

## ABSTRACT

TITLE: TOWN OF PLAINFIELD EXISTING CONDITIONS REPORT –  
VOLUME TWO

AUTHORS: Kathleen Thunes, Principal Planner  
Tom Baron, Planner  
Todd Verboomen, Planner  
Trish Nau, GIS Coordinator  
Mike Patza, GIS/Planning Assistant

SUBJECT: Comprehensive plan for the Town of Plainfield  
Waushara County

DATE: October 14, 2009

LOCAL PLANNING AGENCY: East Central Wisconsin Regional Planning Commission

SOURCE OF COPIES: East Central Wisconsin Regional Planning Commission  
400 Ahnaip Street, Suite 100  
Menasha, WI 54952  
920-751-4770  
dhaney@eastcentralrpc.org  
www.eastcentralrpc.org

## TOWN BOARD

Harvey Nigh, Chairman

Janice Hall, Clerk

Marybeth Crawford, Treasurer

Gary Woyak, Supervisor

Larry Crawford, Supervisor

This report describes existing conditions for the Town of Plainfield, Waushara County.



## EAST CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION

Dick Koeppen, Chair  
Marshal Giese, Vice-Chair  
Eric Fowle, Secretary-Treasurer

### COMMISSION MEMBERS - 2008/2009

#### CALUMET COUNTY

Bill Barribeau  
Pat Laughrin  
Clarence Wolf

#### WAUPACA COUNTY

Dick Koeppen, Chair  
Duane Brown  
Brian Smith  
DuWayne Federwitz

#### MENOMINEE COUNTY

Elizabeth Moses  
(Jeremy Johnson, Alt.)  
Ruth Winter  
Robert Hermes

#### WAUSHARA COUNTY

Norman Weiss  
Walter Petersen  
Neal Strehlow

#### OUTAGAMIE COUNTY

Toby Paltzer  
Clifford Sanderfoot  
Tim Hanna  
Helen Nagler  
Jim Steineke  
Paul Hirte

#### WINNEBAGO COUNTY

Mark Harris  
David Albrecht  
Ernie Bellin  
Paul Esslinger  
(Mark Rohloff, Alt)  
Jim Erdman  
Ken Robl

#### SHAWANO COUNTY

Marshal Giese, Vice Chair  
Ken Capelle  
M. Eugene Zeuske



## TABLE OF CONTENTS

<b>Executive Summary</b> .....	ES-1
<i>A brief description of the location of the community, planning purpose, background of the planning effort, and enabling legislation.</i>	
<b>Chapter 1: Issues and Opportunities</b> .....	1-1
<i>Background information including population, household and employment forecasts, demographic trends, age distribution, education and income levels and employment characteristics.</i>	
<b>Chapter 2: Housing</b> .....	2-1
<i>An assessment of the age, structural, value and occupancy characteristics of existing housing stock; identification of policies and programs that promote the development of housing and provides a range of housing choices that meets the needs of persons of all income levels, age groups and special needs; promotes the availability of land for development or redevelopment of low and moderate income housing; and maintains or rehabilitates the existing housing stock.</i>	
<b>Chapter 3: Transportation</b> .....	3-1
<i>A compilation the various modes of transportation, including highways, transit, transportation systems for persons with disabilities, bicycles, walking, railroads, air transportation, trucking and water transportation.</i>	
<b>Chapter 4: Utilities and Community Facilities</b> .....	4-1
<i>Background information for utilities and community facilities such as sanitary sewer, storm water management, water supply, solid waste disposal, on-site wastewater treatment technologies, recycling facilities, parks, telecommunication facilities, power-generating plants and transmission lines, cemeteries, health and child care facilities, police, fire and rescue facilities, libraries, schools and other governmental facilities.</i>	
<b>Chapter 5: Agricultural, Natural, Cultural Resources</b> .....	5-1
<i>A compilation of the maps, programs and background information for the conservation, and effective management of natural resources such as groundwater, forests, productive agricultural areas, environmentally sensitive areas, threatened and endangered species, stream corridors, surface water, floodplains, wetlands, wildlife habitat, metallic and nonmetallic mineral resources, parks, open spaces, historical and cultural resources, community design, recreational resources and other natural resources.</i>	
<b>Chapter 6: Economic Development</b> .....	6-1
<i>An analysis of the labor force, economic base, and an assessment of categories or particular types of new businesses and industries that are desired, along with the strengths and weaknesses with respect to attracting and retaining these businesses and industries.</i>	



<b>Chapter 7: Intergovernmental Cooperation</b> .....	7-1
<i>A compilation of programs and background information for joint planning and decision making with other jurisdictions, including the school and sanitary districts, counties and adjacent local governmental units, for siting and building public facilities and sharing public services.</i>	

<b>Chapter 8: Land Use</b> .....	8-1
<i>A compilation of background information, maps and programs including the amount, type, intensity and net density of existing land uses such as agricultural, residential, industrial and other public and private uses; an analyzes of the trends in supply, demand and the price of land, opportunities for redevelopment and existing and potential land-use conflicts.</i>	

## Appendices

- A Issues and Opportunities
- B Housing
- C Transportation
- D Agricultural, Natural, and Cultural Resources
- E Economic Development

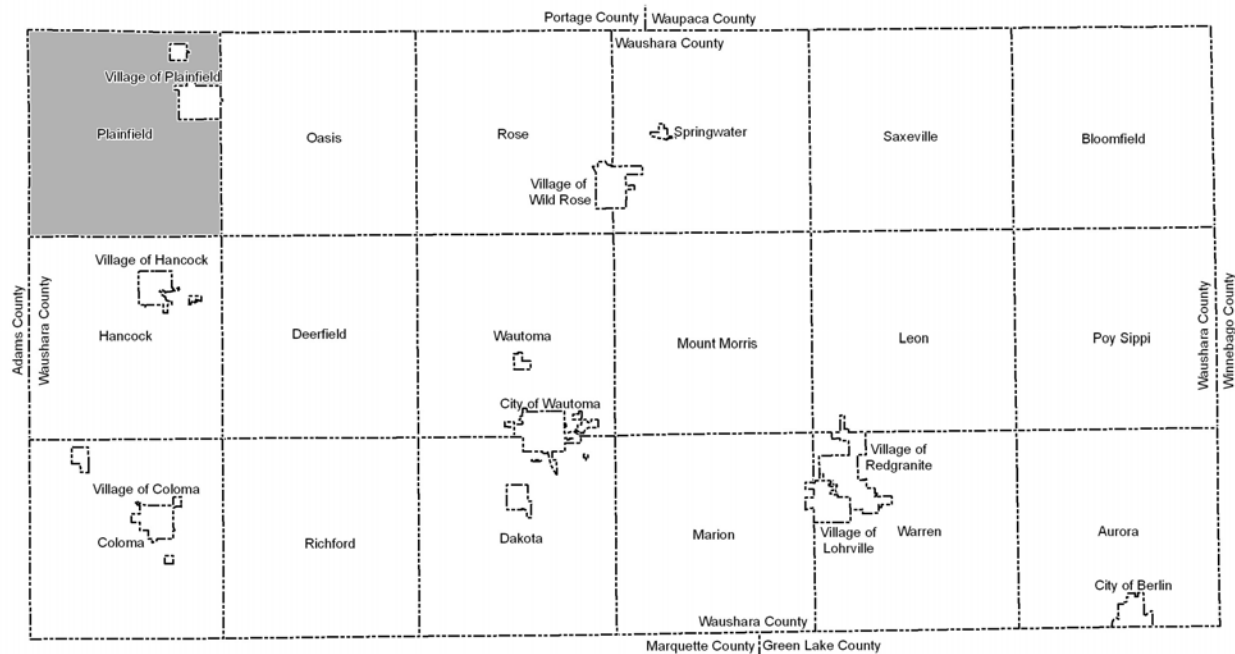


## EXECUTIVE SUMMARY

### Location

Waushara County is located in central Wisconsin and is surrounded by the counties of Portage and Waupaca to the north, Winnebago to the east, Green Lake and Marquette to the south and Adams County to the west. The county is essentially six towns in width and three towns in height. The Town of Plainfield is situated in the northwest corner of Waushara County and is approximately 36 square miles in size. It shares common borders with the towns of Hancock, Oasis and Deerfield and the Village of Plainfield in Waushara County and the towns of Pine Grove, and Almond in Portage County. I-39 intersects the Town and is an important north/south corridor through central Wisconsin. It provides access to Madison and southern Wisconsin as well as Wausau and the northern parts of the state. STH 73 cuts through the Town and provides accessibility to Wautoma and Wisconsin Rapids.

**Figure ES-1. Town of Plainfield, Waushara County Wisconsin**



The Town of Plainfield offers residents a small town atmosphere while providing nearby access to many services and amenities (schools, libraries, post offices, etc.) offered in urban areas. The Town consists of a mix of woodlands (31%), farms (57%) and scattered residential development.

### Planning Purpose

A comprehensive plan is created for the general purpose of guiding a coordinated development pattern. This will result in land use decisions that are harmonious with both the overall vision of the community's future and will ensure the future sustainability of the local natural resource base. Developing a comprehensive plan is a proactive attempt to delineate the ground rules and guidelines for future development within a community. Comprehensive planning decisions evaluate existing facilities and future needs; promote public health, safety, community



aesthetics, orderly development, and preferred land use patterns; and foster economic prosperity and general welfare in the process of development.

The comprehensive plan is a guideline for future development. The plan evaluates what development will best benefit the community's interests in the area while still providing flexibility for land owners and protecting private property rights.

## Planning History

Planning in Waushara County started in 1994, with the creation of the Waushara County Land Use Committee. The committee, comprised of elected officials and local citizens, includes representation from each community in Waushara County. Similar to the Community Management Plan that was adopted by the Town of Plainfield in 2004, many of the earlier plans that were developed in Waushara County were started before or immediately after the state implemented its current comprehensive planning law and consequently do not conform to the "smart growth" legislation. The Town of Plainfield is one of these communities and has therefore prepared this plan as an update to its previously completed community management plan.<sup>1</sup> In total eleven communities (towns of Coloma, Deerfield, Hancock, Leon, Mount Morris, Oasis, Plainfield, Richford, Saxeville, Springwater and the Village of Hancock) participated in a countywide process to update their community/land management plans. Another three communities (villages of Coloma, Lohrville and Plainfield) completed their first comprehensive land use plan. Finally, a countywide plan was created that combines the plans of the various municipalities. The current plans were prepared in compliance with *Wisconsin State Statutes* 66.1001 and utilized a comprehensive planning grant obtained through the Department of Administration.

## Enabling Legislation

This plan was developed under the authority granted by s. 66.1001 of the *Wisconsin State Statutes* and meets the requirements of 1999 Wisconsin Act 9 which states "Beginning on January 1, 2010, any program or action of a local governmental unit that affects land use shall be consistent with that local governmental unit's comprehensive plan".<sup>2</sup>

The Town of Plainfield should consult this plan when making decisions relative to land use and other issues including:

- Official mapping established or amended under s. 62.23 (6).
- Local subdivision regulation under s. 236.45 or s. 236.46. (If applicable)
- County zoning ordinances enacted or amended under s. 59.69.
- Town zoning ordinances enacted or amended under s. 60.61 or 60.62. (If applicable)
- Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351, or 62.231.

## Plan Contents

The Town of Plainfield Comprehensive Plan is composed of two documents – Volume One and Volume Two. Together, the two volumes contain all information necessary to meet state

<sup>1</sup> ECWRPC. 2004. *Town of Plainfield Community Management Plan*.

<sup>2</sup> Wisconsin Legislative Reference Bureau. 1997. *Budget Brief 97-6*.



regulations. The purpose of the two reports is to create a user-friendly plan that separates a majority of the required background material from the Town's goals, objectives, and recommendations. Generally speaking, Volume One serves as the "guide" for decision making whereas Volume Two provides data and support for actions detailed in Volume One. Specific details are provided below for each volume.

Volume One: "Comprehensive Plan (Goals, Objectives, and Recommendations)". This volume contains issues, goals, objectives, and recommendations for each of the nine required comprehensive plan elements for implementation over the next twenty years. It describes actions and strategies to achieve the goals and objectives listed in each of the nine planning elements, or chapters, within the plan. This document should be consulted by the Planning Commission and Town Board when managing community resources. It will also be used by Waushara County on matters where a county land use control, such as zoning, is applied within the town.

Volume Two: "Existing Conditions Report". The second volume of this comprehensive plan contains an analysis of existing conditions within the County. It provides a series of Census and other empirical data available through local, regional, state, and national sources. These data reveal current findings within the Town and how these compare to historical numbers within the Town, County and the State of Wisconsin. These data were primarily used to identify challenges and opportunities in Volume One. The report is a companion document to Volume One and should be used to locate evidence of existing conditions that provide support for recommendations and strategies located in Volume One.

The comprehensive plan contains nine elements that are required by s. 66.1001:

- 1) Issues and Opportunities
- 2) Economic Development
- 3) Housing
- 4) Transportation
- 5) Utilities and Community Facilities
- 6) Agricultural, Natural, and Cultural Resources
- 7) Land Use
- 8) Intergovernmental Cooperation
- 9) Implementation

In addition, the state requires that Wisconsin's 14 goals for local planning be considered as communities develop their goals, objectives, and strategies. These goals are:

- 1) Promotion of the redevelopment of lands 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 features, including wetlands, wildlife habitats, lakes, woodlands, open spaces, and groundwater resources.
- 4) Protection of economically productive farmlands 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, historic, and archeological sites.



- 7) Encouragement of coordination and cooperation among nearby units of government.
- 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.



## CHAPTER 1: ISSUES AND OPPORTUNITIES

### TABLE OF CONTENTS

Introduction .....	1-1
Inventory and Analysis .....	1-1
Demographic Trends .....	1-1
Historic Population .....	1-1
Components of Population Change.....	1-2
Population Density .....	1-3
Age Distribution .....	1-4
Household Structure .....	1-5
Household Size .....	1-5
Household Composition.....	1-5
Race .....	1-6
Racial Distribution.....	1-7
Income Levels .....	1-7
Impact of Earnings on Household Income .....	1-8
Income Comparisons.....	1-8
Household Income By Range .....	1-9
Poverty Status .....	1-10
Population Forecasts .....	1-12
Population Projections by Age Cohort .....	1-13
Household Forecasts .....	1-13
Key Findings .....	1-15
Demographic Trends .....	1-15
Household Structures .....	1-15
Income Levels .....	1-15
Populations Forecasts .....	1-16
Household Forecasts .....	1-16
Interrelationships with other Plan Elements .....	1-16
Economic Development .....	1-16
Housing .....	1-16
Transportation.....	1-17
Utilities and Community Facilities.....	1-17
Agriculture Resources .....	1-18
Natural Resources .....	1-18
Cultural Resources.....	1-18
Land Use .....	1-19
Intergovernmental Cooperation .....	1-19
Policies and Programs.....	1-19
Regional, County and Local Policies .....	1-20
Federal, State and Regional Programs .....	1-21
Federal Agencies.....	1-21
State Agencies.....	1-21
Regional Programs.....	1-22



## TABLES

Table 1-1	Net Migration Estimates, 1950 to 1990 .....	1-3
Table 1-2	Components of Population Change, Waushara County .....	1-3
Table 1-3	Estimated Households, 2000 to 2030.....	1-14

## FIGURES

Figure 1-1	Historic Population Change, 1950 to 2000 .....	1-2
Figure 1-2	Percent of Households by Type, 2000 .....	1-6
Figure 1-3	Distribution of Households by Income Range, 1999 .....	1-9
Figure 1-4	Household Income by Range, 1999 .....	1-10
Figure 1-5	Population Estimates, 1970 to 2030 .....	1-13



## CHAPTER 1: ISSUES AND OPPORTUNITIES

### INTRODUCTION

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

### INVENTORY AND ANALYSIS

This section of the chapter provides a brief summary of historic population growth, followed by more detailed information regarding current population and household characteristics of the region. Population and socioeconomic trends are identified and potential future growth and development patterns are discussed. Characteristics examined include age, race, income and household types. Current and potential population and socioeconomic issues are noted. Their potential impacts and policy implications will be discussed in the remaining comprehensive plan element chapters. The remainder of this chapter will briefly describe the policy context, discuss the need for intergovernmental cooperation, assess current and future trends and identify issues that need to be addressed.

#### Demographic Trends

##### *Historic Population<sup>1</sup>*

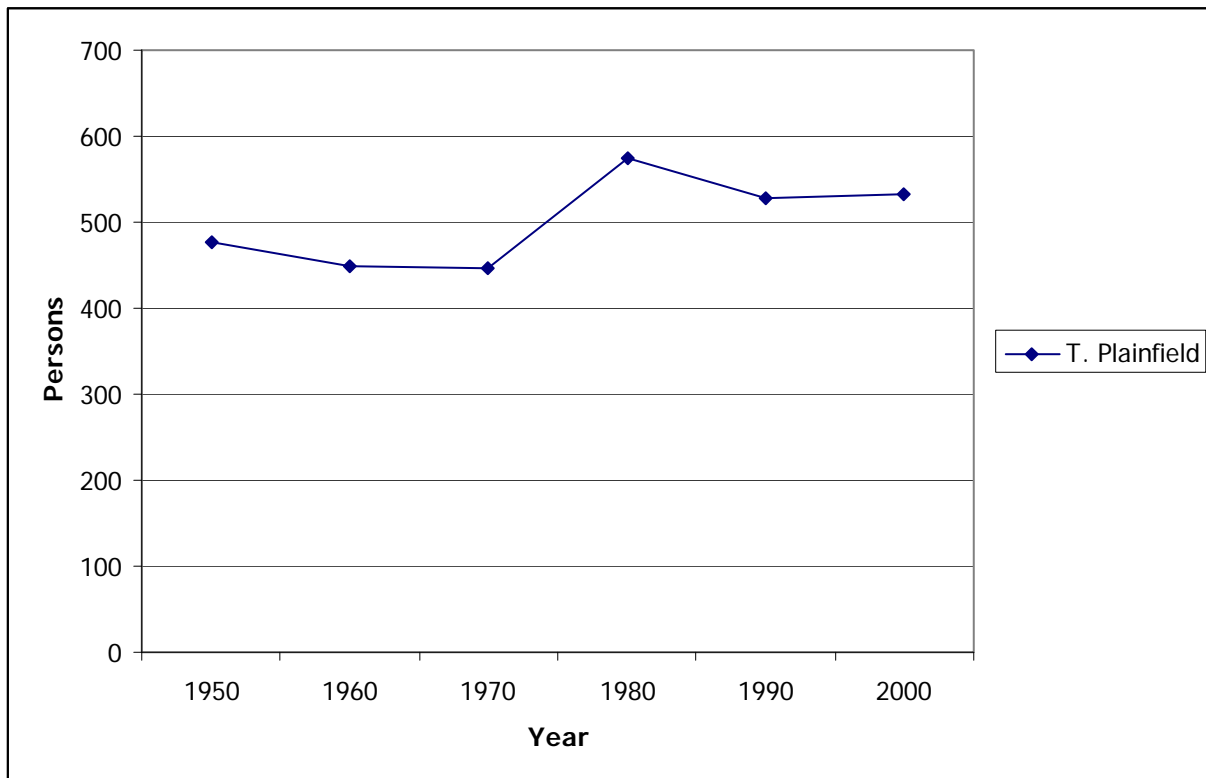
***Over the past fifty years, the population of the Town of Plainfield has remained fairly stable. The population decreased from year 1950 (476) to year 1970 (447), increased to year 1980 (574), then declined to year 1990 (529) before starting a gradual increase to a year 2000 population of 533.*** (Appendix A, Table A-1).

Between 1950 and 2000, population growth in the Town of Plainfield lagged behind Waushara County, the East Central Region, and Wisconsin. During this time period the Town of Plainfield's population increased by 12 percent. Population increases at the county, region and state level exceeded 55 percent, with the region experiencing the largest increase, 66.1 percent. 2005 population estimates from the Wisconsin DOA indicate that recent growth trends are more in line with regional, county and state growth patterns. Since 2000, Plainfield's population has increased by 4.7 percent, compared to 8.0 percent at the county level, 4.8 percent at the regional level and 4.0 percent at the state level.

---

<sup>1</sup> U.S. Census: 1950, 1960, 1970, 1980, 1990, 2000; WI DOA 2001-2005.



**Figure 1-1. Historic Population Change, 1950 to 2000**

Source: U.S. Census: 1950, 1960, 1970, 1980, 1990, and 2000

### ***Components of Population Change***

The two components of population change are natural increase and net migration. Natural increase is calculated by subtracting deaths from births during a specific time period. Net migration is, in theory, the number of people leaving an area (out-migrants) subtracted from the number of people coming into an area (in-migrants). However, since no convenient way of determining the movement of people on a regular basis exists, net migration must be estimated. Net migration can be estimated based on survey data, information from census questions, IRS data or calculated by subtracting natural increase from total population change. Net migration estimates may vary depending on which methodology is used. Data from the University of Wisconsin-Extension Applied Population Laboratory (APL) and the Wisconsin DOA, for example, show similar trends, but their net migration estimates vary.

An examination of the data provided by the University of Wisconsin-Extension APL and the Wisconsin DOA indicate that since 1950, ***migration has played a greater role in population change in Waushara County than natural increase.*** With the exception of the 1950s, Waushara County has experienced a positive net migration rate (Tables 1-1 and 1-2). Furthermore, the rate of net migration in Waushara County has exceeded the overall Wisconsin net migration rates each decade since 1980, which indicates that Waushara County is attracting residents from other parts of Wisconsin.



**Table 1-1. Net Migration Estimates, 1950 to 1990**

	Waushara County		Wisconsin	
	Net Migration	Total Change	Net Migration	Total Change
1950 to 1960	-8.6%	-3.0%	-1.4%	15.1%
1960 to 1970	6.4%	9.6%	0.2%	11.8%
1970 to 1980	17.7%	25.2%	0.2%	6.5%
1980 to 1990	7.3%	4.6%	2.7%	4.0%

Source: UWEX Applied Population Laboratory, "Net Migration by Age for Wisconsin Counties, 1950-1990".

The role of migration in the county's population growth became more important in the 1990s and early 2000s, when the rate of natural increase fell below zero. ***Since natural increase rates were negative, the entire increase in population in Waushara County since 1990 can be attributed to in-migration*** (Table 1-2).

**Table 1-2. Components of Population Change, Waushara County**

	Numeric Change			Percent Change		
	Natural Increase	Net Migration	Total Change	Natural Increase	Net Migration	Total Change
1970-1980	215	3,516	3,731	1.5%	23.8%	25.2%
1980-1990	448	411	859	2.4%	2.2%	4.6%
1990-2000	-23	3,792	3,769	-0.1%	19.6%	19.4%
2000-2005 est.	-131	1,983	1,852	-0.6%	8.6%	8.0%

Source: Population Trends in Wisconsin: 1970-2000, WI DOA, 2001; WI DOA, 2005.

Waushara County migration patterns also varied by age<sup>2</sup> (Appendix A, Table A-2). Between 1990 and 2000, young families (age 30 to 44 yrs) and baby boomers (age 45 to 64) moved to Waushara County. During this time period, Waushara County lost population in two other age groups, as many individuals ages 20 to 29 and individuals age 75 and older migrated out of the county. The net loss of young adults is likely attributable to two factors. First, many students leave the county to attend college. Others may have relocated in search of affordable housing and better employment opportunities. The out-migration of elderly individuals likely resulted from a need or desire for additional services. As people age, many eventually need or desire a wider variety of housing, healthcare, support services and transportation options than are available in rural communities.

### ***Population Density<sup>3</sup>***

Population density reflects the degree of urbanization and impacts the demand and cost effectiveness of urban service provision. Over time, urban growth and suburbanization within Waushara County has expanded, and settlement patterns have increased in density. In 2000, population densities for Waushara County towns ranged from 12 to 62 persons per square mile. ***Population density in the Town of Plainfield was less than the county average, with***

<sup>2</sup> WI DOA, 2005.

<sup>3</sup> U.S. Census, 2000.



***an average of 16 persons per square mile*** (Appendix A, Table A-3). The average population density for Waushara County was 37 persons per square mile, which was considerably less than the state average of 82 persons per square mile.

### ***Age Distribution***

The age structure of a population impacts the service, housing and transportation needs of a community. Communities with growing school age populations may need to expand school facilities. Communities with growing elderly populations may need to expand healthcare, housing options and transportation services. Currently, the largest age cohort within the region and the state is the “baby-boom” generation, which includes those individuals born between 1945 and 1965. These individuals have had, and will continue to have, a significant impact on service and infrastructure needs within the Town.

***The change in population by age cohort between 1990 and 2000 indicates that the area’s population is aging<sup>4</sup>*** (Appendix A, Tables A-4 and A-5). The Town of Plainfield experienced an increase in persons in the 5 to 19 and 45 to 64 age cohorts and a decline in the 20 to 24 and 25 to 44 year age cohorts. The Town lost population in the preschool (age 0 to 5 yrs.) and gained a slight population in the elderly (age 65 and older) age cohort. The largest increase for the Town occurred in the 45 to 64 year old age cohort. Between 1990 and 2000, the number of individuals age 45 to 64 increased by 27.6 percent, and was closely followed by the 65 and older age group with an increase of 24.1 percent.

The relative decline in population under age 5 can be attributed to the out migration of individuals age 20 to 44 and the high proportion of residents age 45 to 64, as most individuals age 45 and older have moved beyond child bearing. The increase in the number of working age individuals can be attributed to in-migration of individuals age 45 and older and the aging of the baby-boomers.

Median age divides the age distribution of the population in half. One half of the population is younger than the median age, while the other half of the population is older than the median age. As a result, the median age of the population provides some insight to the overall population structure within a community. Median age can and does vary over space and time. Changes in population compositions resulted in most Waushara County communities experiencing an increase in median age between 1990 and 2000<sup>5</sup> (Appendix A, Tables A-4 and A-5).

In 1990, the Town of Plainfield had the second youngest median age in Waushara County at 31.1 years; in contrast Waushara County had a median age of 38.6 years. Between 1990 and 2000, the median age increased by 5.7 years in the Town of Plainfield, and as a result the Town had the third youngest median age in the county. The Town of Plainfield had a slightly younger median age than the state in 1990 and a slightly older age in 2000. In Waushara County the median age rose from 38.6 years in 1990 to 42.1 years in 2000. In Wisconsin, the median age increased from 32.9 years in 1990 to 36.0 years in 2000.

<sup>4</sup> U.S. Census; 1990, 2000.

<sup>5</sup> U.S. Census; 1990, 2000.



## Household Structure

### *Household Size*

Household size and changes in household structure help define the demand for different types and sizes of housing units. The composition of a household coupled with the level of education, training, and age also impact the income potential for that household. It also helps define the need for services such as child care, transportation, and other personal services. Decreases in household size create a need for additional housing units and accompanying infrastructure, even if no increase in population occurs.

***Household size for the Town of Plainfield, Waushara County and the state has been decreasing since 1970<sup>6</sup>*** (Appendix A, Table A-21). Historically, the county has retained the lowest average household size. ***The Town of Plainfield had an average household size of 2.8 in 1990, and then dropped slightly to 2.7 in 2000.*** This decline is from the decrease of, four, and more households, and an increase in two and three person households.

### *Household Composition<sup>7</sup>*

***In 1990 and 2000, the majority of households for the Town of Plainfield were family households, and the majority of family households were married couple families*** (Appendix A, Tables A-8 and A-9). Between 1990 and 2000, the Town unlike the County and State experienced an increase in the share of family households. In 1990, the share of family households ranged from 70.0 percent of all households in Wisconsin to 73.1 percent of all households in Waushara County. The Town of Plainfield fell in the middle with 70.7 percent. By 2000, the share of family households ranged from 66.5 percent of all households in Wisconsin to 74.2 percent of all households in the Town of Plainfield. The share of single parent family households increased in all jurisdictions, but still remained a relatively small share of total family households. The state had the largest share of single parent family households and nonfamily households in both years (Figure 1-2.).

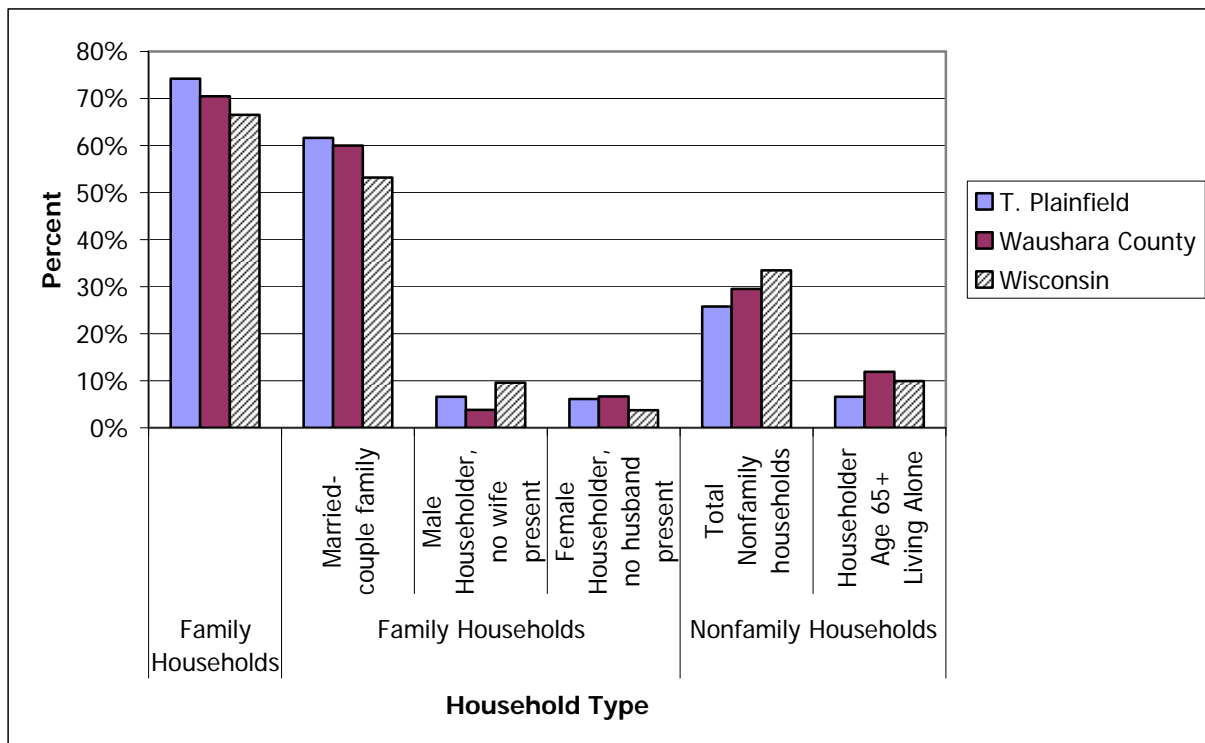
In 1990, householders age 65 or older and living alone ranged from 13.8 percent in Waushara County to 10.5 percent in Wisconsin. Eleven percent of elderly householders lived alone in the Town of Plainfield in 1990. Between 1990 and 2000, the share of elderly householders living alone decreased in the Town of Plainfield, Waushara County and the state. By 2000, elderly householders living alone ranged from 11.9 percent of all households in Waushara County to 6.6 percent in the Town of Plainfield.

In 1990, householders age 65 or older and living alone ranged from 13.8 percent in Waushara County to 10.5 percent in Wisconsin. Eleven percent of elderly householders lived alone in the Town of Plainfield in 1990. Between 1990 and 2000, the share of elderly householders living alone decreased in the Town of Plainfield, Waushara County and the state. By 2000, elderly householders living alone ranged from 11.9 percent of all households in Waushara County to 6.6 percent in the Town of Plainfield.

<sup>6</sup> U.S. Census; 1970, 1980, 1990, 2000.

<sup>7</sup> U.S. Census; 1990, 2000.



**Figure 1-2. Percent of Households by Type, 2000**

Source: U.S. Census; 1990, 2000, STF 1A.

While householders age 65 or older and living alone comprises a very small share of the total households, their numbers are increasing in Waushara County. Between 1990 and 2000, the combined number of householders age 65 or older and living alone in the Town of Plainfield declined from 21 to 13. While this may be a satisfactory living situation for some, for others it may be a challenge. As costs rise and health declines, elderly singles may have difficulty maintaining their housing unit, especially if they own a larger home. Homes may need special modifications or additional equipment if the elderly or disabled are to live independently. Assistance may also be needed with housekeeping, transportation or meal preparation, etc. Social isolation may also become an issue if these individuals have limited mobility options.

## Race

Population by race provides information regarding the social and cultural characteristics of an area. It also provides information regarding population dynamics. Access to education and economic opportunities differ by race. Differences also exist in age structure, language barriers and risks for various diseases and health conditions.

Since new immigrants are more likely to settle in areas with existing populations from their countries of origin, race and ethnicity, existing populations may also influence migration patterns. National population trends indicate that persons of color (includes African Americans, Native Americans, Alaskan Natives, Pacific Islanders, Asians and persons declaring two or more races) and persons of Hispanic Origin are growing faster than non-Hispanic whites<sup>8</sup>. As the population of the cluster, Waushara County, and Wisconsin continue to grow, it is likely that the

<sup>8</sup> U.S. Census.



minority proportion of the population (persons of color and whites of Hispanic Origin) will also continue to grow. If this occurs, communities may need to compensate for the changing demographic composition. It is important that these individuals participate in the planning process so that these individuals not only understand local cultural norms, but also have a positive stake in local communities. Communities may also find it beneficial to promote opportunities for positive interaction between cultures. An increase in understanding of differences and similarities in expectations and cultural values may help reduce friction between groups.

### **Racial Distribution<sup>9</sup>**

Unlike the County and State, the Town of Plainfield experienced a slight decrease in minority population between 1990 and 2000 (Appendix A, Tables A-10 and A-11). In 1990, 31 individuals identified themselves as nonwhite in the Town of Plainfield; by 2000 this number had decreased to 18. Whites continued to comprise an overwhelming majority of the population. Persons of "other races" comprised the largest nonwhite group in Plainfield (16 in 2000). The 2000 Census was the first Census which allowed persons of mixed race to identify themselves as belonging to two or more races. Less than two percent of state residents and less than one percent of Town of Plainfield and Waushara County residents declared they were of two or more races.

***The population in the Town and County is less diverse than that of the state. In 2000, whites comprised 96.7 percent of the Town of Plainfield's population compared to 96.8 percent of the County's and 88.9 percent of the state's population.***

Although Hispanics are the fastest growing ethnic group in the United States, they currently comprise less than four percent of the County's and state's population (Appendix A, Table A-12). However, like the nation, this segment of the population is one of the fastest growing in the area. Between 1990 and 2000, the Hispanic population within Waushara County and Wisconsin just about doubled. At the County level, the Hispanic population increased from 2.0 percent of the County's population to 3.7 percent. At the state level, the Hispanic population increased from 1.9 percent of the state's population in 1990 to 3.6 percent of the state's population in 2000.

Although the number and share of Hispanics increased in the Town of Plainfield between 1990 and 2000, they remain a very small part of the population. Between 1990 and 2000, the share of the population of Hispanic origin increased from 7.9 percent to 9.8 percent in the Town of Plainfield. ***If the Town is going to continue to grow through migration, it is likely that the number and percentage of Hispanics in the area will continue to increase as Hispanics become a larger share of the national, state and county population.***

### **Income Levels**

Income includes both earned and unearned income. Earned income includes money earned through wages, salaries and net self-employment income (including farm income). Unearned income includes money from interest, dividends, rent, social security, retirement income, and disability income and welfare payments<sup>10</sup>. Traditionally, earned income is geographically

<sup>9</sup> U.S. Census; 1990, 2000, STF 1A.

<sup>10</sup> U.S. Census Bureau.



dependent, as the quality of local jobs determines the earning potential and quality of life for local residents dependent on earned income. Unearned income is not geographically dependent. Retirement pensions, for example, may come from a company which is located several states away. As a result, a retiree's quality of life is not as dependent on the health of the local economy and quality of jobs in the area as someone who derives the majority of their income from earnings. As telecommuting increases and becomes more mainstream, earned income may become more geographically independent. However, at this point in time, little telecommuting occurs in Waushara County.

### ***Impact of Earnings on Household Income<sup>11</sup>***

An examination of 1999 income data indicates that the majority of household income within the Town of Plainfield, Waushara County and the state is derived from earnings. As a result, ***access to earning opportunities is a strong determinant in meeting the income needs of residents in all three jurisdictions*** (Appendix A, Table A-13). Seventy eight percent (77.5%) of income in Plainfield was derived from earnings, which is comparable to the 80.6 percent of earned income in Wisconsin. At the county level, only 71.4 percent of income was derived from earnings, which indicates that the county as a whole is less dependent on employment and job creation than the Town of Plainfield or the state.

In all three jurisdictions, the average income per household was higher than the average earnings per household, which indicates that all three jurisdictions also benefit from unearned income (Appendix A, Table A-13). In the three jurisdictions, the percent of households with earnings ranged from 87.5 percent in the Town of Plainfield to 75.7 percent in Waushara County and 81.8 percent for the state.

### ***Income Comparisons<sup>12</sup>***

Three commonly used income measures are median household income, median family income and per capita income. Median income is derived by examining the entire income distribution and calculating the point where one-half of incomes fall below that point, the median, and one-half above that point. Per capita income measures income per person, and is calculated by dividing the total income of a particular group by the total population of that particular group, including all men, women and children, regardless of age and earning potential.

A comparison of median family, median household and per capita income values between 1989 and 1999 indicate the Town of Plainfield, Waushara County, and Wisconsin experienced an increase in all income measures during this time period (Appendix A, Table A-14). The Town of Plainfield experienced the largest increase of all three jurisdictions in Per Capita Income, while Waushara County experienced the largest increases in Household and Family Income.

The Town of Plainfield had a higher household and median family income than Waushara County in 1989. While median household income continued to outpace the county in 1999, the Town of Plainfield lost ground in the median family income category. In 1999, median household income ranged from \$37,000 (Waushara County) to \$43,791 (Wisconsin). The Town of Plainfield had the lowest median family income (\$41,406) and per capita income (\$16,432) than the State and County in 1999.

<sup>11</sup> U.S. Census, 2000, STF 3A.

<sup>12</sup> U.S. Census, 2000

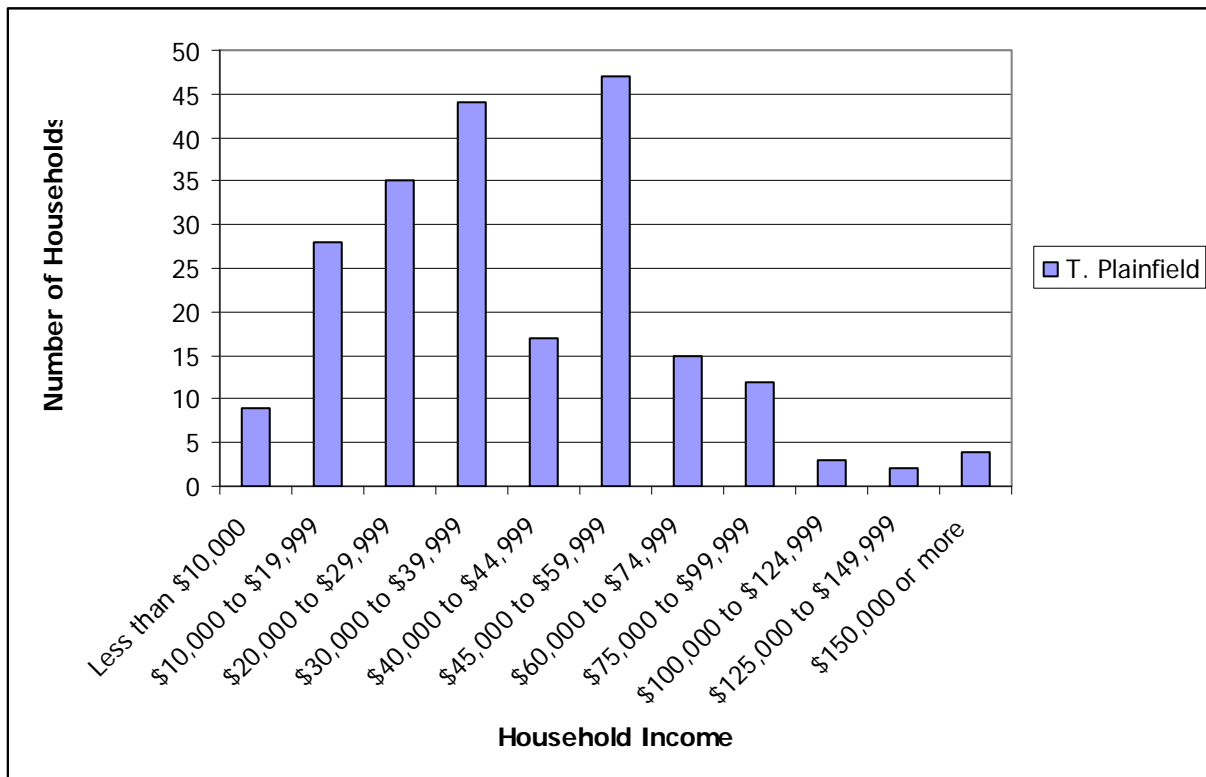


***The State of Wisconsin maintained higher median household, family and per capita incomes than Waushara County and the Town of Plainfield for both years*** (Appendix A, Table A-14).

### ***Household Income by Range***<sup>13</sup>

Median and per capita income figures are often used to compare incomes across communities. Household income by range, however, provides a clearer picture of the distribution of income within a community. This allows communities to target policies, programs, housing and economic development opportunities to better meet the needs of their residents. Table A-15 in Appendix A identifies the number of households in income categories ranging from those with incomes of less than \$10,000 through those with incomes of \$150,000 or more. Figure 1-3 shows the distribution of those households. 2000 Census information indicates that in 1999 the Town of Plainfield had 9 households with incomes below \$10,000. The income range with the largest number and share of households was between \$45,000 to \$59,999 with 47 households or 21.8 percent. There were four households with incomes of \$150,000 or more.

**Figure 1-3. Distribution of Households by Income Range, 1999**



Source: U.S. Census, 2000

For additional comparison and analysis, the eleven income categories in Appendix A, Table A-15 have been consolidated into five broader income categories and presented in Figure 1-4 as a share of total households with income. ***Over ninety percent (90.3%) of households in the Town of Plainfield reported incomes below \$75,000 in 1999.*** Approximately 53.7 percent of Town of Plainfield households reported income at or below the county median income (\$37,000), which means that many households in the area are likely eligible for

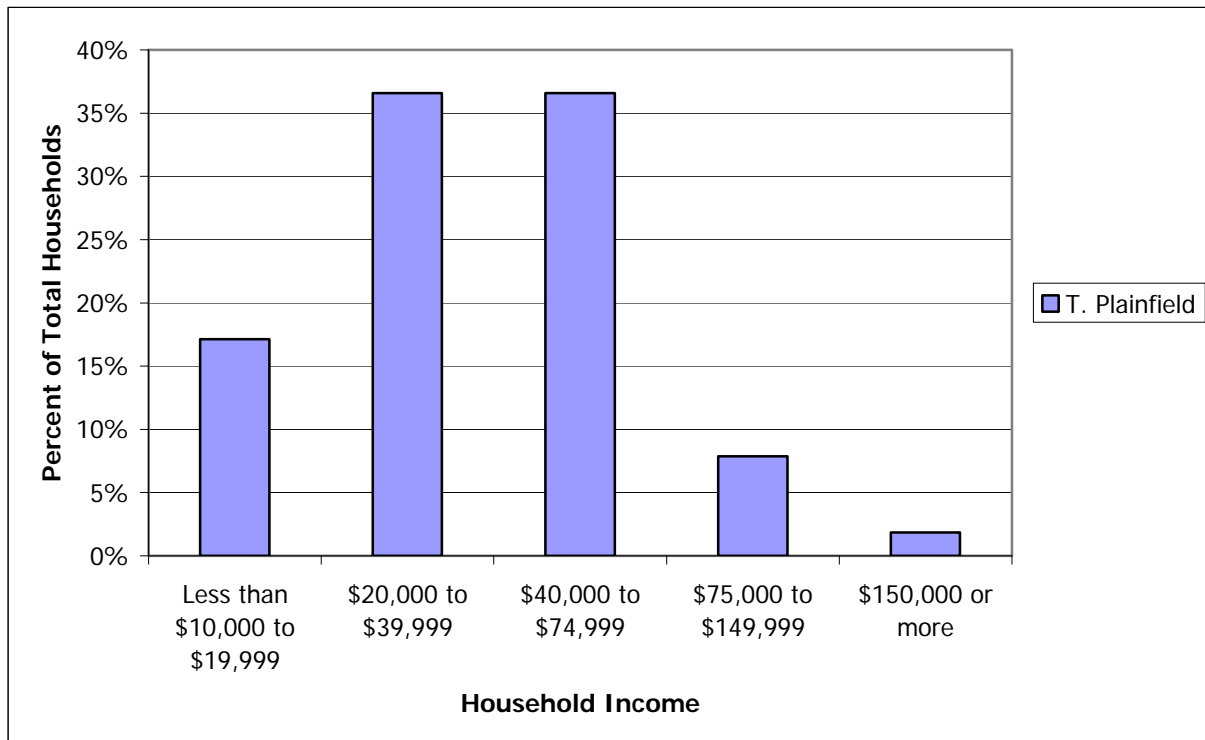
<sup>13</sup> U.S. Census, 2000



programs such as housing rehabilitation grants and loans, guaranteed loans for first time home buyers and job training programs designed to help increase skills which should result in increased earnings potential. Some families may also be eligible for school lunch programs.

The percentage of households with incomes below \$20,000 comprised 17.1 percent of all households in the Town of Plainfield. In comparison, 23.1 percent of county households and 19.1 percent of Wisconsin households had incomes less than \$20,000. At the other end of the spectrum, 11.7 percent of county households and 20.3 percent of Wisconsin households had incomes of \$75,000 or more, while the percentage of households with incomes of \$75,000 or more was 9.7 percent for the Town of Plainfield.

**Figure 1-4. Household Income by Range, 1999**



Source: U.S. Census, 2000, STF 3A

### ***Poverty Status<sup>14</sup>***

The poverty level is determined by the U.S. Census Bureau and based on current cost of living estimates, as adjusted for household size. In 1990, the poverty threshold for a family of four with two children was a household income of \$12,674. By 2000, the poverty threshold for a family of four with two children had risen to \$17,463.

***Between 1989 and 1999, both the number and percentage of persons living below the poverty threshold declined in all three jurisdictions*** (Appendix A, Tables A-16 and A-18). ***In spite of the decline in poverty, 11.4 percent of Town of Plainfield residents still lived below the poverty line in 1999.*** Nine percent (9.0%) of Waushara County residents and 8.4 percent of Wisconsin residents continued to live in poverty as well (Appendix

<sup>14</sup> U.S. Census, 1990; U.S. Census, 2000, STF 3A



A, Table A-18), which indicates that poverty is more common in the Town than at the county or state level.

Poverty by age trends varied. Children were more likely to live below poverty than elderly residents during both time periods in Waushara County and Wisconsin. Not only were children more likely to live below poverty, they comprised a greater number and share of total persons in poverty than elderly residents. For example, at the county level, 584 children lived in poverty in 1999 compared to 462 persons 65 and older. The ratio of children to elderly below poverty was even greater at the state level, where 150,166 children lived below poverty compared to 49,245 persons age 65 and older (Appendix A, Table A-19).

***In 1989, 61 or 35.9 percent of children in the Town of Plainfield lived in poverty, compared to 15 or 51.7 percent of the elderly. By 1999, the share of children living in poverty in the Town of Plainfield had decreased to 32 or 19.5 percent while the share of elderly living in poverty had decreased to 3 or 5.2 percent*** (Appendix A, Table A-17 and A-19).

Of the three jurisdictions, the Town of Plainfield had the highest share of children in poverty in 1989, 35.9 percent, while the state had the lowest, 14.9 percent. Between 1989 and 1999, the Town of Plainfield experienced a sharper decline in the share of children in poverty than the county and state as a whole. However, the Town continued to have a higher share (19.5%) of children in poverty than either the County or State. In Waushara County, 10.9 percent of children still lived in poverty in 1999 compared to 11.2 percent in Wisconsin.

In 1989, the Town of Plainfield had 51.7 percent of elderly residents living in poverty. Nine percent (9.1%) of state residents and 13.9 percent of Waushara County residents lived in poverty in 1989. By 1999, the share of elderly residents living in poverty had decreased to 7.4 percent in the state, 10.8 percent in Waushara County and 5.2 percent in the Town of Plainfield (Appendix A, Table A-17 and A-19).

Between 1989 and 1999, the number of families in poverty declined in all three jurisdictions. Since the total number of families also decreased during this same time period, the share of families living in poverty declined. In 1989, the share of families living in poverty ranged from 7.6 percent in Wisconsin to 19.1 percent in the Town of Plainfield. In 1999, there were 10.9 percent of families living in poverty in the Town of Plainfield (Appendix A, Table A-16 and Table A-18). In all three jurisdictions, the share of families living below poverty was less than the share of total persons living below poverty for both years.

Most discussions regarding poverty tend to focus on children and elderly, as they are considered dependent populations which have little to no ability to change their circumstances. As a result, they are the populations most in need of assistance. However, as the U.S. economy moves from a manufacturing based economy to a service based economy, many individuals find themselves falling into a category called the working poor. These are individuals who are working, but their wages are too low to move them out of poverty.



## Population Forecasts<sup>15</sup>

Population projections can provide extremely valuable information for community planning; but by nature, projections have limitations which must be recognized. First, population projections are not predictions. Population projections are typically based on historical growth patterns and the composition of the current population base. Their reliability depends to a large extent on the continuation of those past growth trends. Second, population projections for small communities are especially difficult and subject to more error, as even minor changes in birth, death or migration rates can significantly impact community growth rates. Third, population growth is also difficult to predict in areas which are heavily dependent on migration, as migration rates may vary considerably based on various “push” and “pull” factors both within and outside of the area.

Since migration has played such an important role in Waushara County population growth, migration rates are expected to significantly impact future population growth. An examination of past growth trends in the Town of Plainfield indicate that decades of growth occurred during periods of high net in-migration and periods of population decline occurred during periods of low net in-migration. These historic population fluctuations are carried forward in the population forecasts for the Town (Table 2-1 and 2-2, Appendix A Table A-20).

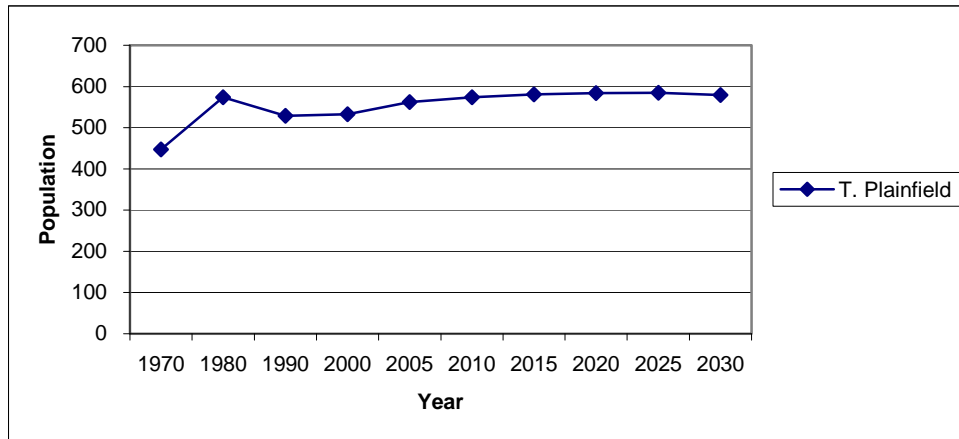
Population growth in the Town will result in an increase in demand for services and land consumption. The density of settlement, coupled with the amount and location of land consumed for housing, commercial and industrial uses will impact service costs. Additional development will decrease the amount of open space. Development choices will also impact the economic vitality of the agricultural and forestry sectors.

Table A-20, Appendix A presents population estimates for Waushara County through 2030. These population projections are based on a combination of average growth trends over the last four decades, anticipated growth patterns developed by DOA, and anticipated impacts from the new Redgranite Correctional Facility. It is assumed that the largest population gains will occur during the first decade and will taper off during the second decade. However, as noted earlier, growth rates can shift quickly in smaller communities and migration can vary substantially based on factors within and outside of communities. As a result, it is recommended that the Town of Plainfield review their population growth every five years to determine if their population change is following anticipated trends or if growth trends are shifting.

***The Town of Plainfield is expected to grow by 8.8 percent between 2000 and 2030 or from 533 to 580 (Figure 1-5).*** This is less than Waushara County's expected growth of 21.6 percent during the same period.

<sup>15</sup> Source: U.S. Census, 1970, 1980, 1990, 2000; WI DOA, 2004; ECWRPC



**Figure 1-5. Population Estimates, 1970 to 2030**

Source: U.S. Census, 1970, 1980, 1990, 2000; WDOA, 2004; ECWRPC

Note: Population estimates include anticipated impact of the Redgranite prison. Includes correction to 2000 Census.

### ***Population Projections by Age Cohort***

Reliable age cohort projections at the community level are not available for the Town of Plainfield. Past trends and anticipated national, state and county trends indicate that population growth has not occurred uniformly in all age groups due to fluctuations in fertility rates and differences in migration patterns by age. These variations in growth rates, coupled with the aging of the baby boom population, will impact the population and age distribution within the Town of Plainfield.

Wisconsin migration patterns by age indicate that as individuals approach retirement age, many relocate to rural communities. As elderly persons in rural areas age and their health begins to deteriorate, many relocate to urban communities for access to better services and healthcare. However, increases in technology and healthcare have contributed to longer life spans and allowed the elderly to remain more independent. It is unclear at this point how these changes will impact future migration patterns by age. ***Wausara County population projections by age cohort<sup>16</sup> indicate that the number of county residents age 65 and older may almost double between 2000 and 2030, while the number of children may decline by 21 percent.*** In the future, the Town of Plainfield may find themselves balancing the needs of school age children with the needs of their elderly residents.

### **Household Forecasts**

In previous household forecasts, East Central relied on county and minor civil division (MCD) persons per household (pphh) projections from DOA to adjust future household growth to reflect modifications to population forecasts. During this update, MCD level pphh information was not formally released. As a result, staff found it necessary to develop an alternative methodology for forecasting households at the MCD level. After reviewing a number of potential methodologies, staff selected the two methodologies which provide the best fit for the largest number of communities within the region.

<sup>16</sup> WI DOA, 2004



While both household forecasts are available for communities and counties to use for planning purposes, ECWRPC uses the methodology which generates the largest number of projected year round households for sewer service area and long range transportation/land use planning purposes. In instances where neither methodology consistently generates the highest number of households for communities within those sewer service and long range transportation plan study areas, a combination of both methodologies is used. This allows communities to develop the infrastructure to handle the largest anticipated amount of growth. Communities which experience seasonal fluctuations in populations will need to make adjustments to these numbers in the appropriate sections of this planning document.

The actual growth rate and amount of future growth communities experience will be determined by local policies which can affect the rate of growth within the context of county, state and national population growth trends. Since migration plays such a large role in Waushara County growth patterns, growth rates and trends outside of the county will influence the pool of potential residents the county can attract. If communities prefer a slower growth option which puts less pressure on their natural resources and lessens the impact on their community character, communities are welcome to use the lower estimates. Regardless of whether communities prefer a no growth, low growth or high growth option, it is recommended they adequately prepare for future growth/changes to provide the most cost-effective services possible. Furthermore, individual communities can maximize the net benefits of public infrastructure and services by encouraging denser, efficient growth patterns which maximize the use of land resources while minimizing the impact on the natural resource base.

***Based on projected growth patterns and smallest average household size assumptions, the number of households in Waushara County is expected to increase by 28.9 percent between 2000 and 2030<sup>17</sup>. It is anticipated that the number of households in the Town of Plainfield may increase by 23.7 percent during the same time period or from 198 to 245 (Table 1-3; Appendix A, Table A-22).***

**Table 1-3. Estimated Households, 2000 to 2030**

Town of Plainfield	2000	2005	2010	2015	2020	2025	2030
No. Households	198	205	218	229	237	243	245
Persons per HH	2.69	2.74	2.63	2.54	2.46	2.41	2.37

*Source: U.S. Census, 2000; ECWRPC.*

The increase in the number of households is expected to result from in-migration of new households and a continued decrease in household size. Since new households are formed within an existing population when households split into two or more households, the number of households can increase even if the population does not. One major factor contributing to an increase in households nationwide will be the aging of the echo-boom generation. As these children of the baby-boomers move out of their parent's home and form their own household, the increase in the number of new households is expected to be large compared to actual population growth.

<sup>17</sup> U.S. Census, 2000; ECWRPC



## **Key Findings**

### ***Demographic Trends***

- Over the past fifty years, the population of the Town of Plainfield has remained fairly stable.
- The population decreased from year 1950 (476) to year 1970 (447), increased to year 1980 (574), then declined to year 1990 (529) before starting a gradual increase to a year 2000 population of 533.
- Migration has played a greater role in population change in Waushara County than natural increase between 1950 and 2005.
- Since natural increase rates were negative, the entire increase in population in Waushara County since 1990 can be attributed to in-migration.
- Population density in the Town of Plainfield was less than the county average (37 persons per square mile) and the state (82 persons per square mile), with an average of 16 persons per square mile.
- The change in population by age cohort between 1990 and 2000 indicates that the area's population is aging.

### ***Household Structure***

- Household size for the Town of Plainfield, Waushara County and the state has been decreasing since 1970.
- The Town of Plainfield had an average household size of 2.8 in 1990, and then dropped slightly to 2.7 in 2000.
- In 1990 and 2000, the majority of households for the Town of Plainfield were family households, and the majority of family households were married couple families.
- The population in the Town and the county is less diverse than that of the state. In 2000, whites comprised 96.7 percent of the Town of Plainfield's population compared to 96.8 percent of the county's and 88.9 percent of the state's population.
- If the Town is going to continue to grow through migration, it is likely that the number and percentage of Hispanics in the area will continue to increase as Hispanics become a larger share of the national, state and county population.

### ***Income Levels***

- Access to earning opportunities is a strong determinant in meeting the income needs of residents in the Town of Plainfield, Waushara County and Wisconsin.
- The State of Wisconsin maintained higher median family and per capita incomes than Waushara County and the Town of Plainfield for both 1989 and 1999.
- Over ninety percent of households in the Town of Plainfield reported incomes below \$75,000 in 1999.
- Between 1989 and 1999, both the number and percentage of persons living below the poverty threshold declined in the Town of Plainfield, Waushara County and Wisconsin.
- In spite of the decline in poverty, 11.4 percent of Town of Plainfield residents still lived below the poverty line in 1999.
- In 1989, 61 or 35.9 percent of children in the Town of Plainfield lived in poverty, compared to 15 or 51.7 percent of the elderly. By 1999, the share of children living in poverty in the Town of Plainfield had decreased to 32 or 19.5 percent while the share of elderly living in poverty had decreased to 3 or 5.2 percent.



### ***Population Forecasts***

- The Town of Plainfield is expected to grow by 8.8 percent between 2000 and 2030 or from 533 to 580.
- Waushara County population projections by age cohort indicate that the number of county residents age 65 and older may almost double between 2000 and 2030, while the number of children may decline by 21 percent.

### ***Household Forecasts***

- Based on projected growth patterns and smallest average household size assumptions, the number of households in Waushara County is expected to increase by 28.9 percent between 2000 and 2030.
- The number of households in the Town of Plainfield may increase by 23.7 percent during the same time period or from 198 to 245.

## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

### **Economic Development**

An aging population creates opportunities and challenges. If current migration trends hold true, the Town of Plainfield will likely continue to attract baby-boomers. Many of these individuals may have personal wealth and/or good retirement incomes. At the same time, the Town will likely continue to have persons age 65 and older living in poverty.

A larger population will likely drive the need for additional goods and services. Local companies and communities may need to find creative ways to attract younger working individuals (25 to 45 years old) to live and work in the planning area to meet workforce needs. At the same time, recruiters should allow elderly who seek employment to continue to remain in the work force.

As people are living longer, many are choosing to work into their traditional retirement years. These individuals often desire more flexibility or part-time employment. Other older individuals may need to earn extra income to afford the basic necessities and/or cover healthcare costs. Some retirees may not be interested in continuing in the workforce, but have the skills, knowledge and desire to serve as mentors and teachers. These individuals may, upon request, desire to volunteer to help communities address housing, literacy, financial education or other local needs. Some may wish to provide expertise to emerging businesses through a SCORE chapter. Since growing local businesses can be as important as attracting outside firms to locate in the area, new entrepreneurs should be encouraged to develop new industries so that job opportunities are available to all residents. Data indicates that earnings are an important component of household income in the Town. As a result, communities in the area should work together to build and attract living wage employment opportunities.

### **Housing**

Additional housing will be needed to meet the anticipated increase in the number of households, the needs of seasonal residents and changing demographic trends within communities. The type, tenure and quantity of housing needed will vary based on the age



structure, physical needs, income levels and preferred housing choices of the overall population. In all likelihood, communities will need a mixture of housing types, styles and price ranges. If current income structures remain in place, quality housing for low income workers and elderly will be important. New single family as well as multi-family homes will be needed. Some conversion of seasonal to year-round residences is anticipated. Existing homes may need to be remodeled or rehabilitated to meet changing needs. Communities will likely need housing for singles, young families and their workforce. A variety of housing will be needed for the elderly and disabled as well. Remodeling or rehabilitation may help elderly or disabled individuals who wish to stay in their existing home to remain in their homes for a longer period. Other individuals may desire other alternatives or need assisted living or skilled nursing facilities. Condominiums, efficiency apartments or community based residential facilities may be best suited for this segment of the population. The Town may need to determine if they wish to provide these alternatives or if these individuals should be served elsewhere. Furthermore, housing costs appear to be rising faster than incomes in the Town of Plainfield.

### **Transportation**

As communities grow, roads and other infrastructure may be needed to access additional housing, commercial, public and industrial buildings that may be constructed to accommodate the increasing population base. Transportation systems should be monitored for adequacy in meeting increased demands for local and through traffic. Potential changes could include additional lanes or other upgrades to existing roads. Local governments should also consider alternative transportation needs and desires. Increased access to bicycle and pedestrian facilities could provide viable, cost-effective transportation options for residents and increase recreational opportunities. As the elderly population's ability to drive decreases, the need for specialized transportation will increase. If these individuals are to remain in the area, increased access to affordable bus, shared ride taxi service or other transportation alternatives will be necessary to ensure that the elderly can visit healthcare professionals, shop for groceries, and meet other basic needs.

### **Utilities and Community Facilities**

As population demographics change, the overall needs of the community also change. A growing elderly population, for example, may increase the need for additional healthcare or adult daycare facilities. School facilities may need to be upgraded or modified to meet changing educational expectations or to help increase the earnings potential of local residents. An increase in residences may increase the need for police or fire protection. In the future, the Town will likely need to increase the number and availability of services targeted towards the elderly while maintaining a balance with services for working age persons and school age children. Communities will also need to balance the demands and needs of year-round and seasonal populations with the costs of those facilities and services. Ideally, improvements and expansions of utilities and community facilities and services should be coordinated with fluctuations in population. While some national recommendations are provided to help communities determine appropriate levels of service for fire, libraries, schools, open space, recreation and other public services, local governments should tailor services to local conditions to ensure that the basic needs of their citizens are met.



## **Agricultural Resources**

Traditionally many of the farms within the County are small family owned operations. Throughout Wisconsin the numbers of agricultural operations, especially dairy farms, are declining significantly as existing farmers reach retirement age. Currently, few younger individuals are entering the farming profession due to increased operational costs and more stringent regulations. As the population in Waushara County increases, more pressure will be placed on landowners to convert land from farmland to residential, commercial and industrial development, which will further exacerbate these trends. Since agriculture is important to the economy of the Town of Plainfield, they should consider ways to reverse the decline in agriculture. Increased reliance on locally produced agricultural products would support the local agriculture and food products sectors and help ensure their continued operation, affordability and access. Alternative farming methods, programs and land use regulations could help meet anticipated increase in food demands.

## **Natural Resources**

The critical question with respect to natural resources is how an expanding population base will affect the protection and preservation of natural resources. The increased demand for housing, commercial and industrial development will consume additional land throughout Waushara County. The abundance of natural resources, including wetlands, lakes, streams and forests sustains a portion of local economy. As development occurs, issues regarding open and natural space preservation/enhancement, water quality protection, wildlife habitat management, floodplain management and others will need to be addressed. Increased road construction will also require gravel, sand, and other non-metallic minerals. Deposits throughout the planning area will need to be identified so that transportation and construction costs can be minimized.

## **Cultural Resources**

Waushara County is rich in historical, archeological, and cultural sites. These sites provide information about early Native Americans, European settlement and the development of the area. Many buildings and areas have significant religious or cultural meaning. Efforts should be made to inventory and map historical, archeological, and cultural sites so that their significance is not destroyed or altered. These sites provide a link with the county's cultural and ethnic heritage. Preserving them would help document the changing demographics and socio-economic characteristics of the area. Historical sites, heritage corridors and museums may also provide economic development opportunities. Moreover, a concerted effort should be made to incorporate historical architectural styles into modern construction to enhance local cultural features and preserve community character.

The latest Census data indicates that the population of Waushara County and Wisconsin is becoming more diverse. As the area's population changes, language barriers and a lack of awareness and understanding between races, cultures, classes and generations can lead to conflict. Positive opportunities for cross-cultural, cross-class and multi-generational interaction can help resolve any issues that may arise as the area's population changes.



## **Land Use**

Additional land will be converted to residential, commercial/industrial and public/institutional uses to accommodate anticipated population and household changes. These changes could alter the pattern of existing development and community character and place additional pressure on natural, cultural and agricultural resources. By recognizing the relationship between the density of settlement and amount and location of land consumed, local governments could minimize conflicts and protect natural and agricultural resources, amenities and community character. Two basic options for locating new development are within areas of existing infrastructure and development or converting farm, forest or open space lands to other uses. Either option will impact local communities. The Town of Plainfield will need to make choices that help achieve the envisioned future.

## **Intergovernmental Cooperation**

Although larger populations will result in an increased tax base, the offsetting costs for infrastructure, maintenance and services will require local governments and organizations to identify ways to provide cost-effective services to their residents. Where feasible, local governments must cooperate not only to provide adequate infrastructure to meet increased demands, but also to encourage economic development and employ sufficient staff to handle the anticipated service usage increases. Furthermore, a well-informed staff is necessary for local governments to meet the growing needs of the general public. Through effective communication, training and education, local governments will avoid unnecessary duplication of services and provide more streamlined access to information and services.

## **POLICIES AND PROGRAMS**

Growth and development patterns do not occur in a vacuum. Over time, federal, state and local policies have directed the amount and location of development. Federal immigration policies determine the flow of immigrants into the United States, both in terms of numbers and countries of origin. Concepts such as Manifest Destiny combined with expansive federal housing, land and transportation legislation, policies and subsidies such as the Homestead and Railroad Acts, the interstate highway system and IRS codes, etc. have heavily influenced settlement patterns. Additional federal legislation such as the Civil Rights Act, Americans with Disabilities Act (ADA) and Affirmative Action legislation have increased access and opportunities for persons of color and persons with disabilities. Wisconsin has broadened federal Civil Rights and Affirmative Action laws to include additional protected classes. State transportation policies and state land use legislation such as NR121, farmland preservation, natural resource protection and real estate tax codes have influenced growth and settlement. Local attitudes towards growth and accompanying zoning legislation, transportation and utility investments and tax and land subsidies also influence the type and amount of growth and development which occurs in each community.

Policies which impact growth and development have been developed over time by different agencies and different levels of government with varying missions and objectives. The resulting policies and programs are sometimes complementary and sometimes contradictory. It is the interaction of these various policies and market influences that determine actual growth patterns. Although many current federal and state policies and subsidies still encourage



expansion, other policies such as the 14 land use goals recently developed by the state also encourage communities to accommodate growth in perhaps a more efficient manner than they have in the past. The recently adopted comprehensive plan legislation encourages communities to develop comprehensive plans, but provides communities with the opportunity to determine their own growth patterns. As a result, the type of development which will occur in the future is still open to debate.

## **Regional, County and Local Policies**

**East Central Wisconsin Regional Planning Commission.** East Central Wisconsin Regional Planning Commission has developed a regional smart growth plan. As part of the planning process, East Central has identified several key issues:

- How do we plan for continued population growth, which will result in an increase in demand for services and land consumption in the region?
- How do we promote the recognition of the relationship between the density of settlement and amount and location of land consumed for housing, commercial, and industrial uses and the costs of services?
- How do we ensure the economic vitality of the agricultural and forestry sectors in the context of a decrease in the amount of open space?
- How do we address the conflicts that will arise given that the majority of future growth is expected to occur in the urban counties, which is where most of the region's more productive farmland is located? More specifically, how will we address the impact on the farm economy?
- How do we ensure that an increase in urbanization has a positive impact on rural communities?
- Urban counties in the region currently have greater social and economic capital, more government support due to a larger tax base, and greater access to nonprofit services than rural counties. Current trends show the educational and income gap between urban counties and rural counties widening. How do we plan to decrease this gap and promote a healthy, vibrant economy and quality of life for all residents throughout the region?

The core goal for the Issues and Opportunities Section is:

- To promote communities that are better places in which to live. That is, communities that are economically prosperous, have homes at an affordable price, respect the countryside, enjoy well designed and accessible living and working environments, and maintain a distinct sense of place and community.

The intent of this goal is to minimize the negative effects of sprawl development and provide a cost-effective variety of services and infrastructure that will meet the changing demographics of the overall population.



## **Federal, State and Regional Programs**

This section includes information on federal, state and regional programs which were used to develop this chapter. Other programs which influence growth and may impact future socio-economic conditions will be described in pertinent chapters within this plan.

### ***Federal Agencies***

#### **United States Department of Commerce**

**Economics and Statistics Administration (ESA).** The Economics and Statistics Administration collects, disseminates and analyzes broad and targeted socio-economic data. It also develops domestic and international economic policy. One of the primary bureaus within the ESA is the U.S. Census Bureau. The majority of information analyzed in this chapter was collected and disseminated by the Census Bureau, which is the foremost data source for economic statistics and demographic information on the population of the United States. The Census Bureau conducts periodic surveys and Decennial Censuses that are used by federal, state, and local officials and by private stakeholders to make important policy decisions. The Bureau produces a variety of publications and special reports regarding the current and changing socio-economic conditions within the United States. It develops national, state and county level projections and also provides official measures of electronic commerce (e-commerce) and evaluates how this technology will affect future economic activity.

### ***State Agencies***

#### **Wisconsin Department of Administration (DOA)**

**Demographic Services Center.** The Wisconsin Department of Administration (DOA) Demographic Services Center is responsible for developing annual population estimates for all counties and all minor civil divisions (MCD) in the state. They develop annual estimates of the voting age population by MCD and population estimates by zip code. The Demographic Services Center also produces annual county level housing unit and household estimates. The Demographic Services Center also develops population projections by age and sex for all Wisconsin counties, and produces population projections of total population for all municipalities.

**Wisconsin State Data Center (WSDC).** The Wisconsin State Data Center is a cooperative venture between the U.S. Bureau of the Census, DOA, the Applied Population Laboratory at the University of Wisconsin-Madison and 39 data center affiliates throughout the state. The U.S. Bureau of the Census provides Census publications, tapes, maps and other materials to the WSDC. In exchange, organizations within WSDC function as information and training resources. DOA is the lead data center and the Applied Population Laboratory functions as the coordinating agency throughout the state. Local data center affiliates, such as East Central, work more closely with communities and individuals within their region.

#### **University of Wisconsin-Madison**

**Applied Population Laboratory (APL).** The Applied Population Laboratory is located with the Department of Rural Sociology at the University of Wisconsin-Madison. They conduct socio-



economic research, give presentations and publish reports and chartbooks. They will contract to do specific studies or school district projections. APL also functions as the coordinating agency for the WSDC and the lead agency for the Wisconsin Business/Industry Data Center (BIDC).

### ***Regional Programs***

**East Central Wisconsin Regional Planning Commission.** As the state data center affiliate for the region, East Central receives Census materials and Demographic Service Center publications from DOA, plus additional information and reports from other state agencies. This information is maintained within its library, used for planning purposes and published within East Central reports. Information and technical assistance regarding this data is also provided to local governments, agencies, businesses and the public upon request.

While DOA provides base level population projections for the state, local conditions, such as zoning regulations, land-locked communities, and local decisions regarding land use development can influence the accuracy of these base line projections. As a result, East Central has the authority to produce official population projections for the region. East Central also estimates future household growth.



## CHAPTER 2: HOUSING

### TABLE OF CONTENTS

Introduction.....	2-1
Inventory and Analysis .....	2-1
Age of Occupied Dwelling Units .....	2-1
Change in Structural Type .....	2-3
Occupancy Status .....	2-3
Tenure .....	2-4
Vacancy Status .....	2-4
Owner-Occupied Housing .....	2-5
Rental Housing .....	2-5
Seasonal Units .....	2-6
Other Vacant .....	2-6
Owner-Occupied Housing Stock Value .....	2-6
Median Housing Value Trends: A Broad Historical Perspective .....	2-6
Current Median Housing Value Trends .....	2-7
Current Values by Price Range .....	2-7
Housing Affordability .....	2-8
Owner-Occupied Housing .....	2-8
Renter-Occupied Housing .....	2-9
Housing Conditions .....	2-10
Subsidized and Special Needs Housing .....	2-11
Housing Needs Analysis .....	2-12
Housing Affordability .....	2-12
Housing Available for Rent or Sale .....	2-12
Age of Occupied Dwelling Units and Owner-Occupied Housing Values .....	2-12
Overcrowding .....	2-12
Plumbing .....	2-12
Community Input Regarding Housing Needs .....	2-12
Continuum of Care Needs Assessment .....	2-13
Homelessness .....	2-13
Key Findings .....	2-14
Age of Occupied Dwelling Units .....	2-14
Change in Structural Type .....	2-14
Occupancy Status .....	2-15
Vacancy Status .....	2-15
Owner-Occupied Housing Stock Value .....	2-15
Housing Affordability .....	2-15
Housing Conditions .....	2-15
Subsidized and Special Needs Housing .....	2-15
Homelessness .....	2-15
Interrelationships with Other Plan Elements .....	2-16
Economic Development .....	2-16
Transportation .....	2-16
Utilities and Community Facilities .....	2-17
Agricultural Resources .....	2-17



Natural Resources .....	2-18
Cultural Resources .....	2-18
Land Use .....	2-19
Intergovernmental Cooperation .....	2-19
Policies and Programs .....	2-19
Regional, County and Local Policies .....	2-19
Federal, State and Regional Programs .....	2-20
Federal Agencies .....	2-21
National Organizations .....	2-23
State Agencies .....	2-24
Regional Programs .....	2-26

## TABLES

Table 2-1	Occupied and Seasonal Units as a Share of Total Housing Units, 1990 and 2000 .....	2-4
Table 2-2	Tenure as a Percent of Occupied Units, 1990 and 2000 .....	2-4
Table 2-3	Federally Assisted Rental Units, 2005 .....	2-11
Table 2-4	Assisted Living Options, 2005 .....	2-11

## FIGURES

Figure 2-1	Occupied Dwelling Units by Year Built, 1990 .....	2-2
Figure 2-2	Occupied Dwelling Units by Year Built, 2000 .....	2-2
Figure 2-3	Housing Values by Range, 2000 .....	2-7
Figure 2-4	Change in Median Housing Values Compared to Change in Median Household Income .....	2-9
Figure 2-5	Percent of Households for which Housing is Not Affordable, 1999 .....	2-10



## CHAPTER 2: HOUSING

### INTRODUCTION

A number of factors influence how well the housing stock meets the needs of the community. The design, placement and density of housing impacts the overall appearance and character of a community by defining a sense of place and encouraging or discouraging social interaction between residents. It influences the cost of housing and the cost and efficiency of other plan elements, such as roadways, school transportation and the provision of public utilities.

The quality and affordability of housing influences the economic health and well-being of the community. Well designed, decent, safe and affordable housing creates a sense of connection and ownership between residents and their neighborhood and community. Residents with decent, safe affordable housing have more resources available for food, clothing, transportation, health care, savings for college or retirement, and other expenses. They also have the resources necessary to maintain their housing, which contributes to the quality of the community's housing stock and appearance of the community.

### INVENTORY AND ANALYSIS<sup>1</sup>

This section of the chapter provides a broad brush of housing characteristics for the Town of Plainfield, plus identifies why a particular housing variable may be important. Characteristics which are unique to a particular community are noted, as are characteristics that can help identify strengths or opportunities for improvement. Tables are provided in Appendix B for those who may be interested in more detail.

#### Age of Occupied Dwelling Units

The age of occupied dwelling units reflect the historic demand for additional or replacement housing units, thereby providing historic information regarding settlement patterns, household formation rates, migration trends and natural disaster impacts. The age of units by itself is not an indication of the quality of the housing stock. However, the age of occupied units can provide limited information regarding building construction and material content, as construction techniques and materials change over time.

***Census information regarding the age of owner-occupied units indicates that the Town of Plainfield was relatively well established by 1960*** (Appendix B, Tables B-1 and B-2). The number of owner-occupied units rose from 1950 through the 1970's, and then fell from the 1980's to Year 2000 (Figures 2-1 and 2-2).

According to the 2000 Census, the Town of Plainfield had a lower percentage of owner-occupied units built prior to 1960 than the county and the state. Thirty-four percent (34.3%) of Plainfield's housing stock was built prior to 1960. At the state and county level, 38.7 percent of Waushara County's housing stock and 44.0 percent of Wisconsin's housing stock was built prior to 1960.

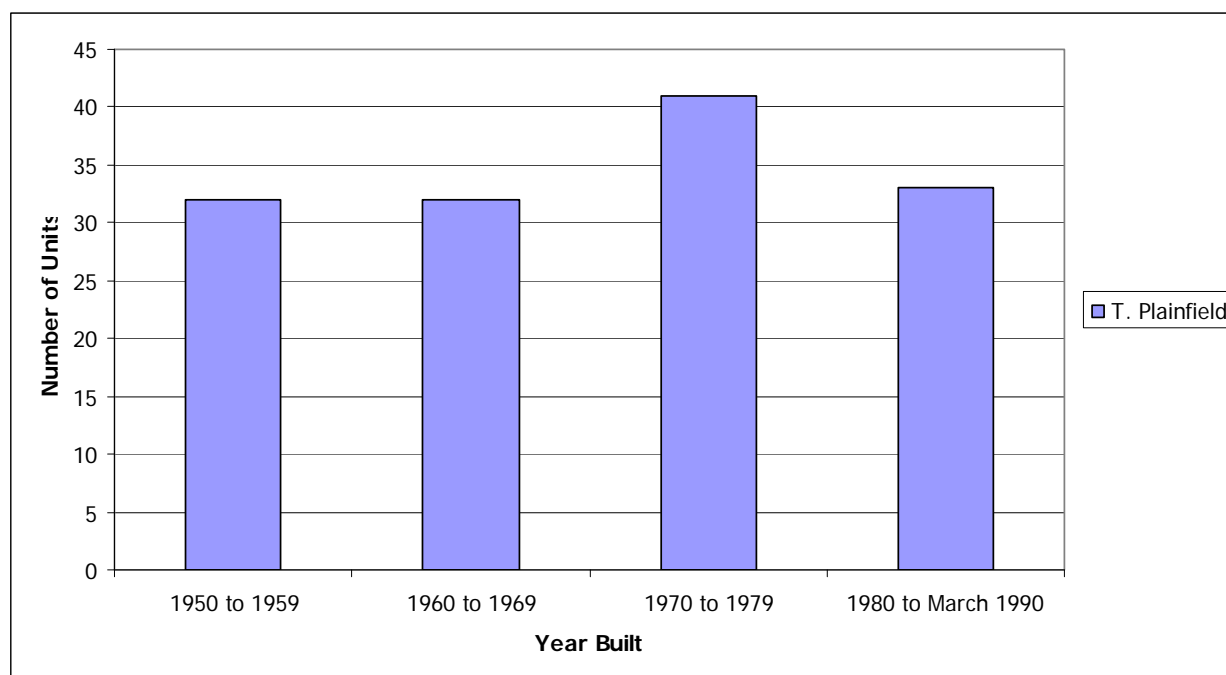
---

<sup>1</sup> U.S. Census, 1990 and 2000, unless otherwise noted.



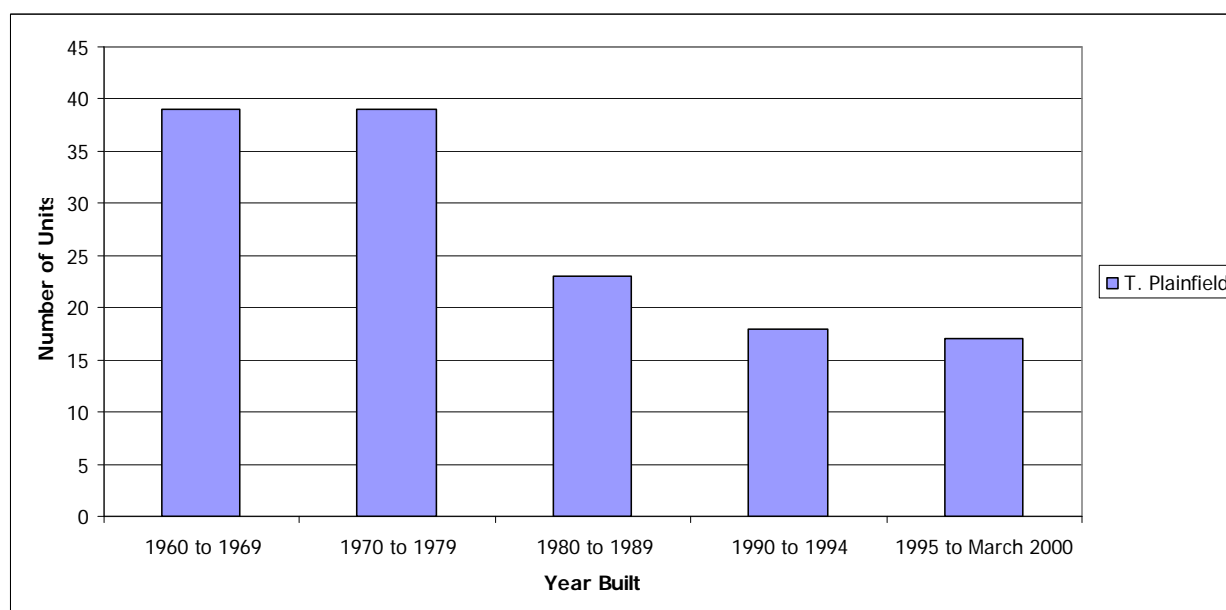
*Between 1990 and 2000, the Town experienced a slightly lower level of growth in owner-occupied units than was indicated in previous Census periods (1960 to 1980) based on the age of structure information provided in the 1990 and 2000 Censuses. The Town of Plainfield gained 35 new occupied units between 1990 and 2000<sup>2</sup>.*

**Figure 2-1. Occupied Dwelling Units by Year Built, 1990**



Source: U.S. Census, 1990.

**Figure 2-2. Occupied Dwelling Units by Year Built, 2000**



Source: U.S. Census, 2000.

<sup>2</sup> U.S. Census 2000.



## Change in Structural Type

Structural type is one indication of the degree of choice in the housing market. Housing choice by structural type includes the ability to choose to live in a single family home, duplex, multi-unit building or mobile home. Availability of units by type is indicative not only of market demand, but also of zoning laws, developer preferences and access to public services. Current state sponsored local planning goals encourage communities to provide a wide range of choice in housing types, as housing is not a 'one size fits all' commodity.

A single person, for example, will have different housing needs than a couple with children. Housing needs also change as we age, lifestyles change, or in the event that one or more members of the household become disabled. Providing a range of housing choices which meets individual household needs and preferences is one way of encouraging individuals to stay in the community and to draw others to locate there.

***As with most rural communities, the dominant housing type in the Town of Plainfield is single family housing.*** In 1990, single family housing comprised 76.3 percent of the Town of Plainfield's housing stock. Almost two percent of the Town's housing stock was comprised of duplex and multi-family units. In 1990, the Town of Plainfield had 50 mobile homes, trailer & other units which were 21.9% of total housing units (Appendix B, Table B-3).

During the 1990s, conversions, deletions and additions to communities' housing stock resulted in a slightly different composition of housing in 2000. ***By 2000, the share of single family units had increased to 85.1% in the Town of Plainfield, while the number and share of mobile home units decreased to 30 units or 12.4% of the total housing units.*** During this same time period, the number and share of two to four units increased slightly in the Town of Plainfield (Appendix B, Table B-3).

At the state and county level, the number and share of single family homes and larger multi-family buildings (those with greater than five units per building) increased between 1990 and 2000, while the number and share of two to four unit buildings and mobile home, trailer and other units decreased. In 2000, single family homes comprised 82.6 percent of Waushara County's housing stock and 69.3 percent of the state's housing stock. Mobile home, trailer and other units comprised the second largest housing category for Waushara County; 13.0 percent. Two or more unit housing comprised less than five percent (4.4%) of the County's housing stock. At the state level, the second largest housing category was two or more unit housing, which comprised 26.2 percent of Wisconsin's housing stock. Mobile home, trailer and other units comprised 4.5 percent of the State's housing stock.

## Occupancy Status

Occupancy status reflects the utilization of available housing stock. The total number of housing units includes renter-occupied, owner-occupied and various classes of vacant units. Vacant units include those which are available for sale or rent and those which are seasonal, migrant, held for occasional use or other units not regularly occupied on a year-round basis.

For a healthy housing market, communities should have a vacancy rate of 1.5 percent for owner-occupied units and 5 percent for year-round rentals. The number of migrant, seasonal and other vacant units will vary depending on the community's economic base.



## Tenure

Occupancy rates vary by community and over time. Total occupancy rates increased for Waushara County, the state and the Town between 1990 and 2000. In both time periods, jurisdictions with the lowest occupancy rates had the highest percentage of seasonal units (Table 2-1). All three jurisdictions experienced a decrease in the number and share of seasonal units between 1990 and 2000 and an increase in the number and share of occupied units and total units. The combination indicates that additional year round units were built and seasonal units were likely converted to year round residences (Appendix B, Tables B-5 and B-6).

Occupancy rates indicate that Waushara County has a higher percentage of seasonal units than the state as a whole. Both jurisdictions experienced an increase in total occupancy rates and a decrease in the number of seasonal units between 1990 and 2000. Waushara County experienced the largest change.

**Table 2-1. Occupied and Seasonal Units as a Share of Total Housing Units, 1990 and 2000**

Jurisdiction	Total Occupied		Seasonal	
	1990	2000	1990	2000
Town of Plainfield	83.8%	86.1%	12.3%	7.8%
Waushara County	62.2%	68.3%	31.7%	27.0%
Wisconsin	88.6%	89.8%	7.3%	6.1%

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

**The majority of occupied units within the Town are owner-occupied. Plainfield fell between the county and the state in terms of the share of owner-occupancy rates** (Table 2-2). Between 1990 and 2000, the share of owner-occupied units increased in all three jurisdictions. By 2000, the share of occupied units that were owner-occupied ranged from 85.4 percent in the Town of Plainfield to 68.4 percent in Wisconsin. The share of renter occupied ranged from 14.6 percent in the Town of Plainfield to 31.6 percent in the state.

**Table 2-2. Tenure as a Percent of Occupied Units, 1990 and 2000**

Jurisdiction	Owner Occupied		Renter Occupied	
	1990	2000	1990	2000
Town of Plainfield	77.5%	85.4%	22.5%	14.6%
Waushara County	80.3%	83.5%	19.7%	16.5%
Wisconsin	66.7%	68.4%	33.3%	31.6%

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

## Vacancy Status

Vacant housing units are units that are livable, but not currently occupied. The vacancy status of units available for purchase or rent is considered to be a strong indicator of housing availability. Generally, when vacancy rates are below 1.5 percent for owner-occupied units and 5 percent for renter-occupied units, housing is considered to be in short supply and additional units are needed. If vacancy rates are at or above standard, the community may have an adequate number of units for rent or for sale. However, additional information, such as choice



in housing and housing affordability is needed to determine if the units on the market meet the needs of potential buyers or renters. A higher vacancy rate may be appropriate, particularly for smaller communities, if the additional units provide needed choices within the housing market. If the existing vacancy rate is too high for existing market conditions, then property values may stagnate or decline.

### ***Owner-Occupied Housing***

Homeowner vacancy rates indicate that the Town of Plainfield and the state had a tight housing market, while Waushara County had an adequate share of owner-occupied units for sale in 1990. Between 1990 and 2000, homeowner vacancy rates increased in the Town of Plainfield, decreased in Waushara County, and remained stable at the state level (Appendix B, Tables B-7 and B-8). Countywide, the homeowner vacancy rate was 1.9 percent in 2000, which indicates that the county had an adequate number of homes on the market to meet demand. The homeowner vacancy rate for Wisconsin remained stable at 1.2 percent, which was just below the standard for both years. ***In 2000, the Town of Plainfield had a homeowner vacancy rate of 3.0 percent, which indicates an adequate number of homes for sale.***

A drop in the vacancy rates is usually related to the increase in the number of owner-occupied units within the Town. Since the vacancy rate is a measure of the number of units for sale compared to the number of owner-occupied units, the number of units for sale is expected to rise as the total number of owner-occupied units rise in order to accommodate the growth in households.

According to the Census, the Town of Plainfield had one house for sale in 1990 and five houses for sale in 2000. The Town of Plainfield exceeded the accepted vacancy rate standard of 1.5 percent in 2000. However, the small number of homes for sale means that the Town of Plainfield, likely did not have an adequate number of units on the market to provide choice to prospective homebuyers.

### ***Rental Housing***

In 1990, rental vacancy rates for the Town of Plainfield (2.3%) was below the vacancy standard of 5.0 percent, which would seem to indicate that the community had less than an adequate supply of housing units for rent (Appendix B, Tables B-7 and B-8). In comparison, the rental vacancy rates for Wisconsin and Waushara County were 4.7% and 8.5%, respectively.

Between 1990 and 2000, the number of rentals for the Town of Plainfield and the state increased, while the county decreased. In 2000, the state, county and Town of Plainfield had vacancy rates above 5.0 percent. ***The Town of Plainfield had a rental vacancy rate of 6.9 percent in 2000.*** The rental vacancy rate for Waushara County was 6.8 percent and the state's rental vacancy rate was 5.6 percent.

As with the number of homes for sale, the number of housing units for rent in the Town was also small. In 1990, the Town of Plainfield had one housing units for rent. In 2000, the number of housing units for rent increased to two units. However, with only two units to choose from, the likelihood that a rental unit will meet the needs of prospective renters is very small.



### ***Seasonal Units***

Seasonal units are units intended for use only in certain seasons or for weekend or other occasional use throughout the year. They include properties held for summer or winter sports or recreation such as summer cottages or hunting cabins. They also include time-share units and may include housing for loggers.

Between 1990 and 2000, the number of vacant seasonal units fell in all three jurisdictions (Appendix B, Tables B-7 and B-8). ***Between 1990 and 2000, the share of vacant units identified as seasonal decreased from 75.7 percent in the Town of Plainfield to 56.3 percent.*** At the state level, the share of vacant units declined from 64.5 percent of all vacant units to 60.9 percent. The share of vacant units identified as seasonal increased in Waushara County from 83.9 percent in 1990 to 85.3 percent in 2000.

### ***Other Vacant***

Other vacant units include: migrant housing; units rented or sold, but not yet occupied; and units held for occupancy by a caretaker or janitor and units held for personal reasons of the owner, but not classified as seasonal. At the state and county level, units held for occupancy by a caretaker or janitor and units held for personal reasons of the owner, but not classified as seasonal comprised the largest segment of the other vacant unit category. At the Town level migrant housing does not exist within the Town of Plainfield.<sup>3</sup> The other vacant units listed were a mix of units rented or sold, but not yet occupied and units held for occupancy by a caretaker or janitor and units held for personal reason of the owner.

According to the Census, other vacant units comprised 18.9 percent of all vacant units for the Town of Plainfield in 1990 (Appendix B, Tables B-7 and B-8). Between 1990 and 2000, the share of other vacant units increased in the Town. By 2000, other vacant units comprised 21.9 percent of all vacant units in Plainfield. The Town of Plainfield reported a total of seven other vacant units in the 1990 and 2000 Census.

### **Owner-Occupied Housing Stock Value**

Owner-occupied housing stock values can provide information about trends in property values, housing demand and choice within the housing market. Housing stock values can also help provide prospective new businesses with information regarding how accessible housing will be for their employees.

### ***Median Housing Value Trends: A Broad Historical Perspective***

State and county level information indicate that owner-occupied housing values have risen substantially since 1970<sup>4</sup>. The largest growth in median housing values occurred in the 1970's. Between 1970 and 1980, median housing prices more than doubled in response to inflationary pressures during the late 1970's and increased demand as baby-boomers entered the housing market. Housing prices continued to rise during the 1980's, but at a much slower rate. Housing prices again increased substantially in the 1990's. Lower interest rates and competitive

<sup>3</sup> Status of Migrant Labor Camps, 2008. Wisconsin Department of Workforce Development Migrant, Refugee, and Labor Services.

<sup>4</sup> U.S. Census. 1970, 1980, 1990 and 2000.



loan products allowed home buyers the opportunity to purchase a higher value home, and the market responded by increasing the average home size for new construction<sup>5</sup>. The number of expected amenities in a home also increased. Communities contributed to the rise in housing prices by increasing minimum lot sizes and minimum square footage. Children of baby-boomers began entering the housing market during this decade, which put additional pressure on the housing market. The increased demand for starter homes and lack of supply drove the value of existing starter homes up substantially. By 2000, the median housing value for Waushara County had risen from \$10,600 in 1970 to \$85,100; and the median housing value for Wisconsin had risen from \$17,300 to \$112,200.

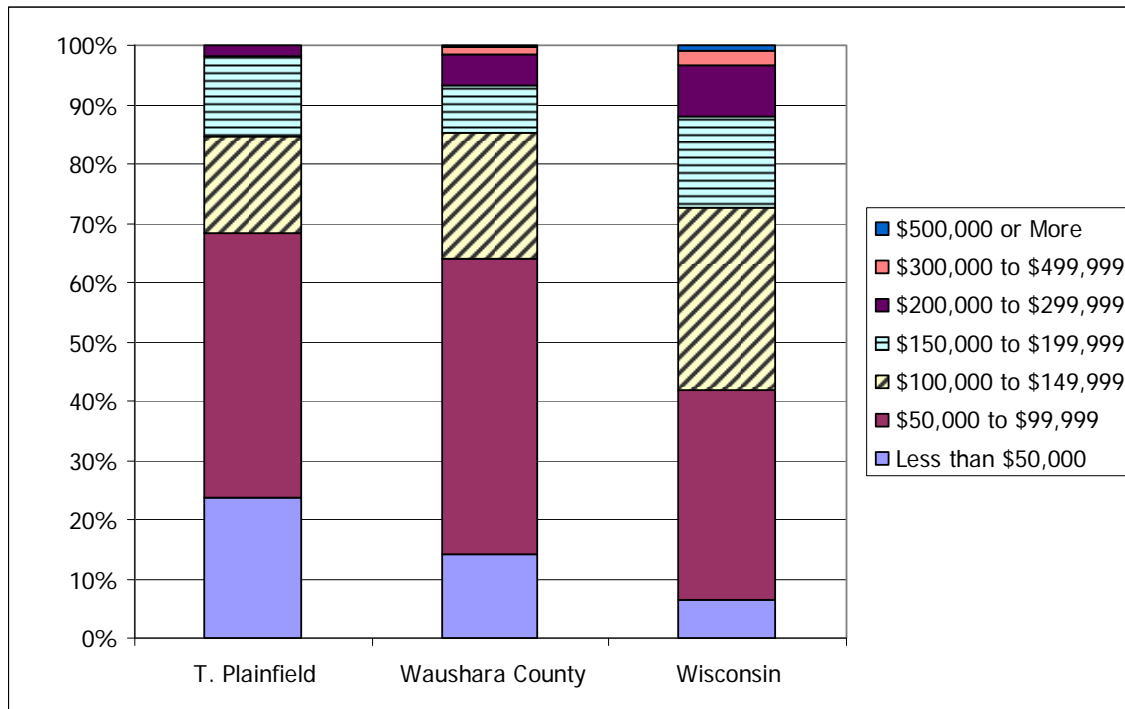
### ***Current Median Housing Value Trends***

***Between 1990 and 2000, median housing value in the Town of Plainfield increased by approximately 45 percent. By 2000, the median housing value for the Town of Plainfield was \$67,900, up from \$46,600 in 1990 (Appendix B, Table B-9).***

### ***Current Values by Price Range***

***Eighty-five percent (84.5%) of the owner-occupied housing stock in the Town of Plainfield was valued at less than \$150,000 in 2000.*** The largest share of owner-occupied units by price range fell within the \$50,000 to \$99,999 range (Figure 2-3 and Appendix B, Table B-9). Forty-five percent of Town of Plainfield's owner-occupied housing stock was valued at \$50,000 to \$99,999 compared to half of the county's housing stock and a third of the state's owner-occupied housing stock.

**Figure 2-3. Housing Values by Range, 2000**



Source: U.S. Census, 2000.

<sup>5</sup> In 1970, the average size of a new single family home in the U.S. was 1,500 sq. ft. By 2000, the average size of a new single family home in the U.S. was 2,266 sq.ft.



## Housing Affordability

The relationship between housing costs and household income is an indicator of housing affordability, which is gauged by the proportion of household income expended for rent or home ownership costs. Rental costs include contract rent, plus the estimated average monthly cost of utilities and fuel. Owner costs include payments for mortgages, real estate taxes, fire hazard and flood insurance on the property, utilities and fuels. In 1989, the U.S. Department of Housing and Urban Development (HUD) raised the standard for determining whether rent or home ownership costs comprised a disproportionate share of income from 25 to 30 percent of gross household income. Households spending more than 30 percent of their income for housing may be at risk of losing their housing should they be confronted with unexpected bills or unemployment of one or more workers per household. Communities should be aware that maintenance and repair costs are excluded from this housing affordability formula, as are other outstanding debts, because these items will have policy impacts. Potential homeowners should be aware that these items are excluded from this housing affordability formula, as these items can impact their housing affordability and future financial stability.

Access to affordable housing is not only a quality of life consideration; it is also an integral part of a comprehensive economic development strategy. Communities need affordable housing for workers in order to retain existing companies and attract new companies to the area. Households which must spend a disproportionate amount of their income on housing will not have the resources to properly maintain their housing, nor will they have adequate disposable income for other living expenses, such as transportation, childcare, healthcare, food, and clothing. This in turn not only has a negative impact on the overall economy, it may also heighten resistance to property tax increases, which is a major source of revenue for many Wisconsin communities.

For persons on the bottom end of the economic ladder, affordable housing is particularly important. A recent study by the Hudson Institute and the Wisconsin Housing Partnership<sup>6</sup> found that the most important factor for individuals to successfully move from welfare to work was their ability to find decent, stable affordable housing.

A review of housing stock values for the Town of Plainfield indicated that housing values were on average lower than the state average. However, many of those units were not affordable for Town residents.

### ***Owner-Occupied Housing***

In 1989, 15.1 percent of homeowners in the state and 17.7 percent of homeowners in Waushara County were paying a disproportionate amount of their income for housing (Appendix B, Table B-10). Residents in the Town of Plainfield had a similar issue with finding affordable housing. In 1989, 17.4 percent of Plainfield residents were spending more than 30% of their income on housing.

***Between 1989 and 1999, housing affordability became a larger issue for homeowners in all three jurisdictions. In the Town of Plainfield, homeowners paying a disproportionate share of their income for housing rose from 17.9 percent***

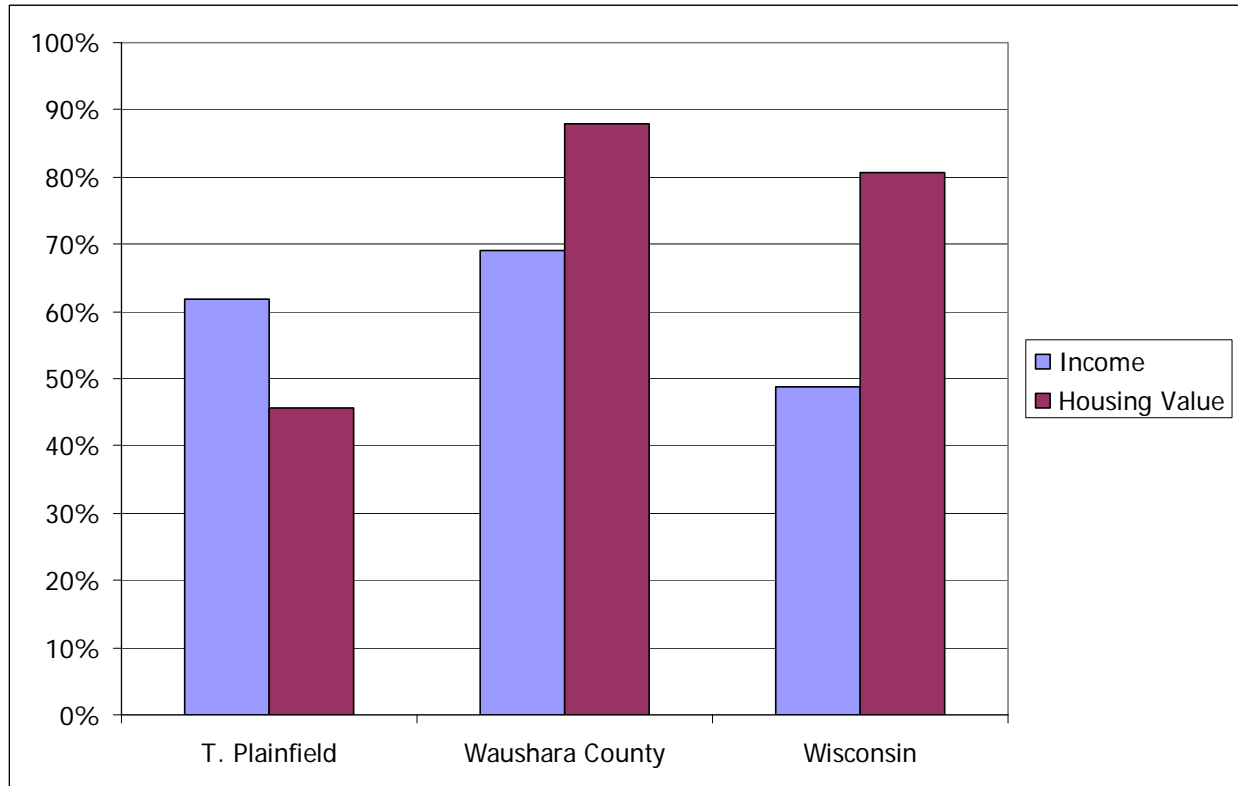
---

<sup>6</sup> Rebecca J. Swartz, Brian Miller with Joanna Balsamo-Lilien, Hilary Murrish, 2001. *Making Housing Work for Working Families: Building Bridges between the Labor Market and the Housing Market.*



**to 25.5 percent.** Almost twenty percent (19.7%) of County residents were paying a disproportionate share of their income for housing in 1999, compared to 17.8 percent of state residents. The change in housing affordability likely resulted from housing prices and values rising faster than incomes. The Town of Plainfield was the only jurisdiction during this time period in which the Median Household Income increased faster than the Median Price of Housing (Figure 2-4.). Even though household income grew at a faster rate, it did not increase enough to offset the increase in the Median Housing Value.

**Figure 2-4. Change in Median Housing Values Compared To Change in Median Household Income, 1989 to 1999**



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

### ***Renter-Occupied Housing***

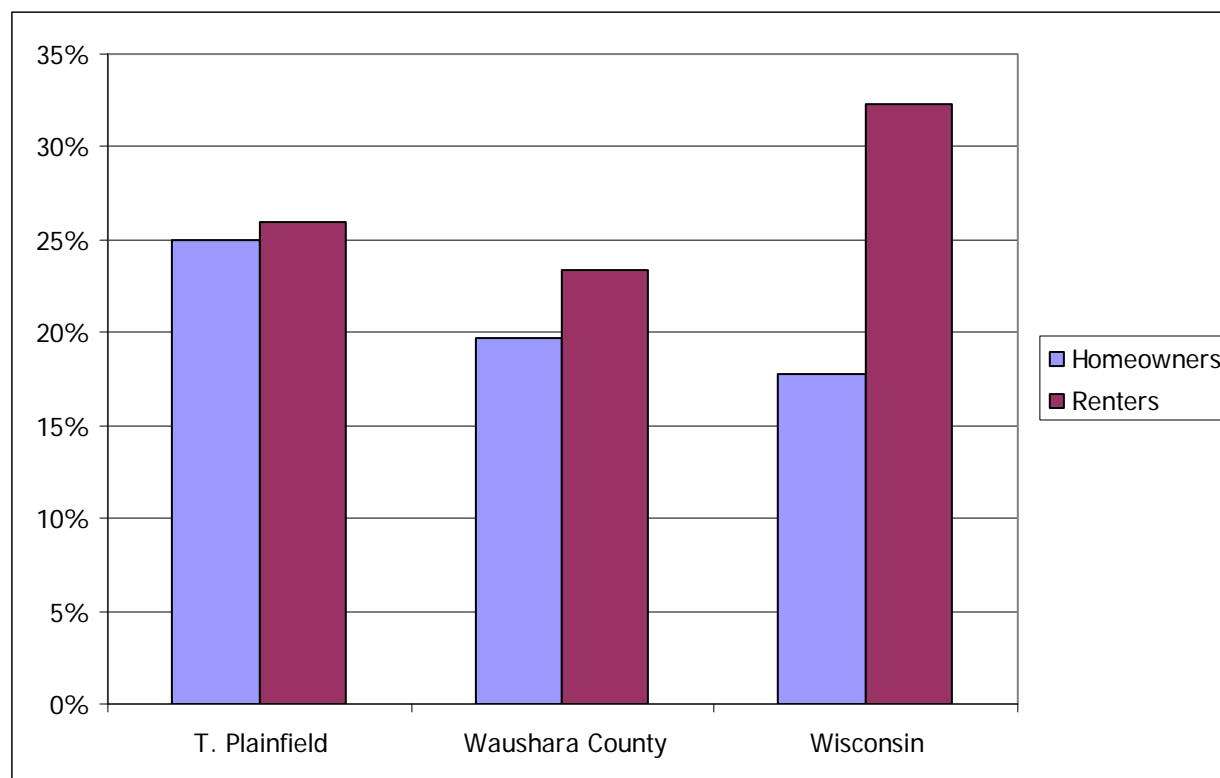
Census data indicates that renters had far greater difficulty finding affordable housing than homeowners. In 1989, 36.0 percent of renters in the state and 34.6 percent of renters in the county paid a disproportionate share of their income for housing, compared to 15.1 percent and 17.7 percent of homeowners, respectively. ***The share of renters paying a disproportionate amount of their income for housing in 1989 was 17.9 percent in the Town of Plainfield*** (Appendix B, Table B-10).

Between 1989 and 1999, the number and share of households paying a disproportionate share of their income for rental housing increased in the Town, and decreased in the county and state. This decrease was accompanied by a decrease in the total number of renters for both the state and the county, which indicates that renters may have relocated in search of more affordable housing.



By 1999, the share of renters paying more than 30% of their income for housing increased to 26.1 percent in the Town of Plainfield (Figure 2-5). Thirty-two percent (32.3%) of state residents were paying more than 30% of their income for rental housing, compared to 23.4 percent of Waushara County residents. This indicates that rent was slightly less affordable for the renters who remained in Plainfield than for renters in the county.

**Figure 2-5. Percent of Households for which Housing is Not Affordable, 1999**



Source: U.S. Census, 2000.

## Housing Conditions

Two Census variables often used for determining housing conditions include units which lack complete plumbing facilities and overcrowded units. Complete plumbing facilities include hot and cold piped water, flush toilet and a bathtub or shower. If any of these three facilities is missing, the housing unit is classified as lacking complete plumbing facilities. The Census defines overcrowding as more than one person per room in a dwelling unit.

***In 2000, seven occupied units without complete plumbing facilities existed in the Town of Plainfield.*** Four percent (3.9%) of dwelling units within the Town of Plainfield were considered overcrowded (Appendix B, Table B-11)<sup>7</sup>. The actual number of overcrowded units listed was eight.

<sup>7</sup> US Census 2000.



## Subsidized and Special Needs Housing

Subsidized and special needs housing should be available for individuals who, because of financial difficulties, domestic violence situations, disabilities, age, alcohol and drug abuse problems, and/or insufficient life skills, need housing assistance or housing designed to accommodate their needs. In some instances, extended family structures and finances may allow families or individuals to cope privately with special needs. Two such examples would be when a child cares for an elderly parent in their own home or when a parent cares for a disabled child in their own home. In most instances, however, some form of assistance is needed. The housing needs of these populations vary based on their circumstances, health, economic conditions and success of educational, training, treatment or counseling programs.

Table 2.3 shows the location of federally assisted rental units by type for Waushara County. ***The closest access to subsidized housing for qualifying elderly, families and persons with disabilities for Town of Plainfield residents is within the City of Wautoma, and the villages of Coloma and Wild Rose.***

**Table 2-3. Federally Assisted Rental Units, 2005**

County	Jurisdiction	Elderly Units	Family Units	Other Units	Total Units
Waushara	C. Wautoma	32	14	2	48
	V. Coloma	0	12	0	12
	V. Redgranite	21	0	3	24
	V. Wild Rose	16	0	0	16
	T. Poy Sippi	0	20	0	20

**Table 2-4. Assisted Living Options, 2005**

County	Jurisdiction	Adult Family Home Capacity	Community Based Res. Care Facility Capacity	Residential Care Apartment Units	Total Units
Waushara	C. Wautoma	11	70	53	134
	V. Coloma	0	16	0	16
	V. Redgranite	0	20	40	60
	V. Wild Rose	0	8	0	8

Source: WI Department of Health and Family Services Assisted Living Directories, website, 2005.

Assisted living options in the area are listed in Table 4-4. All elderly housing options listed for the area are located in nearby incorporated communities. No units or facilities were listed within the Town of Plainfield. This likely reflects the fact that funding agencies are more likely to provide resources and developers are more likely to build these facilities in areas with easy access to health care, transportation, other services and grocery stores. Since many residents in these facilities may have mobility limitations, they may also prefer to be located in an area with easy access to goods and services.



## **Housing Needs Analysis**

As part of the regional planning process, ECWRPC developed a matrix of housing conditions to measure housing stress within the region. This matrix uses a combination of ten Census variables to measure five housing characteristics: housing affordability, housing availability, the prevailing age of units compared to housing values, overcrowding and presence of plumbing facilities. A compilation of these variables show that the Town of Plainfield has a minor amount of housing stress (Appendix B, Tables B-12 and B-13). However, these issues affect no more than a quarter of the population of the community. Based on inventory analysis, the largest housing issue facing the Town of Plainfield is renter housing affordability.

### ***Housing Affordability***

Housing affordability is currently an issue in the Town of Plainfield. Homeowners, in particular, have a difficult time affording housing costs. The need for affordable housing can be addressed by building units which are affordable for residents, subsidizing the housing costs for existing units, and/or increasing incomes to make the existing housing more affordable.

### ***Housing Available for Rent or Sale***

The Town of Plainfield has an adequate share of units for rent. However, given the small number of units available, the community may wish to evaluate the market demand to see if the units for rent provide an adequate choice for those seeking to rent. However, the homeowner vacancy rates indicate that the Town has an adequate owner-occupied housing market. The number of units for sale in the Town is small, which may discourage households from moving into the Town of Plainfield.

### ***Age of Occupied Dwelling Units and Owner-Occupied Housing Values***

This variable compares the percentage of housing stock that was over 40 years of age to the percentage of housing stock that is valued at less than \$50,000. Twenty-four percent of the housing stock in Plainfield was valued at less than \$50,000 in 2000.

### ***Overcrowding***

In 2000, overcrowding affected few households in the Town of Plainfield. However, overcrowding could increase if households choose to double up or move to smaller units in an effort to lower their housing costs.

### ***Plumbing***

There were seven units lacking complete plumbing facilities.

## **Community Input Regarding Housing Needs**

Statistical information can only capture a portion of the information necessary to determine housing needs and a community's ability to meet those needs. Market demand and supply



characteristics (capacity), socio-economic changes (fluidity) and personal desires and biases (individual choice/NIMBYism<sup>8</sup>) also influence housing needs.

### ***Continuum of Care Needs Assessment***

The Continuum of Care<sup>9</sup> Needs Assessment was a county-wide effort to identify housing resources and to identify and prioritize housing needs of homeless persons within the county. As such, it was a more focused assessment. A number of agencies and individuals were included in this information gathering process including: Waushara County's Department of Human Services, Community Programs, UW-Extension and Job Center; WI Department of Workforce Development Migrant, Refugee and Labor Services; Family Health Medical and Dental Center; All-Area Counseling; CAP Services; and Legal Action of Wisconsin. Individual participants included two homeless members, a representative from the Waushara County Coordinated Community Response Team for domestic violence issues, three persons of Hispanic Origin and 11 victims of domestic violence. A variety of needs were identified, including affordable housing, transportation, childcare, education, employment, medical care, counseling/case management, legal services, and others. When these needs were prioritized, affordable permanent housing ranked as the number one need in Waushara County. The need for permanent affordable housing was followed by affordable transitional housing, legal services, case management/assistance with linkage to other community resources, support groups and assistance obtaining employment or training. CAP Services submitted a grant application to request funds to help meet identified needs, and was awarded \$105,025, which will be used to provide affordable housing and support services to victims of domestic abuse in Portage, Waupaca, Waushara and Marquette Counties.

### ***Homelessness***

According to the U.S. Department of Housing and Urban Development (HUD) the term "homeless" or "homeless individual or homeless person" includes: (1) an individual who lacks a fixed, regular, and adequate nighttime residence and (2) an individual who has a primary nighttime residence that is: a supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill); or an institution that provides a temporary residence for individuals intended to be institutionalized; or a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings<sup>10</sup>.

Even though very little information on homelessness is available for Waushara County, it does exist and should be discussed in the context of this plan. ***There are no emergency shelters in Waushara County for the general public.*** The general public must utilize shelters in Stevens Point, Oshkosh or the Fox Cities. However two shelters (Aurora Center and Naomi House) are present in the county. The Aurora Center is owned and operated by United Migrant Opportunity Services (UMOS) for seasonal migrant farm workers and their families. Naomi House is a new facility in Wautoma for pregnant women or women with children who are at risk

---

<sup>8</sup> NIMBY: Not In My Back Yard

<sup>9</sup> The Continuum of Care model is a coordinated effort between providers of housing and housing related services to move persons from homelessness into emergency shelter, through transitional housing to long-term affordable housing. The Continuum of Care also works to prevent persons at risk of homelessness from becoming homeless.

<sup>10</sup> The United States Code contains the official federal definition of homeless. In Title 42, Chapter 119, Subchapter 1.



of becoming homeless. It has a capacity for three families at a time. In 2008, they housed four women and five children.

Twice a year, a point in time survey is compiled by the Waushara County Department of Health and Human Services. ***On January 28, 2009***, the last time a point in time survey was compiled, ***four people were sheltered in an emergency shelter and six people were unsheltered.***<sup>11</sup> It should be noted that a point in time survey only includes information on that one day in time.

Foreclosure and eviction rates are an indication of potential homelessness or the need to double up on housing. It should be noted that the filing of an eviction action Summons and Complaint with a court date (in 7 days), meets HUD's definition of homelessness. The filing of a foreclosure case is not an immediate threat of homelessness because of Wisconsin's redemptive period which is either six or 12 months from when the judgment is granted. Additionally a filing does not indicate how many judgments were granted. ***In 2008, there were 169 foreclosure actions filed in Waushara County, which was a 47 percent increase from the 115 that were filed in 2007.*** Evictions also increased between 2007 and 2008. ***In 2008 there were 48 eviction actions or a 41 percent increase from 2007 when a total of 34 eviction actions took place.***<sup>12</sup>

The school district homeless coordinator's report also indicates that more students in Waushara County are homeless. During the 2007/2008 school year, nine students were reported as being homeless. As of February 2009, a total of 12 students have been reported as homeless for the partial school year of 2008/2009.

Other homeless information that has been reported in the county includes: seven transient homeless individuals were served in 2008<sup>13</sup>; and four household lodging vouchers were issued by the county.

## Key Findings

### ***Age of Occupied Dwelling Units***

- Census information regarding the age of owner-occupied units indicates that the Town of Plainfield was relatively well established by 1960
- Between 1990 and 2000, the Town experienced a slightly lower level of growth in owner-occupied units than was indicated in previous Census periods (1960 to 1980) based on the age of structure information provided in the 1990 and 2000 Censuses

### ***Change in Structural Type***

- As with most rural communities, the dominant housing type in the Town of Plainfield is single family housing.

---

<sup>11</sup> Wisconsin Point in Time Form, for Waushara County Department of Human Services, January 28, 2009.

<sup>12</sup> HUD's Emergency Shelter Grant, Transitional Housing Program, Homelessness Prevention Program Grant Application for 2009/2010.

<sup>13</sup> Waushara County DHS Report for Year 2008.



- By 2000, the share of single family units had increased to 85.1% in the Town of Plainfield, while the number and share of mobile home units decreased to 30 units or 12.4% of the total housing units.

### ***Occupancy Status***

- The majority of occupied units within the Town are owner-occupied. Plainfield fell between the county and the state in terms of the share of owner-occupancy rates.

### ***Vacancy Status***

- In 2000, the Town of Plainfield had a homeowner vacancy rate of 3.0 percent, which indicates an adequate number of homes for sale.
- The Town of Plainfield had a rental vacancy rate of 6.9 percent in 2000.
- Between 1990 and 2000, the share of vacant units identified as seasonal decreased from 75.7 percent in the Town of Plainfield to 56.3 percent.

### ***Owner-Occupied Housing Stock Value***

- Between 1990 and 2000, median housing value in the Town of Plainfield increased by approximately 45 percent. By 2000, the median housing value for the Town of Plainfield was \$67,900, up from \$46,600 in 1990.
- Eighty-five percent (84.5%) of the owner-occupied housing stock in the Town of Plainfield was valued at less than \$150,000 in 2000.

### ***Housing Affordability***

- Between 1989 and 1999, housing affordability became a larger issue for homeowners in all three jurisdictions. In the Town of Plainfield homeowners paying a disproportionate share of their income for housing rose from 17.9 percent to 25.5 percent.
- The share of renters paying a disproportionate amount of their income for housing in 1989 was 17.9 percent in the Town of Plainfield
- By 1999, the share of renters paying more than 30% of their income for housing had increased to 26.1% in the Town.

### ***Housing Conditions***

- In 2000, seven occupied units without complete plumbing facilities existed in the Town of Plainfield.

### ***Subsidized and Special Needs Housing***

- The closest access to subsidized housing for qualifying elderly, families and persons with disabilities for Town of Plainfield residents is within the City of Wautoma, and the villages of Coloma and Wild Rose.

### ***Homelessness***

- There are no emergency shelters in Waushara County for the general public.



- On January 28, 2009, four people were sheltered in an emergency shelter and six people were unsheltered.
- In 2008, there were 169 foreclosure actions filed in Waushara County, which was a 47 percent increase from the 115 that were filed in 2007.
- In 2008 there were 48 eviction actions or a 41 percent increase from 2007 when a total of 34 eviction actions took place.

## **INTERRELATIONSHIPS WITH OTHER PLAN ELEMENTS**

Housing cannot be considered in isolation from other elements. Meeting the housing needs of all Plainfield residents requires an adequate supply of reasonably priced land with the appropriate infrastructure, utilities and services, coupled with access to employment opportunities and dependable transportation options. Decisions regarding economic development, transportation, community and public facilities development, environmental quality and land use have an impact on housing choice, supply and affordability. Likewise, decisions made in the housing sector can influence the cost and efficiency of other plan elements.

### **Economic Development**

Affordable housing is an integral part of a comprehensive economic development strategy. Companies are reluctant to relocate to communities without affordable housing for their workers. Existing companies may move out of the area if they cannot attract an adequate labor force. Labor shortages and high turnover rates resulting from a lack of affordable housing reduce service and productivity, increase administration and training costs, thereby discouraging business development and expansion. In addition, households which must spend a disproportionate amount of their income on housing will not have the resources to properly maintain their housing, nor will they have adequate disposable income for other living expenses, such as transportation, childcare, healthcare, food, and clothing. All this in turn has a negative impact on the overall economy.

Redevelopment of vacant industrial or commercial properties could bring these properties back onto the tax rolls, increase revenue and improve the overall appearance of the community. In some instances, these buildings or locations may be more appropriate for commercial or industrial redevelopment. In other instances, or perhaps in combination with commercial redevelopment, the adaptive reuse of these properties may provide unique housing options and increase the supply of affordable housing, elderly housing and utilize space and structures which may no longer be appropriate for commercial or industrial uses. Apartments above stores can help retail and service establishments supplement their income. Appropriate home based businesses and/or owner-occupied units above or behind retail and service establishments can increase housing affordability, lower transportation costs and perhaps increase access to goods and services within the Town.

### **Transportation**

A mix of transportation options is critical to meet personal mobility needs and decrease social isolation for individuals and individual households, particularly for those unable or unwilling to drive. Sidewalks and pedestrian/bicycle trails can provide a healthy, low cost alternative to the



automobile for small unincorporated areas where homes, schools, places of business, employment and recreational facilities are in close proximity. For the majority of the area, however, paratransit service or a volunteer driver pool may be needed for those who cannot drive.

A good road network and highway system helps provide access to greater economic opportunities beyond those in the immediate vicinity, which can contribute to housing affordability, provided transportation costs to those areas is not prohibitive. As transportation costs rise, carpooling and vans may be a more cost-effective means of traveling between homes and places of employment.

### **Utilities and Community Facilities**

Affordable housing and upscale employment are linked to education, experience and updating job skills. Financial literacy and life skills also help ensure households make good financial decisions and have the wherewithal to properly maintain their housing unit. As a result, a strong school system which adequately prepares students to meet the demands of the workplace is critical. Adult education, job training, retooling and programs to connect individuals with better economic opportunities also contribute to housing affordability. Programs/agencies which provide counseling, financial and investment literacy, life skills training and support groups/services contribute to household stability.

Good law enforcement, fire and EMS services are important to public and household safety. In turn, housing units and properties must be maintained, as poorly maintained housing may pose a health and/or fire hazard. Cluttered or overgrown drives may also limit emergency access to properties.

Accessible, reliable and affordable electrical and heating sources and services contribute to housing safety and affordability. Accessible, affordable and environmentally safe water and waste disposal sources and services are critical to public safety and housing affordability.

Other community and public facilities such as waste disposal options, recycling facilities, parks, libraries, childcare, eldercare, medical facilities and emergency shelters also contribute to an area's quality of life and the wellbeing of individual households. Communication, cooperation and coordination with the entities that provide these services are important to ensure Plainfield residents have access to these services. New residents may appreciate information regarding the location and accessibility of these services.

### **Agricultural Resources**

As new households are formed, more land will be converted from farms, forests and open space to residential uses. Farmland in Plainfield is also under pressure from seasonal home development. The amount of land converted will vary depending on the choices made in terms of the density, design and placement of that development.

Choices must be made. Residential land uses have higher property values than farmland, so their expansion is seen as an opportunity to increase tax revenues. Little attention is paid to



net tax gains, even though various Farmland Trust studies<sup>14</sup> have shown that the cost of services for other forms of development, particularly single family residential, typically exceeds tax revenues generated by that development, while taxes generated by farmland exceed the cost of services for farmland.

As farmers reach retirement age, many of these individuals see farmland conversion as a quick, easy retirement option, especially in the face of increased conflicts between the realities of farming and the expectation of exurban residents. Modern day industrial farming requires substantial monetary investments, which makes it difficult for young farmers to enter the field. Farming is also under considerable economic pressure, as production costs rise and profits from food sales shift away from farmers to food processing and sales.

Allowing a farmer to develop his land provides housing opportunities and cash benefits for that farmer. However, it also increases the need for additional public services which require additional tax revenues. Nonfarm development may also cause economic, land use and transportation conflicts for the farmer who wishes to maintain or expand his operation.

### **Natural Resources**

Building materials, such as lumber and nonmetallic resources are needed for residential development. The density and location of residential development also impacts the amount of land consumed for development and can fragment ecosystems and place undue pressure on our natural resources. As humans consume more land, the amenities, such as the open space and farm and forest land that attracted initial settlement disappears. Human/animal interaction also increases. Communities must deal with a rising number of complaints about bird feces in parks and on lawns; deer and rabbits damaging trees, shrubs and gardens; and in some instances bears foraging through dumps and garbage cans. Pressure is also placed on fragile wildlife habitats, such as migration corridors.

Many communities have established large minimum lot sizes in an effort to preserve rural character. However, the demand for large lot subdivisions, scattered site housing and seasonal homes is, in reality, fragmenting wildlife habitats and changing the appearance and character of the landscape. If communities have an interest in preserving natural resources and/or their rural character, other implementation tools may better serve that objective.

### **Cultural Resources**

The existing housing stock in the Town of Plainfield is an important resource. It provides community character and reflects the historical development of the area. In some instances, the material in some of these units is no longer available. To lose these units is to reduce housing choices and to lose a part of the area's history, cultural and community identity.

Environmental regulations designed to protect the health and safety of individuals such as the lead base paint remediation and asbestos removal rules are extremely costly to implement. These regulations make it cost prohibitive to retain historical features on affordable properties, which are not on the historic register and/or eligible for the historic register, yet contain period features. However, removing these historical features destroys the home's character and lowers its potential market value.

---

<sup>14</sup> American Farmland Trust, 2004. *Farmland Information Center Fact Sheet: Cost of Community Services Studies.*



## Land Use

An adequate supply of reasonably priced land is a critical component for affordable housing. How much land is required depends on the density, design and placement of residential development. Density, design and placement of residential development not only impacts the amount of land consumed for development, it also impacts the effectiveness and efficiency of public services (law enforcement, fire, roads, etc.), the cost of public and social services, the quality of the environment, the ease of access to goods and services and the mobility of those unable or unwilling to drive automobiles.

Residential, commercial and industrial demand for land increases the value of that land. As land prices rise, converting that land from farm, forest and open space becomes more attractive; and long term consequences such as farm and forest land shortages, loss of wildlife habitat, increased public costs, changes in community character and lack of open space are often not considered.

## Intergovernmental Cooperation

All levels of government influence housing supply, availability, location, choice and access. Interaction between government, nonprofit and private sectors can facilitate or discourage housing affordability, choice and access.

## POLICIES AND PROGRAMS

### Regional, County and Local Policies

East Central recently completed a regional comprehensive plan. The five core housing goals have been identified:

- To help ensure that an adequate supply of affordable housing in the region exists to support economic development efforts and ensure that every household has access to shelter.
- To work with others to increase housing options, so that housing choices better reflect the need of individual households.
- To support the preservation and rehabilitation of the existing housing stock within the region.
- To promote increased coordination and cooperation between governments, and between public, nonprofit and private sectors to increase housing affordability, choice and access within the region.

Housing is designed to foster community and neighborhood cohesion and available housing choices are integrated with community facilities and multimodal transportation.

In January 2004, East Central adopted the report, *Overcoming Barriers to Affordable Housing in the East Central Region*. This report is a compilation of input from urban and rural residents,



who identified barriers to affordable housing in their communities and suggested potential solutions that local citizens, county and local governments, developers and other housing providers can use to address these issues. Some of the identified issues and potential solutions which are pertinent to residents in the Town of Plainfield include senior housing issues, farm worker and migrant housing issues, absentee landlords, income and economic development barriers and access to funding, to name a few. This report is available online at: [www.eastcentralrpc.org](http://www.eastcentralrpc.org) and through the ECWRPC office. Communities and agencies are encouraged to review the options presented and choose the best option or combination of options which best serve the needs of their residents and clients. Communities and individuals from the private and nonprofit sectors are encouraged to develop additional solutions and share those solutions with others to help improve the quality of life for all residents in our communities.

CAP Services is a regional community action program which aids low income persons in attaining economic and emotional self-sufficiency. They use a number of strategies to reach this goal, including advocacy, administering programs and grants, developing resources and partnering with public, private and other nonprofit or community groups. CAP Services provides a number of services in Waushara County. They also work closely with other agencies. For example, CAP Services partners with the Waushara County Habitat for Humanity to make more efficient use of nonprofit resources. During the 2005 Continuum of Care application process, CAP Services met with a number of agencies and individuals to identify and prioritize housing needs within Waushara County. These agencies included: the Waushara County Department of Human Services, Community Programs, UW-Extension and the Job Center; the WI Department of Workforce Development Migrant, Refugee and Labor Services; Family Health Medical and Dental Center; All-Area Counseling; and Legal Action of Wisconsin. These agencies plan to meet on a quarterly basis to discuss how best to meet the needs of the area's homeless, including the Hispanic/Latino population.

Waushara County has a number of departments which impact access to housing and housing services for residents in the Town of Plainfield. Some departments such as the Departments of Aging, Human Services, UW-Extension and the Veteran's office provide information and support for residents. Other departments such as Land Records, Public Health, Register of Deeds and Zoning and Land Conservation engage in administrative functions such as enforcing codes and zoning ordinances and collecting fees. These administrative functions can aid or hinder a community's ability to meet the housing needs of their residents.

The Town of Plainfield relies on Waushara County to administer and enforce the uniform dwelling code (UDC). Some communities in the state have found that enforcing the state's uniform dwelling code is not necessarily compatible with preserving some of their existing and historical housing stock. Many of these structures are decent, safe and affordable, but they do not conform to the UDC. This potential conflict can be resolved by adopting a separate building code for older structures which protects the characteristics of those structures while also protecting the health and safety of residents.

### **Federal, State and Regional Programs**

Funding and technical assistance for housing programs are available from several federal, state and regional agencies. A listing of these programs follows.



## ***Federal Agencies***

### **United States Department of Agriculture**

**Rural Development Housing Programs.** USDA Rural Development offers a variety of housing products including single family, multi-family and farm labor housing products. Assistance can be in the form of a loan, grant or technical assistance. Information about individual products can be obtained from the USDA Rural Development website at: <http://www.rurdev.usda.gov/rhs>. Website information is provided in English and Spanish. Information can also be obtained from the state USDA Rural Development office, which is located in Stevens Point. Their phone number is: (715) 345-7615.

### **United States Department of Housing and Urban Development**

**Brownfield Economic Development Initiative Grant.** This grant can be used for brownfield sites (converting old industrial to residential). BEDI and Section 108 funds must be used in conjunction with the same economic development project, and a request for new Section 108 loan guarantee authority must accompany each BEDI application. Funds can be used to benefit low-moderate income persons, prevent/eliminate slum and blight, and address imminent threats and urgent needs (usually follow the same guidelines as CDBG). More specifically, funds can be used for land writedowns, site remediation costs, funding reserves, over-collateralizing the Section 108 loan, direct enhancement of the security of the Section 108 loan, and provisions of financing to for-profit businesses at below market interest rates. The maximum grant amount is \$1 million, and the minimum BEDI to Section 108 ratio is 1:1. For more information, contact David Kaminsky in HUD's Office of Economic Development at (202) 708-0614 ext. 4612 or visit the web site at: <http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm>.

**Community Development Block Grant (small cities).** Small cities, villages, and towns with populations of less than 50,000 are eligible to apply for this grant. Funds are used for housing and neighborhood improvement activities for low to moderate income households, including rehabilitation, acquisition, relocation, demolition of dilapidated structures, and handicap accessibility improvements. The Small Cities Community Development Block Grant is administered by states. For more information, visit the Wisconsin Department of Commerce Bureau Housing website at: <http://commerce.wi.gov/housing/cd-boh-Community-Development-Block-Grant-CDBG.html>, or contact Caryn Stone at (608) 267-3682.

**Fair Housing Assistance Program (FHAP).** The federal fair housing law makes it illegal to discriminate in housing based on race, color, national origin, religion, sex, disability or familial status (i.e., the presence of children) in the sale, rental, or financing of housing. The State of Wisconsin also makes it illegal to discriminate based on age, marital status, lawful source of income and sexual orientation. FHAP provides funds to states to conduct intake of fair housing complaints, investigate complaints, counsel those who believe they have been denied equal access to housing and do systemic investigations. The program also provides outreach and education to consumers, advocates and the general public and technical assistance and training for real estate agents, property owners and managers and other members of the housing industry. General information about the FHAP can be obtained from the HUD website: <http://www.hud.gov/offices/fheo/partners/FHAP/index.cfm>. For local information and assistance, Waushara County residents and officials should initially contact the Wisconsin Department



of Workforce Development Equal Rights Division Civil Right Bureau. Visit their website at: <http://www.dwd.state.wi.us/er/> or contact LeAnna Ware at: (608)266-1997.

**Multi-family Housing Programs.** HUD offers a number of multi-family programs through the state. These programs fund facility purchases, construction, rehabilitation, lead based paint abatement<sup>15</sup>, energy conservation and accessibility improvements. For more information, visit the Wisconsin Department of Commerce Bureau Housing website at: <http://commerce.wi.gov/housing/#HomePrograms> or contact CAP Services ((920) 787-3949), as CAP Services administers many of these programs in Waushara County.

**Public Housing Programs.** HUD offers a number of public housing programs for the development/redevelopment or management of public housing authorities, rental assistance through the Section 8 program and some limited homeownership opportunities. General information can be found at: <http://www.hud.gov/progdesc/pihindx.cfm>. Waushara County currently has no public housing authority.

**Single Family Housing Programs.** HUD offers a number of single family home programs, including homebuyer education and counseling, downpayment assistance, rehabilitation, weatherization, mortgage insurance and reverse mortgages. For general information, visit HUD's website at: <http://www.hud.gov/offices/hsg/sfh/ins/singlefamily.cfm>. Some of these products, such as FHA loans, are available through approved lending institutions. Access to HUD single family home programs can also be obtained through WHEDA or the Wisconsin Department of Commerce Bureau Housing. Information about products WHEDA provides can be found on WHEDA's website at: <http://www.wheda.com/root/WhedaProducts/Residential/Default.aspx?id=182> or you may contact: Arlene Scalzo at: 1-800-334-6873 Ext. 623 for information. For information about products provided through the state Bureau of Housing, visit the Wisconsin Department of Commerce Bureau Housing website at: <http://commerce.wi.gov/housing/#HomePrograms> or contact: Betty Kalscheur at (608) 267-6904. CAP Services also administers some single family home programs in Waushara County. The local phone number for CAP Services is (920) 787-3949. Their website address is: [http://www.capserv.org/pages/About\\_Us.html](http://www.capserv.org/pages/About_Us.html).

**Special Needs Programs.** HUD also funds programs for special need populations through the state. Information regarding emergency shelter/transitional housing programs or housing opportunities for people with AIDS can be found at the Wisconsin Department of Commerce Bureau Housing website at: <http://commerce.wi.gov/housing/#HomePrograms> or by contacting Judy Wilcox at: (608) 266-9388. The state strongly encourages joint emergency shelter/transitional housing (ESG/THS) grant applications. CAP Services has willingly served as the grant writer for ESG and THS grant applications for Waushara County agencies.

## **Federal Financial Institutions Examination Council**

**Community Reinvestment Act.** Through the Community Reinvestment Act (CRA), banks/financial institutions help meet the credit/investment needs of their markets with the primary purpose of community development. This is in part accomplished through direct grants/investments or loans to nonprofits or agencies to develop affordable housing. Direct loans are also given to individual households of which a certain percentage must go to low to

---

<sup>15</sup> Home Lead Assessments are only performed after a child has been poisoned.



moderate income households. More information can be obtained from their website: <http://www.ffiec.gov/cra/default.htm> or from your local financial institution.

### **United States Department of Veterans Affairs**

**Home Loan Guaranty Service.** The Veterans Administration provides a variety of benefits for eligible veterans and their dependents. Housing products include low cost loans for purchase, construction or repair of owner-occupied housing. General information can be obtained from the Veteran's Affairs website at: <http://www.homeloans.va.gov/index.htm>. Two Waushara County websites provide information for veterans and their dependents: <http://www.co.waushara.wi.us/veterans.htm> and <http://www.visitwaushara.com>. The Waushara County Veterans Service Office can also be contacted at (920) 787-0446 for information about specific programs.

### ***National Organizations***

**National Association of Home Builders (NAHB).** The National Association of Home Builders is a trade organization that represents the building industry. They provide information and education about construction codes and standards, national economic and housing statistics, a variety of housing issues, jobs within the housing industry and information about local builders who are members of their organization. Visit their website at: <http://www.nahb.org/> for more information.

**National Low Income Housing Coalition (NLIHC).** NLIHC is a national advocacy group which conducts research on low income housing issues, provides information and data on a variety of housing or housing related issues affecting low income families and publishes reports and data regarding low income housing issues and legislation. Their mission is to end the affordable housing crisis for low income families. Information about NLIHC and its activities can be found at: <http://www.nlihc.org/>. NLIHC also has a number of state partners. Wisconsin has two State Coalition Partners, the Wisconsin Partnership for Housing Development, Inc. and Housing For All. For information about the Wisconsin Partnership for Housing Development, visit their website at: <http://www.wphd.org/> or call their Madison office at: (608) 258-5560. For information about Housing For All, contact Brian Peters of Independence First at: (414) 291-7520.

**United Migrant Opportunity Services (UMOS).** UMOs works with federal, state and local agencies, employers, for profit and nonprofit agencies to meet the housing needs of migrant workers. Call: (920) 787-4617 for information about services and programs in Waushara County. UMOs also operates an emergency shelter in Aurora for a portion of the year. When the Aurora Center Emergency Shelter is open, it can be reached at: (920) 361-1266. Otherwise, persons needing shelter should call (800) 279-8667 for assistance. Information about UMOs's housing programs can also be found on their website at: [http://www.umos.org/social\\_services/housing\\_overview.aspx](http://www.umos.org/social_services/housing_overview.aspx).



## ***State Agencies***

### **University of Wisconsin - Extension**

**Family Living Program.** The family living program provides assistance to families through Waushara County. Some of these programs include financial education and parent education.

**Homeowner Resources.** UW-Extension provides a number of publications and materials to aid homeowners. Topics include home care, home maintenance and repair, life skills, financial information, gardening, landscaping, pest control, etc. These publications may be obtained through the Waushara County UW-Extension office, or accessed online at: <http://www.uwex.edu/ces/house/> or through <http://infosource.uwex.edu/>.

**Housing – Ownership and Renting.** UW-Extension provides a website which includes information on home maintenance and repair, a seasonal newsletter, and Rent Smart, which is a tenant education program. This website is located at: <http://www.uwex.edu/ces/house/housing/renting.cfm>. Publications are also included in Spanish.

**Housing Specialist.** Dr. Marc Smith is the state UW-Extension Housing Specialist. He is located in the UW-Madison School of Human Ecology. His position priorities include assistance with the following topics: local housing policies, homeownership training, housing needs assessment, post-purchase support and housing program evaluation. He can be reached at: (608) 262-2831.

### **Wisconsin Department of Agriculture, Trade & Consumer Protection (DATCAP)**

**Consumer Protection.** DATCAP publishes a number of resources for renters, landlords and homeowners. Some of these are short fact sheets; others, such as “The Wisconsin Way: A Guide for Landlords and Tenants”, are longer publications. These publications can be found on DATCAP’s website at: <http://www.datcp.state.wi.us/cp/consumerinfo/cp/factsheets/index.jsp>.

### **Wisconsin Department of Commerce**

**Bureau of Housing.** This department helps to expand local affordable housing options and housing services by managing a number of federal and state housing programs and providing financial and technical assistance. Visit their website at: <http://commerce.wi.gov/housing/> for additional information. The Bureau of Housing also administers WIFrontDoor, which is a collaborative program with WHEDA and the WI Department of Health and Family Services. This website, located at: <http://www.wifrontdoorhousing.org/>, is a searchable statewide data base designed to help connect those looking for affordable housing with those providing housing and housing services. The website is searchable by location, unit size, availability, accessibility and cost of rent. Landlords and property managers can list their properties; they are also responsible for updating information about their properties. Renters can search for housing and services to fit their needs.

**Migrant, Refugee and Labor Services.** This department coordinates services for migrants, foreign-born residents and their families and employers who hire foreign and Limited English



Proficient workers. Information regarding these services and contact information can be found at: <http://dwd.wisconsin.gov/migrantsandrefugees/>.

### **Wisconsin's Focus on Energy**

**Focus on Energy.** This public private partnership offers a variety of services and energy information to energy utility customers throughout Wisconsin. To learn about the programs and services they offer, visit their website at: <http://www.focusonenergy.com>.

### **Wisconsin Historical Society**

**Historic Preservation.** The Wisconsin Historical Society offers technical assistance and two tax credit programs for repair and rehabilitation of historic homes in Wisconsin. One tax credit program provides state tax credits; the other program provides federal tax credits. The Wisconsin Historic Society also provides grants to local governments and nonprofit organizations for conducting surveys and developing historic preservation programs. For additional information, visit: <http://www.wisconsinhistory.org/hp/>

### **Wisconsin Housing and Economic Development Authority (WHEDA)**

**WHEDA Foundation.** The WHEDA Foundation awards grants to local municipalities and nonprofit organizations through the Persons-in-Crisis Program Fund to support the development or improvement of housing facilities in Wisconsin for low-income persons with special needs. Special needs is defined as homeless, runaways, alcohol or drug dependent, persons in need of protective services, domestic abuse victims, developmentally disabled, low-income or frail elderly, chronically mentally ill, physically impaired or disabled, persons living with HIV, and individuals or families who do not have access to traditional or permanent housing. For more information, visit WHEDA's web site at <http://www.wheda.com/root/AboutWheda/FoundationGrants/Default.aspx?id=72>, or contact: Arlene Scalzo at: 1-800-334-6873 Ext. 623.

**WHEDA Multi-family Products.** WHEDA offers a number of multi-family home products, including tax credits, tax exempt bond funding, construction, rehabilitation and accessibility loans, asset management and tax credit monitoring services. For information about this program, visit WHEDA's web site at <http://www.wheda.com/programs/grants/about.asp>, or contact: Diane M. Schobert at: 1-608-266-0191.

**WHEDA Single Family Products.** WHEDA offers a number of single family home products, including home improvement or rehabilitation loans, homebuyer assistance and homebuyer education. For information about this program, visit WHEDA's web site at <http://www.wheda.com/programs/grants/about.asp>, or contact: Arlene Scalzo at: 1-800-334-6873 Ext. 623.

**Wisconsin Affordable Assisted Living.** WHEDA and the Wisconsin Department of Health and Family Services have partnered to create affordable assisted living for low-income seniors. Through this partnership, housing costs are reduced and assistance is provided to help access the Medicaid program to pay for services. Information regarding elderly statistics, available services, and consumer links to directories of adult day care programs, adult family homes,



community based residential facilities (CBRFs) and residential care apartment complexes (RCACs) can be found at: <http://www.wiaffordableassistedliving.org/>.

### ***Regional Programs***

**CAP Services, Inc.** CAP Services is one of 16 community action programs in the state of Wisconsin. CAP Services offers a number of community based programs in Waushara County, including family services, housing, housing assistance, business development and preschool. CAP Services is a state-designated CHDO (Community Housing Development Organization), which means they have access to certain restricted funds set aside to meet housing needs within communities. The local phone number for CAP Services is: (920) 787-3949. Information about CAP Services can also be found on their website: <http://www.capserv.org/pages/byCounty.html>.



## CHAPTER 3: TRANSPORTATION

### TABLE OF CONTENTS

Introduction .....	3-1
Inventory and Analysis .....	3-1
Streets and Highways .....	3-1
Principal Arterials .....	3-2
Minor Arterials .....	3-2
Major Collectors .....	3-2
Minor Collectors .....	3-3
Local Function Roads .....	3-3
Rustic Roads .....	3-6
Truck Transportation .....	3-6
Railroads .....	3-6
Waterways .....	3-7
Pedestrian Facilities .....	3-7
Cycling Opportunities .....	3-7
Airports .....	3-8
Transit and Transportation Facilities for the Disabled .....	3-9
Current and Future Transportation Projects .....	3-9
Key Findings .....	3-10
Streets and Highways .....	3-10
Other Transportation Modes .....	3-10
Interrelationships with other Plan Elements .....	3-11
Economic Development .....	3-11
Housing .....	3-11
Utilities and Community Facilities .....	3-11
Agriculture Resources .....	3-11
Natural Resources .....	3-12
Cultural Resources .....	3-12
Land Use .....	3-12
Intergovernmental Cooperation .....	3-12
Policies and Programs .....	3-13
State, Regional, County and Local Policies .....	3-13
State of Wisconsin .....	3-13
Regional .....	3-15
County .....	3-15
Federal, State and Regional Programs .....	3-16
Federal Agencies .....	3-16
State of Wisconsin .....	3-16



## TABLES

Table 3-1	Road Network .....	3-1
Table 3-2	PASER Ratings and Maintenance Needs .....	3-4
Table 3-3	Total Miles of Local Roads by PASER Rating .....	3-5

## EXHIBITS

Exhibit 3-1	Functional Class and Average Annual Daily Traffic Volume .....	3-19
Exhibit 3-2	Waushara County Bike Routes .....	3-21



## CHAPTER 3: TRANSPORTATION

### INTRODUCTION

The Town of Plainfield is comprised of a transportation system that is made up of local roads, collectors and arterial streets. Interstate 39 is the predominant transportation corridor spitting the Town east and west. It providing direct route to Madison and Wausau and is an important north and south corridor through central Wisconsin. While private vehicles are the primary mode of transportation in the area, there are several biking and pedestrian opportunities available to residents and visitors.

### INVENTORY AND ANALYSIS

This chapter provides an inventory of the existing transportation, pedestrian, cycling, trucking, and airport facilities in the area. In addition, a summary of the existing transportation plans, policies and funding sources associated with these facilities are discussed.

#### Streets and Highways

The primary transportation system consists of a hierarchal network of highways, byways, and other roads and streets that pass through a community. ***The entire transportation network in the Town of Plainfield is comprised of 73.1 miles of local roads, county highways, interstate and state highways (Table 3-1). Local roads compromise three-quarters (76%) of the road network.***

Table 3-1. Road Network

Town of Plainfield								
Total	IH Miles	% of Total	STH Miles	% of Total	CTH Miles	% of Total	Local Miles	% of Total
73.1	6.2	8%	4.48	6%	7.1	10%	55.3	76%

Source: WisDOT 2008

The hierarchy of the road network calls for each roadway to be classified according to its primary function, ranging from its ability to move vehicles (i.e., a freeway) to its ability to provide direct access to individual properties (i.e., a local street). The three general categories of functional classification used by transportation officials include arterials, collectors, and local roads.<sup>1</sup>

Because traffic volumes are typically a good indicator of a roadway's appropriate functional classification, the Wisconsin Department of Transportation (WisDOT) conducts traffic counts at key locations throughout the state on a regular rotating basis. Displayed as average annual

<sup>1</sup> WisDOT. 2002. *Facilities Development Manual: Procedure 4-1-5*.



daily traffic (AADT), these counts are statistically adjusted to reflect daily and seasonal fluctuations that occur on each roadway.<sup>2</sup> The most recent counts in Waushara County were conducted in 2000, 2003 and 2006. When a significant difference in the two counts is encountered, it can generally be explained by a road closure, detour, or similar circumstance that temporarily disrupts the normal flow of traffic.

### ***Principal Arterials***

Principal arterials serve interstate and interregional trips. These routes generally serve all urban areas with populations greater than 5,000. These roadways are most important in terms of commerce and the transport of goods and services. Rural principal arterials are further subdivided into 1) Interstate highways and 2) other principal arterials. There is one principal arterial in the Town of Plainfield.

- ***I-39 provides a north and south linkage between the south central part of the state, Madison and Beloit and the north central part of the state, Wausau and northern Wisconsin.*** On a larger scale I-39, along with USH 51 traverses central Wisconsin connecting Wisconsin with Upper Michigan and Illinois. I-39 is bisected by a number of principal arterials, including I-90 and I-94 to the south and USH10 to the north. Traffic counts were taken at two locations (within the Town's boundary) along I-39: north and south of the STH 73 interchange in 2006. AADT's on I-39 increased by 1,000 vehicles (13,400 - 14,400) as traffic flowed south through the Town (Exhibit 3-1).

### ***Minor Arterials***

In conjunction with the principal arterials, minor arterials serve other population centers and major traffic generators providing intra-regional and inter-area traffic movements. There is one minor arterial within the Town of Plainfield.

- ***STH 73, a minor arterial, routes traffic east and west through the Town of Plainfield and through the center of the Village of Plainfield.*** On a larger scale STH 73 connects the area to Wisconsin Rapids (northwest) and the City of Wautoma (southeast). AADT's were taken on the east and west side of I-39 in 2003 and 2006. Traffic counts located east of I-39 decreased by 200 vehicles (6,900 – 6,700), while counts recorded west of I-39 decreased by 800 vehicles (4,500 – 3,700) between 2003 and 2006. Generally traffic flow to the east of I-39 increases by 3,000 vehicles per day (Exhibit 3-1).

### ***Major Collectors***

Major collectors provide service to moderate sized communities and other intra-area traffic generators. Major collectors often link those generators to nearby larger population centers or higher function routes (Exhibit 3-1).

---

<sup>2</sup> WisDOT. 2000, 2003 2006. *Wisconsin Highway Traffic Volume Data*.



- **5<sup>th</sup> Avenue** is considered a major collector from CTH O to STH 73. This section of 5<sup>th</sup> Avenue provides access to the southern portions of the Town and the Village of Hancock.
- **CTH BB** begins at the Village of Plainfield's northeast corner and flows north until Alp Avenue where the road curves to the northeast leaving the Town of Plainfield and continues northeast into Portage County. AADT's stayed consistent from 2003 to 2006 (820 – 860).

### ***Minor Collectors***

Minor collectors collect traffic from local function roads and provide links to all remaining smaller communities, locally important traffic generators, and higher function roads. All developed areas should be within a reasonable distance of a collector road.

- **CTH O** is classified as a minor collector from 2nd Avenue eastward to 5<sup>th</sup> Avenue. AADTs were taken at the intersection of CTH O and 4<sup>th</sup> Avenue. Traffic decreased by 460 vehicles per day between 2000 (780) and 2003 (320). This decrease was likely influenced by local factors (i.e. road construction).

### ***Local Function Roads***

Local function roads provide access to adjacent land and provide for travel over relatively short distances. All roads not classified as arterials or collectors are local. These roads provide access to residential, recreational, commercial, and industrial uses within the area. WisDOT does not generally conduct official traffic counts on local function roads; however these roads probably carry fewer than 200 vehicles per day. The Town has a number of significant routes listed as local roads. The Following roads are significant local roads that carry approximately 100 or more vehicles per day:

- **CTH KK** - between 3<sup>rd</sup> Avenue and CTH O;
- **CTH O** – between 5<sup>th</sup> Avenue and 7<sup>th</sup> Avenue;
- **5<sup>th</sup> Avenue** – between STH 73 and Akron Avenue;
- **6<sup>th</sup> Drive** – between South Main Street and Archer Avenue.

Every two years all jurisdictions in Wisconsin are required to rate the condition of their local roads and submit the information to WisDOT. The surface condition rating of each roadway is updated in the State's computer database, the Wisconsin Information System for Local Roads (WISLR). The WISLR database is available to all jurisdictions via the internet and can be used to develop a capital improvement and maintenance program. The WISLR analysis is based, in most cases, on the PASER road rating method.<sup>3</sup>

---

<sup>3</sup> WISLR. 2007. *Wisconsin Information System for Local Roads*. <https://trust.dot.state.wi.us/wislr/>.



**Table 3-2. PASER Ratings and Maintenance Needs**

Paved Road Rating	Condition	Needs
9 & 10	Excellent	None
8	Very Good	Little maintenance
7	Good	Routine maintenance, crack filling
6	Good	Sealcoat
5	Fair	Sealcoat or nonstructural overlay
4	Fair	Structural improvement - recycling or overlay
3	Poor	Structural improvement - patching & overlay or recycling
2	Very Poor	Reconstruction with extensive base repair
1	Failed	Total reconstruction
Gravel Road Rating	Condition	
5	Excellent	Little maintenance
4	Good	Routine maintenance
3	Fair	Regarding, ditch & culvert maintenance, additional gravel
2	Poor	Additional aggregate, major ditch & culvert maintenance
1	Failed	Complete rebuild and/or new culverts

Source: Transportation Information Center, UW-Madison; 2000, 2001, and 2002

PASER pavement management system (PMS) has been developed and improved over the years by the Transportation Information Center (TIC) at the University of Wisconsin – Madison in cooperation with WisDOT and others. In general, PASER rates paved roadway surfaces on a scale of 1 to 10, with 1 being a road that needs to be reconstructed and 10 being a newly constructed road.<sup>4</sup> Unpaved roads are rated on a scale of 1 to 5, with 1 being a road that needs rebuilding and 5 being a brand new road.<sup>5</sup> This inventory provides the basis for developing a planned maintenance and reconstruction program and helps the town to track necessary improvements. Prompt maintenance can significantly reduce long-term cost for road repair and improvement. Table 3-3 and Appendix C provide a breakdown and display of the PASER ratings, conditions and maintenance needs.

Table 3-3 provides a summary of the total miles of local roads in the Town of Plainfield by PASER rating. **Approximately ninety-four percent (51.7 miles) of the roads within the Town are paved.** Of the total paved roads, roughly 28 percent (14.7 miles) of the paved roads are in excellent to very good condition and require little maintenance. **The vast majority of paved roads in Plainfield (35 miles, 68%) are considered to be in good to fair condition.** While they are in good condition structurally, they will need slightly more maintenance work. This work may involve seal coating, crack filling, non-structural overlay and possibly structural improvements. The remaining local roads will require substantially more

<sup>4</sup> Transportation Information Center. 2000, 2001, and 2002. *PASER Manuals: Asphalt, Brick & Block, Concrete, and Sealcoat.*

<sup>5</sup> Transportation Information Center. 2001 and 2002. *PASER Manuals: Gravel and Unimproved Roads.*



work. Approximately 2 miles (4%) of the roads (4<sup>th</sup> Avenue from Archer Avenue to CTH O) are considered to be in very poor shape and will require reconstruction with extensive base repair.

**Table 3-3. Total Miles of Local Roads by PASER Rating**

<b>Town of Plainfield</b>	
<b>Paved Road Rating</b>	<b>Total</b>
10	0.0
9	3.2
8	11.5
7	14.9
6	5.9
5	8.3
4	5.9
3	0.0
2	2.0
1	0.0
Not Rated	0.0
<b>Subtotal</b>	<b>51.7</b>
<b>Gravel Road Rating</b>	<b>Total</b>
5	0
4	1
3	1.1
2	1.4
1	0
Not Rated	0
<b>Subtotal</b>	<b>3.5</b>
<b>Total</b>	<b>55.2</b>

*Source:* WISLR. 2008. *Wisconsin Information System for Local Roads*.

Gravel roads within the Town are also generally well-maintained. The Town has a total of 3.5 miles of unpaved roads, 29 percent (1 mile) of unpaved roads are considered to be in good condition requiring only routine maintenance, while 31% (1.1 miles) of the Town's unpaved roads are considered to be in fair condition requiring a more intensive maintenance schedule. Forty percent (1.4 miles) of the Town's unpaved roads are considered to be in poor condition (Aspen Avenue from 5<sup>th</sup> Avenue to 5<sup>th</sup> Drive, Akron Avenue from 2<sup>nd</sup> Avenue to 2<sup>nd</sup> Avenue, and Aspen Avenue from 1<sup>st</sup> Avenue to 2<sup>nd</sup> Avenue) requiring additional aggregate or major ditch and culvert maintenance (See Appendix C).



## Rustic Roads

The Rustic Roads System was created by the State Legislature in 1973 to help citizens and local units of government preserve scenic lightly traveled country roads for the leisurely enjoyment of bicyclists, hikers, and motorists.<sup>6</sup> They offer excellent opportunities to travel through an attractive rustic area. The scenic qualities of these roads are protected by agreement with bordering property owners and by implementing roadside maintenance practices that allow wildflowers and other native flora to extend to the edge of the pavement. ***There are no Rustic Roads in the Town of Plainfield.*** The WisDOT lists two roads in Waushara County that are in the Rustic Roads program. Rustic Road 48 (26<sup>th</sup> Road) is a 2.1 mile road that begins at CTH H and runs northwest to CTH W in the Town of Saxeville. Rustic Road 102 forms a loop off of STH 21 beginning at Cumberland Avenue and ending at 9<sup>th</sup> Avenue in the Town of Richford, just east of the Village of Coloma. Several other town roads within Waushara County may have the potential of being listed as a Wisconsin Rustic Road.

## Truck Transportation

There are several designated truck routes within Waushara County. STH 21 is the primary truck transportation route in Waushara County and provides direct access to Oshkosh and the Fox Cities to the east. STH 21 also provides access to western destinations in Wisconsin including the I-39/USH 51 corridor, I90, and I94. Of these routes, I-39 and STH 73 are the only routes that falls within the Town. Local truck traffic occurs on several other county highways throughout the County, but is more limited in volume.

***There are two major corridors passing through Waushara County.<sup>7</sup>***

- ***The Cranberry Country Corridor (STH 21) stretches 100 miles across the state from east to west (Oshkosh to Tomah).*** This corridor connects the Fox Valley to I39, southern Minnesota, South Dakota and beyond.
- ***The Wisconsin River Corridor (I-39/US 51) stretches 260 miles linking north central Wisconsin to south central Wisconsin and Illinois.*** This corridor provides critical economic links for industrial and commercial communities in north central Wisconsin (i.e. Wausau, Wisconsin Rapids, Stevens Point and Marshfield).

## Railroads

***Rail service to Waushara County was discontinued several decades ago.*** The nearest rail service is available at Stevens Point, which is a division headquarters for the Canadian National railroad. Other rail lines include the Union Pacific, which passes through southern Marquette County, and the Canadian Pacific Railway, which has a major yard facility in Portage. All three lines generally connect Chicago with the Twin Cities and points westward. Amtrak utilizes the Canadian Pacific line to provide passenger service. In addition to Portage, station stops include Columbus, Wisconsin Dells, and Tomah.

<sup>6</sup> WisDOT. 2005. *Wisconsin's Rustic Roads: A Positive Step Backward.*  
<http://www.dot.state.wi.us/travel/scenic/rusticroads.htm>.

<sup>7</sup> Draft Connections 2030 Long Range Multimodal Transportation Plan



## Waterways

***There are no commercial ports in Waushara County.*** The nearest commercial port is located in Green Bay. Passenger ferries are located in Manitowoc and Milwaukee. Both ports offer passage across Lake Michigan to Lower Michigan.

Several municipalities and Waushara County operate recreational boat facilities throughout the county. Sand Lake is located between 5<sup>th</sup> drive and 7th Avenue; however the lake does not have a boat launch.

## Pedestrian Facilities

Walking is emerging as an important exercise as well as mode of transportation. The *Wisconsin Pedestrian Policy Plan 2020* outlines statewide and local measures to increase walking throughout the state as well as promote pedestrian safety and comfort. Pedestrians, by definition, are anyone who travels by foot. In addition, this definition has been extended to disabled persons who require the assistance of a mobility device. Pedestrian traffic can be difficult along highways where sidewalks are not present, safety measures are absent, or traffic volume is heavy.

Waushara County has several pedestrian opportunities. Hiking trails are located at several county parks. The county also operates the Bannerman Trail. A trailhead is located in downtown Redgranite on the south side of STH 21. The trail provides recreational opportunities for pedestrian activities as well as cross-county skiing, bicycling, and snowmobiling. The trail utilizes the former railroad grade that served quarries located in the Redgranite/Lohrville area. The seven mile trail terminates at STH 73 north of Neshkoro. The Ice Age National Scenic Trail is a thousand-mile-long footpath located entirely within Wisconsin. It is one of only eight National Scenic Trails in the County. Approximately 60 percent of Wisconsin residents live within 20 miles of the Ice Age Trail.<sup>8</sup> A portion of the Ice Age Trail passes through western Waushara County but does not cross into the Town of Plainfield. The trail provides recreational opportunities through the Chaffee Creek and Mecan River State Fishery areas and the Greenwood State Wildlife Area.

Most of the town roads in Waushara County have limited shoulder areas, and the posted speed limits are 45 miles per hour or greater. These conditions often hamper safe pedestrian travel. The relatively low density development and lack of sidewalks do not facilitate increased pedestrian mobility. The centralization of goods and services often requires residents to use motor vehicles for routine trips.

## Cycling Opportunities

Over 1,000 miles of highly scenic low volume roads provide abundant opportunities for bicycling in Waushara County. As such, ***Waushara County has established an interconnected system of bicycle routes throughout the county.***<sup>9</sup> The rolling topography offers several challenges for bicyclists of all fitness levels. The routes follow existing town roads and county trunk highways. Bicycle routes range in distance from 23 to 35 miles in length and offer several

<sup>8</sup> Ice Age Park and Trail Foundation; <http://www.iceagetrail.org/faqs.htm>

<sup>9</sup> Waushara County Parks Department. 2007. *Bike Routes*. [http://www.co.waushara.wi.us/bike\\_routes.htm](http://www.co.waushara.wi.us/bike_routes.htm).



rest stops at municipal and county parks as well as local tourist attractions. ***Waushara County's Route 1 – Plainfield - Oasis totals 30.1 miles and traverses the Village of Plainfield and the towns of Plainfield, Oasis, Hancock and Deerfield.*** This route utilizes a number of county and local roads that consists of a relatively flat easy ride (See Exhibit 3-2).

Roadways with traffic volume less than 1,000 vehicles per day are considered generally safe for bicycling. Roadways meeting this criterion that are located within a primary bicycle corridor identified by WisDOT provide potential linkages between existing bicycle trails and are considered to be part of an interconnected statewide bicycle route network. Currently, the Bannerman Trail is the only multi-use recreational trail within Waushara County.

WisDOT has made several recommendations for bicycle traffic for Waushara County in the *Wisconsin State Bicycle Transportation Plan 2020*.<sup>10</sup> The following recommendations have been made for the Town's bicycle traffic:

Best Conditions for bicycling:

- CTH KK
- CTH O
- CTH B
- STH 73 – east of the Village of Plainfield

Moderate Conditions for bicycling:

- STH 73 – west of the I-39 interchange
- 5<sup>th</sup> Avenue – CTH O to STH 73

Undesirable Conditions for bicycling (high traffic volume)

- STH 73 – from the I-39 interchange to CTH P (eastern portions of the Village of Plainfield).

## Airports

***The four airports most convenient to area residents that provide scheduled commercial air service are: Central Wisconsin Regional Airport in Mosinee, Outagamie County Regional Airport in Appleton, Dane County Regional Airport in Madison, and Austin Straubel Airport in Green Bay.*** Other airports/airfields offering a lesser range of services include those in Oshkosh, Stevens Point, Wisconsin Rapids, Wautoma, Waupaca, and Wild Rose.

Two Basic Utility airport facilities are located in Waushara County. A Basic Utility (BU) airport is capable of handling single engine piston aircraft and smaller twin engine aircraft. Basic Utility airport facilities are sub-classified as class B (BU-B) and class A (BU-A) according to the gross weight and wingspan of the aircraft. These aircraft typically seat up to six persons and are used for private corporate travel, charter flying, recreational flying, and crop dusting. The Wautoma Municipal Airport is a BU-B facility located southwest of the City of Wautoma in the Town of Dakota. The airport has two paved runways measuring 1,190 feet and 3,300 feet in length and a turf runway measuring 2,280 feet. Aircrafts with gross weights of less than

---

<sup>10</sup> WisDOT. 1998. *Wisconsin State Bicycle Transportation Plan 2020*.



12,500 pounds and wingspans less than 49 feet can be accommodated at this airport. Besides serving local air needs, the airport is utilized by pilots attending the annual EAA fly-in in Oshkosh. The Wild Rose Idlewild Airport is BU-A facility. The airport can accommodate aircraft with gross weights less than 6,000 pounds and wingspans less than 49 feet. A helipad is also located at the Wild Rose Community Memorial hospital for "flight for life" emergencies.<sup>11</sup>

Several private airports are located throughout Waushara County. Private facilities are generally characterized by short (2,500 to 3,000 feet) turf covered runways. Private runways primarily provide services for recreational flyers.

### Transit and Transportation Facilities for the Disabled

***There is no scheduled bus service within the county.*** However, the Department of Aging administers two programs on a county-wide basis that serve the elderly and disabled residents of Waushara County. These two programs are a volunteer driver program and a mini-bus program. The mini-bus program is based in the City of Wautoma and provides transportation for both medical and personal trips. Other members of the public can also utilize the mini-bus if space is available.<sup>12</sup>

### Current and Future Transportation Projects

***There one major reconstruction plan scheduled for the Town of Plainfield.***<sup>13</sup> However, WisDOT has listed the following projects in Waushara County:

- CTH E Pine River Bridge Rehabilitation – Town of Leon (2010)<sup>14</sup>
- CTH XX Fox River Bridge Rehabilitation – City of Berlin (2010)<sup>14</sup>
- CTH XX – STH 21 to CTH D Resurface (2009)<sup>14</sup>
- STH 21 – Cambridge Street Road Maintenance – City of Wautoma (2011)<sup>14,13</sup>
- STH 22 – Main Street Road Maintenance – Village of Wild Rose (2011)<sup>14</sup>
- STH 49 – Poy Sippi to Fremont Road Maintenance (2010)<sup>14, 13</sup>
- STH 49 – Auroraville to Waupaca, Mosquito Creek Bridge Replacement (2010)<sup>14, 13</sup>
- ***STH 73 – Wautoma to Plainfield, Construction/Pavement Replacement (2011)***<sup>14, 13</sup>
- STH 73 – Princeton to Wautoma, Road Resurface (2010 – 2013)<sup>13</sup>.

County trunk and state highways comprise the Federal Aids Secondary System, thus qualifying them for federal aid for capital projects involving construction or repair. Waushara County is responsible for routine maintenance on these roadways. Maintenance of roads such as town roads and city/village streets not on the state or county system rests with the local jurisdiction. As Table 3-1 indicates, these local roads comprised the bulk of a community's total roadway mileage. To assist communities with the cost of constructing and maintaining these roads, the state provides general transportation aids (GTA) which are available based on lane mileage and aidable local costs. Aidable local costs generally include the local share of all road and street construction and construction materials. The rate-per-mile is statutorily specified and will be

<sup>11</sup> WisDOT. 1999. *Wisconsin State Airport System Plan*.

<sup>12</sup> Baugrud, P. 2005. Personal Communication. Waushara County Aging and Disability Resource Center.

<sup>13</sup> WisDOT. 2008. *Wisconsin 2008-2013 Six Year Highway Improvement Program*.

<sup>14</sup> 2009 – 2012 Statewide Transportation Improvement Program Final, Jan. 2009. WisDOT.



\$2,015 in 2009.<sup>15</sup> It should be noted that road spending fluctuates, especially for larger municipalities, and depends on the number and types of projects that have been allocated for that year. Cities and villages also have more costly facilities, such as curb and gutter, storm sewer, and sidewalks which raise the cost per mile above town spending amounts.

## **Key Findings**

### ***Streets and Highways***

- The entire transportation network in the Town of Plainfield is comprised of 73.1 miles of local roads, county highways, interstate and state highways. Local roads comprise over half (76%) of the road network.
- I-39, a principal arterial, provides north and south linkage between the south central part of the State (Madison and Beloit) and the north central regions (Wausau and points north).
- STH 73, a minor arterial, routes traffic east and west through the Town of Plainfield and through the center of the Village of Plainfield.
- Approximately ninety-four percent (51.7 miles) of the roads within the Town of Plainfield are paved.
- The vast majority of paved roads in the Town of Plainfield (35 miles, 68%) are considered to be in good to fair condition.

### ***Other Transportation Modes***

- There are no Rustic Roads in the Town of Plainfield.
- There are two major corridors passing through Waushara County. The Cranberry Country Corridor (STH 21) stretches 100 miles across the state from east to west (Oshkosh to Tomah). This corridor connects the Fox Valley to I39, southern Minnesota, South Dakota and beyond. The Wisconsin River Corridor (I-39/USH 51) stretches 260 miles linking north central Wisconsin to south central Wisconsin and Illinois.
- Rail service to Waushara County was discontinued several decades ago.
- There are no commercial ports in Waushara County.
- Waushara County has established an interconnected system of bicycle routes throughout the county. Waushara County's Route 1 – Plainfield-Oasis totals 30.1 miles and traverses the Village of Plainfield and the towns of Plainfield, Oasis, Hancock and Deerfield.
- The four airports most convenient to area residents that provide scheduled commercial air service are: Central Wisconsin Regional Airport in Mosinee, Outagamie County Regional Airport in Appleton, Dane County Regional Airport in Madison, and Austin Straubel Airport in Green Bay.
- There is no scheduled bus service within the county.
- There is one major transportation project scheduled for the Town of Plainfield - STH 73 – Wautoma to Plainfield, Construction/Pavement Replacement (2011).

---

<sup>15</sup> WisDOT. 2005. *General Transportation Aids*. <http://www.dot.wisconsin.gov/localgov/highways/gta.htm>



## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

### **Economic Development**

Providing a quality transportation system is important to the economic success of the area. Businesses need to assess the transportation system as to its ability to ship and receive goods and provide access and increase visibility for customers. Employee access to the business facility is also crucial, especially if the jobs offered will be in the lower-wage category. These jobs are frequently filled by second wage-earners in the household or by persons with limited job options, including untrained persons with disabilities or young people. These groups of people are frequently not able to drive or cannot afford reliable transportation. Service occupations, which employ over 20 percent of people in the county, encompass such jobs.

Additionally, it is important to remember that different businesses have different transportation requirements. For example, retail businesses in the villages or the City of Wautoma may value on-street parking and pedestrian accommodations more than service businesses elsewhere in the County. Businesses which are located along major transportation corridors will require off-street parking.

### **Housing**

Housing plays a strong role in transportation since either the origin or the destination of most trips is the home. When new residential developments are planned, it is important to consider how the new development will affect the transportation infrastructure, community accessibility, and the safety of the area. Affordable housing, including mixed income development, should be located in a manner that facilitates transportation access to services and employment. Consideration to both pedestrian and bicycling facilities should be given in all housing developments.

### **Utilities and Community Facilities**

Joint and/or coordinated planning of public and transportation facilities is essential. The location of schools is closely related to transportation. Ideally, primary and secondary schools should have safe pedestrian and bicycle access. Trip distances should be minimized to reduce the need for school busing and automobile transportation to the school. Access to public transportation can also help minimize transportation costs for the school district. Colleges and universities can also benefit greatly by having public transit available by reducing the need for parking space and by making the campus more accessible to a broader range of students including local, low-income, and disabled students.

Similar to schools, it is important that government buildings as well as human services be located with access to public transportation. Coordinating transportation planning with sewer service area planning helps minimize the overall cost of providing infrastructure.

### **Agriculture Resources**

The transportation system provides access and mobility for rural residents and the farming community. Farmers utilize the transportation system to both transport goods to market and to



provide mobility between their various farming operations. State and county highways throughout Waushara County provide farmers in the county access to both local and regional markets. When considering possible highway expansion projects, the impact on existing farming operations, especially as it relates to the creation of split parcels of agricultural land, must be considered. Access to these parcels may require unsafe highway crossings by farm equipment, or ultimately the loss of use of this land for agricultural purposes.

### **Natural Resources**

Transportation decisions can both positively and negatively impact the environmental quality of the area. Development and subsequent transportation improvements on state and county highway corridors or other potential projects may impact the area's natural resources (wetland areas and forestland). Loss of wetlands, which act as a natural buffer to filter nutrients and other pollutants, can be harmful to the wildlife habitat, including endangered species, and groundwater recharge. Finally, sprawl leads to longer travel times, which could result in increased air quality issues due to automobile emissions.

### **Cultural Resources**

Early Native American habitation, the geological landscape, and the area's historic buildings are significant to the local history. It is imperative that as growth occurs and transportation projects are proposed, sensitivity be given to both the identified resources and to the areas where other historic and cultural resources may exist. Since the identity and integrity of the community depends on the preservation of these unique features, the impact from expanded transportation corridors and new land development must be kept to a minimum. Consideration should also be given to the impact of future transportation projects on the cultural identity of the historic downtown areas.

### **Land Use**

Transportation, as with other planning elements, has a strong connection to land use. While transportation's primary purpose is to serve land use, land use patterns are dependent upon the condition and effectiveness of the transportation system. Expanded arterials, such as US 10, spur development by attracting development in proximity to new interchanges. Secondly, the traffic may be relocated if county highways or local roads are bisected or re-routed. Existing businesses may be negatively impacted as the former traffic flows for economic survival.

The efficient movement of vehicular traffic provides a quicker connection from one place to another. The expansion of STH 21 from two lanes to four lanes may reduce travel times from the Fox Cities to Waushara County and other areas. However, the increased accessibility may create additional development pressure as people are able to move further from urban centers without significantly increasing travel time to work and shopping.

### **Intergovernmental Cooperation**

Transportation systems go beyond municipal boundaries. Regional development patterns and municipal land use policies affect the transportation network. This network must efficiently move people and goods from one place to another. The transportation system is made up of



local roads, collector and arterials, none of which stop at municipal borders but continue from one community to another. An efficient transportation system can not be dependent on the decisions of one community but instead upon the input and cooperation of many different entities working together. For instance the possible expansion of STH 21 would affect many jurisdictions throughout the County. Each of these jurisdictions, along with the State of Wisconsin, would have input into the expansion of these transportation corridors. The resulting expansion will not only impact the local jurisdictions that it passes through, but could also impact the economics of the state as goods and people are more quickly and efficiently transported.

## POLICIES AND PROGRAMS

### State, Regional, County, and Local Policies

#### *State of Wisconsin*

**Wisconsin State Highway Plan 2020.** Wisconsin's State Trunk Highway system, consisting of approximately 11,800 miles of roads, is aging and deteriorating at the same time traffic congestion is increasing. In response to this critical issue, WisDOT, in partnership with its stakeholders, has developed the *Wisconsin State Highway Plan 2020*, a 21-year strategic plan that considers the highway system's current condition, analyzes future uses, assesses financial constraints, and outlines strategies to address its preservation, traffic movement and safety needs.<sup>16</sup> The plan is updated periodically to reflect changing transportation technologies, travel demand, and economic conditions in Wisconsin.

According to the Wisconsin State Highway Plan 2020, STH 21 from Oshkosh to I-39/U.S. 51 has been identified as a potential major project. Potential projects are subject to environmental analysis and legislative approval; they will be re-evaluated in future state transportation plans.

This plan also stressed the need to develop a safe inter-modal transportation system which can accommodate alternate forms of transportation, including designating specific state and county highways capable of safely accommodating bicycle transportation. Specific accommodations recommended in the plan include the use of designated bicycle lanes in urban areas, widening traffic lanes to allow for bicycle travel, and paving shoulders to allow for increased bicycle use.

**Connections 2030 Long Range Multimodal Transportation Plan – Draft.** A draft of the Connections 2030 Long Range Multimodal Transportation Plan was released in the fall of 2008. The plan address all forms of transportation; integrates transportation modes; and identifies policies and implementation priorities to aid transportation decision makers when evaluating program and project priorities over the next 20 years. The plan is organized around transportation themes rather than modes. The seven themes are to (1) Maintain Wisconsin's transportation system; (2) Promote transportation safety; (3) Foster Wisconsin's economic growth; (4) Provide mobility and transportation choice; (5) Promote transportation efficiencies; (6) Preserve Wisconsin's quality of life; and (7) Promote transportation security. Corridor management will be one of the main tools that WisDOT will use to achieve the plans goals.

---

<sup>16</sup> WisDOT. 1999. *Wisconsin State Highway Plan 2020*.



Two corridors are found in Waushara County: the Cranberry Country Corridor and the Wisconsin River Corridor. The Cranberry Country Corridor links the Fox Valley and I-94 to locations west in southern Minnesota, South Dakota and beyond. The corridor also serves the Wisconsin River flowage, Waushara County and Winnebago County tourism/recreation areas. The Wisconsin River Corridor is a critical tourist corridor that connects the population centers in Illinois and southern Wisconsin to major recreation areas on the north. The Wisconsin River Corridor passes through the Town of Plainfield.

**Wisconsin State Bicycle Transportation Plan 2020.** The *Wisconsin State Bicycle Transportation Plan (WSBTP) 2020* specifically addresses the future needs of bicycle transportation. Two primary goals exist in the plan: to double the number of bicycle trips made by 2010 and to reduce the number of motor vehicle-bicycle crashes by 10 percent by 2010. To achieve these goals, objectives for engineering, education, enforcement and encouragement were identified. These included not only the need for the construction of an expanded network of transportation facilities that allows for safe bicycle travel, but also for the promotion of education to advance vehicle driver awareness of bicyclists (drivers licensing and bicycle safety courses). Finally, tips to promote the utility and ease of bicycle transportation were identified as well as the mandate to increase the enforcement of reckless driving behavior by motorists and bicyclists alike.

The *WSBTP* provides suggestions for both intercity (rural) and urban/suburban bicycle facilities. For the purposes of the *WSBTP*, urban areas were defined as villages or cities with populations of 5,000 persons or greater. Providing paved shoulders for bicycle accommodations along rural highways and the widths of these shoulders are determined by ADT, percentage of trucks, and curves and hills (see Wisconsin Rural Bicycle Planning Guide, Appendix A, Road Evaluation Method).

**Wisconsin State Airport System Plan 2020.** The *Wisconsin State Airport System Plan 2020* provides a framework for the preservation and enhancement of a public-use airport system which will meet future aviation demands for the state. It provides an inventory of existing public-use airport facilities; and categorizes them according to their current services, projected use, and future scheduled maintenance and construction projects. Based on existing conditions and projected improvements that are listed within airport master or layout plans, forecasts are made for future airport classifications. No projected changes have been made in the status of Waushara County's airport classifications. Several improvements have been completed in recent years at the Wautoma Municipal Airport. These have included taxing and runway expansion; entrance repairs, hanger improvements, etc. The 5-year Airport Improvement Program<sup>17</sup> indicates that a number of projects are planned at the Wautoma and Wild Rose Airports. These include seal coating, constructing a terminal building, runway expansion, and a land acquisition at the Wautoma Municipal Airport. In addition site improvements are planned for the Wild Rose Idlewild Airport.

---

<sup>17</sup> <http://www.dot.wisconsin.gov/projects/state/docs/air-5yr-plan.pdf>



## ***Regional***

**East Central Wisconsin Regional Planning Commission.** East Central Wisconsin Regional Planning Commission has adopted a regional smart growth plan. As part of this planning process, East Central proposed five core transportation goals:

- To act to help ensure that the negative effects of sprawl development on our regional transportation system are minimized by encouraging new development to locate where adequate services and facilities exist.
- To work with all levels of government and organizations throughout the region to pursue adequate funding for transportation projects and programs which meet short term and long term needs.
- To help ensure that the regional transportation network links economic centers and efficiently moves people and freight throughout the region.
- To help maintain and continue the balance between transportation and the environment through efficient and consistent transportation and land use planning.
- To help ensure that alternative modes of transportation to the automobile exist and mobility options for all are efficient.

In 2002, East Central prepared a *STH 21 Corridor Study* that examined the corridor from Oshkosh to the Town of Rushford in Winnebago County. While this study looked at only a small portion of STH 21, it did address the long term needs of the entire corridor. According to the study, "In the future it may be desirable to construct STH 21 as a four lane expressway to Interstate 90/94".

## ***County***

**Zoning.** The *Waushara County Zoning Code* sets standards for access driveways and streets. Sec. 58.828. regulates access driveways (access permits, spacing standards, and number and width of driveways per land use) while Sec. 42-81 regulates street design within subdivisions.

The county zoning ordinance (Sec. 42-81) requires all roads within subdivisions to be built to certain standards. This is important to the continued success of the transportation network.

**Highway Department.** The Waushara County Highway Department provides maintenance on county highways found in the area. It also provides roadway and ditch maintenance for the towns within the county on a contract basis. The County does not have an officially adopted transportation plan or Capital Improvement plan. However, it is the policy of the County to evaluate the county road system in the spring of the year and set a specific roadway maintenance schedule for the coming year.



## Federal, State and Regional Programs

### *Federal Agencies*

**Surface Transportation Program – Rural (STP-Rural).** This program allocates federal SAFETEA-LU funds to complete a variety of improvements to rural local highways and roadways. To be eligible, two conditions must be met: the road must be located outside of an urban area and must be classified as at least a rural major collector. Project proposal applications are accepted only in odd numbered years. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/stp-rural.htm>.

**Surface Transportation Program – Urban (STP-U).** This program allocates federal funds to complete a variety of improvements to federal-aid-eligible roads and streets in urban areas. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/stp-urban.htm>. Berlin is an urban area that qualifies for STP-Urban and a portion of this is located in Waushara County.

### *State of Wisconsin*

**General Transportation Aid.** Road maintenance is in part funded by disbursement of the State Transportation Fund. The largest portion comes from General Transportation Aids. The State provides an annual payment to each county and municipality, which augments the local government's cost for activities such as road construction, crack and pothole filling, snow removal, and other related transportation maintenance. Disbursements from the account are determined by the total mileage of local roads within the municipality or by a formula based on historic spending. This information must be reported annually. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/gta.htm>.

**Local Roads Improvement Program (LRIP).** This program provides funding to improve or replace seriously deteriorating county highways, town roads, and city or village streets. New roads are not eligible. LRIP funds pay up to 50% of total eligible costs while the remaining amount must be matched by the local government. The program has three basic programs: County Highway Improvement (CHIP); Town Road Improvement (TRIP); and Municipal Street Improvement (MSIP). Additional discretionary funds are available for high cost projects. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/lrip.htm>.

**Connecting Highway Aids (CHA).** The CHA program assists municipalities with costs associated with increased traffic and maintenance on roads that connect segments of the State Trunk Highway system. Over 120 municipalities receive quarterly payments on a per lane mile basis. There are no connecting highways currently located in Waushara County. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/connecting.htm>.

**Flood Damage Aids.** This program provides funds to assist local units of government to improve or replace roads or roadway structures that have sustained major damage from flooding. The program helps defray costs for damaged streets, highways, alleys, or bridges which are not associated with the State Trunk Highway System. More information can be found at <http://www.dot.wisconsin.gov/localgov/highways/flood.htm>.



**Rural and Small Urban Area Public Transportation Assistance Program.** This program allocates federal funds to local units of government to provide both capital and operating costs for public transit services which operate within rural areas. All municipalities with populations less than 50,000 are eligible. More information can be found at <http://www.dot.wisconsin.gov/localgov/transit/ruralsmall.htm>.

**Wisconsin Employment Transportation Assistance Program (WETAP).** This program is designed to provide transportation for low-income workers to jobs, training centers, and childcare facilities through enhanced local transportation services. Funding is provided by a combination of federal, state, and local funds. This program provides a crucial link to allow low-income workers to remain in the workforce. More information can be found at <http://www.dot.wisconsin.gov/localgov/transit/wetap.htm>.

**Local Transportation Enhancement Program (TE).** This program provides funds that increase multi-modal transportation within a region while enhancing the community and the environment. Eligible projects include multi-use recreational trails, landscaping, or the preservation of historic transportation structures. Funds cover up to 80% of the total eligible project costs. More information can be found at <http://www.dot.wisconsin.gov/business/econdev/te.htm>.

**The Bicycle and Pedestrian Facilities Program (BPFP).** This program funds projects that that construct or plan for bicycle or bicycle/pedestrian facilities. For information on this program, go to [www.dot.wisconsin.gov/localgov/aid/bike-ped-facilities.htm](http://www.dot.wisconsin.gov/localgov/aid/bike-ped-facilities.htm).

**Transportation Economic Assistance Grant Program (TEA Grant).** This program provides a 50% state grant to local governments, private businesses, and consortiums for road, rail, harbor, and airport projects that are necessary to help attract employers to Wisconsin. These grants have a performance-based incentive and successful funding requires that businesses and industries created by the grant program retain and expand local economies in Wisconsin. More information can be found at <http://www.dot.wisconsin.gov/business/econdev/tea.htm>.

**County Elderly and Disabled Transportation Assistance Program.** County governments are eligible for funds to establish a transit program for elderly and disabled citizens. The program allows for flexibility in various transportation options to their clients. County governments must provide a 20% match in funds. More information can be found at <http://www.dot.wisconsin.gov/localgov/transit/countyelderly.htm>.



**Exhibit 3-1**

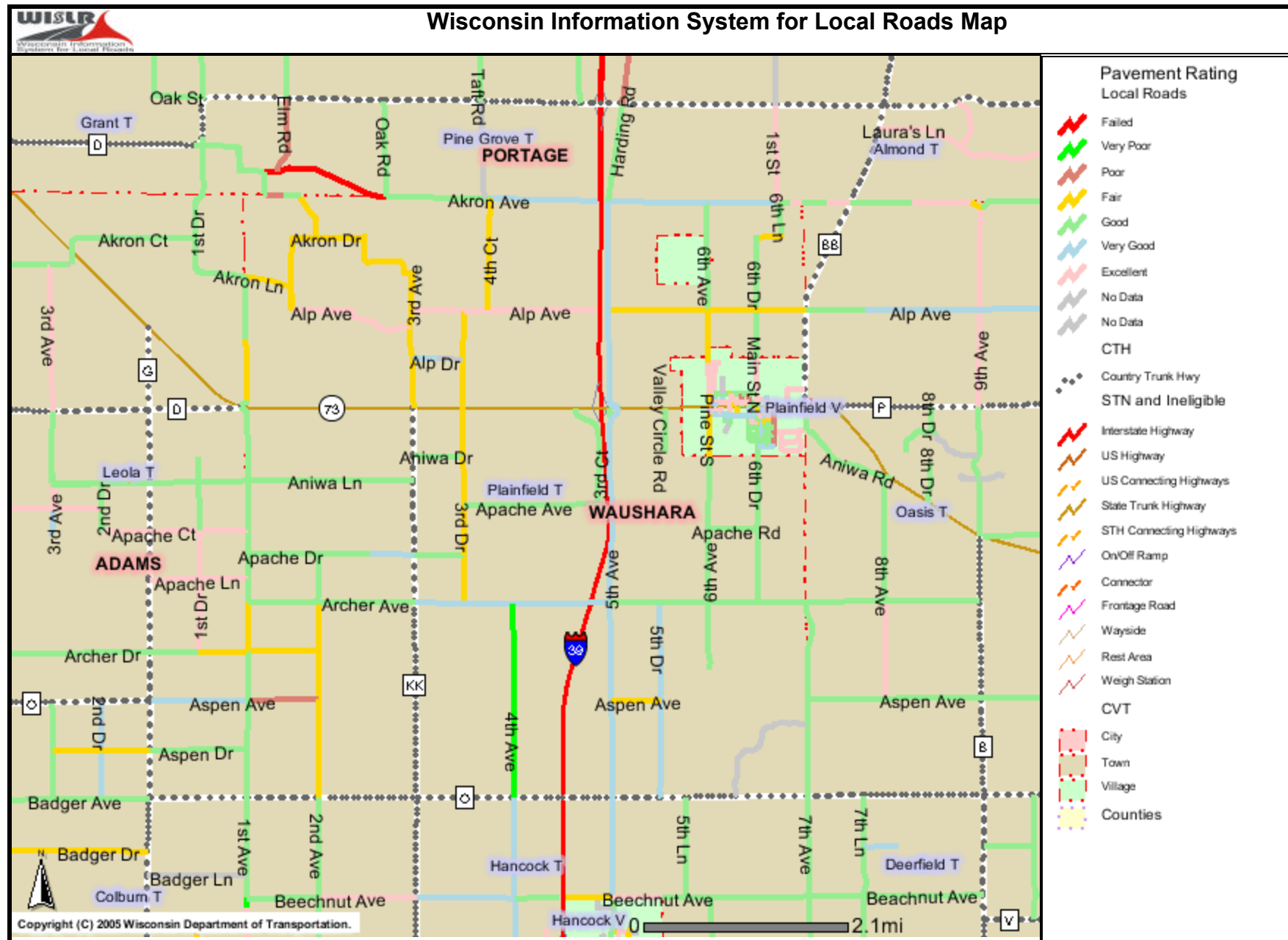
**Functional Class and Average Annual Daily Traffic Volume**



**Exhibit 3-2**

**Waushara County Bike Routes**

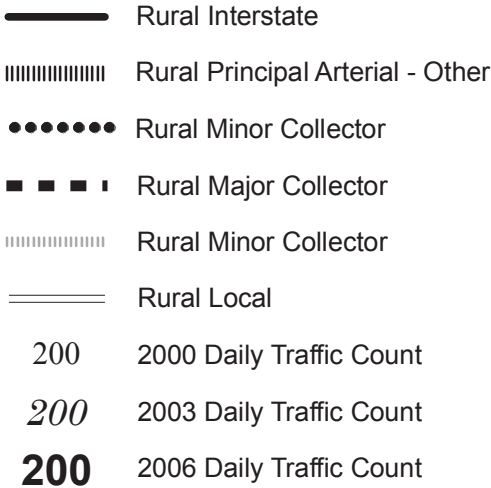




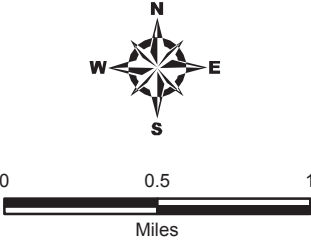
The information contained in this data set and information produced from this dataset were created for the official use of the Wisconsin Department of Transportation (WisDOT). Any other use while not prohibited, is the sole responsibility of the user. WisDOT expressly disclaims all liability regarding fitness of use of the information for other than official WisDOT business.



EXHIBIT 3-1  
TOWN OF PLAINFIELD  
FUNCTIONAL CLASS &  
TRAFFIC COUNTS

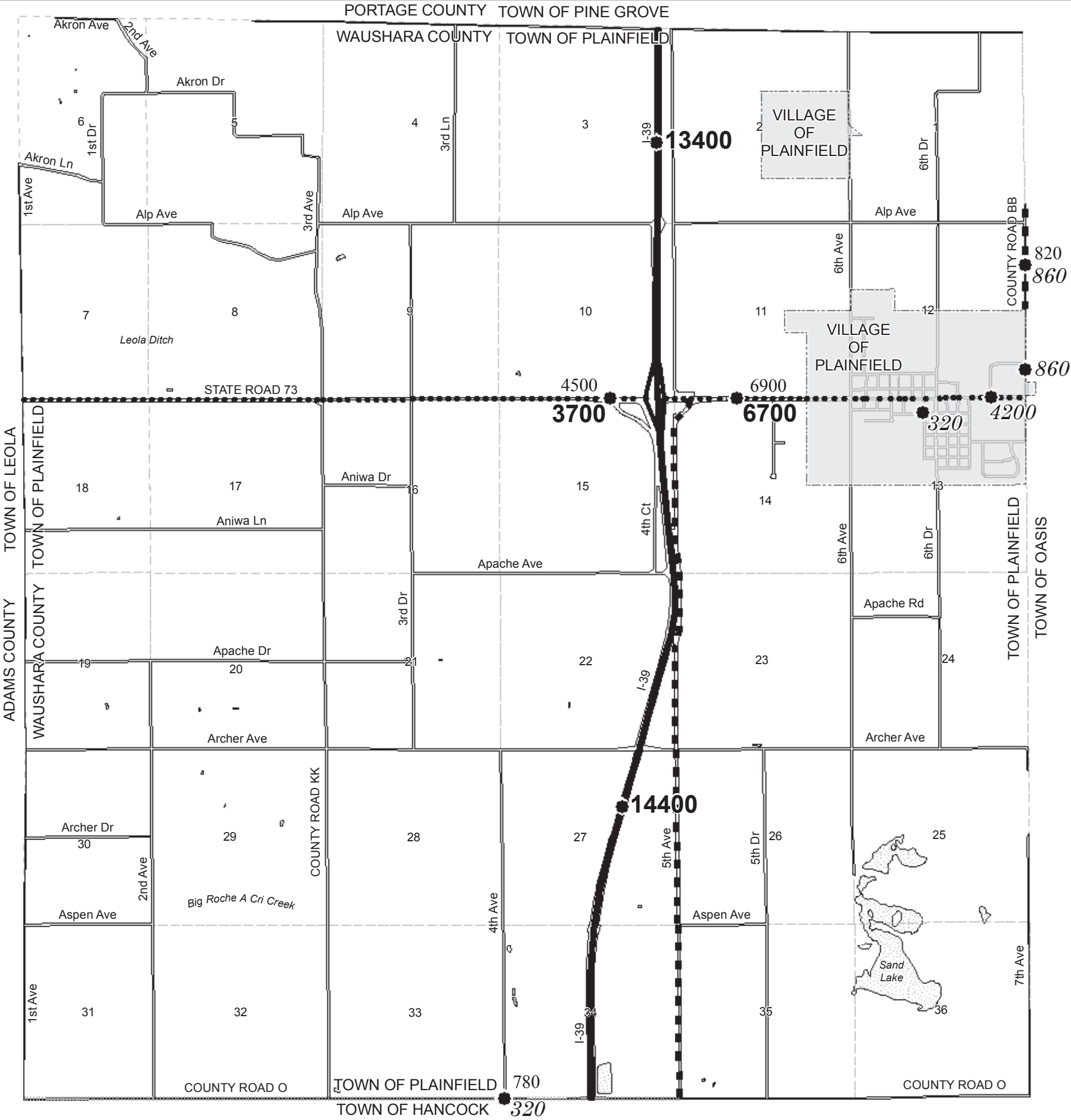


Source: WisDOT, Rural Functional Class System, 2008.  
WisDOT Wisconsin Highway Traffic Volume Data,  
2000, 2003, & 2006.  
Digital Base Data provided by Waushara County, 2008.



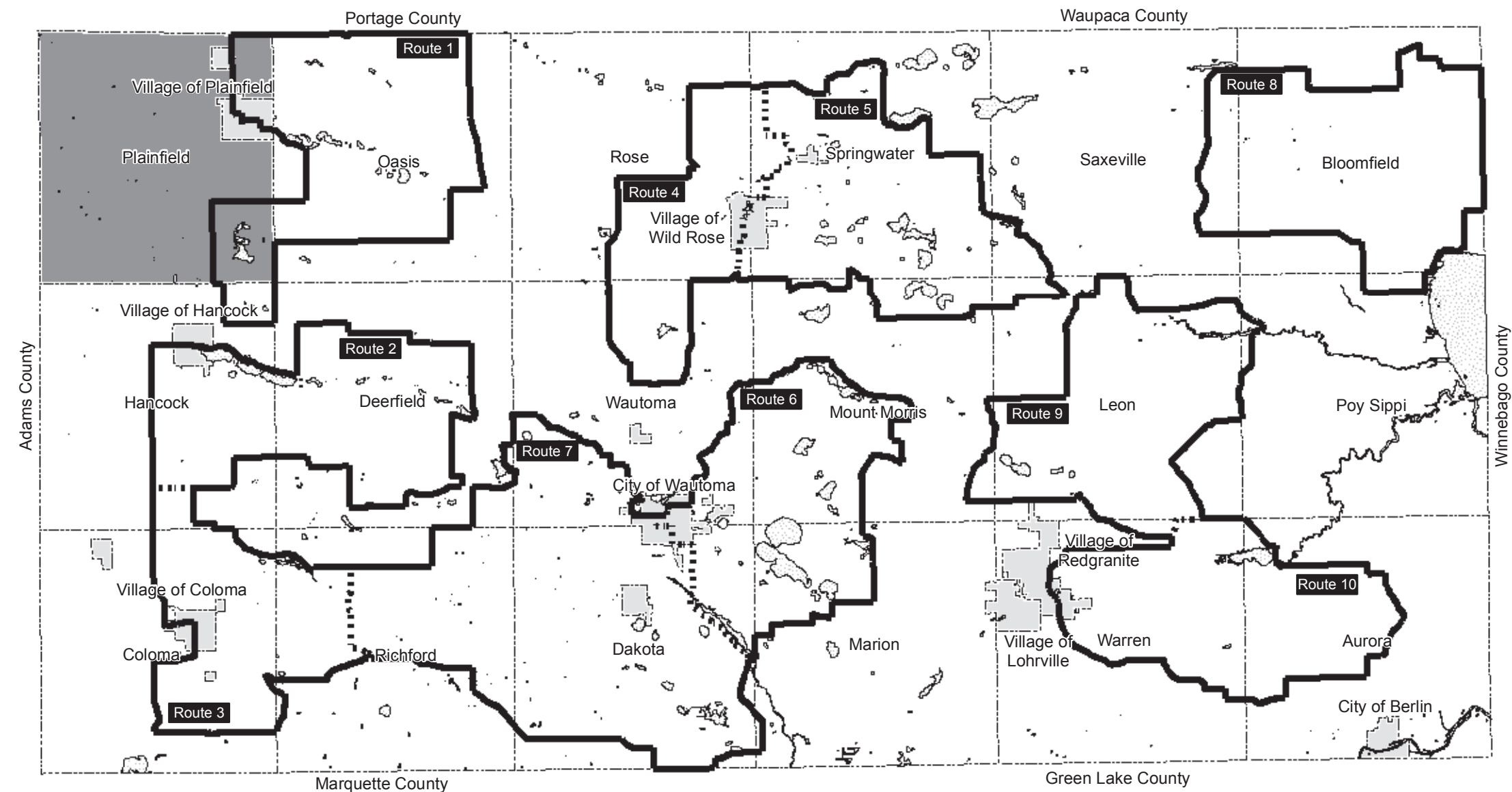
This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-SEPTEMBER 2008



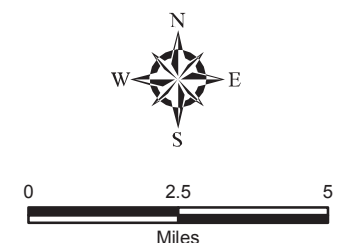


# EXHIBIT 3-2 WAUSHARA COUNTY BIKE ROUTES



———— Bike Route  
 ..... Shared Bike Route

Source: Digital Base Data and Bike Route Data provided by Waushara County.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
 EAST CENTRAL WISCONSIN  
 REGIONAL PLANNING COMMISSION-DECEMBER 2008



## CHAPTER 4: UTILITIES AND COMMUNITY FACILITIES

### TABLE OF CONTENTS

Introduction .....	4-1
Inventory and Analysis .....	4-1
Wastewater Collection and Treatment.....	4-1
Stormwater Management.....	4-2
Drainage Districts .....	4-2
Stormwater Systems .....	4-2
Surface Water Quality Monitoring and Prevention .....	4-3
Water Supply .....	4-3
Solid Waste and Recycling.....	4-4
Electricity .....	4-4
Natural Gas.....	4-5
Power Generation Plants and Transmission Lines.....	4-5
Telecommunications Facilities.....	4-5
Telephone .....	4-5
Internet .....	4-5
Cemeteries.....	4-6
Childcare Facilities .....	4-6
Elderly Services .....	4-7
Residential Care Facilities .....	4-8
Police Service .....	4-10
Waushara County Sheriff Department .....	4-10
Correctional Facilities .....	4-11
Fire Protection.....	4-12
Health Care Facilities/Emergency Medical Services.....	4-13
Libraries.....	4-15
Education.....	4-16
Primary and Secondary Education .....	4-16
Tri-County Area School District .....	4-17
Institutions of Higher Education .....	4-17
Vocational Technical Colleges .....	4-17
Community Theaters .....	4-17
Other Municipal Buildings.....	4-18
Town Halls/Maintenance Garages .....	4-18
Parks and Recreation .....	4-18
Parks.....	4-18
Waushara County .....	4-18
Marl Lake County Park .....	4-18
Lake Huron County Park .....	4-19
Sorenson Natural Area .....	4-19
Town of Plainfield .....	4-19
Recreational Needs .....	4-19
Lakes .....	4-19



Church and Youth Camps.....	4-20
School and Town Forests .....	4-20
Campgrounds.....	4-20
Snowmobile Trails .....	4-20
Sportsman's Clubs and Conservation Organizations .....	4-20
Golf Courses.....	4-21
Post Office .....	4-21
Key Findings .....	4-21
Wastewater Collection and Treatment .....	4-21
Stormwater Management .....	4-21
Water Supply .....	4-21
Solid Waste and Recycling .....	4-22
Electricity .....	4-22
Natural Gas .....	4-22
Power Generation Plants and Transmission Lines .....	4-22
Telecommunications Facilities .....	4-22
Cemeteries .....	4-22
Childcare Facilities .....	4-22
Elderly Services .....	4-22
Police Service .....	4-23
Fire Protection .....	4-23
Health Care Facilities/Emergency Medical Services .....	4-23
Libraries .....	4-23
Education .....	4-24
Community Theaters .....	4-24
Other Municipal Buildings .....	4-24
Parks and Recreation .....	4-24
Church and Youth Camps .....	4-24
School and Town Forests .....	4-24
Campgrounds .....	4-24
Snowmobile Trails .....	4-25
Sportsman's Clubs and Conservation Organizations .....	4-25
Golf Courses .....	4-25
Post Office .....	4-25
Interrelationships with other Plan Elements .....	4-25
Economic Development.....	4-25
Housing .....	4-26
Transportation.....	4-26
Agriculture Resources .....	4-26
Natural Resources .....	4-26
Cultural Resources.....	4-27
Land Use .....	4-27
Intergovernmental Cooperation .....	4-27
Policies and Programs.....	4-28
Regional, County and Local Policies .....	4-28
Regional.....	4-28
County .....	4-28
Local .....	4-29



Federal, State and Regional Programs .....	4-30
Federal Agencies.....	4-30
Other Federal Agencies .....	4-31
State Agencies and Associations .....	4-31
Regional Agencies.....	4-34

## TABLES

Table 4-1	Childcare Facilities.....	4-7
Table 4-2	Elderly Care Facilities.....	4-10
Table 4-3	ISO Ratings .....	4-13
Table 4-4	Recommended Density/Distance Standards for Fire Protection.....	4-13
Table 4-5	Area Hospitals.....	4-14
Table 4-6	Public Library Statistical Data .....	4-15
Table 4-7	Library Service Levels .....	4-16

## EXHIBITS

Exhibit 4-1	Utilities .....	4-35
Exhibit 4-2	Community Facilities.....	4-37



## CHAPTER 4: UTILITIES AND COMMUNITY FACILITIES

### INTRODUCTION

One responsibility of a community is to maintain a certain level of community services. To achieve it, they must continuously maintain, upgrade, and expand existing facilities in a cost-effective manner based on future growth projections and the desires of the community. The involvement of the community in the planning process illustrates the importance that the board places on maintaining a high level of public services and facilities. The following section provides an inventory of some of the services and facilities available in the community. The analysis of facilities is based on generalizations and predictions and is no substitute for detailed engineering or architectural studies, which should be completed before municipal funds are expended on specific projects. The size of community facilities along with the cost of providing services is directly related to land use, development patterns, and the existing and future densities of development. See Exhibit 8-1, Existing Land Use Map, and Exhibit 4-1 and 4-2, Community Facilities, which illustrate the location of the various items discussed below.

### INVENTORY AND ANALYSIS

This section describes the existing utilities and community facilities within the Town of Plainfield.

#### Wastewater Collection and Treatment

***Private on-site wastewater treatment systems (POWTS) serve the majority of the Town of Plainfield.*** Within the Town of Plainfield, one residential and one commercial building are on the village municipal system. There are no problems with on-site systems in the Town<sup>1</sup>.

Typically, individual systems are designed for each household or business based on the site's soil characteristics and capabilities. However, in some cases, a community, or 'cluster' system, may be used to serve more than one household. In rare cases, some existing development may have only a privy or no system at all. On-site systems, depending on the type and maintenance frequency, can function for 15 to 30 years and can cost-effectively treat wastes in rural areas not served by public sewers.

Beginning in 2000, Waushara County began an inspection program for POWTS. Newer POWTS built since 2000 are inspected every three years. Additional systems are included in the inspection program as they are replaced, or if there has been an improvement of over 25% of existing buildings and/or structures. Waushara County does not allow holding tanks systems for new construction, although they are an option for replacement situations. The Comm 83 rules do allow the use of holding tanks for new construction, however, individual counties and municipalities can continue to enforce such a ban at their discretion. The allowance of private on-site treatment systems will certainly be needed to accommodate new and existing development within the rural portions of the planning area.

---

<sup>1</sup> Town of Plainfield Community Management Plan, July 2004.



As of October of 2008 the State of Wisconsin has created new requirements that will greatly affect POWTS. This change requires that by 2011 all counties in the state have a complete inventory of every POWTS in their area. By 2013 all POWTS will need to be part of the same inspection program that POWTS built since 2000 are a part of.

## **Stormwater Management**

Stormwater runoff and management have recently gained more attention as an environmental concern due to flooding and surface water quality issues. When the impacts of stormwater management are considered from a regional perspective, the potential for damage is tremendous. Although an individual development may not seem to have a significant impact on the natural drainage system, the cumulative impacts of development and urbanization can influence natural system functions. According to studies by the Center for Watershed Protection, as little as 10% impervious cover (concrete, asphalt, buildings, etc.) can negatively impact fish habitat. Moreover, if 25% of an area is impervious, the natural functions of a watershed become overloaded and stream quality can become permanently degraded.<sup>2</sup>

### ***Drainage Districts***

The Waushara County Drainage Board administers and oversees the drainage of agricultural lands. It regulates various land practices used to remove excess water from farmlands and raises issues regarding the impacts of scattered rural development and the cumulative impacts on water quality flowing to and through their legal drains. In addition, county drainage boards are authorized to assess costs to a landowner for any adverse impacts on downstream water quality that can be directly attributed to that landowner. Landowners must receive drainage board approval before undertaking any action which could potentially affect a drainage system.

Drainage districts usually require a 20 foot vegetated strip on both sides of any ditch, which is to be used as a maintenance corridor, or any applicable stream within the watershed. Row cropping is prohibited within this corridor. These requirements can be coordinated with soil and water conservation plans required under the Farmland Preservation program<sup>3</sup>.

***Eight drainage districts have been established within Waushara County. The only active district is the Marion-Warren district.***

### ***Stormwater Systems***

Typically, curb and gutter stormwater systems are located in urbanized areas. ***Due to the rural nature of the town, curb and gutter is limited. A series of open ditches and culverts collects stormwater in the Town of Plainfield.*** The ditches discharge water into local streams and rivers at various points throughout the area.

---

<sup>2</sup> *Site Planning for Urban Stream Protection*. 2004. Center for Watershed Protection.

<sup>3</sup> *Guide to Community Planning in Wisconsin*. 1999. Ohm, B.W.



## ***Surface Water Quality Monitoring and Prevention***

Several different methods can be used to control and reduce the amount of stormwater runoff into local waterways. These methods can be implemented at a localized, town-wide, or regional level.

**Watershed Planning.** A watershed is an interconnected area of land draining from surrounding ridge tops to a common point such as a lake or stream confluence with a neighboring watershed.<sup>4</sup> This approach allows stakeholders on an individual water body to collectively focus their interests on improving the water quality in one area.

**Land Conservation Techniques.** Land conservation techniques are used to provide physical barriers and improvements and may include legislative actions to change the physical environment and reduce current levels of runoff. These techniques can include cluster or conservation subdivisions, setbacks, buffers, and land acquisition.

**Aquatic Buffers.** An aquatic buffer is an area along a shoreline, wetland, or stream where development is restricted or prohibited.<sup>5</sup> Natural vegetation is highly encouraged in the buffer area. If properly designed, buffers can physically protect waterways from future disturbance or encroachment. Furthermore, buffers can protect surface water quality by removing nutrients and silt from stormwater runoff.

**Site Design Techniques.** Site design techniques can be applied to all developments. Every development should incorporate three main goals: reduce the amount of impervious cover, increase the amount of lands set aside for conservation, and utilize pervious areas for more effective stormwater treatment.<sup>6</sup> Techniques that can be used to achieve these goals include reduction in lot sizes, building narrower streets, planting rain gardens, creating bioretention ponds, etc.

**Stormwater Best Management Practices (BMPs).** Best Management Practices (BMPs) is a general term used to describe a broad range of structural controls that may be utilized by agricultural, residential, and commercial developments to control and reduce the amount of erosion caused by stormwater.<sup>2</sup> These practices may be used to reduce pollutant loads, maintain groundwater recharge areas, protect stream quality, and limit development within the 100-year floodplain.

## **Water Supply**

***The Town of Plainfield is served by private wells.*** As such, groundwater is the source of drinking water within the Town. As with many other locations in Wisconsin, a high concentration of minerals in the soil substrate creates “hard” water. Iron, one mineral which contributes to hardness, is found at extremely high levels.<sup>7</sup> (See the Agricultural, Natural and Cultural Resource Chapter for more information.)

<sup>2</sup> *Site Planning for Urban Stream Protection.* 2004. Center for Watershed Protection.

<sup>4</sup> *The Watershed Approach.* 2004. Wisconsin Department of Natural Resources.

<sup>5</sup> *Aquatic Buffers.* 2004. Center for Watershed Protection.

<sup>6</sup> *Better Site Design.* 2004. Center for Watershed Protection.

<sup>7</sup> Summers, W.K. 1981. *Geology and Groundwater Resources of Waushara County, Wisconsin.* United States Geological Survey Report 1809-B.



## Solid Waste and Recycling

Waushara County currently subsidizes waste management within the county. ***The County operates nine waste collection sites and contracts with Waste Management of Wisconsin, Inc. and Onyx Waste Services to haul waste and recyclables***, respectively, that are collected at the sites. All non-recyclable wastes are hauled to Valley Trail Landfill in Berlin, Wisconsin. Wastes generated by commercial establishments are not accepted at the sites. Most commercial businesses and some rural residents also have curbside pickup. It is the policy of Waushara County to pay tipping charges for municipal, commercial, and rural residents that choose to have curbside pickup. The county also provides partial compensation for municipalities (cities and villages) to help them finance the hauling portion of waste disposal. The County does not pay tipping charges for foundry sand, demolition materials, rolloff containers, or compactors. The drop-off sites are open on Wednesdays from 12:00 PM to 4:00 PM and Saturdays from 10:00 AM to 4:00 PM year round; and Sundays from 12:00 PM to 3:00 PM during the months of June, July and August.<sup>8</sup>

***Residents of the Town of Plainfield are able to utilize any drop-off site within the county, but they most likely utilize the Village of Plainfield site*** (Exhibit 4-1). The 2.5-acre site is situated in the northwestern corner of the village on Pine Street. Waushara County has a yearly lease agreement with the village to use this site. One county employee mans this site.

***All waste management sites in Waushara County accept recyclable materials.*** Recyclables are sent to Paper Valley Recycling in Menasha (paper) and Resource Management in Chicago (co-mingled). Waste oil is subcontracted by Superior Services to Jacobus in Madison. Iron and tin collected by Superior Services is subcontracted to Fox Valley Metal in Oshkosh. Subsidized by the County, residents receive no payment for these materials. Materials that are collected include: glass, tin, aluminum, plastic, newsprint, cardboard, magazines, office paper, yard waste, scrap iron, waste oil, batteries, and tires.

Waushara County currently works with Waupaca County to provide a disposal option for household hazardous waste. County residents bring their household hazardous waste to a Waupaca County Processing and Transfer Facility located in Manawa. This program runs from May through October with regular hours of operation. Residents pay a fee for disposing of these hazardous items, but Waushara County helps to reduce costs by contributing grant money towards the program.

## Electricity

***Adams-Columbia Electric Co-op and Alliant-Wisconsin Power & Light provides electric power to the Town of Plainfield*** (Exhibit 4-1).<sup>9</sup> Wisconsin Power and Light (WP&L), incorporated in 1917, is a subsidiary of Alliant Energy Corporation. It serves about 450,900 electric customers and 175,900 gas customers<sup>10</sup>. Adams-Colombia Electric Cooperative is a rural electric distribution cooperative serving approximately 36,156 member/customer in parts of 12 central Wisconsin counties<sup>11</sup>.

<sup>8</sup> Schuman, S. 2005. Personal Communication. Waushara County Parks, Recreation, and Solid Waste Department. Director.

<sup>9</sup> Waushara County 2005, Utility Data by WPS

<sup>10</sup> WP&L website: [www.hoovers.com/wisconsin-power-&-light](http://www.hoovers.com/wisconsin-power-&-light). Accessed November 20, 2008.

<sup>11</sup> Adams-Colombia Electric Cooperative website: [www.acecwi.com](http://www.acecwi.com). Accessed November 20, 2008.



## Natural Gas

***Wisconsin Gas Company provides natural gas service to the Town of Plainfield*** and is a subsidiary to Wisconsin Energy Corporation (Exhibit 4-1).<sup>12</sup> The company serves approximately 583,300 gas customers in Wisconsin<sup>13</sup>. **WE Energies** has a pipeline that runs from the north to south through the Town of Plainfield.

## Power Generation Plants and Transmission Lines

***American Transmission Company (ATC) owns and maintains a number of transmission lines in the area*** (Exhibit 4-1). ATC began operations on January 1, 2001, as the first multi-state transmission only utility. They own 9,350 circuit miles of transmission lines and wholly and jointly own 500 substations.<sup>14</sup> A transmission line runs in a north to south direction passing through the Town of Plainfield. According to ATC, transmission systems throughout Zone 1 (includes Waushara County) are overloaded and experiencing low voltages.<sup>15</sup> To increase transmission capacities, several projects are planned.

## Telecommunications Facilities

***According to information obtained from Waushara County there are three towers located in the Town of Plainfield*** (Exhibit 4-1). The three towers include a cable television tower, storm siren (Plainfield Fire Department) and US Cellular tower (5<sup>th</sup> and Archer).

### Telephone

***Union Telephone provides service to the Town of Plainfield.***<sup>16</sup> Union also provides local dial-up internet service to Almond, Coloma, Hancock and Plainfield.

The advancement of telecommunication technologies, such as cell phones, has greatly increased the need for towers to provide receiving and sending capabilities. The number of telecommunications towers in the United States currently exceeds 77,000; this number could double by 2010.<sup>17</sup> The federal government recognized this need with the passage of the Telecommunications Act of 1996. Currently, the Waushara County Zoning Ordinance regulates the placement of cell towers within the county.

### Internet

Due to the proliferation of internet service providers (ISP), area residents can also choose from several national and local ISPs. ***Union Telephone is one of the providers that supplies internet service to the area***<sup>18</sup>. Bandwidth.com provides high speed internet to the Plainfield

<sup>12</sup> Waushara County 2005, Utility Data by WPS

<sup>13</sup> [http://www.business.com/directory/energy\\_and\\_environment/natural\\_gas\\_utilities/wisconsin\\_gas\\_company/profile/](http://www.business.com/directory/energy_and_environment/natural_gas_utilities/wisconsin_gas_company/profile/)

<sup>14</sup> [www.atcille.com](http://www.atcille.com). Accessed November 20, 2008.

<sup>15</sup> ATC. 2008. *10-Year Assessment 2008*.

<sup>16</sup> East Central Wisconsin Regional Planning Commission, *Milestone Report #1, State of the Region*.

<sup>17</sup> Wind Turbines and Birds: Putting the Situation in Perspective in Wisconsin. 2004. Sagrillo, M.

<sup>18</sup> <http://www.google.com/search?hl=en&q=internet+providers+in+Hancock+Wisconsin&aq=f&oq=> (11/20/08)



area<sup>19</sup>. According to the Public Service Commission, Cable TV (CATV) Companies have reported providing broadband internet service to the Plainfield area<sup>20</sup>. The availability of high speed access may change as ISPs increase coverage areas or if state and federal regulations or involvement change.

## Cemeteries

***There are two cemeteries located in Plainfield (Exhibit 4-2).*** Plainfield Cemetery is located on the east side of 5<sup>th</sup> Avenue north of the intersection of STH 73. This cemetery is jointly owned and maintained by the town and village of Plainfield. There is an unnamed cemetery located about ¾ of mile south of Archer Avenue on the east side of 5<sup>th</sup> Avenue. This cemetery is maintained by the Tubbs family.

## Childcare Facilities

Public involvement at the state level in the role of childcare falls largely under the supervision of the Wisconsin Department of Workforce Development's Office of Childcare (OCC). One of the OCC's primary areas of responsibility is the oversight of the Wisconsin Shares program, which is a childcare subsidy program.

The Wisconsin Shares program is administered by local counties, tribes and Wisconsin Works (W-2) agencies. The program assists families whose incomes are less than 200% of poverty to pay for childcare services. Parents choose the type of care and share the cost through co-payment. In order to be eligible for reimbursement, childcare providers must be licensed by the State, certified by county or tribal government, or operated by a public school. Research indicates that public dollars play a large financial role in the provision of childcare in the state, and in both urban and rural counties. Table 4-1 identifies available information on the number of regulated childcare facilities in the area. These figures are for licensed childcare providers only. A license is required for those who provide care for four or more children under the age of 7 at any one time.<sup>21</sup>

ChildCare Resource & Referral, Inc. works with counties and the State in monitoring childcare provision and has reported that the highest demand for care is for full-time, first shift (6 AM to 6 PM) hours. ***The Mid-Wisconsin ChildCare Resource & Referral, Inc. and CAPSELL Services works with Waushara County.***

***Residents most likely use childcare facilities in Plainfield. These facilities have a combined capacity of 76 children.***

UMOS is a non-profit, community-based organization which provides housing and other services to underserved populations.<sup>22</sup> Within Waushara County, migrant workers utilize these programs. ***UMOS operates a housing complex, Head Start program, and childcare facilities in Plainfield. The licensed facility provided childcare for 60 children in 2008.***<sup>23</sup>

<sup>19</sup> [www.bandwidth.com/service/US/WI/Hancock](http://www.bandwidth.com/service/US/WI/Hancock). Accessed 11/20/08

<sup>20</sup> Wisconsin Public Service Commission, Infra Map 7; March 2008.

<sup>21</sup> *Wisconsin State Statutes 48.65.*

<sup>22</sup> UMOS. 2006. *Welcome to UMOS*. <http://www.umos.org>.

<sup>23</sup> Mid-Wisconsin Child Care Resource & Referral, 2008 .



**Table 4-1. Childcare Facilities**

<b>Provider</b>	<b>Regulation Type</b>	<b>City</b>	<b>Capacity</b>
Kathy's Clubhouse	Licensed Family	Almond	8
Little Blessings Christian Daycare	Licensed Group	Berlin	22
Tiny Tots Daycare	Licensed Family	Berlin	8
UMOS-Aurora Center	Licensed Group	Berlin	70
Kopach Family Daycare	Licensed Family	Coloma	8
Lor's Kinder Kare	Licensed Family	Coloma	8
Diane's Little Treasures Daycare	Licensed Family	Neshkoro	8
Trina's Little Critters Daycare	Licensed Family	Plainfield	8
UMOS-Plainfield Center	Licensed Group	Plainfield	60
Wendy's Little Ones	Licensed Family	Plainfield	8
Little Lambs' Haven	Licensed Family	Redgranite	8
Little Rascals Daycare	Certified	Redgranite	6
Little Sprouts Discovery Center	Licensed Group	Redgranite	60
UMOS-Spring Lake Center	Licensed Group	Redgranite	96
Country Kids Preschool	Licensed Group	Saukville	24
Beckies Daycare	Licensed Family	Wautoma	8
Dancing Star Daycare	Licensed Family / Certified	Wautoma	8
Deb's Den	Licensed Family	Wautoma	8
Jessica's Daycare	Certified	Wautoma	6
Little Peanuts	Licensed Family	Wautoma	6
Little Tykes Family Daycare	Licensed Family	Wautoma	8
Little World of Wonders Daycare	Licensed Family	Wautoma	8
Peek-a-boo Daycare	Licensed Family / Certified	Wautoma	8
Sweet Peas	Licensed Family	Wautoma	8
Village of Learning Inc	Licensed Group	Wautoma	34
Wautoma Early Learning Center	Licensed Group	Wautoma	20
Day Dreams Family Child Care	Licensed Family	Wild Rose	8
Happy Hearts Family Daycare	Certified	Wild Rose	6

Source: *Mid-Wisconsin Child Care Resource & Referral, 2008*

According to the Mid-Wisconsin ChildCare Resource & Referral agency, a need exists in Waushara County for additional childcare, especially for children of non-traditional workers such as second shift. It should be noted that the available capacity versus number of children 12 years old and under may not be representative of the need, since not all children in this age category require licensed childcare. Some children come from families in which the primary caregiver is not employed outside of the home, while other people may seek childcare near their place of employment or utilize unlicensed facilities or family and friends for childcare needs.

## **Elderly Services**

**Waushara County Department of Aging** offers several programs to area senior citizens. In 2007, these programs provided almost 4,000 individuals with assistance.<sup>24</sup> ***The Waushara County Coordinated Transportation System offers rides to not only senior citizens but also to veterans and human service clientele on Medical Assistance.*** Transportation is provided by either mini-bus or volunteers. While transportation for medical appointments is provided almost exclusively by volunteer drivers, the mini-bus offers rides for

<sup>24</sup> Waushara County Department of Aging Services. 2007. *Waushara County Department of Aging Services Summary*.



not only medical appointments but also for grocery shopping and other personal errands. This program has been successful and may need to expand to serve the increasing number of senior citizens.

***Meals along with activities and fellowship are provided to seniors at eight locations throughout Waushara County. The closest site is located at the Plainfield Senior Center (114 W. Clark Street) in the Village of Plainfield.*** All sites are open from Monday through Friday unless indicated otherwise. Participants must be age 60 or older, but a spouse and/or caregiver any age are welcome to participate as well. Besides Plainfield, the other locations include the Wautoma-Waushara Senior Center (W8220 Cottonville Avenue in the Town of Dakota), the Wild Rose Community Center (500 Wisconsin Avenue), the Redgranite Civic Center (202 Pine River Street), the Hancock Community Building (420 Jefferson Street), the Coloma Community Center (155 Front Street; Monday, Wednesday, Thursday and Friday), and The House Next Door in Poy Sippi (W2306 Prospect Street; Tuesday and Thursday). Meals are served at the Saxeville Town Hall (W4022 Archer Avenue; Monday and Wednesday)<sup>25</sup>. Meals are also delivered to individual residences. Currently, the county provides this service to nearly 1,000 senior citizens<sup>26</sup>.

***The Aging & Disability Resource Center of Green Lake, Marquette and Waushara Counties provides information and assistance on aging, long term care, disabilities, and other related topics.*** A grant written in 2007, and extended through 2010 has allowed the expansion of services and the development of this tri-county consortium<sup>26</sup>.

A trained benefit specialist is available to help seniors and their families find information on public programs such as Social Security, Medicare, and other related programs. This individual not only provides guidance by thoroughly explaining all available options, but also assists seniors with completing all required paperwork for these programs. The benefit specialist offers flexible hours at meeting locations which include the office, local senior centers, and personal residences. Since this program is supervised by an attorney, legal help is available to seniors with an appeal process if they are denied claims or assistance.

According to the Aging and Disability Resource Center, transportation remains an issue within the county.

The **Wautoma-Waushara Senior Center** is located at W8220 Cottonville Avenue in the Town of Dakota. The center serves as a meal site for the Waushara County Department of Aging meal program each weekday. ***The center offers a wide range of social and educational activities for seniors including bingo, card tournaments, crafts, and others.*** Several field trips are organized each year to Wisconsin casinos, museums, and other destinations.

### ***Residential Care Facilities***

The Wisconsin Department of Health and Family Services (DHFS) regulates adult care facilities. Several types of residential services exist for the elderly. These include Residential Care

---

<sup>25</sup> Communication with the Aging and Disability Resource Center, November 21, 2008.

<sup>26</sup> Waushara County Department of Aging Services 2007 Summary



Apartment Complexes (RCACs), Adult Family Homes (AFHs), Community Based Residential Facilities (CBRF), and adult day cares.

RCACs provide independent apartment living options for individuals in groups of five or more. Apartments must have a lockable entrance and exit; a kitchen with a stove (or microwave); and individual bathroom, sleeping, and living areas. Individuals can receive no more than 28 hours of supportive services (transportation, housekeeping, recreation), personal assistance (dressing, bathing, etc.), or nursing care per week. They are appropriate only for individuals who require in-depth health monitoring by health care professionals.<sup>27</sup>

AFHs are designed to provide care for up to four persons and allow the opportunity for residents to receive specialized care. AFHs can specialize in residents of advanced age or persons with dementia, Alzheimer's, or physical disabilities.<sup>28</sup>

In Wisconsin, CBRFs provide housing for five or more residents. The minimum age for CBRF residency is 18. CBRFs provide housing for both individuals who can live independently and for those who require care.<sup>29</sup>

An Adult Day Care Facility provides services for adults who need assistance with daily activities in a group setting. Adult day care may be provided in home, a specialized facility, or other community facility (i.e., churches). Unlike other elderly services, adult day care facilities provide services for only a portion of the day; these services are usually provided during normal business hours. ***There is an adult day care facility in Wautoma called Adult Day Services Living Environmental. Cooperative Care, based out of Wautoma and Redgranite, provides in-home personal and home care services to elderly and disabled residents.*** The profits from this member owned cooperative are divided up between all the members who worked in that year. Table 4-2 lists the number of adult care facilities that Town of Plainfield citizens may choose to use and their corresponding capacities. ***Facilities for Waushara County are located in Wautoma and Redgranite.***

Although the elderly population is healthier and living longer than in the past, assistance will likely be needed at some point in their lives. The type of assistance preferred should be identified with input from potential users. ***The overall capacity for adult care facilities serving the planning area is 258 persons.*** By 2030, about 30 percent of the population in Waushara County is projected to be age 65 or older<sup>30</sup>. As the population ages, it can be assumed that a growing proportion of senior citizens may need additional facilities to meet their recreational, medical, and everyday necessities. In addition, more focus is being placed on allowing individuals to remain in their personal residences. Additional staff may be needed to provide care and assistance to senior citizens who wish to remain in their homes.

<sup>27</sup> DHFS. 2006. *Residential Care Apartment Complexes (RCACs) – Introduction*. [http://dhfs.wisconsin.gov/rl\\_dsl/RCACs/RCACintro.htm](http://dhfs.wisconsin.gov/rl_dsl/RCACs/RCACintro.htm)

<sup>28</sup> DHFS. 2006. *Adult Family Homes – Introduction*. [http://dhfs.wisconsin.gov/rl\\_DSL/AdultFamilyHomes/AFHintro.htm](http://dhfs.wisconsin.gov/rl_DSL/AdultFamilyHomes/AFHintro.htm)

<sup>29</sup> DHFS. 2006. *Community Based Residential Facilities (CBRFs) – Introduction*. [http://dhfs.wisconsin.gov/rl\\_dsl/CBRF/CBRFintro.htm](http://dhfs.wisconsin.gov/rl_dsl/CBRF/CBRFintro.htm).

<sup>30</sup> Wisconsin Department of Administration, 2004.



**Table 4-2. Elderly Care Facilities**

Facility	Waushara County	
	Number	Capacity
Residential Care Apartment Complexes (RCAC)	3	93
Adult Family Homes (AFH)	5	19
Community Based Residential Facilities (CBRF)	8	106
Adult Day Care Facilities (ADC)	1	40
Total	17	258

Source: Wisconsin Department of Health and Family Services, 2008.

## Police Service

### ***Waushara County Sheriff Department***

***The Waushara County Sheriffs Department provides around the clock law enforcement services to the Town as needed.*** The sheriff's department has two vehicles patrolling the entire county from 5:00 AM to 5:00 PM, while three patrol vehicles work in the county the remainder of the day. ***Response time in the Town of Plainfield is about 20 minutes.***

***The Waushara County Sheriff's Office is located on Division Street in Wautoma. The Hancock and Poy Sippi fire departments serve as satellite headquarters each Saturday afternoon.*** This increases the officers' visibility and availability to county residents who do not live near the sheriff's office.<sup>31</sup> The department employs 25 full-time sworn officers. Other employees include 25 correction officers, eleven E911 dispatchers, one emergency management specialist, and two secretaries. The emergency management specialist coordinates the emergency disaster response programs for both natural and manmade disasters. One police liaison officer is employed by the department; he serves as liaison officer for schools in Wautoma, Redgranite, and Wild Rose.

Several specialized units, including drug enforcement and canine units, are operated by the Waushara County Sheriff's Office. Cooperative agreements exist with other multi-jurisdictional drug units in East Central Wisconsin. Several employees have been trained in latent print examination (fingerprint analysis).<sup>32</sup> In 2000, the County instituted an enhanced county-wide 911 system. The County is now working with Green Lake County, Centurytel and other county agencies on a wireless 911 project.

A common method used to assess the level of service that is being provided locally is to compare the number of employees per 1,000 residents served with averages for other law enforcement agencies statewide. However, it should be noted that the number of employees

<sup>31</sup> *Waushara County Sheriff Department Annual Report*, 2003. Waushara County Sheriff Department.

<sup>32</sup> Waushara County Sheriff's Department. 2000. Personal Communication



per 1,000 residents served is related to a variety of factors including crime level, geographic coverage, size of agency, and budgetary issues.<sup>33</sup> As of October 31, 2006, for a police department serving a community of 25,000 to 49,999 residents, the state average was 1.74 sworn employees per 1,000 residents served. ***For a sheriff's office (includes most jail personnel), the state average was 1.77 sworn employees per 1,000 residents served. The Waushara County Sheriff's Office employs 1.1 officers per 1,000 population. This is below the state average.***

Plans exist to upgrade several facilities. In 2003, a joint effort to develop an interoperability plan was initiated between county and local jurisdictions. The plan includes improving radio coverage; ensuring communication with all other agencies; decreasing reliance on telephone cable; and upgrading to digital equipment by 2008. Additionally, all equipment upgrades identified in the 2007 Radio Improvement Project were purchased and installed.<sup>34</sup> Video cameras will also be added to patrol cars within the next 10 years. New cameras for crime scene investigations and specialized equipment for latent prints examination are also budgeted in future fiscal years.

The Waushara County Sheriff's Department maintains a TRIAD program to educate and raise senior and retired citizens' awareness of safety related issues. The TRIAD meets monthly and includes a different topic or issue at each meeting.

### ***Correctional Facilities***

According to the Wisconsin Adult Jail Report 2003, total adult admissions to state jails increased by 30 percent from 2001 to 2003, while Waushara County jails have decreased by 20.1 percent in the same time period.<sup>35</sup>

The average daily population (ADP) or average number of inmates held each day during one year is based upon a combination of admissions and the average length of stay. Waushara County reported an ADP of 87 in 2003 which is a 42 percent decrease from 2001. Generally, when the ADP reaches 80 percent of maximum capacity, the facility is considered to be overcrowded. Setting the standard below maximum capacity allows for flexibility in managing seasonal populations, weekend arrests, and other special situations. ***There are three correction facilities in Waushara County:***

The **Waushara Huber Facility** is located in Wautoma. The facility is housed in the former county jail on Park Street and has a maximum capacity of 36 inmates. Inmate populations for the Huber facility fluctuate seasonally.

The **Waushara County Jail** is located in Wautoma. The current facility was opened in January 2000 and has a maximum capacity of 153 inmates. The jail employs 29 security staff and other employees. In 2002, the ADP of the facility was 135 inmates (88.2%).

<sup>33</sup> Office of Justice Assistance Statistical Analysis Center. 2007. *Crimes and Arrests in Wisconsin*.

<sup>34</sup> Waushara County Sheriff's Department Annual Report, 2007.

<sup>38</sup> Office of Justice Assistance Statistical Analysis Center. 2007. *Crimes and Arrests in Wisconsin*.

<sup>35</sup> *Wisconsin Adult Jail Populations*, 2003. Office of Justice Assistance.



The **Redgranite Correctional Institution** is located in the Village of Redgranite. This facility is situated north of downtown and west of CTH EE on an 89-acre parcel. This medium security facility was opened in January 2001. With recent expansions, the prison has a maximum capacity of 990 inmates. Currently, the facility is over capacity with 1,013 inmates.<sup>36</sup> The prison employs 182 security staff and 94 other employees.

## Fire Protection

***The Plainfield Volunteer Fire Department is housed on S. Main Street in the village (Exhibit 4-2).*** The fire department operates two pumpers, two tankers, one rescue vehicle and two brush rigs. The fire department employs 28 volunteer fire fighters and 6 to 7 First Responders. Response time varies among communities, from 30 minutes in the towns of Oasis and Plainfield to less than 10 minutes in the Village of Plainfield. There is a mutual aid agreement with the many of the surrounding communities, including the towns of Hancock, Almond, Wild Rose and Bancroft.<sup>37</sup>

The Insurance Service Office (ISO) of Wisconsin, through the use of the Fire Suppression Rating Schedule, evaluates the adequacy of fire protection within the state for municipal fire protection.<sup>38</sup> The schedule provides criteria to be used by insurance grading engineers in assessing the physical conditions of municipalities relative to fire hazards and rating municipalities' fire defenses. Ratings obtained under the schedule are widely used to establish base rates for fire insurance. While ISO does not presume to dictate the level of fire protection services that a municipality should provide, reports of evaluation results published by its Municipal Survey Office generally outline any serious deficiencies found through the evaluation. Over the years, these findings have come to be used as a guide to municipal officials planning improvements to local fire protection services.

The grading is obtained by ISO based upon its analysis of several components of fire protection, including fire department equipment, alarm systems, water supply systems, fire prevention programs, building construction, and the distance of potential hazard areas from the fire station. In rating a community, total deficiency points in the areas of evaluation are used to assign a numerical rating of 1 to 10, with a 1 representing the best protection and 10 representing an essentially unprotected community. Many towns and villages in the more rural areas typically have ratings of class 8 through 10 (Table 4-3). ***The Plainfield Volunteer Fire Department has an ISO rating of 6 within the Village of Plainfield and 9 within the towns of Plainfield and Oasis.***

<sup>36</sup> *Offenders Under Control Report*, 2008. Wisconsin Department of Corrections.

<sup>37</sup> *Community Management Plan, Town of Hancock*, 2005. East Central WI Regional Planning Commission.

<sup>38</sup> ISO. 2006. *Fire Suppression Rating Schedule*. <http://www.iso.com/products/2400/prod2404.html>.



**Table 4-3. ISO Ratings**

Fire Department	Coverage Area	Class
Coloma FD	V. & T. Coloma, T. Richford (partial)	6, 6/9
Hancock FD	V. & T. Hancock, T. Deerfield (partial)	7/9
Plainfield FD	V. & T. Plainfield, T. Oasis	6/9
Redgranite FD	V. Redgranite, T. Marion (partial), T. Mt. Morris (partial) T. Leon (partial), T. Warren (partial), V. Lohrville	5, 5/9
Wild Rose FD	V. Wild Rose, T. Rose, T. Springwater (partial) T. Wautoma (partial), T. Mt. Morris (partial)	8, 8/9
Poy Sippi FD	T. Poy Sippi, T. Saxeville (partial), T. Leon (partial), Tustin	8/9
Saxeville/Springwater FD	T. Saxeville (partial), T. Springwater (partial)	8/9
W. Bloomfield	T. Bloomfield	9/9
Wautoma Area FD	T. Dakota, T. Deerfield (partial), T. Marion, T. Mt. Morris, T. Richford (partial), C. Wautoma	5, 5/9
Berlin FD (Green Lake Co.)	C. & T. Berlin, T. Seneca, T. Aurora, T. Rushford, T. Nepeukum (partial), T. Warren (partial)	4, 4/9
Neshkoro FD (Marquette Co.)	V. Neshkoro, T. Crystal Lake, T. Neshkoro, T. Marion (partial)	9

Source: Milestone Report #1; State of the Region, ECWRPC 2003

The standards for fire station location utilized by the National Board of Underwriters are given in Table 4-4. These standards are based on the density of development in the station service area.<sup>39</sup> Since the towns constitute a relatively low-density rural area, a four to six mile service radius is the recommended standard.

**Table 4-4. Recommended Density/Distance Standards for Fire Protection**

Land Use	Suggested Service Radius	
	Engine or Pumper Company	Ladder Company
Commercial/Industrial	.75 - 1.0 miles	1.0 miles
Res. Med./High Density (<100' bet. Structures)	2.0 miles	3.0 miles
Res. Scattered (>100' bet. Structures)	3.0 - 4.0 miles	3.0 miles
Res. - Rural Low Density	4.0 - 6.0 miles	-

Source: American Planning Association, 1988

### Health Care Facilities/Emergency Medical Services

***There are no hospitals located within the Town of Plainfield; however there are six hospitals located within approximately 50 miles.*** The six General Medical-Surgical

<sup>39</sup> American Planning Association. 1988. 1988 Small Town Planning Handbook.



hospitals include Wild Rose Community Memorial Hospital in Wild Rose, Adams County Memorial Hospital in Friendship, Berlin Memorial Hospital in Berlin, St. Michael's Hospital in Stevens Point, Divine Savior in Portage, and Riverview Hospital Association in Wisconsin Rapids. Table 4-5 indicates which hospitals are used by residents, as well as the approximate distance between the hospital and the municipality and general information about the area hospitals.

**Table 4-5. Area Hospitals**

	Adams Co. Memorial, Friendship	Wild Rose Comm. Mem., Wild Rose	Riverview Hosp. Assoc., WI Rapids	Berlin Memorial, Berlin	Divine Savior, Portage	St. Michael's, Stevens Point	Mercy Medical Center, Oshkosh	Aurora Medical Center, Oshkosh
Distance	30	14	24	37	47	26	52	50
Beds Set Up & Staffed	25	25	69	25	52	122	172	71
Level of Service:								
Adult Med-Ser, Acute	1	1	1	1	2	1	1	1
Orthopedic	2	2	2	2	2	2	1	2
Rehab & Phy. Med.	2	2	2	5	2	5	1	5
Hospice	4	2	4	5	5	3	4	2
Acute Long-Term Care	5	5	5	5	5	5	4	5
Other Acute	5	5	5	5	5	5	5	5
Pediatric, Acute	2	2	2	2	2	1	5	1
Obstetrics	5	5	1	1	1	1	1	1
Psychiatric	5	5	2	5	5	1	1	5
Alcoholism/Chem. Dep.	5	3	2	5	2	2	2	5
ICU/CCU:								
Med.-Sur.	5	5	2	2	1	2	2	2
Cardiac	5	5	2	2	5	2	2	2
Pediatric	5	5	2	2	5	2	2	5
Burn Care	5	4	5	5	5	5	2	5
Mixed IC	5	5	1	1	5	1	1	1
Step-Down (Sp. Care)	5	5	2	5	1	1	2	2
Neonatal Interm/IC	5	5	5	5	5	1	4	1
Other	5	2	5	5	5	5	5	5
Subacute	5	2	5	5	5	5	1	5
Other Inpatient	5	5	5	5	5	5	5	5

1 = Provided-Distinct Unit, 2 = Provided-Not Distinct Unit, 3 = Available in Network, 4 = Contracted, 5 = Service Not Provided

Source: 2006 Wisconsin Hospital Guide, Office of Health Care Information, State of Wisconsin



***Emergency medical services for the Town of Plainfield are provided by the Waushara County EMS. First Responders through the Plainfield Volunteer Fire Department serve the town of Plainfield and Oasis.*** An ambulance, shared jointly between the Coloma Fire Department and the Village of Plainfield, resides half time in the Village of Coloma and half time in the Village of Plainfield in alternating months. This ambulance provides service to the entire area and response time depends on where the ambulance is located at the time.

## Libraries

***Residents within the Town of Plainfield have good selection of libraries, but will most likely use the library in Plainfield.*** The Plainfield public library is located at 126 S. Main Street in the Village of Plainfield. Table 4-6 provides relevant information for libraries within Waushara County.

**Table 4-6. Public Library Statistical Data**

	Library Type	Municipal Population 2007	Additional Service Population	Total Service Population 2007	Annual Hours Open	Total Staff	Library Materials Total
<b><u>Waushara</u></b>							
Coloma	Municipal Library	471	1,276	1,747	1,716	1.60	\$9,013
Hancock	Municipal Library	441	898	1,339	1,508	1.13	\$7,050
Pine River	Joint Library	2,486	247	2,733	1,560	1.15	\$6,091
Plainfield	Municipal Library	884	1,105	1,989	1,540	1.33	\$9,560
Poy Sippi	Municipal Library	967	862	1,829	1,404	0.73	\$5,123
Redgranite	Municipal Library	2,076	1,150	3,226	1,248	0.90	\$4,231
Wautoma	Municipal Library	2,109	6,608	8,717	2,600	3.20	\$22,285
Wild Rose	Municipal Library	730	2,826	3,556	2,264	2.20	\$11,013
<b>Waushara Total</b>		<b>10,164</b>	<b>14,972</b>	<b>25,136</b>	<b>13,840</b>	<b>12.24</b>	<b>\$74,366</b>

	Book and Serial Volumes Owned	Audio Materials	Video Materials	Other Material	Periodical Subscriptions	E-Books	Electronic Audio Materials (downloadable)
<b><u>Waushara</u></b>							
Coloma	10,136	998	1,897	31	51	8,825	2,745
Hancock	7,795	563	2,270	37	45	8,825	2,745
Pine River	12,214	1,099	2,551	21	50	8,825	2,745
Plainfield	15,946	962	1,923	0	45	8,825	2,745
Poy Sippi	11,551	604	2,568	86	15	8,825	2,745
Redgranite	13,360	509	1,873	0	20	8,825	2,745
Wautoma	20,318	2,389	4,598	400	107	8,825	2,475
Wild Rose	11,949	1,155	3,439	1,042	40	13,391	0
<b>Waushara Total</b>	<b>103,269</b>	<b>8,279</b>	<b>21,119</b>	<b>1,617</b>	<b>373</b>	<b>75,166</b>	<b>18,945</b>

Source: Wisconsin Department of Public Instruction, 2007



The library, as are all libraries within the county, is part of the Winnefox Federated Library System. The federated library system is designed to provide expanded library service to more people without making additional large expenditures. The libraries receive the majority of their revenue from the local municipalities and county based on resident usage. Any town, city or village resident has access to the materials in any county-supported library within Waushara County. Besides other services listed above, the libraries offer their patrons Internet service.

Service targets for libraries are based on quantitative standards contained in the Wisconsin Library Standards. Reported for each standard is the effort required to achieve basic, moderate, enhanced or excellent levels of service. These standards are based on the population served and vary for a community in regard to municipal population versus service population. For the Plainfield and Wautoma public libraries (the most likely to be used by Town of Plainfield residents), municipal and service population varies greatly (Table 4-6). Other standards that apply, besides what is listed in Table 4-7 are that a certified library director is paid to perform board-designated duties for no fewer than 25 hours per week and that the library supports the library director's continuing education. Neither the Plainfield nor Wautoma libraries employ a certified library director. Additionally the operating budget for the Plainfield Library is less than the minimum standards.

***The Plainfield Public Library provides a less than basic for material expenditures. However, with limited resources the library is able to provide a level of moderate to enhanced service levels for most criteria for both the municipal and service populations*** (Table 4-7). The Wautoma Public Library provides a lower service level for the number of volumes held in print for its municipal population. However, for other criteria, the Wautoma Public Library generally provides between an enhanced and excellent level of service. Service levels fall when the service population is considered, however.

**Table 4-7. Library Service Levels**

Criteria	Plainfield		Wautoma	
	Municipal	Service Pop	Municipal	Service Pop
Staff FTE	Enhanced	Basic	Enhanced	< Basic
Volumes Held (print)	Enhanced	Moderate	Basic	< Basic
Periodical Titles Received	Moderate	Moderate	Moderate	Basic
Audio Recording Held	Excellent	Enhanced	Excellent	Enhanced
Video Recordings Held	Excellent	Enhanced	Excellent	Excellent
Hours Open per Week	Basic	Enhanced	Excellent	Moderate
Materials Expenditures	< Basic	< Basic	Enhanced	< Basic
Collection Size (print, audio, video)	Enhanced	Moderate	Moderate	< Basic

Source: Public Library Service Data, 2007; Wisconsin Public Library Standards, 4th edition, 2005.

## Education

### ***Primary and Secondary Education***

***The Town of Plainfield is served entirely by the Tri-County Area School District.***



### ***Tri-County Area School District***

The Town of Plainfield is part of the Tri-County Area School District, home of the Penguins. The Tri-County School District is comprised of 92.0 staff members, 717 students, and a pupil to teacher ratio of 13.2.<sup>40</sup> The Tri-County Area School District operates a total of three schools: the Tri-County High School (grades 9-12, Plainfield), Tri-County Middle School (grades 5-8, Plainfield), and the Tri-County Area Elementary School (pk-4, Plainfield). The Tri-County Area High School, along with the middle and elementary schools, are located at 409 S. West Street in Plainfield (Exhibit 4-2). The district houses all students, grades K-12 in one building. The schools share common facilities but maintain separate administrative staff. The building's most recent addition was completed in 1996<sup>41</sup>.

***The district is experiencing a declining enrollment at all levels. Therefore, it is anticipated that the schools will be able to continue to serve the enrollment of the area's population for the near future***<sup>42</sup>. However, it may be necessary to provide updates at the schools in the future based on technological advances.

### ***Institutions of Higher Education***

***The Town of Plainfield does not have any institutions of higher education.*** However, UW-Oshkosh (Oshkosh), UW-Stevens Point (Stevens Point), Lawrence University (Appleton), and Ripon College (Ripon) are within an hour's drive of the area. UW – Fox Valley (Menasha) is a two-year university offering freshman and sophomore level classes. Students can earn an associate's degree, or credits are transferable to all four-year UW system schools.

### ***Vocational Technical Colleges***

The state is covered by 16 multi-county vocational technical and adult education districts which are organized on a regional basis and financed primarily by local property taxes.<sup>43</sup> These districts tend to follow school district boundaries rather than county lines. ***The Town of Plainfield is part of the Mid State District.*** Curricula in the technical schools are usually geared toward an area's particular needs. Typically a student may choose from among a two-year highly technical associate degree program, a two-year vocational program, a one-year vocational program, and a short-term program.

### ***Community Theaters***

***There are no community theaters in the Town of Plainfield.*** Several smaller theaters are located in City of Wautoma and the towns of Saxeville and Mount Morris. These theaters schedule a diverse calendar of events throughout the year including musical concerts, talent shows, the Wautoma Queen Pageant, and theatrical performances. Audiences are attracted from throughout Waushara County and central Wisconsin. The general public can rent the facilities for private events.<sup>44</sup>

<sup>40</sup> Wisconsin Taxpayers Alliance. 2008. *School Facts 08*.

<sup>41</sup> Tri-County Area School District. 2006. <http://www.penguin.tricounty.k12.wi.us/indix.html>.

<sup>42</sup> Connie Hamilton, District Secretary, person communication 11/24/08.

<sup>43</sup> Wisconsin Department of Instruction. 2006. *Wisconsin Technical College Districts*. <http://dpi.wi.gov/lbstat/techcmap.html>.

<sup>44</sup> McComb-Brush Performing Arts Center. 2006. <http://www.mccombbruchspac.com>.



## Other Municipal Buildings

### *Town Halls/Maintenance Garages*

***The Plainfield town hall is located at the intersection of STH 73 and 3<sup>rd</sup> Drive about two miles west of the Village of Plainfield*** (Exhibit 4-2). The building was constructed around 1950 as a Grange Hall and was turned over to the Town in the early 1970s. The town hall is used for elections, town meetings, office space and storage of town records. According to the Town of Plainfield's Community Management Plan, ***the Town feels that the existing town hall is adequate for its needs and there are no plans for expansion or relocation.***<sup>1</sup>

***The town garage is located at the intersection of STH 73 and 3<sup>rd</sup> Drive***, about two miles west of the Village of Plainfield. The town garage was built in 1973 and is used for storage and repair of town equipment. The building houses three trucks and one tractor. According to the Town of Plainfield's Community Management Plan, ***the Town feels that the building is adequate for its needs and there are no plans for expansion.*** The Town maintains the town roads and provides snow plowing as needed.

## Parks and Recreation

The Waushara County area is a popular recreational retreat. Waushara County's natural resources and outdoor recreational facilities provide a wide range of active and passive recreational activities. The abundance of natural lakes, forests, parks, recreational trails, and other amenities provide year-round recreational opportunities.

### *Parks*

#### Waushara County

***Waushara County's park system is comprised of 15 sites containing a total of 761 acres.*** The county park system is considered to primarily provide active recreational opportunities. ***There are no county park facilities found within the Town of Plainfield.*** The following County facilities are found within the surrounding towns and are described below.<sup>45</sup>

#### ***Marl Lake County Park***

Located in the west central portion of Waushara County between Wautoma and Hancock on CTH C, Marl Lake County Park occupies a 24-acre wooded site leased from the Town of Deerfield on the west side of 12th Avenue. Facilities include a paved boat ramp, a shelter, restroom facilities, picnic facilities, play equipment, and drinking water. Park visitors use a portion of the shoreline for swimming. Erosion control remains a problem in this area. Because parking capacity is limited, parked vehicles often infringe on adjacent lawn areas. Recent projects include a property survey and boundary markings in 2001, resurfacing of the boat landing in 2003, and installation of a fishing/boarding pier in 2005.

<sup>45</sup> Waushara County Parks, Recreation, and Solid Waste Department. 2006.  
<http://www.co.waushara.wi.us/parks.htm>



### ***Lake Huron County Park***

Located four miles east of Plainfield in the Town of Oasis, Lake Huron County Park serves residents in the northwestern portion of the county. The 1.5-acre park functions primarily as a boat access site to Lake Huron, widely regarded as one of the county's finest lakes. Facilities include a boat ramp, restroom building, and picnic equipment. Erosion control measures undertaken several years ago adjacent to the ramp have proven to be relatively effective. In 2002 a boundary survey was undertaken and property lines staked. More recently, a fence has been installed along the south property line.

### ***Sorenson Natural Area***

Purchased about five years ago, this 71-acre site in the Town of Deerfield is located on the north shore of Hartford (Lyman's) Lake, a 9-acre kettle pond some 27 feet deep. The County intends to limit development of this site so that its natural character is preserved. Walk-in access to the lake and a boarding pier is provided but use of the lake will be limited to canoes, kayaks, and other non-motorized craft. Sorenson Natural Area lies within the identified corridor of the Ice Age Trail and could provide modest overnight camping facilities for trail users without compromising the beauty and natural setting the site provides. An extensive trail system for hiking and snowshoeing is presently available. Other site improvements include a well and septic system.

### **Town of Plainfield**

***There are no local park facilities in the Town of Plainfield.***

### **Recreational Needs**

According to the National Park and Recreation Association, local communities should provide 10 acres of park and open space for every 1,000 residents.<sup>46</sup> Generally, smaller communities may require more acreage if all recreational needs are to be met. This is particularly the case when a community is expected to provide recreational opportunities not only for its residents, but also for residents of the surrounding area and a sizable number of visitors.

These standards suggest that Plainfield's present need is 6 acres. This figure is expected to remain unchanged at 6 acres in 2030, as the population of the Town increases to 580 people. ***The Town of Plainfield currently has zero acres of park and recreational land<sup>47</sup>, plus extensive WDNR holdings (approximately 503 acres). Based on these standards the Town has an adequate amount of park and recreational to meet these standards through the year 2030.***

### ***Lakes***

Many significant lakes can be found within the area.<sup>48</sup> The lakes provide a diversity of recreational opportunities including boating, swimming, and fishing. Many of the lakes within the area

---

<sup>46</sup> Recreation, Park, and Open Space Guidelines, 1990. National Park and Recreation Association.

<sup>47</sup> Existing land use map. 2008. ECWRPC

<sup>48</sup> Wisconsin DNR. 1970. *Surface Water Resources of Waushara County*.



have public access. ***Sand Lake is found in southeast corner of the Town of Plainfield.*** More detail on Sand Lake can be found in the Natural Resources element of this plan.

### Church and Youth Camps

Waushara County has long been a popular area for churches and other organizations to develop camps and retreats for members and their children. There are several of these facilities located throughout the county, collectively occupying nearly 2,000 acres of land. However, ***there are no camps in Plainfield.*** While the facilities they provide are generally not available to the public, the county benefits from goods and services they obtain from local vendors. In recent years, some of these camps have been sold off.<sup>49</sup>

### School and Town Forests

Three school forests and a town forest provide 819 acres of passive open space in Waushara County. However, ***there are no town or school forests within the Town of Plainfield.*** These holdings are generally ignored by the public for recreational activity, but they have excellent potential for providing linear recreational opportunities. Interested citizens may consider donating their land to a local school district through estate planning.

### Campgrounds

Sixteen private campgrounds are located throughout Waushara County. These facilities occupy an estimated 250 acres and provide an estimated 1,700 camping sites. Most of the campgrounds offer a diversity of recreational activities including swimming, boating, and fishing. ***No campgrounds are located within the Town of Plainfield.*** Because a high proportion of the campground sites in Waushara County are seasonal rentals, a shortage of overnight or short-term campsites continues to exist in the county.

### Snowmobile Trails

***About 285 miles of state-funded snowmobile trails are available in Waushara County.*** The public trail network and 50 miles of interconnected privately maintained club trails are readily accessible to all portions of the county and link up with trails of surrounding counties as part of a statewide system. Most of the public trails operate on wintertime easements which cross private property. A notable exception is the previously discussed Bannerman Trail between Redgranite and Neshkoro. Snow permitting, the public snowmobile trail system has a major impact on county's economy during the winter months. ***The private trails within the area are maintained by the Wautoma Snow Drifters, Hancock Snow Goers, Tri-County Drifters, and the Snow Drifters.***

### Sportsman's Clubs and Conservation Organizations

***Over a dozen parcels in the county are owned by a variety of sportsmen's and conservation groups.*** These sites total an estimated 800 acres and accommodate a variety of uses including trap and other shooting ranges; a snowmobile club; hunting and fishing grounds, areas set aside for preservation; and, in the case of private hunting clubs, hunting

<sup>49</sup> ECWRPC. 2006. *Waushara County Outdoor Recreation Plan.*



opportunities on a fee basis. Some of the hunting clubs also provide overnight accommodations. Depending on the activities each site provides and the user groups it serves, it can make a noticeable contribution to the local economy. Because some of these lands provide public recreational opportunities at times, they also help reduce use pressure on public land holdings.

## **Golf Courses**

There are three golf courses located in Waushara County. ***However, there are no golf courses within the Town of Plainfield.*** The following golf courses are located within the county and are further described below: the Waushara Country Club, Two Oaks North Golf Course and Marl Links.

The Waushara Country Club is located on STH 21 east of Wautoma, has recently been expanded to a 27-hole facility. Although the course is semi-private, guests are always welcome. Two Oaks North Golf Course is located near the City of Wautoma on CTH F in the Town of Marion. This 18-hole public golf course provides a golfing experience amid a scenic, peaceful, countryside setting. Marl Links, a par 3 course located near Marl Lake in the Town of Deerfield, is also available for public play. The courses offer challenging opportunities for golfers of all skill levels.

## **Post Office**

***The Town of Plainfield is served by the post office located on North Street.*** The facility is full service and provides local delivery to Town residents. ***At the present time there are no plans to expand this facility<sup>1</sup>.***

## **Key Findings**

### ***Wastewater Collection and Treatment***

- Private on-site wastewater treatment systems (POWTs) serve the majority of the Town of Plainfield.

### ***Stormwater Management***

- Eight drainage districts have been established within Waushara County. The only active district is the Marion-Warren district.
- Due to the rural nature of the town, curb and gutter is limited.
- A series of open ditches, culverts and drainage channels collect storm water in the Town of Plainfield.

### ***Water Supply***

- The Town of Plainfield is served by private wells.



### ***Solid Waste and Recycling***

- The County operates nine waste collection sites and contracts with Waste Management of Wisconsin, Inc. and Onyx Waste Services to haul waste and recyclables, respectively that are collected at the sites.
- Residents of the Town of Plainfield are able to utilize any drop-off site within the county, but they most likely utilize the Village of Plainfield site.
- All waste management sites in Waushara County accept recyclable materials.

### ***Electricity***

- Adams-Columbia Electric Co-op and Alliant-Wisconsin Power & Light provides electric power to the Town of Plainfield.

### ***Natural Gas***

- Wisconsin Gas Company provides natural gas service to the Town of Plainfield.

### ***Power Generation Plants and Transmission Lines***

- American Transmission Company (ATC) owns and maintains a number of transmission lines in the area.

### ***Telecommunications Facilities***

- According to information obtained from Waushara County there are three towers located in the Town of Plainfield.
- Union Telephone provides service to the Town of Plainfield.
- Union Telephone is one of the providers that supplies internet service to the area.

### ***Cemeteries***

- There are two cemeteries located in Plainfield: the Plainfield Cemetery and an unnamed cemetery.

### ***Childcare Facilities***

- The Mid-Wisconsin ChildCare Resource & Referral, Inc. and CAPSELL Services works with Waushara County.
- Residents most likely use childcare facilities in Plainfield. These facilities have a combined capacity of 76 children.
- UMOS operates a housing complex, Head Start program, and childcare facilities in Plainfield. The licensed facility provided childcare for 60 children in 2008.

### ***Elderly Services***

- The Waushara County Coordinated Transportation System offers rides to not only senior citizens but also to veterans, and human service clientele on Medical Assistance.



- Meals along with activities and fellowship are provided to seniors at eight locations throughout Waushara County. The closest site is located at the Plainfield Senior Center (114 W. Clark Street) in the Village of Plainfield.
- The Aging & Disability Resource Center of Green Lake, Marquette and Waushara Counties provides information and assistance on aging, long term care, disabilities, and other related topics.
- The Wautoma-Waushara Senior Center (in the Town of Dakota) offers a wide range of social and educational activities for seniors including bingo, card tournaments, crafts, and others.
- There is an adult day care facility in Wautoma called Adult Day Services Living Environmental. Cooperative Care, based out of Wautoma and Redgranite, provides in-home personal and home care services to elderly and disabled residents.
- Facilities for Waushara County are located in Wautoma and Redgranite.
- The overall capacity for adult care facilities serving Waushara County is 258 persons.

### ***Police Service***

- The Waushara County Sheriffs Department provides around the clock law enforcement services to the Town of Plainfield, as needed.
- Response time in the Town of Plainfield is about 20 minutes.
- The Waushara County Sheriff's Office is located on Division Street in Wautoma. The Hancock and Poy Sippi fire departments serve as satellite headquarters each Saturday afternoon.
- For a sheriff's office (includes most jail personnel), the state average was 1.77 sworn employees per 1,000 residents served. The Waushara County Sheriff's Office employs 1.1 officers per 1,000 population. This is below the state average.
- There are three correction facilities in Waushara County: the Waushara Huber Facility, the Waushara County Jail, and the Redgranite Correctional Facility.

### ***Fire Protection***

- The Plainfield Volunteer Fire Department is housed on S. Main Street in the village.
- The Plainfield Volunteer Fire Department has an ISO rating of 6 within the Village of Plainfield and 9 within the towns of Plainfield and Oasis.

### ***Health Care Facilities/Emergency Medical Services***

- There are no hospitals located within the Town of Plainfield; however there are six hospitals located within approximately 50 miles.
- Emergency medical services for the Town of Plainfield are provided by the Waushara County EMS.
- The First Responders through the Plainfield Volunteer Fire Department serve the towns of Plainfield and Oasis.

### ***Libraries***

- Residents within the Town of Plainfield have good selection of libraries, but will most likely use the library in Plainfield.



- The Plainfield Public Library provides a less than basic for material expenditures. However, with limited resources the library is able to provide a level of moderate to enhanced service levels for most criteria for both the municipal and service populations.

### ***Education***

- The Town of Plainfield is served entirely the Tri-County Area School District.
- The Tri-County Area School District is experiencing a declining enrollment at all levels. Therefore, it is anticipated that the schools will be able to continue to serve the enrollment of the area's population for the near future.
- The Town of Plainfield does not have any institutions of higher education.
- The Town of Plainfield is part of the Mid State Vocational Technical College District.

### ***Community Theaters***

- There are no community theaters in the Town of Plainfield.

### ***Other Municipal Buildings***

- The Plainfield town hall is located at the intersection of STH 73 and 3<sup>rd</sup> Drive about two miles west of the Village of Plainfield.
- The Town feels that the existing town hall is adequate for its needs and there are no plans for expansion or relocation.
- The town garage is located at the intersection of STH 73 and 3<sup>rd</sup> Drive. The Town feels that the building is adequate for its needs and there are no plans for expansion.

### ***Parks and Recreation***

- Waushara County's park system is comprised of 15 sites containing a total of 761 acres.
- There are no county park facilities found within the Town of Plainfield.
- There are no local park facilities in the Town of Plainfield.
- The Town of Plainfield currently has zero acres of park and recreational land<sup>50</sup>, plus extensive WDNR holdings (approximately 503 acres). Based on these standards the Town has an adequate amount of park and recreational to meet these standards through the year 2030.
- Sand Lake is found in southeast corner of the Town of Plainfield.

### ***Church and Youth Camps***

- There are no camps in Plainfield.

### ***School and Town Forests***

- There are no town or school forests within the Town of Plainfield.

### ***Campgrounds***

- No campgrounds are located within the Town of Plainfield.

---

<sup>50</sup> Existing land use map. 2008. ECWRPC



### ***Snowmobile Trails***

- About 285 miles of state-funded snowmobile trails are available in Waushara County.
- The private trails within the area are maintained by the Wautoma Snow Drifters, Hancock Sno-Goers, Tri-County Drifters, and the Snow Drifters.

### ***Sportsman's Clubs and Conservation Organizations***

- Over a dozen parcels in the county are owned by a variety of sportsmen's and conservation groups.

### ***Golf Courses***

- There are no golf courses within the Town of Plainfield.

### ***Post Office***

- The Town of Plainfield is served by the post office located on North Street in the Village of Plainfield.
- At the present time there are no plans to expand this facility.

## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

### **Economic Development**

Rising health care costs directly impact a company's ability to compete in a global market. High quality, affordable, and accessible health care that is available to all residents is important to the vitality of the area. As the area's residents become older, the importance of healthcare will increase. Residents who live and work in healthy communities are more active, have fewer health problems, and are more productive. Studies have shown that productivity for working parents increase if they have access to safe, reliable, quality daycare for their children.

A vital, safe, clean and healthy environment is an economic draw for new industry and residents. It aids in the retention of existing residents and businesses. Parks or green space add to the local economy by maintaining or increasing property values; providing a place where local citizens can socialize, play sports or relax; and promoting healthy active lifestyles that encourage physical activity. In addition, local parks and recreational facilities draw visitors to an area. These visitors spend money at local restaurants, motels and other businesses.

A good educational system has the ability to respond to an ever-changing job market, to educate or retain residents, and to form partnerships between businesses and schools.

Citizens, businesses and industries need accessible, reliable gas and electric services. To enable economic growth and open up new markets and opportunities for diverse and innovative services, access to fast, reliable, cost-effective, and cutting edge telecommunications must be available.



## **Housing**

Preplanning can save municipalities time and money. Infill of housing units or reuse of existing buildings in areas that already have the needed infrastructure in place, such as streets, sewer, water, emergency services and schools, saves taxpayers the cost of extending these services to new areas.

Housing developments should be provided with infrastructure that promotes healthy community lifestyles. It is important that housing, businesses and schools be interconnected with a network of sidewalks, green space and parks to encourage active lifestyles. Schools, parks, and libraries should be located in or near existing residential areas within walking distance for both children and adults. Parks and green space not only promote more active lifestyles but may increase housing values in the area.

However economically expedient or convenient it may seem at the time, housing should not be located in floodplains, areas of high groundwater, or other areas that are susceptible to flooding. Not only does this ill-conceived practice increase insurance costs, but it may also increase the cost to install basements and on-site sewage systems.

## **Transportation**

A well maintained, efficient and safe transportation network provides access for emergency service providers (police, fire and ambulance) and ensures a timely response. By incorporating pedestrian and bicycling facilities into the design of a transportation system, options other than the motor vehicle are made available and active healthy lifestyles that rely less on driving can be promoted.

The siting of a local park, recreational facility, school, library, solid waste or recycling facility may have an impact on the adjoining transportation network or facility. These facilities often result in additional vehicular and pedestrian traffic, increasing the likelihood that new roads, signalized intersections and pedestrian facilities will need to be built. The siting of facilities that attract birds and other wildlife, such as parks, solid waste or recycling centers, can adversely impact the safety of nearby transportation systems, including air traffic.

## **Agricultural Resources**

Preplanned development leads to the efficient use of public infrastructure and reduces the extent of sprawl, which contributes to the consumption of the rural countryside. Educating local officials and citizens about local land use decisions and their implications for farming is essential if farmland and the ability to grow or raise food are to be preserved.

## **Natural Resources**

The ability to accommodate growth while protecting the natural environment is essential if our quality of life is to be maintained or improved. The quality of the surface and groundwater resources is linked to the proper siting, installation and maintenance of individual on-site wastewater treatment systems. Improper treatment can result in the discharge of excessive human waste and bacteria into the groundwater system, which in turn can contaminate public and private water supplies. The cumulative impacts of development and well density can not only



affect the level of aquifers but also the rate at which the aquifer is recharged due to increased amounts of impervious surface. Additionally, improperly abandoned wells provide a direct link between the upper and lower aquifers and can be the cause of leakage between the two.

Parks, recreational areas, and other open space preserve and protect green areas for future generations to enjoy. They protect wildlife habitat within our communities, enhance water and air quality, lower heating and cooling costs, help control stormwater runoff, enhance property values, contribute to the vitality of a community, and encourage active lifestyles.

### **Cultural Resources**

Cultural and historical resources often help to determine and define a community's identity. Renovating or preserving an existing historic structure or building and reusing it not only enhances the area, but is often coveted by future tenants. Forming partnerships between public and private sectors to encourage development or redevelopment in already developed areas can make better use of existing public infrastructure and allow for ideas to become reality. Historic buildings can often be creatively converted to restaurants and other business and residential uses. Reuse of these buildings contributes to the tax roll as they are in close proximity to existing facilities; eliminates the need to expand infrastructure to new areas; cuts down on urban sprawl and the consumption of farm and open land; and saves taxpayers money. Cemeteries preserve the history of a community or area and are invaluable in the search for individual family history. In addition to their historical significance, they also contribute to the green space within a community.

### **Land Use**

Preplanned development leads to an efficient use of an area's resources, reduces urban sprawl, utilizes existing public infrastructure, and helps to eliminate land use conflicts. Concerns regarding the siting of solid waste and recycling facilities; gas, electric and telecommunications facilities; cemeteries; schools; and other public facilities are often raised by local citizens. However, education of local citizens and officials may result in a better general understanding of the issues and an acceptance of a solution that ultimately benefits everyone. Compact development in more urban areas reduces the cost to install public and private infrastructure and deliver public services (garbage pickup, sewer, water, emergency, electric, gas, and telecommunication, and elderly services, etc.).

Comm 83 regulations (affecting private on-site systems) have brought about state-level concerns regarding the promotion of "sprawl" development patterns and the ability to develop in or near sensitive areas. While the county has adequate groundwater supplies, well density in both urban and rural areas can impact the level of the aquifers. The rate at which they are recharged is influenced by the amount of impervious surface. Therefore when making land use decisions, it is imperative that the cumulative impacts of development on natural resources be examined carefully.

### **Intergovernmental Cooperation**

Forming partnerships between schools, park departments, libraries, non-profits and others benefits the community and saves the local taxpayer money. In some instances, if these



facilities are located near each other, additional cost savings and avoidance of duplicative services can be realized.

## **POLICIES AND PROGRAMS**

The provision of public and private utilities and community facilities is governed at federal, state, regional, and local levels. Given the breadth of topics discussed in this chapter, the policy background is provided for those areas most relevant to the comprehensive planning process.

### **Regional, County and Local Policies**

#### ***Regional***

**East Central Wisconsin Regional Planning Commission.** East Central has adopted a regional smart growth plan. As part of this planning effort, East Central has adopted six Public and Community Facilities goals:

- Support opportunities for the sustainable and safe management of solid waste and recycling, collection, processing and disposal activities working in a cooperative, regional manner.
- Support efforts to provide electric, gas and telecommunication services to meet industrial and residential needs while being environmentally conscientious.
- Support the provision of efficient quality emergency and non-emergency services in a timely cost-effective manner within the region.
- Work cooperatively to protect and preserve current park, open space, recreational facilities, programs and plan for new facilities, while providing for and balancing the needs of various community groups with the needs of the general public in a financially responsible manner.
- Support a collaborative regional forum to create and implement a strategic policy framework for the continuum of care for the health and well being of the residents of the region.
- Support a variety of meaningful educational options and opportunities for all students.

#### ***County***

**Waushara County Zoning Ordinance.** The Waushara County Zoning Ordinance regulates many of the public facilities referenced in this chapter. The following chapters contain relevant information.<sup>51</sup>

Chapter 30, Parks and Recreation, regulates land, structures and properties owned or leased by the County. This chapter specifies the laws associated with public usage of county parks. Topics discussed include, but are not limited to, park hours, permissible activities, safety standards, and police protection.

Chapter 38, Solid Waste, regulates solid waste and recycling activities in the county. Zoning ordinances are intended to preserve and protect environmental resources, to safeguard public health, and promote county-wide recycling initiatives. This section establishes hours for county

---

<sup>51</sup> Waushara County Zoning and Land Conservation Department. 2006. *Code of Ordinances: Waushara County, Wisconsin*.



waste collection facilities, delineates recycling guidelines, and discusses proper disposal techniques for solid waste.

Chapter 54, Utilities, regulates private on-site wastewater treatment systems within the unsewered portions of the County. This section regulates the proper siting, design, installation, inspection, and maintenance of private on-site wastewater systems (POWTS). The prerequisites necessary for the essential protection of the public health and the environment are the same everywhere. To a lesser extent, POWTS are also regulated by the Health and Sanitation Zoning Ordinance contained within Chapter 22. This ordinance declares that improper disposal of sewage and effluents are a public health hazard.

Chapter 54 is augmented by Comm 87 and Comm 83. Comm 87 requires that all new private on-site wastewater treatment systems be inspected at installation. Comm 83 specifies that all new POWTS must be inspected and maintained by a licensed certified professional. All new or replacement systems must be inspected every three years. POWTS should also be pumped out as mandated by their normal usage. Individual owners are now required to execute a verified affidavit and restrictive covenant running with the land which verifies that the POWTS serving the property is under such a maintenance program. Comm 83 requires that the service providers submit these forms on behalf of the POWTS owner within 30 days of the service. Records are kept on file with individual counties for a period of six years.

Chapter 58, Zoning, establishes the general zoning practices for unincorporated areas of Waushara County. Chapter 58 regulates cell tower heights (58-825), airport height limitations (58-236) and Wireless Communication Facilities (58-236). Cell towers are permitted as conditional uses according to the Waushara County zoning ordinances. Cell towers can be placed anywhere in the county with the exception of shoreland, wetland, or floodplain areas or the Wautoma airport height limitation zone. Although not specifically included in the Waushara County Zoning Codes, additional restrictions could be placed on communication towers.

**Waushara County Outdoor Recreation Plan.** The Waushara County Outdoor Recreation Plan discusses longstanding goals and objectives, inventories existing park and recreation needs and opportunities, and presents recommendations and an action program for addressing the system's growth and development. The current plan was adopted in April 2006.

**Waushara County Solid Waste Plan Update.** The Waushara County Solid Waste Plan Update 1999 inventories current waste management activities, projects future waste volumes, and discusses alternatives that the county may want to consider as they proceed into the future.<sup>52</sup>

### ***Local***

The Town of Plainfield adheres to Waushara County's Zoning Ordinance.

---

<sup>52</sup> Waushara County Parks, Recreation, and Solid Waste Department. 1999. *Solid Waste Plan Update*.



## Federal, State and Regional Programs

### *Federal Agencies*

#### **United States Environmental Protection Agency (USEPA)**

**Water Pollution Control Act.** The Federal Water Pollution Control Act (1977), more commonly known as the Clean Water Act, established the basic structure for regulating discharges of pollutants into surface waters. Effluent standards for wastewater treatment plants and other industrial facilities were established by this landmark legislation. The legislation also provided grants to communities to assist with planning and construction of upgraded facilities. Today, increasing levels of growth and changing treatment standards have caused more recent expansions and improvements of these systems.

**National Pollutant Discharge Elimination System (NPDES) Storm Water Program.** The Clean Water Act also established the National Pollutant Discharge Elimination System (NPDES) Storm Water Program. The comprehensive two-phased program addresses the non-agricultural sources of stormwater discharges which adversely affect surface water quality. A NPDES permitting mechanism requires the implementation of controls designed to reduce the volume of stormwater runoff and the level of harmful pollutants in stormwater runoff.

**Safe Drinking Water Act (SDWA).** Drinking water standards are set by the USEPA. The Safe Drinking Water Act (SDWA) requires the USEPA to set primary standards, while individual public water systems must ensure that they are met. Drinking water standards apply to public water systems which supply at least 15 connections or 25 persons at least 60 days of a calendar year. Standards have been set for 90 chemical, microbiological, radiological, and physical contaminants. Non-enforceable guidelines are also set for secondary standards for contaminants that may cause cosmetic effects such as poor taste or odors.

#### **United States Department of Agriculture**

**Rural Emergency Responders Initiative.** The Rural Emergency Responders Initiative can be utilized to strengthen the ability of rural communities to respond to local emergencies. Public bodies and non-profit organizations are eligible to receive funds. Eligible projects include the purchase of equipment, vehicles or buildings for the following types of projects: fire protection, rescue/ambulance, civil defense/early warning systems, communication systems, training facilities, and several other projects. More information can be found at [http://www.rurdev.usda.gov/rhs/cf/Emerg\\_Responder/rural\\_emergency\\_responders\\_initi.htm](http://www.rurdev.usda.gov/rhs/cf/Emerg_Responder/rural_emergency_responders_initi.htm).

**Water and Waste Grant and Loan Program.** The Water and Waste Grant and Loan Program offers grants and loans to communities with populations of up to 10,000. The funds are utilized to develop water and wastewater systems, including water supply, storage, waste disposal and storm drainage in rural areas. Eligible projects involve the original construction, modification or extension of existing projects. More information can be found at <http://www.usda.gov/rus/water/programs.htm>.

**Community Facilities Grant Program.** The Community Facilities Grant Program provides assistance to rural communities in the development of essential community facilities. Eligible applicants include public entities with populations less than 20,000. Grant funds may be used



to purchase equipment or construct, enlarge, or improve facilities associated with health care, public safety, or community and public services. More information can be found at [http://www.rurdev.usda.gov/rhs/cf/brief\\_cp\\_grant.htm](http://www.rurdev.usda.gov/rhs/cf/brief_cp_grant.htm).

### **Federal Emergency Management Administration (FEMA)**

FEMA offers several annual grant awards to fire departments. Eligible project costs include equipment, supplies, training, emergency work (evacuations, shelters, etc.), and mobilization/demobilization activities. All municipal jurisdictions with a population of less than 50,000 are eligible to receive funding. Recipients must provide a 10 percent match for all project costs. FEMA also operates disaster relief programs. For additional information see <http://www.fema.gov>.

### ***Other Federal Agencies***

Federal regulation of telecommunications, radio, and television towers is currently under the auspices of the **Federal Communications Commission (FCC)**, the **Federal Aviation Administration (FAA)**, and the **Occupational Safety and Health Administration (OSHA)**. The FCC issues licenses for new telecommunication facilities by determining the overall need, coordinates frequencies, and regulates tower placement. Communication towers must be located at the most central point at the highest elevation available. The FAA regulates tower height, coloring, and lighting to ensure aircraft safety. OSHA regulates the occupational exposure to non-ionizing electromagnetic radiation emitted from radio, microwave, television, and radar facilities.

### ***State Agencies and Associations***

**Public Service Commission (PSC)**. Public utilities in Wisconsin are regulated by the PSC, an independent regulatory agency. The PSC sets utility rates and determines levels for adequate and safe service. More than 1,400 utilities are under the agency's jurisdiction. PSC approval must be obtained before instituting new rates, issuing stock or bonds, or undertaking major construction projects such as power plants, water wells, and transmission lines.

### **Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP)**

Rural areas are governed by several non-point pollution prevention programs. Small-scale drains are prevalent throughout Waushara County. Administrative rules relating to agricultural runoff include NR-151, ATCP-50, NR-88, and ATCP-48. The first two regulations govern the total suspended solids (TSS) loadings; a 20 percent reduction is required by 2008 and 40 percent reduction by 2013. The latter two regulations pertain to the daily operations and functions of agricultural drainage districts. Primary responsibility for planning for, administering, and enforcing drainage district regulations resides with the county drainage board.

### **Wisconsin Department of Commerce**

COMM 83 is a health and safety code that sets standards for private on-site wastewater treatment system (POWTS). COMM 83 provides a technical and administrative framework for enforcing POWTS related issues. This legislation regulates traditional septic and mound



systems as well as delineates alternative options in which soil conditions and other factors limit the use of these traditional methods of private domestic wastewater treatment. The updated code prescribes specific effluent standards for POWTS.

**Community Development Block Grant – Public Facilities (CDBG – PF).** The Community Development Block Grant – Public Facilities (CDBG – PF) is a versatile tool that allows local units of government to finance public works projects. Projects must enhance the economic vitality of a community by undertaking public investment that contributes to overall community and economic development. Funds can be allocated to a wide array of infrastructure and public building projects, excluding buildings for the conduct of government. Typically, funded projects include improvements or construction of municipal sewer systems, wastewater treatment plants, municipal water systems, and other related projects. More information can be found at <http://www.commerce.state.wi.us/CD/CD-bcf-cdbg-pf.html>.

**Community Development Block Grant Public Facilities for Economic Development (CDBG – PFED).** The Community Development Block Grant Public Facilities for Economic Development (CDBG – PFED) helps underwrite municipal infrastructure development that retains or promotes business development by creating employment opportunities. Eligible projects include water and sewer systems and roads that are owned by a special purpose unit of government. All local governmental units with populations of less than 50,000 are eligible for funding. More information can be found at <http://www.commerce.state.wi.us/CD/CD-bcf-cdbg-pfed.html>.

**Wisconsin Fund.** The Wisconsin Fund provides grants to homeowners and small commercial businesses to repair, rehabilitate, or replace an existing private on-site wastewater treatment system (POWTS). Since 1978, the program has provided \$77 million in assistance. Waushara County residents living in areas not serviced by municipal sewer systems are eligible to participate if the annual household income is less than \$45,000. Small businesses with gross revenues totaling less than \$362,700 are also eligible. Waushara County provides assistance to county residents to prepare grant applications. A portion of the funds is used to develop more environmentally friendly systems. More information can be found at <http://www.commerce.state.wi.us/SB/SB-WisconsinFundProgram.html>.

## **Wisconsin Department of Natural Resources**

Federal legislation such as the Clean Water Act has served as the impetus for state legislation. Areawide Water Quality Management under Section 208 and the Facility Planning Grant Program under Section 201 mandated the preparation of sewer service area plans for urban areas. These principles have been embodied into Chapters NR-121 and NR-110 of the Wisconsin State Statutes respectively. NR-121 specifies the standards and processes for initiating and continuous areawide wastewater treatment management planning. As provided by NR-121, the WNDNR's role is to review and approve every sewer service area plan and its amendments, taking into account water quality impacts and cost-effectiveness. NR-110 regulates site-specific facility planning and sanitary sewer extensions. Decisions regarding the extension or expansion of wastewater collection facilities are made primarily at the local level.

**Wisconsin Solid Waste Management Program.** Begun in the 1970s, the Wisconsin Solid Waste Management Program regulates existing landfills and provides assistance to local governments. The program delineates all environmental regulations and standards that landfills



must adhere to including construction specifications, water monitoring requirements, and sanitary procedures. The program inventories and licenses all operating and proposed solid waste facilities. Periodic updates are performed to ensure that environmental protection standards are the most current based on data collection.

**Wisconsin Act 335.** In 1989, Wisconsin Act 335 was passed. This law governs the recycling programs within the state. Recycling programs for all commercial and residential entities were mandated under this legislation. The intent of the legislation is to divert recyclable material and various household hazardous wastes from landfills. Municipal governments are responsible for arranging residential programs, and the WDNR oversees and supports these efforts.

**NR-809.** Drinking water standards are also maintained at a state level. NR-809 regulates the design, construction, and proper operation of public water systems. The WDNR also assures that regulated contaminants are adequately monitored.

**Knowles-Nelson State Stewardship.** The Knowles-Nelson State Stewardship Fund is a land acquisition program for the State of Wisconsin. Created by the state legislature in 1989, \$60 million dollars per year is utilized to purchase lands for parks and other recreational purposes. An important component of the program is the cooperation between the DNR and local governments and non-profit organizations. The program offers a 50 percent grant match to create parks, hiking trails, hunting grounds, and other facilities. The funds can also be utilized for facilities improvements such as road construction and capital acquisition projects (picnic equipment, playgrounds, etc.). More information can be found at <http://dnr.wi.gov/org/caer/cfa/lr/stewardship/stewardship.html>.

**Clean Water Fund Program (CWFP).** The Clean Water Fund Program (CWFP) offers loans and hardship grants to any town, village, city, county utility district, public inland lake protection & rehabilitation district, metropolitan sewerage district or federally recognized American Indian tribe or band to construct or modify municipal wastewater systems or construct urban storm water best management practices. More information can be found at <http://dnr.wi.gov/org/caer/cfa/BUREAU/CleanWaterFund.pdf>.

**Safe Drinking Water Loan Program (SDWLP).** The Safe Drinking Water Loan Program (SDWLP) offers loans to any city, village, town, county, sanitary district, public inland lake protection & rehabilitation district, or municipal water district to construct or modify public water systems to comply with public health protection objectives of the Safe Drinking Water Act. More information can be found at <http://dnr.wi.gov/org/caer/cfa/EL/Section/drinkingwater.html>.

**Wisconsin Pollutant Discharge Elimination System (WPDES) Storm Water Program.** The NPDES program is administered by the WDNR through NR-216. The Wisconsin Pollutant Discharge Elimination System (WPDES) Storm Water Program regulates stormwater discharge from construction sites, industrial facilities, and selected municipalities. Recent Phase II requirements will require six minimum control measures to be addressed by communities and other local entities: public education, public participation, illicit discharges, construction site pollutant control ( $\geq 1$  acre in size), post construction site stormwater management, and pollution prevention. More information can be found at <http://dnr.wi.gov/org/water/permits/wpdes.htm>.



**Well Compensation Program.** The Well Compensation Program provides grants to owners of contaminated private water supplies that serve a residence or are used for livestock. Contamination can not be bacterial in nature. Eligibility is determined based on annual family income. More information can be found at <http://dnr.wi.gov/org/caer/cfa/Grants/wellcomp.html>.

## **Department of Public Instruction (DPI)**

The Wisconsin Constitution as it was adopted in 1848 provided for the establishment of district schools that would be free to all children age 4 to 20. Subsequent laws allowed a property tax to be collected to fund school programs. Today, the Department of Public Education (DPI) oversees the operations of school systems and sets state standards for educational curricula, teacher certification standards, and other educational programs.

## **Wisconsin Community Action Program Association (WISCAP)**

**Rural Community Assistance Program (RCAP).** Rural Community Assistance Program (RCAP) offers training and technical assistance to small (under 10,000), rural, low income communities, sanitary districts, and isolated rural areas for problems related to water and wastewater system development. More information can be found at [http://www.wiscap.org/rcap\\_what\\_is\\_rcap.htm](http://www.wiscap.org/rcap_what_is_rcap.htm).

## **Board of Commissioners of Public Lands (BCPL)**

**State Trust Fund Loan Program.** The State Trust Fund Loan Program offers loans to municipalities, lake districts, metropolitan sewerage districts and town sanitary districts for a wide variety of municipal purposes. More information can be found at <http://bcpl.state.wi.us/>.

## **Wisconsin Rural Water Association**

The Wisconsin Rural Water Association offers rural communities with populations of less than 10,000 grants, loans, and technical assistance for approved Rural Utility Service, Clean Water, Safe Drinking Water and Brownfield projects. More information can be found at <http://www.wrwa.org>.

## ***Regional Agencies***

**East Central Wisconsin Regional Planning Commission (ECWRPC).** ECWRPC acts in an advisory and regulatory role for Sewer Service Area (SSA) Plans. ECWRPC has prepared detailed long range plans for 26 wastewater treatment plants to address growth and ensure water quality within the region. These plans were developed and administered by East Central through an agreement with the Wisconsin DNR. ECWRPC also acts in an advisory capacity to WDNR and provides recommendations on various plan updates, amendments, facilities plans, and sewer extensions.



**Exhibit 4-1**

**Utilities**



**Exhibit 4-2**

**Community Facilities**



**EXHIBIT 4-1  
TOWN OF PLAINFIELD  
UTILITIES**

**Electric Service Boundaries**

- Adams-Columbia Electric Co-op
- Alliant-Wisconsin Power & Light
- Pioneer Power & Light Co.
- Wisconsin Electric Power Co.

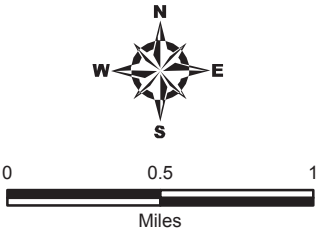
**Gas Service Boundaries**

- Alliant/Wisconsin Power & Light
- Wisconsin Gas Company

**Other Features**

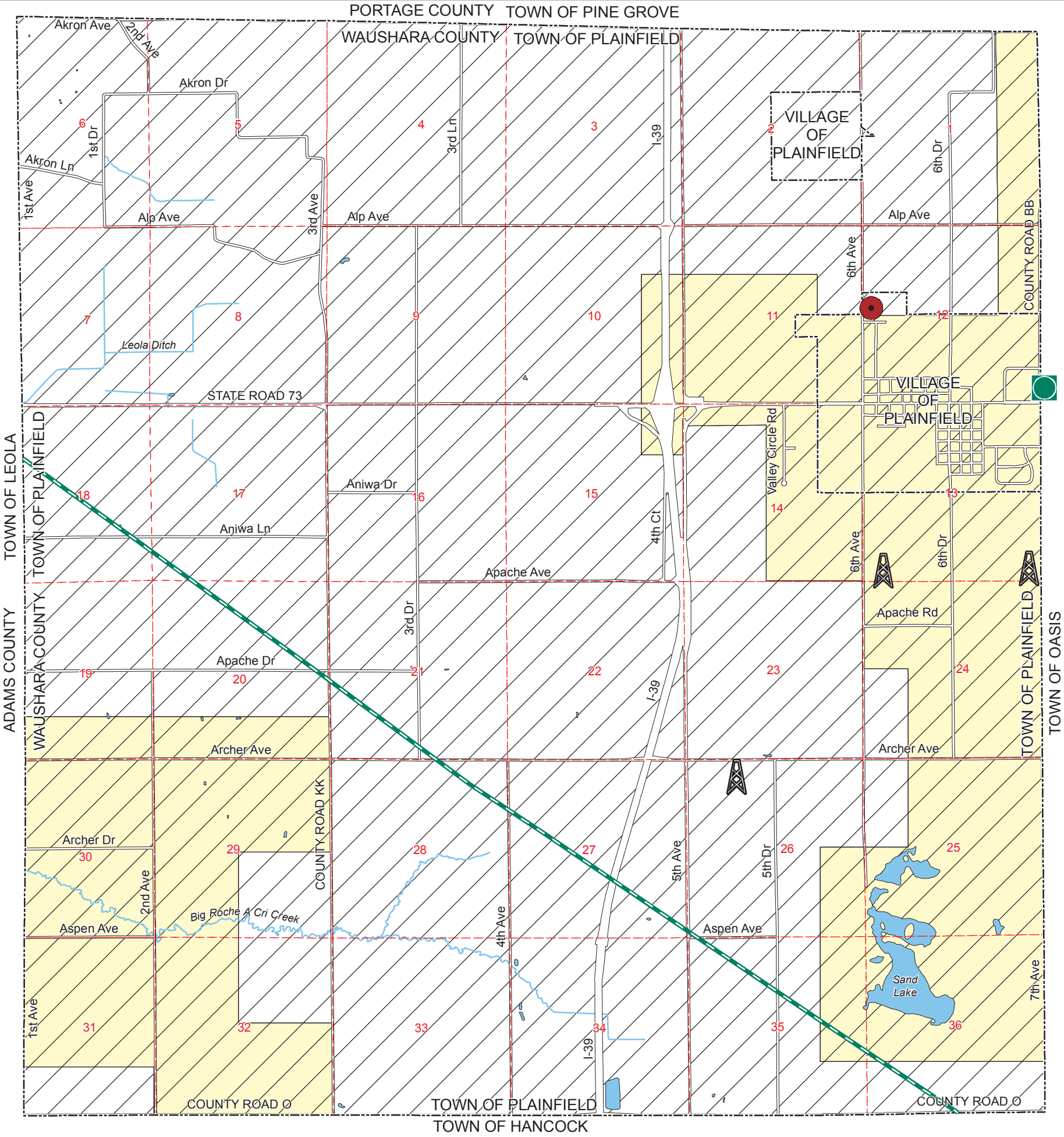
- Waste Drop Off Site
- Tower
- Electric Transmission Line
- Electric Substation
- Water Features
- Municipal Boundary

Source: Base data by Waushara County, 2008.  
Utility Data by WPS



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.










Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-NOVEMBER 2008



















# EXHIBIT 4-2 TOWN OF PLAINFIELD COMMUNITY FACILITIES

## School District Boundaries

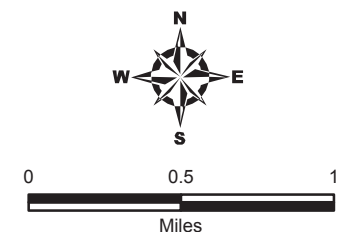
-  Almond-Bancroft School District
-  Berlin Area School District
-  Omro School District
-  Tri-County Area School District
-  Westfield School District
-  Wautoma Area School District
-  Waupaca School District
-  Weyauwega-Fremont School District
-  Wild Rose School District

## Other Features

-  Fire Station
-  Police Department
-  County Sheriff's Department
-  Hospital
-  Park
-  County Facility
-  Town / Village Hall
-  School
-  Cemetery
-  Church

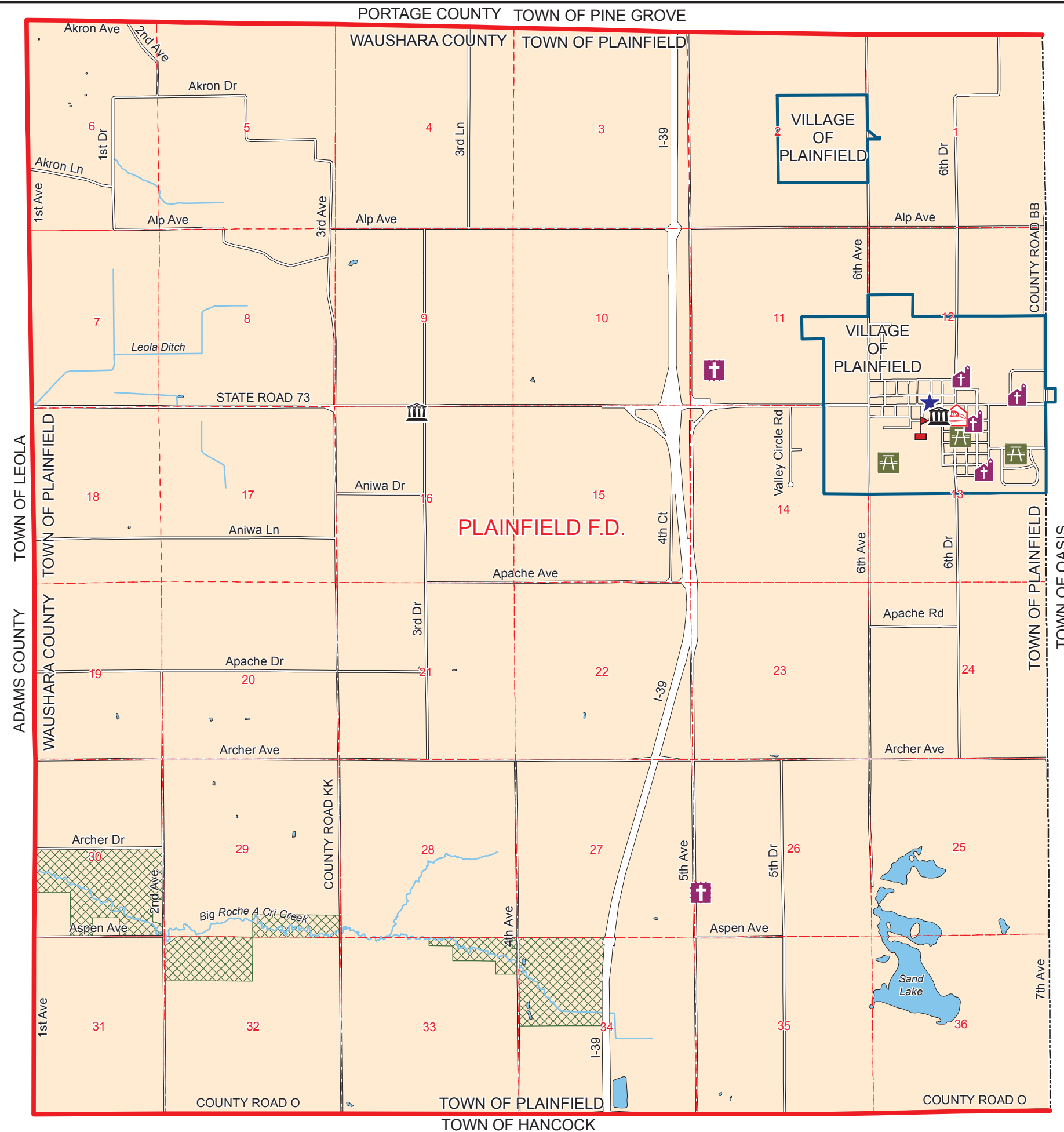
-  Police Service Boundary
-  Fire Service Boundary
-  Municipal Boundary
-  Water
-  DNR Fish & Wildlife Area
-  DNR Fish Hatchery
-  Mount Morris County Park
-  US Fish & Wildlife Area

Source: Base data by Waushara County, 2008. Community facilities data provided by WI DNR & Waushara County.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-NOVEMBER 2008





## CHAPTER 5: AGRICULTURE, NATURAL, AND CULTURAL RESOURCES

### TABLE OF CONTENTS

Introduction .....	5-1
Inventory and Analysis .....	5-1
Agricultural Resources .....	5-1
Agricultural Land Cover .....	5-1
Farmland Losses .....	5-2
Farmland Soils .....	5-3
Natural Resources .....	5-4
Soils .....	5-5
On-Site Waste Disposal .....	5-6
Building Site Development .....	5-6
Septage Spreading .....	5-7
Geology and Topography (Scenic Resources) .....	5-7
Steep Slopes .....	5-8
Water Resources .....	5-8
Watersheds and Drainage .....	5-8
Lakes, Ponds and Quarries .....	5-9
Rivers and Streams .....	5-10
Floodplains .....	5-10
Wetlands .....	5-10
Groundwater .....	5-11
Natural Springs and Artesian Wells .....	5-13
Groundwater Planning .....	5-13
Wildlife Resources .....	5-14
Wildlife Habitat .....	5-14
Rare, Threatened and Endangered Species and Natural Communities .....	5-15
Exotic and Invasive Species .....	5-15
Woodlands .....	5-15
Parks, Open Space and Recreational Resources .....	5-16
WDNR and Public Lands .....	5-16
Environmental Corridors .....	5-17
Mineral Resources .....	5-17
Solid and Hazardous Waste .....	5-18
Air Quality .....	5-18
Cultural Resources .....	5-18
State and National Register of Historic Places .....	5-18
Architecture & History Inventory .....	5-19
Archaeological Sites Inventory .....	5-19
Wisconsin Historical Markers .....	5-20
Museums/Other Historic Resources .....	5-20
Local History .....	5-20
Ethnic Origin .....	5-21
Key Findings .....	5-22
Agricultural Resources .....	5-22



Natural Resources .....	5-22
Soils .....	5-22
Geography and Topography .....	5-23
Water Resources .....	5-23
Wildlife Resources .....	5-23
Parks, Open Space and Recreational Resources .....	5-24
Mineral Resources .....	5-24
Solid and Hazardous Waste .....	5-24
Air Quality .....	5-24
Cultural Resources .....	5-24
Interrelationships with other Plan Elements .....	5-25
Economic Development.....	5-25
Housing .....	5-25
Transportation.....	5-26
Utilities and Community Facilities.....	5-26
Land Use .....	5-27
Intergovernmental Cooperation .....	5-27
Policies and Programs.....	5-28
State, Regional, County and Local Policies.....	5-28
Regional.....	5-29
County .....	5-30
Federal and State Programs .....	5-31
Federal.....	5-31
State.....	5-32

## TABLES

Table 5-1	Percent of Land Cover, 1991-1993 .....	5-2
Table 5-2	Trends in Farm Numbers, 1990-1997 .....	5-2
Table 5-3	Loss of Farm Acres, 1990-1997 .....	5-3
Table 5-4	Farmland Sales, 1990-1997.....	5-3
Table 5-5	Important Farmland Classes .....	5-4
Table 5-6	Soil Limitations for On-Site Waste Disposal .....	5-6
Table 5-7	Soil Potential for Building Site Development .....	5-6
Table 5-8	Soil Limitations for Septage Spreading.....	5-7
Table 5-9	Steep Slopes.....	5-8
Table 5-10	Lakes and Ponds .....	5-9
Table 5-11	Floodplains .....	5-10
Table 5-12	Wetlands .....	5-11
Table 5-13	Nitrate Levels (ppm) in Waushara County Wells .....	5-12
Table 5-14	Depth to Groundwater .....	5-13
Table 5-15	Woodlands.....	5-16
Table 5-16	Managed Forest Law and Forest Crop Law Lands .....	5-16
Table 5-17	Non-metallic Mining Sites .....	5-17
Table 5-18	Waste Disposal Sites .....	5-18
Table 5-19	Top 5 Ancestries .....	5-22



## EXHIBITS

Exhibit 5-1	Important Farmland Classes .....	5-37
Exhibit 5-2	Soil Limitations for On-Site Waste Disposal .....	5-39
Exhibit 5-3	Soil Potential for Building Site Development .....	5-41
Exhibit 5-4	Soil Limitations for Septage Spreading.....	5-43
Exhibit 5-5	Environmental Features (Map 1) .....	5-45
Exhibit 5-6	Environmental Features (Map 2) .....	5-47



## CHAPTER 5: AGRICULTURAL, NATURAL, AND CULTURAL RESOURCES

### INTRODUCTION

Agricultural, natural, and cultural resources give definition to a community and strongly affect its quality of life. For communities in Waushara County, a tapestry of working farms interwoven with large stands of woodlands and wetlands continue to dominate the rural landscape and help shape the area's identity and culture. The County's natural features such as topographic relief, lakes, streams, wetlands and soils also have a significant bearing on historic and contemporary land use, development patterns and contribute to a strong heritage of outdoor recreational pursuits. Fishing, swimming, hunting, and other outdoor activities are important quality of life past-times. The area's lakes and other scenic landscape features provide attractive home sites for many permanent and seasonal residents. At the same time, many of these environmental elements have limiting conditions that make them less than ideal for supporting particular types of activity or development. Understanding the relationship between these environmental characteristics and their physical suitability to accommodate specific types of activity or development is a key ingredient in planning a community's future land use.

### INVENTORY AND ANALYSIS

This chapter provides an inventory of existing agricultural, natural, and cultural resources. In addition, existing policies associated with these resources are discussed.

#### Agricultural Resources

The Town of Plainfield has had a farming history and tradition that have attracted residents to the area. Waushara County farmers produce a variety of feed and cash crops. Farming and other agricultural activities contribute significantly to the local economy. As with elsewhere in rural Wisconsin, these trends are changing as new developments encroach on productive farmland. The suburbanization trend is of great concern to both farmers and residents of the County. This section will look at important farmland classifications, agricultural land cover and farmland losses, and sales between 1990 and 1997. The UWEX Program on Agricultural Technology Studies is currently finalizing an updated *Wisconsin Town Land Use Databook; Town-Level Farming and Land Use Trends* from 2002 - 2007. This document is to be published in early 2009 and will provide a more comprehensive view of Waushara County's agricultural trends.

#### *Agricultural Land Cover*

Agricultural land cover includes row crops (corn, peas, potatoes, snap beans, soybeans and other row crops); forages (hay and hay/mix); and grassland (timothy, rye, pasture, idle, Conservation Reserve Program land, grass and volunteer grasses).<sup>1</sup> ***Agricultural land cover, which includes row crops, forages, and grassland, comprised approximately 64 percent of the total area of the Town of Plainfield and 56 percent of the total area of Waushara County (Table 5-1).***<sup>1</sup>

---

<sup>1</sup> Jackson-Smith, D., and E. Finnin. 2001. *Wisconsin County Agricultural Trends in the 1990s*.



**Table 5-1. Percent of Land Cover, 1991—1993**

Community	Row Crop	Forages	Grassland	Total Farmland
T. Plainfield	43.2	7.9	12.7	63.8
County	26.6%	9.0%	20.4%	56.0%

Source: UWEX Program on Agricultural Technology Studies, 1999

### ***Farmland Losses***

Farm and farmland losses are the result of economic pressures within agriculture as well as competition for agricultural lands from residential and recreational development. Within the state and nation there has been a steady decline in the number of farms and farmland acreage. Trends have indicated that, while the number of farms has declined, the acreage per farm has increased. This was true in the Town of Plainfield (257 and 263 respectively), but not for Waushara County (291 and 278 respectively) as a whole.

***In 1997, an estimated 56 farms existed within the Town of Plainfield. This represents a loss of 3 farms from 1990*** (Table 5-2). The percentage of the farms within the Town have decreased at a faster rate than the county as a whole. The Town of Plainfield also has a higher percentage of farms based on land area than the county with 1.6 farms per square mile, compared to 1.2 farms per square mile for Waushara County.<sup>2</sup>

Dairy farms within the Town of Plainfield and Waushara County have declined since 1990 (Table 5-2). ***In 1990, there were 2 dairy farms in the Town and 232 in Waushara County; by 1997, the Town lost one dairy farm while the County lost 101 dairy farms.***

**Table 5-2. Trends in Farm Numbers, 1990 – 1997**

Community	Estimated Farms				Dairy Farms			
	1990	1997	% Change	Per sq. mile (1997)	1990	1997	% Change	Per sq. mile (1997)
T. Plainfield	59	56	-5.10%	1.6	2	1	-50%	0
County	709	710	0.10%	1.2	232	131	-43.50%	0.2

Source: UWEX Program on Agricultural Technology Studies, 1999

Although the total number of farms decreased, the total amount of farmland remained about the same in Town during this time frame. ***Between 1990 and 1997, 48 acres (0.3%) of farmland were lost in the Town of Plainfield*** (Table 5-3). Waushara County experienced a larger decline in the amount of farmland (4.4%) than the Town. The average farm size in Plainfield and Waushara County in 1997 was 263 acres and 278 acres respectively. The percent of Town taxed as farmland represents the overall percentage of the Town of Plainfield that is considered agricultural by the local assessor.

<sup>2</sup> UWEX Program on Agricultural Technology Statistics. 1999. *Wisconsin Land Use Databook: Town-level Farming and Land Use Trends 1990-1998, Waushara County.*



**Table 5-3. Loss of Farm Acres, 1990 – 1997**

Community	Farmland (Acres)		Percent Change	% of Town Taxed as Farmland (1997)
	1990	1997		
T. Plainfield	14,797	14,749	-0.30%	67.90%
County	206,263	197,197	-4.40%	54.10%

Source: UWEX Program on Agricultural Technology Studies, 1999

When agricultural land is sold in the State of Wisconsin, information is collected by the Wisconsin Department of Revenue regarding whether the land is going to remain in agricultural use. It should be noted that the Wisconsin Department of Revenue only collects information on larger parcels. In 1990 a “large” parcel was 20 acres in area and in 1997 a large parcel was increased to 35 acres in area. Between 1990 and 1997, 41 parcels encompassing 2,758 acres was sold in the Town of Plainfield (Table 5-4). Approximately 94 percent of this land remained in agricultural use, while 6 percent was converted to other uses. Losses of agricultural lands in the Town of Plainfield were lower than the average conversion rates throughout Waushara County; approximately 22 percent of land sold in the County was converted to non-agricultural uses.

**Table 5-4. Farmland Sales, 1990 – 1997**

Community	No. Parcels Sold	Remain Agricultural	Converted to Other	Total Acres
T. Plainfield	41	2,584	174	2,758
County	974	33,881	9,558	43,439

Source: UWEX Program on Agricultural Technology Studies, 1999

### ***Farmland Soils***

Waushara County's farmland contributes to the quality of life, provides an open agricultural landscape, and adds to the economy of the area. A classification system rating the suitability of a specific area based on soil type and condition was developed by the U.S. Department of Agriculture.<sup>3</sup> These classifications in order of importance are: 1.) prime farmland, 2.) unique farmland, 3.) farmlands of statewide importance, 4.) farmlands of local importance, and 5.) other lands. Table 5-5 and Exhibit 5-1 summarize the distribution of available farmland in these categories.

**Prime farmland**, as defined by the U.S. Department of Agriculture is “the land that is best suited for food, feed, forage, fiber, and oilseed crops” when managed according to acceptable farming methods. These lands may be cultivated, pasture, woodland, or other land, however the land cannot be built-up, urbanized, or a water area. Prime farmland produces the highest yields with minimal inputs of energy and economic

<sup>3</sup> USDA. 1993. *USDA Handbook 18: Soil Survey Manual*.



resources with the least damage to the environment. Criteria used to determine prime farmland include an adequate and dependable supply of moisture from precipitation or irrigation, few or no rocks, high permeability, gently sloping terrain (0 to 6%) and a low erodibility. Prime farmland is not frequently flooded during the growing season or saturated with water for long periods of time. Soils that have a seasonal high water table may qualify as prime farmland if this limitation is overcome by drainage measures.

**Unique farmland** is defined as land other than prime farmland that is used to produce specific high-value food or fiber crops. It has a moisture supply, either from stored precipitation or irrigation systems, and combines favorable factors of soil quality, growing season, temperature, humidity, drainage, elevation, aspect or other conditions. Examples of specialty crops that typically require a high management and investment level include apple orchards, lettuce, carrots, celery, and cauliflower.

**Farmlands of statewide importance** are lands in addition to prime and unique farmland that are important to the State of Wisconsin for crop production.

**Farmlands of local importance** are lands in addition to the previous three categories which are important to Waushara County for crop production.

**Other lands** are areas which have little value for producing crops.

According to the above criteria, the highest percentage of land within the Town of Plainfield is considered local importance farmland. Within the Town, 49 percent (10,436 acres) is classified as local importance farmland. Of this total approximately 2,239 acres needs to be drained before the land can be utilized. State importance farmlands are the second most abundant category of farmland (38%) with a total of 8,065 acres. ***Only 675 acres or 3.1 percent of the land in the Town of Plainfield is considered prime farmland.*** Approximately 9 percent (1,966 acres) of land is considered unique farmlands, while 1 percent (245 acres) of the land is classified as other lands (Table 5-5, Exhibit 5-1). The remaining 98 acres are classified as water.

**Table 5-5. Important Farmland Classes**

Farmland Class	T. Plainfield	
	Acres	Percent
Prime Farmland	675	3.1%
Unique Farmland	1,966	9.2%
State Importance	8,065	37.5%
Local Importance	10,436	48.6%
Other Lands	245	1.1%
Water	98	0.5%
<b>Total</b>	<b>21,486</b>	<b>100.0%</b>

*Source: USDA-NRCS, 1982, Waushara County, 2003.*

## Natural Resources

This section will describe the general soils' associations of the Town of Plainfield together with the soils' suitability for on-site waste disposal, septage spreading, the potential for building site



development and steep slopes. It will also explain the water resources of the area including watersheds and drainage; lakes, ponds and quarries; rivers and streams; floodplains; wetlands and groundwater. Wildlife, parks, open space, recreational and mineral resources will also be touched upon.

### ***Soils***

Soils provide the physical base for development and agriculture within a community. Knowledge of their limitations and potential difficulties is important in evaluating crop production capabilities and other land use alternatives such as residential development, and utility installation. The criteria considered by the Natural Resource Conservation Service (NRCS) in establishing the severe rating of soils include wetness, shrink–swell potential, bearing strength, susceptibility to flooding, land spreading, slope steepness, and frost action.<sup>4</sup> Severe soil limitations do not necessarily exclude areas from being developed, but instead indicate that more extensive construction measures must be taken to prevent environmental and property damage.

Soils are classified according to their associations, which are a grouping of similar soil types based on geographic proximity, physical characteristics, and permeability. There are four major soil associations within the Town of Plainfield.

**Plainfield-Okee-Richford Association soils** are sloping to steep sandy soils located on moraines, hills, and terraces. Plainfield soils are rapidly permeable and excessively drained, while Okee and Richford soils are moderately permeable and somewhat excessively drained. Slopes range from 6 to 30 percent. While some of the Richford soils are used for cropland, most acreage in this association is used for woodlands. These soils are especially suited for pine species.

**Plainfield-Richford-Boyer Association soils** are nearly level and gentle sloping soils that are well drained to excessively drained sandy soils located on outwash plains and terraces. Most acreage in this association is used as irrigated cropland with a few areas suitable for woodlands. Soil erosion and very rapid permeability are the main concerns with this association.

**Kingsville-Meehan Association soils** are located along the Town of Plainfield's western border. These nearly level and gently sloping soils are poorly drained sandy soils located on glacial outwash plains, glacial depressions, and lake basins. Most of the acreage in this association is used as cropland; some areas are used as pasture or woodlands. Many of the areas are drained and used as irrigated cropland. The main concerns of this association are wetness and low available water capacity.

**Plainfield-Pearl-Leola Association soils** are moderately well drained sandy soils which are nearly level to gently sloping. These soils are found in glacial outwash plains. The soils within this association range from well to moderately drained (Plainfield and Pearl) to poorly drained (Leola). Most of the acreage in this association is used as irrigated cropland with some areas used as pasture or woodlands. The main concerns of this association are low available water capacity, soil blowing and wetness.

---

<sup>4</sup> U.S. Department of Agriculture Soil Conservation Service. 1989. *Soil Survey of Waushara County, Wisconsin*.



### ***On-Site Waste Disposal***

Exhibit 5-2 identifies suitability for on-site waste disposal options based on an evaluation of soil characteristics. This map is not intended to serve as a substitute for on-site soil investigations, but rather as an indicator of reasonable expectations for soils underlying a site.

Evaluation of the soil data indicates that the vast majority of the soils in the Town of Plainfield (86%) are rated suitable for conventional or at-grade in-ground pressure or mound systems (Table 5-6). Generally, soils near streams and rivers are the least suitable for on-site waste disposal. Areas with high groundwater or characterized by poorly drained soils are also more likely to be unsuitable for on-site systems.

Almost all of the soils in the Town of Plainfield are capable of supporting private on-site wastewater disposal systems. ***About 34 percent of the area in the Town of Plainfield is suitable for conventional systems; while another 52 percent is suitable for at-grade, in-ground pressure and mound systems.*** The remaining 3.2 percent (678 acres) of the soils in Plainfield are rated unsuitable for on-site systems due primarily to wet soil conditions and low permeability. Water features account for less than one percent (0.5%, 98 acres) of the surface area within the Town of Plainfield.

**Table 5-6. Soil Limitations for On-Site Waste Disposal**

Community	Conventional		At-Grade <sup>1</sup>		Holding Tank <sup>2</sup>		Unsuitable		No Rating		Water		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	7,226	33.6%	11,245	52.3%	2,239	10.4%	678	3.2%	0	0.00%	98	0.5%	21,486

<sup>1</sup>Includes in-ground pressure and mound systems.

<sup>2</sup>Includes new technology systems producing 10<sup>4</sup> or less coliform fecal units (cfu) per 100ml.

Source: USDA-NRCS, 1982, Waushara County, 2003.

### ***Building Site Development***

The USDA-Natural Resource Conservation Service has evaluated soil characteristics and rated soil potential for building site development based upon wetness, shrink-swell potential, bearing strength, susceptibility to flooding, slope steepness, and frost action. The ratings range from low to very high potential. Typically, areas near flowages and in wetlands have the lowest ratings. Exhibit 5-3 identifies soil potential for building site development. ***Over one quarter of the area within the Town of Plainfield (28.3%, 6,082 acres) has soils that are considered to have a very high suitability for building site development,*** while an additional 38.4 percent (8,242 acres) have a medium suitability (Table 5-7). Approximately 33 percent (7,064 acres) of the Town is rated very low or is not rated for building site developments. Water accounts for slightly more than one percent of the area.

**Table 5-7. Soil Potential for Building Site Development**

Community	Very High		Medium		Very Low, No Rating		Water		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	6,082	28.3%	8,242	38.4%	7,064	32.9%	98	0.5%	21,486

Source: USDA-NRCS, 1982, Waushara County, 2003.



## Septage Spreading

The Waushara County Land Conservation Office has evaluated soil characteristics for the suitability of septage spreading based on groundwater depths, permeability, soil texture, slope, wetness, and soil depths (Exhibit 5-4). The ratings range from none or slight to severe. Soils rated slight are relatively free of limitations that affect the intended use or have limitations that are easily overcome. Soils with moderate limitations can normally be overcome with corrective planning, careful design, and good management. Soils rated severe have physical limitations which are severe enough to make the use of the soil doubtful for the proposed use. Septage spreading cannot occur within 300 feet of rivers and streams or within 1,000 feet of lakes unless they are incorporated into the soil within 72 hours of application. Spreading rates need to be based on current soil tests, on-site vegetation, and a septic nutrient test.

***One quarter of the soils (25.2%, 5,412 acres) pose a slight risk to no limitations for septage spreading within the Town of Plainfield.*** Approximately 41.5 percent (8,911 acres) are listed as having a moderate risk, while 32.6 percent (6,994 acres) of the soils in Plainfield are considered a severe risk for septage spreading (Table 5-8).

**Table 5-8. Soil Limitations for Septage Spreading**

Community	None to Slight		Moderate		Severe		No Rating		Water		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	5,412	25.2%	8,911	41.5%	6,994	32.6%	70	0.3%	98	0.5%	21,486

Source: USDA-NRCS, 1982, Waushara County, 2003.

## Geography and Topography (Scenic Resources)

The local communities in the Waushara County are defined by diverse topographical features<sup>5</sup>. Evidence of several phases of the Wisconsin Glacier can be found in the County.<sup>6</sup> The western edge of the County is a flat outwash plain. A narrow moraine is located on the eastern boundary of this outwash plain extending through the Villages and towns of Coloma, Hancock and Plainfield. This moraine ridge creates a groundwater divide separating the County's groundwater flow east and west. Central Waushara County (City of Wautoma, Village Wild Rose and surrounding towns) gradually flattens to a rolling plain as you move eastward across the County. The eastern third of the County is a gently rolling lake plain. The southeastern areas of Waushara County were once occupied by Lake Oshkosh and are characterized by relatively flat to gently rolling plains. The glacial plain areas of Waushara County have expansive deposits of red clay and organic-rich soils.<sup>7</sup> This combination has resulted in expansive wetlands and valuable agricultural areas.

As a result of glacial activity, land relief within Waushara County is quite varied.<sup>8</sup> ***Within the Town of Plainfield, land relief is approximately 100 feet, from a low of 1,050 feet***

<sup>5</sup> WDNR, *Ecological Landscapes of Wisconsin*; 2001

<sup>6</sup> Dutch, S. 2003. *Lake Oshkosh Drainage*. <http://www.uwgb.edu/dutchs/geolwisc/geohist/wi12ka.htm>

<sup>7</sup> Attig, J., et al. 2005. *Glacial Lakes Wisconsin and Oshkosh: Two Very Different Late-Glacial Ice-Marginal Lakes*. [http://gsa.confex.com/gsa/2005NC/finalprogram/abstract\\_86950.htm](http://gsa.confex.com/gsa/2005NC/finalprogram/abstract_86950.htm)

<sup>8</sup> USGS. 1984. *USGS 7.5 Minute Quadrangle Maps*.



***above sea level along the Big Roche-A-Cri Creek to a high of 1,150 in areas north of Sand Lake (Sections 24 and 25).***

### ***Steep Slopes***

Exhibit 5-5 indicates areas that have slopes greater than 12 percent. **Less than one percent (0.4%, 84 acres) of the Town of Plainfield is classified as having slopes in excess of 12 percent** (Table 5-9). In the Town of Plainfield, steep slopes are concentrated within the southeast corner of the Town, generally following the outer moraine (east of I39). Steep slopes are generally found in conjunction with moraines, drumlins, and other glacial features.

**Table 5-9. Steep Slopes**

Community	0-12 Percent		>12 Percent		No Rating, Water		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	21,234	98.8%	84	0.4%	168	0.8%	21,486

*Source: USDA-NRCS, 1982, Waushara County, 2003.*

### **Water Resources**

Water resources are sources of water that are useful or potentially useful to humans. Water is important because it is needed for life to exist. Water is used for household, agricultural, recreational, industrial and environmental activities<sup>9</sup>. Essentially all these uses require fresh water.

### ***Watersheds and Drainage***

The WDNR has divided the state into 24 hydrological based geographic management units (GMUs) or basins. Each GMU is further divided into smaller units based on smaller sub-watersheds. The Wisconsin DNR has completed several reports analyzing water quality for designated GMUs.<sup>10</sup>

***Surface water drainage for the Town of Plainfield is located entirely within the Central Wisconsin River Basin.*** The Central Wisconsin River Basin (4,021 square miles) includes twenty-nine different sub-watersheds.

***The Town of Plainfield is divided into three sub-watersheds*** (Exhibit 5-5). The Big Roche-A-Cri Creek Sub-watershed (CW06) encompasses the majority of land in the Town. The northwest and north central portion of the Town fall within the Fourteenmile Creek Sub-watershed (CW07), while a very small portion of the town's northeast corner fall within the Sevenmile & Tenmile Creeks Sub-watershed (CW09).

- **The Big Roche-A-Cri Sub-watershed** (Central Wisconsin River Basin) drains the southern portions of the Town of Plainfield into the Big Roche-A-Cri Creek. The Big Roche-A-Cri Creek head waters are located in the southwest portion of Plainfield. This is a 2.5 mile hardwater trout stream that flows into Adams County and eventually drains

<sup>9</sup> Wikipedia, [http://en.wikipedia.org/wiki/Water\\_resources](http://en.wikipedia.org/wiki/Water_resources), 2/16/07.

<sup>10</sup> WDNR. 2002. *State of the Basin Reports*. <http://dnr.wi.gov/org/gmu/stateofbasin.html>



into the Wisconsin River. Wind erosion is severe in this sub-watershed and it is rated high for stream and wind erosion controls.

- **The Fourteenmile Creek Sub-watershed** (Central Wisconsin River Basin) is situated in Waushara, Wood and Adams Counties. Ditching and drainage for agricultural uses have significantly reduced what was once extensive wetlands in the northern portions of this sub-watershed. Water quality concerns for this sub-watershed are high nitrate levels, stream pasturing, and water draw for agricultural uses.
- **The Sevenmile & Tenmile Creeks sub-watershed** (Central Wisconsin River Basin) is a maze of ditches and laterals that were created to drain lowland areas for agricultural activities. Large areas of land are being maintained by the State as grassland ecosystems. This sub-watershed ranks as a high priority watershed. Water quality is impacted by grazing and pivot irrigation systems. Soil erosion due to wind and water is a major concern for this sub-watershed.

### ***Lakes, Ponds and Quarries***

The majority of lakes within Waushara County are natural and of glacial origin. Sandy soils readily allow for the percolation of precipitation into the ground rather than overland flow directly to surface waters. This results in a continual recharge of the shallow aquifer underlying the county and surrounding region.<sup>11</sup> ***There is one lake within the Town of Plainfield.*** (Table 5-10, Exhibit 5-5).

**Table 5-10. Lakes and Ponds**

Name	Acres	Maximum Depth Feet	Location (Section Number)	Lake Type
Sand Lake	143	9	36	Seepage

*Source: WDNR Wisconsin Lakes, 1995; ECWPC, 2008.*

Lakes can be described as drainage, seepage, spring, or drained lakes. The vast majority of Lakes within Waushara County are classified as seepage lakes. Seepage lakes do not have an inlet or an outlet and are recharged by precipitation and runoff supplemented by groundwater. Seepage lakes commonly reflect groundwater levels and can fluctuate seasonally.

The second most common type of lake in Waushara County is drainage lakes. These lakes have both an inlet and an outlet; the main water source is stream drainage. Drainage lakes in which one-half of the maximum depth is dependant on a dam are considered to be artificial lakes or impoundments.

Waushara County has a small number of spring lakes, primarily scattered throughout north central and south central Waushara County (towns of Springwater, Saxeville, Mount Morris, Leon, Dakota, and Richford). Spring lakes have an outlet, but have no inlet. The primary source of water is groundwater flowing into the bottom of the lake from inside and outside the immediate surface drainage area. Spring lakes are the headwaters of many streams.

<sup>11</sup> WDNR. 1970. *Surface Water Resources of Waushara County.*



Waushara County has one listed drained lake (located in Mount Morris). Drained lakes have no inlet, but have a continuously flowing outlet. Drained lakes are not groundwater fed. The primary source of water is from precipitation and direct drainage from the surrounding land. Water levels fluctuate depending on the supply of water.

### ***Rivers and Streams***

#### ***There is only one named river/stream in the Town of Plainfield.***

Big Roche-A-Cri Creek is located in the southwest portion of the Town. Headwaters for the Big Roche-A-Cri Creek originate in the Town. The Creek is classified as a warm water sport fishery, Class I and II trout stream. Intense irrigation threatens the creek's base flow. Large sediment loads, primarily influenced by agricultural landuse activities are carried by the creek.

There are several unnamed creeks within the Town of Plainfield and throughout the County. In addition, agricultural ditches have been constructed throughout Waushara County to drain excess water from agricultural fields.

### ***Floodplains***

Areas susceptible to flooding are considered unsuitable for development due to potential health risks and property damage. Flood Insurance Rate Maps for the unincorporated portions of Waushara County identify areas lying within the Town of Plainfield.<sup>12</sup>

Mapped floodplains within the Town are primarily located along the Big Roche-A-Cri Creek corridor with a small amount of floodplains surrounding the Sand Lake shoreline (Exhibit 5-5).

Table 5-11 indicates the total number of acres and overall percentages of land which are within the 100-year floodplain. ***Approximately 2.3 percent (488 acres) of the land within the Town of Plainfield lie in a floodplain.***

**Table 5-11. Floodplains**

Community	Acres	Percent
T. Plainfield	488	2.3%

*Source: FEMA, 1985, Waushara County, 2001*

Waushara County has adopted a floodplain ordinance requiring certain land use controls in designated flood hazard areas, thus making residents eligible to participate in the Federal Flood Insurance Administrative Flood Insurance Program. The program requires all structures that are constructed or purchased in designated flood areas utilizing loans from federally insured banks to be insured by a flood insurance policy.

### ***Wetlands***

Wetlands act as a natural filtering system for nutrients such as phosphorous and nitrates. More importantly, wetlands also serve as a natural buffer protecting shorelines and stream banks

<sup>12</sup> FEMA. 1985. *Flood Insurance Rate Maps*.



from erosion. Wetlands are essential in providing wildlife habitat, flood control, and groundwater recharge. Consequently, local, state, and federal regulations place limitations on the development and use of wetlands and shorelands. The Shoreland/Wetland Ordinance adopted by Waushara County regulates development within 1,000 feet of the ordinary high water elevation mark of navigable lakes, ponds, or flowages or 300 feet from the ordinary high water elevation mark of navigable rivers or streams. The U.S. Army Corps of Engineers has authority over the placement of fill materials in virtually all wetlands two acres and larger or adjacent to navigable waters. The Wisconsin Department of Natural Resources and United States Department of Agriculture also have jurisdiction over wetlands within Wisconsin. The U.S. Department of Agriculture incorporates wetland preservation criteria into its crop price support programs. Prior to placing fill or altering wetland resources, the appropriate agencies must be contacted to receive authorization.

The wetlands surveyed according to the Wisconsin Wetlands Inventory Map are shown in Exhibit 5-6.<sup>13</sup> They were identified on aerial photographs by interpreting vegetation, visible hydrology, and geography based on the U.S. Fish and Wildlife Service.

Wetlands in the Town of Plainfield are scattered throughout the western portions of the Town. Large wetland areas are located along the Big Roche-A-Cri Creek corridor and the creek's headwater areas located between I-39 and 4<sup>th</sup> Avenue. Smaller scaled wetlands are spread out across the Town and are generally associated with the town's unnamed streams or drainage ditches.

Table 5-12 indicates the number of acres and the percentage of wetlands within the Town of Plainfield. Not including small tracts of wetlands (less than five acres); ***only seven percent (1,524 acres) of the Town of Plainfield is classified as wetlands.*** The amount and variety of wetlands have moderate limitations on the future growth and development of the area.

**Table 5-12. Wetlands**

Community	Acres	Percent
T. Plainfield	1,524	7.1%

*Source: WDNR, 2004; Waushara County, 2008.*

### ***Groundwater***

In Waushara County, groundwater occurs mostly in the alluvium and glacial drift of the Quaternary Age and in the sandstone of the Cambrian Age. Precipitation in the form of either rain or snow is the largest contributor to recharge of the groundwater aquifers. Recharge is generally greatest in spring when water from melting snow and heavy rains saturates the ground and percolates to the water table. If discharge (the drawing out and use of groundwater) is greater than recharge, the elevation where the groundwater is extracted will fall and a local depression in the water table will result. Lower water levels cause the pumping lifts to increase and may reduce the yields of some of the wells.

<sup>13</sup> WDNR. 1979. *Wisconsin Wetland Inventory Maps.*



Groundwater within the county occurs under both water table and artesian conditions. Water in the unconsolidated beds of sand and gravel is generally unconfined and occurs under water table conditions. Confined or artesian conditions exist locally where the water in the sand and gravel deposits is confined by layers of silt or clay.

***A groundwater divide, located west and parallel to the topographic divide, cuts diagonally through Waushara County. It extends from Marquette County, through the towns of Hancock and Coloma, the Village of Hancock, and then east of the Village of Plainfield to the Portage County line.<sup>14</sup> East of this divide, groundwater moves southeasterly toward the Wolf and Fox Rivers. West of this divide groundwater moves westerly toward the Wisconsin River.***

According to the well water information obtained from the Central Wisconsin Groundwater Center in Stevens Point, some private wells located in this area contain nitrate levels that are higher than the EPA Safe Drinking Water Act standards of 10 mg/L.<sup>15</sup> These standards apply to municipal water sources only, but are strongly suggested thresholds for private systems. Nitrates originate in both agricultural and residential fertilizers, human sewage, and farm animal waste. Excessive levels of nitrates in drinking water have caused serious illness or death in infants under six months of age. Pregnant women are also advised not to drink water in which nitrate levels exceed the EPA standards. Due to sandy soils within the County, there is potential for groundwater contamination in the shallower aquifers. However, this potential is greatly reduced in the deeper aquifers. Table 5-13 lists the results of water sample tests conducted between 1990 and 2001.<sup>16</sup> For conversion purposes, 1 part per million (ppm) is the same concentration as 1 mg/L. ***Eleven wells within the Town of Plainfield exceeded the 10 ppm threshold level for nitrate.***

**Table 5-13. Nitrate Levels (ppm) in Waushara County Wells**

Community	None Detected	0.1 - 2.0 ppm	2 -10 ppm	10 -20 ppm	> 20 Ppm
T. Plainfield	2	4	3	2	9

Source: Central Wisconsin Groundwater Center, UW – Stevens Point, 2001.

According to Waushara County, ***the majority of homes within the Town of Plainfield are served by private wells.*** Although groundwater is found at varying depths throughout the area, the majority of groundwater in the Town of Plainfield is found in depths of two to six feet (Table 5-14 and Exhibit 5-5). ***Groundwater depths of less than two feet are found in about fourteen percent (2,916 acres) of the land area,*** an additional 52.3 percent (11,245 acres) of the area has groundwater depths of 2 to 6 feet. Groundwater depths exceed 6 feet in 33.3 percent (7,156 acres) of Plainfield. The remaining 0.8 percent (168 acres) in Plainfield has either no rating or is surface water. In general, there is a strong correlation between areas of high groundwater and wetlands.

<sup>14</sup> Geology and Ground-Water Resources of Waushara County, Wisconsin, Geological Survey Water-Supply Paper, 1809-B. Map of Waushara County, Wisconsin, Showing Configuration of Water Table, July 1957 and Location of Wells, Springs, and Streamflow-Measurement Sites.

<sup>15</sup> USEPA. 2005. *List of Drinking Water Contaminants & MCLs*. <http://www.epa.gov/safewater/mcl.html>.

<sup>16</sup> Central Wisconsin Groundwater Center. 2001. *UWEX Private Well Project: Waushara County*.



**Table 5-14. Depth to Groundwater**

Community	< 2 Feet		2-6 Feet		> 6 Feet		No Rating		Water		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	2,916	13.6%	11,245	52.3%	7,156	33.3%	70	0.3%	98	0.5%	21,486

Source: USDA-NRCS, 1982. Waushara County, 2005.

According to the *Wisconsin Administrative Code, Chapter ATCP 30 Atrazine, Pesticides; Use Restrictions*, atrazine prohibition areas have been established throughout Waushara County and within the Town of Plainfield. In the prohibition areas no person can apply, mix or load any atrazine product, except under special conditions. ***The atrazine prohibition area includes portions of sections 10, 11, 14, 15, 22 and 23, between Alp Avenue and Archer Avenue west of 6<sup>th</sup> Drive and the Village of Plainfield*** (Exhibit 5-1). The Department of Agriculture has determined these areas based on well samples. These areas are monitored, and if atrazine is not applied, the levels may diminish and may be removed from the list.

### ***Natural Springs and Artesian Wells***

There are a number of natural springs and artesian wells scattered throughout Waushara County. A natural spring can occur when an impermeable layer (usually consisting of clay) forces the water table to the surface or when water-bearing crevasses in fractured rock intersect the surface. An artesian well is created when a well is drilled into a confined aquifer which is recharged from a source located at a higher elevation<sup>17</sup>. The majority of springs within Waushara County are gravity depression springs, generally located in the eastern portions of the County.

### ***Groundwater Planning***

Water quality and quantity have been a concern for Waushara County communities. Low lake levels throughout Waushara County underscore a more pressing problem: groundwater quantity and quality preservation. Communities throughout East Central Wisconsin have been challenged with a number of issues ranging from potable water supply shortfalls to contamination issues such as elevated arsenic and radium levels. A prolonged drought coupled with increased water demands may be contributing to a declining water table. The anticipated population increases, agricultural irrigation demands, and growing recreational demands will continue to place significant demands on Waushara County's groundwater resources.

With an ever increasing demand on current groundwater supplies, local communities must assess how local and county-wide land use decisions will continue to affect groundwater quantity and quality. Identifying soil characteristics, water table levels, and groundwater susceptibility is just a beginning step in this process. Other underlining geological characteristics such as bedrock, groundwater flow direction, private well information, community groundwater pumping rates, and water table depth will be essential in understanding the current status of groundwater. Moreover, the abundance and quality of surface water is directly tied to groundwater supplies. Many streams and lakes rely on

<sup>17</sup> Wisconsin Department of Natural Resources, Source Water Springs and Natural Wells  
<http://dnr.wi.gov/org/water/dwg/OpCert/HTML/chapter2/sw2a.htm>,



groundwater as their primary source of water; thus, local lake levels are directly tied to groundwater levels. Human impacts such as high capacity wells, irrigation systems, and others also place demands on groundwater supplies.

Additional information and technical expertise is available from several governmental and academic agencies statewide. The Center for Land Use education has completed several case studies and groundwater planning assistance documents for local communities. Additional information can be found at <http://www.uwsp.edu/cnr/landcenter/groundwater/index.html>.

## Wildlife Resources

### *Wildlife Habitat*

Waushara County falls within the following ecological landscapes<sup>18</sup>:

- **Central Sand Plains** is located in western Waushara County, occurs on a flat, sandy lake plain, and supports agriculture, forestry, recreation, and wildlife management. This Ecological Landscape formed in and around what was once Glacial Lake Wisconsin, which contained glacial meltwater extending over 1.1 million acres at its highest stage.
- **Central Sand Hills** encompasses the majority of Waushara County, located at the eastern edge of what was once Glacial Lake Wisconsin. The landforms in this Ecological Landscape are a series of glacial moraines that were later partially covered by glacial outwash. The area is characterized by a mixture of farmland, woodlots, wetlands, small kettle lakes, and cold water streams, all on sandy soils. The mosaic of glacial moraine and pitted outwash throughout this Ecological Landscape has given rise to extensive wetlands in the outwash areas, and the headwaters of coldwater streams that originate in glacial moraines.
- **Southeast Glacial Plains** is located in the eastern portions of Waushara County, made up of glacial till plains and moraines. Most of this Ecological Landscape is composed of glacial materials deposited during the Wisconsin Ice Age.

*The vast majority of the Town of Plainfield falls within the Central Sand Plains ecological landscape, while the southeastern portion of the Town falls within the Central Sand Hills ecological landscape.* Together, these ecological landscapes support numerous habitat types throughout Waushara County for a varied and abundant wildlife and fish community. Habitats found within Waushara County include streams, lakes, rivers, woodlands, marshes, open wet meadows, and fallow/abandoned farmland. White-tailed deer and small mammals such as opossum, raccoon, gray and fox squirrels are abundant in wooded areas. Lakes and streams support diverse warm and cold water fisheries. Wetlands attract waterfowl during spring and fall migrations as well as during the nesting season. Other wildlife found in the area include grassland and wetland birds, cottontail rabbits, mink, otter, muskrats, red fox, and a wide variety of songbirds and similar passerines.

---

<sup>18</sup> WDNR, 2002. *Ecological Landscapes of Wisconsin*



### ***Rare, Threatened and Endangered Species and Natural Communities***

The Wisconsin Department of Natural Resources maintains a database of rare, special concern, threatened, and endangered species and natural communities in Waushara County.<sup>19</sup> In order to protect these communities from harm, their exact locations are not released to the public; however, Waushara County has access to this database. When a development proposal is presented to the county, the WDNR database is consulted prior to granting approval. Before development, precautions should be taken to minimize adverse impacts which could disturb potential habitats for these flora and fauna. A list of the rare, threatened, and endangered species and natural communities is included in Appendix D

### ***Exotic and Invasive Species***

Non-native species commonly referred to as exotic or invasive species have been recognized in recent years as a major threat to the integrity of native ecosystems, habitats, and the species that utilize those habitats. Invasive species disrupt native ecosystems by out-competing native plants and animals for valuable resources such as food and space. The resulting competition between native and invasive species has the potential to completely displace native species. Invasive species are found in both aquatic and terrestrial habitats. The WDNR updates a list of plant and animal invasive species in Wisconsin. This list can be found on the Department's website at: <http://dnr.wi.gov/invasives/>. Human livelihood and quality of life are greatly altered by invasive species; they hamper boating, swimming, fishing, and other water recreation; place an economic burden on local communities in eradication and control costs; and in some instances present a potential fire hazard. Prior to introduction of any non-native fish or wildlife, a permit from the WDNR is required pursuant to Wisconsin Statutes 29.736 and 29.745.

### **Woodlands**

Originally, the majority of Waushara County contained vegetation consisting of a mixture of oak forest species interspersed with pine forests and oak openings with an understory of prairie grasses. Waushara County once encompassed substantial areas of wetland conifers, lowland hardwoods, wet meadows with lowland shrubs, and marshes. Currently, upland forest areas are characterized by an oak-hickory association. Pine species are found throughout much of the county, while the wetland conifers have been replaced largely by shrub wetlands, general agriculture, and urban areas. Woodlands are found in large stands as well as scattered throughout the Town. ***Woodlands comprise 30.2 percent of the total land area in the Town of Plainfield*** (Exhibit 5-6). Some wetlands, especially along stream corridors, are predominantly forested.

Forests and woodlands can be classified into one of two categories: general (unplanted) woodlands and planted woodlands. General woodlands are naturally occurring forests and hedgerows. Planted woodlands are tree plantations in which trees are found in rows; these areas include orchards, timber tracts, Christmas tree production and other general uses. ***There are 5,528 acres of general woodlands and 965 acres of planted woodlands in the Town of Plainfield.*** These woodlands should be considered as prime wildlife habitat areas; efforts to protect them from encroaching development should be evaluated (Table 5-15).

---

<sup>19</sup> WDNR. 2005. *Natural Heritage Inventory Program*. <http://dnr.wi.gov/org/land/er/nhi/>.



**Table 5-15. Woodlands**

Community	General Woodlands		Planted Woodlands		Total Woodlands		Total Acres
	Acres	Percent	Acres	Percent	Acres	Percent	
T. Plainfield	5,528	25.7%	965	4.5%	6,493	30.2%	21,512

Source: ECWRPC, 2005.

The Forest Crop Law of 1927 (FCL) and the Woodland Tax Law of 1954 (WTL) were established to encourage sound forestry practices on private lands. In 1985, the Managed Forest Law (MFL) replaced both the FCL and WTL.<sup>20</sup> Enrollment in the FCL closed in 1986, and renewal in the program is not permitted. The last WTL contract expired in 2000. The MFL ensures the growth of future commercial crops while balancing individual property owner objectives and society's need for compatible recreational activities, forestry aesthetics, wildlife habitat, erosion control and protection of endangered resources. ***In 2008, a total of 970 acres were actively managed within the Town of Plainfield under the MFL*** (Table 5-16).

**Table 5-16. Managed Forest Law And Forest Crop Law Lands**

T. Plainfield	Acres	Percent
Managed Forest Law	970	4.5%
Forest Crop Law	0	1.1%

Source: WDNR, 2008.

## Parks, Open Space, and Recreational Resources

Public open space such as parks and parkways are important to the quality of life within a community. These lands serve many purposes including outdoor recreation and education; buffers between different land uses; flood and stormwater management; habitat preservation; air and surface water quality improvements; protection of groundwater recharge areas; and aesthetics. They can also enhance the value of nearby properties. (See Utilities & Community Facilities Chapter)

## Wisconsin Department of Natural Resources (WDNR) and Public Lands

Since 1876, the State of Wisconsin has been acquiring land to meet conservation and recreation needs. Public lands managed by the Wisconsin Department of Natural Resources provide many opportunities and public spaces to hunt, fish, hike, canoe, or watch or photograph wildlife. All Wildlife Areas are open to a full range of traditional outdoor recreational uses. These include hunting, fishing, trapping, hiking, nature study, and berry picking. Dog training or trialing (hunting dog competitions) may be allowed by permit. A limited number of properties allow additional outdoor recreation at designated locations; like camping, bicycling, horseback riding, and snowmobiling.

State Fishery Areas (SFAs) protect important waterways in Wisconsin by providing a natural buffer from agricultural practices and urban runoff. SFAs often preserve and manage the

<sup>20</sup> WDNR. 2005. *Managed Forest Law*. <http://dnr.wi.gov/org/land/forestry/ftax/mfl.htm>.



headwaters or springs of streams which serve as the biological base for fish and other aquatic life. SFAs also increase the availability of public access to navigable waterways throughout the state. ***The WDNR owns approximately 503 acres within the Town of Plainfield.***

The Town of Plainfield has the following State owned and managed lands:

State Wildlife Areas:

***The Town of Plainfield does not have any lands classified as State Wildlife Areas.***

State Fishery Areas:

- ***Big Roche-A-Cri Fishery provides public access to approximately 493 acres.*** This public fishery extends along the majority of the Big Roche-A-Cri Creek corridor. To see a detailed map and overview of the Big Roche-A-Cri Fishery visit the WDNR website at: [http://www.dnr.state.wi.us/org/land/wildlife/wildlife\\_areas/temp/bigroche.htm](http://www.dnr.state.wi.us/org/land/wildlife/wildlife_areas/temp/bigroche.htm)

WDNR Managed Lands:

***The Town of Plainfield does not have lands managed by the WDNR other than the State owned fishery areas.***

### ***Environmental Corridors***

Environmental corridors are continuous systems of open space created by the natural linkage of environmentally sensitive lands such as woodlands, wetlands, and habitat areas that provide important travel ways for a variety of wildlife and bird species. These features are sensitive natural resources; preserving the corridors from development protects habitat and keeps non-point source pollution to a minimum, thus ensuring that high quality groundwater and surface water is maintained and habitat is not impaired. ***As stated above the lands along the Big Roche-A-Cri Creek corridor protects invaluable habitat within the Town.***

### **Mineral Resources**

**Non-metallic Mineral Resources.** Non-metallic mineral resources include all mined minerals other than those mined as a source of metal. Economically important non-metallic minerals include building stone, lime, sand, gravel, and crushed stone. ***There is one active non-metallic mining site in the Town of Plainfield*** (Table 5-17 & Exhibit 5-6).

**Table 5-17. Non-metallic Mining Sites**

Operator	Total Acres	Location (Section number)
Kraemer Company	14.74	13

*Source: Waushara County Zoning, 2008.*

**Metallic Mineral Resources.** Metallic mineral mining refers to mining of mineral deposits that contain recoverable quantities of metals such as copper, zinc, lead, iron, gold, silver, and others. ***There are no metallic mineral resource sites in the Town of Plainfield.***



## Solid and Hazardous Waste

The Wisconsin Department of Natural Resources has inventoried the past and current sites which have been used for solid and/or hazardous waste disposal.<sup>21</sup> The list includes active, inactive, and abandoned landfills and collection sites. Inclusion of a site on the Registry does not mean that environmental contamination has occurred, is occurring, or will occur in the future. Instead, the document is intended to be utilized as a general information resource and planning tool. ***There are three sites in the Town of Plainfield that are listed on the WDNR's registry of active, inactive and abandoned sites where solid waste or hazardous wastes were known or likely to have been disposed*** (Table 5-18).

**Table 5-18. Waste Disposal Sites**

Facility Name	Location (Section number)
Village of Plainfield	12
David Phillips (Demo)	Not listed
Raebe Flying (pesticides)	10

*Source: WDNR, 1999 Registry of Waste Disposal Sites in Wisconsin*

## Air Quality

Air quality, particularly good air quality, is often taken for granted. Clean air is vital to maintain public health. Sound local and regional planning can minimize negative impacts to the air. Development patterns can impact automobile use. As communities become more spread out, the use of automobiles increases dramatically, resulting in more emissions and subsequent decreases in air quality. As residential development moves into rural areas, there are increased conflicts between non-farm residents and agricultural operations that emit odors and dust. Emissions from certain industrial uses also have the potential to impact air quality.

***There are no areas in Waushara County which exceed the limits of the National Ambient Air Quality Standards (NAAQS) for ozone, particulates, or carbon monoxide.*** The nearest ozone monitoring sites are in Brown and Outagamie Counties.<sup>22</sup>

## Cultural Resources

Cultural resources, like natural resources are valuable assets which should be preserved. These resources define a community's unique character and heritage. Included in this section is an inventory of historic buildings, sites, structures, objects, archeological sites and districts.

## State and National Register of Historic Places.

The Wisconsin Historical Society's Division of Historical Preservation (DHP) is a clearing house for information related to the state's cultural resources including buildings and archaeological sites. A primary responsibility of the DHP is to administer the State and National Register of Historic Places programs. The National Register is the official national list of historic properties

<sup>21</sup> Wisconsin Department of Natural Resources. 1999. *Registry of Waste Disposal Sites in Wisconsin*.

<sup>22</sup> U.S. Environmental Protection Agency. 2007. *County Air Quality Report – Criteria Air Pollutants*.



in the United States that are worthy of preservation. The program is maintained by the National Park Service in the U.S. Department of the Interior. The State Register is Wisconsin's official listing of state properties determined to be significant to Wisconsin's heritage. The inventory is maintained by the DHP. Both listings include sites, buildings, structures, objects, and districts that are significant in national, state, or local history. Sites are chosen based on the architectural, archaeological, cultural, or engineering significance.

The following items are listed on the National Register for Waushara County:

- Alanson M. Kimball House – Town of Leon
- Waushara County Courthouse, Waushara County Sheriff's Residence and Jail – City of Wautoma
- Whistler Mound Group – Village of Hancock

***At the present, no properties within the Town of Plainfield are listed on the National Register.*** The National Register is not a static inventory. Properties are constantly being added, and, less frequently, removed. It is, therefore, important to access the most updated version of the National Register properties. This can be found by accessing the DHP website (<http://www.wisconsinhistory.org/histbuild/register/index.html>) or by contacting the DHP at (608) 264-6500.

### **Architecture and History Inventory (AHI)**

In order to determine those sites that are eligible for inclusion on the National Register, the DHP frequently funds historical, architectural, and archaeological surveys of municipalities and counties within the state. Surveys are also conducted in conjunction with other activities such as highway construction projects. A minimal amount of this type of survey work has been done in Waushara County. The Wisconsin Historical Society records indicate that a survey was conducted in 2002.

***A search of the DHP's on-line Architecture and History Inventory (AHI) indicates that a total of 6 properties are listed within the Town of Plainfield.*** All listings are for the Hamerstrom Farmstead that includes the house, rootcellar, shed, outbuildings and barn.

Inclusion in this inventory conveys no special status, rights, restrictions, or benefits to owners of these properties. It simply means that some type of information on these properties exists in the DHP's collections. As is often the case, many of these properties may no longer exist. AHI is primarily used as a research and planning tool. Like the National Register, this is not a static inventory. Properties are constantly being updated. Information can be found on the DHP web site (<http://www.wisconsinhistory.org/ahi/search.asp?cnty=WS>).

### **Archaeological Sites Inventory (ASI)**

An inventory similar to the AHI exists for known archaeological sites across the state: the Archaeological Sites Inventory (ASI). Due to the sensitive nature of archaeological sites, information as to their whereabouts is not currently made available on-line. This information is distributed only on a need-to-know basis. Archaeological sites are added to ASI as they are discovered; discovery is a continual process. For technical assistance and up to date information on sites within a given area, contact the DHP at (608) 264-6500.



## Wisconsin Historical Markers

Wisconsin historical markers identify, commemorate and honor important people, places, and events that have contributed to the state's rich heritage. The Wisconsin Historical Markers Program is a vital education tool, informing people about the most significant aspects of Wisconsin's past. The Society's Division of Historic Preservation administers the Wisconsin Historic Markers Program. Applications are required for all official State of Wisconsin historical markers and plaques.<sup>23</sup> ***There are no historical markers in the Town of Plainfield.*** According to the Wisconsin Historical Society, three historical markers or plaques are located within Waushara County:

- Sir Henry Wellcome – Town of Oasis
- Whistler Mound Group and Enclosure – Town of Hancock
- The Auroraville Fountain – Town of Aurora

## Museums/Other Historic Resources

Museums protect valuable historic resources for community enjoyment. Residents are welcome to learn from the exhibits and amenities they have to offer. Although ***there are no museums in the Town of Plainfield***, several museums are located in close proximity to the town.<sup>24</sup>

- **Waushara County Museum** is housed in the former county jail in Wautoma. The Waushara County Historical Society maintains several exhibits detailing the genealogy, antiques, and the history of the sheriffs department. The original doors and bars of the jail cells have been preserved. Other nearby museums are located in the Oshkosh and Appleton areas.
- **Pioneer Museum** is located in the Village of Wild Rose. This museum encompasses the Victorian era home of Elisha and Jane Stewart, Pioneer Hall (bank and drug store), a country school, barn and carriage house.
- **Woodland Indian Mounds** in Whistler Park. These historic earthen structures were constructed by Woodland Indians during the period of 650 to 1200 AD.
- **Hancock Public Library** is housed in a fully restored historic firehouse.

## Local History<sup>25</sup>

The earliest inhabitants of Waushara County were Native Americans. Considerable evidence of their civilization has been found. A total of 332 mounds, 49 camp and village sites, two spirit stones, two cemeteries, and several other archeological sites have been identified within the County<sup>26</sup>. ***Traces of Native American existence are still in evidence today. Sand Lake, which is located in the southeast corner of the Town of Plainfield, was once the site***

<sup>23</sup> Wisconsin Historical Markers of the Wisconsin Historical Society.  
<http://www.wisconsinhistory.org/hp/markers/index.asp>. Accessed 10/28/08

<sup>24</sup> <http://www.explorewisconsin.com/countypages/waushara.asp>

<sup>25</sup> Reetz, E. 1981. *Come Back in Time: Vol. 1*.  
Sertz, N. 1996. *Auroraville, Wisconsin*.  
[http://www.wisconsinhistory.org/turningpoints/tp-061/?action=more\\_essay](http://www.wisconsinhistory.org/turningpoints/tp-061/?action=more_essay)

<sup>26</sup> Fox, G., and E.C. Tagatz. *The Wisconsin Archeologist, Indian Remains in Waushara County, Volume 15, October 1916 No. 3*.



***of a Native American campsite. An additional campsite may have been located in the southwestern quarter of section 7.***

On October 18, 1846, the Menominee Tribe ceded their land, including Waushara County, to the U.S. Government. In 1848, Isaac and William Warwick, the first white settlers to the area, built a log cabin in the Town of Marion. During the winter of 1848 to 1849, Philip Green settled on the site of the former Village of Wautoma. Other settlers soon followed. By 1849 a crude dirt road was built between Berlin (Strong's Landing) and Wautoma (Shumway Town). The 1849 road roughly corresponds with present day CTH F. The community of Sacramento, located on the south side of the Fox River, was platted in either 1849 or 1850 and a post office was established for the community in 1852. During 1849 and 1850, other settlers began gathering and making settlements in other parts of what is now Waushara County. On February 15, 1851, the Wisconsin Legislature established Waushara County and selected Sacramento as the county seat. The county originally consisted of a single town, the Town of Waushara. In 1852, Waushara County was organized for judicial purposes and in September 1854 the county seat was moved to Wautoma.

The first settler to the area, E.C. Waterman, erected a shanty in 1852 in what is now the Village of Plainfield. Other settlers followed and soon the small settlement included a school and hotel. ***William Kelley was the first settler in the Town of Plainfield, which was created on November 19, 1854.*** Originally the tiny settlement was called Norwich, but when it came time to build a post office, Plainfield was decided on. The opening of the post office and platting of the Village of Plainfield in the same year brought new growth the area.

## **Ethnic Origin**

***In 2000, the most common ancestry identified by Town and county residents was German*** (Table 5-19; Appendix D, Table D-2). ***Thirty-two percent (32.0%) of Town of Plainfield and 38.0 percent of Waushara County residents claimed German ancestry.*** Several residents (19.7% Town of Plainfield, 20.0% Waushara County) could not identify or chose not to report their ancestry. The second most common ancestry identified by Town of Plainfield residents was Other Groups. Other groups include individuals whose response did not fit within an ancestry category. Examples of these responses include a religions affiliation or a race or Hispanic Origin table. Sixty-eight people or 12 percent of the population were included in this category. The second most common ancestry for Waushara County residents was Polish. Approximately 7.3 percent of Waushara County residents claimed Polish ancestry.

Research has shown that there is a high correlation between those communities with Pennsylvania German ancestry and those communities with concentrations of Amish population.<sup>27</sup> Within Waushara County, Amish settlements include 52 households, 291 people, and an average household size of 5.6 persons (Appendix D, Table D-3). Thirty-three percent are employed in farming, 23 percent in dairying and 51 percent in woodworking. ***While Waushara County has Amish Settlements, these settlements are not concentrated in the Town of Plainfield area.*** According to a power point presentation given by UW-Extension<sup>28</sup>, in 2000, there were between 0 to 10 Waushara County residents over the age of 5,

<sup>27</sup> UW Madison Applied Population Lab

<sup>28</sup> *Waushara County Demographic Overview, 2008*; as presented by UW-Extension Waushara County. Source data: Wisconsin Department of Administration.



who speak a Germanic language at home in the Town of Plainfield. It further states that “The Amish speak a Germanic language at home”.

**Table 5-19. Top 5 Ancestries**

	Ancestry	Total Population in Sample	Percent of Population
T. Plainfield	German	182	32.0%
	Unclassified or Not reported	112	19.7%
	Other Groups	68	12.0%
	Polish	62	10.9%
	English	30	5.3%
	Total Population	569	100.0%
Waushara County	German	8,805	38.0%
	Unclassified or Not reported	4,629	20.0%
	Polish	1,681	7.3%
	Irish	1,101	4.8%
	United States or American	1,055	4.6%
	Total Population	23,154	100.0%

Note: Includes individuals who only reported one ancestry and the first response listed for those who reported multiple ancestries.

Other Groups includes individuals whose response did not fit within the ancestry category.

Examples include persons answering with a religious affiliation or an answer that fits in a race or Hispanic Origin tables.

Source: U.S. Census, 2000 STF 3A

## Key Findings

### Agricultural Resources

- Agricultural land cover, which includes row crops, forages and grassland, comprised over 64 percent of the total area in the Town of Plainfield (1991-1993).
- In 1997, an estimated 56 farms existed within the Town of Plainfield. This represents a loss of 3 farms from 1990.
- In 1990, there were 2 dairy farms in the Town of Plainfield and 232 in Waushara County; by 1997 the Town lost one dairy farm, while the county lost 101 dairy farms.
- Between 1990 and 1997, 48 acres (0.3%) of farmland were lost in the Town of Plainfield.
- Only 675 acres or 3.1 percent of the land in the Town of Plainfield is considered prime farmland.

### Natural Resources

#### Soils

- About 34 percent of the area in the Town of Plainfield is suitable for conventional systems; while another 52 percent is suitable for at-grade, in-ground pressure and mound systems.



- Over one quarter of the area within the Town of Plainfield (28.3%, 6,082 acres) has soils that are considered to have a very high suitability for building site development.
- One quarter of the soils (25.2%, 5,412 acres) pose a slight risk to no limitations for seepage spreading within the Town of Plainfield.

### ***Geography and Topography***

- Within the Town of Plainfield, land relief is approximately 100 feet, from a low of 1,050 feet above sea level along the Big Roche-A-Cri Creek to a high of 1,150 in areas north of Sand Lake (Sections 24 and 25).
- Less than one percent (0.4%, 84 acres) of the Town of Plainfield is classified as having slopes in excess of 12 percent.

### ***Water Resources***

- Surface water drainage for the Town of Plainfield is located entirely within the Central Wisconsin River Basin.
- The Town of Plainfield is divided into three sub-watersheds: the Big Roche-A-Cri Creek (Central Wisconsin River Basin), Fourteenmile Creek (Central Wisconsin River Basin) and the Sevenmile & Tenmile Creeks (Central Wisconsin River Basin).
- There is one lake within the Town of Plainfield; Sand Lake.
- There is only one named river/stream in the Town of Plainfield; Big Roche-A-Cri Creek.
- Approximately 2.3 percent (488 acres) of land within the Town of Plainfield lie in a floodplain.
- Only seven percent (1,524 acres) of the Town of Plainfield is classified as wetlands.
- A groundwater divide, located west and parallel to the topographic divide, cuts diagonally through Waushara County. It extends from Marquette County, through the towns of Hancock and Coloma, the Village of Hancock, and then east of the Village of Plainfield to the Portage County line. East of this divide, groundwater moves southeasterly toward the Wolf and Fox Rivers. West of this divide groundwater moves westerly toward the Wisconsin River.
- Eleven wells within the Town of Plainfield exceeded the 10 ppm threshold level for nitrate.
- The majority of homes within the Town of Plainfield are served by private wells.
- Groundwater depths of less than two feet are found in about fourteen percent (2,916 acres) of the land area.
- The atrazine prohibition area includes portions of sections 10, 11, 14, 15, 22 and 23, between Alp Avenue and Archer Avenue west of 6<sup>th</sup> Drive and the Village of Plainfield

### ***Wildlife Resources***

- The vast majority of the Town of Plainfield falls within the Central Sand Plains ecological landscape, while the southeastern portion of the Town falls within the Central Sand Hills ecological landscape.
- Woodlands comprise about 30 percent of the total land area in the Town of Plainfield.
- There are 5,528 acres of general woodlands and 965 acres of planted woodlands in the Town of Plainfield.
- In 2008, a total of 970 acres were actively managed with the Town of Plainfield under the MFL.



### ***Parks, Open Space and Recreational Resources***

- The WDNR owns approximately 503 acres within the Town of Plainfield.
- The Town of Plainfield does not have any lands classified as State Wildlife Areas.
- The Big Roche-A-Cri Fishery (State Fishery Area) provides public access to approximately 493 acres.
- The Town of Plainfield does not have lands managed by the WDNR other than the State owned fishery areas.
- Lands along the Big Roche-A-Cri Creek corridor protects invaluable habitat within the Town.

### ***Mineral Resources***

- There is one active non-metallic mining site in the Town of Plainfield.
- There are no metallic mineral resource sites in the Town of Plainfield.

### ***Solid and Hazardous Waste***

- There are three sites in the Town of Plainfield that are listed on the WDNR's registry of active, inactive and abandoned sites where solid waste or hazardous wastes were known or likely to have been disposed.

### ***Air Quality***

- There are no areas in Waushara County which exceeds the limits of the National Ambient Air Quality Standards (NAAQS) for ozone, particulates, or carbon monoxide.

### ***Cultural Resources***

- At the present, no properties within the Town of Plainfield are listed on the National Register.
- A search of the DHP's on-line Architecture and History Inventory (AHI) indicates that a total of 6 properties are listed within the Town of Plainfield.
- There are no historical markers in the Town of Plainfield.
- There are no museums in the Town of Plainfield.
- Traces of Native American existence are still in evidence today. Sand Lake, which is located in the southeast corner of the Town of Plainfield, was once the site of a Native American campsite. An additional campsite may have been located in the southwestern quarter of section 7.
- William Kelley was the first settler in the Town of Plainfield, which was created on November 19, 1854.
- In 2000, the most common ancestry identified by Town and county residents was German. Thirty-two percent (32.0%) of Town of Plainfield and 38.0 percent of Waushara County residents claimed German ancestry.
- While Waushara County has Amish Settlements, these settlements are not concentrated in the Town of Plainfield area.



## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

Wisconsin's important agricultural base is strongly integrated with its natural resources. Complex agricultural patterns are mixed with the state's natural features to form a patchwork of different land uses. Natural resource issues and concerns are closely linked to activities taking place on agricultural lands, not only adjacent to one another, but in the area. Soil erosion from farm fields and surface water runoff of crop nutrients and agricultural chemicals can impact the quality of streams, rivers, and lakes. Leaching of pesticides and nutrients has the potential to impact underground aquifers and affect drinking water supplies. There is a growing concern, especially in areas where rural residential development is occurring, about the impact of livestock farming on air quality. However, it is important to note that individual farming operations differ in management practices and vary widely in their contribution to these environmental problems.

Although agricultural activities can have negative impacts on the environment, they can also provide positive benefits. People value the open agricultural landscape and the benefits of maintaining wildlife habitats. Other benefits include nutrient recycling and enhanced water recharge.

The long, rich history of farming in Wisconsin has led to the creation and exposure of many of the state's archaeological sites. In the County it is not uncommon to find evidence of native villages and burial mounds. Architecturally distinctive homes, barns, or entire farmsteads can reflect a significant time period, be associated with a notable person, reflect ethnic building types and construction practices, or represent an example of a once important agricultural specialty.

### **Economic Development**

Agriculture, natural and cultural resources should be considered when developing an economic development plan. It is important to remember that farming is still an important segment of Waushara County's rural economy. There may be specific economic development strategies that could help improve the well-being of local farmers; as long as financial conditions remain difficult, farmers will continue to find alternative uses for their land. Natural resources can provide a positive economic benefit to the area through recreational uses and overall aesthetics. However, protection and impact to the area's natural resources should be considered whenever a new business or development is proposed.

Cultural and natural elements provide opportunities for enhanced quality of life for current residents and can be a valuable tool to bring new workers and employers to the area. Historic preservation can be used to enhance unique qualities found in many of Waushara County's communities and towns.

### **Housing**

Agriculture and natural resources need to be considered when planning for the housing element. Most new residential construction is occurring on agricultural land or adjacent to significant natural resources such as a lake, stream, river, wetland, steep slope, or woods. Although these natural features provide aesthetically pleasing views for new homeowners, residential encroachment has detrimental impacts to the natural resource base. In many areas,



housing development patterns have been rather haphazard. Scattered housing patterns have resulted in high costs to local communities in the form of lost farmland, increased demand for public services, and conflicts between homeowners, farmers, environmentalists, and recreationalists. Demand for home sites also drives land costs upward, reducing the ability of farmers to buy land to either begin farming or expand existing operations.

Existing older housing stock provides community character and reflects the historical development of the area. Older neighborhoods often offer the best opportunities for low income housing that can be rehabilitated using community improvement programs. Abandoned historic industrial buildings and old schools can be retrofitted and preserved to provide unique and attractive affordable housing for the community.

## **Transportation**

Transportation planning should consider the transportation needs of the area. Transportation is critical to the agricultural community because it provides access to suppliers, processors, haulers, and other support industries. The transportation network also allows goods to be brought to local, regional, national, and international markets. An efficient transportation network can increase income levels for Wisconsin farmers. Additionally, when planning for transportation, it is important to consider how rural residential developments and expanding agricultural operations will affect the transportation infrastructure and safety of the local area. Development and subsequent transportation improvements may impact the County's natural resources, wetland areas, and farmland adjacent to existing highway corridors. To minimize this impact, Waushara County and its communities should monitor these situations and consider development techniques that offer greater environmental protection.

When transportation corridors are expanded or proposed, care should be taken to minimize the effects on historical and cultural resources. Sensitivity must be shown for historic buildings and markers as well as archaeological sites and objects. The integrity and identity of a community is dependent on the preservation of its historic character and distinctive natural features. For example, the identity and aesthetics of a historic neighborhood can easily be threatened by a street widening project that removes large trees and narrows street terraces.

## **Utilities and Community Facilities**

Planned development leads to an efficient use of public infrastructure and reduces the amount of sprawl, which leads to the consumption of the rural landscape and other natural resources. Educating local officials and citizens about how local land use decisions impact the agricultural industry is important if the ability to grow and raise food is to be preserved. Diminishing farmland also affects a community's ability to land spread bio-solids, a byproduct of the wastewater treatment process. As large areas of farmland in close proximity to suburban areas decrease, communities must travel longer distances to dispose of this waste, thereby increasing the cost of sewage disposal.

Similar to farmland, our natural resources are limited and are being consumed at an alarming rate. Fossil fuel emissions lead to persistent health and environmental problems; regional haze; acidification of surface waters and forests; mercury in fish and other wildlife; acidic damage and erosion to buildings and other materials; ozone damage to forests; and eutrophication of water bodies. Renewable energy, or an alternative energy source, is created from sustainable natural



resources. Corn and other cellulose products can be used to produce ethanol for alternative fuel vehicles. Wind energy provides an alternative to coal and natural gas boilers.

To maintain our quality of life, it is essential that not only is growth accommodated but that it be done while protecting our natural environment. The quality of the region's surface and groundwater resources are linked to the proper siting, installation, and maintenance of individual on site wastewater systems. Improper treatment and discharge of human waste and bacteria can contaminate public and private water supplies. The impact of increased development and associated impervious area can adversely affect groundwater quality and quantity.

Public buildings such as city or town halls, county courthouses, schools, water treatment plants, water towers, libraries, and fire stations are often architecturally significant landmarks in a community and are an important element of the community's character. Even when these buildings have outgrown their original use, they are often converted into a community center, senior center, housing or another productive use due to the community's attachment to them.

## **Land Use**

Land use is an integral part of all the elements in the plan. County residents value the preservation of agricultural land and the natural resources. There is a need to protect the rural atmosphere while allowing for controlled orderly development. Opportunities for historical preservation should also be considered in all future planning, zoning, and development decisions.

## **Intergovernmental Cooperation**

Many agricultural and natural resource issues go beyond local boundaries. Watersheds and other ecosystems, economic conditions, transportation patterns, and housing can impact regions as a whole. Air and water pass over the landscape so that one jurisdiction's activities can affect other jurisdictions located downwind or downstream. Regional development patterns and neighboring municipal land use policies also affect land price, availability of land, and the economic performance of local farms in adjoining towns. Unless towns, cities, villages, and counties communicate and coordinate effectively, it will be difficult to control growth in agricultural areas that preserves farmland and protects natural resources.

Preserving a community's heritage allows people to connect with the past. Unfortunately, little has been done in Waushara County to establish a base of historically significant buildings and other features. The Wisconsin Historical Society's Division of Historic Preservation provides funding to local governments and non-profit organizations. These funds can be sought independently or collectively with neighboring communities to fund architectural and historical surveys. Communities should work together to utilize existing local expertise on not only the history of the area, but also on historic preservation issues.



## **POLICIES AND PROGRAMS**

### **State, Regional, County, and Local Policies**

**Wisconsin Administrative Code.** Comm 83, revised during the 1990s to add provisions for new wastewater treatment system technologies and land suitability criteria, came into effect on July 1, 2000. Unlike the code it replaced, the new rules prescribe end results – the purity of wastewater discharged from the system – instead of specific characteristics of the installation. This rule provides land owners with more on-site wastewater treatment options, while at the same time protecting natural resources and groundwater. Within Waushara County, holding tanks are banned for new construction and are not allowed for replacement systems unless the property cannot support any other on-site sewage disposal systems.

NR-103, Water Quality Standards for Wetlands, establishes water quality standards for wetlands.

NR-115, Wisconsin's Shoreland Management Program, requires counties to adopt zoning and subdivision regulations for the protection of all shorelands in unincorporated areas.

NR-116, Wisconsin's Floodplain Management Program, requires municipalities to adopt reasonable and effective floodplain zoning ordinances.

NR-117, Wisconsin's City and Village Shoreland-Wetland Protection Program, establishes minimum standards for city and village shoreland-wetland zoning ordinances.

NR-135 was established to ensure that nonmetallic mining sites are properly abandoned. This law promotes the removal or reuse of nonmetallic mining refuse, removal of roads no longer in use, grading of the nonmetallic mining site, replacement of topsoil, stabilization of soil conditions, establishment of vegetative groundcover, control of surface water flow and groundwater withdrawal, prevention of environmental pollution, development and reclamation of existing nonmetallic mining sites, and development and restoration of plant, fish and wildlife habitat if needed to comply with an approved reclamation plan.

NR-243, Animal Feeding Operations, purpose of this chapter is to implement design standards and accepted manure management practices for concentrated animal feeding operations. This chapter also establishes the criteria under which the department may issue a notice of discharge or a permit to other animal feeding operations which discharge pollutants to waters of the state or fail to comply with applicable performance standards and prohibitions in ch. NR 151.

### **Wisconsin State Statutes.**

Wis. Stats. S. 93.90 and rule ATP 51, Livestock Facility Siting Law regulates the siting of new and expanded livestock operations. The statute limits the exclusion of livestock facilities from agricultural zoning districts. It establishes procedures local governments must follow if they decide to issue conditional use or other local permits for siting livestock facilities. It also creates the Livestock Facility Siting Review Board to hear appeals concerning local decisions on permits.



Wis. Stats. S. 823.08, Actions against agricultural uses. The “Right to Farm” law protects farmers from nuisance law suits related to odor and noise in normal agricultural operations provided that public health and safety are not endangered.

### ***Regional***

**East Central Wisconsin Regional Planning Commission.** East Central has adopted a regional comprehensive plan. As a part of this Plan, East Central has adopted several core policies and/or goals for agricultural, natural, and cultural resources.

### **Agricultural Resources**

- Encourage appropriate and practical conservation oriented land and wildlife management practices.
- Promote management of renewable resources in ways compatible with sustained yield.
- Support land use patterns which are consistent with soil suitability and other environmental considerations.
- Encourage development on lands not suitable for farming and community recreation.
- Maintain employment and increased income in the agricultural sector.
- Encourage contiguous planned development to eliminate the intermingling of farms and urban land uses.
- Preserve land suitable for the production of food and fiber to meet present and future needs.
- Promote adoption of exclusive agricultural zoning districts to ensure that valuable farming lands are not lost or disrupted by urban land uses.

### **Natural Resources**

- Improve and protect surface and groundwater quality.
- Improve and/or maintain high air quality.
- Preserve and protect environmentally sensitive areas and promote the linking of these areas into environmental corridors.
- Manage wildlife and wildlife habitat in a manner that maintains ecological stability and diversity while considering the social and economic impacts.
- Protect nonmetallic mineral deposit sites.
- Ensure sufficient natural public open space is provided to meet the active and passive recreational needs of all residents while preserving and protecting the region’s natural and cultural resources.
- Promote the consideration of design and aesthetics as a means of ensuring that communities and the region as a whole remain attractive as places to live, work, and play.

### **Cultural Resources**

- Establish a regional cultural resource implementation committee to work on pursuing implementation of the regional cultural resources plan.
- Hold an annual Cultural Resources Summit where local organizations, preservation professionals, HP commissioners, and the general public could hear speakers, exchange



ideas and interact with each other, raise and address current issues and needs, and encourage support for cultural resource appreciation, enhancement, and protection.

- Create a web-based clearinghouse to serve the region, offering a variety of resources to support preservation of our prehistoric and historic, archeological, and cultural heritage.
- Ensure that decision makers have an understanding of, and an appreciation for, cultural resource protection.
- Make the public better aware of the tax benefits and protections which are available to local landmarks, state and national register site properties, as well as associated responsibilities.
- Work with the Wisconsin Historical Society to increase access to the WHS WHPD database and expand its usefulness to a broader user base.
- Develop an easy, reliable way to alert local government officials conducting permit reviews, and prospective buyers making land/home purchase decisions, as to the location of culturally significant properties by including these cultural resource status designations in all title transfer records.
- Work with local and regional groups to update the State's list of archaeological and historical inventories.
- Revise the Wisconsin State Statutes (709.02) to expand and include "archaeological sites" as well as historic buildings and sites, in the items which realtors must make known to potential buyers.
- Prevent generational loss of cultural heritage by encouraging the use of more cultural resource programming in the history and social studies curriculum of K-12 and higher education institutions in the region.
- Establish a Cultural Resource Center for the ECWRPC region.
- Encourage greater interaction and sharing of ideas, resource materials, etc. between the private sector and the public sector, volunteers and professionals.

## ***County***

**Waushara County Zoning Ordinance.** The Waushara County Zoning Ordinance regulates zoning in the Town of Plainfield. The following Chapters contain relevant information.

Chapter 22: Article IVs, Manure Waste Storage Ordinance regulates the location, design, construction, installation, alteration, closure, and use of manure storage facilities in order to prevent water pollution and the spread of disease. The county does not currently regulate large animal farming operations (CAFOs); however, regulation of these operations is being investigated and may be included under the Manure Waste Storage Ordinance.

Chapter 58, Zoning defines the different zoning categories and identifies what land uses are permitted in a given zone). Exclusive agricultural zoning is not practiced within the county. The A-G zone is designed primarily for large-scale agricultural uses of land related to growing of crops and the raising of livestock. However, single family residential homes are permitted. The A-R zoning provides a semi-rural type of environment, allowing for general agricultural use. According to the Waushara County Zoning Ordinance, all unincorporated areas within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages within 300 feet of the ordinary high water mark of a navigable river or stream fall under Shoreland Jurisdictional Area. Restrictions meant to protect these areas address lot size, setbacks, building, permitted uses, vegetative shore cover, grading and filling.



**Waushara County Farmland Preservation Plan.** Waushara County adopted a Farmland Preservation Plan on June 9, 1981. The goal of program is to preserve productive and potentially productive agricultural land, forest land, and environmentally sensitive areas while providing other areas for well planned growth in other appropriate areas of the county. Adoption of this plan allows farmers in preservation areas (existing farms with a minimum of 35 acres of productive cropland that are mapped as preservation areas) to sign a voluntary agreement under the State's Farmland Preservation Act for tax credits. Even though existing cropland is enrolled in this program, farmland in the County continues to be lost as more people seek homesites in rural areas.

## **Federal and State Programs**

### ***Federal***

#### **United States Department of Agriculture**

**Conservation Reserve Program (CRP) and Conservation Reserve Enhancement Program (CREP).** These programs protect sensitive land by reducing erosion, increasing wildlife habitat, improving water quality, and increasing forestland. CREP, a partnership between federal and state agencies and county land conservation departments, allows a landowner to enroll agricultural lands into various land conservation management practices. To be eligible under this program, farmland needs to be highly prone to erosion and must have been planted for 4 to 6 years before the enactment of the 2002 law. Marginal pastureland is also eligible. Producers need to develop and follow a plan for the conversion of cropland to less intensive use and to assist with the cost, establishment, and maintenance of conservation practices. More information can be found at <http://www.nrcs.usda.gov/Programs/crp/> and <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=cep>.

**Grassland Reserve Program (GRP).** This program is used to protect private grasslands, shrublands, and pasturelands. Agricultural areas which were formerly one of these ecosystems are also eligible for enrollment. The program helps to restore native grasslands and forbs by banning any agricultural practice which requires breaking the ground. Landowners must place their land into an easement for a period of between 10 and 30 years. An accompanying restoration plan delineates how best to return the area to a natural state. Program participants must share in installation costs. More information can be found at <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=grp>.

**Wildlife Habitat Incentives Program (WHIP).** This voluntary program is used to develop or improve wildlife habitat on privately owned land. All private land is eligible for this program unless the land is enrolled in CRP, WRP, or other similar programs. Producers must design and implement a wildlife habitat development plan and assist in the implementation costs. More information can be found at <http://www.nrcs.usda.gov/Programs/whip/>.

**Grazing Lands Conservation Incentive.** This program provides cost sharing to improve grazing land management. More information can be found at <http://www.nrcs.usda.gov/Programs/glici/>.

**Environmental Quality Incentives Program (EQIP).** This voluntary conservation program promotes agricultural production and environmental quality and compatible goals. Financial assistance and technical help are offered to assist eligible participants in the installation and



implementation of structural improvements and management practices which better protect agricultural land from environmental degradation. All private agricultural land is eligible for enrollment including cropland, grassland, pastureland, and non-industrial private forestland. Participants are required to develop and implement an EQIP plan that describes the conservation and environmental purposes to be achieved. Participants must share in the overall costs. More information can be found at <http://www.nrcs.usda.gov/Programs/eqip/>.

**Forest Land Enhancement Program (FLEP).** This program aids landowners in the application of sustainable forestry on private land. The program places a permanent easement on farmland. All non-industrial private forestlands are eligible for financial, technical, and educational assistance. Landowners must develop and implement a management plan to harvest timber while protecting the environmental quality of the forest. More information can be found at <http://www.fs.fed.us/spf/coop/programs/loa/flep.shtml>.

**USDA Farmland Protection Policy Act (FPPA).** The purpose of this program is to maintain prime farmland in agricultural use through agricultural conservation easements. This program provides funding for state, tribal, or local government to purchase development rights on prime agricultural land. More information can be found at <http://www.nrcs.usda.gov/programs/fppa/>.

**Wetland Reserve Program.** This program which provides financial and technical assistance to private landowners to restore, protect, and enhance wetlands. The management goals include restoring both the functional values of the wetlands and providing optimal wildlife habitat. Most private wetlands that were converted to agricultural uses prior to 1985 are eligible. Participants must develop and follow a plan for the restoration and maintenance of the wetland and, if necessary, assist in the cost of restoration. More information can be found at <http://www.nrcs.usda.gov/PROGRAMS/wrp/>.

## **US Environmental Protection Agency**

**Clean Water Act (1977).** The Clean Water Act established the basic structure for regulating discharges of pollutants into the waters of the United States.

**National Pollution Discharge Elimination System (NPDES) Storm Water Program.** The NPDES program addressed the non-agricultural sources of storm water discharge and the Safe Drinking Water Act.

## ***State***

### **Wisconsin Department of Agriculture, Trade and Consumer Protection**

**Wisconsin Farmland Preservation Program.** The 1977 Wisconsin Farmland Preservation Program was developed to preserve farmland through local planning and zoning; promote soil and water conservation; and provide tax relief to participating landowners. Landowners qualify if their land is located in an exclusively agricultural zoning district or if they sign an agreement to use their land exclusively for agricultural purposes. Participating landowners must comply with soil and water conservation standards set by the state Land Conservation Board.



## Wisconsin Department of Revenue

**Farmland Tax Relief Credit Program.** The Farmland Tax Relief Credit Program provides tax relief to all farmland owners with 35 or more acres. The credit is computed as a percentage of the first \$10,000 in property taxes up to a maximum credit of \$1,500. The DOR determines the actual percentage based on the estimated number of claims and amount appropriated for the credit.<sup>29</sup>

## Wisconsin Department of Natural Resources

**Wisconsin Pollutant Discharge Elimination System Permits (WPDES).** The Wisconsin Pollutant Discharge Elimination System Permits (WPDES) was instituted as a complement to the NPDES program. WPDES regulates municipal, industrial, and agricultural operations which discharge (or have the potential to discharge) into local surface waters. Depending on the site-specific land use, the program regulates three different uses. Wastewater discharge permits regulate effluents discharged by industries and municipalities into surface and groundwater. Construction sites greater than one acre and industrial sites (non-metallic mining) are regulated through stormwater runoff permits.<sup>30</sup> Concentrated Animal Feeding Operations (CAFOs) with 1,000 animal units or more are regulated as a result of potential contamination from animal waste.<sup>31</sup> If an individual operation is found to be a significant contributor of pollutants, it may be considered a medium-sized CAFO; permits can be issued for medium-sized CAFOs which exceed 300 animal units.

In order to be defined a CAFO, the agricultural operation must first be defined as an animal feeding operation (AFO). AFOs are facilities which animals are stored, stabled, or fed for at least 45 days within a 12 month period and which vegetation or post-harvest residues are not sustained in the normal growing season over any portion of the facility.<sup>32</sup> Permits require CAFOs to provide runoff management plans for outdoor lots and feed storage areas; a manure storage facility plan/diagram, an annually updated comprehensive manure management plan; and routine monitoring and reporting of daily operations. Permits are issued for a maximum of five years. The permit system regulates land application, manure storage, and runoff management; it does not address noise, land values, traffic, odors, or other similar types of issues because there is no statutory authority to do so. These issues must be regulated by county and local ordinances.

**Forest Crop Law and Managed Forest Law.** In 1927, the Wisconsin Legislature enacted the Forest Crop Law (FCL), a voluntary forest practices program to encourage sound forestry on private lands. It has promoted and encouraged long-term investments as well as the proper management of woodlands. This law allowed landowners to pay taxes on timber only after harvesting, or when the contract is terminated. Since the program expired in 1986, participants are not allowed to re-enroll in the program. Since 1986, the Managed Forest Law has replaced the Forest Crop Law.

<sup>29</sup> Wisconsin Department of Revenue. 2002. *Division of Research and Policy Farmland Preservation Credit Program and Farmland Tax Relief Credit Program.*

<sup>30</sup> Wisconsin State Statutes NR 135 and NR 216.

<sup>31</sup> Wisconsin State Statutes NR 243.

<sup>32</sup> U.S. Environmental Protection Agency and U.S. Department of Agriculture. 1999. *Unified National Strategy for Animal Feeding Operations.*



The Managed Forest Law (MFL), enacted in 1985, encourages the growth of future commercial crops through sound forestry practices. To be eligible, a landowner must own at least 10 contiguous acres of woodlands in a village or town. The landowner must implement a forestry management plan for future commercial harvests on the land. Contracts can be entered for a period of either 25 or 50 years. Portions of the land enrolled are open to public access for hunting, fishing, cross-country skiing, sight-seeing, and hiking. The program recognizes individual property owners' objectives while providing for society's need for compatible recreational activities, forest aesthetics, wildlife habitat, erosion control, and protection of endangered resources.

**Wisconsin Forest Landowner Grant Program.** The Wisconsin Forest Landowner Grant Program assists private landowners in protecting and enhancing their woodlands. Only private non-industrial forest owners of at least 10 acres but no more than 500 acres who have an approved or pending forest stewardship management plan are eligible for assistance. Qualified projects include reforestation; soil and water protection; wetland and riparian protection, restoration, and creation; fish and wildlife habitat enhancement; recreational, historic, and aesthetic forest enhancement; and endangered or threatened resources protection.

**Forest Land Enhancement Program (FLEP).** The purpose of this program is to assist private landowners in protecting and enhancing their forested lands and water by providing cost-share reimbursement for sustainable forestry practices.

**Partners for Fish and Wildlife.** Partners for Fish and Wildlife is a program which provides financial and technical assistance to private landowners to restore, protect, and enhance wildlife habitats on their land. This is a voluntary incentive based program. State resource agencies and individual landowners work closely with the Service to help establish priorities and identify focus areas. The restoration of degraded wetlands, native grasslands, streams, riparian areas, and other habitats to conditions as close to natural is emphasized. The program's philosophy is to work proactively with private landowners for the mutual benefit of declining Federal trust species and the interests of the landowners involved. A 50 percent cost sharing is required from individual landowners. Landowners must sign an agreement to retain the restoration for a minimum of 10 years. During this time period, no other private property rights are lost.

### **Wisconsin Historical Society**

The Wisconsin Historical Society (WHS) Division of Historic Preservation (DHP) provides funds for conducting surveys to identify and evaluate historical, architectural, and archaeological resources, nominating properties and districts to the National Register, and carrying out a program of comprehensive historic preservation planning and education. These are available to local units of government and non-profit organizations. Although funding is limited, the DHP identified target communities during each funding cycle. In recent years the DHP has favored underrepresented communities: unincorporated communities or villages or fourth-tier cities with a population less than 5,000. A set of funds is also designated for use by Certified Local Government (CLG) status communities. In addition, many private funding sources specifically target smaller communities in the more rural parts of the state. Other specific programs are listed below.

**Federal Historic Preservation Credit.** This program returns 20 percent of the cost of rehabilitating historic buildings to owners as a direct reduction in the federal income taxes. To



qualify, buildings must be income producing historic buildings, must be listed on the National Register of Historic Places, or contribute to the character of a National Register Historic District.

**Wisconsin Supplemental Historic Preservation Credit.** This program returns an additional 5 percent of the cost of rehabilitation to owners as a discount on their Wisconsin state income taxes. Owners that qualify for the Federal Historic Preservation Credit automatically qualify for the Wisconsin supplement if they get National Park Service approval before they begin any work.

**25-Percent State Income Tax Credits.** This program can be used for the repair and rehabilitation of historic homes in Wisconsin. To qualify, buildings must be either listed on the state or national register; contribute to a state or national register historic district; or be eligible for individual listing in the state register.



**Exhibit 5-1**

**Important Farmland Classes**



**Exhibit 5-2**

**Soil Limitations for On-Site Waste Disposal**



**Exhibit 5-3**

**Soil Potential for Building Site Development**



**Exhibit 5-4**

**Soil Limitations for Septage Spreading**



**Exhibit 5-5**

**Environmental Features (Map 1)**








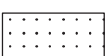



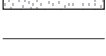




**Exhibit 5-6**

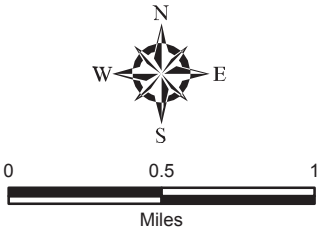
**Environmental Features (Map 2)**



# EXHIBIT 5-1 TOWN OF PLAINFIELD IMPORTANT FARMLAND CLASSES

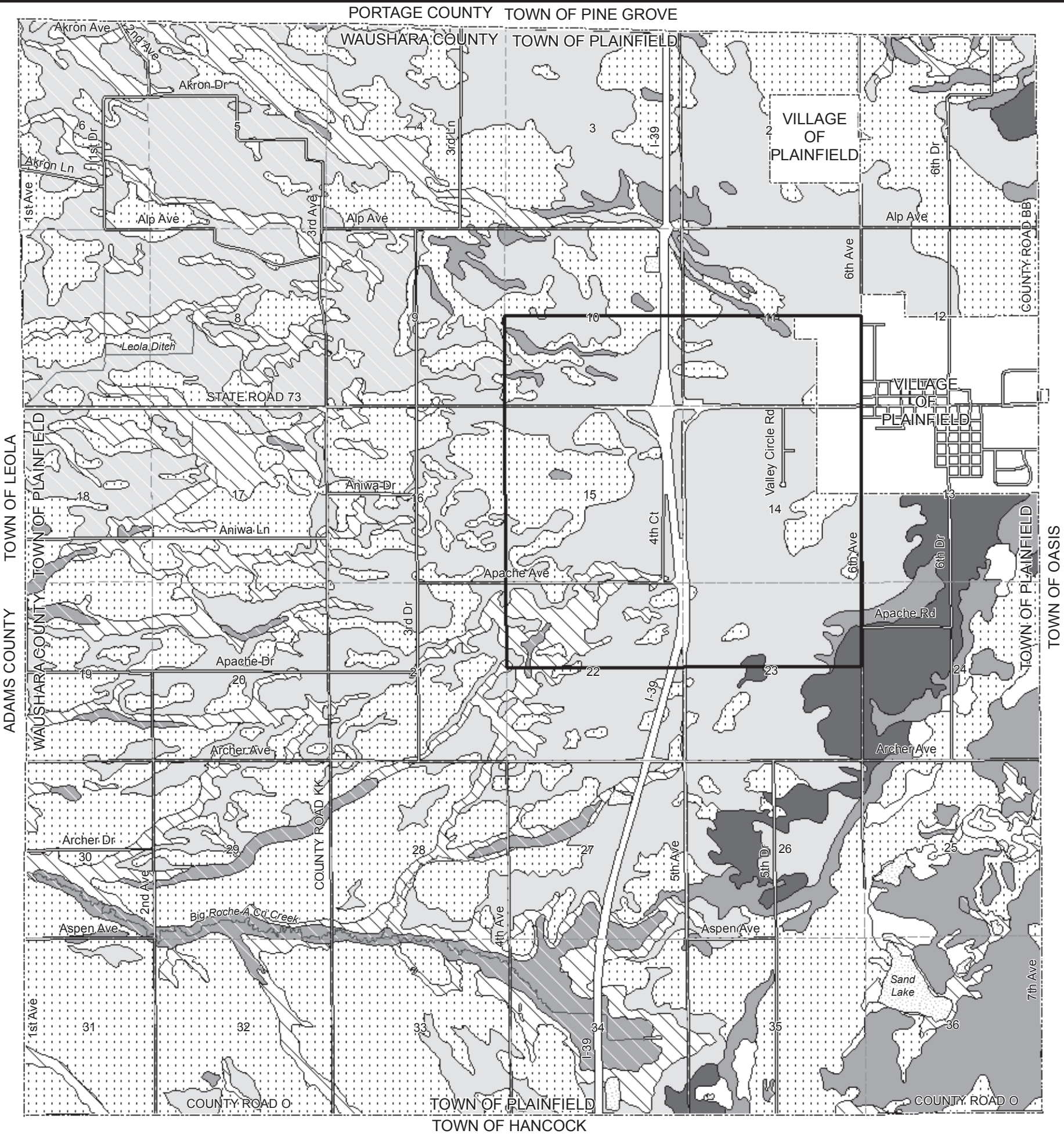
-  Prime Farmland - Those soils that produce the highest yields of food, fiber, feed, forage and oilseed crops when managed according to acceptable farming methods.
-  Prime Farmland Where Drained
-  Unique Farmland - Land other than prime that is used to produce specialty crops such as apple orchards, lettuce, carrots, celery, cauliflower, etc. that require a high management and investment level.
-  Unique Farmland Where Drained and Protected From Frequent Flooding
-  Statewide Important Farmland - Land in addition to prime and unique that is important to the State of Wisconsin for crop production.
-  Statewide Important Farmland Where Drained
-  Statewide Important Farmland Where Drained and Protected From Frequent Flooding
-  Local Important Farmland - Land in addition to prime, unique and statewide that is important to Waushara County for crop production.
-  Local Important Farmland Where Drained
-  Other Lands - Land that has little value for producing crops.
-  Atrazine Prohibition Area
-  Water Body
-  Stream / River
-  Municipal Boundary (Village of Plainfield Not Included)

Source: Soils Data USDA-NRCS, 1982. Waushara County, 2003. Digital Base Data provided by Waushara County, 2008. Atrazine Prohibition Area Data obtained from the Wisconsin Administrative Code, Chapter ATCP 30 Atrazine, Pesticides; Use Restrictions



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-OCTOBER 2008



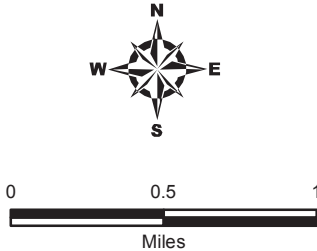


# **EXHIBIT 5-2** **TOWN OF PLAINFIELD** **SOIL LIMITATIONS FOR** **ON-SITE WASTE DISPOSAL**

- Soils Suitable for Conventional Septic Systems
- Soils Suitable for At-Grade, In-Ground Pressure or Mound Systems
- Soils Suitable for Holding Tanks or New Technology Systems\*
- Soils Unsuitable for Private Sewage Systems
- No Rating
- Water Body
- Stream / River
- Municipal Boundary (Village of Plainfield Not Included)

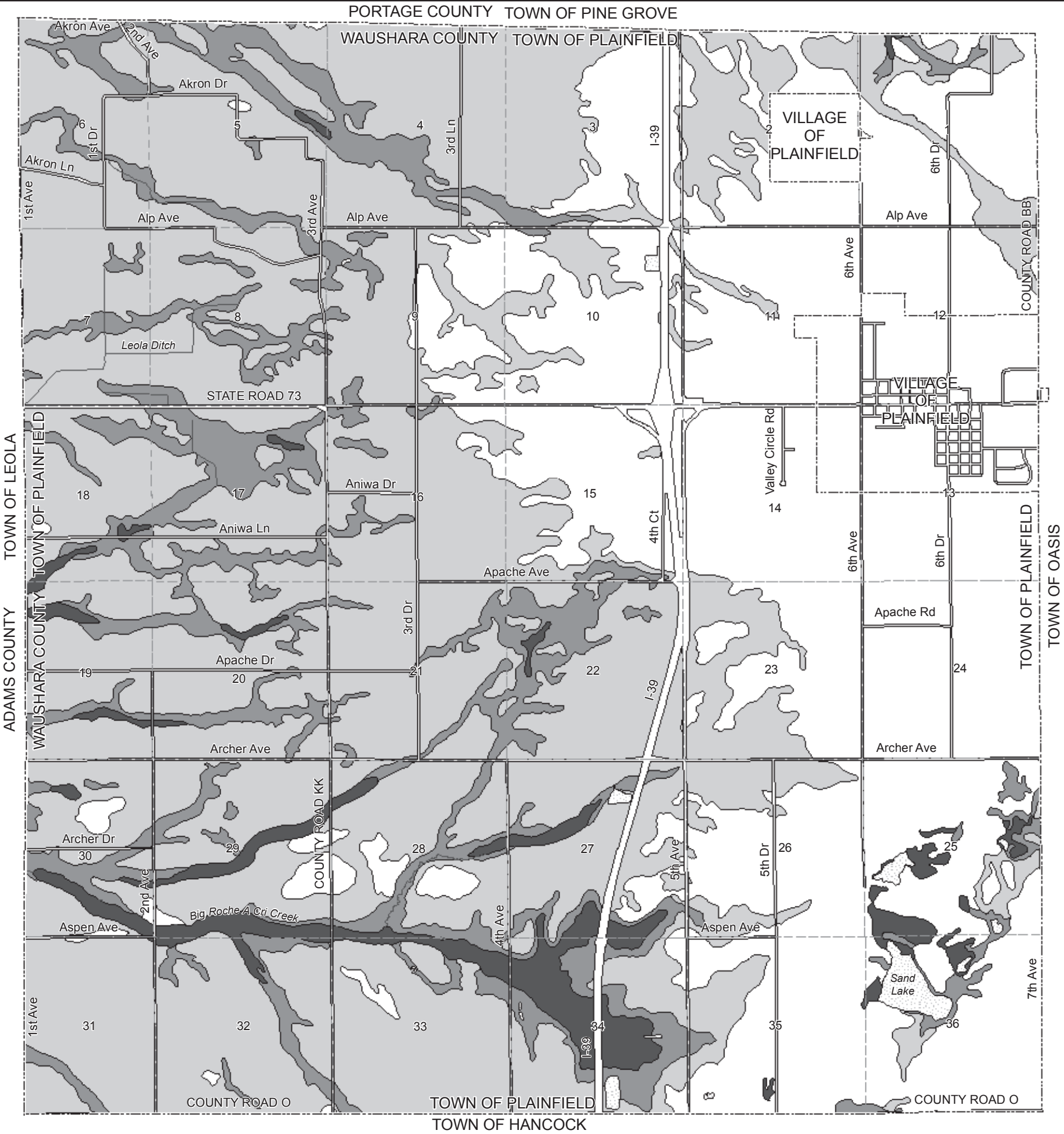
\* All systems producing 104 or less coliform fecal units (cfu) per 100 mL

Source: Soils Data USDA-NRCS, 1982. Waushara County, 2003.  
 Digital Base Data provided by Waushara County, 2008.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
 EAST CENTRAL WISCONSIN  
 REGIONAL PLANNING COMMISSION-OCTOBER 2008

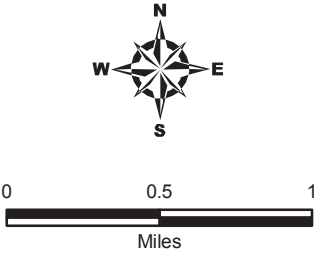




# **EXHIBIT 5-3** **TOWN OF PLAINFIELD** **SOIL POTENTIAL FOR** **BUILDING SITE DEVELOPMENT**

- Very High Rating
- Medium Rating
- Very Low / No Rating
- Water Body
- Stream / River
- Municipal Boundary  
(Village of Plainfield Not Included)

Source: Soils Data USDA-NRCS, 1982. Waushara County, 2003.  
 Digital Base Data provided by Waushara County, 2008.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
 EAST CENTRAL WISCONSIN  
 REGIONAL PLANNING COMMISSION-OCTOBER 2008

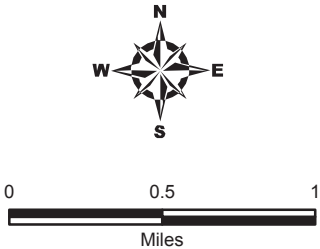




EXHIBIT 5-4  
TOWN OF PLAINFIELD  
SOIL LIMITATIONS FOR  
SEPTAGE SPREADING

- None to Slight - Soils relatively free of limitations that affect the intended use or the limitations are easy to overcome.
- Moderate - Soils with moderate limitations resulting from the effects of slope, wetness, soil texture, soil depth, groundwater, etc. Normally the limitations can be overcome with correct planning, careful design, and good management.
- Severe - Soils with severe limitations resulting from the effects of slope, wetness, soil texture, highwater table, etc. Soils rated as having severe limitation are severe enough to make the use of the soil doubtful for the proposed use. Careful planning and above-average design and management are required. This often includes major soil reclamation work.
- No Rating
- Water Body
- Stream / River
- Municipal Boundary (Village of Plainfield Not Included)

Source: Soils Data USDA-NRCS, 1982. Waushara County, 2003.  
Digital Base Data provided by Waushara County, 2008.



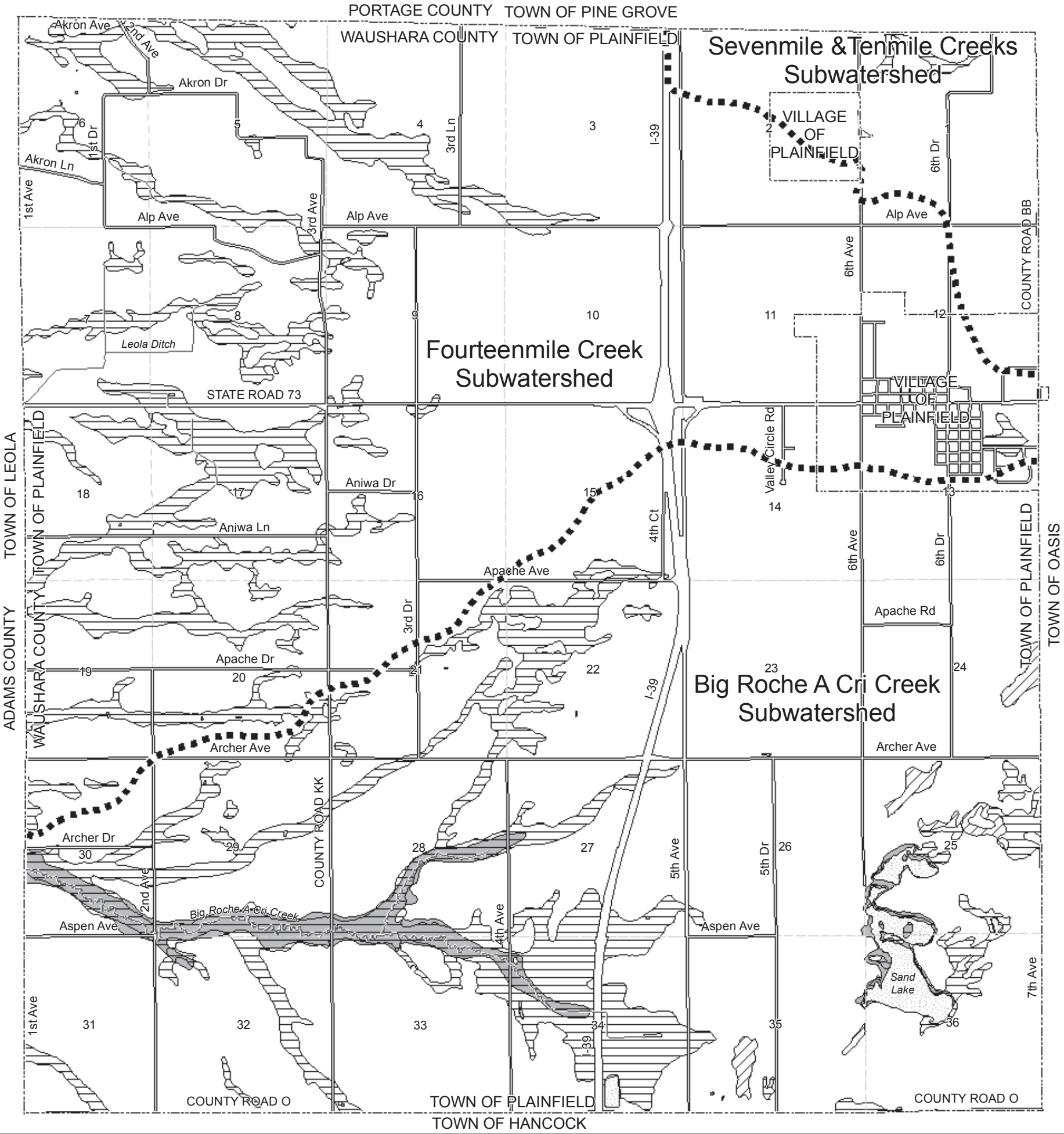
This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-OCTOBER 2008



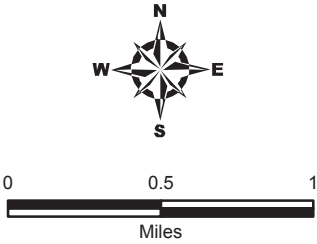


# **EXHIBIT 5-5** **TOWN OF PLAINFIELD** **ENVIRONMENTAL FEATURES**



- Floodplain
- Depth to Groundwater < 2 Ft.
- Slope > 12 %
- Subwatershed Boundary
- Water Body
- Stream / River
- Municipal Boundary

Source: Soils Data USDA-NRCS, 1982. Waushara County, 2003.  
 Floodplain Data provided by FEMA, 2001.  
 Subwatershed Data provided by WI DNR, 2004.  
 Digital Base Data provided by Waushara County, 2008.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

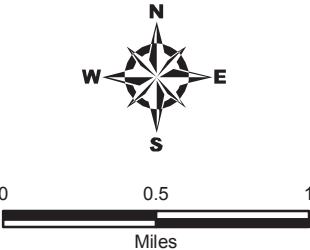
Prepared By  
 EAST CENTRAL WISCONSIN  
 REGIONAL PLANNING COMMISSION-SEPTEMBER 2008



# EXHIBIT 5-6 TOWN OF PLAINFIELD ENVIRONMENTAL FEATURES

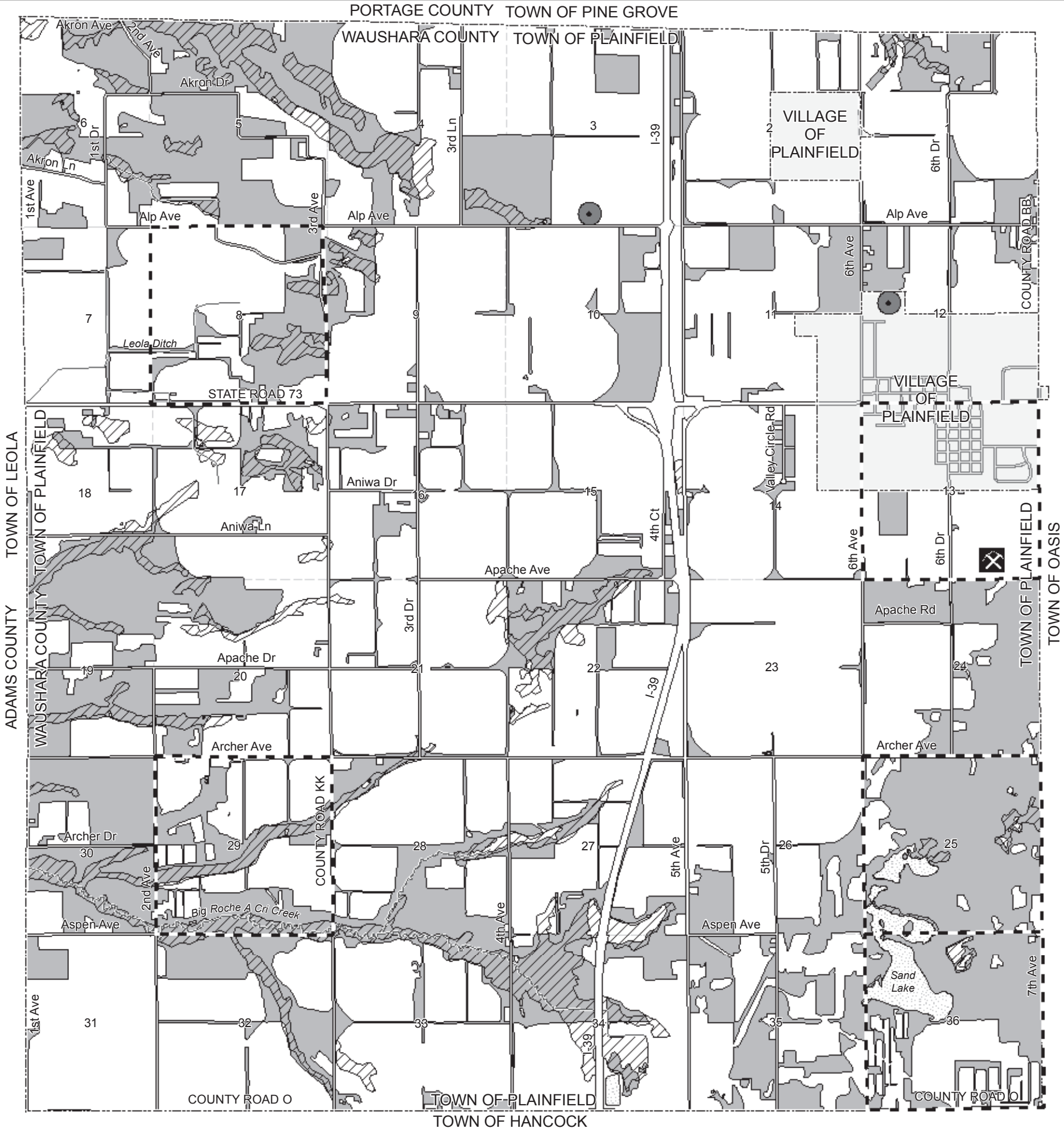
- Woodlands
- Endangered / Threatened Species
- Wetlands > 5 Acres
- Wetlands < 5 Acres
- Non-Metallic Mining Sites
- Abandoned Landfill Sites
- Water Body
- Stream / River
- Municipal Boundary

Source: Woodland data from Town of Plainfield Land Use, 2001.  
Mining Site Data provided by Waushara County Zoning Office, 2008.  
Endangered and Threatened Species Data provided by WI DNR, 2003.  
Wetland Data provided by WI DNR, 2004.  
Digital Base Data provided by Waushara County, 2008.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-SEPTEMBER 2008





## CHAPTER 6: ECONOMIC DEVELOPMENT

### TABLE OF CONTENTS

Introduction .....	6-1
Inventory and Analysis .....	6-1
Educational Attainment .....	6-1
Labor Force .....	6-1
Economic Base Information .....	6-2
Travel Time to Work .....	6-3
Location of Workplace .....	6-5
Employment Forecast .....	6-5
Industrial Park Information .....	6-6
Business Retention and Attraction .....	6-7
Economic Strengths and Weaknesses .....	6-8
Strengths .....	6-8
Weaknesses .....	6-8
Commercial and Industrial Design .....	6-8
Infill and Brownfield Development .....	6-8
Key Findings .....	6-11
Educational Attainment .....	6-11
Labor Force .....	6-11
Economic Base Information .....	6-11
Travel Time to Work .....	6-11
Location of Workplace .....	6-11
Employment Forecast .....	6-11
Industrial Park Information .....	6-11
Business Retention and Attraction .....	6-12
Economic Strengths and Weaknesses .....	6-12
Commercial and Industrial Design .....	6-12
Infill and Brownfield Redevelopment .....	6-12
Interrelationships with other Plan Elements .....	6-12
Housing .....	6-12
Transportation .....	6-12
Utilities and Community Facilities .....	6-13
Agriculture Resources .....	6-13
Natural Resources .....	6-13
Cultural Resources .....	6-14
Land Use .....	6-14
Intergovernmental Cooperation .....	6-14
Policies and Programs .....	6-14
Regional, County and Local Policies .....	6-14
Regional .....	6-14
Federal, State and Regional Programs .....	6-17
Federal Agencies .....	6-17
State of Wisconsin .....	6-18



Regional .....	6-22
Private .....	6-23

## TABLES

Table 6-1	Annual Average Unemployment Rates .....	6-2
Table 6-2	Employment by Occupation and Industry.....	6-3
Table 6-3	Top 20 Public and Private Employers in Waushara County .....	6-4
Table 6-4	Mean Travel Time to Work, 1990 and 2000 .....	6-4
Table 6-5	Top Five Workplace Destinations, 2000 .....	6-5
Table 6-6	Industrial Parks .....	6-6



## CHAPTER 6: ECONOMIC DEVELOPMENT

### INTRODUCTION

Planning for economic development is an on-going process in which a community organizes for the creation and maintenance of an environment that will foster both the retention and expansion of existing businesses and the attraction of new businesses and ventures. It is important to place an emphasis on existing resources which serve as assets for economic development efforts.

### INVENTORY AND ANALYSIS

Some components of the area's economy are presented in this chapter to better understand the state of the economy in the Town of Plainfield. Characteristics reviewed in this element include educational attainment, employment and unemployment levels, location of workplace, travel times, and a look at the area's economic base.

#### Educational Attainment

Table E-1 (Appendix E) presents educational achievement information from the 2000 Census for residents 25 years of age or older. ***A higher percentage of residents in the Town of Plainfield (48.4%) received high school diplomas than the State of Wisconsin (34.6%).*** It is in the area of post-high school achievement where the state generally has a higher level of educational attainment. For example, 28 residents (7.5%) from Plainfield completed four years of college or more. Comparatively, at the state level, 22.4 percent of residents have achieved this goal.

The U.S. Census Bureau reports that ***a person with a bachelor degree can expect to earn \$2.1 million over the course of a career, nearly double what the expected earnings are for a high school graduate.***<sup>1</sup> The results of this study demonstrate there is a definite link between earning potential and education. Greater educational attainment is a goal that all of Wisconsin should be striving toward. Since the data suggests that many of the county's best educated residents are retirees, it points to the apparent lack of job opportunities in the area to retain or attract better educated members of the workforce.

#### Labor Force

Labor force is an indicator of economic performance. It shows how quickly the labor force is growing and the extent to which people are able to find jobs. The labor force is defined as individuals currently with a job, the employed; and those without a job and actively looking for one, the unemployed.

Census information indicates that ***labor force growth rates for Waushara County (29.4%) and the Town of Plainfield (25.9%) exceeded the state's 14 percent growth rate between 1990 and 2000*** (Table E-2, Appendix E). Even though the labor market experienced overall growth in Waushara County, the unemployment rates in the county

---

<sup>1</sup> U.S. Census Bureau. 2002. *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings.*



were higher than the state in both 1990 and 2000 (Table E-3 and Table E-4, Appendix E). According to census data, in 2000, Waushara County and Wisconsin had unemployment rates of 6.6% and 4.7%, respectively. The Town of Plainfield (7.6%) was high relative to the unemployment rate for the state and Waushara County. Table 6-1 includes more recent information for the county and state between 2001 and 2004.<sup>2</sup> According to Wisconsin Department of Workforce Development, unemployment rates dropped between 2004 and 2007 for both Waushara County and Wisconsin

**Table 6-1. Annual Average Unemployment Rates**

	2004	2005	2006	2007
Waushara County	6.0%	5.6%	5.5%	5.4%
Wisconsin	5.0%	4.8%	4.7%	4.9%

Source: Wisconsin Department of Workforce Development, 2004 to 2007

### Economic Base Information

The composition and types of employment in the county and the Town of Plainfield provides a snapshot description of the economic base in the area. Table 6-2 illustrates employment information by occupation and by industry.<sup>3</sup> ***The manufacturing (22.3%), agriculture, forestry, fishing, and hunting, and mining (17.2%), and educational, health and social services(12.1%) industries employed half (51.6%) of workers in the Town of Plainfield in 2000.*** The information sector (0.8%), which is composed of publishing, telecommunications, and data processing, employs the fewest workers in the Town. In comparison, manufacturing (22.1%/22.2%), educational, health and social services (17.9%/20.0%), and retail trade (10.4%/ 11.6%) employed the largest percentage of workers in Waushara County and the state.

The positive aspect of this distribution is that the manufacturing sector, in general, pays higher wages than most service industries. The negative aspect, however, is that the manufacturing sector tends to be severely impacted by recessions, which is particularly painful for most Wisconsin communities.

***The top three occupations for Town of Plainfield workers in 2000 were production, transportation, and material moving (21.5), sales and office (21.1%), and service occupations (18%).*** The production, transportation, and material moving occupations and the sales and office occupations were also in the top three occupations for Waushara County and Wisconsin. However the distribution was slightly different, the top occupation in the Town of Plainfield (21.5%) and the County (25%) was production, transportation, and material moving, while management, professional and related occupations was the top occupation in Wisconsin (31.3%).

<sup>2</sup> Wisconsin Department of Workforce Development, 2004 through 2007. *Local Area Unemployment Statistics Estimates Report*.

<sup>3</sup> U.S. Census Bureau, 2000. *Community Profiles*. <http://www.doa.state.wi.us/dir/wisconsin/index.html>.



**Table 6-2. Employment by Occupation and Industry**

	Town of Plainfield	Waushara County	Wisconsin
<b>Occupation</b>			
Management, professional, and related occupations	17.6%	23.5%	31.3%
Service occupations	18.0%	16.1%	14.0%
Sales and office occupations	21.1%	21.4%	25.2%
Farming, fishing, and forestry occupations	9.8%	2.9%	0.9%
Construction, extraction, and maintenance occupations	12.1%	11.1%	8.7%
Production, transportation, and material moving occupations	21.5%	25.0%	19.8%
<b>Industry</b>			
Agriculture, forestry, fishing and hunting, and mining	17.2%	7.1%	2.8%
Construction	3.9%	8.1%	5.9%
Manufacturing	22.3%	22.1%	22.2%
Wholesale trade	1.6%	3.1%	3.2%
Retail trade	7.0%	10.4%	11.6%
Transportation and warehousing, and utilities	9.4%	5.9%	4.5%
Information	0.8%	1.3%	2.2%
Finance, insurance, real estate and rental and leasing	5.5%	3.8%	6.1%
Professional, scientific, management, administrative, and waste management services	2.3%	3.7%	6.6%
Educational, health and social services	12.1%	17.9%	20.0%
Arts, entertainment, recreation, accommodation and food services	10.5%	7.5%	7.3%
Other services (except public administration)	2.3%	4.4%	4.1%
Public administration	5.1%	4.6%	3.5%

U.S. Census 2000, SF 3

Table 6-3 lists the largest employers in Waushara County.<sup>4</sup> Two of the top nine employers are manufacturing facilities. This list also indicates that Waushara County, the Department of Corrections and three school districts provide a large share of public sector employment. Care for the elderly is provided by three of the top 20 employers.

### Travel Time to Work

Travel time to work provides information about the time residents spend commuting to work. *On an average, residents from the Town of Plainfield, Waushara County and the state spent less than 30 minutes traveling to and from work in 1990* (Table 6-4). *In 1990, average commute times for residents was 21.1 minutes in the Town of Plainfield.* County residents traveled an average of 21.8 minutes to work, while state residents traveled an average of 18.3 minutes to work.

<sup>4</sup> Wisconsin Department of Workforce Development, 2005. *OEA – Top 100 Employers*.  
[http://dwd.wisconsin.gov/oea/xls/top\\_100\\_all.xls](http://dwd.wisconsin.gov/oea/xls/top_100_all.xls).



**Table 6-3. Top 20 Public and Private Employers in Waushara County**

Employers	Industry/Product/Service	Employees
Wautoma Public School	Elementary & secondary schools	250-499
County of Waushara	Executive & legislative offices, combined	250-499
Redgranite Correctional Institution	Correctional institutions	250-499
Magnum Products LLC	Other lighting equipment manufacturing	100-249
Milsco Manufacturing (Jason Incorporated)	Motor vehicle seating & interior trim mfg.	100-249
Fleet Guard Inc	Miscellaneous general purpose machinery mfg.	100-249
Tri-County Area School	Elementary & secondary schools	100-249
Wild Rose Public School	Elementary & secondary schools	100-249
Wild Rose Community Memorial	General medical & surgical hospitals	100-249
Mayville Engineering Co Inc	Metal coating & nonprecious engraving	100-249
Plainfield Trucking Inc	General freight trucking, local	100-249
Nordic Mountain LLC	Skiing facilities	50-99
Cooperative Care	Services for the elderly & disabled	50-99
The Copps Corp	Supermarkets & other grocery stores	50-99
Heartland Preston Inc	Homes for the elderly	50-99
Stone Ridge Meat & Country Market	Supermarkets & other grocery stores	50-99
Paramount Farms Inc	Potato farming	50-99
Pine Ridge of Wautoma LLC	Full-service restaurants	50-99
Wild Rose Manor (Wisconsin Illinois Senior Housing)	Nursing care facilities	50-99
Alabama Farmers Coop Inc	Floriculture production	50-99

Source: Wisconsin Department of Workforce Development, March 2007. Since 3/07 Fleet Guard Inc has closed.

**Table 6-4. Mean Travel Time to Work, 1990 and 2000**

	T. Plainfield	Waushara County	Wisconsin
1990 Mean Travel Time	21.1	21.8	18.3
2000 Mean Travel Time	23.6	27.1	20.8

Source: U.S. Census 1990 and 2000, SF 3

Between 1990 and 2000, average commute times rose for all jurisdictions, Waushara County as a whole experienced the largest increase (Tables E-5 and E-6, Appendix E). On an average, commute time for Town of Plainfield residents increased by about 2.5 minutes. Waushara County experienced a larger increase in average commute time (6 minutes) than the Town and state. ***In 2000, average commute times for residents from Plainfield was 23.6 minutes***, County residents traveled an average of 27.1 minutes, and state residents traveled an average of 20.8 minutes to work.

Commuting times increased for several reasons. There was a decrease in the share of residents working at home or traveling shorter distances to work. In addition, there was an increase in the share of commuter trips lasting 30 minutes or longer. For example, in 1990 about 28 percent of Town of Plainfield residents traveled more than 30 minutes to work; by 2000 the share of residents traveling more than 30 minutes to work had increased to 35 percent. Additionally the share of town residents working at home in the Town of Plainfield fell from 6.5 percent to 4.5 percent. This indicates that the residents had to travel further away from home to obtain adequate employment and/or wages.



## Location of Workplace<sup>5</sup>

Location of workplace data provides information on the direction and distance residents have to travel to find employment. Table E-7 (Appendix E) includes the Top 20 workplace destinations for Waushara County and Town of Plainfield residents. According to the U.S. Bureau of Census, the over fifty percent (58.7%) of county residents worked in Waushara County in 1990. ***In 1990, over a half (53%) of the residents from the Town of Plainfield worked in Waushara County. While about a quarter (26.5%) worked in Portage County.***

In 2000, the location of workplace somewhat mirrored the information from 1990 but showed a decreased dependence on employment locations in Waushara County. ***The largest share of residents from the county (52.5%) and the Town of Plainfield (50.8%) continued to work in Waushara County*** (Appendix E, Table E-7). While a shift of employment was experienced by Waushara County workers from the county, to the Appleton-Oshkosh MSA, three out of the top five workplace destinations remained in Waushara County (Table 6-5). According to U.S. Census information, the majority of Town of Plainfield workers were employed in either Portage County (36.6%) or Waushara County (50.8%) in 2000. Per Table 6-5, a quarter (25.2%) of Town residents was employed in the Town of Plainfield and a sixth (18.3%) in the City of Stevens Point in Portage County.

**Table 6-5. Top Five Workplace Destinations, 2000**

Place of Residence	Place of Work	Number	Percent
Town of Plainfield	T. Plainfield	62	25.2%
	C. Stevens Point. Portage Co.	45	18.3%
	V. Plainfield	22	8.9%
	T. Plover, Portage Co.	16	6.5%
	Top 4 Total*	145	58.9%
	Total Employed	246	100.0%
Waushara County	C. Wautoma	1,661	16.1%
	C. Berlin, Green Lake Co.	696	6.8%
	C. Oshkosh, Winnebago Co.	686	6.7%
	V. Wild Rose	612	5.9%
	T. Wautoma	525	5.1%
	Top 5 Total	4,180	40.6%
	Total Employed	10,288	100.0%

Source: U.S. Census 2000.

\*Note: Listed top four destinations because the next largest ( fifth) was only 7

## Employment Forecast

The Wisconsin Department of Workforce Development calculates employment projections for the various industries and occupations for the State of Wisconsin.<sup>6</sup> These projections are completed on a statewide basis and growth is expected in all industries. ***It is anticipated that the largest increases will be seen in the education and health services sector.*** Educational services, which makes up part of this sector includes all public and private

<sup>5</sup> U.S. Census, 1990 and 2000.

<sup>6</sup> Wisconsin Department of Workforce Development, 2002. *Wisconsin Detailed Industry Employment Projections, 2002 – 2012.*



elementary, secondary and post-secondary schools. This sector also includes ambulatory health care. The ambulatory health care industry, which is estimated to have the highest growth, is made up of offices of physicians, dentists, and other health practitioners as well as home health care. ***While the state is expected to see the highest increases in this area, employment opportunities in Waushara County may differ.*** According to the various school districts serving the county, enrollment is declining. These declines in enrollment may be the result of limited work opportunities for county residents, an aging population, and the subsequent loss of residents with children in the school district. Education sector employment is unlikely to increase if enrollments continue to drop. It should be noted that it is difficult to forecast employment for small communities, since the addition or loss of one industry or employer greatly impacts the community's economic base.

### Industrial Park Information

***There are no industrial parks in the Town of Plainfield.*** Most industrial uses within the Town are smaller in nature. Table 6-6 contains more information about industrial parks within the county. When these parks become full, it is important that community leaders plan for the expansion of existing parks and for the development of land for future industrial and business sites. An area where infrastructure is already in place is the most cost efficient choice for the community.

**Table 6-6. Industrial Parks**

Park Location/ Name	Size (Acres)	Water	Sewer	Sanitary Sewer	Storm Sewer	Electricity	Rail	Highway	Avail. Acres	Private / Public	Improved / Not Improved
City of Berlin / Berlin North Business Park	186	Y	Y	Y	N	Y	N	STH 49,21,91	80	Public	Improved
City of Wautoma / South Industrial Park	19	Y	Y	(1)	N	Y	N	STH 21,22,73	0	Public	Improved
City of Wautoma / Southeast Industrial Park	45	Y	Y	(1)	N	Y	N	STH 21,22,73	8	Public	Improved
Village of Coloma / Coloma Business Park	42	Y	Y	Y	N	Y	N	I-39, STH 21	25	Public	Improved
Village of Redgranite / Redgranite Industrial Park <sup>4</sup>	22	Y	Y	(1)	N	Y	N	I-39, STH 21	22	Public	Improved
Village of Wild Rose / Roberts Industrial Park	23	Well	Y	(2)	N	Y	N	STH 22	18	Public	Improved
Village of Wild Rose / South Industrial Park	9	Well	Y	(2)	N	Y	N	STH 22	2	Public	Improved

Source: ECWRPC, and NEWREP 2008



## Business Retention and Attraction

***Tri-County Regional Development Corporation (TCREDC) is a partnership between Waushara County and Marquette and Green Lake counties.*** The TCREDC has a 6-member volunteer board of directors, and a fulltime director. The mission of the TCREDC is to work in cooperation with public and private entities; to promote the region and businesses in order to attract, stimulate and revitalize commerce, industry and manufacturing that results in the retention and creation of viable living wage jobs. Within the county, ***the Waushara County Economic Development Corporation, run by a board of volunteers, is working to foster new business development, and support and sustain existing businesses throughout the county.***

Several nearby communities also actively promote business retention and attraction.<sup>7</sup> The Berlin Community Development Corporation facilitates community growth by aiding in the expansion and retention of business in the City of Berlin and surrounding areas; the organization operates eight TIF districts throughout the City. The Redgranite Economic Development Committee manages the two TIF districts within the village and works to retain existing businesses and recruit new businesses to the community. The Redgranite Economic Development Committee is volunteer based. Table E-8, Appendix D contains a listing of economic development organizations and groups present in the county.

The Town of Plainfield has little or no staff to engage in the activities listed below. However, the Tri-County regional Development Corporation and the Waushara County Economic Development Corporation will be able in certain instances to offer assistance in some of these areas.

***Business attraction involves the promotion of community assets.*** For example, some of the activities that are involved in a business attraction program include:

- Providing information about available commercial/industrial sites
- Identifying labor and community characteristics
- Marketing sites to businesses that would be complementary to existing businesses or would provide diversity to the local economy
- Offering low cost land, state or federal grants or other incentives to encourage businesses to locate in the community

***Business retention is very important in that it is a relationship building effort between the community and already present local businesses.*** Activities associated with business retention programs include:

- Helping businesses learn about potential sites for expansion, offering low cost loans and identifying state and federal grants to finance business expansions
- Providing business areas with reliable, efficient public services such as snow removal, road repair, sewer/water utilities, and technology infrastructure
- Providing a contact person to answer business questions and to serve as a resource for business leaders regarding future business development

---

<sup>7</sup> UW – Extension Waushara County, 2005. *Economic Development Organizations*.  
<http://www.uwex.edu/ces/cty/waushara/cnred/ed/organizations.html>.



- Partnering with organizations to support the development of a qualified, educated and trained workforce

## **Economic Strengths and Weaknesses**

By developing a set of strengths and weaknesses, the Town of Plainfield is better prepared to develop an economic development strategy. ***These strengths and weaknesses are listed below.***

### ***Strengths***

- Access to the I-39 corridor
- Natural Areas, Open Space, and Recreational Opportunities
- Prime Agricultural Soils
- Strong agricultural economy

### ***Weaknesses***

- Lack of diversity in economic base
- Lack of population density is a deterrent for service and retail businesses
- Distance from urban centers

Although new development is highly encouraged, it must exist in harmony with the local environment. It should not compromise the natural resources or the historical and cultural components of the area. New development should blend into the rural landscape and complement existing development.

## **Commercial and Industrial Design**

***Site review procedures and design standards can be used to improve the quality of design and to promote the individual identity for a community.*** Specific standards regarding commercial building design, lot layout, building materials, parking, landscaping, and preservation of sensitive natural resources where necessary can be created so that developers have a clear understanding of the requirements they need to meet in order for their project to receive approval. Communities should consider applying site plan review to all commercial and industrial buildings. This ensures that downtown areas and other planned development are designed in a manner consistent with the vision of the local community comprehensive plans.

In addition to design standards, restrictive covenants are another tool business and industrial parks can use. The use of restrictive covenants enables communities to develop business parks with quality buildings and businesses. Covenants also serve to protect the investments of businesses that choose to locate in these parks.

## **Infill and Brownfield Redevelopment**

Brownfield's are sites where development or redevelopment is complicated by real or perceived hazardous substances, pollutants, or contamination. Knowing the location of Brownfield's and the extent of pollution greatly improves the likelihood that these sites will be redeveloped.



***The Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment maintains a listing of Brownfield's and contaminated sites. This website lists 43 entries for Plainfield in Waushara County.*** These entries are classified in the following six categories: Environmental Repair (ERP), Leaking Underground Storage Tank (LUST), Spills, General Property Information (GP), Liability Exemption (VPLE) and No Action Required by RR Program (NAR). Statuses include Closed, Historic, Open, General Property and No RR Action Required. Closed is defined as "Activities where investigation and cleanup of the contamination has been completed and the State has approved all cleanup actions." Open is defined as "Spills, LUST, ERP, VPLE and Abandoned Container activities in need of cleanup or where cleanup is still underway". Historic is defined as "Spills where cleanups may have been completed prior to 1996 and no end date is shown." General Property is defined as "Liability exemptions, liability clarifications, etc. to clarify the legal status of the property." No RR Action Required is defined as "There was, or may have been, a discharge to the environment and, based on the known information, DNR has determined that the responsible party does not need to undertake an investigation or cleanup in response to that discharge." ***Two of the sites listed in Table 6-7 below are listed as open while the all the other sites are either closed, historic or No RR Action required.*** A listing of Brownfield and contaminated sites is available from the Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment. A tracking feature is available at their website.<sup>8</sup> The sites below were identified for Plainfield.

Waushara County and its communities should complete and maintain an inventory of existing vacant buildings and land identified as "Brownfields". This information could be used to encourage infill development and redevelopment opportunities that take advantage of existing infrastructure and services and removes blight created by vacant and dilapidated buildings and parcels. Once identified, State and federal programs could be used to further study, clean, and redevelop these Brownfields.

Funding resources are listed at the end of the chapter for remediation of contaminated sites. To prevent future environmental damage, the Town of Plainfield should encourage environmentally friendly businesses that are properly permitted and regulated to protect the soil and groundwater. This is particularly critical in areas that depend on private wells for drinking water.

---

<sup>8</sup> Wisconsin Department of Natural Resources. 2005. Remediation and Redevelopment Tracking System.  
<http://botw.dnr.state.wi.us/botw/Welcome.do>



**Table 6-7. WDNR Remediation Sites**

<b>LOCATION</b>	<b>ADDRESS</b>
FOX OIL CO	N WOODWARD AVE
CORNELI KIP FIELD	CTH KK
UAP Distribution – Bulk Liquid Plant*	N5853 5 <sup>th</sup> AVE
PLAINFIELD TRUCKING	HWY 73
PLAINFIELD METALS	1212 W NORTH
MIKES BUS SERVICE	712 PINE ST
76 TRUCK STOP #94 - WASTE OIL TANK AREA	HWY 51 & 73 (SE CORNER)
76 TRUCK STOP #94 - DISPENSER ISLAND	HWY 51 & 73 (SE CORNER)
PIORIER SALES & SERVICE	W12792 STH 73 W
TONYS UNOCAL 76 SELF SERVE	110 E NORTH ST
AMOCO FOOD MART*	N6481 5TH AVE
WOODWARD AVE - 3 BLKS N HWY 73 [HISTORIC]	WOODWARD AVE - 3 BLKS N HWY 73
4 MI S OF PLAINFIELD ON HWY 51 [HISTORIC]	HWY 51
HWY 51 N ARCHER IN MEDIAN STRIP [HISTORIC]	HWY 51 N ARCHER IN MEDIAN STRI
BURNS LAND - N OF TN [HISTORIC SPILL]	BURNS LAND - N OF TOWN
REABE SPRAYING SVC	W13105 ALP AVE
T H AGRICHEMICALS	.3 MI W OF ASPEN DR
BEER RESIDENCE	201 MAIN ST
GASEL LINES INC	N6409
FRIDAY CANNING/STOCKLEY USD	INTERS OF 5TH & HWY 73
RUAN [HISTORIC SPILL]	HWY I39
KLOIBER SPILL	W12879 CTH O
LARSON CO/ FRESHLIKE/VEG-ALL	AKRON AVE & 9TH AVE
ROADWAY EXPRESS	HWY I39
TRANSPORT SERVICE CO [HISTORIC SPILL]	HWY 51
DNR/GARY BARTAN/MORTENSON FARMS	193 3RD AVE
T H AGRICHEMICALS @PLAINFIELD	617 E NORTH ST
T H AGRI CHEMICAL INC	617 E NORTH ST
T H AGRI CHEMICAL INC	617 E NORTH ST
REABE SPRAYING-PLAINFIELD/BEGGES	11TH AVE
WILBUR ELLIS CO	N5933 CTH KK
PLAINFIELD TRUCKING SPILL	W12650 STH 73
CENEX CHS SPILL	N5933 CTH KK
WILLIE CRUZ SPILL	HWY 39
830 NORTH ST	830 NORTH ST
BARKER CHEVROLET	203 N WEST ST
MILL ST CRAFTS	809 NORTH ST
PLAINFIELD TRUCKING	818 W NORTH ST
NORTH CENTRAL IRRIGATION	W12680 HWY 73 W
REID DAVE	226 S MAIN ST
EMPIRE FARMS	224 ANIWA LN
SZUKIS PROPERTY	531 E NORTH ST
WISCONSIN TURF EQUIPMENT PROPERTY (FORMER)	206 W NORTH ST

Source: WDNR BRRTS 2008

\*Open sites



## **Key Findings**

### ***Educational Attainment***

- A higher percentage of residents in the Town of Plainfield (48.4%) received high school diplomas than the State of Wisconsin (34.6%).
- A person with a bachelor degree can expect to earn \$2.1 million over the course of a career, nearly double what the expected earnings are for a high school graduate.

### ***Labor Force***

- Labor force growth rates for Waushara County (29.4%) and the Town of Plainfield (25.9%) exceeded the state's 14 percent growth rate between 1990 and 2000.

### ***Economic Base Information***

- The manufacturing (22.3%), agriculture, forestry, fishing, and hunting, and mining (17.2%), and educational, health and social services(12.1%) industries employed half (51.6%) of workers in the Town of Plainfield in 2000.
- The top three occupations for Town of Plainfield workers in 2000 were production, transportation, and material moving (21.5), sales and office (21.1%), and service occupations (18%).

### ***Travel Time to Work***

- On an average, residents from the Town of Plainfield, Waushara County and the state spent less than 30 minutes traveling to and from work in 1990.
- In 1990, average commute times for residents was 21.1 minutes in the Town of Plainfield.
- In 2000, average commute times for residents from Plainfield was 23.6 minutes.

### ***Location of Workplace***

- In 1990, over a half (53%) of the residents from the Town of Plainfield worked in Waushara County. While about a quarter (26.5%) worked in Portage County.
- The largest share of residents from the county (52.5%) and the Town of Plainfield (50.8%) continued to work in Waushara County.

### ***Employment Forecast***

- It is anticipated that the largest increases will be seen in the education and health services sector.
- While the state is expected to see the highest increases in this area, employment opportunities in Waushara County may differ.

### ***Industrial Park Information***

- There are no industrial parks in the Town of Plainfield.



### ***Business Retention and Attraction***

- Tri-County Regional Development Corporation (TCREDC) is a partnership between Waushara County and Marquette and Green Lake counties.
- The Waushara County Economic Development Corporation, run by a board of volunteers, is working to foster new business development, and support and sustain existing businesses throughout the county.
- Business attraction involves the promotion of community assets.
- Business retention is very important in that it is a relationship building effort between the community and already present local businesses.

### ***Economic Strengths and Weaknesses***

- Economic strengths generally include the town's location and natural resources and agricultural base, while weaknesses include low population density and lack of economic diversity.

### ***Commercial and Industrial Design***

- Site review procedures and design standards can be used to improve the quality of design and to promote the individual identity for a community.

### ***Infill and Brownfield Redevelopment***

- The Wisconsin Department of Natural Resources Bureau of Remediation and Redevelopment maintains a listing of Brownfield's and contaminated sites. This website lists 43 entries for Plainfield in Waushara County.
- Two of the sites listed in Table 6-7 are open while the all the other sites are either closed, historic or No RR Action required.

## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

### **Housing**

Economic growth will generate more jobs and, consequently, a need for greater housing availability and choices. These choices should reflect the needs of an area. For example if economic growth results in lower wage service sector jobs (retail, leisure, hospitality, and food services) and pay remains at the minimum wage level, housing affordability may become a concern. Therefore it is essential that a balanced mix of well designed housing types of various sizes and prices be available for all income levels. Affordable housing is also an important component of an economic development strategy, as it helps ensure an adequate labor force supply.

### **Transportation**

Facilitating commerce in the area and state is the function of the transportation system. Adequate access to the transportation system is essential to the economic success of the area. Businesses must have the ability to ship and receive goods quickly and economically. Access to and visibility of the business facility may be crucial for both customers and employees.



Businesses in different locations may need different transportation accommodations. For example businesses in downtown areas may value on-street parking and pedestrian accommodations more than businesses in a more rural setting.

### **Utilities and Community Facilities**

A vital, safe, clean and healthy environment is an economic draw for new industry and residents. It aids in the retention of existing residents and businesses. Parks and green space add to the local economy by maintaining or increasing property values; providing a place where local citizens can socialize, play sports or relax; and promoting healthy active lifestyles that encourage physical activity. In addition, local parks and recreational facilities draw visitors to an area. These visitors spend money at local restaurants, motels and businesses.

A good educational system has the ability to respond to the ever changing job market, to educate or retrain the residents of an area and to form partnerships between business and schools.

Citizens, businesses and industries need accessible, reliable, and affordable gas and electric services. To enable economic growth and open up new markets and opportunities for diverse and innovative services, access to fast, reliable, cost effective, and cutting edge telecommunications must be available.

### **Agriculture Resources**

Agriculture and agricultural related industries have been and are still important to the economy of Waushara County. One of the many challenges facing Waushara County and the state is the preservation of prime agricultural soils and the farming industry as more farms are converted out of farming and into other uses. Additionally, the future of family farms is a concern as fewer children are choosing to take over farming operations. Reasons given for this include time commitments, cost of entry and the inability to make a living solely from farming. To remain competitive, farmers working with others in the county may want to explore opportunities for industry cluster development. A cluster, which is a geographical group of interconnected companies or associations in a particular field, can include product producers, service providers, suppliers, educational institutions and trade associations. As part of this effort, specialty and organic crops and livestock, along with support industries could be expanded in the area. Communities could also explore programs that match outgoing farmers with individuals who want to farm.

### **Natural Resources**

Although economic benefits can accrue from both consumptive and non-consumptive uses of natural resources, balancing the demands of economic development with the preservation of natural resources is a challenge. Conserving these resources is necessary to maintain and in some cases improve the quality of life for residents while providing an attraction tool for new businesses and workers. Given the importance of tourism in the county, protection of the area's natural resources is essential. However, communities should be aware of the economic trade-offs between sectors. These trade-offs include long term intrinsic values versus current economic gain; high wages versus low wages; informed decisions versus short term economic gains; and actual protection and preservation versus aesthetics.



## Cultural Resources

Buildings dating back to the early 1900's can be found throughout Waushara County. These buildings along with artifacts tell the story of the county and the area. This rich history includes the early Native American habitation, the quarrying of red granite, and the development of the communities that make up the county. While the promotion of economic development is important, special care must be taken to preserve not only the character but the historical and cultural elements that remain today. Positive economic benefits can be realized by preserving these elements to provide a charming setting for businesses and communities that evokes a feeling in people's minds of a time or era when things were simpler, peaceful and more welcoming. It may also draw people to an area to explore their culture and/or identity.

## Land Use

The development of land can impact the value of land as well as the quality of life within the community. Ideally, the siting of commercial and industrial land uses should have minimal environmental impacts and be located near the necessary infrastructure. Redevelopment of abandoned buildings and areas contribute to the economic vitality of the area.

## Intergovernmental Cooperation

Economic development goes beyond municipal and county borders. Commercial and industrial development as well as sporting, tourism and other activities in one community will impact others. This business may also generate a support industry elsewhere in the county. Working in partnership, communities and the county can promote the amenities of the area that contribute to a high quality of life; work to form industrial clusters that involve producers, service providers, suppliers and education; and promote other things that are important to the economic development of the area such as agriculture, organic and specialty crop production, biomass, and forest products.

## POLICIES AND PROGRAMS

### Regional, County and Local Policies

#### *Regional*

**East Central Wisconsin Regional Planning Commission.** East Central has recently completed a regional comprehensive plan. As part of this planning effort, East Central has adopted five core economic development goals:

- Promote the expansion and stabilization of the current economic base and employment opportunities, while working to promote a positive, growth oriented, entrepreneurially supportive image to attract new business and create additional employment.
- Increase the awareness of on-going collaborative economic activities in the area to ensure maximum benefit to the regional economy.
- Create better relationships between political representatives and the business and educational sectors to effectively link and apply research, development, and technology to production processes, as well as to ensure an appropriately trained workforce.



- Encourage planning to guide community development to maximize the use of existing infrastructure, facilitate the provision of shared resources, minimize costs and environmental impacts, and promote a sense of place and healthy communities.
- Promote the economic benefits of natural resources, parks and recreation.
- Assess options to increase the viability of family farms.

**NorthEast Wisconsin (NEW) Economic Opportunity Study.** Waushara County participated in the NEW Economic Opportunity Study.<sup>9</sup> The NEW Study is a multi-jurisdictional partnership intending to further connect workforce development issues with economic development goals. Even before the economic downturn, the northeast region of Wisconsin experienced declines in its strong manufacturing sector employment levels and these negative changes in many cases have continued. The Fox Valley Workforce Development Board initiated a study to address these negative trends and to present recommendations to change the direction of the northeast Wisconsin economy. In addition to Waushara County, the study area is composed of the following 16 counties: Brown, Calumet, Door, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, and Winnebago Counties.

The five strategies developed for the NEW Economic Opportunities project are:

- *Strategy I – Move to a New Economy Construct*  
The New Economy building blocks are brain power, risk capital, technological innovation, and entrepreneurship. These New Economy building blocks must be incorporated within the mindset of abundance theory. Business, labor, government, education, and the communities across NEW must all work actively together under a common vision to harness the resources available within the region (and some outside the region) to drive future economic growth.
- *Strategy II – Move to a Collaborative Economic Development Construct*  
NEW must abandon the economic strategy of a cost race to the bottom and embrace the concept of abundance theory – that by collaborating, the pie will increase with everyone getting a larger piece. This is best and most efficiently accomplished through proactive collaboration across all sectors in the region – business, labor, government, education, and the general populace.
- *Strategy III – Change Social and Cultural Mindset to Risk and Collaboration*  
Proactive collaboration will require an opening up of the region's mindset both socially and culturally. Cultural diversity is a key to the melding of fresh ideas, best practices, and collaboration. It is what has worked in the country and the region in the past and it will be what works in the future.
- *Strategy IV – Change Regional Image*  
NEW and much of the greater Midwest has an image of being a wholesome but dull place. It is perpetuated by the national press and exists in the mindsets of Hollywood and Wall Street. That image is somewhat internalized, but also generally accepted by businesses and worker talent outside the region, making it difficult to retain and attract talent to the region. NEW must also develop both an internal and external image that promotes the resource and lifestyle benefits in the region. Inventorying and promoting

---

<sup>9</sup> NorthStar Economic, Inc. 2004. *Northeast Wisconsin Economic Opportunity Study*.  
<http://www.neweconomyproject.org/Pages/NEWEconStudy.htm>.



the richness of the region's assets will help to retain and attract businesses and workers to NEW.

- *Strategy V – Promote Industry Cluster Development*

This strategy addresses clusters, or a concentration of industries, that have potential for the area based on current industries and their expansion. Waushara County is a part of the Fox Valley Rural Sub-Region and for this sub-region the study recommended the possibility of building a biomass refinery that would use wood and other agricultural products to supply power to local foundries and other users be considered. The study suggests collaboration on food production and processing, safety, and packaging cluster. Specialty and organic crops and livestock should be expanded for farmers in this area.

**Lake Winnebago Anglers' Survey.** Researchers from UW-Extension, UW-Green Bay, UW-Madison, and the Wisconsin Department of Natural Resources (WDNR) recently completed the Lake Winnebago Anglers' Survey.<sup>10</sup> This study examined the economic impact of the Lake Winnebago Pool Lakes fisheries. The study area was defined as the entire pool lake system within the five county region surrounding the Winnebago system (Calumet, Fond du Lac, Outagamie, Waushara, and Winnebago counties). Only fishing trips from the mouth of the Wolf River on Lake Poygan southward to the mouth of the Upper Fox River were considered in this study. An extensive 12-page survey was mailed to a stratified sample of tournament anglers, anglers within the five-county region, anglers statewide, and out-of-state anglers randomly selected from the WDNR ALIS license database. The survey asked specific questions on anglers' fishing habits and preferences, fishing equipment replacement costs, fishing excursions on the Winnebago system, expenditures on these excursions, and attitudes towards current fisheries management practices.

Researchers concluded that:

- Over 1.1 million fishing trips were made on the Lake Winnebago system in 2005.
- 41% of these trips were made by local anglers within the five county region.
- The typical angler from out of the region spent \$273 per day, while out-of-state and tournament anglers spent \$755 and \$469, respectively.
- Conservative estimates indicate that anglers from outside of the five county region contributed \$147.5 million in direct spending in the region.
- Researchers found that spending generated from fishing created an additional \$73.9 million dollars in indirect and induced spending.

Indirect spending is defined as increased sales among businesses in different sectors. For example, increased sales at a local bait and tackle shop may lead to an expansion of the store size; the bait shop will use the increased revenue to buy building materials from a hardware store. Induced effects result from increased buying power of local employees from the pay raises received.

This study emphasized the true importance of the Lake Winnebago system and the economic implications that a quality natural resource base can have on local communities. The direct revenues generated by fishing were greater than several major events or tourist attractions in the area including the annual EAA Fly-in (\$80 million), Country USA (\$23 million), or the Green

---

<sup>10</sup> UW – Extension and UW – Green Bay. 2005. Lake Winnebago Angler Survey.  
<http://www.uwex.edu/ces/cty/winnebago/cnred/documents/finalinitialdatapressrelease063006.doc>.



Bay Packer Lambeau Field Atrium Complex (\$144 million). Unlike week-long festivals, fishing generates revenues for local businesses throughout the year.

Furthermore, this study will have important ramifications on local land use policies throughout the region. Due to the economic importance of the Winnebago fisheries, local policy makers should continue to address land use issues which have the potential to adversely affect water quality and aquatic wildlife habitat within shoreland areas. Development practices that increase shoreland protection and promote erosion control should be implemented. Since only 10 percent of the population lives on the lakeshores, public access will continue to be a major issue. Providing adequate boat ramps, parking areas, shoreline fishing piers, and handicapped accessible facilities will ensure more people have access to this unique fishery. Since these issues must be addressed within the context of current budgetary constraints, it may be necessary to address how user fees can better contribute to the management of the fishery as well as improving public infrastructure. Creative solutions will be needed to incorporate natural resource policies that enhance the Winnebago system fisheries and complement local economic development and revitalization projects.

## **Federal, State and Regional Programs**

### ***Federal Agencies***

Some communities in Waushara County meet the requirements of the US Department of Agriculture-Rural Development and may be eligible for Rural Development Economic Assistance Programs. However, there are typically strict income limits associated with some of the programs so the Wisconsin Division of USDA-Rural Development should be contacted regarding eligibility for certain programs. A complete listing of USDA-Rural Development Programs can be found at <http://www.rurdev.usda.gov/wi/programs/index.htm>. Grants are also available through the US Department of Labor and can be found at <http://www.doleta.gov/sqa>. A partial list is given below.

**Rural Business Opportunity Grants.** The Rural Business Opportunity grant program promotes sustainable economic development in rural communities with exceptional need. Grants typically fund projects that will become sustainable over the long term without continued need for external support. These projects should have the ability to serve as a local catalyst to improve the quantity and quality of economic development within a rural region. Grant funds can be used for technical assistance to complete business feasibility studies, conducting training for rural managers and entrepreneurs, establishing business support centers, conducting economic development planning, and providing leadership training. Information regarding the Rural Business Opportunity Grant Program can be found at <http://www.rurdev.usda.gov/wi/programs/rbs/opportun.htm>.

### **Rural Economic Development Loans and Grants**

Rural Economic Development Loans and Grants help develop projects that will result in a sustainable increase in economic productivity, job creation, and incomes in rural areas. Projects may include business start-ups and expansion, community development, incubator projects, medical and training projects, and feasibility studies. Information regarding Rural Economic Development Loans and Grants can be found at <http://www.rurdev.usda.gov/wi/programs/rbs/economic.htm>.



**Susan Harwood Training Grants Program.** These training grants are awarded to nonprofit organizations for training and education. They can also be used to develop training materials for employers and workers on the recognition, avoidance, and prevention of safety and health hazards in their workplaces. Grants fall into two categories; Target Topic Training and Training Materials Development. The Target Topic Training grants are directed towards specific topics chosen by OSHA. Follow-up is required to determine the extent to which changes were made to eliminate hazards associated with the chosen topic. The Training Materials Development grants are specifically aimed at creating classroom quality training aids. Aids which are developed under the grant program must be ready for immediate self-study use in the workplace. Information regarding the Susan Harwood Training Grant Program can be found at <http://www.osha.gov/dcsp/ote/sharwood.html>.

**Community-Based Job Training Grants.** Community-Based Job Training grants (CBJTG) seek to strengthen the role of community colleges in promoting the US workforce potential. The grants are employer-focused and build on the President's High Growth Job Training Initiative. The primary purpose of the CBJTG grants is to build the capacity of community colleges to train workers to develop the skills required to succeed in high growth/high demand industries. Information regarding the Community Based Job Training Grants can be found at <http://www.doleta.gov/business/Community-BasedJobTrainingGrants.cfm>.

**H-1B Technical Skills Training Grant Program.** The H-1B Technical Skills Training Grant program provides funds to train current H-1B visa applicants for high skill or specialty occupations. Eligible grant applicants include local Private Industry Councils and Workforce Investment Boards that were established under the Workforce Investment Act. Eighty percent of the grants must be awarded to projects that train workers in high technology, information technology, and biotechnology skills. Specialty occupations usually require a bachelor's degree, and an attainment of this degree is strongly encouraged. The program is designed to assist both employed and unemployed American workers acquire the needed technical skills for high skill occupations that have shortages. Information regarding the H-1B Technical Skills Training Grant program can be found at <http://www.doleta.gov/h-1b/html/overv1.htm>.

### ***State of Wisconsin***

There are many state programs that communities can consider utilizing to meet their stated goals and objectives. While not an all inclusive list, there are several programs that communities should strongly consider and are addressed below. Wisconsin Department of Commerce area development managers assist business expansions, promote business retention, and help local development organizations in their respective territories. Area development managers (ADM) use their knowledge of federal, state, and regional resources to provide a variety of information to expanding or relocating firms. They also mobilize resources to help struggling businesses. Local economic development practitioners can turn to area development managers for assistance with long-term marketing and planning strategies. Waushara County is in Region 3. The ADM is Deb Clements and she can be reached at 715/344-1381 or via email at [dclements@commerce.state.wi.us](mailto:dclements@commerce.state.wi.us).

**Wisconsin Main Street Program.** The Main Street Program is a comprehensive revitalization program designed to promote the historic and economic redevelopment of traditional business districts in Wisconsin and is administered by the Wisconsin Department of Commerce – Bureau



of Downtown Development. Communities are selected to participate on an annual basis and are judged on a submitted application. These communities receive technical support and training needed to restore their Main Streets to centers of community activity and commerce. Details regarding the Wisconsin Main Street Program can be found at <http://commerce.wi.gov/cd/CD-bdd.html>.

**Community Based Economic Development (CBED) Program.** The Community-Based Economic Development (CBED) Program provides financing assistance to local governments and community-based organizations that undertake planning or development projects, or that provide technical assistance services that are in support of business (including technology-based businesses) and community development. The program provides grants for planning, development, and assistance projects; Business Incubator/Technology-Based Incubator; a Venture Capital Fair; and Regional Economic Development Grants. Additional information regarding the CBED program can be found at <http://www.commerce.wi.gov/cd/CD-bcf-cbed.html>.

**Community Development Block Grant for Economic Development (CDBG-ED).** The CDBG-ED program is designed to assist businesses that will invest private funds and create jobs as they expand or relocate to Wisconsin. The Wisconsin Department of Commerce would award the funds to the community, which then loans the funds to a business. When the business repays the loan, the community may retain the funds to capitalize a local revolving loan fund. This fund can then be utilized to finance additional economic development projects within the community. Communities may also utilize the existing Waushara County Economic Revolving Loan Fund to provide loans to community businesses. Additional information regarding the CDBG-ED program can be found at the following website: <http://commerce.wi.gov/BD/BD-RLF.html>.

**Early Planning Grant Program (EPG).** The EPG program is designed to help individual entrepreneurs and small businesses throughout Wisconsin obtain the professional services necessary to evaluate the feasibility of a proposed start up or expansion. Under the EPG program, the Wisconsin Entrepreneurs' Network (WEN) – with funding from the Wisconsin Department of Commerce – can provide applicants with a grant to help cover a portion of the cost of hiring an independent third party to develop a comprehensive business plan. The maximum funding available for Early Planning Grants is 75% of eligible project costs up to \$3,000. Additional information regarding the EPG program can be found at the following website: [http://wenportal.org/grant\\_applications/epg\\_help.html](http://wenportal.org/grant_applications/epg_help.html).

**Milk Volume Production (MVP) Program.** The Milk Volume Production (MVP) program is designed to assist dairy producers that are undertaking capital improvement projects that will result in a significant increase in Wisconsin's milk production. This program was created to aggressively support Wisconsin's \$20 billion dairy industry. The goal of the MVP program is to provide qualifying dairy producers with the type of financing necessary to fill the "equity gap" and to partner with local communities to increase dairy production in Wisconsin. It is important to note that the MVP application process is competitive, and not all applications will be funded. Only those projects that have a comprehensive business plan and can demonstrate that they will have a long-term sustainable impact upon Wisconsin's milk production will be successful. Information regarding the Milk Volume Production (MVP) Program can be found at <http://commerce.wi.gov/BD/BD-AG-MilkVolumeProduction.html>.



**Dairy 2020 Early Planning Grant Program.** The Dairy 2020 Early Planning Grant Program is specifically designed for small Wisconsin dairy farms. Professional assistance can help keep smaller operations profitable and competitive in the agricultural industry. Information regarding the Dairy 2020 Early Planning Grant Program can be found at <http://commerce.wi.gov/BD/BD-AG-Dairy2020EPG.html>.

**Customized Labor Training Program (CLT).** The CLT program provides a matching grant to assist companies which are utilizing new technologies or manufacturing processes to train employees on new technologies. Grant recipients must either expand an existing or build a new facility within the state. The grants help Wisconsin's manufacturers remain on the cutting edge of technological innovation. Eligible expenditures must focus on the continuing technological education of employees. Grants can cover employee wages, training materials, and trainer costs. Grants provide up to \$2,500 per trainee. Information regarding the CLT Program can be found at <http://commerce.wi.gov/BD/BD-CLTprogram.html>.

**Entrepreneurial Training Grant Program (ETG).** The ETG program provides potential new small business owners with partial tuition for attending the Small Business Center's (SBDC) Entrepreneurial Training Course. This course helps entrepreneurs prepare a comprehensive business plan that evaluates the feasibility of the proposed start up or expansion; identifies possible financing sources; and provides other information in regard to initial business start-up costs. Grants provide up to 75% of total tuition costs. Information regarding the ETG Program can be found at [http://wenportal.org/grant\\_applications/etp\\_help.html](http://wenportal.org/grant_applications/etp_help.html).

**Business Employees' Skills Training Program (BEST).** The BEST program helps small businesses in industries that are facing severe labor shortages upgrade the skills of their workforce. This program provides applicants with a tuition re-imbursement grant to cover training costs. To be eligible, businesses must have 25 or fewer employees and sales of less than \$2.5 million. In addition, businesses must specialize in automation, agricultural/food products, biotechnology, manufacturing, medical devices, paper/forest products, printing, tourism, or child care. All training must be provided by an independent third party. Information regarding the BEST Program can be found at <http://commerce.wi.gov/BD/BD-BESTprogram.html>.

**Industrial Revenue Bond Program.** The Industrial Revenue Bond program allows all Wisconsin municipalities to support industrial development through the sale of tax-exempt bonds. The proceeds from the bond sale are loaned to businesses to finance capital investment projects. Even though the bonds are issued by the municipality, the interest and principal are paid by the company. Information regarding the Industrial Revenue Program can be found at <http://commerce.wi.gov/BD/BD-IRB.html>.

**Transportation Economic Assistance (TEA) Program.** The state-funded Transportation Economic Assistance (TEA) program provides fast tract financing to construct rail spurs and port improvements for new or expanding industries. The program is available through the Wisconsin Department of Transportation. Additional information regarding the TEA program can be found at the following website: <http://www.dot.wisconsin.gov/localgov/aid/tea.htm>



## Wisconsin Department of Commerce

Listed below are additional Wisconsin Department of Commerce programs. This quick reference guide identified these programs and selected programs from other agencies. Commerce maintains a network of Area Development Managers to offer customized services to each region of Wisconsin.

**Brownfield's Initiative.** The Brownfield's Initiative provides grants to persons, businesses, local development organizations, and municipalities for environmental remediation activities for Brownfield sites where the owner is unknown, cannot be located or cannot meet the cleanup costs. Contact Jason Scott, 608/261-7714.

**CDBG-Blight Elimination and Brownfield Redevelopment Program.** This program can help small communities obtain money for environmental assessments and remediate Brownfield's. Contact Joe Leo, 608/267-0751.

**CDBG-Emergency Grant Program.** This program can help small communities repair or replace infrastructure that has suffered damages as a result of catastrophic events. Call 608/266-8934.

**Community Development Zone Program.** This program is a tax-benefit initiative designed to encourage private investment and job creation in economically-distressed areas. The program offers tax credits for creating new, full-time jobs, hiring disadvantaged workers and undertaking environmental remediation. Tax credits can be taken only on income generated by business activity in the zone. Call 608/267-3895.

**Freight Railroad Preservation Program.** The Freight Railroad Preservation Program provides grants to communities to purchase abandoned rail lines in the effort to continue freight rail service, preserve the opportunity for future rail service, and to rehabilitate facilities, such as tracks and bridges, on publicly-owned rail lines. Contact Ron Adams, Department of Transportation, 608/267-9284.

**Health Care Provider Loan Assistance Program.** This program provides repayment of educational loans up to \$25,000 over a five-year period to physician assistants, nurse practitioner, and nurse midwives who agree to practice in medical-shortage areas in Wisconsin. The program is designed to help communities that have shortages of primary care providers and have difficulty recruiting providers to their area. Contact M. Jane Thomas, 608/267-3837.

**Minority Business Development Fund – Revolving Loan Fund (RLF) Program.** This program is designed to help capitalize RLFs administered by American Indian tribal governing bodies or local development corporations that target their loans to minority-owned businesses. The corporation must be at least 51-percent controlled and actively managed by minority-group members, and demonstrate the expertise and commitment to promote minority business development in a specific geographic area. Contact Mary Perich, 414/220-5367 or Bureau of Minority Business Development, 608/267-9550.

**Physician Loan Assistance Program.** This program provides repayment of medical school loans up to \$50,000 over a five-year period to physicians who are willing to practice in medical-shortage areas in Wisconsin. The program is designed to help communities that have shortages



of primary care physicians, and have had difficulty recruiting these physicians to their area. Contact M. Jane Thomas, 608/267-3837.

**State Infrastructure Bank Program.** This program is a revolving loan program that helps communities provide transportation infrastructure improvements to preserve, promote, and encourage economic development and/or to promote transportation efficiency, safety, and mobility. Loans obtained through SIB funding can be used in conjunction with other programs. Contact Dennis Leong, Department of Transportation, 608/266-9910.

**Tax Incremental Financing (TIF).** Tax Incremental Financing (TIF) can help a municipality undertake a public project to stimulate beneficial development or redevelopment that would not otherwise occur. It is a mechanism for financing local economic development projects in underdeveloped and blighted areas. Taxes generated by the increased property values pay for land acquisition or needed public works.

**Wisconsin Transportation Facilities Economic Assistance and Development Program.** This program funds transportation facilities improvements (road, rail, harbor, airport) that are part of an economic development project. Contact Dennis W. Leong, Department of Transportation, 608/266-9910.

**Freight Railroad Infrastructure Improvement Program.** This program awards loans to businesses or communities wishing to rehabilitate rail lines, advance economic development, connect an industry to the national railroad system, or to make improvements to enhance transportation efficiency, safety, and intermodal freight movement. Contact Ron Adams, Department of Transportation, 608/267-9284.

**Recycling Demonstration Grant Program.** This program helps businesses and local governing units fund waste reduction, reuse, and recycling pilot projects. Contact JoAnn Farnsworth, 608/267-7154, DNR.

**Wisconsin Fund.** The Wisconsin Fund provides grants to help small commercial businesses rehabilitate or replace their privately-owned sewage systems. Contact Jean Joyce, 608/267-7113.

### ***Regional***

**East Central Wisconsin Regional Planning Commission.** The East Central Wisconsin Regional Planning Commission annually creates a Comprehensive Economic Development Strategy (CEDS) report, which evaluates local and regional population and economic activity. Economic development trends, opportunities, and needs are identified within the CEDS report. All communities, which are served by the Commission, are invited to identify future projects for economic development that the community would like to undertake. Those projects are included within the CEDS and may become eligible for federal funding through the Economic Development Administration (EDA) Public Works grant program. Additional information can be found at <http://www.eastcentralrpc.org/planning/economic.htm>.

**Northeast Wisconsin Regional Economic Partnership.** The combined Bay-Lake and East Central Wisconsin Regional Planning Commission areas were recently named as a Technology Zone by the Wisconsin Department of Commerce. The Northeast Wisconsin Regional Economic



Partnership (NEWREP) Technology Zone provides \$5 million in tax credits to businesses certified by commerce, based on a company's ability to create jobs and investment and to attract related businesses. The Technology Zone Program focuses primarily on businesses engaged in research, development, or manufacture of advanced products or those that are part of an economic cluster and knowledge-based businesses that utilize advanced technology production processes in more traditional manufacturing operations. Additional information can be found at <http://www.eastcentralrpc.org/planning/economic.htm>.

**CAP Services, Inc.** CAP Services Inc. (CAP) is a private non-profit corporation offering programs in Waushara, Marquette, Outagamie, Portage, Waupaca and parts of Marathon and Wood counties. The primary mission of CAP is to help low-income households attain economic and emotional self-sufficiency. Programs include Skills Training to help low-income individuals acquire skills to compete for higher paying jobs by assisting them with tuition, books, transportation and child care costs related to training; Business Development to provide entrepreneurs with the technical assistance, coaching advice and loan packaging they need to successfully start and grow their businesses; and Home Buyers Assistance to provide matching dollars to eligible low-and moderate-income, first-time homebuyers for down payment and closing costs. Funds are also available for repair and rehabilitation on newly purchased units; Weatherization measures including caulking, insulation, window repair and other conservation measures; Special Needs Housing; Asset Development to provide financial wellness training and incentives to low-income households; Preschool Services including head start for ages 3-5 and their families; and Crisis Intervention. Additional information can be found at [www.capserv.org](http://www.capserv.org).

### ***Private***

The Wisconsin Public Service Corporation (WPS) also contributes a number of economic development services that communities should be aware of for their businesses. WPS maintains an online database of available industrial buildings with information provided by the communities. The WPS economic development page can be a useful resource for communities, and can be accessed at <http://www.wisconsinpublicservice.com/business/bcd.aspx>.



## CHAPTER 7: INTERGOVERNMENTAL COOPERATION

### TABLE OF CONTENTS

Introduction .....	7-1
Inventory and Analysis .....	7-1
Governmental Units and Relationships to Communities .....	7-1
Communities .....	7-1
School Districts .....	7-1
Community Facilities .....	7-2
County .....	7-3
Region .....	7-3
State of Wisconsin .....	7-3
Intergovernmental Comprehensive Planning Efforts .....	7-4
Laws, Ordinances and Regulations .....	7-4
Key Findings .....	7-5
Communities .....	7-5
School Districts .....	7-5
Community Facilities .....	7-5
County .....	7-5
Region .....	7-6
Interrelationships with other Plan Elements .....	7-6
Economic Development .....	7-6
Housing .....	7-6
Transportation .....	7-6
Utilities and Community Facilities .....	7-6
Agriculture Resources .....	7-7
Natural Resources .....	7-7
Cultural Resources .....	7-7
Land Use .....	7-7
Policies .....	7-8
State, Regional, and County Policies .....	7-8
State .....	7-8
Regional .....	7-8
County .....	7-8



## CHAPTER 7: INTERGOVERNMENTAL COOPERATION

### INTRODUCTION

The relationship a municipality has with school districts, neighboring communities, the county, the Regional Planning Commission, the state, and the federal government can impact residents in terms of taxation, planning, service provision, and siting of public facilities. An examination of these relationships and the identification of existing or potential conflicts can help a municipality address these situations in a productive manner.

### INVENTORY AND ANALYSIS

#### Governmental Units and Relationships to Communities

##### *Communities*

***The Town of Plainfield shares its borders with the towns of Hancock, Oasis, and Deerfield and the Village of Plainfield in Waushara County; the Town of Leola in Adams County; the towns of Pine Grove and Almond in Portage County.*** The Town has no boundary agreements with the Village of Plainfield.

##### *School Districts*

***The town is served by the Tri-County Area School District.*** While school districts are working with area communities, additional communication and cooperation can be done that will benefit both the school districts and the communities. This may include sharing recreational facilities, utilizing existing school facilities for after school meeting space, and working together to coordinate the siting and utilization of new school facilities. Communities, school districts and local businesses can also establish agreements to work together on other issues. This can include partnerships to construct local buildings (sheds, garages, houses) that not only give students valuable life and work skills but also benefit individuals within the local community. Community service type projects by local students strengthen young people's senses of civic engagement and have life long implications. Local governments and school districts should establish a method of communication and explore ways in which they can work together. Joint cooperation between school districts will allow the goals of the comprehensive plan to be met while providing safe, efficient transportation, community services, and related amenities.

Three school forests and a town forest provide 819 acres of passive open space in Waushara County. ***These facilities are open to the community and include the Tri-County School Forest (230 acres), the Wild Rose School Forest (128 acres), the Coloma School Forest (40 acres), and the Town of Rose Forest (421 acres). However, there are no school or town forests located in the Town of Plainfield.***

Although the Town is served by the Mid State Technical College, no classes are held within Hancock. Mid State Technical College has campuses in Adams, Marshfield, Stevens Point, and Wisconsin Rapids.



### ***Community Facilities***

***Due to the rural nature of Waushara County, many facilities and services are shared jointly between neighboring communities as well as provided through agreement with the county. Police protection for the Town of Plainfield and the other communities within Waushara County is provided by the Waushara County Sheriff's Department that dispatches officers from the City of Wautoma. To provide a more visual presence in the area, the Hancock Fire Department serves as a satellite headquarters for the Sheriff's Department every Saturday afternoon. Fire protection and First Responders are through the Plainfield Volunteer Fire Department, located in the Village of Plainfield. To better serve the communities, the fire department maintains mutual aid agreements with Marquette, Adams, Portage and Waushara counties. Emergency medical services for the majority of the county are provided by the Waushara County EMS. An ambulance, shared jointly between the Coloma Fire Department and the Village of Plainfield, resides half time in the Village of Coloma and half time in the Village of Plainfield in alternating months, to improve service for the communities in the western part of the county. Finally, libraries within Waushara County are part of the Winnefox Federated Library System. The federated library system is designed to provide expanded library service to more people without making additional large expenditures. For this reason, libraries do not need to purchase the same collection materials or multiple copies since patrons are able to order materials from any library in the system.***

Communication and coordination between communities and utility infrastructure providers (gas, electric, telephone, etc.), the WisDOT and the Waushara County Highway Department ensures that upcoming road construction and utility upgrades will run smoothly and that all work is done before restoration is completed. This lessens the chance that new road surfaces and restored terraces will need to be excavated shortly after construction is completed. Likewise, local governments, school districts and businesses working together on technological upgrades, ensure that these upgrades are made in concert without duplication of efforts so that a common goal can be achieved.

As indicated above, the Town of Plainfield has various intergovernmental agreements with others in regard to public services and facilities. Communities should continue to look for ways that limited resources can be shared. New intergovernmental agreements which involve senior citizens and other social services; park and recreational facilities; stormwater management; or other topics may be issues that are explored in the future.

The Plainfield town hall is located at the intersection of STH 73 and 3<sup>rd</sup> Drive about two miles west of the Village of Plainfield (Exhibit 4-2). The building was constructed around 1950 as a Grange Hall and was turned over to the Town in the early 1970s. The town hall is used for elections, town meetings, office space and storage of town records.

Meals along with activities and fellowship are provided to seniors at the Plainfield Senior Center (114 W. Clark Street) in the Village of Plainfield. This is one of eight sites located in Waushara County. All sites are open from Monday through Friday unless indicated otherwise. Participants must be age 60 or older, but a spouse and/or caregiver any age are welcome to participate as well.



## ***County***

The Town of Plainfield is located in Waushara County. ***The town has adopted county zoning and has therefore given the county jurisdiction over zoning matters.*** However, the Town comments on and approves all proposed development within its jurisdiction before it approves any final action from the county. ***Communities work with the various county departments to coordinate road construction and maintenance; solid waste and recycling efforts; senior citizen and other social services; and park and recreational facilities and programs.*** The communities and the County continue to maintain open communications with one another that work to foster good working relationships and mutual respect.

## ***Region***

***Waushara County is a member of the East Central Wisconsin Regional Planning Commission (ECWRPC).*** ECWRPC provides planning and technical assistance to counties, communities, businesses, interest groups and individuals within its region. These services include environmental management, housing, demographics, economic development, transportation, community facilities, land use, contract planning, and others. ECWRPC has worked with the Town of Plainfield in the past on the preparation of a community management plan.

## ***State of Wisconsin***

**Wisconsin Department of Natural Resources (WDNR).** The WDNR is responsible for the regulation, protection, and sustained management of natural resources within the state. The WDNR operates various programs in water and air quality management, habitat preservation, recreational trail development, and other programs. The WDNR helps local landowners successfully manage their woodlots for wildlife habitat and timber production throughout Waushara County. The WDNR also maintains environmental corridors which enhance surface water quality and stream habitat throughout the planning area. The WDNR maintains a service center in the Wautoma Industrial Park.

**Department of Agriculture, Trade, and Consumer Protection (DATCP).** The overall mission of DATCP is multi-fold. The agency oversees programs which ensure the safety and quality of food, fair business practices for buyers and sellers, consumer protection, efficient use of agricultural resources in a quality environment, healthy animal and plant populations, and the vitality of Wisconsin agriculture and commerce. Since agriculture will continue to be an important economic industry within the area, many of the programs DATCP offers will benefit and help local citizens.

**Wisconsin Department of Transportation (WisDOT).** WisDOT deals with issues related to all transportation uses in the planning area. WisDOT evaluates existing transportation infrastructure for bicycle and pedestrian trails as well as assists in planning efforts for future trails. Additionally, WisDOT provides maintenance services for Interstate 39.



## Intergovernmental Comprehensive Planning Efforts

Periodically, representatives from various agencies, businesses and Waushara County (Wis DOT, WDNR, CAP Services, Waushara Area Chamber of Commerce, Waushara County Economic Development Corporation, Tri-County Regional Economic Development Corporation) should be invited to town board or plan commission meetings to talk and/or provide input into the implementation process.

## Laws, Ordinances and Regulations

**Cooperative Boundary Plans and Agreements.** Cooperative boundary plans and agreements are joint planning efforts in which two or more municipalities establish a mutually agreeable plan to establish boundary lines, provide public services and facilities, share revenues, and establish land use criteria.<sup>1</sup> The majority of municipal boundary agreements are conducted between a town and an incorporated village or city. Cooperative boundary plans, which are subject to a minimum of a ten-year period, must be approved by the Wisconsin Department of Administration.

**Extraterritorial Subdivision Regulation.** Incorporated villages and cities can exercise plat review authority in unincorporated areas adjacent to their communities,<sup>2</sup> however, only the City of Wautoma has effectuated this. This allows incorporated areas the same authority to approve or reject a specific plat or CSM as if it were within its own jurisdiction. This authority extends to a distance of 1.5 miles from the incorporated boundary for villages and small cities and 3.0 miles for cities with population of greater than 10,000. The incorporated area must have a subdivision ordinance in place in order to exercise this authority.

Cities and villages can work to ensure that land use conflicts be minimized near the incorporated boundaries. If the incorporated area has more restrictive guidelines than the adjacent town, the city/village can require that the subdivisions meet the more restrictive regulations. A plat can be rejected if it conflicts with a city/village ordinance, fails to comply with state statutes, or fails to comply with the city/village master plan.

**Extraterritorial Zoning.** Incorporated villages and cities have been given authority to practice extraterritorial zoning authority if they have developed a zoning ordinance for the incorporated areas.<sup>3</sup> Only the City of Berlin has effectuated this. This authority extends to a distance of 1.5 miles from the incorporated boundary for villages and cities with populations less than 10,000 and 3.0 miles for cities if the population exceeds 10,000. Extraterritorial zoning allows for smooth transitions between suburban and rural areas, reduces conflicting land uses, and promotes intergovernmental cooperation in planning for future community needs. The Village of Hancock does not exercise extraterritorial zoning authority.

Three major steps are involved in the adoption of an extraterritorial zoning ordinance.<sup>4</sup> First, the incorporated area must adopt and publicize a resolution to establish its intent to exercise its zoning authority within the extraterritorial area. Second, a joint committee with members from both the incorporated municipality and town must develop the specific zoning ordinance.

<sup>1</sup> *Wisconsin State Statutes* s.66.0307.

<sup>2</sup> *Wisconsin State Statutes* s.236.10.

<sup>3</sup> *Wisconsin State Statutes* s.62.23.

<sup>4</sup> Ohm, B. 1999. *Guide to Community Planning in Wisconsin*.



Finally, the final plan must be adopted through the joint committee. The joint committee consists of three members from the city or village and three members from each affected town. This ensures that zoning cannot happen unless everyone agrees.

## **Key Findings**

### ***Communities***

- The Town of Plainfield shares its borders with the towns of Hancock, Oasis and Deerfield, and the Village of Plainfield in Waushara County; the Town of Leola in Adams County; the towns of Pine Grove and Almond in Portage County.

### ***School Districts***

- The Town is served by the Tri-County Area School District.
- School and town forests are open to the community and include the Tri-County School Forest (230 acres), the Wild Rose School Forest (128 acres), the Coloma School Forest (40 acres), and the Town of Rose Forest (421 acres). However, there are no school or town forests located in the Town of Plainfield.

### ***Community Facilities***

- Due to the rural nature of Waushara County, many facilities and services are shared jointly between neighboring communities as well as provided through agreement with the county.
- Police protection for the Town of Plainfield and the other communities within Waushara County is provided by the Waushara County Sheriff's Department that dispatches officers from the City of Wautoma.
- Fire protection and First Responders are through the Plainfield Volunteer Fire Department, located in the Village of Plainfield. To better serve the communities, the fire department maintains mutual aid agreements with Marquette, Adams, Portage and Waushara counties.
- Emergency medical services for the majority of the county are provided by the Waushara County EMS. An ambulance, shared jointly between the Coloma Fire Department and the Village of Plainfield, resides half time in the Village of Coloma and half time in the Village of Plainfield in alternating months, to improve service for the communities in the western part of the county.

### ***County***

- The Town has adopted county zoning and has therefore given the county jurisdiction over zoning matters.
- Communities work with the various county departments to coordinate road construction and maintenance; solid waste and recycling efforts; senior citizen and other social services; and park and recreational facilities and programs.



## ***Region***

- Waushara County is a member of the East Central Wisconsin Regional Planning Commission.

## **INTERRELATIONSHIPS WITH OTHER COMPREHENSIVE PLAN ELEMENTS**

### **Economic Development**

Communities should partner with community, county, and regional economic development groups; the local chamber of commerce; organizations such as CAP Services; state agencies such as Wisconsin Department of Commerce and UW-Extension; area school districts and technical schools; local businesses and others which promote economic development. Since the economy of the individual communities in western Waushara County is dependent on the economy of all the municipalities in the area, all communities within Waushara County and the Tri-County region must work together.

### **Housing**

Housing choices that reflect the needs of individual households are an integral part of comprehensive planning. Economic development professionals, housing providers, local government officials, county departments and consumers should work together to promote the development of housing that meets the needs of all income levels within the area. Communities should continue to work with and forge new ties with agencies such as CAP Services, United Migrant Opportunity Services (UMOS), the Federal Department of Housing and Urban Development, and private entities to ensure that an adequate amount of affordable housing is present.

### **Transportation**

Communities should work with WisDOT, Waushara County and ECWRPC to resolve local, regional and state transportation related issues. Roadway projects must be jointly coordinated with public utilities, local emergency rescue departments, community departments, school districts and others to ensure that repairs are made cost-effectively and on a timely basis.

### **Utilities and Community Facilities**

Coordination of road construction projects and utility upgrades can save everyone time and money. If a community is aware of a needed utility upgrade on a local street, they may also decide that it would be cost-effective for them to resurface the roadway after construction has occurred. Likewise, if a utility knows that a local road is going to be under construction, they may decide to upgrade their facilities at the same time.

Coordination of new school facilities is also vital. Communities need to plan for increased traffic, reuse of former buildings, and needed public infrastructure (roads, sewer, water, police and fire protection). Multi-use and extended use of buildings can also save the community money. A school facility is an ideal location to hold evening classes for adults, as well as recreational programs and public meetings. In some instances, school districts have worked



with communities to construct joint library projects and recreational facilities (swimming, gym and weight room).

Communities and the County should work together on joint and regional park and recreational programs and facilities. Some of the larger facilities such as a ski or tubing hill, ice rink and swimming pool maybe too costly for one entity to tackle alone. Moreover, the use of these facilities is not limited to the residents of one community but is usually enjoyed by the residents and visitors of the entire area. Countywide recreational leagues may also be something that can be investigated. One community alone may not have enough participation to field a sufficient number of teams to support league play, but with input from a number of communities in the area, this may become feasible. Some things that could be investigated may include soccer (adult and youth), baseball (adult and youth), volleyball, or others.

### **Agricultural Resources**

The economy and the character of the area are dependent on a viable agricultural community. Preserving productive agricultural land and maintaining a critical mass of farmers in the area to sustain the local agribusiness are tasks that can not be tackled alone. It will take input and support from communities, farmers, economic development groups, local agencies, and citizens alike.

### **Natural Resources**

Preserving the natural resources of the area is a joint effort. Natural resources do not stop at municipal boundaries. The actions and policies of one community impact the resources of another.

### **Cultural Resources**

The cultural and historical features of a community help define it. Preserving these resources that residents feel have made meaningful contributions to the community's heritage allows a connection to the past and an opportunity to pass this heritage onto future generations. Communities should work together to seek funding from the Wisconsin Historical Society to identify and evaluate historical, architectural and archeological resources in the area. Joint efforts should be made to ensure consistency between communities on planning related issues that affect cultural and historical resources. Finally, communities and the County should work together to educate citizens and elected officials about the importance of these resources and how they can be protected.

### **Land Use**

Land use brings the other elements together. The future land use map illustrates existing and future development based on the goals, objectives and strategies that each community has established. Land use decisions of one community have a direct impact on other communities. Communities should work together to jointly develop visions of how land along common borders should be developed or preserved. When new development or land divisions occur in these areas, joint input should be obtained before decisions are made.



## POLICIES

### State, Regional and County Policies

#### *State*

The Wisconsin Department of Natural Resources (WDNR) and the Wisconsin Department of Transportation (WisDOT) routinely engage in master planning for natural resource management and transportation purposes. The University of Wisconsin Extension office located in Wautoma serves as an educational resource for County residents.

Waushara County is located within the Northeast Region of the WDNR. The Northeast Region has a regional office in Green Bay and a service center in Wautoma. A master plan is developed for each property that WDNR owns. This plan establishes goals and objectives for how the property will be managed and developed.<sup>5</sup> In addition, the master plan delineates adjacent lands or related parcels that should be acquired in the future to expand the property. The master plan discusses not only the proposed future of the property, but also the benefits it will provide to local communities. In order for the WDNR master planning process to be effective, local participation from the affected communities is needed. All citizens affected by the WDNR owned land should consider becoming involved in the planning process or attending meetings related to the projects.

Waushara County is located within the North Central Region of the Wisconsin Department of Transportation (WisDOT). The North Central Region has regional offices in Wisconsin Rapids and Rhinelander. WisDOT has prepared several master plans specifically for various modes of transportation as well as a highway improvement plan.<sup>6</sup> Although the plans are adequate to 2020, these plans will be periodically updated. Additionally, the Connections 2030 Plan, currently in draft form, identifies I-39 as an intercity bus network connecting Madison, Stevens Point, and Wausau.<sup>7</sup> The Town of Plainfield should take a proactive role in all transportation planning processes in the future to ensure that, as existing transportation facilities are expanded to meet the existing and future needs of the individual communities, the planning area, Waushara County, and the State of Wisconsin, other local concerns are addressed.

#### *Regional*

**East Central Wisconsin Regional Planning Commission.** East Central Wisconsin Regional Planning Commission has completed all milestones in their regional comprehensive planning process. Communities should use the information identified in the first two milestone reports and review the goals set in the third milestone report.

#### *County*

**Waushara County Comprehensive Plan.** Waushara County is currently in the process of creating and adopting a smart growth comprehensive plan in accordance with s.66.1001. It is

<sup>5</sup> Wisconsin DNR. 2005. *Property Master Planning*. [http://dnr.wi.gov/master\\_planning/](http://dnr.wi.gov/master_planning/).

<sup>6</sup> Wisconsin DOT. 2009. *Plans and Projects*. <http://www.dot.state.wi.us/projects/mode.htm>.

<sup>7</sup> Wisconsin DOT. 2009. *Connections 2030 Plan, draft*.  
<http://www.dot.wisconsin.gov/projects/state/connections2030.htm>.



the responsibility of the Town of Plainfield to actively participate in the county-wide plan and to promote the incorporation of their land use planning decisions into the overall Waushara County plan.

**Waushara County Land and Water Management Plan.** Waushara County has adopted a County Land and Water Management Plan. This plan was developed by the County Land Conservation Committee with assistance from a citizen advisory committee that included representatives from the WDNR, USDA Natural Resources Conservation Service, Central Wisconsin Windshed Partners, and Watershed Lakes Council. It is the responsibility of Waushara County communities to review and implement this plan within their respective jurisdictions.



## CHAPTER 8: LAND USE

### TABLE OF CONTENTS

Introduction .....	8-1
Inventory and Analysis .....	8-1
Existing Land Use .....	8-1
Land Use Categories .....	8-1
Current Land Use Inventories .....	8-3
Zoning .....	8-4
Waushara County .....	8-5
Development Trends.....	8-8
Land Use Trends .....	8-10
Building Permits .....	8-11
Density and Intensity.....	8-12
Density .....	8-12
Intensity.....	8-13
Development Considerations.....	8-13
Recommended State, Regional, and County Goals .....	8-13
State of Wisconsin .....	8-14
East Central Wisconsin Regional Planning Commission .....	8-14
Waushara County .....	8-15
Local Land Use Issues.....	8-15
Environmental and Public Utility .....	8-15
Land Supply .....	8-16
Market Trends .....	8-16
Energy Demands .....	8-17
Future Land Use Projections .....	8-18
Land Use Issues and Conflicts .....	8-20
Key Findings .....	8-21
Existing Land Use .....	8-21
Zoning .....	8-21
Development Trends .....	8-21
Land Use Trends .....	8-21
Building Permits .....	8-22
Density and Intensity .....	8-22
Local Land Use Issues .....	8-22
Future Land Use Projections .....	8-22
Interrelationships with other Plan Elements .....	8-23
Economic Development .....	8-23
Housing .....	8-23
Transportation.....	8-24
Utilities and Community Facilities.....	8-24
Agriculture Resources .....	8-24
Natural Resources .....	8-24
Cultural Resources.....	8-24



Intergovernmental Cooperation .....	8-25
Policies and Programs.....	8-25
Regional, County and Local Policies .....	8-25
Zoning Ordinances .....	8-25
County Policies .....	8-26
Local Policies .....	8-27
Federal, State and Regional Programs .....	8-28
State of Wisconsin .....	8-28

## TABLES

Table 8-1	Town of Plainfield Existing Land Use 2001 .....	8-4
Table 8-2	Town of Plainfield Zoning .....	8-8
Table 8-3	Land Use Trends (ECWRPC), 1980 to 2001 .....	8-11
Table 8-4	Land Use Trends (DOR), 1980 to 2005 .....	8-11
Table 8-5	Residential Building Permits, 1990 to 2007 .....	8-12
Table 8-6	Residential Density, 1990 to 2000 .....	8-13
Table 8-7	Intensity, 2001.....	8-13
Table 8-8	Equalized Values, 1998 to 2008.....	8-16
Table 8-9	Waushara County Home Sales, 1998 to 2008 .....	8-17
Table 8-10	High Density Residential Land Consumption .....	8-20
Table 8-11	Mid Density Residential Land Consumption .....	8-20
Table 8-12	Low Density Residential Land Consumption .....	8-20

## FIGURES

Figure 8-1	Town of Plainfield Existing Land Use, 2001 .....	8-4
------------	--	-----

## EXHIBITS

Exhibit 8-1	Existing Land Use.....	8-29
Exhibit 8-2	Existing Zoning .....	8-31



## CHAPTER 8: LAND USE

### INTRODUCTION

Land use directly influences all the various elements presented in the previous chapters. Many aspects of daily life within the planning area are impacted by elements of the previous chapters. The choices for housing type, location, transportation alternatives, decisions on employment locations, recreational opportunities, and the quality of the man-made and natural environments are all intricately woven together into land use. Land use policy decisions can have far-reaching repercussions for factors including housing growth and the protection of natural resources. For example, rural areas in Waushara County are under pressure from scattered rural residential and vacation home development. Large lot development in rural areas has fragmented farmland and forests and placed greater stress on the lakes, streams, and other environmentally sensitive areas.

This chapter describes existing land use patterns and current zoning ordinances. Development trends over the past 20 years were analyzed, and future land use needs were extrapolated. Finally, the chapter discusses the land use policy context and the need for additional intergovernmental cooperation. Several potential land use conflicts are identified, and issues that must be addressed are discussed.

### INVENTORY AND ANALYSIS

#### Existing Land Use

***The Town of Plainfield existing land use map was last updated by the Town in 2001.*** Land use information was compiled into the general land use categories summarized below and is presented in Table 8-1 and Exhibit 8-1. ***The land use categories are agricultural, residential, commercial, industrial, transportation, utilities/communications, institutional facilities, recreational facilities, water features, woodlands and other open land.***

#### Land Use Categories

**Agricultural.** Agricultural land is broadly classified as land that is used for crop production. Agricultural uses include farming, dairying, pastures, apiculture (bees), aquaculture (fish, mussels), cropland, horticulture, floriculture, viticulture (grapes), and animal and poultry husbandry. Agricultural land is divided into two sub-categories: irrigated and non-irrigated cropland. Irrigated cropland is watered by artificial means, while non-irrigated cropland is watered by natural means (precipitation).

**Residential.** Residential land is classified as land that is used primarily for human habitation. Residential land uses are divided into single family residential, farmsteads, and multi-family residential and mobile home parks. Single family residential includes single family dwellings, duplexes, and garages for residential use. Within platted subdivisions, residential land use encompasses the entire lot. In rural areas where lots are typically larger, single family includes the primary residence, outbuildings, and the mowed area surrounding the structures. Single family also includes isolated garages and similar structures on otherwise undeveloped rural lots.



Farmsteads include the farm residence, the mowed area between the buildings and the associated outbuildings (barn, sheds, manure storage, abandoned buildings). Multi-family includes apartments of three or more units; condos; room and boarding houses; residence halls; group quarters; retirement homes; nursing care facilities; religious quarters; and the associated parking and yard areas. Mobile home parks are classified as land that is part of a mobile home park. Single standing mobile homes are classified under single family residential.

**Commercial.** Commercial land uses represent the sale of goods and services and other general business practices. Commercial uses include retail and wholesale trade (car and boat dealers; furniture, electronics and appliance stores; building equipment and garden equipment; grocery and liquor stores; health and personal care stores; gasoline stations; clothing and accessories, sporting goods, hobby, book and music stores; general merchandise; miscellaneous store retailers; couriers; and masseuse), services (publishing; motion picture and sound recording; telecommunications; information systems; banks and financial institutions; real estate offices; insurance agencies and carriers; waste management; accommodations; restaurants and drinking places; repair and maintenance; personal and laundry; social assistance, etc.) and other uses (warehousing and automobile salvage and junk yards).

**Industrial.** Industrial land uses represent a broad category of activities which involve the production of goods. Industrial is divided into two separate categories: industrial and quarries. Industrial uses include construction; manufacturing (includes warehousing with factory or mill operation); mining operations and quarries; and other industrial facilities (truck facilities).

**Transportation.** Transportation includes land uses that directly focus on moving people, goods, and services from one location to another. Transportation is divided into two separate categories: transportation and airport. Transportation uses include highway and street rights of way; support activities for transportation (waysides, freight weigh stations, bus stations, taxi, limo services, park and ride lots); rail related facilities; and other related categories. Airports included areas that are dedicated specifically to air traffic.

**Utilities/Communications.** Utilities and communications are classified as any land use which aids in the generation, distribution, and storage of electric power (substations and transformers); natural gas (substations, distribution brokers); and telecommunications (radio, telephone, television stations and cell towers). It also includes facilities associated with water distribution (water towers and tanks); water treatment plants; wastewater processing (plants and lift stations); landfills (active and abandoned); and recycling facilities.

**Institutional Facilities.** Institutional uses are defined as land for public and private facilities dedicated to public services. Institutional land uses include educational facilities (schools, colleges, universities, professional schools); hospitals; assemblies (churches, religious organizations); cemeteries and related facilities; all governmental facilities used for administration (city, village, town halls, community centers, post office, municipal garages, social security and employment offices, etc.); and safety services (police departments, jails, fire stations, armories, military facilities, etc.). Public utilities and areas of outdoor recreation are not considered institutional facilities.

**Recreational Facilities.** Recreational facilities are defined as land uses which provide leisure activity opportunities for citizens. This category encompasses both active and passive activities. Recreational activities include designated hunting and fishing areas; nature areas; general



recreational parks; sports facilities (playgrounds, ball diamonds, soccer fields, tennis courts, etc.); city, county and state parks; fairgrounds; marinas; boat landings; spectator sport venues; hiking trails; mini-golf; bowling; bicycling; skiing; golf courses; country clubs; performing arts centers; museums; historical sites; zoos; amusement parks; gambling venues; and other related activities.

**Water Features.** Water features include all surface water including lakes, streams, rivers, ponds, and other similar features. Intermittent waterways are also incorporated into this category.

**Woodlands.** Woodlands are forested areas which are characterized by a predominance of tree cover. Woodlands are divided into two subcategories: general woodlands and planted woodlands. General woodlands are naturally occurring; this category includes forests, woods, and distinguishable hedgerows. Planted woodlands include forestry and timber track operations where trees are typically planted in rows; this category includes tree plantations, orchards and land dedicated to Christmas tree production (nurseries are not included).

**Other Open Land.** This category includes land which is currently vacant and not developed in a manner similar to the other land use categories described within this section. Open land includes areas that are wet, rocky, or outcrop; open lots in a subdivision; or rural parcels and side or back lots on a residential property that are not developed.

### Current Land Use Inventories

Developed land has been altered from its natural state to accommodate human activities. Although agricultural areas are considered undeveloped by land classification systems, these uses have different impacts on land use decisions than urbanized uses; thus, agricultural uses have been separated to obtain an accurate total of all related activities.

***The Town of Plainfield encompasses approximately 21,512 acres*** (Table 8-1, Figure 8-1 and Exhibit 8-1). ***Approximately 6 percent (6.2%) of the total area is developed.*** The primary developed uses include Transportation (55.9%), Single Family Residential (22.7%), and Commercial (12.1%). Collectively these uses account for 91 percent (90.7%) of the developed area.

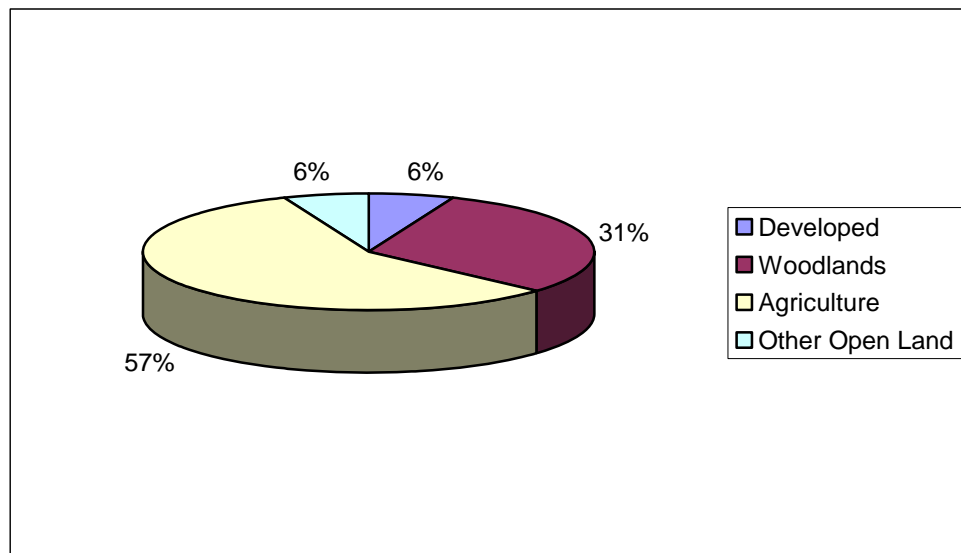
***Overall, cropland (irrigated and non-irrigated) accounts for 57 percent (56.6%) of the total land use, while woodlands (planted and unplanted) make up another 30 percent (30.2%).*** Other open land (6.0%), water features (0.8%), and active quarry (0.3%) comprises the remaining seven percent (7.1%) of the remaining land uses.



**Table 8-1. Town of Plainfield Existing Land Use, 2001**

<b>Land Use</b>	<b>Total Acres</b>	<b>Percent of Developed Land</b>	<b>Percent of Total</b>
Single Family Residential	300	22.7%	1.4%
Farmstead	85	6.4%	0.4%
Multi-Family Residential	4	0.3%	0.0%
Mobile Home Parks	0	0.0%	0.0%
Industrial	0	0.0%	0.0%
Recreational Facilities	0	0.0%	0.0%
Commercial	160	12.1%	0.7%
Institutional Facilities	26	1.9%	0.1%
Utilities/Communications	9	0.7%	0.0%
Transportation	739	55.9%	3.4%
<b>Total Developed</b>	<b>1,323</b>	<b>100.0%</b>	<b>6.2%</b>
Non-irrigated Cropland	1,088		5.1%
Irrigated Cropland	11,078		51.5%
Planted Woodlots	965		4.5%
Unplanted Woodlots	5,528		25.7%
Active Quarry	55		0.3%
Other Open Land	1,301		6.0%
Water Features	174		0.8%
<b>Total Acres</b>	<b>21,512</b>		<b>100.0%</b>

Source: Town of Plainfield, 2001

**Figure 8-1. Town of Plainfield Existing Land Use, 2001**

Source: ECWRPC, 2001

## Zoning

Zoning is a major tool used to regulate land uses. A zoning ordinance regulates the use of property in order to advance public health, safety, and welfare through orderly development. Zoning is performed at several levels in Waushara County. Each incorporated city or village has



general zoning powers.<sup>1</sup> Waushara County has general zoning jurisdiction within most unincorporated areas of the county; the ordinances are administered by the Zoning and Land Conservation Department (WCZLC).<sup>2</sup> The Town of Plainfield has adopted the general Waushara County Zoning ordinances. Towns with “village powers” can adopt their own zoning ordinances as long as they are at least as restrictive as the general county ordinance.<sup>3</sup>

## **Waushara County**

***The Town of Plainfield adheres to Waushara County Zoning.***<sup>4</sup> All zoning district information is contained within the Waushara County Zoning Ordinance adopted in 2003. A summary of the usage requirements and restrictions of the districts found within the area is listed below.

- *(A-G) General Agriculture Zone:* This zone is designed primarily for large-scale agricultural uses of land related to growing of crops and the raising of livestock. Permitted uses include airstrips, general farming, single family residential homes, home occupations, and other uses. Residential lot sizes vary. Minimum lot sizes are indicated by the suffix. For example, lots zoned AG-5 must be a minimum of 5 acres.
- *(A-R) Agricultural Residential Zone:* This zone is intended to provide a semi-rural type of environment which allows general agricultural use. Single family residential development on minimum one acre lots, general farming, and home occupations are permitted under this classification.
- *(C-G) General Commercial:* This zone provides for uses found in small commercial areas located throughout the county. Permitted uses include banking; bed and breakfast establishments; professional offices; medical clinics; funeral homes; laundromats; storage garages; restaurants; semi-public uses; warehouses; and retail stores. Single family dwellings are permitted only as accessory to a principal use.
- *(C-C) Community Commercial:* This zone provides for uses found in the central business districts of small communities. Permitted uses include banks, bed and breakfasts, professional offices, medical clinics, funeral homes, laundromats, storage garages, restaurants, semi-public uses, warehouses, and retail stores. Single family dwellings are permitted only as accessory to a principal use.
- *(C-S) Service Commercial:* This zone is designed for small commercial service businesses which are oriented toward the traveler, tourist or vacationer. Lots sizes must be a minimum of 10,000 square feet. Permitted uses include bed and breakfasts; boat sales and service; clubs or lodges; and public swimming pools.
- *(M-G) General Manufacturing Zone:* This zone is intended for any manufacturing or industrial operation which, on the basis of actual physical and operational characteristics, would not be detrimental to the surrounding area or the county as a whole by reason of

---

<sup>1</sup> *Wisconsin Statutes* 62.23 for cities and *Wisconsin Statutes* 61.35 for villages.

<sup>2</sup> *Wisconsin Statutes* 69.69.

<sup>3</sup> *Wisconsin Statutes* 60.22.

<sup>4</sup> WCZLC. 2003. *Code of Ordinances: Waushara County, Wisconsin.*



noise, dirt, smoke, odor, traffic, physical appearance, or any other similar features. Automotive-heavy repair and upholstery; cleaning, pressing, and dyeing establishments; commercial bakeries, greenhouses, and recycling operations; distributors; farm machinery sales and/or service; food locker plants; laboratories; machine shops; manufacturing and bottling of nonalcoholic beverages; manufacturing, fabrication, processing, packaging, and assembly of selected products; printing or publishing; storage and sale of machinery and equipment; trade and contractors' offices; warehousing and wholesaling; offices, storage, power supply, and other such uses normally incidental to the principal use are permitted uses that fall under this classification. Lot sizes must be a minimum of 20,000 square feet.

- *(M-I) Intensive Manufacturing Zone:* This zone is intended to provide for uses which by their nature can exhibit characteristics harmful, noxious, or detrimental to surrounding uses. Permitted uses include all those permitted under General Manufacturing Zone, as well as freight yards and depots, breweries, and inside storage. Lot sizes must be a minimum of 20,000 square feet.
- *(O-N) Natural Resource Preservation Zone:* This zone provides for the conservation and protection of natural resources. Generally this zone includes swamps, marshlands, river and lakeshore and other land of natural aesthetic value. Residential development is a conditional use and is only allowed as an accessory to a principal use within these areas on one-acre lots. Permitted uses include agriculture, wildlife preserves, fish hatcheries, and farm ponds. Camping trailers, mobile campers, and houseboats are permitted for temporary living quarters within the district.
- *(GWPOD) Groundwater Protection Overlay District:* The purpose of this district is to institute land use regulations to protect the municipal water supplies and to promote the public health, safety and general welfare of the residents of the county. The residents of the county depend exclusively on groundwater for a safe drinking water supply. Certain land use practices and activities can seriously threaten or degrade groundwater quality.
- *(O-F) Forest Zone:* This zone provides for the continuation of forestry practices and related uses in those areas best suited to this activity. This zone is further intended to encourage forestry and to recognize the value of the forest as a recreational resource. Permitted uses include all uses within the O-N zone; debarking operations; maple syrup processing plants; and portable sawmills. Single family dwellings are allowed as a conditional use. Residential lot sizes must be a minimum of one acre.
- *(O-P) Park and Recreation Zone:* This zone provides for the orderly and attractive grouping of recreational oriented service establishments and is further intended to encourage the maintenance and protection of natural resources. Permitted uses include all agriculture, wildlife preserves, fish hatcheries, and farm ponds. Camping trailers, mobile campers, and houseboats are permitted for temporary living quarters within the district.
- *(O-SW) Shoreland/Wetland Zone:* This purpose of this zone is to maintain safe and healthful conditions; to prevent water pollution; to protect fishing and spawning grounds and aquatic life; and to preserve shore cover and natural beauty.
- *(RS-10) Residential Single-Family:* This zone provides a suitable environment for single-family residential development on moderate size lots in areas with public sewer systems.



Permitted uses include agriculture and single-family dwellings. The minimum lot size is 10,000 square feet.

- *(RS-20) Residential Single-Family Zone:* This zone is intended to provide a suitable environment for single-family residential development on large lots in areas without public sewage systems. Permitted uses include single-family residential lots of a minimum of 20,000 square feet and agricultural uses.
- *(R-M) Residential Multiple-Family Zone:* This zone provides for multiple-family dwellings in a residential environment. Permitted uses include single-family dwellings, duplexes, and multiple-family dwellings and duplexes. The regulations for this zone apply to multiple-family dwellings served by public sewer systems. Multi-family dwellings not served by a public sewer must have an approved septic system. Sewered lot sizes must be a minimum of 12,000 square feet.
- *(RS-P) Residential Single-Family Planned Development Zone:* The purpose of this zone is to provide the means whereby land may be planned and developed as a unit for residential uses under standards and conditions which encourage good design and promote a stable living environment.
- *(RM-P) Residential Multifamily Planned Development Zone:* The purpose of this zone is to provide the means whereby land may be planned and developed as a unit for residential uses under standards and conditions which promote a stable living environment. This zone is intended to permit flexibility and variety in development at increased densities, to encourage the preservation of natural features and open space, and to minimize present and future burdens on the community as a whole which result from poor planning.

Several generalizations can be made about zoning in the Town of Plainfield (Table 8-2 and Exhibit 8-2). ***The predominant zoning district in the Town is General Agriculture. This category comprised 93.8 percent of the area in the Town of Plainfield.*** Agriculture Residential accounted for 1.0 percent of the total area in the Town of Plainfield. About one percent of the Town is zoned general commercial (0.5%), general manufacturing (0.2%), residential single family, RS-20 (0.2%), and natural resource preservation (0.1%). Roads and water make up the remaining 4.1 percent.



Table 8-2. Town of Plainfield Zoning

Zoning Classification	Acres	Percent
General Agriculture (A-G)	20,184	93.8%
Agricultural Residential (A-R)	219	1.0%
General Commercial (C-G)	102	0.5%
Community Commercial (C-C)	0	0.0%
Service Commercial (C-S)	0	0.0%
General Manufacturing (M-G)	40	0.2%
Intensive Manufacturing (M-I)	0	0.0%
Natural Resource Preservation (O-N)	32	0.1%
Forestry (O-F)	0	0.0%
Park and Recreation (O_P)	0	0.0%
Shoreland / Wetland (O-SW)	0	0.0%
Residential Single Family (10,000 SF min.) (RS-10)	0	0.0%
Residential Single Family (20,000 SF min.) (RS-20)	46	0.2%
Residential Multiple Family (R-M)	2	0.0%
Residential Single Family Planned Development (RSP-10)	0	0.0%
Residential Multi-Family Planned Development (RM-P)	0	0.0%
NA (NA)	0	0.0%
Water	135	0.6%
Roads*	751	3.5%
<b>Total Acres</b>	<b>21,512</b>	<b>100.0%</b>

Source: Waushara County, 2008

\*Waushara County does not include roads in zoning data

## Development Trends

The growth and development of Waushara County has been influenced by a number of factors. These factors include the topography, the abundance of navigable surface waters, wooded lands and natural resources, the ability of the soils to support crops and the central location of the county in the state, and its proximity to the Fox Cities, Oshkosh, Stevens Point and Madison.

***The earliest inhabitants of Waushara County were Native Americans.*** Considerable evidence of their civilization has been found throughout the county and still exists today. The Whistler Mound group, in the Village of Hancock, is included on the National Register, but many other sites are still present in the county.

On October 18, 1846, the Menominee Tribe ceded their land, including Waushara County to the U.S. Government. ***By the late 1840's and early 1850's, farming communities centered around small villages and hamlets could be found in the county.*** Many of these communities were established along existing logging and old military roads, and at creek and river crossings. A typical early farming community usually included a tavern, sawmill, stage house (a place for overnight accommodations), church, houses and a few commercial establishments.

***In the 1880's, the county experienced a surge of activity with the coming of the railroad and the discovery of red granite.*** Overnight houses and businesses materialized in the Redgranite/Lohrville area as skilled workers, their families and others made Waushara



County their home. The boom ended in the 1920's as concrete replaced stone as the nation's preferred paving material.

***Today, agriculture and tourism has grown to become the county's major industries.***

While the county has seen a decline in the number of farms over the years, in 1997 over half of the county was taxed as farmland. Waushara County's 136 lakes make up about 7,000 acres of surface water. The greatest concentration of lakes is found among the moraines and drumlins in central and western portions of the county. These lakes, along with over 500 miles of rivers and streams and 185,000 acres of woodlots provide for a diversity of boating, fishing, hunting, hiking and other recreational opportunities.

Similar to other rural areas in the state, Waushara County has faced development pressures.

***Large portions of farm and woodlands are being converted to small parcel residential development.***

Easy access to STH 21 and the expansion of USH 10 has shortened the time/distance between Waushara County and the Fox Cities and Oshkosh. As a result, towns along the eastern tier have experienced growth in housing starts by people working outside the county. While communities along the western tier of the county, have closer ties to Stevens Point, Westfield and other areas along the I-39 corridor.

As growth occurs, land use changes in intensity and net density. Analyzing the patterns in land use provides valuable information to local communities in determining how the community has changed and assessing current needs. This information can be used to plan for the appropriate development in the future. To analyze land use changes, East Central Wisconsin Regional Planning Commission (ECWRPC) looked at a number of different data sources, including its own land use inventories of the area, revenue data from the Wisconsin Department of Revenue (DOR), and building permit records from the Wisconsin Department of Administration (DOA).

Several limitations with the information in the data sets necessitate utilizing general summaries for land use trends. A brief discussion of the limitations follows.

ECWRPC conducted land use inventories in 1980 and again in 2000. This information was updated by the local communities when the land management plans were developed. Two distinct classification systems were used in the 1980 and in 2000 and the subsequent land use updates. This made it difficult to compare specific categories between the two inventories. Secondly, computer technology has changed the degree of specificity in which data is collected. In 1980, computerized parcel data was not available. Current land use utilizes parcel data; therefore if a house is located in a subdivision, the entire parcel may be included as residential. Residential areas in 1980 may have included only a portion of these areas.

A comparison of Wisconsin Department of Revenue (DOR) data was used to analyze land use changes between 1990 and 2005<sup>5</sup> The DOR collects information by real estate class for each minor civil division in the state.<sup>6</sup> Acreage figures from DOR do not include Department of Natural Resource (DNR) lands or other tax-exempt properties.<sup>7</sup> Acreage data for incorporated communities is also incomplete, as their information is frequently provided in number of parcels, as opposed to the total acreage of the parcels. Beginning in 1996, the DOR also

---

<sup>5</sup> DOR. 1980. *1980 Statistical Report of Property Values Waushara County, Wisconsin.*

<sup>6</sup> DOR. 1990, 2000, and 2005. *Statement of Equalized Values.*

<sup>7</sup> DOR. 1990, 2000, and 2005. *Statement of Assessments.*



changed their classification system. Wisconsin Act 27 mandated that agricultural land was categorized from a standard based on use value instead of a standard based on full market value.<sup>8</sup> Therefore, some land use changes between 1990 and 2005 are a direct result of Act 27 and do not necessarily reflect a change in land use but a change in the way that the land was classified. Following the implementation of the use value standard, agricultural land with improvements was moved to other categories. If these improvements included residential, then the agricultural land with improvements was moved to residential. Additionally, following the use value assessment, less productive land was moved out of agriculture and reclassified as swamp and waste land. Furthermore, the increasing popularity of privately owned recreational land caused a shift of lands from agriculture to both forestland and swamp and wasteland.

The Wisconsin Department of Administration (DOA) collects building permit information for new construction as well as demolition information from communities within the state.<sup>9</sup> This data is annually reported by communities and includes single-family, two-family, multi-family and mobile homes. The data is an inventory of the net change in the number of residential units for each community that were reported to DOA. This data set includes information that is reported by individual communities to the DOA. If a community does not accurately report its building permit information, it is infeasible to determine actual land use changes.

While the historical data from ECWRPC, DOR and DOA gives us an incomplete picture of the total amount of land historically devoted to the various land uses, it does give us a picture of land consumption patterns within the communities. According to these data sources, several trends can be seen. The collective summary utilizing all three sources is presented below; general trends are discussed.

## Land Use Trends

As stated above, some of the changes in land use trends utilizing ECWRPC data can be directly attributed to changes in technology and changes in the way land use data was categorized. To determine overall trends in land use between the 1980 and 2001 years the following land use categories were grouped together:

- Residential: Single family, multi-family, farmsteads, mobile homes, mobile home parks, duplex, group quarters, part-time and seasonal;
- Industrial: Industrial and quarries;
- Parks and Recreation: Parks, recreational activities, conservation and preservation areas, resorts and camps;
- Institutional Facilities: Educational, public assembly, government facilities, cemeteries, churches, hospitals, libraries and institutional;
- Cropland: Irrigated cropland, pastureland, and non-irrigated cropland; and
- Residual: Residual, streets, highways, water features, utilities, planted woodlots, unplanted woodlots, other open land and transportation.

After grouping the land use categories, certain trends were evident: ***commercial, residential, and institutional facilities increased, while parks and recreation, industrial, and cropland decreased between 1980 and 2001*** (Table 8-3). While the table below indicates

<sup>8</sup> Wisconsin State Assembly. 1995. *Wisconsin Act 27 (Assembly Bill 150)*.

<sup>9</sup> Wisconsin Demographics Service Center. 1990 to 2004. *Annual Housing Units Surveys*.



acreage totals as collected by ECWRPC, due to changes in methodology, the reader should be looking at trends only that these numbers represent.

**Table 8-3. Land Use Trends (ECWRPC), 1980 to 2001**

Existing Land Use	1980 Acres	2000 Acres	Change Acres	Percent Change
Residential	268	389	121	45%
Commercial	39	160	121	311%
Industrial	122	55	-67	-55%
Parks and Recreation	387	0	-387	-100%
Institutional Facilities	20	26	5	26%
Cropland	13,410	12,165	-1,244	-9%
Residual	7,427	8,717	1,289	17%
<b>Total</b>	<b>21,674</b>	<b>21,512</b>		

Source: ECWRPC: 1980 and 2001

Even though land use trends utilizing Department of Revenue data does not include WDNR data or tax exempt properties, certain broad trends can be seen and correspond to trends apparent in the data from ECWRPC. **Commercial acreages are increasing, while agricultural and forest land acres are decreasing** (Table 8-4). The difference in total acreage in the Town is related to the property that is tax exempt.

**Table 8-4. Land Use Trends (DOR), 1980 to 2005**

Land Use	1980 Acres	1990 Acres	2000 Acres	2005 Acres	Percent Change		
					1980-1990	1990-2000	2000-2005
Residential	220	605	1,094	1,081	175%	81%	-1%
Commercial	35	117	142	158	234%	21%	11%
Manufacturing		8	5	5	-	-38%	0%
Agricultural	14,047	14,797	13,195	13,073	5%	-11%	-1%
Undeveloped	665	218	1,909	1,926	-67%	776%	1%
Forest Land	5,768	4,594	3,629	3,419	-20%	-21%	-6%
Other			63	84	0%	-	33%
<b>Total</b>	<b>20,735</b>	<b>20,339</b>	<b>20,037</b>	<b>19,746</b>			

Source: WI DOR Final Statement of Assessment Report. 1980, 1990, 2000, 2005.

## Building Permits

As stated above, net building permit data is available from the DOA. This data has been submitted by the jurisdictions that issue building permits. Net building data indicates the net change, not the total number of building permits. Therefore, if a building is demolished within a community, this information is subtracted from the new permit numbers. **Between 1990 and 2007, 56 net units were added within the Town of Plainfield. This averages to about 3.1 units per year (units/yr)** (Table 8-5). The largest growth in single family units occurred during 2004 to 2006. During these three years, an average of six units was added per year. It is important to note that the accuracy of the data source is dependent on timely reporting by local officials.



**Table 8-5. Residential Building Permits, 1990 to 2007**

Year	Additions Number	Deletions Number	Net Number
1990	6	0	6
1991	5	0	5
1992	0	0	0
1993	4	0	4
1994	4	0	4
1995	3	2	1
1996	3	0	3
1997	2	1	1
1998	0	1	-1
1999	1	1	0
2000	6	2	4
2001	5	0	5
2002	2	0	2
2003	1	1	0
2004	7	1	6
2005	7	0	7
2006	5	0	5
2007	4	0	4

Source: State of Wisconsin Demographic Services Center  
Annual Housing Unit Surveys.

Utilizing ECWRPC, DOR and DOA data, the following trends are apparent between 1980 and 2000/2001: residential land use and commercial land uses are increasing while agricultural land uses are decreasing.

## Density and Intensity

### *Density*

Density is broadly defined as “a number of units in a given area”.<sup>10</sup> For the purposes of this report, residential densities are defined as the number of housing units per square mile of total land area (units/square mile), excluding water. **Between 1990 and 2000, residential densities increased throughout the county, state, and the Town of Plainfield.** As the population of the area has grown, so has the overall housing density (Table 8-6). ***Within the Town of Plainfield, residential densities increased by less than one percent from 6.72 units per square mile to 6.77 units per square mile during this time period.*** Residential densities in Waushara County increased by about 12 percent from 19.56 units per square mile to 21.83 units per square mile. While residential densities in Wisconsin increased by about 13 percent from 37.85 units per square mile to 42.74 units per square mile.

<sup>10</sup> Measuring Density: Working Definitions for Residential Density and Building Intensity, November 2003. Design Center for American Urban Landscape, University of Minnesota.



**Table 8-6. Residential Density, 1990 to 2000**

Jurisdiction	Land Area Sq. Miles	1990		2000	
		Total Units	Units/Sq. Mi.	Total Units	Units/Sq. Mi.
Wisconsin	54,313.7	2,055,774	37.85	2,321,144	42.74
Waushara County	626.1	12,246	19.56	13,667	21.83
Town of Plainfield	34.0	228	6.72	230	6.77

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

### ***Intensity***

Intensity is the degree of activity associated with a particular land use. Generally, higher intensity land uses also have higher environmental impacts. Due to limited information available, this report will compare the intensities of single-family versus multi-family developments in the various communities. To calculate land intensities, the ECWRPC categorizes single and two-family residential, farmsteads, and mobile homes as "single family."

Incorporated communities or areas served by public sewer often have more intense development patterns than rural towns. Single-family residential development is typically a less intense land use than multi-family (3 or more units) which is typically restricted to areas on public sewer. According to the 2000 U.S. Census, there are three structures within the Town of Plainfield that have 3 or more units. Second, incorporated areas in Waushara County are smaller in overall land area than the surrounding towns, resulting in a more intensive land use. Finally, incorporated municipalities, in the county, have areas of older development that were constructed during a period when society was less dependent on cars for transportation. This necessitated the need for smaller lot development that allowed for closer proximity to neighbors and services.

Utilizing 2000 U.S. Census data and adding four net single family units per the data from DOA, in 2001 there were 231 single family units in the Town of Plainfield on a total of 385.11 acres (Table 8-7). ***This resulted in a single family intensity of less than 1 unit per acre in the Town in 2001. There were three multi-family units in the Town of Plainfield in 2001 on a total of 3.99 acres. Therefore the multi-family intensity in 2001 was 0.7 units per acre.***

**Table 8-7. Intensity, 2001**

Municipality	Single Family			Multi-Family		
	Units	Acres	Units/Ac.	Units	Acres	Units/Ac.
Town of Plainfield	231	385.11	0.60	3	3.99	0.71

Source: Town of Plainfield Land Use data, 2001. U.S. Census, 2000. State of Wisconsin Demographic Services Center, Annual Housing Unit Surveys.

## **DEVELOPMENT CONSIDERATIONS**

### **Recommended State, Regional, and County Goals**

State, regional, and county goals were developed to provide communities with a framework on which land use decisions could be based. These goals make the planning process and decision



defensible to the general public when formulating alternate scenarios for developing parcels within a community.

### ***State of Wisconsin***

The State of Wisconsin requires that communities address 14 specific goals in their comprehensive plans.<sup>11</sup> These goals encourage development to occur in an orderly well-planned manner. The goals are:

- Promoting the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial structures.
- Encouraging neighborhood designs that support a range of transportation choices.
- Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces, and groundwater resources.
- Protecting economically productive areas, including farmlands and forests.
- Encouraging land uses and development patterns that promote cost-efficient government services and utility costs.
- Preserving cultural, historic, and archaeological sites.
- Encouraging coordination and cooperation with neighboring communities.
- Building community identity by improving overall appearance and attractiveness to visitors.
- Providing an adequate supply of affordable housing for all income levels.
- Providing adequate infrastructure, public services, and a supply of affordable land to meet existing needs and accommodate future growth.
- Promoting the expansion or stabilization of the current economic base and the creation of additional and better employment opportunities.
- Balancing individual property rights with community interests and goals.
- Planning and developing a pattern of land use that preserves and creates a pleasing and unique setting.
- Providing all citizens, including those that are transportation dependent, a variety of economical, convenient, and safe transportation options adequate to meet their needs.

### ***East Central Wisconsin Regional Planning Commission***

East Central Wisconsin Regional Planning Commission has developed a regional comprehensive plan.<sup>12</sup> As a part of this planning process, East Central has identified several key land use goals:

- Educate the public on potential conflicts and trade-offs associated with alternative development patterns.
- Encourage efficient development in order to reduce land use conflicts and contain community costs.
- Encourage actions and incentives which preserve and protect natural and cultural resources.

---

<sup>11</sup> *Wisconsin State Statutes 66.1001.*

<sup>12</sup> ECWRPC, 2008. *Milestone Report #3: Goals, Strategies and a Plan for Action.*



- Educate all decision makers regarding what their property rights are and how they can influence the public arena.
- Educate the public on potential cultural, economic and land use conflicts.
- Encourage intergovernmental cooperation and coordination.
- Encourage building code standards which preserve historical and cultural character.
- To protect and improve the aesthetic qualities and high-value scenic resources of the region and its communities while balancing the needs of private industry, government, and the general public.
- Identify techniques, which can be used to preserve local community character.
- Encourage a balance between individual property rights and community interest and goals.
- Encourage public participation in comprehensive planning.
- To ensure the region and its communities develop in a manner which is sustainable in nature.
- Comprehensive plan updates have considered the voluntary incorporation of sustainable concepts.
- Communities are informed and educated on the benefits of developing sustainable plans and regulations.

### ***Waushara County***

The Waushara County Zoning Ordinance has identified the following criteria for all unincorporated areas within the county:

- Promote and protect public health, safety, comfort, convenience, prosperity, aesthetics, and other aspects of general welfare.
- Establish reasonable standards to which buildings and structures shall conform.
- Regulate and restrict lot coverage and population density.
- Conserve the value of land and buildings.
- Guide the proper distribution and location of land use patterns.
- Promote safety and efficiency of transportation networks.
- Provide adequate light, air, sanitation, and drainage.
- Prevent the uncontrolled use of shorelands and pollution of the navigable waters of the county.
- Encourage the preservation, conservation, and development of land areas for a wide range of natural resources.
- Minimize expenditures of public funds for flood control projects; rescue and relief efforts undertaken at the expense of the taxpayers; business interruptions and other economic disruptions; damage to public facilities in the floodplain; and minimize the occurrence of future flood blight areas.
- Discourage the victimization of unwary land and homebuyers.

### **Local Land Use Issues**

#### **Environmental and Public Utility**

***Development costs vary based on density, design, social, economical, political and environmental constraints.*** Public opposition can increase costs through project delays. Development often necessitates the expansion of public infrastructure such as sewer, water,



streets, schools, parks and services such as fire and police protection. Increased development can infringe on wetland and floodplain areas, destroy wildlife habitat, and increase runoff to streams and lakes.

To protect and enhance the natural resource base, communities should identify and protect environmental corridors found within the planning area. Environmental corridors are areas in the community that contain and connect natural areas, open space, and other resources. They often lie along streams, rivers, and other natural features. Environmental corridors provide a beneficial buffer between sensitive natural resources and human development. These areas can provide flood control and valuable wildlife habitat and can significantly benefit the aesthetic appeal of the community.

## Land Supply

***The amount of land available for development within the Town of Plainfield is finite.*** Factors that limit the amount of developable land include environmental restrictions (floodplains, high groundwater, wetlands, steep slopes, and water quality), zoning (setbacks, conservancy and development easements, permitted uses), and conflicts between uses.

## Market Trends

The price of developable land varies depending on the surrounding land uses, location, access, services, and other subjective factors. Natural amenities such as water frontage, forests, and open space may increase the overall value. Land prices are subject to market demand and fluctuations. As such, land values show periodic variations. Housing affordability is dependant on land prices.

**Table 8-8. Equalized Values, 1998 to 2008**

Year	Town of Plainfield Land Value	Percent Increase	Waushara County Land Value	Percent Increase
1998	19,831,500	-	494,927,000	-
1999	19,674,800	-1%	531,492,800	7%
2000	13,239,500	-33%	532,430,300	0%
2001	15,513,700	17%	649,433,500	22%
2002	14,771,900	-5%	684,983,500	5%
2003	14,465,100	-2%	737,864,100	8%
2004	14,074,300	-3%	758,648,000	3%
2005	13,261,900	-6%	774,526,900	2%
2006	14,412,800	9%	838,017,300	8%
2007	15,482,800	7%	890,245,700	6%
2008	17,806,600	15%	1,003,757,200	13%

Source: WDOR: Statement of Equalized Values; 1998 - 2008.

The Wisconsin Department of Revenue (DOR) annually reports equalized value as set by the department by real estate class per municipality in Wisconsin. Table 8-8 shows the equalized value of all classes of land in the Town of Plainfield and Waushara County. While Waushara County experienced increases in land value between 1998 and 2008, overall the Town of Plainfield experienced a decrease. ***During this time period, the value of land in the Town***



**of Plainfield decreased by 10 percent, while land values in the County went up by 103 percent.** Years of largest increases for both the Town of Plainfield and Waushara County occurred in 2001 and 2008. In 2001, land values in the Waushara County increased by 22 percent compared to 17 percent in the Town of Plainfield. While in 2008, land values increased by 15 percent in the Town and by 13 percent in the County. More recently (2006 to 2008) land values in the Town of Plainfield are increasing at a faster rate than the County. **From 2006 to 2008, the town's land value increased by 23.6 percent, while the County increased by 19.8 percent. This indicates that land in Plainfield may be in greater demand.**

State of Wisconsin housing statistics provided by the Wisconsin Realtors Association's provide information on the number of home sales and median price over a period of time. **Between 1998 and 2008 there were 2,666 home sales in Waushara County, with an average of 242 home sales per year** (Table 8-9). **During this time period the median sale price increased from \$81,800 in 1998 to \$105,000.** This represents a 28 percent increase.

**Table 8-9. Waushara County Home Sales, 1998 to 2008**

Year	Number of Home Sales	Median Sale Price
1998	176	\$81,800
1999	226	\$82,100
2000	235	\$86,600
2001	198	\$98,600
2002	234	\$95,700
2003	250	\$107,700
2004	314	\$97,100
2005	261	\$131,100
2006	296	\$121,800
2007	278	\$109,100
2008	198	\$105,000

Source: Wisconsin Realtor Association Consumer Resources

[Http://www.wra.org/Consumer\\_Resources/about/housingstats.asp](http://www.wra.org/Consumer_Resources/about/housingstats.asp)

Note: Fourth quarter information not available for 1998 and is not included in total.

## Energy Demands

**Development is dependant on the availability of a cost-effective, abundant, efficient energy supply.** Industry needs to know that reliable energy will be available to run equipment and people rely on affordable energy to heat and power their homes. Not only is energy important for heating and power, but the cost and availability of gasoline may also impact development in Plainfield. Tourism is a major revenue generator for the county, and many people within the county also regularly commute to work. Over half the people in the county regularly travel further than 27.1 minutes to work. In 2000, there were about 643 seasonal units in Plainfield. **An increase in gas prices may cause some residents to move closer to their place of employment and out of Waushara County or cause others to consider closer locations from home for their vacation destinations.** Therefore, energy availability can have an impact on new and sustained development in the town.



## FUTURE LAND USE PROJECTIONS

Wisconsin statutes require comprehensive plans to include five year projections for residential, commercial, industrial, and agricultural uses over the length of the plan.<sup>13</sup> A summary of future land use projections and criteria follows.

While projections can provide extremely valuable information for community planning, by nature, projections have limitations which must be recognized. First and foremost, projections are not predictions. Projections are typically based on historical growth patterns and the composition of the current base. Their reliability depends to a large extent on the continuation of those past growth trends. Second, projections for small communities are especially difficult and subject to more error, as even minor changes can significantly impact growth rates. Third, growth is also difficult to predict in areas which are heavily dependent on migration, as migration rates may vary considerably based on economic factors both within and outside of the area.

The actual rate of growth and amount of future growth communities experience can be influenced by local policies which can slow or increase the rate of growth. Regardless of whether communities prefer a no growth, low growth or high growth option, it is recommended they adequately prepare for future growth and changes to provide the most cost-effective services possible. Furthermore, individual communities can maximize the net benefits of their public infrastructure by encouraging denser growth patterns which maximize the use of land resources while minimizing the impact on the natural resource base.

Expected increases in residential and commercial acreage and resulting decreases in agricultural acreage can be estimated by analyzing and projecting historical data into the future. An anticipated range of population and housing growth and the amount of land that would be required to accommodate that increase in growth were made using past housing and population trends and future population and household projections.

***In 2000, 533 permanent residents resided in the Town of Plainfield. A total of 230 dwelling units (227 single family and 3 multi-family) existed in the Town.<sup>14</sup> Of these units, 198 dwelling units were occupied year round and 32 were vacant.*** Vacant units are comprised of seasonal units and other (for rent, for sale, other). Eighteen units or 56.3 percent of the vacant units were considered seasonal in 2000. The 198 occupied dwelling units (households) had an average household size of 2.69 people. Based on ECWRPC projections, ***the population is expected to increase to 585 people by 2025, before declining to 580 people in 2030.*** Although the population is expected to decrease after 2025, the number of households is predicted to continue to rise as the population ages and the number of people per household declines. ***In 2030, ECWRPC projections indicate that there will be 245 households with an average size of 2.37 people per household.*** It is important to remember that the number of total dwelling units does not equal the total number of households. The total number of dwelling units in the Town is a combination of occupied units and vacant units (for sale, rent, seasonal and other), while the total households is equal to the number of dwelling units times a vacancy rate. ***Assuming a constant vacancy rate of 13.9 percent (vacancy rate from 2000 Census held constant), it is anticipated that there***

<sup>13</sup> Wisconsin State Statutes 66.1001.

<sup>14</sup> U.S. Census 2000.



***will be a total of 285 dwelling units in the Town of Plainfield by 2030.*** Maintaining the current split between single family and multi-family, it is assumed that ***there will be a total of 281 single family and 4 multi-family units in the Town of Plainfield by 2030. Over a 30 year period, an additional 54 single family units or 1.8 units per year will be added in the Town. One multi-family unit will be added during this same time period.***

Historical building permit data from the DOA indicates that between 1990 and 2007, a net total of 56 units (Table 8-5) were added in the Town of Plainfield (3.1 dwelling units per year).<sup>15</sup> According to U.S. Census data, a total of 2 additional dwelling units were built in the Town between 1990 and 2000 (0.2 dwelling units per year). While historical building permit data from DOA and the U.S. Census indicates that Town averaged 0.2 to 2.3 dwelling units per year between 1990 and 2000, these trends are not expected to continue (Appendix A: Table A-20 and Table A-22).

Based on existing information, there are approximately 231 single/two-family residential units in the Town<sup>16</sup> that occupied approximately 385 acres.<sup>17</sup> As a result, the average size of a residential parcel in the Town of Plainfield is approximately 1.67 acres. According to the 2000 U.S. Census and ECWRPC existing land use, there are three multi-family units in the Town that occupied about 3.99 acres. Consequently, there were 1.3 acres per multi-family unit. The Town of Plainfield Community Management Plan does not specify a future residential lot size. Therefore ***future single family residential land use was calculated utilizing one dwelling unit per acre (Table 8-10, minimum lot size one acre per existing agricultural zoning); 0.6 units per acre (Table 8-11, minimum lot size 1.67 acres per existing density); and 0.2 units per acre (Table 8-12, minimum lot size 5 acres). This means that the Town of Plainfield would likely experience an increase of about 67 to 337 acres of new residential growth, depending on the density chosen.*** This assumes a 15 percent infrastructure and 20 percent market factor.

Multi-family land use was calculated assuming that one additional unit of multi-family would be added at the same density as the existing (0.7 units per acre). Assuming a ***15 percent infrastructure and 20 percent market factor 1.7 acres of multi-family will be added.***

Future commercial and industrial growth was estimated using a ratio of existing population to existing commercial and industrial land use and projecting it forward based on future population estimates. Consequently, ***19.1 acres of commercial and 6.6 acres of industrial will be added over the life of the plan.*** This assumes a 15 percent infrastructure and 20 percent market factor.

Future agricultural land use was calculated based on the assumption that the majority of future development would occur in areas that are currently wooded or farmed. The 2001 land use indicates that if these two land use categories are compared, about 35 percent would be wooded and 65 percent would be in agricultural uses. Based on these assumptions, ***approximately 62 to 237 acres of agricultural land would be lost over the life of the plan.***

<sup>15</sup> DOA indicates that between 1990 and 1999, a net total of 23 units were added or 2.3 per year.

<sup>16</sup> U.S. Census 2000 plus DOR net building data.

<sup>17</sup> ECWRPC existing land use 2001.



**Table 8-10. High Density Residential Land Consumption (Min. Lot Size 1 Acre)**

	2005 Acres	2010 Acres	2015 Acres	2020 Acres	2025 Acres	2030 Acres
Residential	403	427	433	440	446	452
Multi-Family	4	5	5	5	5	6
Commercial	163	166	169	173	176	179
Industrial	55	57	58	59	60	62
Agriculture	12,151	12,133	12,125	12,118	12,111	12,104

Source: ECWRPC 2001 land use, household projections. U.S.Census 2000. DOA

**Table 8-11. Mid Density Residential Land Consumption (Min. Lot Size 1.7 Acres)**

	2005 Acres	2010 Acres	2015 Acres	2020 Acres	2025 Acres	2030 Acres
Residential	414	455	465	476	487	497
Multi-Family	4	5	5	5	5	6
Commercial	163	166	169	173	176	179
Industrial	55	57	58	59	60	62
Agriculture	12,144	12,115	12,105	12,095	12,085	12,075

Source: ECWRPC 2001 land use, household projections. U.S.Census 2000. DOA

**Table 8-12. Low Density Residential Land Consumption (Min. Lot Size 2 Acres)**

	2005 Acres	2010 Acres	2015 Acres	2020 Acres	2025 Acres	2030 Acres
Residential	403	427	433	440	446	452
Multi-Family	4	5	5	5	5	6
Commercial	163	166	169	173	176	179
Industrial	55	57	58	59	60	62
Agriculture	12,151	12,133	12,125	12,118	12,111	12,104

Source: ECWRPC 2001 land use, household projections. U.S.Census 2000. DOA

## Land Use Issues and Conflicts

In order to avoid future land use conflicts, neighboring towns should establish a communication process to determine the potential effects of new developments within 300 feet of their common border. By doing so, the impacts of the development will be more likely to be minimized.

Waushara County communities, sanitary districts, school districts, planning commissions and others should monitor and provide comments to communities and the County during the ongoing comprehensive planning process which is currently underway. Potential land use conflicts may arise as new development occurs. Local officials and county employees will need to collaborate to ensure that the overall density of development within the town is consistent with the overall land use visions.

Natural resource preservation and development may be in conflict with each other. High quality wetlands, floodplains, and other features comprise the natural resource base. Increased



development near these resources could lead to displacement of wildlife; degradation of surface and groundwater; and loss of forest, farmland and other open lands and resources.

Incompatibilities may arise between adjacent land uses as development continues. Future land use maps designate specific areas for various uses. To minimize these conflicts, other land use controls such as setbacks, screening, and buffering should be utilized to limit potential conflicts. Many of these controls are detailed within the respective zoning ordinances. Any subdivision that is approved should be designed in a manner that preserves the rural character of the area while enhancing the natural resource base.

## **Key Findings**

### **Existing Land Use**

- The Town of Plainfield existing land use map was last updated by the Town in 2001.
- The land use categories are agricultural, residential, commercial, industrial, transportation, utilities/communications, institutional facilities, recreational facilities, water features, woodlands and other open land.
- The Town of Plainfield encompasses approximately 21,512 acres. Approximately 6 percent (6.2%) of the total area is developed.
- Overall, cropland (irrigated and non-irrigated) accounts for 57 percent (56.6%) of the total land use, while woodlands (planted and unplanted) makes up another 30 percent (30.2%).

### **Zoning**

- The Town of Plainfield adheres to Waushara County Zoning.
- The predominant zoning district in the Town is General Agriculture. This category comprised 93.8 percent of the area in the Town of Plainfield in 2008.

### **Development Trends**

- The earliest inhabitants of Waushara County were Native Americans.
- By the late 1840's and early 1850's, farming communities centered around small villages and hamlets could be found in the county.
- In the 1880's, the county experienced a surge of activity with the coming of the railroad and the discovery of red granite.
- Today, agriculture and tourism has grown to become the county's major industries.
- Large portions of farm and woodlands are being converted to small parcel residential development.

### **Land Use Trends**

- According to data collected by ECWRPC, commercial, residential and institutional facilities increased, while parks and recreation, industrial, and cropland decreased between 1980 and 2001.
- According to data collected by the DOR between 1980 and 2005, commercial acreages are increasing, while forest land acres are decreasing.



## Building Permits

- According to the DOA, between 1990 and 2007, 56 net units were added within the Town of Plainfield. This averages to about 3.1 units per year (units/yr).

## Density and Intensity

- Between 1990 and 2000, residential densities increased throughout the county, state, and the Town of Plainfield.
- Within the Town of Plainfield, residential densities increased by less than one percent from 6.72 units per square mile to 6.77 units per square mile during this time period.
- This resulted in a single family intensity of less than 1 unit per acre in the Town in 2001.
- There were three multi-family units in the Town of Plainfield in 2001 on a total of 3.99 acres. Therefore the multi-family intensity in 2001 was 0.7 units per acre.

## Local Land Use Issues

- Development costs vary based on density, design, social, economical, political and environmental constraints.
- The amount of land available for development within the Town of Plainfield is finite.
- Between 1998 and 2008, the value of land in the Town of Plainfield decreased by 10 percent, while land values in the County went up by 103 percent.
- From 2006 to 2008, the town's land value increased by 23.6 percent, while the County increased by 19.8%. This indicates that land in Plainfield may be in greater demand.
- Between 1998 and 2008 there were 2,666 home sales in Waushara County, with an average of 242 home sales per year. During this time period the median sale price increased from \$81,800 in 1998 to \$105,000.
- Development is dependant on the availability of a cost-effective, abundant, efficient energy supply.
- An increase in gas prices may cause some residents to move closer to their place of employment and out of Waushara County or cause others to consider closer locations from home for their vacation destinations.

## Future Land Use Projections

- In 2000, 533 permanent residents resided in the Town of Plainfield. A total of 230 dwelling units (227 single family and 3 multi-family) existed in the Town.<sup>18</sup> Of these units, 198 dwelling units were occupied year round and 32 were vacant.
- The population is expected to increase to 585 people by 2025, before declining to 580 people in 2030.
- In 2030, ECWRPC projections indicate that there will be 245 households with an average size of 2.37 people per household.
- Assuming a constant vacancy rate of 13.9 percent (vacancy rate from 2000 Census held constant), it is anticipated that there will be a total of 285 (single family and multi-family) dwelling units in the Town of Plainfield by 2030.
- There will be a total of 281 single family and 4 multi-family units in the Town of Plainfield by 2030.

---

<sup>18</sup> U.S. Census 2000.



- Over a 30 year period, an additional 54 single family units or 1.8 units per year will be added in the Town. One multi-family unit will be added during this same time period.
- Future single family residential land use was calculated utilizing one dwelling unit per acre (Table 8-10, minimum lot size one acre per existing agricultural zoning); 0.6 units per acre (Table 8-11, minimum lot size 1.67 acres per existing density); and 0.2 units per acre (Table 8-12, minimum lot size 5 acres).
- This means that the Town of Plainfield would likely experience an increase of about 67 to 337 acres of new residential growth depending on the density chosen.
- During the life of the plan, based on 15 percent infrastructure and 20 percent market factor, about 1.7 acres of multi-family will be added.
- It is anticipated that 19.1 acres of commercial and 6.6 acres of industrial will be added over the life of the plan.
- Approximately 62 to 237 acres of agricultural land would be lost over the life of the plan.

## **INTERRELATIONSHIPS WITH OTHER PLAN ELEMENTS**

Land use cannot be considered in isolation from other elements. Economic development; housing; transportation; community and public facilities; and agricultural, natural and cultural resources all interact with one another. A vibrant economy brings people to the area in search of jobs and housing. Additional jobs may require the construction of more businesses, while additional people may demand other housing and services. Infrastructure such as roads and sewer and water extensions may be needed to serve these areas and people. This development may impact existing farm lands, forest areas, and other natural features.

### **Economic Development**

Commercial and industrial land uses should be located in areas that are compatible with adjacent land uses, minimize environmental impacts, and utilize existing infrastructure. Additionally, industrial and concentrated commercial land uses should be situated in areas, if possible, where public sanitary sewer and water are available. While public sewer is not available in the Town of Plainfield, commercial and light industrial uses should be concentrated near similar land uses.

### **Housing**

It is critical that an adequate supply of reasonably priced land be available for residential development. The amount of land that is required depends on the density, design, and placement of development. Residential development should be placed to minimize environmental impacts and utilize existing infrastructure. Scattered residential development increases the cost to provide public services such as fire, police and emergency protection; consumes and fractures large tracts of agricultural and forested areas; and increases conflicts between agricultural and residential uses.

Demand for property with access to natural resources has driven up land values and the cost of housing in the area. New residential development may not be affordable to residents who depend on the area for jobs. The provision of a mix of residential units must be available for all income ranges. Affordable housing including smaller homes on smaller lots and reasonably



priced rental properties must be provided for individuals on low or fixed incomes. These areas should be located within walking distance of schools, stores, and other services.

### **Transportation**

A well planned transportation system provides access to housing, schools, work and through traffic. As part of this transportation system, bike and pedestrian facilities should be expanded in existing areas to provide safe access to schools and business. When new subdivisions or roads are built or existing roads are reconstructed, pedestrian and bike access should be incorporated into these new designs.

Communities should carefully consider the creation of a system of recreational trails for both non-motorized and motorized traffic. Bicycling and pedestrian trails provide alternative transportation methods for local residents and potential tourist attractions.

### **Utilities and Community Facilities**

New development should occur in proximity to existing infrastructure. Unsewered development should not be allowed to occur in areas that can be cost effectively and readily served by public sewer. In rural areas, scattered residential development increases the cost or makes costs prohibitive for services such as fire, police and emergency protection and public transportation (school bus and elderly/disabled). The road network should provide easy access to all areas as valuable time is lost when emergency vehicles must travel on winding local roads.

### **Agricultural Resources**

Agriculture not only supports the economy of the county, but also defines the rural character that residents of the area value. The county is experiencing a decrease in the number of farming operations as farmland is converted to other uses. Farmland areas are being fragmented by scattered residential development which often results in agriculture operational conflicts and limits farm expansion for farmers who wish to remain in farming.

### **Natural Resources**

An abundance of natural resources including Lake Poygan, Willow Creek, the Fox River, streams, woodlands, wetlands, wildlife habitat, agricultural land and other open spaces can be found in the County. People who visit and live in the County value these resources. Increased development can adversely affect these very resources that drew people to the area and caused them to remain. New development should be directed away from sensitive environmental areas including floodplains and wetlands. Care should be taken to minimize the effects of new construction on the existing environment by strictly enforcing erosion control practices. Older septic systems should be inspected regularly to minimize the consequences of failing systems on water quality.

### **Cultural Resources**

The historical past of the area helps to define the present. Care should be taken to preserve, protect, and enhance the cultural resources, historic areas, and buildings that remain. New



development should be incorporated into existing development so that it enhances the historic components that remain.

### **Intergovernmental Cooperation**

Land use decisions that are made within one municipality often affect the decisions and land use of another. For example, the development of a heavy industrial activity near the border of one community has the potential to affect the land use, natural resources and economy of an adjacent community. In this example, a residential use may not be compatible with the heavy industrial use, the industry may pollute a stream that flows through another community, or the business may purchase raw products or supplies from a business in an adjacent community. To minimize conflicts, communities should solicit input and find an effective form of communication with neighboring communities and residents.

## **POLICIES AND PROGRAMS**

### **Regional, County and Local Policies**

#### ***Zoning Ordinances***

The Wisconsin enabling legislation requires that zoning ordinances must be reviewed and modified if necessary to be consistent with a community's comprehensive plan.

Local municipalities and counties can enact wind energy zoning ordinances to proactively plan for siting future wind energy projects.<sup>19</sup> Wind energy zoning ordinances can establish setbacks from property lines, roads, communication and electricity transmission systems, and residential structures. Additionally, setbacks can be established for undeveloped residential properties. Although noise level effects may be difficult to determine due to differences between individuals, it is possible to establish maximum allowable decibel levels at residential dwellings and specific public facility sites. Height restrictions can be placed on individual turbines. Height restrictions must be used cautiously since a restriction could lead to an increased number of turbines and decreased land use efficiencies. Several safety features can be incorporated into a zoning ordinance. For example, restrictions can be placed controlling the accessibility (lockable, non-climbable towers), electrical connection systems, and appropriate warning signage installation to cite a few examples. Ordinances can also include specific plans for site reclamation if a turbine is abandoned or its use is discontinued.

Other zoning tools can also be utilized to limit the number of potential sites for wind energy facilities. Extra-territorial airport zoning can restrict the maximum height of structures to a distance of three miles from a public airport facility. In addition, overlay zoning can be utilized to further protect significant natural or cultural resources by limiting the conditional uses within a specific area.

---

<sup>19</sup> *Wisconsin State Statutes 66.0401.*



## ***County Policies***

**County Zoning.** The Waushara County Code of Ordinances regulates private on-site wastewater treatment systems, land divisions and land uses. A few of the chapters that relate to land use are summarized below.

**Waushara County Utilities Ordinance** is contained within Chapter 54 of the Waushara County Code of Ordinances. This ordinance regulates all private on-site wastewater treatment systems within the county. Although this ordinance does not directly determine land uses, it influences the location of future development according to soil suitability.

**Waushara County's Subdivision Ordinance** is contained in Chapter 42 of the Waushara County Code of Ordinances. The ordinance facilitates division of larger parcels of land into smaller parcels of land. Land divisions create less than three lots of 15 acres or less. Land divisions can be classified as either major or minor subdivisions. A major subdivision creates five or more lots which are each 5 acres or less in area by successive divisions within a 10-year period. A minor subdivision contains three or more lots that are 15 acres or less in area by successive divisions within a 10-year period. The ordinance also contains design standards for streets, setbacks, utility easements, stormwater management techniques, and erosion control.

The **Floodplain Zoning Ordinance** is contained within Chapter 18 of the Waushara County Code of Ordinances. The purpose of the floodplain ordinance is to protect life, health, and property; to minimize the costs associated with flood control projects; and to minimize the costs associated with relief and reconstruction efforts. The ordinance regulates residential uses, storage of hazardous materials, sewage disposal, wells for drinking water, and uses mentioned in NR 116.

The **Shoreland Zoning Ordinance** is contained within Chapter 58 of the Waushara County Code of Ordinances. Shorelands are defined as unincorporated areas which are: 1,000 feet from the ordinary high water elevation mark of navigable lakes, ponds, or flowages; or 300 feet from the ordinary high water elevation mark of navigable rivers or streams. If the landward side of the floodplain exceeds either of these two measurements, this is used as the zoning standard. This ordinance controls the lot size, building setbacks, landfills, agricultural uses, alteration of surface vegetation, sewage disposal, filling, grading, lagoons, and other uses which may be detrimental to this area.

Chapter 58 also addresses **wind energy generation facilities**.<sup>20</sup> The existing ordinance permits wind energy facilities for on-premise consumption in areas that have been zoned for either general agricultural (A-G) or forestry (O-F) uses. Off-premise consumption requires a conditional use. As such, the landscape within these areas must be dominated by agricultural practices or woodlots. Several setbacks, safety restrictions, and ground clearance requirements have been established. The County and local municipalities may wish to collaborate to designate specific sites appropriate for future wind energy facilities.

**Farmland Preservation Plan.** Waushara County adopted the county Farmland Preservation Plan on June 9, 1981.<sup>21</sup> The goal of the plan is to preserve productive and potentially

<sup>20</sup> WCZLC. 2006. *Code of Ordinances: Waushara County, Wisconsin 58.236 (20)*.

<sup>21</sup> WCZLC. 1980. *Waushara County Farmland Preservation Plan*. [http://www.co.waushara.wi.us/more\\_lcd.htm](http://www.co.waushara.wi.us/more_lcd.htm).



productive agricultural land, forest land, and environmentally sensitive areas while providing other areas for well planned growth in other appropriate areas of the county. Agriculturally productive areas are defined as existing farms consisting of a minimum of 35 contiguous acres of productive farmland. This plan allows farmers in preservation areas to sign agreements on a voluntary basis under the state's Farmland Preservation Act for tax credits.

**Pine River/Willow Creek/Poygan South Priority Watershed Plan.** The Pine River/Willow Creek/Poygan South Priority Watershed was selected as a priority watershed in 1995.<sup>22</sup> The watershed drains 308 square miles in Waushara and Winnebago Counties. Both waterways are clear, hard water streams that drain the southern two-thirds of Waushara County. The local soils, geology, and other physical resources present in the watershed are highly susceptible to groundwater and surface water contamination from poor land use practices. The high occurrence of agricultural uses exacerbates this vulnerability. The overall goal of the High Priority Watershed program is to reduce sedimentation and nutrient loading to local water resources. The project will end in 2009. In 1997, the Pine River/Willow Creek/Poygan South Priority Watershed Plan was adopted to protect these watersheds.

**Land and Water Resource Management (LWRM) Plan.** The Waushara County LWRM plan was written in 1999.<sup>23</sup> In 2005, it was revised in response to a legislative call to redesign Wisconsin's programs to reduce pollution from unknown sources. The revised plan was adopted in February 2006. The plan identifies long term goals and implementation strategies to reduce non-point source pollution into rivers, streams, and lakes in Waushara County. The four goals that were identified include: 1.) Reduce soil erosion and continue to protect natural resources; 2.) protect and enhance in-stream, riparian, wetland and upland habitat; 3.) protect surface waters from construction site erosion control & non-metallic mining; and 4.) implement the animal waste prohibition.

### ***Local Policies***

**Official Map.** An official map is intended to implement a master plan for a city, village, or town. The master plan helps direct development by designating areas for streets, highways, parkways, floodplains, and other pertinent land uses. Official maps direct development away from sensitive areas which are designated for future public use. The Waushara County parcel map may serve as a basis for Plainfield's official map.

**Existing Comprehensive/Land Management Plans.** A Community Management Plan for the Town of Plainfield was completed in 2004. Waushara County is in the process of developing a Comprehensive Plan that will be completed in 2009.

<sup>22</sup> WDNR. 1995. *Pine River and Willow Creek Watershed*.  
<http://dnr.wi.gov/org/gmu/wolf/surfacewaterfiles/watersheds/wr02.htm>.

<sup>23</sup> WCZLC. 2005. *Waushara County Land and Water Resource Management Plan*.  
[http://www.co.waushara.wi.us/more\\_lcd.htm](http://www.co.waushara.wi.us/more_lcd.htm).



## Federal, State and Regional Programs

### *State of Wisconsin*

**Land and Water Resource Management Planning Program (LWRM).** The land and water resource management planning program (LWRM) was established in 1997 by Wisconsin Act 27 and further developed by Wisconsin Act 9 in 1999.<sup>24</sup> Although both Acts are designed to reduce non-point pollution, Wisconsin Act 27 regulates rural and agricultural sources while Wisconsin Act 9 regulates urban sources.<sup>25</sup> Counties are required to develop and periodically revise LWRM plans. Citizens and professionals in each county identify local needs and priorities in regards to conservation needs through watershed based planning. All LWRM plans must be approved by the Wisconsin Department of Agriculture, Trade, and Consumer Protection.

**Wisconsin Act 204.** Recent blackouts and other incidents throughout the United States have raised concerns regarding both the supply of energy and the adequacy of the transmission grid. Wisconsin Act 204 mandates that a portion of electricity generation facilities be from renewable resources. To ensure that the renewable energy goals set forth in Wisconsin Act 204 are not unduly hindered, the State passed additional legislation restricting the ability of local governments to prohibit or curtail the development of wind and solar energy systems.<sup>26</sup> Municipalities can only impose restrictions on the construction and operation of wind turbines to protect public health and safety. Furthermore, communities cannot impose regulations which increase construction/operation costs, decrease the efficiency of wind generation systems, or specifically prohibit installation of alternate energy systems.

Although traditional approaches such as coal and natural gas are still utilized, other options are being explored that include renewable resources. Under this mandate, other sources of energy such as wind are currently being proposed at several locations throughout Wisconsin. While there is an extensive review process for the placement of large electrical generation facilities, smaller facilities, such as wind turbines, often fall below the size limitation and bypass this review process. Thus, many communities find themselves unprepared to handle future wind turbine proposals.

---

<sup>24</sup> Wisconsin Legislative Reference Bureau. 1997. *Budget Brief 97-6*.

<sup>25</sup> Wisconsin Legislative Reference Bureau. 2000. *Budget Brief 00-7*.

<sup>26</sup> Wisconsin Statutes 66.0401



**Exhibit 8-1**

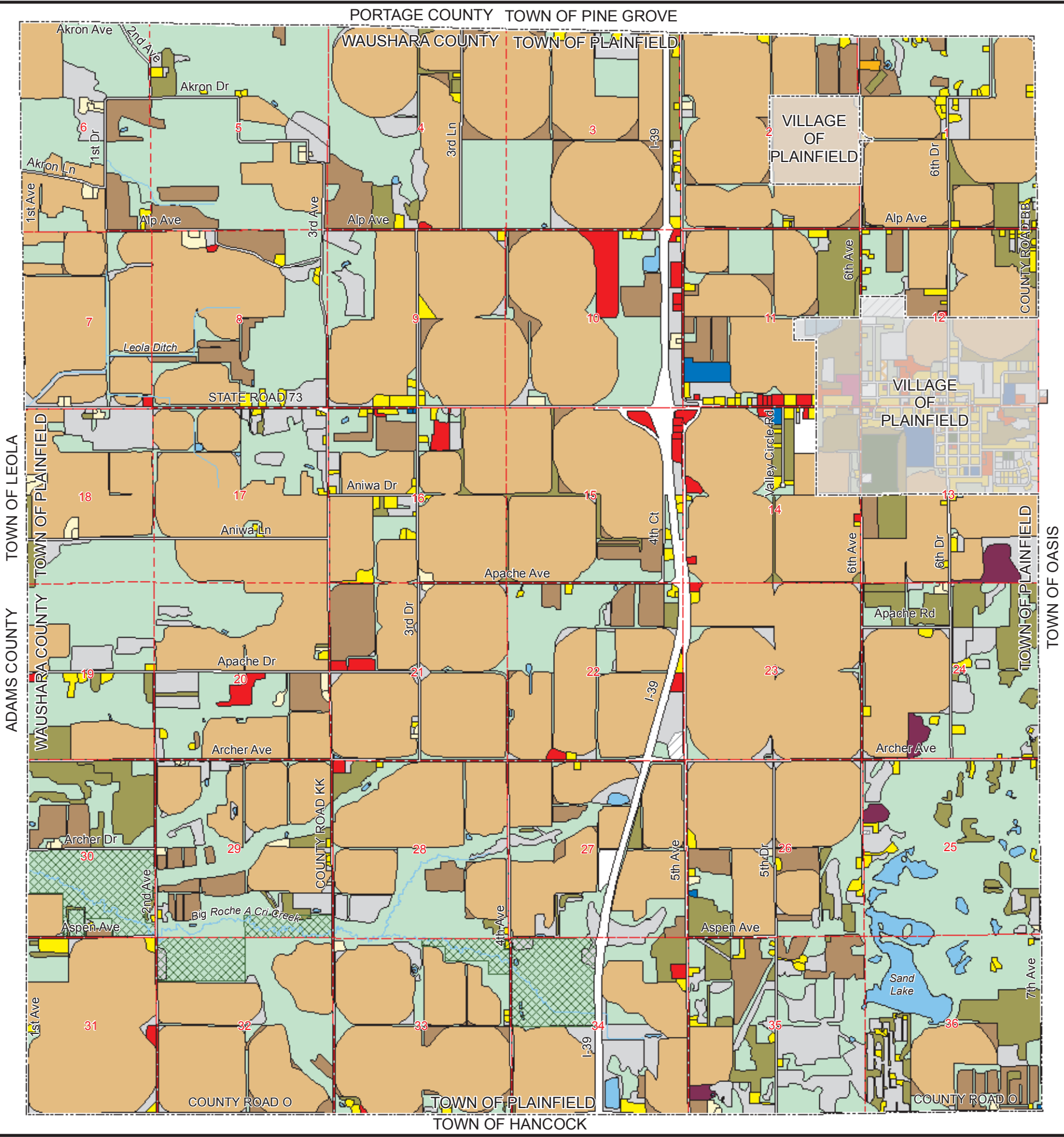
**Existing Land Use**



**Exhibit 8-2**  
**Existing Zoning**

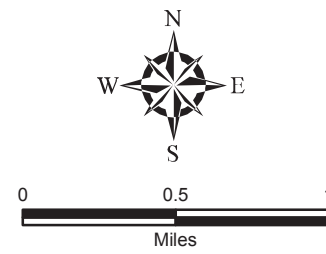


**EXHIBIT 8-1  
TOWN OF PLAINFIELD  
EXISTING LAND USE**



- Single Family Residential
- Farmsteads
- Multi-Family Residential
- Mobile Home Parks
- Commercial
- Industrial
- Quarries
- Institutional Facilities
- Transportation
- Utilities/Communications
- Non-Irrigated Cropland
- Irrigated Cropland
- Water Features
- Recreational Facilities
- Planted Woodlands
- General Woodlands
- Open Other Land
- DNR Owned Land

Source: Land Use data updated by Town of Plainfield, 2001.  
DNR Data provided by WI DNR, 2008.  
Digital Base Data provided by Waushara County, 2008.

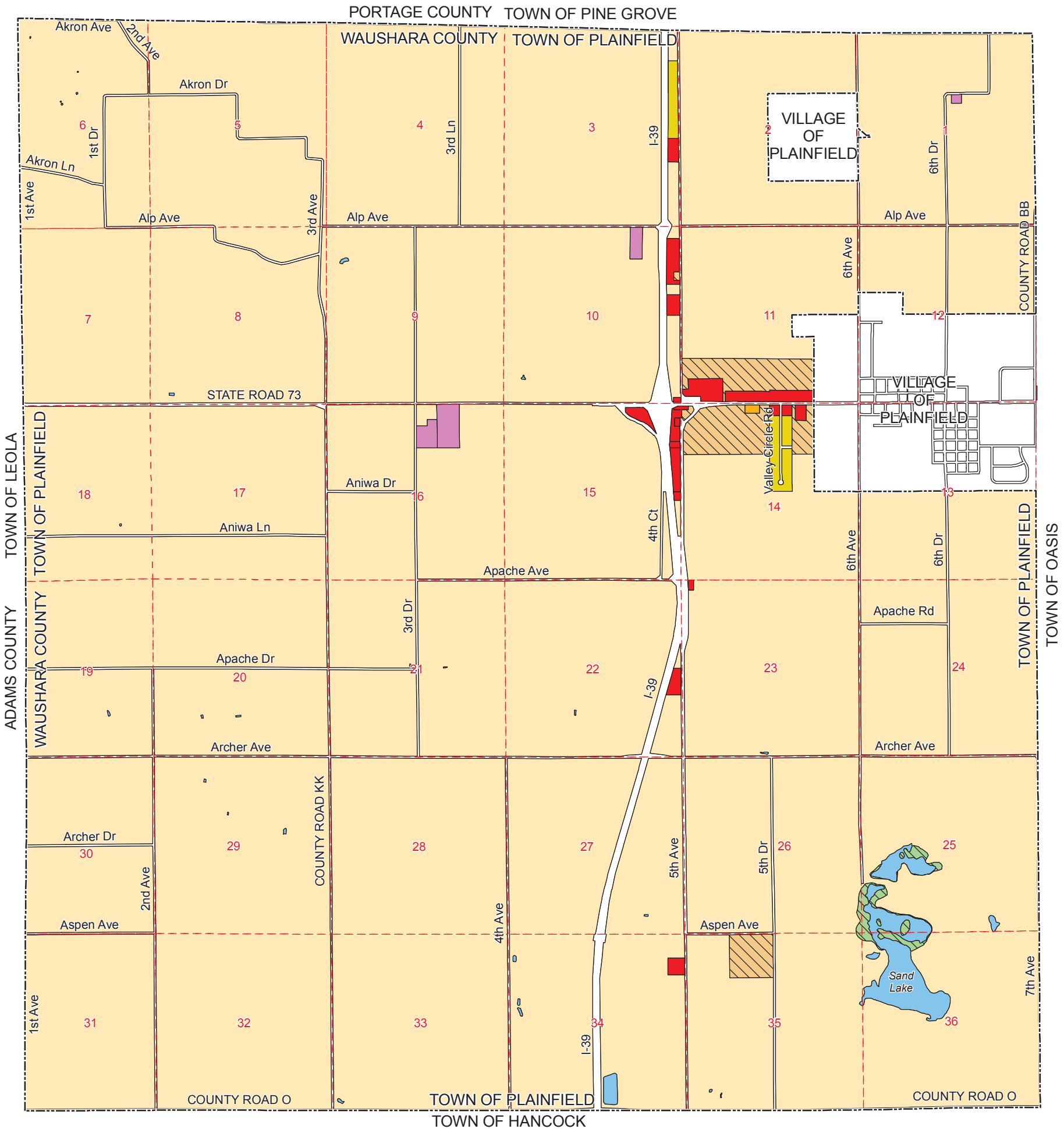


This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-SEPTEMBER 2008



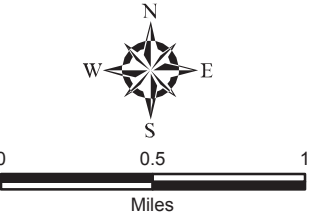
EXHIBIT 8-2  
TOWN OF PLAINFIELD  
EXISTING ZONING



- (A-G) General Agricultural (Minimum Lot Size 1 Acre)
- (A-G) General Agricultural Zone 2 (Minimum Lot Size 2 Acres)
- (A-G) General Agricultural Zone 3 (Minimum Lot Size 3 Acres)
- (A-G) General Agricultural Zone 5 (Minimum Lot Size 5 Acres)
- (A-R) Agricultural Residential
- (C-C) Community Commercial
- (C-G) General Commercial
- (C-S) Service Commercial
- (M-G) General Manufacturing
- (M-I) Intensive Manufacturing
- (O-F) Forest
- (O-N) Natural Resource Preservation
- (O-P) Park & Recreation
- (O-SW) Shoreland / Wetland
- (R-M) Residential Multiple Family
- (RM-P) Residential Multifamily Planned Development
- (RS-10) Residential Single Family  
(Minimum Lot Size 10000 Square Feet)
- (RS-20) Residential Single Family  
(Minimum Lot Size 20000 Square Feet)
- (RSP-10) Residential Single Family  
Planned Development
- Water
- Right of Way

\* Village of Plainfield Not Included

Source: Town of Plainfield Zoning and Base Data provided by Waushara County, 2008.



This data was created for use by the East Central Wisconsin Regional Planning Commission Geographic Information System. Any other use/application of this information is the responsibility of the user and such use/application is at their own risk. East Central Wisconsin Regional Planning Commission disclaims all liability regarding fitness of the information for any use other than for East Central Wisconsin Regional Planning Commission business.

Prepared By  
EAST CENTRAL WISCONSIN  
REGIONAL PLANNING COMMISSION-DECEMBER 2008