperity Center	66	Industrial	Municipal
25	Village of Kimberly Opportunity Business Park	22	Commercial	Private
26	Village of Kimberly Kimberly Business Park	0	Light Industrial	Municipal
27	Village of Little Chute Little Chute Industrial Park	27	Industrial	Municipal
28	City of New London Northeast Industrial Park	135	Business & Industrial	Municipal
29	City of Seymour Seymour Business Park	80	Industrial	Municipal
30	Village of Wrightstown Wrightstown Industrial Park	112	Industrial	Municipal-Private
		995 acres		

\* Available acres figures are current ranging from 2005 to 2007.

Brownfields

Brownfields are abandoned, idle or underused properties where expansion or redevelopment has not occurred due to known or perceived environmental contamination. Brownfield remediation is made feasible by the desire of local units of government to get these properties to be economically viable. The remediation of these sites also has environmental and social benefits for a community. Successful brownfield remediation requires three things:

1. Managing the liabilities.
2. Conducting the clean up (including finding the funding).
3. Implementing the redevelopment project.

There are numerous known brownfields within Outagamie County and possibly more that have not yet been identified. The County has successfully partnered with private parties in the past to work together to remediate brownfield sites. It is important to the overall economic health of a community that these sites get cleaned up and put back into a viable industrial use. In some cases, these sites are located in areas that have transitioned from industrial use to a more commercial and/or residential use. These properties can also make that transition, depending on the specifics of the site. Regardless of how the site will be used, it is important environmentally that the site is cleaned and it is important to the economy to get these sites redeveloped.

Tourism

Tourism has an estimated \$330 million impact on just the Fox Cities region and tourist dollars directly and indirectly created more than 9,000 full-time job equivalents and \$170 million in resident income. In 2003, visitors to Outagamie County spent \$288,248,632, according to Department of Tourism data. That total ranked as the eighth highest in the state. It is the fastest growing industry in the country, with shopping and dining in a pedestrian setting being the number one activity. It is also where visitors spend the most money after lodging.

Outagamie County offers two distinct tourism features, the urban area of the Fox Cities and the rural portion with its natural resources and small towns. The urban area offers such attractions as the Performing Arts Center, the Fox River Mall and the Wisconsin Timber Rattlers. This portion of the County also hosts the majority of the County's lodging and dining establishments. The rural portion of the County features the Mosquito Hill Nature Center, thousands of acres of public lands, and an extensive river system. There are also numerous shopping and dining opportunities.

#### Agriculture

Agriculture is an important component of the County's economy. It includes hundreds of farming operations, as well as related businesses and industries that provide equipment and services to the farm community. The *Agricultural, Natural & Cultural Resources* chapter of this plan included statistical evidence of the significance of agriculture to the area's economy. Further support is provided in a 2004 University of Wisconsin Extension publication, "Outagamie County Agriculture: Value and Economic Impact". That document provides the following facts:

- Agriculture provides jobs for 15,470 persons.
- Agriculture accounts for \$2.11 billion in economic activity.
- Agriculture contributes \$683.6 million to the County's total income.
- Agriculture pays \$18.9 million in taxes, not including property taxes paid to school districts.

Given the statistics shown above, as well as the data in the *Agricultural, Natural & Cultural Resources* chapter, it becomes very clear that for agriculture to remain a viable component of the local economy land use policies need to be put into place ensure that productive agricultural lands are protected from development. People are going to continue to want rural living as an alternative; however, it should be directed away from areas that are highly productive. Rural housing should be placed in such a manner that large contiguous tracts of agricultural lands can be maintained as farmland.

#### Existing Economic Development Programs, Tools & Resources

There are three basic types of economic development – business retention and expansion, business attraction, and entrepreneurial development. The following programs are just some that are available to enhance economic development. It is meant to highlight the major programs and not to be all-inclusive.

Federal assistance is available through the following agencies:

- U.S. Small Business Administration (SBA)– this agency has the mission to help people to get into business and to stay in business. They can offer direct financial assistance, as well as training and technical assistance directly to local businesses. The SBA has three regional offices in Wisconsin; Madison, Milwaukee and Eau Claire.
- U.S. Department of Commerce – this agency houses many bureaus and offices designed to generate jobs, retain existing jobs and stimulate industrial and commercial growth in economically distressed areas of the United States. The Economic Development Administration, Bureau of Economic Analysis, Bureau of the Census, International Trade Administration, and Patent & Trademark Office are just some of the areas of assistance that is available. Wisconsin is within the Chicago region.
- Foreign Trade Zones – administered through the Department of Commerce, this designation allows for domestic activity involving foreign items to take place prior to formal customs entry. This can greatly streamline typical customs procedures, as well as exempting or deferring some duty taxes. In 1990, Brown County received this designation, which in addition to Milwaukee are the only two in the state.

State resources that aid in economic development include the following:

- Wisconsin Main Street Program – this is a comprehensive revitalization program designed to promote the historic redevelopment of the downtown business district. It is administered by the Department of Commerce, which can provide funding and technical assistance to local communities.

- Community Development Block Grants for Economic Development (CDBG-ED) – this program is also administered through the Department of Commerce. The intent is to provide financial assistance to businesses that create jobs through expansion or relocation. The funding is in the form of low-interest loans to the business, which repays the funds to the local community or county. Those funds are then available for future loans to other businesses as part of a revolving loan fund. Outagamie County has such a fund, as do various local municipalities.
- Milk Volume Production Program (MVP) – this program is similar to the CDBG-ED program with a target of assisting dairy producers that undertake capital improvements. These funds are also in the form of low-interest loans, with the repayment going into a local revolving loan fund.
- Community Based Economic Development Program (CBED) – this is another Department of Commerce program, but this one is targeted at local communities and community-based organizations that undertake economic development planning and development. The program provides grants for incubators, venture capital fairs, and the like.
- Technology Zone Tax Credit Program – this is one of the newer programs offered through the Department of Commerce. Through this program, new and expanding businesses that utilize new technologies can claim tax credits to reduce their state tax burden. Outagamie County is part of the Northeast Wisconsin Regional Economic Partnership, which is one of only eight technology zones established across the state.
- Transportation Enhancement Assistance Program (TEA) – this program is administered by the Department of Transportation. It provides financing to construct such things as rail spurs or port improvements for existing or expanding businesses.
- Forward Wisconsin – Forward Wisconsin, Inc. is a unique public-private marketing organization. Its job is to market outside Wisconsin to attract new businesses, jobs and economic activity to Wisconsin.

- Industrial Revenue Bond Program – the Department of Commerce has more than \$206 million available to assist small manufacturers with expansion projects through low interest financing. Commerce grants the bonding authority to cities, villages and towns to issue bonds on behalf of the business.
- Brownfields Initiative – this program provides grants for environmental remediation activities for brownfield sites where the owner is unknown, cannot be located or cannot meet the cleanup costs.
- Enterprise Development Zones – this is a tax credit program. Based on the economic impact of a proposed business project, the Department of Commerce is able to designate an enterprise development zone. The zone is site specific and applies to only one business. The maximum amount of credits per zone is \$3 million.
- Community Development Zones – the community development zone program is a tax benefit initiative designed to encourage private investment and to improve both the quality and quantity of employment opportunities. The program provides tax credits to businesses for job creation.
- Agricultural Development & Diversification (ADD) Grant Program – this program is administered by the Department of Agriculture, Trade and Consumer Protection. It is aimed at projects that will add value to or improve utilization of agricultural resources and will create new enterprises and opportunities in the food and agricultural industry. This is a competitive grant program.
- Joint Effort Marketing (JEM) Program – administered by the Wisconsin Department of Tourism, this program provides marketing grants to joint efforts to stimulate projects that serve an area in brand or image development. The intent is to expand or extend the typical tourist season of an area.

Regional & local economic development resources include:

- Northeast Wisconsin Economic Partnership (NEWREP) – formed in response to the technology zone program, this organization is looking to develop a marketing strategy for the 16-county area of northeast Wisconsin.
- Fox Cities Economic Development Partnership (FCEDP) – this organization was formed in 1985 to cooperatively market the Fox Cities region for business creation, expansion and relocation.
- Greater Outagamie County Economic Development Corporation (GOCEDC) – this organization formed in 1997 to enhance economic development in the rural portions of the County. It is a collaborative effort aimed at retaining and expanding business opportunities.
- Revolving Loan Fund (RLF) – Outagamie County has a small revolving loan fund that is being capitalized from a handful of Community Development Block Grants. As the loans to local businesses are paid back, this fund should be available in the near future for additional business loans. Many local communities also have revolving loan funds that are available as a possible source of revenue to a business.
- Tax Incremental Financing (TIF) – TIF districts are available in municipalities as a mechanism for financing local economic development projects in underdeveloped or blighted areas. Taxes generated by the increased property tax values pay for acquisition and/or needed public works.
- Fox Cities Convention & Visitor Bureau's Capital Development Fund - The Bureau's capital development fund was created to further the development of new visitor attractions to enhance the Fox Cities as a tourism destination.
- E-Seed Program – this is 12-week entrepreneurship series that provides training for start up and early-stage development of a new business. The program began in 2000 and is run through the Fox Valley Technical

College. As of August 2004, it has served 170 entrepreneurs and more than 30 businesses have resulted.

- Fox-Wisconsin Rivers Heritage Corridor - Outagamie County is part of this 250-mile corridor that embodies a unique portion of Wisconsin history. This corridor takes on more importance with the plans to reopen the Fox River locks system. The tourism potential of this project is enormous.

#### Economic Development Recommendations

1. Prepare an inventory of vacant commercial and industrial buildings and sites. Incorporate the database into Forward Wisconsin's master list maintained at their web site, known as the Location One Information System (LOIS) database. The inventory should be available on the Internet and should include links to other local and regional databases.
2. Implement a business retention program that is coordinated with local community efforts. It is important that this effort provides any necessary follow up with the business.
3. Inventory the infrastructure needs of existing businesses as part of the retention program.
4. Prepare an inventory of the existing infrastructure; especially items like broadband Internet, fiber optics, cable and the like. This would include supporting regional efforts, such as the wireless study. Combine with the inventory of business needs to work with suppliers to provide the service.
5. Continue to support the E-Seed program through the FCEDP and the northeast Wisconsin business plan competition through NEWREP.
6. Support the continued remediation and redevelopment of brownfield sites within the County.
7. Continue to support and participate in the regional economic development organizations and efforts underway with East Central Wisconsin Regional Planning Commission, the Fox Cities Convention & Visitors Bureau, the Fox Valley Workforce Development Board, NEWREP, NEWERA,

NEWCORE, Coalition of Chambers of Commerce, Northeast Wisconsin Innovation Network (WIN), FCEDP, and GOCEDC.

8. Support efforts to implement revenue sharing that would further regional economic development efforts.
9. Support and participate in efforts to work regionally including joint marketing efforts, multi-jurisdictional grant applications, and efforts to retain and attract young talented employees to name a few.
10. Explore the potential for the development of a regional revolving loan fund.
11. Encourage the Department of Commerce to update program requirements to look at the quality of jobs created rather than the number of new jobs.
12. Support increased funding on the state level for Forward Wisconsin and the Department of Commerce for improved marketing and better business inducements.
13. Work with local business to create a foreign trade zone at the Outagamie County Regional Airport, as well as other potential locations, as an extension of Austin Straubel Field in Brown County.
14. Support and encourage communication between educators and the business community to match course work with job needs. This should include an effort by the business community to better market potential careers within their respective industries.
15. Support and encourage a broader representation in the Northeast Wisconsin Educational Resource Alliance (NEWERA) to include the region's private colleges and local school or CESA districts.
16. Support land use decision-making that keeps in mind the importance of agriculture to the County's economy. This should include development of policies that protect and preserve the area's environmental features, which add to the overall quality of life.
17. Work the Smart Growth criteria into revolving loan fund reviews to ensure consistency with the goals of the planning efforts.

18. Cooperate in the implementation of the *Bridge to a New Economy – A Cluster-Based Strategy of the Fox Cities Economic Development Partnership*.

19. Support the continued efforts to develop the Fox River Heritage Corridor Parkway plan being led by the East Central Wisconsin Regional Planning Commission.
20. Encourage and support efforts to strengthen tourism opportunities within the County, including supporting the Fox Cities Convention and Visitors Bureau's way-finding signage program and efforts to increase exposure of the rural portions of the County.

## 4. HOUSING

### Introduction

The Wisconsin comprehensive planning legislation requires that this chapter examine how to provide an adequate housing supply that meets existing and forecasted demand. This needs to include an inventory of existing housing stock, housing characteristics, and housing values. This chapter then must identify the means to promote housing development that provides choices to meet the needs of all income levels, age groups and for persons of special needs. It will also identify areas for the development and redevelopment of low and moderate income housing, as well as identifying programs to maintain or rehabilitate the existing housing stock.

### Goals

1. Promotion of the redevelopment of land with existing infrastructure and public services and the maintenance and rehabilitation of existing residential structures.
  - A. Promote preservation and rehabilitation of older neighborhoods.
  - B. Promote the infill of housing on existing vacant parcels.
  - C. Support the redevelopment of vacant or underutilized commercial and industrial sites for residential use.
2. Encouragement of residential land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.
3. Providing an adequate supply of affordable housing for individuals of all income levels throughout the County.

4. Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential uses.
5. Provide for alternative housing types.

### Existing Housing Stock-Characteristics

As of the 2000 Census, Outagamie County had a total of 62,614 housing units. Of these, 96.7 percent are occupied and of those, 72.4 percent are owner-occupied. At the state level, 89.8 percent of the housing is occupied and 68.4 percent is owner-occupied. The average household size for owner-occupied units in Outagamie County in 2000 was 2.81, while the state figure was 2.66. Exhibit 4-1 summarizes the occupancy data for the year 2000. The Wisconsin Department of Administration estimates that there were 67,059 total housing units in the County as of April 2003. That is an increase of 4,445 units since the last census or roughly 1,480 units per year. The Department of Administration also estimates that 64,827 of those units were occupied, which is consistent with the census rate of occupancy.

**EXHIBIT 4-1  
OUTAGAMIE COUNTY HOUSING OCCUPANCY - 2000**

	Number	Percent
Total Housing Units	62,614	100.0%
Occupied Units	60,530	96.7%
Vacant Units	2,084	3.3%
Vacant Units – Seasonal Only	237	0.4%
Homeowner Vacancy Rate	--	0.9%
Rental Vacancy Rate	--	4.9%
Owner-Occupied Units	43,830	72.4%
- Average Household Size	2.81	--
Renter-Occupied Units	16,700	27.6%
- Average Household Size	2.08	--

Source: U.S. Bureau of the Census, 2000.

The housing stock is dominated by single-family detached dwellings (70.3%), which compares to 66 percent for the state as a whole. A breakdown of the type of housing structures is included in exhibit 4-2.

**EXHIBIT 4-2  
OUTAGAMIE COUNTY HOUSING BY UNITS IN STRUCTURE**

Units in Structure	1990	2000	1990-2000 Percent Change
1 Unit, Detached	36,569	44,041	20.4%
1 Unit, Attached	1,323	2,507	89.5%
2-4 Units	6,906	6,856	-0.7%
5-9 Units	1,821	2,773	52.3%
10 or More Units	3,351	5,217	55.7%
Mobile Homes	1,953	1,220	-37.5%
Total Units	51,923	62,614	20.5%

Source: U.S. Bureau of the Census, 1990 and 2000.

Exhibit 4-3 illustrates the age of the current housing stock of the County. That information shows that 65 percent of the housing was constructed prior to 1980 while on the state level 72 percent of the housing was built prior to 1980.

**EXHIBIT 4-3  
OUTAGAMIE COUNTY HOUSING BY YEAR BUILT**

Year Built	Number	Percent
1999 to March 2000	1,733	2.8%
1995 to 1998	5,688	9.1%
1990 to 1994	5,723	9.1%
1980 to 1989	8,556	13.7%
1970 to 1979	10,467	16.7%
1960 to 1969	6,703	10.7%
1940 to 1959	11,254	18.0%
1939 or Earlier	12,490	19.9%
Total	62,614	100.0%

Source: U.S. Bureau of the Census, 2000.

The value of owner-occupied housing has risen from \$64,400 in 1990 to \$106,000 in 2000. That compares to the state figures of \$62,500 in 1990 and

\$112,200 in 2000. In 1990, there were 64 owner-occupied homes that were valued over \$300,000, the highest level listed. By 2000, there were 119 homes valued in excess of \$500,000 and nine dwellings over a million dollars. Eighty four percent of the owner-occupied households pay less than 30 percent of their household income for housing. That means that 16 percent are spending more than the HUD recommended 30 percent. Median rent change from 1990 to 2000 was from \$327 for the County and \$331 for the state to \$534 for the County and \$540 for the state. Seventy percent of the renting households pay less than 30 percent of their income on housing. Conversely, that means that 30 percent of the renters are paying more of their income on housing than is recommended. Exhibit 4-4 highlights the County housing value information.

HUD recommends that households spend less than 30% of their gross income on housing. Households that spend more than that are considered to be at risk should they experience financial difficulties, such as major medical bills, job loss or other significant change in income.

**EXHIBIT 4-4  
OUTAGAMIE COUNTY HOUSING VALUES - 2000**

	Number	Percent
Specified Owner-Occupied Housing Units	38,015	100.0
Less than \$50,000	655	1.7
\$50,000 to \$99,999	16,623	43.7
\$100,000 to \$149,999	12,754	33.5
\$150,000 to \$199,999	5,100	13.4
\$200,000 to \$299,999	2,237	5.9
\$300,000 to \$499,999	527	1.4
\$500,000 to \$999,999	110	0.3
\$1,000,000 or more	9	--
Median Value	\$106,000	--
Specified Renter-Occupied Housing Units	16,515	100.0
Less than \$200	580	3.5
\$200 to \$299	663	4.0
\$300 to \$499	5,480	33.2
\$500 to \$749	6,715	40.7
\$750 to \$999	1,896	11.5
\$1,000 to \$1,499	407	2.5
\$1,500 or more	181	1.1
No Cash Rent	593	3.6
Median Rent	\$534	--

Source: U.S. Bureau of the Census, 2000.

Providing housing for a changing population will be a challenge for Outagamie County. As the County population continues to age, especially with the large number of baby-boomers approaching retirement, more housing choices will need to be provided. This is often referred to as “life cycle” housing. Apartments and starter homes for the young families and singles, larger homes for the growing and extended families, and smaller condos, apartments and homes for the empty nesters. Economic changes also affect the demand for housing. With the recent losses of high paying manufacturing jobs, comes the challenge of finding adequate affordable housing for the County’s workforce.

Data on home sales in Outagamie County for 2004 show a connection between housing price and the average days it is on the market. The exhibit below illustrates that homes generally priced under \$140,000 spend less than the overall average time on the market.

**EXHIBIT 4-5  
OWNER-OCCUPIED HOME SALES - 2004**

Listed-Selling Price Range	Average Days on the Market
\$0 – \$29,999	46
\$30,000 – \$39,999	95
\$40,000 – \$49,999	114
\$50,000 – \$59,999	143
\$60,000 – \$69,000	106
\$70,000 – \$79,999	80
\$80,000 – \$89,999	92
\$90,000 – \$99,999	87
\$100,000 – \$119,999	92
\$120,000 – \$139,999	91
\$140,000 – \$159,999	116
\$160,000 – \$179,999	127
\$180,000 – \$199,999	126
\$200,000 – \$249,999	118
\$250,000 – \$299,999	129
\$300,000 – \$399,999	119
\$400,000 – \$499,999	137
\$500,000 – \$999,999	300
Average for All Prices	106

Source: Northeast Wisconsin Realtors Association, December 2004.

Projected Housing Demand

Outagamie County’s population is projected to grow by 55,783 persons between the years 2000 and 2030, according to projections prepared by the East Central Wisconsin Regional Planning Commission (ECWRPC). ECWRPC also projects that the persons per household will continue to decline, which will result in the need for even more housing units for the increase in population. Based on the population projections and the persons per household projections, an additional 27,656 units over the 2000 census figure will be needed to house that population. The exhibit below summarizes the population and housing forecasts.

**EXHIBIT 4-6  
OUTAGAMIE COUNTY HOUSING PROJECTIONS**

	2000	2005	2010	2015	2020	2025	2030
Total Population	161,091	171,854	181,224	190,570	200,012	208,688	216,874
Group Quarters Population	3,373	3,598	3,795	3,990	4,188	4,370	4,451
Persons Per Household	2.61	2.57	2.52	2.48	2.45	2.43	2.32
Total Households	60,530	65,423	70,321	75,104	79,872	84,030	88,186

Source: East Central Wisconsin Regional Planning Commission, October 2004.

The 2000 housing figures indicate that 72 percent of the units are owner-occupied, while the remaining 28 percent are rental units. Using those same percentages translate into a need for 20,016 owner-occupied units and 7,639 rental units.

Using the 2000 percentages shown in exhibit 4-2, the projected housing can be further broken down by structural type. The following exhibit outlines the structural characteristics for the 27,656 forecasted units, based on those percentages. Please note that this information merely utilizes the 2000 percentages and does not account for the trends from 1990 to 2000. It is meant to illustrate a need for a variety of housing styles and not to be predictive. It can be noted, however, that the housing trends since the 1980 Census have shown a

slight shift in the makeup of housing has been occurring. The percentage of single-family detached housing has declined (76% to 70%) slightly, as has the percentage of 2-4 unit structures (13% to 11%). All other housing types have increased their percentage share of the County total, with the exception of mobile homes, whose percentage share has remained fairly constant. It is anticipated that further shifts could occur in housing due to the aging of the population, increasing energy costs, shifts in emphasis in federal housing programs, changes in the area's demographics, among other reasons, which will continue to influence the area's housing demand.

**EXHIBIT 4-7  
OUTAGAMIE COUNTY HOUSING PROJECTIONS  
BY STRUCTURE - 2030**

	<b>2030</b>
1 Unit, Detached	61,995
1 Unit, Attached	3,527
2-4 Units	9,612
5-9 Units	3,880
10 or More Units	7,319
Mobile Homes	1,676
<b>Total Units</b>	<b>88,186</b>

Source: Outagamie County Planning, March 2005.

Affordable Housing

The lack of affordable housing is a growing concern in Outagamie County. Affordable housing benefits the entire community. It allows for a diversity of ages, backgrounds and interests that add value to neighborhoods. It provides a place to live for the area's workforce. As noted in the "Economic Development" chapter, the character of the County's workforce is changing. Losses of manufacturing jobs are slowly being replaced. However, many of these new jobs do not offer the same pay as the ones they are replacing.

The median rent paid in the County as of the last census was \$534. To be able to pay that and not exceed the recommended 30 percent of a family's gross income, the annual income would need to be approximately \$21,400.

Unfortunately, the majority of the occupations projected to have the most job openings between 2000 and 2010 will not pay that much. According to the Wisconsin Department of Workforce Development, most of the forecasted job growth will occur in fields that generally do not require much education. Thus, the salaries for these new jobs will be too low to afford most of the housing within the County. The top 20 projected job openings for the state are shown below.

**EXHIBIT 4-8  
PROJECTED JOB OPENINGS, WISCONSIN 2000-2010**

<b>Occupation Title</b>	<b>Estimated Annual Openings</b>	<b>Average Annual Salary</b>
Retail Sales Persons	4,290	20,450
Cashiers	4,000	15,780
Combined Food Preparation/Serving	3,980	15,730
Waiters and Waitresses	2,840	14,230
Registered Nurses	2,010	46,750
Laborers/Freight/Stock/Material Movers	1,700	21,850
Office Clerks/General	1,490	22,560
Janitors/Cleaners exc. Maids/Housekeeping	1,460	20,140
Stock Clerks/Order Fillers	1,440	20,730
Customer Service Representatives	1,270	28,310
Nursing Aides/Orderlies/Attendants	1,240	20,730
Truck Drivers, Heavy and Tractor-Trailer	1,140	35,670
Special/Vocational Educators	1,140	42,210
Bartenders	1,140	16,240
Teacher Assistants	1,050	19,890
Technical/Scientific Products	1,020	49,240
Hand Packers/Packagers	1,020	19,710
General and Operations Managers	980	72,180
Team Assemblers	950	25,150
Maids/Housekeeping Cleaners	950	16,960

Source: Wisconsin Department of Workforce Development, Division of Workforce Solutions, Bureau of Workforce Information, Projections Unit, 2003.

Providing an adequate supply of housing to meet the needs of the workforce is just one issue. Outagamie County also has a need to ensure that the poor also have access to safe and decent housing. According to the 2000 census, there are 1,215 families and 7,417 individuals whose income was below the poverty level. This group needs government assistance in locating and securing

housing. The Section 8 Housing Choice Voucher Program is a means of assistance for some of these persons. This is a federal program administered by the Department of Housing and Urban Development (HUD) through local housing authorities. The Voucher Program works as a rent subsidy allowing families to pay a reasonable share of their income for rent while the housing authority makes up the difference.

Other programs, such as public housing, transitional housing, homeless shelters, and senior housing, also provide assistance to the area's poor. Unfortunately, the number of persons needing help exceeds the money available to provide the help. As an example, in 2001 the Appleton Housing Authority served 550 households through the Voucher Program. However, despite their efforts they still had 514 on their waiting list. Additional funding sources need to be secured to meet the needs, including local dollars. One example might include the establishment of a local revolving loan fund specifically for the purpose of addressing affordable housing needs. Exhibit 4-9 provides an overview of poverty levels in the County.

**EXHIBIT 4-9  
OUTAGAMIE COUNTY POVERTY STATUS - 1999**

	<b>Number Below Poverty Level</b>
Families	1,215
With Related Children Under 18 Years	955
With Related Children Under 5 Years	522
Families With Female Householder, No Husband Present	576
With Related Children Under 18 Years	542
With Related Children Under 5 Years	292
Individuals	7,417
18 Years and Over	4,906
65 Years and Over	1,002
Related Children Under 18 Years	2,392
Related Children 5 to 17 Years	1,730
Related Children Under 5 Years	662
Unrelated Individuals 15 Years and Over	2,943

Source: U.S. Bureau of the Census, 2000.

Affordable Housing Barriers

Barriers to affordable housing limit choice, stifle economic development, and place the burden of finding appropriate housing on those citizens least able to afford it. Barriers reduce the supply of affordable housing and may drive those on low or fixed incomes away due to the lack of supply. Lack of affordable housing can result in reductions to the available labor supply for lower pay occupations. This can lead to labor shortages and higher turnover rates, which reduce service and productivity and increase administration and training costs. As noted earlier in this chapter, some of the employment sectors that are projected to add the most new jobs are not necessarily paying the highest wages. Yet the persons employed in those positions are critical to the overall quality of life and stability of the region.

In their report titled "Overcoming Barriers to Affordable Housing in the East Central Region" (January 2004), East Central Wisconsin Regional Planning Commission presents an inventory of identified barriers in both urban and rural areas. They are grouped in one of three areas; political barriers, regulatory barriers, and community-economic barriers. The report also outlines some potential solutions to address those barriers. Some common barriers to affordable housing include, but are not limited to:

- Public opposition to apartment developments and low/moderate housing developments, such as mobile home parks and modular housing.
- Affordable housing is often associated with welfare, crime and minorities, i.e. negative stereotyping.
- Lack of political support for affordable housing developments.
- Inadequate funding, particularly for the extremely low income. Certain grant programs are also extremely competitive, which can put smaller communities without adequate staff at a disadvantage.
- Lack of understanding about the real need for affordable housing.
- Government regulation can add to the cost of housing – large minimum lot sizes, impact fees, low-density requirements, etc.

- Difficulty to site housing for the extremely low income, such as homeless shelters, transitional housing and single room occupancy units.
- Shortage of Section 8 housing units and a reluctance from some landlords to participate in the program.
- Regulatory restrictions that can prohibit mixed-use developments, restrictive development standards, and overly restrictive building code requirements as they related to the rehabilitation of older housing stock.

Next Steps

Safe and decent housing needs to be provided to all County citizens. Outagamie County, as well as all local units of government, must promote the development and redevelopment of housing that will meet those needs. Strategies need to be developed to address the housing issues of the County. Partnerships need to be formed that will bring together the groups that can develop those strategies. Government, private organizations, nonprofits, and the builders will have to collaborate to remove the existing barriers to affordable housing and to provide adequate housing choice for all persons.

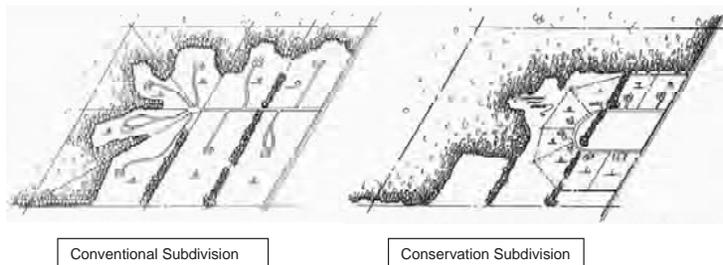
One method to provide affordable and varied housing options is with mixed-use developments. By placing residential units in close proximity to places to work, shop and recreate, there is less dependence on the automobile. The intent of these developments is to create neighborhoods rather than subdivisions. They allow the residents to walk or bike to destinations rather than having to drive. The segregation of uses, which most current zoning ordinances require, means that those who cannot or choose not to drive may be hampered.

One type of mixed-use development is the traditional neighborhood design (TND). Traditional neighborhoods typically feature smaller lot sizes and mixed uses. The homes are generally set closer to the street with front porches and garages to the rear. They also provide a mixture of housing types (single family, duplex, townhouse, apartments, etc.) within the same area. This allows a person or family to remain in the same neighborhood as their housing needs change. It also promotes diversity, which is one of the recommendations of the *Northeast*

*Wisconsin Economic Opportunity Study* to attract young talent. TND is particularly appropriate in large infill or redevelopment areas where public facilities and services exist. For communities without suitable infill or redevelopment sites, it may be appropriate to locate a TND adjacent to existing development where utilities can be easily extended. A true TND may not be appropriate for all communities, but the concept of increased densities, connectivity, and mixing of land uses should be applicable to certain areas in almost any community.

Another method that can result in providing more affordable and varied housing is to utilize the conservation design subdivision, as illustrated in exhibit 4-10. This method is probably more suited for rural areas where public facilities are not available. Conventional subdivisions are generally designed where all the land is either used for house lots or streets. In a conservation design subdivision, an agreed upon percentage of the buildable land is designated as undivided permanent open space. Home sites are clustered on smaller lots allowing the plat to offer that same number of building sites on less land. Essentially, these are golf course developments, without the expense of the golf course. This design provides the opportunity to reduce infrastructure and construction costs. The smaller lots make for shorter utility and street runs, while the open space can be utilized to address stormwater management issues. The open space can also serve as farmland, which is consistent with the recommendations of the Agricultural, Natural & Cultural Resources chapter. However, it should be noted that this design alternative does not necessarily result in more affordable housing developments. Recent examples of this style of platting in the immediate region have not created affordable housing.

EXHIBIT 4-10



Source: "A Model Ordinance for a Conservation Subdivision, UW – Extension, December 2000.

There are additional resources that can be used to provide housing choices to meet the needs of all age and income groups. The following is just a few examples of how communities can address housing need:

- Allow a secondary residential unit on a single-family lot. As people age, there may be a time when they do not want to maintain their home but do not wish or need to go into a retirement facility. An alternative could be to permit a secondary living quarters on the lot. These small units, often referred to as granny flats or accessory apartments, allow the elderly to have independent living for sleeping and bathing, while keeping them in close contact with other family members.
- Encourage the development of additional rental units. With vacancy rates below 5 percent, there is limited amount of units to provide adequate choice. The additional units should be varied in size, ranging from studio apartments to larger three- and four-bedrooms, to meet the needs of all those looking for rental housing.
- Rehabilitation of the existing housing stock, both owner-occupied and renter, is another means providing housing choice. Nearly 40 percent of the housing stock in the County was constructed prior to 1960. Rehabilitation and regular maintenance is an important aspect of ensuring that these homes remain viable. The preservation of the existing housing stock also helps maintain the cultural identity of communities. Local communities should investigate the feasibility of establishing housing rehabilitation programs. Funding or assistance for these efforts is available through Community Development Block Grants, historic preservation programs, US Department of Agriculture, and others.

Affordability is not the only issue related to housing. Communities of the County should recognize the housing needs of all their citizens, including those with special needs. This segment of the population includes those with physical disabilities, developmental disabilities, and the elderly. As the population of the County continues to age, these needs will only increase. Accessibility issues will need to be addressed.

#### Housing Recommendations

As part of their regional comprehensive planning efforts, ECWRPC has prepared three fact sheets dealing with housing; affordable housing, housing choice, and housing preservation. Each of the fact sheets includes strategies for action, identifies potential partners to work on the strategies, and desired outcomes. In an effort to promote regional consistency and intergovernmental cooperation, the strategies, partners and outcomes contained in the ECWRPC facts sheets are included within this chapter. The strategies for action are included below with the potential partners and desired outcomes from those fact sheets following.

#### 1. Affordable Housing

- a. Promote collaboration within and between governmental, private and non-profit sectors to ensure the provision of an adequate supply of affordable housing in urban and rural areas.
- b. Encourage local government and other agencies to aggressively/progressively pursue federal funding to meet affordable housing needs of the very low income within the region.
- c. Increase awareness of the issues surrounding affordable housing among decision makers, real estate professionals, and the public. Specifically, to overcome the stigma that affordable = social/welfare housing, as well as to promote quality design that is cost effective.
- d. Encourage liaison between economic development professional, housing providers and consumers to help promote the development of housing that meets the needs of all income levels within a community, including entry-level and low-skill workers.

Potential Partners	Initial Outcomes	Intermediate Outcomes	Long-term Outcomes
local governments, counties, state, schools, UWEX, real estate professionals, developers, WHEDA, USDA Rural Development, non-profit agencies, business leaders, citizens, builders	Language will be consistent between sectors and communities. Working partnerships will develop. Barriers to cooperation/collaboration will be identified.	Improved communication. Ways to remove the barriers will be identified and pursued. Increased cooperation between sectors. Additional partnerships/collaborations will be identified.	Adequate supply of decent, safe, affordable housing. Households will have access to decent, safe, affordable housing. Visionary: Affordable housing costs are equitably distributed throughout the region.

## 2. Housing Choice

- a. Promote development and preservation of varied types of housing developments
- b. Encourage developers to recognize the income potential in meeting a wider range of housing needs in both new housing and rehabilitation of existing housing.
- c. Promote regional cooperation and incentives to encourage mixed income, mixed use housing developments.
- d. Increase public awareness of cultural and generational differences in housing preferences.

Potential Partners	Initial Outcomes	Intermediate Outcomes	Long-term Outcomes
local governments, counties, technical and trade schools, universities, UWEX, architects, real estate professionals, developers, non-profit agencies, business leaders, advocacy groups, citizens, builders, funding/technical assistance agencies such as WHEDA, USDA Rural Development, VA.	Information regarding universal design, healthy home design and culturally sensitive designs is available to all interested parties.  Existing agencies and support groups work with communities, developers and realtors to identify underserved markets and explain cultural and generational preferences.	Zoning regulations, subdivision ordinances and covenants, building codes and occupancy standards are revised to encourage housing options.  Communities and builders develop partnerships, which facilitate the development of affordable housing options and inclusive community designs.	Housing options within the region have increased in the rental and ownership markets.  Housing options exist for households of all income levels, ages, family structures, disabilities and household sizes.  Households have access to a variety of rental and ownership options, which are decent, safe and affordable.

## 3. Housing Preservation

- a. Encourage the preservation and rehabilitation of the existing affordable housing stock.
- b. Develop and adopt new zoning and building codes for housing built prior to the adoption of the Uniform Dwelling Code that would allow for the effective and cost efficient preservation and rehabilitation of the older housing stock.
- c. Identify additional funding sources and encourage better utilization of the existing programs to make the most efficient use of housing dollars.
- d. Encourage intergovernmental cooperation to promote cost effective, socially responsible redevelopment and municipal changes and expansions that meet current and future business and community needs.
- e. Encourage public-private partnerships that promote economic opportunities and provide decent, safe affordable housing.

Potential Partners	Initial Outcomes	Intermediate Outcomes	Long-term Outcomes
local governments, counties, technical and trade schools, universities, UWEX, architects, real estate professionals, developers, non-profit agencies, historical societies/committees, advocacy groups, citizens, SHS, WHEDA, USDA Rural Development, VA, builders	<p>Information about support mechanisms such as preservation tools, funds and resource and advocacy groups is available.</p> <p>An inventory exists, which lists residential, commercial and industrial properties with historically significant features.</p>	<p>Zoning regulations, subdivision ordinances, covenants, building codes, occupancy standards and taxation policies encourage housing preservation and rehabilitation.</p> <p>Information about inventoried properties in need rehabilitation has been shared with the appropriate agencies.</p>	<p>The built environment reflects a community's character, identity and history.</p> <p>Well maintained downtowns and older neighborhoods provide unique housing choices within the region.</p> <p>Households have access to a variety of rental and ownership options, which are decent, safe and affordable.</p>

4. Promote the modification of local and County ordinances that will allow for the development of more housing choice and more affordable housing.

These changes can include:

- a. Smaller lot sizes, especially in relation to conservation subdivisions and traditional neighborhood design, to increase the number of lots in a particular development.
- b. Support mixed used developments throughout the County, in an effort to develop neighborhoods and not just subdivisions.
- c. Promote the use of development incentives for developments that include affordable housing units. This could include density bonuses reduction of street/pavement widths, or reduction of parking requirements, particularly for multi-family projects.
- d. Promote the development of secondary housing units (granny flats and accessory apartments) on existing residential lots.
- e. Allow for zero lot line developments, which can permit the splitting of a duplex structure into two single-family attached units.
- f. Allow for the development of existing vacant in-fill lots (currently considered substandard due to size) for affordable housing projects.

5. Promote changes to the County's permitting procedures with the goal of reducing time and expense for housing developers, thereby reducing the cost of the development and work with local communities to do the same.
6. Promote and support mixed-use developments, including the concepts of traditional neighborhood design for suitable areas that have access to the necessary public facilities. This can include promoting the development of residential units above commercial establishments, where appropriate.
7. Promote project reviews that consider how a proposed development will fit into the overall pattern of the community. These reviews should consider the safe and efficient connectivity to and from the development and surrounding land uses.
8. Promote the development of conservation subdivisions, especially in areas where unique agricultural, natural or cultural resources are present.
9. Promote the sharing of wells and septic systems in rural developments to gain economies of scale and to reduce costs. This is especially important for wells, given the new WDNR well casing regulations for the County regarding arsenic contamination.
10. Promote the development of additional multi-family housing units. This includes supporting a variety of unit sizes to meet the varied consumer need.
11. Promote cooperation among units of government, nonprofits and developers to deal with housing affordability and choice issues. This includes, but is not limited to:
  - a. Developing educational programs to better explain the need for affordable housing and to reduce public opposition. This might include the development of fact sheets to dispel some of the incorrect preconceptions regarding affordable housing. The fact sheets could state information that relates to concerns, such as:

- i. Affordable housing is intended for the residents of the community, including the teachers, nurses, police officers, librarians, and others vital to the health and welfare of the community and economy.
  - ii. Traffic generated from apartment complexes is generally less than that generated from single-family developments.
  - iii. Recent studies have shown that affordable homes have no negative impact on property values.
  - iv. Higher density developments require less per unit for infrastructure, such as street repairs and sewer expansions.
  - v. There is no correlation to high density and high crime.
- b. Preparing joint applications for additional funding for housing assistance programs, for both rental and owner-occupied. For non-entitlement communities, this could include joint applications for Community Development Block Grant funding to be used for housing redevelopment and/or rehabilitation programs.
  - c. Developing coordinated ordinance language to reduce delays and confusion for housing developments. Communities should also explore the potential for sharing administrative (i.e. permitting, inspections) expenses to increase economies of scale and reduce overall cost.
  - d. Establish regional goals to increase the number of affordable units and not to place the burden on a single community. This could include the development of incentives to developers to construct affordable units.

12. Promote the redevelopment of vacant and underutilized commercial or industrial sites, including older hotels and motels, into residential developments. Placing housing in areas of potential employment can reduce resident's expenses for transportation.

13. Promote programs that promote the preservation and maintenance of the existing housing stock, especially those in older neighborhoods. This might include the establishment of a revolving loan fund that would make low-interest loans available for housing rehabilitation, as well as for the rehabilitation and redevelopment of businesses in older neighborhoods.

- 14. Promote economic development initiatives that relate employee housing needs to the creation of jobs.
- 15. Promote housing developments that provide choices to meet the needs of all income groups and age groups, as well as for persons with special needs.
- 16. Support the creation of walkable neighborhoods, especially where the pedestrian linkages can be made to schools, shopping, employment and recreation. The use of development incentives might assist communities to achieve this.
- 17. Promote community connectivity that is safe, efficient and cost effective.

## 5. TRANSPORTATION

### Introduction

The Wisconsin comprehensive planning legislation requires that this chapter examine how to guide the future development of various modes of transportation, including highways, transit, systems for persons with disabilities, bicycles, walking, air transportation, trucking and water transportation. This chapter is to include a comparison of local objectives, policies, goals and programs to state and regional plans. It will include the identification of highways by function and will include applicable state, regional and other plans, including corridor plans, airport master plans, rail plans, and other functional/jurisdictional transportation plans, whether urban or rural.

A safe, affordable, and cost-efficient transportation system is critical to the overall economic health and quality of life of the County. It needs to include a complete network of roads, trails, rail, air, and water modes that will allow for easy accessibility to all citizens of the County. That network needs to provide connectivity between residences, places of employment, schools, recreational areas, and all other points within the County and beyond. A healthy transportation system is one of the keys to the continued vitality and growth of the County and it needs to work in concert with all the other elements of this plan.

### Goals

Relating to Sprawl Development:

1. Provide an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens.
2. Encourage new development in areas served by existing and adequate transportation facilities.
3. Encourage development of alternative modes of transportation and ensure that they can co-exist with each other efficiently.

4. Discourage the sprawl effects of highway expansion.

Relating to Transportation Funding:

5. Provide a safe street and highway system that, together with other transportation facilities, will meet short and long-range needs, interests, and objectives of the regions citizens in a cost-effective manner.
6. Protect future transportation corridors by purchasing right-of-way.
7. Encourage consolidation and coordination of transportation projects and programs through intergovernmental cooperation to improve the efficient use of tax dollars.
8. Develop alternative funding sources to the gas tax and related transportation fees.
9. Encourage the review of current street and highway design standards.

Relating to Regional Connectivity:

10. Encourage the exploration into the potential benefits of promoting increased use of rail facilities for transporting freight.
11. Expand bus route services to provide connections to various urban areas throughout the region.
12. Identify and preserve transportation corridors and facilities.

Relating to the Environment:

13. Encourage land uses that minimize vehicle miles traveled.
14. Encourage development of a transportation system that minimizes environmental disruption and strives to maintain a quality environment.
15. Promote the conservation of energy and recognize energy supply uncertainties in the future.
16. Promote full and efficient utilization of existing regulations and incentives to protect environmental resources.
17. Encourage impact mitigation in transportation project development.
18. Provide more education about production and use of more efficient vehicles, modes and energies, as well as on the incentives available.
19. Attract industries to the region that do research and development of alternative fuels.

Relating to Alternative Modes of Transportation and Mobility:

20. Encourage development and expansion of affordable, cost-effective alternative modes of transportation to the automobile.
21. Promote an integrated transportation network that makes mobility for all efficient.
22. Encourage coordinated transportation and land use planning that ensures housing options for all persons near existing transportation services.
23. Continue to examine the funding options for the implementation of the Midwest Regional Rail Initiative.
24. Maintain and expand the existing trail system.

Highway Transportation

Outagamie County currently has 1,905 miles of roads and highways, according to the 2003-2004 Wisconsin Blue Book. Of that total, 195 miles are part of the State Trunk System and 346 miles are within the County Trunk System, while the remaining mileage consists of the local street system. The Federal Highway Administration's functional classification system (see exhibit 5-1) categorizes these roads and highways as:

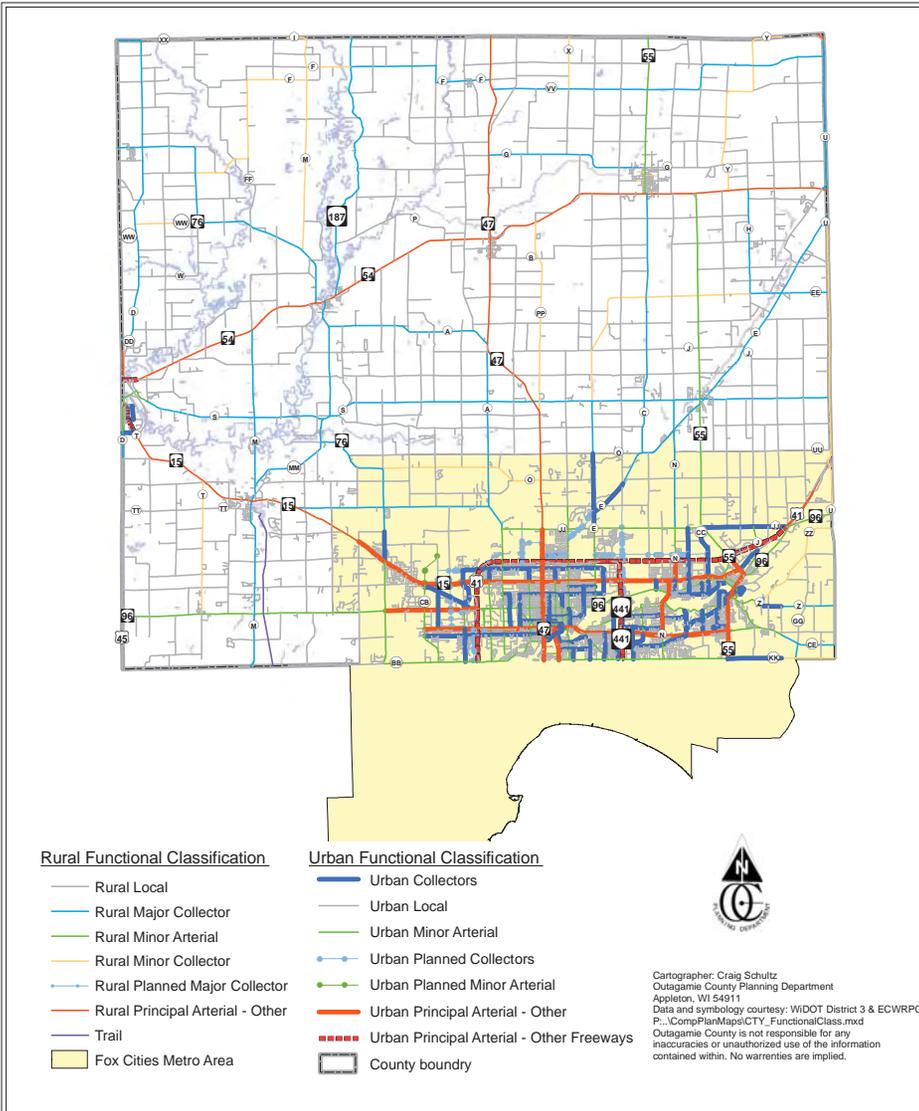
- Arterials – these roadways give full attention to traffic flow and are designed for longer distance vehicle trips between activity centers. They offer high mobility and little access. Arterials are further classified as principal or minor.
- Collectors – these facilities link the local streets with the arterial system. They literally collect traffic in local areas and serve as local through routes. These roadways are further broken down into major and minor collectors in rural areas.
- Local Streets – gives full attention to providing access to adjoining properties and are designed for low traffic volumes and speeds.

A combination of its rated carrying capacity and the level of service generally evaluate the performance of the street and highway network provided. Capacity is rated by the design of the facility. A two-lane local street will have a lower capacity than a two-lane arterial. The level of service (LOS) can be considered as a measure of the degree of traffic congestion. Those levels are characterized as follows.

- LOS A – a free flowing condition with negligible interaction with other traffic.
- LOS B – has no delay conditions, but some interaction with other traffic, requiring awareness of other movements
- LOS C – stable flow, but interaction with other motorists is frequent and requires constant vigilance. Speed may be variable because of the presence of others, but overall speed is within design expectations.
- LOS D – represents high-density, stable flow requiring full concentration because of constant interaction with other vehicles. A state of congestion occurs periodically.
- LOS E – unstable operating conditions at or near capacity volumes. Speeds are reduced and small increases in traffic result in traffic flow breakdowns. Maneuverability is extremely difficult.
- LOS F – defines forced or breakdown flow conditions. Characterized by extremely unstable stop-and-go waves of traffic movements.

An area of significant concern is highway safety. Vehicle accident data obtained from the Wisconsin Department of Transportation illustrates reported accidents on County roadways from the period of January 1, 2002 through December 31, 2004 (Exhibit 5-2). The information comes from police reports at the scene. The data shows that 31 percent of the accidents resulted in either injury or death, six percent involved alcohol and one percent involved a bicyclist or pedestrian. Although only one percent involved either a bicyclist or pedestrian, 97 percent of those resulted in injury, including one fatality.

**EXHIBIT 5-1**  
**Outagamie County**  
 Functional Classification System



**EXHIBIT 5-2**  
**OUTAGAMIE COUNTY ACCIDENT SUMMARY 2002-2004**

Year	Total Reported Accidents	Accidents With Injuries	Accidents With Fatalities	Involving Alcohol	Involving Bicycle or Pedestrian
2002	3,627	1,112	11	227	37
2003	3,768	1,167	17	231	43
2004	3,668	1,131	12	223	30
Totals	11,068	3,410	40	681	110

Source: Wisconsin Department of Transportation

One of the factors that enter into the accident data is average daily traffic. Traffic count trends for some of the major roadway segments in the County are highlighted in exhibit 5-3.

**EXHIBIT 5-3  
AVERAGE DAILY TRAFFIC COUNTS – SELECTED HIGHWAY SEGMENTS**

Highway	Segment	Average Daily Traffic			Percent Change	
		1982	1994	2004	1982-94	1994-04
USH 41	CTH BB – CTH CA	23,140	63,600	76,300	175%	20%
	CTH E – CTH N	15,570	33,600	47,200	116%	40%
	CTH J – CTH U	14,690	28,400	41,300	93%	45%
STH 47	CTH E – CTH JJ	5,090	9,000	13,300	77%	48%
	STH 54 – CTH G	3,480	5,300	7,100	52%	34%
STH 54	CTH U – CTH H	3,950	5,100	8,400	29%	65%
	STH 55 – STH 47	3,640	3,700	6,000	2%	62%
	CTH M – CTH D	2,100	4,000	4,400	90%	10%
STH 55	USH 41 – CTH UU	2,030	2,400	n.a.	18%	n.a.
	CTH EE – STH 54	1,090	1,600	1,800	47%	13%
STH 76	STH 15 – CTH JJ	2,500	4,100	6,700	64%	63%
	CTH S – CTH A	1,200	1,200	2,000	0%	67%
CTH A	USH 41 – CTH JJ	5,950	9,800	9,800	65%	0%
	STH 47 – STH 76	2,670	2,200	2,300	-18%	5%
CTH BB	USH 41 – CTH CB	4,110	17,900	8,500	336%	-53%
CTH CA	USH 41 – CTH CB	4,350	11,700	11,700	169%	0%
CTH CB	CTH BB – CTH CA	990	2,200	9,100	122%	314%
CTH CE	STH 441 – CTH N	6,510	14,900	21,500	129%	44%
	CTH HH – STH 55	4,150	8,900	10,400	114%	17%
CTH E	USH 41 – CTH EE	3,290	7,000	7,900	113%	13%
	CTH C – STH 55	2,740	4,600	5,200	68%	13%
	CTH EE – CTH U	1,700	2,800	2,500	65%	-11%
CTH KK	John St. – STH 441	5,460	12,400	18,800	127%	52%
CTH JJ	STH 55 – CTH N	1,020	1,300	2,300	27%	77%
	STH 47 – CTH A	1,020	4,200	5,000	312%	19%
	STH 76 – STH 15	1,150	2,300	2,800	100%	22%
CTH M	STH 15 – CTH S	940	2,000	2,100	113%	5%
CTH N	CTH KK – CTH CE	5,380	7,000	9,400	30%	34%
	USH 41 – CTH JJ	2,270	4,200	4,800	85%	14%
CTH S	CTH U – CTH J	560	1,700	2,900	204%	71%
	CTH M – STH 54	1,460	2,300	3,000	58%	30%

Source: Wisconsin Department of Transportation

Transit

The City of Appleton operates Valley Transit within the Fox Cities urbanized area of Outagamie County. Public transportation in the Fox Cities began in 1886 using electric streetcar systems. In 1930, buses replaced the streetcars. Using a 1977 Urban Mass Transportation Administration capital grant, Appleton

purchased the bus system and has been operating the system since that time. The system consists of regular fixed route service, as well as a paratransit service for the elderly and disabled. The system also includes one Call-A-Ride zone (Town of Buchanan urban area), which connects passengers to the fixed route system via shared ride taxi service. Regular bus service is also provided between Neenah and Oshkosh. Exhibit 5-4 illustrates the current Valley Transit system.

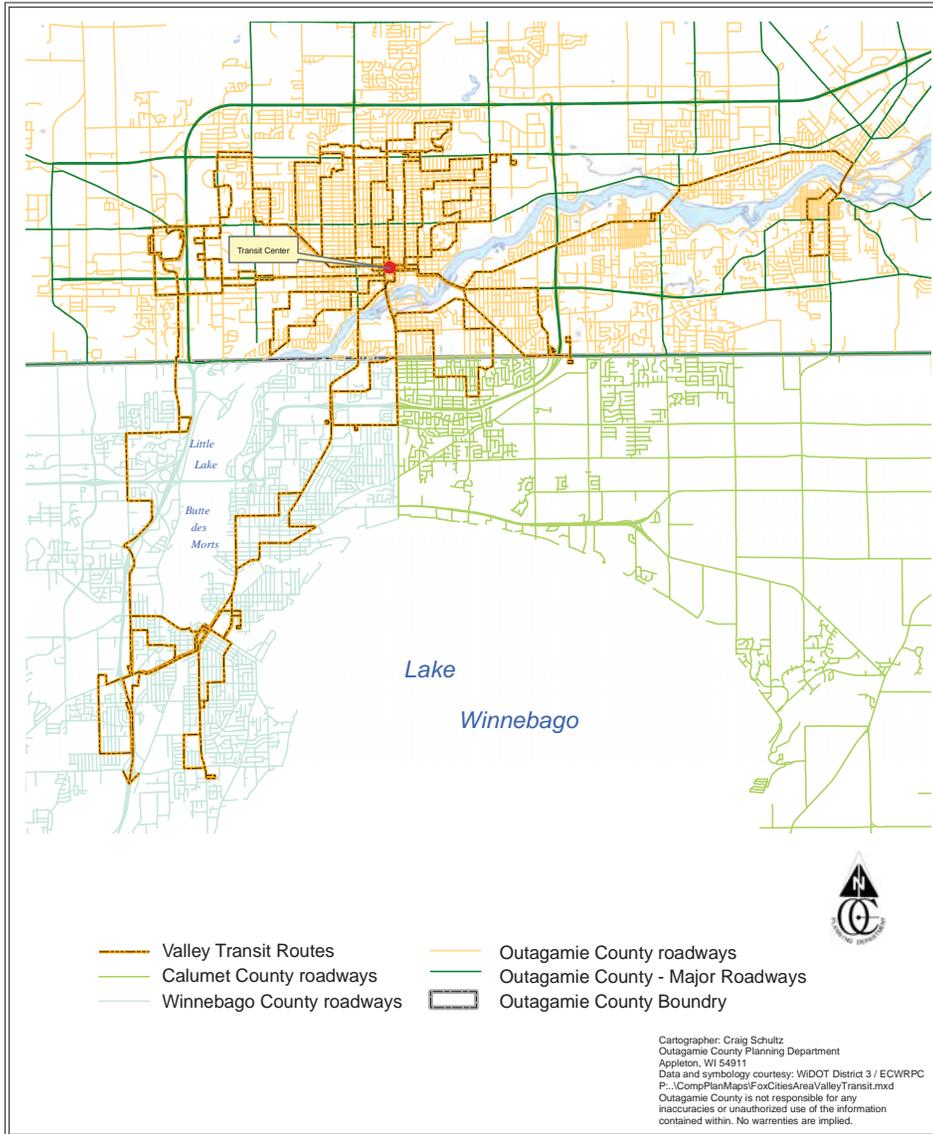
Valley Transit is currently facing some very serious budget shortfalls due to rising fuel prices and health insurance costs. They are looking at a number of ways of meeting this shortfall, including service reductions, layoffs, and fare increases. Additionally, given the Fox Cities projected population (over 200,000 persons), Valley Transit will be facing a major loss of federal funding sometime around the year 2010, based on the Federal Transit Administration funding formula.

On the positive side, Valley Transit experienced a three percent increase in ridership in 2004, as compared to 2003. Ridership during the first half of 2005 continues to increase. Additionally, 20 new buses were added to the fleet to replace older models.

Intercity Bus Service

Greyhound Bus provides transportation across the country and has a full-service terminal in Appleton, located at 100 E. Washington Street. This location offers both Greyhound Package Express service, as well as charter service. The City of New London is served by limited schedule bus stop, which as a rule provides no ticketing, baggage, or package express service.

**EXHIBIT 5-4  
Fox Cities Area Valley Transit System Fixed Routes  
Outagamie County, WI**



Specialized Transportation

Outagamie County, through the Department of Health and Human Services, provides door-to-door transportation service for residents with disabilities and for persons 60 years of age or older. This service is provided with advanced reservations and is available to the rural portions of the County through a contract with Kobussen Buses, Ltd. This is a cooperative and coordinated effort between Valley transit and Outagamie County.

Trucking Services

Freight trucking in the County is facilitated by the major highway corridors linking this area to markets elsewhere. Outagamie County is served by many trucking and warehousing firms that furnish local and long distance trucking, transfer services, and storage of commercial goods. Increased tonnage being hauled by truck is leading to increased wear on the area's highway system. Based on a 1996 Department of Transportation origin and destination study, it is estimated that 55 million tons of product will be trucked into and out of the three county MSA during 2005. That estimate is based on a growth rate of approximately three percent per year since 1996.

Freight movement data for Outagamie County indicate that the County is a net exporter of products. Approximately 10 million tons of freight is moved into the County (8.2 million from other parts of Wisconsin and 1.8 from areas out of the state), while 14.8 million tons are moved out of Outagamie County (10.8 million to other areas of Wisconsin and 4 million out the state). Pulp, paper, allied wood products, wood and lumber make up the majority of the County's imports, while secondary traffic, pulp, paper and allied paper products account for the majority of the County's exports. The vast majority of the freight movement is via trucks.

### Railroad Service

The Canadian National Railroad provides rail transportation for the region, which is another means of moving freight in to and out of the County. Canadian National purchased the rail lines from Wisconsin Central in 2001 and now own approximately 80 percent of the rail lines within the state (1,700+ miles). Outagamie County should encourage more freight shipments by rail for long hauls and use trucks to make the shorter shipments to points of destination. Decreasing long haul truck travel will also reduce the wear and deterioration of the County's highway system due to increased truck travel. Multi-modal transportation areas need to be established where truckloads can be taken off or placed on rail cars.

Although trucking accounts for most of the freight movements, rail plays an important role. Of the 1.8 million tons that is shipped into the County from outside of Wisconsin, nearly one million of that comes in via rail. The total freight that comes into and out of Outagamie County via rail amounts to 1.9 million tons.

### Air Transportation

The Outagamie County Regional Airport, designated by airport code ATW, began operations at its current location in the Town of Greenville in 1965, replacing a facility located on Ballard Road in Appleton. The airport property consists of approximately 2.5 square miles of land, which is split by two intersecting runways. The existing airport facilities are located west of Appleton at the end of County Highway CA. The terminal went through an extensive remodeling and expansion in 2002, which resulted in a new seven-gate concourse with jetways. The airport is served by four passenger airlines; Air Wisconsin (United Express), Comair (Delta), Midwest Connect Airlines, and Pinnacle Airlines (Northwest Airlink). It is the fourth largest airport in Wisconsin handling over 250, 000 passengers and 10 million pounds of freight and mail annually.



Remodeled Airport Terminal Interior

To guide the airport's continued growth, the *Outagamie County Regional Airport Master Plan* was developed and adopted in 2002. That plan outlines a number of phased improvements that will allow this facility to continue to meet a projected increase in passenger and freight usage, including the recent runway extension, through the year 2020. Capital improvements at the airport must be outlined within an

adopted plan to be eligible for funding from the Federal Aviation Administration and/or the Wisconsin Aviation Program.

### Water Transportation

Rail and truck service links the County to the ports of Green Bay, approximately 30 miles to the northeast, and to Milwaukee, roughly 100 miles to the south. Both ports offer access to the Great Lakes Seaway and both are capable of handling general cargo, heavy industrial machinery & equipment, and liquid & dry bulk product. Passenger ferry service on Lake Michigan is available between Manitowoc (approximately 50 miles east) and Ludington, Michigan from early May to mid-October.

Use of the County's waterways for recreation is common. The Embarrass and Wolf rivers are popular canoe and kayak routes. Both offer slow moving waters in a generally natural environment. The Fox River offers limited boating opportunities due to the existing locks. However, with the recent transfer of ownership of the locks system from the federal government to the state, plans to get the locks rehabilitated and operational are in place. Fund raising is underway

to complete that task. The goal is to raise \$6.25 million and to have the complete system navigable by 2009. This project is in concert with the development of the river as the Fox-Wisconsin Rivers Heritage Corridor. These two rivers stretch 250 miles across Wisconsin. The Heritage Corridor was established in 1990 when it received national and state recognition as one of four pilot projects in Wisconsin as a tourism initiative. The 150-year old lock system, with 17 locks, is the centerpiece of this potential tourism attraction.

Efforts are underway to establish water trails in the Fox Cities area. Water trails are a network of access points, resting places and attractions for users of watercraft on lakes and rivers. They afford an opportunity for people to personally explore our natural and cultural heritage from a distinctly unique perspective - "sitting on" the water. Canoeists and kayakers are looking to create routes on Lake Winnebago, Little Lake Butte des Morts, and the Fox River. Similar efforts in other communities have been successful and well received.

#### Pedestrian-Bicycle Facilities

Walking is the most elementary form of transportation. The provision of sidewalks and trails is necessary to enable this mode of transportation to continue. While vehicle transportation receives the greatest attention and funding, not all persons are able to utilize that mode. To meet the needs of all the citizens of the County, alternatives to the personal vehicle need to be provided. Walking and biking is the only alternative for many. Safe and efficient connections to places of employment, education, shopping, and recreation should be provided so a complete transportation network is available. Safety is a major concern with regards to walking and biking, especially given the injury rates when they are involved in an accident with a motor vehicle.

Many communities have started to address the need for additional pedestrian and bicycle routes. Exhibits 5-5 through 5-7 illustrate some of the planning and development for trails and bike routes, which include making regional

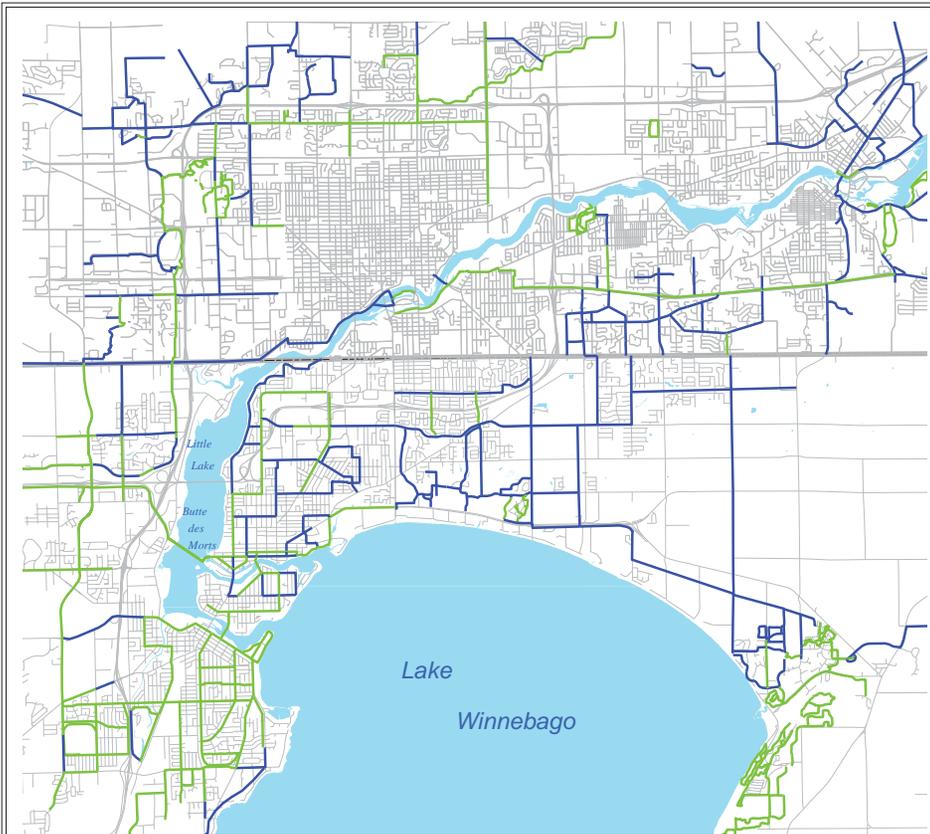
connections to other trail networks. Recommendations contained in the *Housing* chapter support walkable communities and improved connectivity. For those persons dependent on either walking or biking, this is critically important. These efforts also need to be coordinated between communities, especially in the Fox Cities region where communities literally share common boundaries.

#### Other Trail Users

Snowmobile trails exist throughout Outagamie County during the winter months. There is approximately 268 miles of groomed trails that are maintained by funding received through the registration funds of seventeen different clubs within the area. Snowmobiles are allowed to use the Wiouwash Trail. Additionally, there are several equestrian groups within the County and region. They also are allowed to utilize the Wiouwash Trail. All-terrain vehicles (ATV) usage has increased markedly across the state and County, however, there is no existing trail system for them to use locally.



**EXHIBIT 5-5  
Fox Cities Area Trails  
Outagamie County, WI**



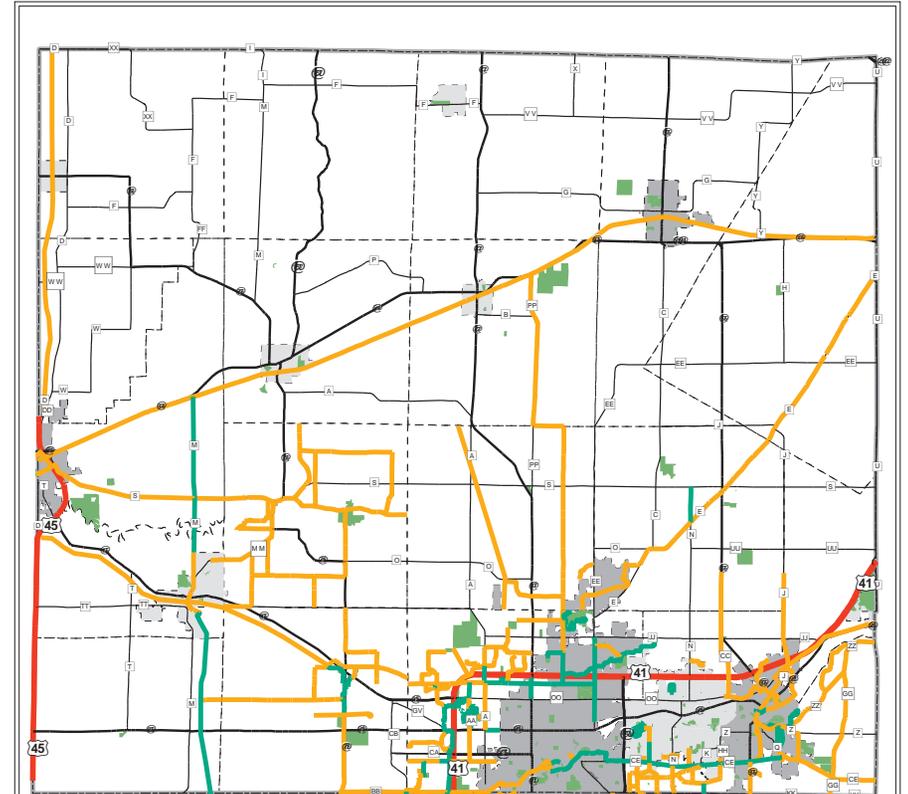
**Legend**

- Existing Trails
- Proposed Trails
- Outagamie County Boundary



Cartographer: Traci Schiltz  
Outagamie County Planning Department  
Appleton, WI 54911  
Data courtesy: ECWRPC  
P:\\_CompPlanMaps\FoxCitiesAreaTrails.mxd  
Outagamie County is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

**EXHIBIT 5-6  
COUNTY TRAILS MAP  
Outagamie County, WI**

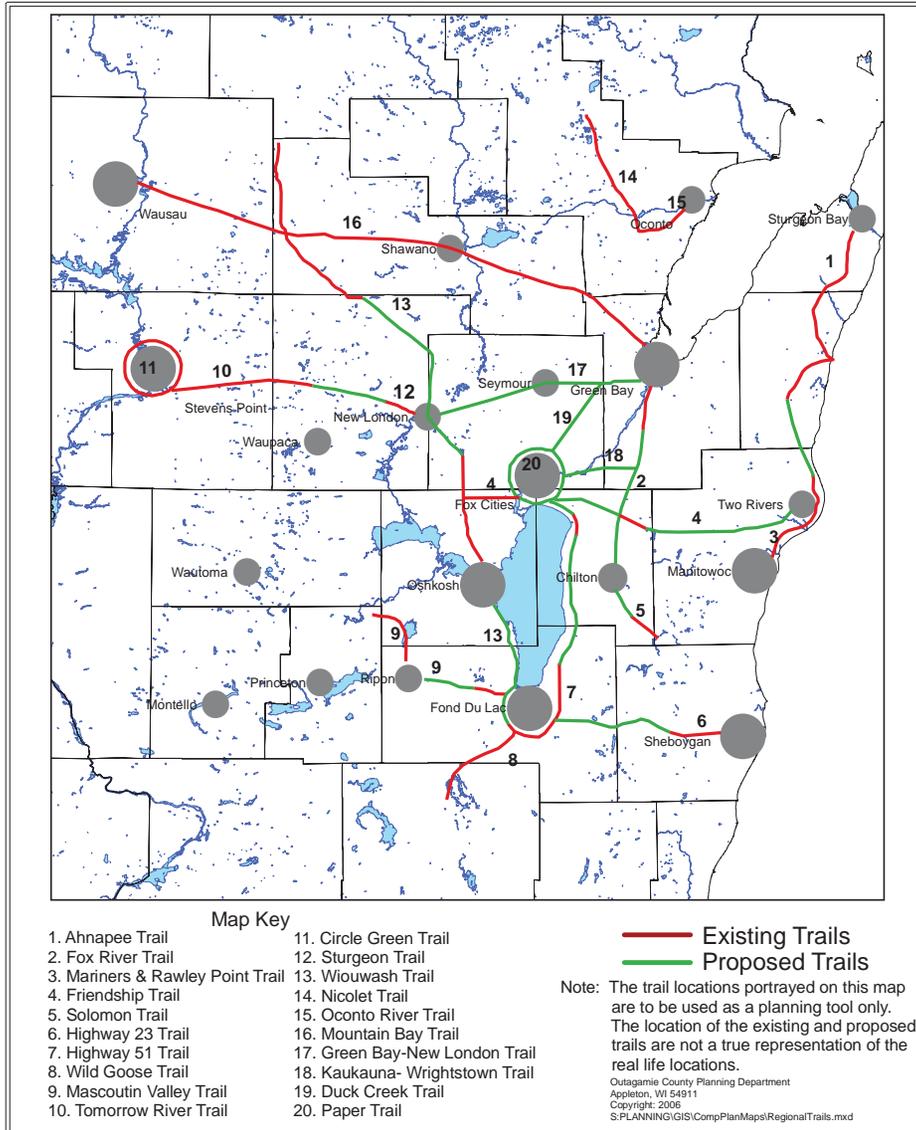


- Existing Trails
- Proposed Trails
- Recreation Areas



Cartographer: Traci Schiltz  
Outagamie County Planning Department  
Appleton, WI 54911  
Copyright: 2008  
P:\\_CompPlanMaps\OCtrailsMap.mxd  
Outagamie County is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.

EXHIBIT 5-7  
**REGIONAL TRAILS MAP**  
 Outagamie County, WI



The Federal Highway Administration has made it clear that pedestrian and bicycle use is to be encouraged, which is emphasized in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Long-rang transportation planning is required to address pedestrian and bicycle facility needs. This planning needs to address not only facilities within the County, but how the County facilities connect with other regional and state facilities, such as the Ice Age National Scenic Trail.

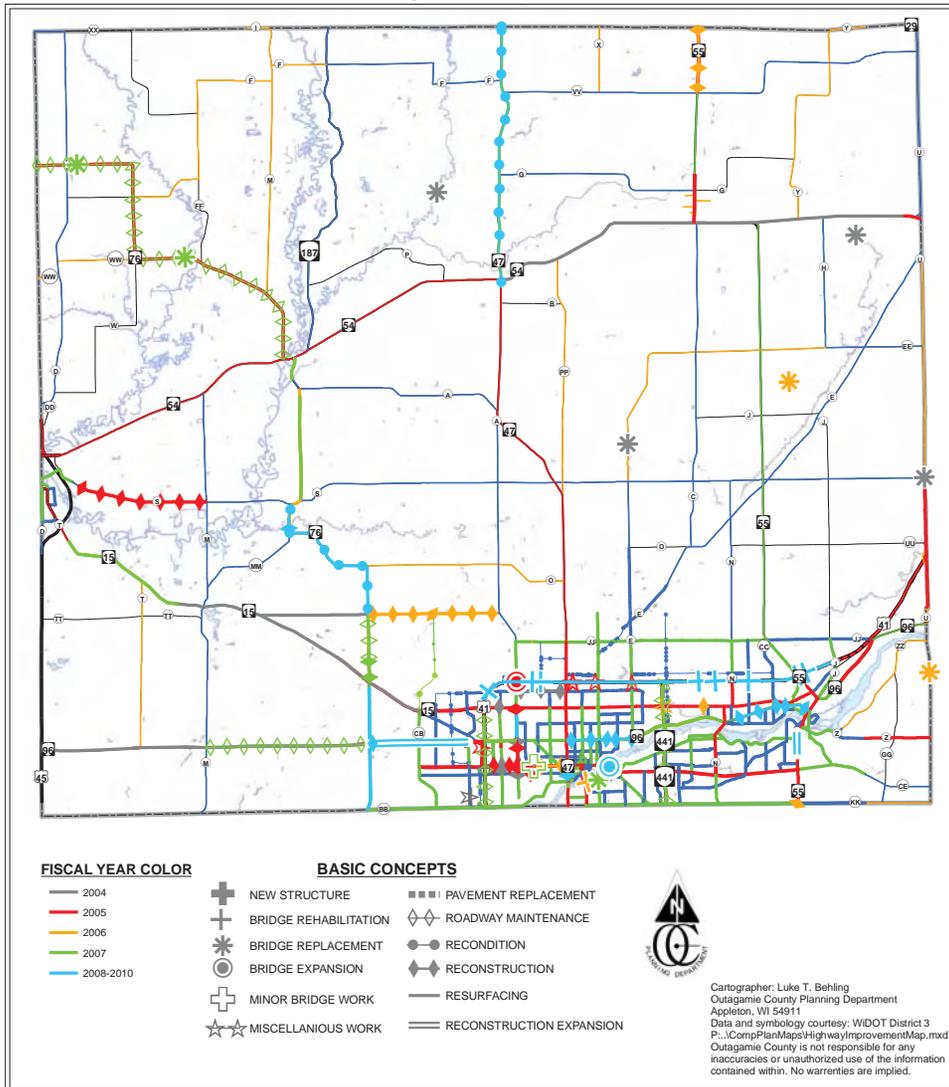
Existing Transportation Plans

“Wisconsin State Highway Plan 2020” (SHP 2020), prepared by the Wisconsin Department of Transportation (WisDOT), considers the goals of economic development and environmental protection along with three areas of emphasis. Those areas are preservation of the existing highway system, improve the system’s ability to move traffic and improving safety. The SHP 2020 also incorporates recommendations included in the Wisconsin’s Bicycle Transportation Plan and Translinks 21. That includes maintaining rail, bus and air transportation, as well as new high-speed passenger rail, transit service to outlying communities and inter-city bus connections.

WisDOT also prepares highway improvement plans that encompass projects that have been allocated funding or are anticipated to be funded in the near future. The projects in the current state plan for Outagamie County are shown in the following exhibit. “Wisconsin Pedestrian Policy Plan 2020” is the state’s first comprehensive pedestrian plan. WisDOT also prepared this report. This plan was developed around three main goals – increase the number and improve the quality of walking trips in the state, reduce the number of pedestrian crashes and fatalities, and increase the availability of pedestrian planning and design guidance and other general information for local officials and citizens.

WisDOT prepared the “Wisconsin Rail Issues and Opportunities Report”, which addresses the need to maintain rail transportation because of its importance to

**EXHIBIT 5 - 8**  
**Wisconsin Department of Transportation Highway Improvement Plan**  
**Outagamie County, WI**



Wisconsin's economy. It focuses on nine major issues – rail congestion in Chicago, Intermodal facilities, rail corridor preservation, publicly owned rail infrastructure, intercity passenger service, hazardous waste movement, vehicle-train crashes, railroad taxation, and railroad regulations.

WisDOT is currently developing a long-range transportation plan for the state, called "Connections 2030". This plan will address all forms of transportation over a 25 year planning horizon: highways, local roads, air, water, rail, bicycle, pedestrian and transit. The overall goal of the planning process is to identify a series of policies to aid transportation decision-makers when evaluating programs and projects.

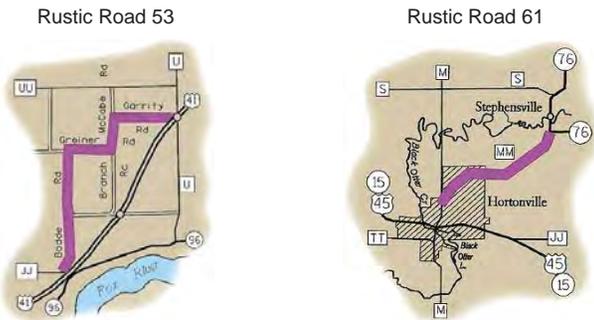
Three highway corridor studies were recently completed or near completion that impact Outagamie County. They are the Highway 29 Corridor, the Highway 15 Corridor and the Highway 54/172 Corridor. The 29-corridor study calls for eventually removing the access at CTH U in the northeast corner of the County. That study is currently being followed up with a corridor preservation planning effort by the Department of Transportation. The 15-corridor study is still in progress. This study is looking at the segment between Greenville and New London and involves a possible new route around Hortonville. The 54/172-corridor involves the segment between Seymour and Green Bay. The findings of this report are calling for maintaining the rural highway character within Outagamie County. This includes keeping access points to a minimum and improving the local road network to keep local trips off the highway. This study is also looking at a possible relocation of STH 54 through the unincorporated community of Oneida.

A corridor preservation study of the Highway 47 corridor from Highway 41 north to Highway 29 has been initiated and is currently in the data collection phase. WisDOT will be working with the local units of government, East Central Wisconsin Regional Planning Commission and the public to develop a long-term

vision for the corridor, focusing on access control and other preservation strategies.

The Wisconsin Legislature established the Rustic Roads program in 1973 to help citizens and local units of government preserve what remains of Wisconsin's scenic, lightly traveled country roads. Outagamie County currently has two road segments in the Rustic Road program, one in the Town of Kaukauna (Rustic Road 53) on Garrity, McCabe, Greiner and Bodde roads between USH 41 and CTH JJ (4.1 miles), while the other (Rustic Road 61) is located on CTH MM between CTH M and STH 76 (3.3 miles).

**EXHIBIT 5-9  
OUTAGAMIE COUNTY RUSTIC ROADS**



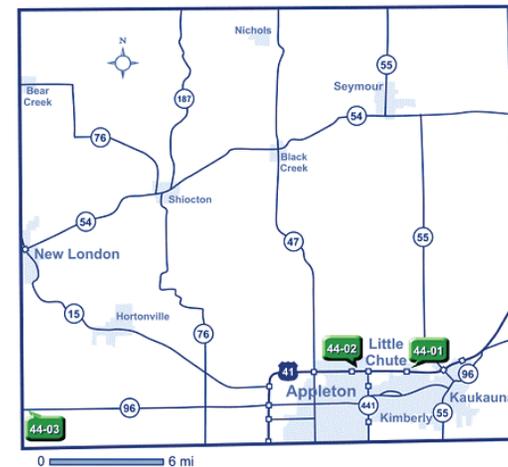
Source: Wisconsin Department of Transportation

Park and Ride sites are another service provided by the WisDOT. There are 97 park and ride facilities across Wisconsin and three of these lots are within Outagamie County. They are further described below:

- USH 41 & CTH N (Lot 44-02) – located just north of USH 41 at the intersection of CTH N and Evergreen Drive, this is a lighted asphalt lot with capacity for 88 vehicles.

- USH 41 & CTH E (Lot 44-01) – located just north of USH 41 at the intersection of CTH E and Evergreen Drive, this is a lighted asphalt lot with a capacity for 40 vehicles.
- USH 45 & STH 96 (Lot 44-03) – located at the southeast corner of this intersection, this is a lighted asphalt lot with a capacity for 20 vehicles.

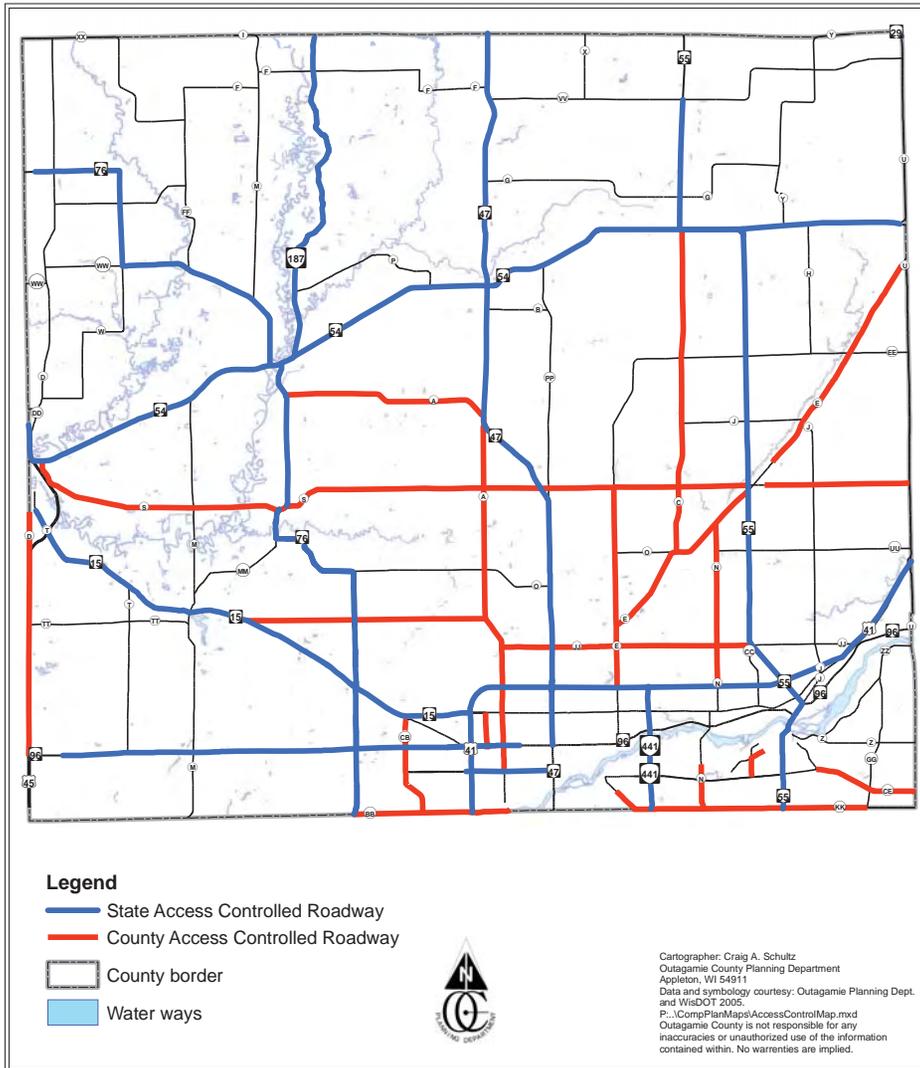
**EXHIBIT 5-10  
PARK & RIDE LOT LOCATIONS**



Source: Wisconsin Department of Transportation

Both the State and County utilize access control on major roadways. This is done to promote safety by reducing conflict points, protect the public investment in highways, and to promote a balanced use of land for the mutual benefit of landowners and motorists. Outagamie County currently has just less than 105 miles of its county highway system covered by access control regulations. The exhibit below illustrates the access controlled highway segments within Outagamie County.

**EXHIBIT 5 - 11**  
**Access Controlled Roadways**  
**Outagamie County, WI**



The East Central Wisconsin Regional Planning Commission (ECWRPC) has a number of current transportation planning projects underway that will impact Outagamie County. Their regional comprehensive planning process is near the midpoint for the entire process and recently released a series of fact sheets dealing with the various elements. For transportation, the Commission prepared five such fact sheets, which include:

1. Effect of Sprawl Development on Transportation
2. Transportation Funding
3. Regional Connectivity
4. Balance Between Transportation and the Environment
5. Alternative Modes of Transportation and Mobility

Each of the fact sheets includes a set of core goals, which have been included in this chapter for the purpose of consistency.

There are federal transportation planning requirements for urban areas. All urban areas in the nation with a population of 50,000 or more are required to establish a metropolitan planning organization (MPO) that represents all the jurisdictions in the urbanized area. The MPO includes the urban portion of Outagamie County that comprises the Fox Cities. For this region, ECWRPC is the designated MPO. As the MPO, they are responsible for preparing long-range transportation plans and transportation improvement programs that meet federal requirements.

ECWRPC is currently updating the "Long-Range Transportation and Land Use Plan" for the urban areas of their region, including the Fox Cities. The report provides a compilation of all community plans and must have a planning horizon of at least 20 years. The target year for the Fox cities Urbanized Area is 2035. The plan is designed to recognize that land use and transportation decisions by one community can impact neighboring communities and that planning should be cooperative. The plan serves as a guide for development and the effective use of federal funding assistance. One of the tools that were developed as part of

the planning process is a computer based travel demand model that will allow users to analyze the different impacts of land use decisions on the transportation system. This plan was completed in the fall of 2005.

ECWRPC prepares an annual "Transportation Improvement Plan" (TIP), which outlines a staged five-year program of both capital and operating projects for the Fox Cities Urbanized Area. MPO areas must have an approved TIP as a prerequisite for receiving federal transportation funding. Each year, transit operators, municipalities and counties are asked to submit a list of proposed transportation projects for inclusion in this report. These projects must be included in the TIP to compete for federal funding assistance. Projects included in the most recent TIP that directly impacts Outagamie County include those shown in the exhibit below.

**EXHIBIT 5-12**

**FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING**

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
Appleton Outagamie	Evergreen Dr./Ballard-French Reconstruction, 4-lane, urban 1.05 m.	0	0	0	1177
Appleton Outagamie	College Ave./John - Matthias Reconstruction 0.79 m.	0	0	0	3061
Appleton Outagamie	Mason St/Wisconsin-Lindbergh 0.71 m.	675	0	0	0
Appleton Outagamie	College Ave/Richmond-Linwood 2815	2815	0	0	0
Appleton Outagamie	Packard/Badger-Richmond Reconstruction 0.49 m.	0	0	525	0
Appleton Outagamie	Spencer/Mason-Badger Reconstruction 0.47 m.	0	0	590	0
Appleton Outagamie	Spencer/Mason-Whitman Reconstruction 0.50 m.	0	0	630	0

**EXHIBIT 5-12 (Continued)**

**FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING**

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
Appleton Outagamie	College/Drew-Alton Reconstruction 0.30 m.	0	0	0	1035
Appleton Outagamie	John St/College - S. River Reconstruction 0.17 m.	0	0	0	320
Appleton Outagamie	Lawe St/College - Fox River Reconstruction, 4-lane, urban 0.25 m.	170	0	0	0
Appleton Outagamie	Valley Transit 5294	6455	5818	12137	
Grand Chute Outagamie	Oneida/Capitol-Northland Reconstruct to Urban 0.60 m	0	0	0	975
Grand Chute Outagamie	Capitol/ Richmond-Oneida Reconstruction, urbanw/bike&ped 0.60 m	0	0	1300	0
Grand Chute Outagamie	W. Spencer/Mayflower Casaloma Reconstruction, urbanw/bike&ped 1.04 m.	0	0	0	2200
Grand Chute Outagamie	McCarthy/ Brookview-CTH GV Reconstruct to Urban, 4lane 0.25 m.	0	0	0	250
Grand Chute Outagamie	McCarthy/ CTH GV-STH 15 Reconstruct to Urban, 4lane 0.5 m.	0	0	0	1000
Grand Chute Outagamie	McCarthy/ STH 15-Capitol Reconstruct to Urban, 4lane 0.9 m.	0	0	0	1400
Grand Chute Outagamie	Grand Chute Blvd/ Victory-Capitol Dr Underpass - New Construction .3m.	0	0	0	750
Grand Chute Outagamie	Rifle Range Rd/ Capitol-Grand Chute Bvd Reconstruct to Urban, 4-lane with bike/ped 0.6m.	0	0	0	810
Grand Chute Outagamie	Boardwalk Tr./CTH CB -Spencer new bike/ped. facility - candidate project 1.25mi	0	750	0	0

**EXHIBIT 5-12 (Continued)**

**FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING**

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
Grand Chute Outagamie	S. Bluemound Rd./Prospect-Spencer Reconstruction, 4-lane, urban 1.0 m.	0	0	0	1500
Grand Chute Outagamie	Casaloma/Prospect-Spencer Reconstruction, 4-lane urban 1.00 m.	0	0	0	1500
Grand Chute Outagamie	Casaloma/Converters Dr.-Capitol Reconstruction, urban 0.68 m.	0	0	0	1500
Grand Chute Outagamie	College Ave. at Mall Dr./Nicolet int. Intersection improvements 0.00 m.	0	0	0	2800
Grand Chute Outagamie	Capitol Dr./McCarthy-USH 41 Reconstruction, urban 1.71 m.	0	0	0	1520
Grand Chute Outagamie	Capitol Drive/USH41-Lynndale Reconstruction, urban 0.86 m.	0	0	0	1320
Grand Chute Outagamie	Nicolet Rd./Van Dyke - Pine Reconstruction, urban 0.23 m.	0	640	0	0
Kimberly Outagamie	Kimberly Ave/ Railroad - Marcella Reconstruction 0.85m.	0	0	0	1300
Little Chute Outagamie	Vandenbroek St./Canal-Main Reconstruction 0.18 m.	154	0	0	0
Little Chute Outagamie	Main St./Jackson-Hayes Reconstruction 1.49 m.	0	0	0	3000
Little Chute Outagamie	Lincoln Ave./Wilson-Vandenbroek Extension of Lincoln Ave. 0.05 m.	0	0	0	95
Little Chute Outagamie	Main St./Vandenbroek intersection Realignment 0.00 m.	0	0	0	220
Little Chute Outagamie	French Rd./Main St-CTH OO Reconstruction 0.55 m.	0	0	0	700

**EXHIBIT 5-12 (Continued)**

**FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING**

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
Little Chute Outagamie	Washington St/Main St-CTH OO Reconstruction 0.63 m.	400	0	0	0
Outagamie Co. Outagamie	CTH OO/Holland-Washington Reconstruction 0.38 m.	1740	0	0	0
Outagamie Co. Outagamie	CTH A/Wisconsin - CTH OO Reconstruction, urban, 4-lane 1.0 m.	0	0	4100	0
Outagamie Co. Outagamie	CTH GV/STH 96 - CTH CB Reconstruction, urban 1.5 m.	0	0	0	150
Outagamie Co. Outagamie	CTH CB/STH 96 - STH 15 Reconstruction, urban, 4-lane 1.0 m.	0	0	0	150
Outagamie Co. Outagamie	CTH JJ/CTH N - STH 55 Reconstruction 1.00 m.	0	0	0	1020
Outagamie Co. Outagamie	CTH OO/Washington-Buchanan Reconstruction 1.2 m.	0	0	0	570
Outagamie Co. Outagamie	CTH OO/STH 55-CTH J Reconstruction 1.0 m.	0	0	490	0
Outagamie Co. Outagamie	CTH N/CTH KK-CTH CE Reconstruction 1.0 m.	0	0	0	2200
Outagamie Co. Outagamie	CTH HH/CTH CE-CTH Z Reconstruction 1.0 m.	0	0	0	952
Outagamie Co. Outagamie	CTH CB/CTH BB-Spencer Reconstruction 1.25 m.	0	0	0	621
Outagamie Co. Outagamie	CTH A/Grand Chute-CTH JJ Reconstruction, urban, 4-lane 1.00m.	0	0	0	1500
Outagamie Co. Outagamie	CTH JJ/CTH A-STH 47 Reconstruction, urban, 4-lane 1.00m.	0	0	0	1750

EXHIBIT 5-12 (Continued)

FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
Outagamie Co. Outagamie	CTH CE/STH 55-CTH Q Reconstruction, urban, 4-lane 1.00m.	0	0	0	1660
Outagamie Co. Outagamie	CTH E/CTH JJ-CTH EE Reconstruction, urban, 4-lane 1.00m.	0	0	0	1650
WisDOT Outagamie	STH 15/Appleton-New London Resurface 4.03 m.	1066	0	0	0
WisDOT Outagamie	College Ave./Fox River Bridge Bridge Replacement (4984-01-14) 0.00 m.	0	0	8233	0
WisDOT Outagamie	CTH A (Lynndale Avenue) Reconstruction (4984-01-39 & 40) 0.88 m.	0	0	501	0
WisDOT Outagamie	CTH JJ/STH 76-CTH A Reconstruction (6049-01-71) 2.8m.	1062	0	0	0
WisDOT Outagamie	CTH OO/Northland Ave Reconstruction (4677-08-71) 0.54 m.	2051	0	0	0
WisDOT Outagamie	Lawe St Bridge (4984-01-38) 0.00 m.	3010	0	0	0
WisDOT Outagamie	Olde Oneida St Bridge Bridge Rehab (4984-01-32) 0.00 m.	1464	0	0	0
WisDOT Outagamie	STH 96/CTH E-Adams (Little Chute) Resurfacing 4075-14-21 & 71) 2.62 m.	6	1469	0	0
WisDOT Outagamie	STH 96/Main Street (Lt. Chute) Resurface (4075-20-71) 1.48 m.	0	0	0	923
WisDOT Outagamie	STH 96/Main Street (Lt. Chute) Resurface (4075-20-71) 1.48 m.	0	0	0	923
WisDOT Outagamie	STH 96/Draper St City of Kaukauna Resurface (4075-21-71) 0.9 m.	0	75	0	615

EXHIBIT 5-12 (Continued)

FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
WisDOT Outagamie	STH 96/Rankin-CTH E RECST (4075-17-71) 0.68 m.	0	0	0	5021
WisDOT Outagamie	STH 96/Midway Rd-STH 76 RDMNT (4075-16-60) 6.02 m.	1117	0	0	0
WisDOT Outagamie	STH 96/STH 76-USH 41 Reconstruction (4075-11-71) 3.02 m.	0	0	7835	0
WisDOT Outagamie	STH 96/STH 76-USH 41 Reconstruction (4075-11-72) 3.02 m.	0	1271	0	0
WisDOT Outagamie	STH 96_WI Ave/USH 41- CTH A Reconstruction (40757-19-71) 1.03 m.	0	1001	0	0
WisDOT Outagamie	STH 55&CTH CE Traffic Study Traffic Study (6560-06-00) 0	8	0	0	0
WisDOT Outagamie	STH 125/USH 41-RR structure on College (4659-10-00) 0.0m.	0	360	0	0
WisDOT Outagamie	STH 125/CN RR structure on College Bridge Rehab (4659-11-60) 0.0m.	225	0	0	0
WisDOT Outagamie	STH 55 / 18th St-7th St (Kaukauna) Reconstruct (4658-09-71) 0.43 m.	0	2301	0	0
WisDOT Outagamie	USH 41/ CTH A-STH 55 Bridge Rehab (1132-20-71) 0.00 m.	0	0	0	452
WisDOT Outagamie	USH 41/ Gillette St & Soo Line Str Bridge Rehab (1132-20-72) 0.00 m.	490	0	0	0
WisDOT Outagamie	USH 41/ STH 15-CTH J Resurfacing (1131-14-71) 11.3 m.	0	0	0	6956
WisDOT Outagamie	USH 41/ Buchanan Rd Overpass Bridge Rehab (1123-01-72) 0.0 m.	0	0	0	471

**EXHIBIT 5-12 (Continued)**

**FOX CITIES URBANIZED AREA - OUTAGAMIE COUNTY CANDIDATE PROJECT LISTING**

Primary Jurisdiction	Project Description	2006 Totals	2007 Totals	2008 Totals	2009-2010 Totals
WisDOT Outagamie	USH 41/ Vandenbroek Rd Overpass Bridge Rehab (1123-01-73) 0.0 m.	0	0	0	354
WisDOT Outagamie	USH 41/Holland Rd Overpass Bridge Rehab (1123-01-74) 0.0 m.	0	0	396	0
WisDOT Outagamie	USH 41/Capitol Dr. Overpass Bridge Rehab (1123-01-75) 0.0 m.	0	0	0	379
WisDOT Outagamie	USH 41/Breezewood-STH 15 Maintenance (1120-33-60) 9.0 m.	1680	0	0	0
WisDOT Outagamie	USH 41/CTH J Interchange Bridge Rehab (1130-26-00 & 71) 0.01 m.	0	0	62	0
WisDOT Outagamie	STH 47/CTH JJ-Wege Rd Reconstruction (6240-13-21 & 40) 2.88 m.	0	0	0	2350
WisDOT Outagamie	STH 76/CTH JJ-CTH S Reconstruction 96517-07-21 & 71) 4.91 m.	105	0	2331	0
WisDOT Outagamie	STH 76/STH 15-CTH JJ Reconstruction (6517-04-60 & 71) 1.43m.	0	1323	0	0
WisDOT Outagamie	STH 76/USH 10-STH 15 Resurfacing (6430-11-21 & 71) 4.87m.	0	30	0	1599
WisDOT Outagamie	STH 47-Memorial/Lawrence-College Reconstruction (6240-16-71) 0	0	0	0	1432
WisDOT Outagamie	STH 441/CTH OO Ramps Reconstruction (4685-14-71) 128	0	0	0	0
WisDOT Outagamie	STH 441/USH 41-USH 41 Maintenance (4685-14-74) 10.4m.	265	0	0	0

Source: East Central Wisconsin Regional Planning Commission, Transportation Improvement Program for the Fox Cities and Oshkosh Urbanized Area, 2005  
Note: Amounts shown are in thousands of dollars.

The "Midwest Regional Rail Initiative" (MWRRI) evolved out of a series of concepts to bring a regional passenger rail system to the Great Lakes area. The system is proposed to use Chicago as the hub with spokes leading to the major cities of the Midwest. Additionally, the MWRRI proposes links to other portions of the involved states, including a line from Milwaukee to Green Bay. Other sub-regions are proposed to be linked to these rail stations with feeder bus lines. This initiative is consistent with the goals outlined earlier in this chapter.

The "Outagamie County Capital Improvements Program" (CIP) outlines development projects that the County will be undertaking over the next five years. The plan is updated annually as part of the budget process. Transportation projects listed within the current CIP include those shown in the exhibit below.

**EXHIBIT 5-13  
OUTAGAMIE COUNTY CAPITAL IMPROVEMENTS PROGRAM**

Project Description	2005	2006	2007	2008	2009
<b>Highway Projects:</b>					
CTH A – Wisconsin Ave. to CTH OO		X			
CTH CC – USH 41 to CTH JJ		X			
CTH EE – CTH E to East County line				X	
CTH EE – CTH C to CTH E			X		
CTH G – Miller Rd. to STH 55			X		
CTH JJ – French Rd. to CTH N				X	
CTH M – within Hortonville limits		X			
CTH O – STH 76 to CTH A				X	
CTH O – CTH A to STH 47	X	X			
CTH OO – STH 441 to Holland Rd.		X			
CTH OO – STH 55 to CTH JJ				X	
CTH PP – Wolf Rd. to STH 54		X			
CTH S – CTH E to East County line		X			
CTH VV – CTH Y to East County line				X	
CTH VV – STH 47 to STH 55		X	X	X	
Culvert Replacement Program	X	X	X	X	X
Highway Equipment Replacement	X	X	X	X	X
Lawe St./Olde Oneida St. Lift Bridges		X		X	
Lawe St. Navigation Canal Bridge			X		
Lawe St. Power Canal Bridge			X		
Olde Oneida St. River Bridge		X			
Olde Oneida St. Canal Lift Bridge			X		
Prospect St. Bridge over Jackman St.	X		X		
S. Island Power Canal Bridge	X		X		

**EXHIBIT 5-13 (Continued)**  
**OUTAGAMIE COUNTY CAPITAL IMPROVEMENTS PROGRAM**

<b>Project Description</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Airport Projects:</b>					
Perimeter Road	X	X	X	X	
Land Acquisition					
Taxiway B Reconstruction	X	X	X		

Source: Outagamie County Capital Improvements Program, 2005-2009, Outagamie County Planning Department, 2004

Outagamie County recently prepared a Highway CE Corridor study, with assistance from Short, Elliot and Hendrickson consulting firm. That study identified a number of issues that exist along that route and outlines possible strategies to address those issues.

Highway CE is not the only facility that the County has concerns about. Improvements to the entire county trunk system are a concern, especially as they relate to funding. The amount of funding that is available to the county trunk system is not keeping up with the increases in costs, including the rising cost of fuel. Machinery costs have increased 10% from 2004 to 2005. Material costs, such as oil, aggregates and salt, have escalated significantly, as have labor costs. Maintenance of the existing county trunk highway system is priority for the County. Motorists and businesses that rely on the County highways expect a consistent level of service. The increasing costs of highway maintenance may jeopardize the County's ability to meet those expectations.

The "Outagamie County Greenway Plan" was originally drafted in 1995 to promote the use of existing and planned trails, to raise public awareness, and gain support. The plan outlined the benefits of trails and greenways and laid out priorities for implementation. As that plan is now over a decade old, it is in need of updating and is incorporated into this document.

The objectives of the original plan were as follows and they are still relevant within this update.

- To maintain and preserve the natural beauty of Outagamie County.

- To enhance the quality of life for residents of Outagamie County.
- To promote planned and managed growth in an effort to control urban sprawl and maintain rural character and community identity.
- To protect the ecology of Outagamie County threatened by development.
- To improve the overall economy of Outagamie County and the Fox Valley through the development of green space and related activities.
- To provide additional recreational opportunities for the citizens of Outagamie County.
- To develop an alternative means of transportation.

In order to meet the objectives listed above, the following phases of projects are proposed:

- Develop a system of local and regional trails within Outagamie County.
  - Appleton to Plamann Park
  - Plamann Park to Oneida, through Freedom
  - Connect Grand Chute trail system to CB Trail
  - Support the development of the Paper Trail system in and around the Fox Cities area
  - Fox Cities to Black Creek
  - Oneida to New London
  - Fox Cities to New London
  - Hortonville to New London to Bear Creek (Wiouwash Trail)
- Develop routes from the system within Outagamie County to attractions and trail systems in neighboring counties and Northeast Wisconsin.
  - Establish link to High Cliff State Park and Sherwood area
  - Link Wiouwash Trail to Friendship Trail
  - Link Wiouwash Trail to Mountain Bay Trail
  - Establish link from Kaukauna to Wrightstown
  - Support the development of the Paper Trail system extensions through neighboring Calumet and Winnebago counties
  - Establish link to Fox River Trail

- Connect Oneida to Green Bay
- Establish trail link from New London to the Tomorrow River Trail at Scandinavia (Waupaca County)

As noted previously in this chapter, the “Outagamie County Regional Airport Master Plan” was developed and adopted in 2002. Within that document are a series of proposed improvements, which are broken into short-term, mid-term and long-term time frames. Those improvements are highlighted below.

**EXHIBIT 5-14  
OUTAGAMIECOUNTY REGIONAL AIRPORT CAPITAL IMPROVEMENT  
PROGRAM SUMMARY**

Year	Project	Total Cost
<i>Short-Term Improvements (2003-2007)</i>		
2003	Consolidated Ground Run-Up Area and Compass Pad	\$600,000
	General Aviation (GA) Site Development – Phase 1	\$1,800,000
	Total 2003	<b>\$2,400,000</b>
2004	Reconstruct Taxiway B	\$4,025,000
	Drainage Retention	\$500,000
	Perimeter Service Road – North Side	\$340,000
	Total 2004	<b>\$4,865,000</b>
2005	Taxiway J extension – 500'	\$700,000
	Parking Lot Expansion – Public Parking Phase 1 (600)	\$1,100,000
	Parking Lot Expansion – Employee Lot Phase 1 (300)	\$480,000
	Total 2005	<b>\$2,280,000</b>
2006	GA Site Development – Phase 2	\$1,700,000
	Perimeter Service Road – East Side	\$700,000
	Total 2006	<b>\$2,400,000</b>
2007	Demolish Existing Fixed Base Operation Facilities	\$50,000
	Noise Attenuation Barrier/Berm at Run-Up Area	\$200,000
	Parking Lot Expansion – Rental Car Parking Phase 1	\$300,000
	Total 2007	<b>\$550,000</b>
	Total Short-Term Improvements	<b>\$12,495,000</b>
<i>Mid-Term Improvements (2008-2012)</i>		
	GA Site Development – Phase 3	\$1,800,000
	Relocate Existing T-Hangars	\$400,000
	Parking Lot Expansion – Public Parking Phase 2	\$1,700,000
	Cargo Area Site Development	\$575,000
	Property Acquisition – South Quadrant	\$800,000
	GA Site Development – Phase 4	\$2,000,000
	Crossover Taxiway From GA to Runway 11/29	\$1,500,000
	Environmental Assessment for Runway 3/21 Extension	\$125,000
	Runway 3/21 & Taxiway B Extension to 8,000'	\$4,000,000
	Master Plan Update	\$200,000
	Total Mid-Term Improvements	<b>\$13,100,000</b>

**EXHIBIT 5-14 (Continued)  
OUTAGAMIECOUNTY REGIONAL AIRPORT CAPITAL IMPROVEMENT  
PROGRAM SUMMARY**

<i>Long-Term Improvements (2013-2020)</i>	
Parallel Taxiway to Ultimate Runway 11/29	\$1,800,000
GA Site Development – Phase 5	\$1,500,000
Demolish Existing T-Hangars	\$150,000
Parking Lot Expansion – Rental Phase 2 (80)	\$250,000
Parking Lot Expansion – Employee Phase 2 (120)	\$300,000
Parking Lot Expansion – Public Phase 3 (500)	\$1,000,000
Environmental Assessment Runway 11/29 Extension	\$150,000
Property Acquisition (Runway 29)	\$300,000
Property Acquisition (Runway 11)	\$1,000,000
Extend Runway 11/29 & Taxiway A to 8,000'	\$6,000,000
Total Long-Term Improvements	<b>\$12,450,000</b>
Total Improvements (2003-2020)	<b>\$38,045,000</b>

Note: All costs are in 2002 dollars.

Source: Outagamie County Regional Airport Master Plan, Mead & Hunt Inc., August 2002.

Transportation Recommendations

1. Support the efforts of the Midwest Regional Rail Initiative to establish passenger rail service to northeast Wisconsin.
2. Support and promote transit-friendly development patterns.
3. Promote land use patterns that do not negatively impact the region's transportation system.
4. Promote the use of roundabouts.
5. Support the development of a network of on and off road pedestrian and bicycle routes that link important origins and destinations.
6. Support the replacement of the intersection of CTH U and STH 29 with an overpass of the state highway, per the STH 29 Corridor Study.
7. Promote and support the discussions concerning the development of a regional transit authority that would cover multiple counties in the area.
8. Expand development of Park and Ride facilities and promote multi-modal uses, such as offering bicycle racks and transit stops.
9. Promote widened paved shoulders on state and county highways where they can serve as safe bicycle routes as part of the overall trail network.
10. Support the continued high level of maintenance of the existing county trunk highway system, including snow plowing.

11. Continue to make improvements to address congestion, capacity issues, areas of safety concerns and structural deficient bridges on the county trunk system.
12. Support making USH 41 a six-lane facility from Oshkosh to Green Bay.
13. Support making CTH JJ a four-lane facility in the future, with a bicycle and pedestrian component.
14. Support and promote the consideration of bicycle and pedestrian travel be included in the preliminary planning, scoping and design stages of all highway projects.
15. Promote and support the development of a wholly connected network of trails and greenways within the region as a transportation alternative, as well as for recreational and other purposes.

THIS PAGE LEFT BLANK INTENTIONALLY

## 6. UTILITIES AND COMMUNITY FACILITIES

### Introduction

The Wisconsin comprehensive planning legislation requires that this chapter describe the existing and planned utilities and facilities, including sanitary sewer service, stormwater management, water supply, solid waste disposal, recycling facilities, on-site wastewater treatment technologies, parks, telecommunication facilities, power generating plants and transmission lines, cemeteries, health care facilities, police service, fire and rescue facilities, libraries, schools, and other governmental facilities. The chapter needs to describe the location, use and capacity of existing facilities, as well as, a timetable for the expansion, rehabilitation, or replacement of those facilities. Additionally, this chapter needs to assess the needs for government services that are related to utilities and public facilities.

The quality of infrastructure within a community is one of the major reasons it is chosen as a place to reside and to open a business. Parks, quality water supply, energy supplies, police and fire service, among other services and facilities define a community's ability to satisfy the needs of its residents. This infrastructure supports a region's housing and economic development opportunities. The quality of these services adds to the quality of life within a community.

### Goals

- o Promote the redevelopment of land with existing infrastructure and public services.
- o Encourage land uses, densities and regulations that promote efficient development patterns and relatively low governmental and utility costs.
- o Encourage the coordination and cooperation of the provision of public services among nearby units of governments.
- o Provide adequate infrastructure and public services to meet existing and future market demand for residential, commercial and industrial uses.

### Public Safety & Emergency Services

Outagamie County provides a full range of services through its Sheriff's Department, including a County jail, Huber facility, 911 emergency dispatch, and boat and snow patrols. The Sheriff provides full law enforcement services to those portions of the County that do not have their own enforcement officials. The communities of Appleton, Hortonville, New London, Shiocton, Black Creek, Seymour, the Oneida Nation, and Wrightstown provide their own police services. The communities of Kaukauna, Little Chute, and Kimberly have a joint police service – Fox Valley Metro Police. The towns of Freedom and Grand Chute also have local police services. Buchanan and Bear Creek provide their police services through contracts for staff through the County Sheriff.

The County Emergency Management Office coordinates the effective response and recovery efforts due to natural and technological disasters. This office provides countywide coverage, working closely with the Sheriff's Department.

Fire and rescue operations are generally handled at the local level of government. There are 26 local fire departments, many of which offer supporting first-responder services. Seven of these local departments cover areas in multiple jurisdictions. Most communities are involved in mutual aid agreements with neighboring communities to provide backup and assistance.

### Water & Wastewater Treatment Facilities

Municipal water supplies are available within each of the County's cities and villages. Municipal service is also available to portions of the towns of Buchanan, Grand Chute, and Greenville. The Oneida Nation provides municipal water to portions of their jurisdictions within the Town of Oneida. The Town of Freedom is currently developing a municipal system within the unincorporated community of Freedom. The source of water supply for all of these municipal systems is

groundwater, with the exception of Appleton, which pulls its water from Lake Winnebago.

The remainder of the businesses and residences within the County obtain their potable water from private wells. As noted in the Agricultural, Natural and Cultural Resources chapter, Outagamie County has been identified as a "Special Well Casing Pipe Depth Area". This designation includes requirements that all new private wells be cased, grouted and disinfected to more stringent standards to reduce health risks to the well users. Each quarter section of the County has minimum depth of well requirements that can range from as little as 60 feet to as much as 610 feet.

Sanitary sewer service provides wastewater treatment for the Fox Cities region of the County, as well as for all of the outlying incorporated communities. Additionally, there are municipal systems in place for portions of the towns of Dale, Ellington, and Freedom. The Oneida Nation serves portions of the Town of Oneida that is within their jurisdiction with municipal sanitary sewer service.

East Central Wisconsin Regional Planning Commission (ECWRPC) recently completed the "2030 Fox Cities Sewer Service Area Plan". This plan is a formal element of the Wisconsin Department of Natural Resources Administrative Code NR-121. The plan delineates environmentally sensitive areas, and discusses wastewater treatment and water quality impacts resulting from potential development during the planning period.

Similar to the water supply, the remainder of the County utilizes private on-site treatment systems. Permits for the installation and repair to these systems are issued by the Outagamie County Zoning Department. The exhibit below illustrates the permitting trends over a recent five-year period.

**EXHIBIT 6-1  
OUTAGAMIE COUNTY SANITARY PERMIT TRENDS 2000-2004**

	2000	2001	2002	2003	2004	Average
New	263	294	242	291	264	270.8
R-R-R	146	117	107	121	129	124.0
Total	409	411	349	412	393	394.8

NOTE: R-R-R refers to permits issued for the reconnection to, repair of, or replacement of an existing system.

Source: Outagamie County Zoning Department, 2000-2004.

Solid Waste and Recycling

Outagamie County has partnered with the counties of Brown and Winnebago to provide a cooperative program of solid waste disposal and material recycling facilities. This joint effort has realized overall cost savings to each of the participating counties for both solid waste and recycling and has extended life spans of the existing landfills in each of the counties. The joint recycling program has resulted in gaining greater economies of scale for the sale of recyclable materials. In 2002, the Tri-County recycling and solid waste program won the "American City & County" magazine local government award for excellence. The overall economies of scale obtained by the partnership will save the three counties \$35 million in disposal costs over a 25-year period and \$8 million in recycling costs over a 12-year period. Local communities within the County contract for the collection of solid waste and recyclables. In addition to the County landfill, there are two licensed private landfills in Outagamie County – the Appleton Coated, LLC landfill and the Thilmany Phase 5 Red Hills landfill.

The Outagamie County landfill also incorporates a cogeneration system. This system utilizes methane gas that is produced by the landfill and converts it to electricity. The system has the capacity to produce electricity for 3,000 households. Both electricity and waste heat from the cogeneration system are used in the County's solid waste and highway buildings to reduce the energy purchased from utilities. Excess electrical energy that is produced is sold to WE Energies.

### Stormwater Management

Early in 2002, Outagamie County was notified that the County and the Fox Cities region were identified in the Environmental Protection Agency's (EPA) Stormwater Phase II Final Rule. This ruling requires that the communities listed must not only manage stormwater quantity, but must now manage stormwater quality. The rules include six minimum control measures. They are:

- o Public Participation and Outreach
- o Public Participation/Involvement
- o Illicit Discharge Detection and Elimination
- o Construction Site Runoff Control
- o Post-Construction Runoff Control, and
- o Pollution Prevention/Good Housekeeping

Outagamie County worked closely with the other named communities within the County to develop an Erosion and Sediment Control Ordinance (construction site runoff control) and a Stormwater Management Ordinance (post-construction runoff control). The intent of those joint efforts was to develop consistent ordinance language that all impacted communities would adopt to provide a consistent set of regulations to the public, regardless of jurisdiction. The County is also partnering with other units of government within northeast Wisconsin to address the other minimum control measures. An organization has been created called the North East Wisconsin Stormwater Consortium (NEWSC). NEWSC has started making stormwater public service announcements, hosted educational seminars, and is working on developing model ordinance language.

### Utilities

WE Energies provides electricity and natural gas to the majority of Outagamie County. On the electric side, they own and operate coal-based generating facilities in Port Washington and Oak Creek, as well as the nuclear plant at Point Beach, which is operated by the Nuclear Management Company. WE Energies is currently planning to extend the license for the Point Beach facility, expand the

Oak Creek plant with two 615-megawatt coal-fueled generating units, and convert the existing coal-fuel Port Washington plant into an intermediate load natural gas facility. In Outagamie County, WE Energies has continued to see steady growth in electrical demand for the last 10 years and currently projects this annual 2-3 percent growth trend to continue into the foreseeable future. There are pockets in Outagamie County where this average growth rate has been exceeded, reaching the 5-6 percent level of increased demand. With an approximate total load of 600 megawatts serving the entire WE Energies, Fox Valley Service territory, a 2 percent rate is equivalent to adding a new substation or new transformer at an existing substation, every year on an ongoing basis. While it is often possible to upgrade existing substations by adding transformers or replacing older ones with new, larger units; as undeveloped areas of the county experience growth, it is likely that new green field substations will be required to supply adequate capacity and reliability.

On the natural gas side, WE Energies is a distribution utility. They are planning additional pipelines in an attempt to meet increasing demand, especially in the Fox Valley area. Natural gas use has been increasing annually and WE Energies believes it will continue that trend in growing areas like the Fox Valley. Natural gas is the preferred choice for home heating and reduces air pollution in many industrial applications. Current growth rates are approximately 1-2 percent per year in Outagamie County. WE Energies and the interstate pipelines that supply gas to WE Energies will continue to make improvements necessary to meet the projected growth in demand. Distribution systems will grow outward from urban and suburban areas to serve new subdivisions as housing density makes such extensions practical.

Guardian Pipeline Company is proposing a 119-mile natural gas extension from its current terminus in Jefferson County into Outagamie County. This project will include a lateral into the Fox Cities region. ANR Pipeline Company is also expanding natural gas service in the County. This project involves approximately 3 miles of pipeline between Little Chute and Appleton.

Wisconsin Public Service Corporation (WPSC) provides electric power to the Village of Wrightstown and the towns of Buchanan, Deer Creek, Kaukauna, Oneida and Seymour. WPSC owns and operates four coal-fired plants, 15 hydroelectric plants and purchase nuclear power from the Kewaunee power plant to meet its electricity needs. A major expansion is proposed for their coal plant in Weston (west of Wausau). Natural gas customers of WPSC include the villages of Nichols and Wrightstown and the towns of Cicero, Kaukauna, Oneida, and Seymour. WPSC contracts with the ANR Pipeline Company for the distribution of the gas they purchase.

Kaukauna Electric and Water Utility generates electric power for the City of Kaukauna and the villages of Combined Locks and Little Chute. They own and operate a hydroelectric power plant located on the Fox River. Kaukauna Utilities is currently involved in a three- year facility expansion/remodel project to accommodate their current and projected needs over the next 20 years. New London Electric and Water Utility provides electric service to the City of New London, as well as portions of the towns of Liberty and Maple Creek.

American Transmission Company (ATC) owns and operates the transmission facilities that move the electricity from power plants where it is produced to local distribution systems, where it is delivered to the end user. ATC has identified a number of transmission system performance issues in zone 4 (Northeastern Wisconsin), most notably are:

- o Insufficient transformer capacity
- o Limited transfer capacity to and from Michigan's Upper Peninsula
- o The stability response of the Kewaunee and Point Beach nuclear plants
- o Aging facilities in poor condition, and
- o Heavily loaded facilities in the Fox Valley and Green Bay areas

ATC recently released its "10-Year Transmission System Assessment Summary Report" (dated September 2005), which outlines the following projects and

projected year of completion within Outagamie County to address the issues that were summarized above:

- o Werner West (New London) – development of a 345/138-kV substation to address chronic transmission service limitation and facility overloads, and to improve system voltages in the area (2006).
- o Werner West-Morgan 345-kV line and Clintonville-Werner West 138-kV line – install new transmission lines to address chronic transmission service limitations in Green Bay, to improve Wisconsin-UP of Michigan transfer capability, and to lower system losses (2009).
- o Substation Modifications – modifications to four existing substations located in central, northern, and northeastern portions of the County are proposed to take place between 2005 and 2015.

The newest addition to Outagamie County's energy picture is the Fox Energy Center, which is owned by Calpine Corporation. This is a natural gas-based electric peaking plant. The first phase of this project (300 megawatts) went into operation during the summer of 2005. Phase II of this development is expected to be completed by the end of 2005, which will bring the total capacity of the power plant to more than 550 megawatts. The facility sells its energy to Wisconsin Public Service Corporation.

Renewable energy sources are getting increased attention. Wind, solar and biomass (gases produced naturally from such things as landfills and farm animal waste) are being utilized now to meet a small portion of the retail electricity demand. In February 2000, Wisconsin adopted the Renewable Portfolio Standard legislation that requires utility companies to provide increasing amounts of energy sold to retail customers to be generated from renewable sources. That legislation set a minimum standard that 0.5 percent comes from renewable energy sources by 2001 and the minimum increases to 2.2 percent by 2011.

Telecommunications

Several private companies offer local and long distance telephone service to Outagamie County residents. AT&T provides telephone service to largest portion of the County, followed by CenturyTel Central, Frontier Communications, Northeast, and Century L-C. Because of the competitive nature of telephone service, especially cellular, a variety of services are available and should continue to be available as technology changes within this field. With regards to cellular phone service, the federal government passed the Federal Telecommunications Act of 1996 to permit local government to regulate the placement of cellular towers, as long as they do not unreasonably discriminate between providers or prohibit the service.

Demand for Internet access has increased and will continue to increase, especially for high-speed, digital, and wireless access. Demand for access to fiber optics is also growing, which allows for transmission over greater distances and at higher data rates.

Health Care

There are currently three hospitals located within Outagamie County; St. Elizabeth's Hospital (Appleton), Appleton Medical Center, and New London Family Medical Center. These three facilities have a total of 388 beds available and staffed, most of which is located in Appleton (90%). The hospital information was obtained from 2002 reports on file with the Wisconsin Department of Health and Family Services. There are an additional 214 beds available in Neenah, 25 in Waupaca, 46 in Shawano, and 584 in Green Bay.

Ten emergency service providers cover the County, with Appleton Gold Cross serving the largest area and largest population.

Outagamie County has 289 medical doctors serving the County's residents, according to a 2000 survey by the Bureau of Health Information.

There are ten nursing homes operating within the County with capacity of 1,040 licensed beds, according to 2004 data on file with the Wisconsin Department of Health and Family Services. Those homes had an average daily census was 950 persons. In addition to the County operated Brewster Village, there are four facilities operated by private companies, four by non-profits, and one operated by the Oneida Tribe. Six of the facilities are located in the Appleton area, while the remaining four are in Little Chute, Kaukauna, Oneida, and Seymour. Exhibit 6-2 illustrates the location of the County's assembly areas, Red Cross shelters, hospitals, and nursing homes.

Other facilities that are aimed at meeting the needs of the County's older population include assisted living facilities, independent living developments, retirement communities, elder care, and activity centers, to name a few. As the population of the County continues to grow and grow older, the demand for these facilities will continue to grow.

Cemeteries

The Outagamie County Planning Department was able to identify 58 cemeteries within the County from the United States Geological Survey quadrangle maps. Additional cemeteries were added due to individual's knowledge of a particular area. While the size and capacity of these sites are not known, it is generally felt that cemetery space is not currently an issue for the County nor is it thought to be one in the foreseeable future.

Childcare

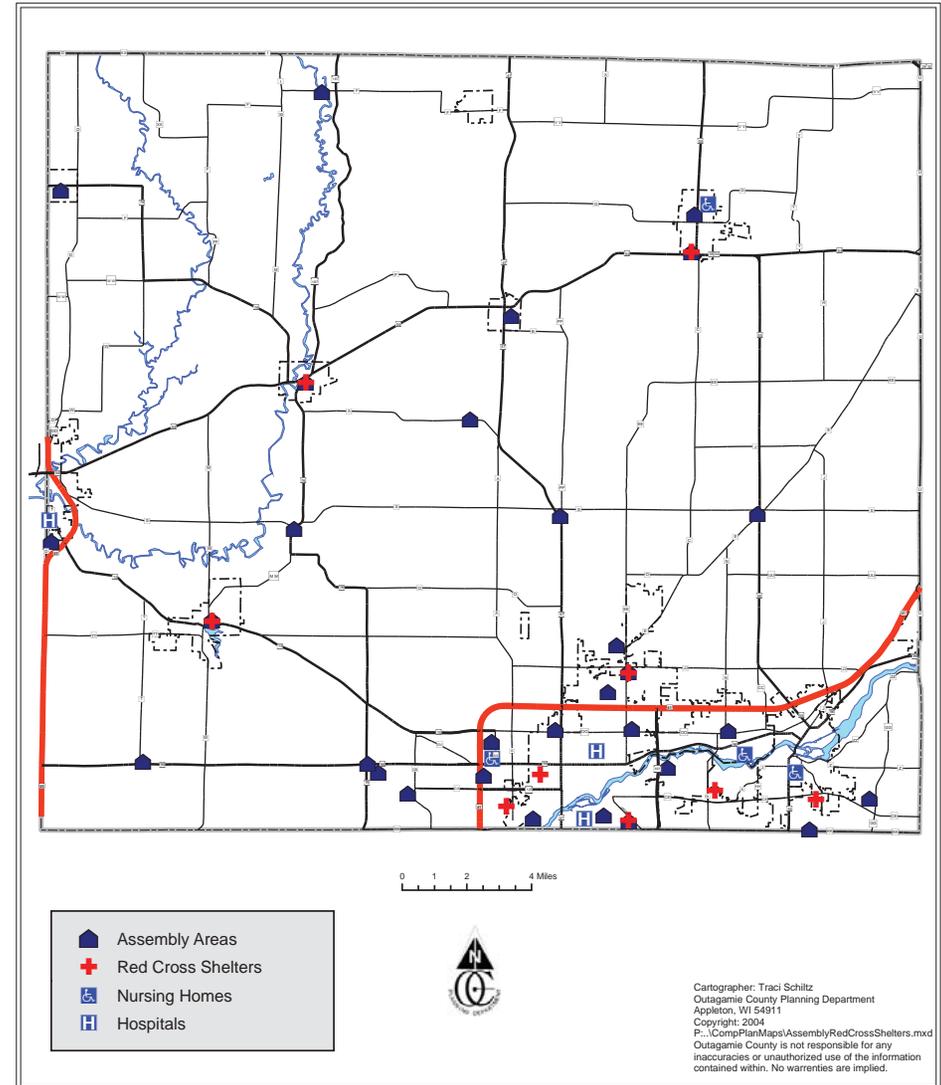
Quality childcare has become extremely important in today's economy that includes many families where both parents work outside the home or have one parent. Wisconsin has 17 children care resource and referral (CC R & R) agencies throughout the state designed to help parents locate childcare. These CC R & R's have a listing of all regulated, licensed or certified childcare providers

in the counties they serve. They can supply you with lists of providers that meet your specific needs, as well as additional information related to choosing quality childcare. Just call 1-888-713-KIDS (5437) and you'll be transferred to the appropriate agency. In addition to the toll-free number listed above, the Child Care Resource and Referral Network [www.wisconsinccrr.org](http://www.wisconsinccrr.org) operates a Web site that provides information about individual CC R & R agencies. The site also includes a guide to choosing childcare, Wisconsin childcare information for employers, and other information of interest to parents and child care providers. Figures for licensed and regulated childcare providers in Outagamie County are shown below. The information was provided from the East Central Wisconsin Regional Planning Commission, who acquired the data from Child Care Resource & Referral, Inc.

- o County Regulated Facilities/Capacity = 40/236
- o State Licensed Facilities/Capacity = 104/3,829
- o Nursery/Preschool Programs/Capacity = 8/211
- o School Age Programs/Capacity = 18/667
- o Drop-in Facilities/Capacity = 1/65
- o Head Start Programs/Capacity = 7/255

Childcare is one of the featured activities of the local YMCA facilities. There are currently three of these facilities in the County – Appleton, Kimberly (Heart of the Valley), and Greenville. These facilities also offer a number of activities aimed to meet the recreational and educational needs of the area residents, including active older adult programs, preschool programs, teen programs, and a variety of health and fitness activities for all age groups.

**EXHIBIT 6-2  
EMERGENCY AREAS  
Outagamie County, WI**



Educational Facilities

The quality of education is a critical component of an area's quality of life and economic development strategy. As noted in the Economic Development chapter, the New Economy is based on an educated and innovative workforce. Historically, Wisconsin has been one of the highest ranked states in the nation in educational comparisons. Wisconsin had the third lowest drop out rate and the highest average ACT scores in 2004, according to the U.S. Department of Education. The Morgan Quitno Press, an independent research and publishing company based in Kansas, ranked Wisconsin as the fifth smartest state in the union in 2004.

The education facilities that are present in Outagamie County are an important asset to the County's economic development strategy. The County's school districts generally rank as good as or higher than state averages. The exhibit below illustrates the County's public school districts in some of the rankings.

**EXHIBIT 6-3  
PUBLIC EDUCATIONAL COMPARISONS  
OUTAGAMIE COUNTY vs. WISCONSIN**

	<b>3<sup>rd</sup> Grade Reading Proficiency (2004-05)</b>	<b>Drop-Out Rates High School (2002-03)</b>	<b>Graduation Rates High School (2002-03)</b>
<i>Wisconsin</i>	87.4%	1.899%	91.83%
Appleton	88.1%	.235%	98.26%
Freedom	89.8%	.612%	97.18%
Hortonville	92.1%	.952%	96.15%
Kaukauna	90.2%	.883%	96.43%
Kimberly	95.7%	.196%	99.16%
Little Chute	92.2%	.818%	98.09%
Seymour	88.2%	0%	100.00%
Shiocton	96.0%	0%	98.39%

Source: Wisconsin Department of Public Instruction

There are 99 schools located within Outagamie County, including the two higher education institutions, Lawrence University and Fox Valley Technical College. Exhibit 6-4 outlines a breakdown by school district. It should be noted that the

information presented in the following exhibit should be used with discretion. The district totals may include schools that are not located within the County, such as the Appleton Area School District. Additionally, there are four other school districts in neighboring counties whose borders extend into Outagamie County and those students and school facilities are not included in that information.

**EXHIBIT 6-4  
OUTAGAMIE COUNTY SCHOOL DISTRICTS**

<b>District</b>	<b>Number of Schools</b>	<b>Enrollment</b>		<b>Percent Change</b>
		<b>2000-01</b>	<b>20003-04</b>	
<i>Public Schools:</i>				
Appleton Area	33	14,793	15,275	3.3%
Freedom Area	3	1,525	1,557	2.1%
Hortonville	5	2,636	3,003	13.9%
Kaukauna Area	7	3,615	3,750	3.7%
Kimberly Area	6	3,117	3,956	26.9%
Little Chute Area	3	1,465	1,500	2.4%
Seymour Community	4	2,467	2,472	.2%
Shiocton	2	834	856	2.6%
Public School Totals	63	30,452	32,369	6.3%
<i>Private Schools:</i>				
Appleton Area	14	3,861	3,320	-14.0%
Freedom Area	2	262	248	-5.3%
Hortonville	4	738	677	-8.3%
Kaukauna Area	7	730	714	-2.2%
Kimberly Area	3	620	475	-23.4%
Little Chute Area	1	488	403	-17.4%
Oneida Nation	1	363	402	10.7%
Seymour Community	1	124	92	-25.8%
Private School Totals	33	7,186	6,331	-11.9%
County Totals	96	37,638	38,700	2.8%

Source: Wisconsin Department of Public Instruction

While overall enrollments have increased in all the public school districts, the high rate of growth in the Hortonville and Kimberly districts mirrors the rapid growth in the Greenville and Buchanan areas. As a result of the rapid growth in the Hortonville school district, the district is proposing a new three-school campus in the Greenville area. The first step for this proposed campus would be the approval of a referendum to purchase a 77-acre site within the Greenville Sanitary District. The Appleton Area School District is proposing a district-wide

redistricting to shift student populations from facilities that are experiencing crowding. However, no immediate construction plans are available. No other major expansion projects by the other districts within the County are known at this time.

#### Libraries

Outagamie County, along with Waupaca County, form the Outagamie-Waupaca Library System (OWLS). There are 17 libraries within that system, eight of which are located within Outagamie County. The Appleton Public Library is the main branch of the system. Exhibit 6-5 illustrates the County's school and library locations.

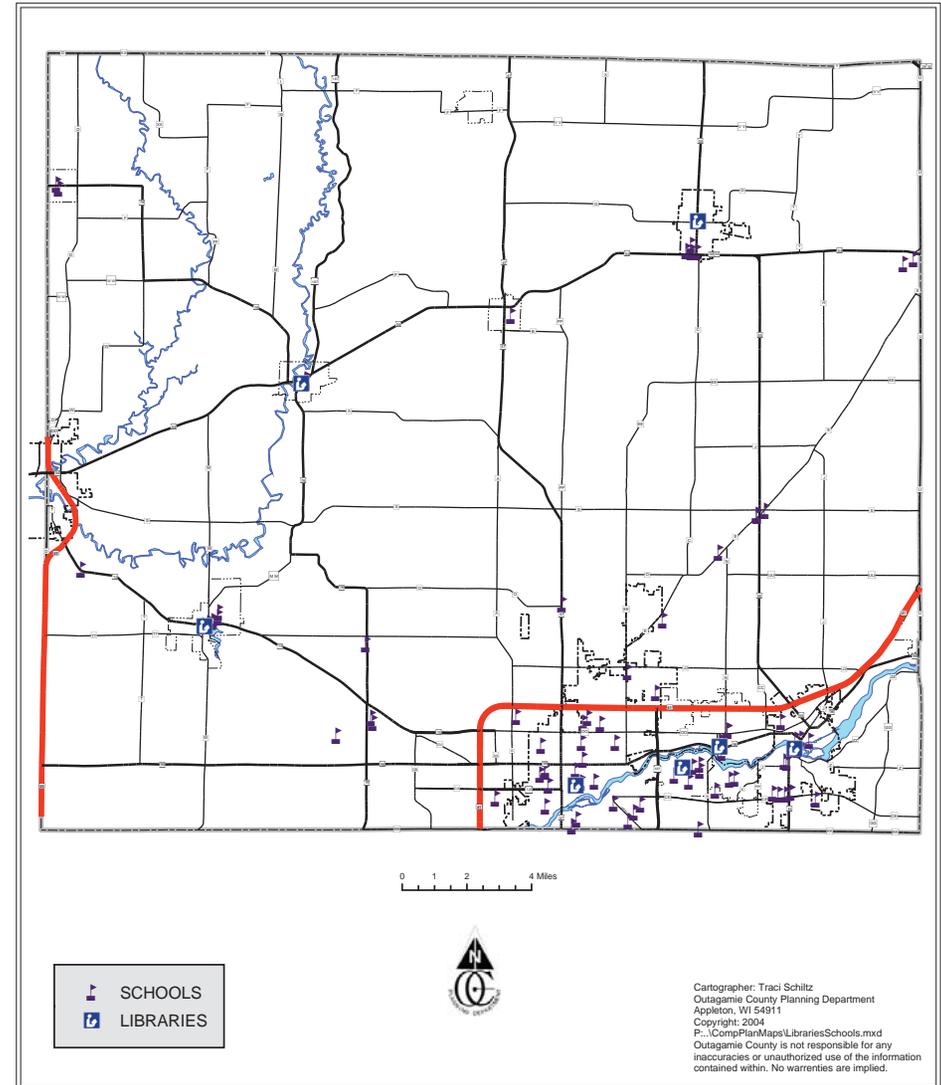
Under Wisconsin law, counties that participate in public library systems are responsible for providing library services to county residents who reside outside of communities that maintain their own libraries. As such, Outagamie County is required to engage in regular planning to ensure that County residents have access to adequate library services. To meet that requirement, the OWLS Board prepared the "Outagamie County Library Services Plan: 2005-2009". That plan indicates that the public libraries in the County have done a good job of providing service to the residents. However, the plan identifies funding and funding equity as the most significant issues that need to be addressed.

Future needs relating to library services consists of a few potential expansion projects and the possibility of a branch facility. Seymour, Hortonville and Kaukauna are exploring the potential for significant expansions to meet increased demand. The potential for a branch facility of the Appleton library is being discussed as a possibility for the north side of the City.

#### Parks and Recreation

As noted in previously in chapter 2, Agricultural, Natural and Cultural Resources, Outagamie County has a total of 16,265.5 acres of existing park and recreational

### EXHIBIT 6-5 LIBRARIES AND SCHOOLS Outagamie County, WI



lands. The vast majority of that is owned and maintained by the State of Wisconsin in the form of wildlife and natural areas, especially in the Embarrass and Wolf rivers area. With a 2000 population of 160,971, that equates to just fewer than ten persons per acre of park and recreational land.

To meet the regional open space needs for Outagamie County, 100 acres of park and recreational land should be provided for every 1,000 residents, based on standards developed by the regional planning commission. This acreage should be comprised of:

- 70 acres of passive recreational open space per 1,000 population – includes national, state, county and school forests, state wildlife and fisheries area, state natural areas, etc.
- 30 acres of active recreational open space per 1,000 population – includes state and county parks, public golf courses, campgrounds, swimming areas, etc.

Local recreational resources should account for an additional 10 acres of park and recreation land per 1,000 persons, which includes city, village and town parks, tribal lands and school grounds.

The County's projected 2030 population is 215,720 persons. Based on the formula stated above, 21,572 acres of recreational lands will be needed to meet the projected demand, or an additional 5,300 acres. While major State recreational resources existing in adjacent counties (High Cliff State Park, Hartman Creek State Park and Navarino State Wildlife Area) may aid in meeting those needs, Outagamie County will need to continue to increase its supply of open space to meet the growing demand. This is especially true with regards to active recreational lands. Exhibit 2-18 in the Agricultural, Natural & Cultural Resources chapter depicts the location of the recreational lands within Outagamie County.

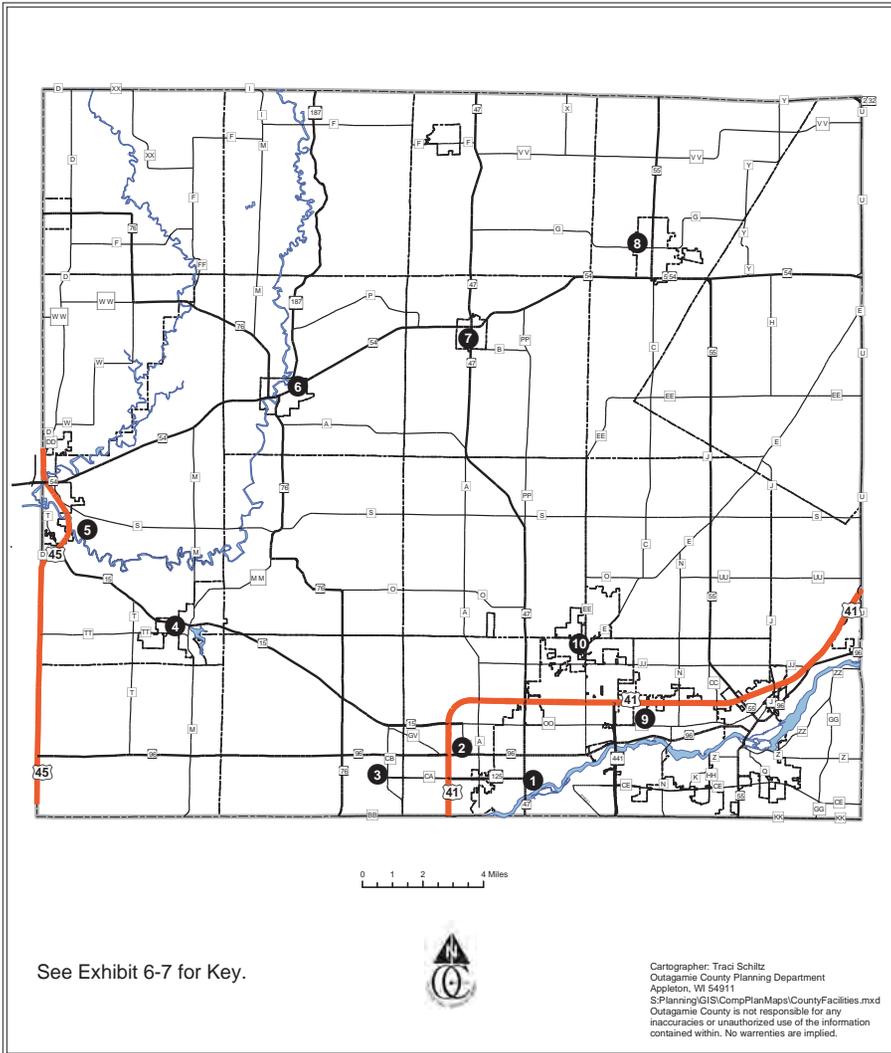
#### Outagamie County Facilities

Exhibit 6-6 illustrates the location of County facilities. The primary location of County facilities is at their downtown Appleton campus on south Walnut Street. This location houses the administration offices, Health and Human Services department, public safety, emergency management, and Courts. A space needs study of this campus was completed in May 2001. Some of the major findings of the study include the need for additional space for the Courts, District Attorney, Health and Human Services, and parking. Parking needs were recently addressed with the purchase of the former St. Joseph's school, which was razed and the site was converted into parking. The report notes that approximately 27,000 net square feet of additional space will be needed at this campus with nearly 12,000 square feet needed for both the Justice Center and the Human Services buildings. A more recent evaluation of the County's jail needs indicates a future demand for an additional 400 jail cells beginning in 2010.

The County also maintains a campus located on Brewster Street. This location includes Brewster Village (a 204 bed skilled nursing facility), University of Wisconsin Extension, Land Conservation, and a building being occupied by state and federal offices, including the Department of Natural Resources and U.S. Department of Agriculture. There are no immediate space needs for this campus, which does include approximately 14 acres of vacant land that would be available for future County needs.

Other County facility locations include Parks Department at Plamann Park, Solid Waste Department on Holland Road adjacent to the landfill, and the Highway Department, which is also abutting the landfill. The Highway Department also operates satellite facilities in Hortonville, Shiocton, and Seymour. There are no anticipated space needs for these facilities. The Outagamie County Regional Airport is located at the end of east College Avenue.

**EXHIBIT 6-6**  
**OUTAGAMIE COUNTY FACILITY LOCATIONS**  
 Outagamie County, WI



This facility recently remodeled and added space to the airport terminal and is currently addressing its long-term parking issues. To guide the airport's continued growth, the *Outagamie County Regional Airport Master Plan* outlines a number of phased improvements that will allow this facility to continue to meet a projected increase in passenger and freight usage through the year 2020.

**EXHIBIT 6-7**  
**OUTAGAMIE COUNTY FACILITY INDEX**

Map Key	Facility	Location
1	227 S. Walnut Building	Downtown Campus
	Administration Building	Downtown Campus
	Human Services Building North	Downtown Campus
	Human Services Building South	Downtown Campus
	Justice Center	Downtown Campus
	Maintenance Building	Downtown Campus
2	YFS Building	Downtown Campus
	Brewster Village	Brewster Street Campus
3	UWEX-Land Conservation Building	Brewster Street Campus
	Outagamie County Regional Airport	Greenville
4	Highway Garage-Salt Shed	Hortonville
5	Mosquito Hill Nature Center	T. Liberty
6	Highway Garage-Salt Shed	Shiocton
7	Sheriff Satellite Office	Black Creek
8	Highway Garage-Salt Shed	Seymour
9	Highway Department	Landfill
	Solid Waste Department	Landfill
	Parks Department	Plamann Park

Recommendations

1. Support the continuing efforts by utility companies to generate energy using renewable resources.
2. Explore the possibility of converting closed sections of the County landfill into recreational resources to meet future demand.
3. Encourage and promote the use of cluster septic systems and community wells in areas where public sewer and water is not available long-term per adopted NR-121 sewer service area plans.

4. Encourage and promote the development of trails and green space as part of development projects, not only as recreational resources, but also to promote walkable communities.
5. As need and demand increase, promote the potential for co-location of facilities, such as YMCA, adult care/activity center, and library.
6. Support the examination of the concept of optimization, in which municipal water systems are linked to better manage groundwater pumping.

THIS PAGE LEFT BLANK INTENTIONALLY